

Constructed caves: transformations of the underworld in prehistoric South-East Italy

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This paper examines long-term transformations in the human use and perception of natural and artificial caves, particularly as sacred spaces, between the Upper Palaeolithic and the Bronze Age in the Apulia region of Southeast Italy (c. 34,000 BP–3000 BP/1300 BC). It focuses attention on the visual dimensions of the caves: not only their natural features (comprising, for example, durable stone structures in the landscape as well as complex underground formations), but also their cumulative, historically and culturally specific, modifications (ranging from special deposits, to parietal art, dry-stone walling and monumental entrances). In other words, it regards caves as cultural constructs, and, more specifically, as visually expressive and stimulating elements of visual culture, embedded in dynamic cultural processes.

From this perspective, a variety of questions are explored. These refer to the materials and techniques used in the modification and production of natural and artificial caves, the appearance of those caves, their uses and life histories, the social and aesthetic values ascribed to them, their phenomenological impact on viewers, and their contribution to processes of social interaction. More specifically, interpretations of the changing social and symbolic significance of these underground features, and of the ritual

performances that led to their creation, are proposed, with reference to a broader cultural context of socio-economic dynamics.

The Early Upper Palaeolithic: social aggregation and visual communication

The Early Upper Palaeolithic dates in Apulia to between around 34,000 and 29,000 years BP. This was an important period of transition, linked to the disappearance of the Neanderthals and the appearance of anatomically modern humans in Italy (e.g. Mussi 2001: 167-217). It is thought that the latter, who formed relatively dynamic and mobile hunting groups, but a low population density, colonized the Italian peninsula from the North. Both groups established a predominantly coastal pattern of settlement, possibly linked to long distance coastal communication routes. In particular, they occupied selected caves as base-camps.

Some of these caves appear to have been established as key places of social aggregation and visual communication. An interesting archaeological contrast can be identified between the most intensively occupied caves, whose deposits contain the earliest sound evidence of the cultural use of visually attractive natural materials, and the less intensively frequented caves, which have so far not produced any 'special artifacts'. The 'art objects' comprise small quantities of perforated seashells and coloured iron oxide minerals. These have been found at a few cave-sites near Nardò in south Apulia, and further inland at the Grotta del Cavallo (Borzatti von Löwenstern 1963; 1964; 1970; Palma di Cesnola 1965).

It may be that these objects were mobilized as elements of body decoration during occasions of social aggregation at key caves, involving group activities and performances whose organisation required greater non-verbal communication between members of normally dispersed social networks (Gamble 1999, 268-416). Over time, these caves may also have contributed to the cultural and symbolic construction of the landscape. In particular, generations of mobile and dispersed social groups – particularly colonizing groups of modern humans, may have perceived them as visible, durable, shelters, vantage points and landmarks.

The Mid Upper Palaeolithic: placing the dead

The following period is the Mid Upper Palaeolithic, which dates in Apulia to between around 28,000 and 20,000 BP. This period saw the re-colonization of the Italian peninsula by more sophisticated human groups, who are thought to have spread southwards in small numbers (e.g. Mussi 2000). Subsistence strategies appear to have been flexibly focused on the hunting of local and migratory species of large mammals. A variety of strategically placed sites was established. At one extreme were small-scale activity sites, such as upland flint procurement sites. At the other extreme were base-camps, including caves with stratified deposits formed by repeated occupations, such as Grotta Paglicci, located on a boundary between the uplands and lowlands. At the latter, dispersed and mobile groups may have congregated seasonally (possibly during the winter), to share in both everyday and ceremonial activities, as well as to exchange information, food and partners (c.f. Soffer 2000).

The social and symbolic significance of selected caves seems to have been enhanced during this period. In particular, what we now see, archaeologically, is the new formation of visually elaborate mortuary deposits, on different occasions, in selected cave sites also occupied intensively by the living. Good examples come from Grotta Paglicci in North Apulia, Grotta Santa Maria di Agnano in Central Apulia, and the Grotta delle Veneri in the South (Coppola 1992; Cremonesi *et al.* 1972; Mezzena & Palma di Cesnola 1972b; 1989-90). The mortuary deposits found at these sites generally comprise articulated and intentionally placed bodies, deposited in the inner chambers of caves. They are generally accompanied by relatively large numbers of carefully placed body ornaments, including head-dresses covered with ochre paste, deer canines and seashells, as well as necklaces and bracelets. Some are also closely associated with flint tools. They were generally coated by large quantities of powdered red ochre.

These visually striking mortuary deposits were surely of cultural and symbolic significance. Within the caves, they could have contributed to the symbolic ordering of social space and social relations, by being placed, repeatedly, towards the back of some intensively occupied caves. In this way, they may have helped to put the dead, and more specifically the ancestors, in their place, in relation to the living and the landscape. The caves themselves may also have contributed to the re-colonization and cultural reconstruction of the landscape, seen from afar and experienced close-up (c.f. Bradley 2000; Conkey 1984). They could have helped to generate a more symbolically structured landscape of culturally significant places and pathways, through being occupied and connected by generations of mobile and dispersed socio-economic groups, and by being actively seen, through their intensive occupation and ritual elaboration, as visible, durable

and *ancestral* gathering places and resting places, vantage points, landmarks, monuments and liminal points of contact with the supernatural.

The Late Upper Palaeolithic: symbolic elaboration

The next period is the Late Upper Palaeolithic, dated in Apulia to between around 20,000 and 15,000 BP. It coincides broadly with the relatively benign environmental context of the 'last glacial maximum.' This was a period of cultural consolidation and gradual expansion (e.g. Mussi 2001, 219-82). Settlement patterns can again be interpreted in terms of a system of logistical mobility. Certain cave sites were re-occupied. A good example is Grotta Paglicci, which continued to be frequented intensively throughout the Late Upper Palaeolithic, as a base for the strategic exploitation of local resources and for related symbolic activities.

During this period, the symbolic elaboration of selected caves was taken even further, to the extent that parts of them can now be defined as ritual spaces. For example, in Grotta Paglicci not only were a series of visually striking body ornaments and engraved objects deposited in the cave, but also the very walls of the cave began to be decorated with paintings and incisions (Mezzena & Palma di Cesnola 1972a; 1992). The most elaborate engraved artefact is a fragment of a horse pelvis with incisions clearly delineating the profiles of animals and projectiles. Some cave paintings can probably also be assigned to the same phase of the site's history. The best-dated of these is an exfoliated slab of limestone displaying part of a painted horse. Other paintings occur *in situ*, in one of the deepest and most inaccessible recesses of the cave complex: in a niche,

at the mouth of a small tunnel, in the terminal part of the cave. Details of at least three red and black painted horses have been identified here, together with at least five positive and negative red painted handprints.

As a consequence of these elaborate, and primarily naturalistic, artistic interventions in Grotta Paglicci, this cave may have taken on, exhibited and framed additional, new and more explicit symbolic meanings, especially during the course of ritual performances in it. The accumulation of painted horses and handprints in this cave is particularly suggestive of repeated ritual practices, which might have addressed a central theme of co-operative large game hunting. Their location in one of the deepest and most inaccessible recesses of the cave also suggests that, in this particular space, such practices involved a degree of secrecy, heightened sensory experience, and even ritual initiation into special knowledge (Zampetti & Mussi 1991, 154-7). Caves and the artworks displayed within them became, then, a malleable resource that individuals and groups embellished, manipulated and drew upon (Lewis Williams 2002).

The Final Upper Palaeolithic: ritual specialization

The Final Upper Palaeolithic follows, dated in Apulia to between around 15,000 and 7500 BP. This period was associated with the onset of a warmer post-glacial climate. It was a period of significant environmental and cultural change (e.g. Mussi 2001, 283-388). Human groups adapted well to new environmental niches, and consequently established more diversified patterns of settlement (Barker 1996). A variety of sites were occupied throughout Apulia. These range from upland caves on the Gargano

promontory, to small camp sites and rock shelters in the interior of the region, to more numerous, and sometimes large, open- and cave-sites around the coast. These sites were probably still occupied seasonally, but perhaps some for longer periods, by groups who gradually replaced their traditional specialised hunting economy with diversified systems of hunting, fishing and gathering. Social networks of interaction, and even small-scale exchange, may also have developed.

During this period, the use of selected rock shelters and caves, both old and new, appears to have become even more specialized in nature. This is indicated by the accumulation within them of sometimes large quantities of art-works, particularly in special deposits, at sites such as Grotta Romanelli (Fabbri *et al.* eds 2003). Small quantities of traditional body ornaments occur. Engraved and painted art-works also appear in greater quantities. Some of these are decorated with naturalistic representations of animals but more frequently they carry abstract linear and geometric motifs, some of which are highly complex. Portable examples include decorated flint cores and cortical flakes, pebbles, pieces of limestone and bone. A similar, but locally specific, type of decorated object is represented by some pieces of stalactite found in the Bocca Cesira at Fondo Focone (Segre Naldini & Biddittu 1992). Four fragments of engraved and painted stalactite were found here. In one case the entire surface of the stalactite is covered by groups of intersecting lines, forming a lattice or 'weave' pattern that seems to 'wrap' the entire stalactite. Parietal examples were generally incised, but occasionally also painted. A few human burials also reappear in the archaeological record.

It is clear that selected rock shelters and caves, both old and new, served as key repositories of visual culture during the Final Upper Palaeolithic. Within them,

sometimes large quantities of art-works were accumulated, particularly in special deposits. From this, it is tempting to suggest that their use became more specialised in nature, particularly as the number and variety of open sites increased throughout the region. However, the distinction between cave and open sites should not be over-stated, particularly since examples of engraved cores and pebbles have been found at both. Instead, it seems appropriate, as in earlier periods, to regard the largest rock shelters and caves as seasonal aggregation sites, used as bases for the strategic exploitation of local resources and as arenas for related social and symbolic activities. On the other hand, all of these aspects probably now became more intensive, elaborate and varied. This is particularly evident at Grotta Romanelli. Here, in addition to containing deep occupation deposits that provided good evidence of the broad-based strategic exploitation of local resources, the cave walls exhibit both semi-naturalistic and abstract motifs, and the cave floors contain an accumulation of stones decorated with matching motifs and human burials.

The idea of ritual performance seems appropriate, particularly to the repeated production and consumption of the portable art-objects, but also to the other specialized symbolic activities engaged in at the cave sites (Conkey 1985; Pluciennik 1994). The sheer number of engraved objects, and the repeated re-inscribing of many of them, resulting in some deeply grooved lines, densely decorated surfaces and superimposed motifs, particularly in the Epiromanellian phase, seems both deliberate and meaningful. So too does their later fragmentation and cumulative deposition in large numbers, in special deposits, including piles, pits and depressions in selected cave sites. Some of the human and animal remains found in Grotta Paglicci also appear to have been subjected to

a similar process, involving disarticulation, fragmentation and selective re-deposition. The portability of the decorated objects, indicated by their restricted size, shape and weight, also seems relevant. It is possible to imagine that, in ritual performances; they were selected, decorated, handled and inspected, as well as broken and placed in the ground. Furthermore, the making, manipulation and breaking of visually expressive and stimulating 'art', within the distinctive structure of caves, highlighted by engraved and painted parietal decoration, would have made the experience of this ritual process a highly visual one.

We can only guess at the symbolic meanings of such rituals, but the visual materials do provide us with some hints of at least four related themes. One theme, perhaps indicated by the portable art, may have been concerned with enhancing group membership and identity (Conkey 1980). In particular, the stylistic coherence of this material might have been maintained locally in order to emphasize the importance of contacts between members of increasingly separate social groups. The ritual fragmentation and burial of these portable objects might have served a similar purpose, by repeatedly emphasising the threat of the fragmentation of social relations (Chapman 2000). Social distinctions, on the other hand, might have been pointed out with reference to some of the parietal art, notably the gendered 'vulva' and 'phallic' symbols. A second theme, perhaps indicated by the installation art, may have been concerned with defining access to local resources. The ritual production of art at key sites in the landscape, which also served as bases for the exploitation of local resources and as places of social aggregation, might have highlighted the significance of those places to local kin groups. More specifically, the visible and repeated marking of those sites with parietal art, human

burials and other special deposits, might have comprised part of a process in which groups increasingly defined and asserted territorial rights over local resources (Lewthwaite 1986: 61).

A third theme, perhaps indicated by the representation of animals, notably aurochs, in some cases associated with projectiles, may refer to hunting. This theme is likely to have had some historic, perhaps even mythical, significance, since it clearly developed out of the figurative art of the Late Upper Palaeolithic, which may have remained visible in the painted interior of Grotta Paglicci. However, the meanings of the depicted animals and of hunting may now have been transformed, as their representation became more schematic in the Romanellian phase, and then disappeared, perhaps into abstraction, in the Epiromanellian phase. Perhaps this shift related to a redefinition of the status of large game hunting, particularly within the context of the development of more diversified post-glacial subsistence economies. A fourth theme, possibly indicated by the band motifs, and in particular by the complex 'ribbon' and 'weave' motifs, engraved on some stones and bones, and by the accumulation of these objects at certain sites, may have highlighted the importance of food gathering and storage. This hypothesis stems from an idea presented by Paolo Graziosi (1973: 36), who suggested that some of the 'ribbon-shaped' engraved motifs with 'fringes', 'tufts' and 'knots' might have been abstract representations of intertwined strings netting the stones. The 'textile' motifs from the Grotta delle Venere, and the 'weave' motif that 'wraps' a stalactite from Bocca Cesira, are equally evocative. Could it be that these motifs represented organic containers, such as bags of string and woven textiles? If so, it may be significant that they were directly associated with special objects that were stored and accumulated in

large numbers at key sites. Perhaps, then, their decoration and ritual use symbolized the increasingly important collaborative activities of food gathering and storage, particularly at key sites that served as bases for the exploitation of local resources and as foci for social aggregation.

The Earliest Neolithic: tradition and acculturation

The earliest phase of the Neolithic period in Apulia can be dated to between around 6100 and 5800 BC. This was another period of significant cultural transformation. A degree of cultural continuity and evolution, including greater behavioural specialization, can be claimed to exist, particularly in gathering, fishing and gathering practices and related equipment identified at Earliest Neolithic sites. Traditional settlement patterns may also have been maintained, to judge from the continued concentration of sites along the coastal margins. At the same time, a wide range of novel elements of material culture is clearly present at Earliest Neolithic sites in Apulia. All of these can be related, in one way or another, to the appearance of a new cultural 'package' of resources, socio-economic practices and knowledge relating to early agriculture. Ammerman and Cavalli Sforza (1971) explain this as a process of 'demic diffusion', which would have seen small numbers of inherently expansive agricultural settlers advancing Westwards, carrying with them elements of their own culture. This model may be appropriate to the ditched enclosure sites of the Tavoliere plain in North Apulia. For other parts of Southeast Italy, however, it is possible to argue that the 'transition to agriculture' was a gradual and selective process, characterized by 'acculturation'.

This would have involved the spread of new ideas and resources from neighbouring groups in the Eastern Adriatic to indigenous groups in Apulia, who continued to adapt their lifestyle, adding stock herding, crop cultivation and related equipment, when they became available, to their already broad-based and evolving subsistence economies (e.g. Donahue 1992; Whitehouse 1968b; 1971). This process could have taken place within a broader context of intensifying social networks of interaction and exchange, and growing maritime mobility and exploration, which enhanced connections between human groups based in different parts of the Southern Adriatic zone (e.g. Bass 1998).

These patterns of cultural continuity and change are also evident in the use of caves during the Earliest Neolithic, which can now be compared and contrasted with that of contemporary open sites as well as with Palaeolithic caves. On the one hand, stratigraphic continuity between Final Upper Palaeolithic 'Romanellian' and 'Earliest Neolithic' deposits has been claimed by the excavators of some cave sites, such as the Grotta delle Mura and the Grotta di Uluzzo (Cornaggia Castiglioni & Menghi 1963; Borzatti von Löwenstern 1964). However, it is difficult to define just how 'continuous' the occupation of these sites actually was. On the other hand, a wide range of novel elements of material culture are present at the cave sites. However, additional novel elements have been found exclusively at open sites. These include: the carbonized remains of food plants; a wider range of novel tools and ornaments of stone, fired clay and shell; and a variety of novel settlement features, including a few enclosure ditches, which now give the impression of relatively sedentary residential open sites (Skeates 2000: 176-7).

Furthermore, differences in site-specific practices are hinted at by differences in the deposition of early ceramics at the open and cave sites. At the former, ceramics are characteristically present in 'living deposits', sometimes in large quantities, while in caves such as the Grotta di Uluzzo relatively few sherds were deposited, notably in pits together with large quantities of mollusc shells. This filling of excavated features with mixed cultural deposits, including fragments of decorated artifacts, can be compared to earlier practices identified in certain Final Upper Palaeolithic cave sites.

It is difficult to interpret these patterns, particularly due to the archaeological bias in the region towards the excavation of cave sites for the Upper Palaeolithic and open sites for the Neolithic. It may again be possible to regard the large occupied coastal caves as seasonal aggregation sites. They may have continued to be used in a traditional manner, both as bases for the strategic exploitation of local resources and as arenas for related social and symbolic activities. At the same time, these cave-based practices selectively incorporated novel resources, socio-economic practices and knowledge relating to early agriculture. However, the use of caves as performative contexts appears to have become slightly less intensive, elaborate and varied. Indeed, a shift may have occurred in the spatial context within which visual and ritual communication took place, with visual material - such as novel types of body ornaments, decorated ceramics and special features - becoming more embedded within the fabric of daily life at open residential sites, rather than concentrated in ritual cave contexts.

The Later Neolithic: liminality

The Later Neolithic dates to between around 5800 and 4100 BC in Apulia. Over this period, and in contrast to the Earliest Neolithic, a large body of archaeological data enables us to piece together a more comprehensive picture of socio-economic practices and patterns in Apulia (e.g. Cremonesi 1979; Geniola 1987; Palma di Cesnola & Vigliardi 1984; Tinè & Simone 1984). The agricultural lifestyle and its material culture, introduced and adopted during the Earliest Neolithic, became fully established during the Later Neolithic. This is clearly reflected at the literally hundreds of Later Neolithic agricultural settlements identified across the region. They are particularly well represented on the Tavoliere plain in North Apulia, where extensive aerial- and field-survey has identified numerous sites characteristically enclosed by circular ditches (first seen during the Earliest Neolithic), and containing smaller C-shaped ‘compound’ ditches (e.g. Jones ed. 1987). This period also saw the continued intensification of social relations amongst members of agricultural communities. This is characterized by the development of slightly wider and more intensive exchange and alliance networks, and of more elaborate and frequent ritual activities, compared to the Final Upper Palaeolithic and Earliest Neolithic (Skeates 1993b). Within these contexts, certain useful artifacts - such as obsidian blades, small polished serpentinite and jadeite axes, and painted fineware vessels, decorated in inter-regionally recognizable styles - appear to have been mobilized during the course of social and ceremonial performances, and to have consequently taken on added values. New types of symbolically rich artifacts were also produced, such as ceramic figurines, decorative ceramic stamps (or ‘*pintaderas*’), and ‘face-pots’ decorated with anthropomorphic and zoomorphic motifs. New forms of institutionalized social control and power may also have developed at this time, based

upon a principle of anteriority in social relations (Skeates 2000). Rituals, for example, may increasingly have involved the demonstration of links to ancestors. The social relations embedded in these activities were probably based, above all, on recognition of the benefits of mutual dependency and of social cohesion to groups that had adopted a fully agricultural lifestyle. However, clearer signs of social differentiation also began to appear in this period, both between communities and within them. In the densely settled Northern half of the Tavoliere, for example, a picture of growing inter-community differentiation is indicated: by the formation of some very large residential communities through settlement nucleation, the multiplication and symbolic elaboration of boundary ditches, and the production of locally distinctive fineware styles. At the same time, hints of gender and age differences appear in the archaeological record.

Selected caves were a complementary component of this dynamic Later Neolithic socio-economic system. These sites tend to be located on the margins of the agricultural landscape, around the edges of the Gargano uplands, along rocky coastlines, on the sides of karstic valleys, and in the Murge. However, they were never far removed, spatially and socially, from contemporary open sites and the mainstream of agricultural life (Skeates 1995b; 1997b). Their use was complex and varied, although some general spatial regularities can be identified.

Around their entrances, deep occupation deposits often accumulated, which suggests that many of them served a convenient residential function as shelters, the seasonality of which still needs to be assessed scientifically. Cereals and domesticated animals were certainly consumed at them, if not actually produced in the immediately

vicinity, but local resources were also exploited, including a greater range and number of wild fauna compared to open sites.

In the interiors these caves, special deposits were also often formed. They are characterized by the presence of human remains, pits, hearths, large quantities of grain, animal bones and pottery sherds, and significant numbers of artifacts with a high symbolic value. These seem to reflect the performance of mortuary rites accompanied by feasting, as well as the ritual 'sacrifice' and accumulation of valued objects. They are comparable to the mortuary deposits identified at some contemporary open residential sites, save for the fact that infants and children, and possibly also women, appear to have been buried more commonly in the caves. A prime example is Grotta Scaloria (Quagliati 1936: 118-44; Tinè & Isetti 1975-80; Winn & Shimabuku 1980). This cave is situated on a lowland plain between the Adriatic coast and the Gargano uplands. The cave system comprises two main chambers. Scaloria Alta (or Camerone Quagliati) is a large upper chamber lying adjacent to the cave entrance, extending over 80 by 100 metres, with a ceiling some two metres high. This space was repeatedly used as a burial chamber during the Later Neolithic. The remains of as many as 137 individuals have been found here, particularly in the deepest part of the chamber.

The deep interior spaces of the largest cave sites, with extensive underground complexes of chambers and corridors, were also visually elaborated by more specialized ritual structures and deposits. Here, human groups exploited and added to the existing natural, visually striking, morphologies of the caves (including their walls, passages, floors, fissures, stalagmites and water pools), inheriting and developing further a traditional way of seeing and ritually experiencing caves previously established in the

Upper Palaeolithic (Skeates 1991; Whitehouse 1992b). Scaloria Bassa provides a unique example from North Apulia. It comprises a wide lower chamber which terminates in a small lake, situated beyond and below Scaloria Alta, and reached via a narrow and low gallery. This chamber was used in a more specialized way than the upper one, particularly for the collection of stilicid water. A hollowed rectangular basin was identified in the centre of the sloping area of the chamber. This appears to have been used to collect the water dripping from the stalactites on the roof. Around this were found groups of pottery vessels, some still whole. All of these lay close to truncated stalagmites, some even on top of the base of the broken stalagmites. Traces of a large hearth, with the remains of partially burnt animal bones, were also found close to the basin, and a couple of human burials were also placed in natural fissures in the lower cave.

Another example is provided by the Grotta di Santa Croce near Bisceglie in Central Apulia (Boscato *et al.* 2002; Radina 2002a). This large natural cave lies on the edge of a stream valley. It comprises a wide rock-shelter and a long corridor. A small group of red painted starburst motifs are visible on the side wall, 3.4 metres above the present floor level, and 14 metres in from the entrance. Special deposits have also been identified deep inside the cave, about 60 metres along the corridor. A large, coil-built, woven basket, filled with burnt grains of barley, placed on the floor, looks like a ritual offering. Some broken vessels of elaborately impressed and incised ware, found nearby in a pair of small hollows, are also thought to have been used to collect stilicid water (as at Grotta Scaloria). Further South, two much more elaborately decorated cave complexes have been found in the Salento peninsula, near Santa Cesàrea Terme. The best known is

the Grotta di Porto Badisco (or ‘Grotta dei Cervi’) (Graziosi 1980; Guerri 1993; Lo Porto 1976). This site is today located on the top of a low hill slope, which overlooks a small coastal inlet. Like Grotta Scaloria, its location is visible and accessible, and it would have lain within easy reach of contemporary settlements (indicated by the presence of Later Neolithic pottery on the surrounding plateau). However, when entered, the great extent, complexity and, in some parts, inaccessibility of this underground system is surprising, with its four main branching corridors, extending over a total distance of around 850 metres. The morphology of these corridors varies from relatively large chambers (6–10 metres wide, and 4–8 metres high), to restricted passages (1–3 metres high, and 1–2 metres wide), some sections of which are only negotiable by crawling. This cave was first occupied and decorated during the Final Upper Palaeolithic. It was then re-occupied during the Middle Neolithic, from around 5600–5250 BC, through the Late Neolithic, up to the Copper Age.

During this period, and perhaps especially during the Late Neolithic, the cave complex was modified further, particularly by paintings, which have been identified in 12 morphologically distinctive zones along three of the main corridors. The paintings are coloured black-brown and red. According to scientific analyses, the dark pigment is bad guano, a rich deposit of which exists in one part of the cave, while the red is derived from ochre materials (Cipriani & Magaldi 1979). The paintings combine schematic figures with abstract geometric and curvilinear motifs. They are dominated, numerically and spatially, by hunting scenes, some of which occupy central positions within particular decorated zones. However, the range of abstract motifs is wide and varied, and includes some distinctive geometric and curvilinear motifs. According to statistical analyses of

the distribution of particular motifs along the corridors, some spatial contrasts and patterns were established within the cave complex (Albert 1982; Graziosi 1980; Whitehouse 1992b).

Particular spaces in the cave were further elaborated and demarcated by carefully constructed special features and deposits. Part of the second corridor may have been artificially widened. Simple drystone walls were constructed. Steps were cut into the deposits filling the entrance passage. Some natural circular cavities in the floor of the cave appear to have been artificially widened, and many were re-filled with numerous sherds of pottery. Stepping stones were laid across the pool of stilicidic water. Pits were dug just inside the entrance to the cave, and later filled and overlain by a layer of dark brown ashy soil, which contained some quite sizeable deposits of carbonised grain, a few bones, stone artefacts and pottery sherds. Large quantities of pottery vessels and sherds were also deliberately deposited at the foot of the painted walls.

Such deep interior spaces still create an awe-inspiring sense of ‘otherness’, and may well have been regarded as ‘liminal’ places in the past, providing a point of contact between the lived-in and supernatural worlds. With the exception of the paintings placed relatively close to the entrance to the Grotta di Santa Croce, which may have alerted visitors to the ritual significance of the cave’s interior, these special features were clearly not intended for open viewing, since they were situated in the most inaccessible (deepest, darkest and most restricted) parts of the underground cave complexes in Grotta Scaloria and the Grotta di Porto Badisco. Indeed, a degree of ritual secrecy, characterized by socially restricted and controlled access to key symbolism and knowledge, is likely to have surrounded their production and consumption (Whitehouse 1990; 1992b). More

specifically, they may even have been associated with initiation rites, involving the induction of successive generations into different levels of secret, powerful, religious, ancestral knowledge. As part of this process, constraints may have been placed on women and children in terms of their access to the hidden interiors of these caves. This interpretation seems particularly appropriate to the painted Grotta di Porto Badisco, with its increasingly abstract symbolism the deeper one moves into the cave, and its group of painted juvenile handprints situated half way along the second corridor.

Such features might be regarded, more generally, as characteristic elements of a distinctive 'cave-cult', which developed throughout the south-central Mediterranean during the Neolithic (Whitehouse 1992b, 2-3). However, locally specific practices and meanings are also likely to have been expressed (Skeates 1995b). In Grotta Scaloria in the North, for example, specific ritual concerns with death and 'abnormal' water may have been expressed. These might have related to specific agrarian concerns over the fertility, health and productivity of people, crops and stock on the adjacent densely settled Tavoliere plain. In the Grotta di Porto Badisco in the South, on the other hand, a slightly different set of ritual concerns may have been expressed through the re-use of a Palaeolithic ritual cave, the recurrent representation of the male hunting of wild deer, the representation of animal-human hybrids, the repeated deposition of crops in the form of burnt offerings in the entrance to the cave, the confining of female symbols to the first decorated zone of the cave, and the group of juvenile handprints in the interior. These powerful images might have related to tensions within local indigenous groups with a hunter-gatherer ancestry surrounding their full transition to an agricultural way of life, including the gender- and age-based division of labour within this.

This period also saw the construction of what might be regarded as the earliest artificial cave in the region. The 'Manfredi hypogeum', at Santa Barbara near Polignano a Mare, is a unique Late Neolithic ritual feature, partly mortuary in nature (Geniola 1987; 1995). This artificial underground complex was dug into the inner side of a Late Neolithic settlement enclosure ditch, into the limestone bedrock. It is nine metres long, and has a symmetrical plan. A sloping access ramp (or '*dromos*') leads to two underground chambers: a small elliptical 'ante-chamber' and a large 'back room', linked by a short central corridor with a square section and a step in the floor. Deer skulls were arranged along the walls of the 'dromos' and first chamber, while small niches and a cross-shaped symbol were engraved in the walls of the second chamber. A small trench containing a deposit of human remains was also found in a lobe of the back room. The hypogeum also contained a stratified deposit, containing faunal and artifactual, possibly derived from ritual feasting.

An even more sophisticated pattern of cave use and perception was established, then, in the Later Neolithic, which incorporated as well as separated the underworld in relation to the landscape and local patterns of agricultural life. The entrance chambers of natural caves appear to have continued to be used in a traditional manner, as convenient shelters for the strategic exploitation of local resources. Cave interiors, on the other hand, appear to have been re-established and further transformed - physically, symbolically and conceptually - as powerful sacred spaces, during the course of increasingly elaborate and distinctive liminal ritual performances.

The Final Neolithic: the reinvention of tradition

The Final Neolithic period in Apulia dates to between around 4100 and 3900 BC. This phase is marked, archaeologically, by evidence of both cultural continuity and innovation in the region (e.g. Cremonesi 1979; Geniola 1979; Palma di Cesnola 1985; Palma di Cesnola & Vigliardi 1984). Site patterns indicate the continued but less intensive occupation of the coastal lowlands, as well as an extension of settlement inland into hilly areas (Whitehouse 1984, 1114). Daily life appears to have generally followed a traditional pattern, although a few significant developments also took place. For example, it seems clear that the tradition of ditch digging ceased when the Later Neolithic ditched enclosure sites were abandoned. Mixed farming continued to be practiced. A familiar range of tools were manufactured and used, with the addition of a few new projectile points. An increase in the quantity of imported obsidian and polished stone found at sites in Apulia, as well as the development of a greater degree of stylistic uniformity in potting and mortuary practices between sites, also indicate a strengthening and re-orientation of long-distance interaction and exchange networks (e.g. Robb 1999; Skeates 1993b).

In this context, caves continued to be used for a range of activities. Some large caves were again occupied as residential sites, particularly in the more traditional South. Other caves, situated close to contemporary residential sites, continued to be used as burial places for relatively large numbers of both adults and children. These are generally characterized by disturbed primary burials, accompanied by grave goods and other special deposits. They are similar in style and scale to the mortuary deposits found at open cemetery sites, but contain greater quantities of food-related remains, which

probably derived from mortuary feasts. For example, Scaloria Alta continued to be used as a burial cave during the Final Neolithic. Another burial cave was newly established in the Grotta di Cala Colombo, situated on the Adriatic coast near Torre a Mare (De Lucia *et al.* 1977). Here, the walls of a natural cave entrance appear to have been enlarged artificially, to form an elaborate multi-cellular chamber. A few underground sites situated along the Adriatic coast were also used as special, non-mortuary, structures, in which ritual performances involved the creation of some distinctive structural features and objects, rather than human remains. For example, the elaborately decorated and structured Grotta di Porto Badisco may have been elaborated and transformed at this time. The Grotta di Cala Scizzo, on the other hand, was first occupied in this period (Geniola & Tunzi 1980). The deep interior of this cave was transformed into a ritual space at an early stage, through the modification of a natural hollow into an artificial basin, surrounded by a large dry-stone platform, within which were embedded some rare artworks.

The rock-cut Manfredi hypogeum continued to be used during the Final Neolithic. At the same time, another new kind of artificial underground mortuary structure was established. It is represented by an oven-shaped 'rock-cut' tomb found at Arnesano (Lo Porto 1972). It comprised a small cylindrical chamber with an access pit, dug into the soft clay and sand terrain. The pit was sealed by a large limestone slab. Within the tomb, the body of an adult had been laid out on the floor of the chamber, in a crouched position. Grave goods were placed on one side of the body, including three plain pottery vessels and a stone 'idol'. The form of this oven-shaped tomb seems, on first impression, to be exotic (e.g. Walter 1988, 153). Nevertheless, it is not that different to earlier and

contemporary mortuary structures found in Apulia. Regional precedents for it are provided by the burial cavities and hypogeum cut into the sides of ditches and the artificial caves of the Later Neolithic, not to mention the natural caves used for burials since the Upper Palaeolithic (Whitehouse 1972). It is also comparable in size to the contemporary earth- and rock-cut pit and trench graves of the Taranto province.

These liminal underground places probably continued to be used for the performance of agrarian and initiation rituals, although their use as burial caves seems to have gradually increased at this time. Slightly more specialized assemblages of portable artifacts were also deposited at them. These mainly comprise either tools used in the preparation and serving of ritual feasts, ritual paraphernalia, or valuable objects of exchange and display 'sacrificed' in special deposits. These transformations, introduced into traditional ritual performances in the caves, presumably by ritual leaders, may have been intended to establish even stronger reciprocal relations between members of living kin-groups, their ancestors and the supernatural.

The Copper Age: social and ritual elaboration

The Copper Age remains a poorly defined period of Southeast Italian prehistory (Cazzella 1994). As a rough guide, the Earlier Copper Age may date to between around 3900 and 3100 BC, and the Later Copper Age and Early Bronze Age to between around 3100 and 2300 BC. The period as a whole is clearly characterised by continued cultural developments. Settlement and subsistence patterns expanded along similar lines to those established during the Final Neolithic. A growing number of above-ground special-

purpose ritual sites developed, including statue-stele, menhirs and rock-engravings.

Social dynamics also developed trends previously established during the Final Neolithic in Apulia (e.g. Skeates 1995a: 293-4; Whitehouse 1968a). For example, long-distance maritime and overland networks of interaction and exchange were maintained, expanded and intensified. In particular, the use of a widely shared set of mortuary practices and symbols, and the circulation of some valuable artifacts (including some made of copper), reflect strengthened connections within the Mediterranean (Biancofiore 1987).

Participation in a socio-economic 'tournament' may have lain at the heart of these developments. In this, prestige may have been won by leaders and their supporters, through ceremonially advertising their control over local groups, territories and resources, and their contacts with 'exotic' (supernatural and distant) people, places and things. It may be as a consequence of this tournament that the archaeological record provides growing signs of socio-economic instability and competition, played out on different geographical and social scales: between regional 'cultures', territorially-based communities and kin-based burial-groups.

In line with these developments, the human use of natural caves continued to evolve during the Copper Age. Some of these caves may have served as habitations, and in particular as base camps for herders and hunters. More commonly, however, they were used as places for the performance of rituals, including more visually elaborate funerary rites. These focussed attention on the successive, collective, primary burial of relatives, especially adults but also some children (the latter sometimes spatially segregated). They were also accompanied by larger collections of valued goods. Particularly rich mortuary deposits were found in Grotta Cappuccini in South Apulia

(Ingravallo 2002). This is a small natural cave, 11 metres long and 4 metres wide, located on the side of a large valley near Galatone. Spit 7, comprising the earliest and main cultural deposit in the cave, contained human and animal bones, charcoal, a small flat stone smeared with red ochre, tools, ornaments and ceramics. Three radiocarbon dated samples of human bone provide a date-range of around 2550–2350 BC. The human bones were found in a disarticulated, fragmented and partially burnt state, partly as a result of old burials having been pushed towards the back to the cave to make space for new ones. A minimum of 311 individuals were buried there, comprising about two thirds adults and a third juveniles and children. These and other caves sometimes also contain special, possibly votive, deposits of valuable artifacts, not directly associated with burials, particularly in South Apulia. The most obvious example comes from the Grotta della Zinzulusa, which is well-known today for its fantastic stalagmite and stalactite formations (Zecca 1984). Here, a special deposit of 11 ceramic vessels was recovered from one of the small lakes in the cave. They had been deposited along the edge of the natural basin. They have been interpreted as having been used in a water-related cult, like the Later Neolithic vessels placed under the stalactites in the Grotta Scaloria.

Artificial rock-cut tombs increased in number during the Copper Age, and especially during the Later Copper Age. Although they are normally described as ‘rock-cut’, most were actually dug into soft bedrock, and a few were dug into compact sand and clay deposits. They have been found in small cemetery groups of between one and five tombs, at least some of which may have been situated close to settlement sites. The best known Copper Age examples come from Central Apulia, at Monte Sannace near Gioia del Colle, Casal Sabini near Altamura, Cellino San Marco, Pizzone, and along the Valle

delle Rose near Laterza (Biancofiore 1967a; 1979; Biancofiore & Ponzetti 1957; Gervasio 1913: 77-94; Lo Porto 1962-3). The form of these tombs varies considerably, although some broadly shared features can be identified. They comprise artificially excavated, small, circular or oval, underground chambers. There is normally just one chamber. In section, some of these chambers have a flat floor and a domed roof. These spaces were accessible from above, but sealed at their entrance, usually by a single square stone slab. A broad distinction can be drawn between those tombs accessed via a vertical 'man-hole' or steeply sloping cylindrical pit, and others accessed via a gently sloping passage (or '*dromos*'). The number and disposition of human remains deposited within these tombs also varies, although general patterns can again be identified. Some chambers contained just one or two articulated bodies. Other tombs contained the remains of numerous individuals. At Cellino San Marco, for example, Chamber A contained 35 articulated skeletons, and Chamber B contained 41 skeletons. These individuals appear to have been originally deposited in the form of primary inhumations. At Laterza, however, some of the bodies appear to have been disturbed by secondary burial practices, leading to the dis-articulation of skeletons, and the arrangement of some skulls along the end walls of the chamber. Each individual appears to have been accompanied by a few ornaments, tools and pots. A few domesticated and wild animal bones and ashes, perhaps comprising the remains of mortuary feasts and food offerings, were also identified in some tombs. To this broad group of rock-cut tombs can also be added an abandoned flint mine re-used in the Later Copper Age as a burial place, situated on a hill-slope in the Valle Sbernia near Peschici on the Gargano promontory (Sublimi

Saponetti 1991). Both the form of the mine, and the nature of the mortuary deposits found within it, are comparable to those of the rock cut tombs.

Various meanings could have been expressed during the course of these underground rituals. The deposition of the dead away from settlements, in special-purpose mortuary sites, may reflect a strategic move by members of different families to bury their deceased relatives away from the *community*-based settlements within which they resided, in order to maintain and demonstrate their distinct *kin*-based identities (Skeates 1995c: 231-2). Successive burials in the same place may then have expressed the continuity and cohesion of members of the descent- groups to whom those sites belonged, including their ancestors, the newly deceased and their living relatives (Malone 1996, 54). At the same time, the prestigious social status, influence, wealth and power of selected deceased individuals, and their mourners, may have been signalled through the public accumulation, display and sacrifice of socially and symbolically valued portable grave goods (Skeates 1995a, 294-5; Whitehouse 1992b, 171). Non-mortuary rituals performed in natural caves, which, like the burials at these sites, involved the votive deposition of valuable gifts, may also have expressed a desire to ensure the maintenance of beneficial reciprocal relations with spirits thought to dwell in the underworld.

The Middle Bronze Age: monumentalization

The Middle Bronze Age dates to between around 2300 and 1200 BC. This period is characterized by patterns of continuity combined with significant developments.

Settlement patterns in Apulia clearly exhibit these combined trends (e.g. Cazzella 1998;

Gravina 1999; Tunzi Sisto 1996). In both coastal and inland zones, large settlements of long duration developed, situated in naturally defended positions, some augmented by artificial fortifications, dominating key communications routes and/or territories containing valued economic resources. Signs of growing settlement differentiation are also provided by new contrasts between some of the larger sedentary settlements supporting diversified economies, and smaller, more short-lived, sites, situated in adjacent strategic but less dominant locations perhaps associated with more restricted and possibly seasonal economic activities. Outside living areas, assemblages of relatively varied and valuable objects, accompanied by food and human remains, were deposited in increasingly monumental special-purpose ritual sites, including underground natural caves, artificial underground 'rock-cut tombs' and 'hypogea', and above-ground 'tumuli' covering 'dolmens' or 'passage graves'.

Social dynamics developed along similar lines to those established during the Final Neolithic and Copper Age in Apulia. However, they also became more intense, leading to greater extremes of socio-economic integration and instability, competition and violence, and at least a modest degree of social differentiation by the end of the period (Cazzella 1998; Malone *et al.* 1993; Moscoloni 1987). Arguably, an ever-expanding long-distance maritime and overland network of interaction, exchange and social integration lay at the heart of these developments (e.g. Cazzella 1998, 18-19). Within this, local leaders and their supporters appear to have competed more aggressively to win prestige and power, particularly by advertising their control over local groups, territories and resources, and their contacts with 'exotic' (supernatural and distant) people, places and things.

A few natural caves and rock shelters continued to be occupied throughout the region, and modified during the performance of rituals, but to a lesser extent than in the Copper Age. In the North, rich mortuary deposits have been found in a cave known as the Grottone di Manaccora near Peschici (Baumgärtel 1951; 1953). It is located at the Western end of the Manaccore bay, at the base of a limestone promontory (the Punta Manaccore), and is protected from the sea by a high sand dune. Given that a contemporary and (to judge from the ceramics found at both sites) clearly related settlement was located on this promontory, it may be that the underlying burial cave was perceived as a kind of liminal 'underworld'. It is a large cave, with a broad entrance, some 18 metres wide, and a main chamber leading to two smaller corridors, extending up to about 49 metres in depth. Mortuary deposits have so far been uncovered in four different areas along the cave walls, and especially towards the back of the cave. Access to the innermost 'funerary cleft' appears to have been restricted by a wooden structure, indicated by numerous post-holes, and by a dry-stone wall constructed at the entrance to the passage. This area contained exclusively adult human remains, and also the richest grave goods found in the cave. In Central Apulia, the much smaller Grotta della Tartaruga provides an example of a previously occupied cave site that may have been architecturally elaborated during the Middle Bronze Age (Coppola & Radina 1985). Here, four small oval chambers were cut into the walls of the central natural cavity, which made the cave look more regular and monumental. The body of an infant was buried in the first of these chambers. Further South again, a special deposit of two bronze axes comes from the Grotta della Zinzulusa, one of which was decorated (Blanc 1958-61).

Rock-cut tombs also continued to be constructed during the Middle Bronze Age, particularly in the more traditional Central and South (e.g. Drago 1954-5; Orlando 1995a). They are generally located in prominent positions in the landscape, within sight of the coast, and up to about 12 kilometres inland from it. In North Apulia, however, rock-cut tombs appear to have evolved into hypogea, with more marked entrances, elongated access corridors and enlarged chambers. At Terra di Corte near San Ferdinando di Puglia, a complex of at least 12 Middle Bronze Age hypogea has been discovered (Tunzi Sisto ed. 1999). The forms of these hypogea are varied, but share some general features. They tend to be linear in arrangement, varying in total length from around 11 to 29 metres. They may have been entered, initially, via some kind of wooden structure. They then continue with one or two long, narrow, access corridors. Their initial, steeply sloping, sections are often revetted and covered by stone slabs. These corridors lead to a small entrance hole or chamber. This, in turn, leads to a large rectangular or sub-circular chamber (5–15 metres long and 3 metres wide). The roof of this chamber, which sometimes comprises a barrel vault, is perforated by one or more circular pits, interpreted as ventilation shafts.

These chambers also appear to have been separated and divided by wooden structures, represented by post-holes, and, in one case, by a small stone pillar. Special deposits were formed within these structures, as a result of a variety of ritual practices, which may have included secondary burial rites, ritual feasts and rites of closure. The main chambers contained the richest and most varied deposits. Special deposits also sometimes accumulated in the access corridors. Piles of stones were eventually used to seal the entrances to the hypogea.

A similar complex of at least five Middle Bronze Age rock-cut hypogea has been found at Madonna di Loreto near Trinitapoli, not far from Terra di Corte (Tunzi Sisto ed. 1999, 183-316). This was previously the site of a ditched settlement during the Later Neolithic. All of the hypogea appear to have followed the line of the original enclosure ditch, whose sunken surface presumably remained visible in the landscape. The elaborate 'Hypogeum of the Bronzes' is the best-known of these. It was first established as a non-mortuary ritual space, then sealed, and later re-used and modified as a burial place, throughout the Middle Bronze Age. It contained the remains of around 200 individuals. Their bodies were originally deposited as primary burials. Age- and gender-specific artifacts were often closely associated with these bodies, as well as large animal bones interpreted as food offerings. Care was evidently taken not to disturb earlier burials. Burning torches, indicated by the presence of charcoal (and the absence of hearths and ashes), helped to illuminate this ritual process.

A series of contrasts can be identified between the mortuary deposits found in different parts of the hypogeum, which seem to have developed over space and time. Essentially, these patterns might be interpreted in terms of a shift in the social use of the hypogeum: from the burial place of a kin-based group, to a burial place dominated by the bodies of a less closely related warrior class of men. Another underground structure, comprising an artificially modified natural cave at Madonna di Grottole near Polignano a Mare, might be regarded as a Southern relative of the North Apulian hypogea (Cardini 1948; Tunzi Sisto & Langella 1995). The main cave chamber has a trilobate plan, and is preceded by an access corridor with a shallow slope. The use of this site has been

plausibly interpreted in terms of the ritual preparation and consumption of food, and compared to the evidence of ritual feasting at contemporary rock-cut tombs.

These underground structures may not have been particularly visible from a distance, but they do appear to have been ascribed a growing visual significance during the Middle Bronze Age. Grander entrances, comprising rock-cut façades, wooden doorways and stone-lined access passages, were constructed at some of them. Their entrances were further elaborated during the course of mortuary rites, which led to the formation of symbolically rich deposits within them. Rituals appear to have commonly involved feasting and fragmentation, as well as occasional sacrifices of valuable artifacts. Mortuary rituals shared these features, but also involved the incrementally collective deposition of the bodies of selected individuals accompanied by a wide of personal goods, presumably regarded as being of use to them in the afterlife. Rituals of closure were performed at some of these sites, particularly when they became filled with mortuary deposits. Many of these underground ritual sites were also located in prominent vantage points in the landscape. Views from them may therefore have played a part in the embodied rituals that were repeatedly performed at them. A variety of meanings could have been expressed at them. On the one hand, traditional but publicly visible ritual themes may have been expressed at them, through their establishment in liminal places and during successive gatherings and rituals enacted around their entrances. These may have made particular reference to: the power of the ancestors contained within their mortuary deposits; their membership of different kin-, gender- and aged-based groups; their well-being and material wealth; the durability and strength of their living descent-groups; and the history of their territories (Malone *et al.* 1993: 186-8; Whitehouse 1995:

85). On the other hand, their dramatic mortuary rituals and architecture might have reinforced social distinctions between audiences positioned outside them and selected individuals allowed to enter and re-order their hidden and spatially structured interiors (c.f. Thomas 1993).

Conclusion

Through this case-study of natural and artificial caves in prehistoric Southeast Italy, I have explored how successive generations selectively created, occupied, sacralized and transformed the underworld in the process of constructing themselves. This process was culturally constrained by a respect for convention and tradition. However, through a variety of social and visual practices, caves were gradually ascribed old and new functions, meanings and values, particularly at times of profound socio-economic disruption, conflict and change. In the Upper Palaeolithic, they appear to have been established as bases for the exploitation of local resources and as key places of social aggregation and visual communication. Initially they may have been seen as durable residential shelters, vantage points and landmarks, but later they may also have increasingly been perceived as performative ritual spaces, burial places, ancestral gathering places, monuments and liminal points of contact with the supernatural. In the Neolithic, Copper and Bronze Ages, these traditional values continued to be applied to natural caves, and also extended to a new range of elaborately modified and artificial caves, although access to their powerful ritual symbolism appears to have become increasingly socially restricted and controlled. In this way, these physically durable but

conceptually malleable structures were actively used by people, across space and time, to perceive the world around them and to reproduce their social lives. They helped them to establish personal and collective boundaries, identities and relationships, to acquire and exercise power, to promote ideologies, and to contest them, particularly in response to key social tensions. This was generally a subtle process, embedded in the routine experiences of life and landscape. However, on special occasions it was displayed and also concealed more overtly, marked by repeated ritual performances in culturally significant caves.