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Performance and Narrative, Bodies and Movement in the Construction of Places and Objects, Spaces and Knowledges The Case of the Maltese Megaliths

David Turnbull

IN THE endeavour to explain the complex interactions of agents, objects, knowledge and place the social sciences have for sometime now experienced a number of high velocity turns, the 'spatial', 'narrative', 'performative' and the 'material', each of them barely exhausting its predecessor before surrendering to the fickle finger of fashion and switching preemptorily in a new direction.¹ This article is an attempt to bring all these turns together in a science studies perspective to explore the ways the cognitive and the material are jointly co-produced with the social, that is, how knowledge, artefacts and human agents work together to produce our lived lives in the world. The aim is to examine the ways in which knowledge is constructed as spatialized narratives of human actions and artefacts are a material form of those spatial narratives. The attempt to write a new script for the performance of the social and material order based in a rethinking of our understandings of place, space and knowledge is located in the archipelago of Malta and its megalithic monuments and recent thinking on wayfinding.

This may seem a strange and perversely antiquarian starting point for articulating an account of the performance of knowledge and space. However, it is neither arbitrary nor mere self-serving idiosyncrasy on my part. Science studies has concentrated very largely on the contemporary

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technosciences while drawing much of its analytical strength from finely contextualized accounts of the production of knowledge, place and material culture in Europe between the 17th and 20th centuries. Consequently science studies has largely ignored the earlier periods and the non-continental sites. The Maltese megaliths are amongst the very earliest complex, material objects produced by humankind. Though they are not as widely known as the pyramids or Stonehenge, many of the originary narratives about place, space and knowledge have been written around the Maltese megaliths precisely because it is claimed they are the 'earliest free-standing monuments of stone in the world' (Renfrew, 1973a: 147). Though little is all that secure in Maltese archaeology, current dating suggests the megalithic monument building period began in Malta around 4500 BC, finished around 2500 BC and was at its peak at around 3300 BC (Bonanno, 1997). This makes them a lot older than the Pyramids in Egypt which were mostly built around 2500 BC, or Stonehenge which was started around 3500 BC and finished around 1500 BC.

The Maltese monuments are large, complex and architecturally sophisticated, with claims to a multiplicity of firsts. Ggantija on Gozo (Figure 1) has a massive, 16m high facade 'perhaps the earliest conceived exterior in the world', Hagar Qim on Malta employs what seems to be the 'earliest use of dressed stone in the world' and Tarxien has the earliest large-scale statue (Renfrew, 1973a: 148–9). The architectural historian Spiro Kostof even goes so far as to make the somewhat extravagant claim that

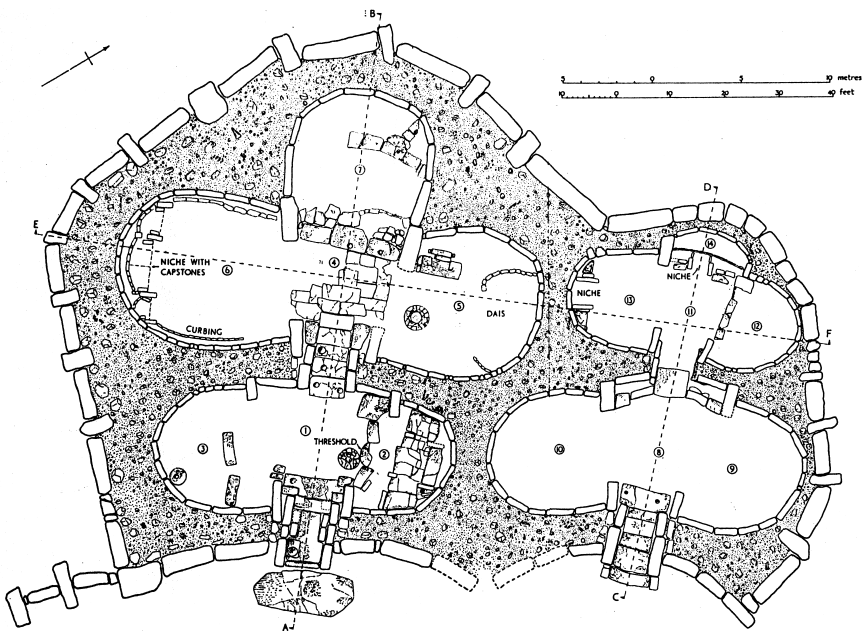


Figure 1 Ggantija

'Ggantija is a wholly man-made form, which is to say, it is thought out and reproducible. As such it is the first true building type' (Kostof, 1985: 35). So what makes the Maltese megalithic monuments a significant site for science studies is that they are among the first, large, complex objects built by humans that have endured relatively intact, and that as such they are a focus of contested understandings of the co-production of people, knowledge, objects and place.

This exploration of the various explanations that have been given of the function, purpose, position, shape, and social context of megalithic monuments like Malta and Stonehenge attempts to show how knowledge and space are performed through such monuments. In so doing I will be both creating a narrative and revealing the narratological nature of knowledge and space. My interposed narrative construes the monuments as 'theatres of knowledge'. They are sites in which contemporary anthropologists and archaeologists perform their spatial narratives and they are also structured spaces that served to mark, perform and represent knowledge for their builders.²

Owing to their insular status, the Maltese islands have often been framed narratologically as a 'laboratory' in which a restricted number of variables and inputs can be measured and evaluated in understanding cultural change (Evans, 1973; Cherry, 1990; Pace, 1996). This modernist, highly spatialized conception of islands as experimental labs with controllable, simplified, cultural inputs became plausible and commonplace as a result of an earlier spatial/origins story that was partly played out on the Maltese stage – the overthrow of diffusionism by localism. Before radio-carbon dating it was taken-for-granted by the leading archaeologists working in Malta that the megalithic monuments could not have been built by an autonomous local culture. Such complexity and sophistication were taken as necessarily being a pale imitation of superior Eastern Mediterranean predecessors. J.D. Evans, who led the first comprehensive Prehistoric Survey of Malta in the 1950s, assumed that 'all the major steps in the attainment of civilisation were taken in the Near East and first affected Europe largely as a result of diffusion from that region', and that 'the masterpieces of Maltese art and architecture were produced under the stimulus of contact with the brilliant Minoan and Mycenaean civilisations of Crete and Greece' (Evans, 1959: 30).

The radical revision of archaeological dating following the 'Carbon 14 revolution' showed the Maltese megaliths to predate any supposed ancestor cultures. Revising the dates created the opportunity for Colin Renfrew to construct his localist thesis of megalithism in which the megaliths of NW Europe and the Mediterranean were to be explained in purely local or regional terms (Renfrew, 1973a). Each culture simply made use of the most readily available building materials, in this case large stone slabs, to build enclosed, surface, burial chambers and monuments, in line with local needs and styles. And indeed, Maltese megalithic monuments seem to be without analogy or parallel anywhere else, they are entirely curvilinear and predomi-

nantly based on combinations of three-lobed spaces, hence their shape, style, and size make them culturally specific and entirely local. The monuments are thus especially 'good things to think with' from a science studies perspective where its own localist approach has led to a recognition of the spatial nature of knowledge production (Turnbull, 1993b, 1996; Shapin, 1995, 1998). They are ideal sites to locate the ways we perform differing spatialities in our narrative reconstructions of material artefacts, human agents, place, space, time and knowledge.

Renfrew became one of the founding fathers of processual archaeology and did much to set the reigning paradigm for the discipline through his still unchallenged reading of the Maltese monuments. The new processual archaeology based itself on an explicitly empirical and 'scientific' approach in which society and the processes of cultural change were to be explained through controlled observation. Society was conceived as a patterned set of naturally evolving, adaptive, behaviours developed in particular social and natural environmental contexts which are reflected in the material culture. The major focus was consequently on resources, subsistence and economic strategies, trade and exchange, and technology, in identifying societal types, chiefdoms etc., and in schemes of cultural evolution.

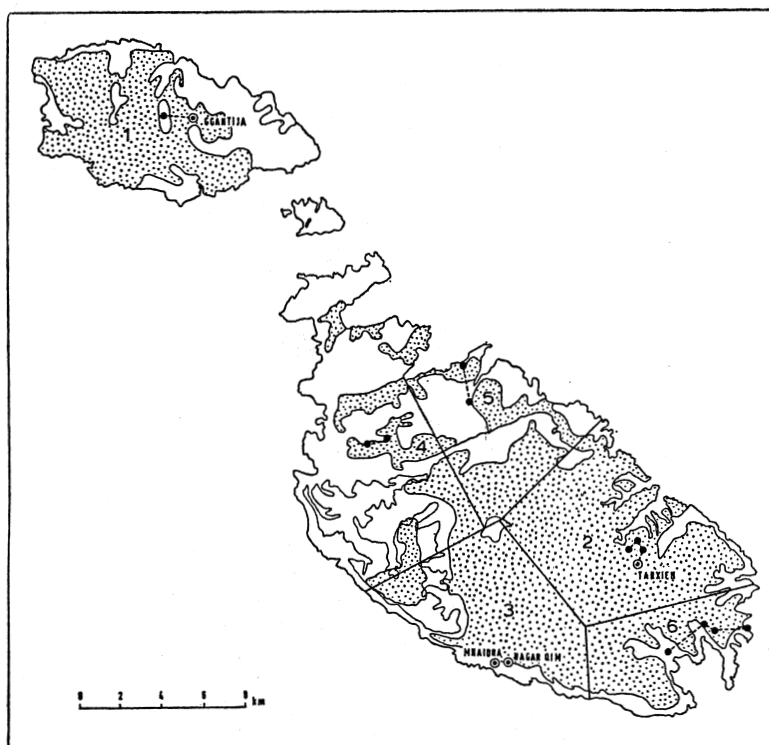


Figure 2 Renfrew's Map of the Maltese Monuments and their Distribution relative to Arable Land

Much of Renfrew's impact on Maltese megalithism came as a result of a deceptively simple performance of modern spatiality – the imposition of a map on the monuments. By dint of claiming a spatial distribution he was able to establish a processual analysis of them, which with some major embellishments, remains the framework of the standard account.

Renfrew reads his map (Figure 2) as showing the distribution of paired temples in the landscape dominating and controlling six agricultural regions. He argues that this is evidence for a 'chiefdom society' with groups of 500–2000 people controlled by an hereditary elite, allowing exchange and redistribution of specialized trade goods, comparable to the cultures of Zimbabwe and Easter island (Renfrew, 1973a: 155–6).³

Most of the recent changes in the explanation of the Maltese megaliths have been the result of the work done by The Anglo-Maltese Gozo Project in two excavation seasons in 1987 and 1993/4. This group excavated the Brochtorff Circle on the Xaghra plateau, a mortuary complex adjacent to the Ggantija temple on Gozo. Their explicitly processual account claims the Maltese megalithic period to be the flourishing of a ritualistic cult society, explained in terms of 'an isolated archipelago entering, leaving and re-entering the exchange processes of the Mediterranean world' (Stoddart et al., 1993: 4).

The Gozo team argue that the presence of imported material like obsidian and similarities in ceramic styles show that from about 5000 BC until around 3500 BC Malta was in full contact with Sicily, Italy and even the Alps, but the contact was broken by incapacity to build boats due to the depletion of timber resources.⁴ This isolation led to an obsessive and competitive elaboration of ritual behaviour which eventually resulted in cultural collapse, invasion from other islands and an end to isolation. The monument building in the Ggantija and Tarxien phases was a manifestation of this cultural isolation and the 'ritualization of the landscape'. In their view 'the rivalry between families in pursuing exchange outside the archipelago . . . was transferred . . . to rivalry between factions in the construction of the temples' (Stoddart et al., 1993). For Malone, Bonanno, Gouldner, Stoddart and Trump it is 'a failed experiment in the Mediterranean laboratory' and 'a cautionary tale of what happens when a people spend too much energy on worshipping life rather than sustaining it' (Malone et al., 1993: 117, 110).

It is an interesting question why scientific, archaeological, narratives can conduce to over-elaborate theorizing on skimpy evidence, but my concern here is to point to the very extensive and highly structured society invoked in the Gozo team's explanation. This may in part be due to the processual framework in which the neolithic is conceived as a switch in resource extraction from hunter gathering to farming, and in which megalithic structures are taken to *reflect* the society (Thomas, 1991). It may also be due to their representation of the monuments as plans (Richards, 1993: 147). This approach is a good example of what the anthropologist Tim Ingold calls a 'building-perspective' in which 'which worlds are made before they

are lived in' (Ingold, 2000: 179). It leads to an erasure of the people who built them, moved through them and performed space through them – phenomenological components recognized in the contrasting form of spatiality of Ingold's 'dwelling perspective' which is discussed later (Ingold, 1993b: 152; 1995: 58; 2000: ch. 13; Tilley, 1993: 14).

It is, I think, the modernist spatiality of the plan-based view which leads to the assertion that there must have been an architect for the monuments and hence a stratified society with specialized division of labour. Pace for example claims that:

because of the sheer engineering feats that these structures demanded, construction may have certainly required careful organisation of human resources and materials as well as pre-designed plans. Indeed it has often been tempting to view fragments of limestone and ceramic models of buildings as possible evidence of pre-construction planning and design. (Pace, 1996: 6)

Clay and limestone models of buildings are, however, fairly commonplace at other sites and are more routinely interpreted as votive offerings, as in the Minoan context for example.

Functionally, the monuments, almost without exception, have been taken to be 'temples' because of the presence of what are seen as altars, offering bowls, evidence of sacrifice, and the ubiquity of apparent 'cult figures'. Additionally there is no evidence of domestic habitation at the monument sites and burials are restricted to the Hypogeum at Hal Saffieni near Tarxien on Malta and the Xhagra circle near Ggantija on Gozo. But the designation 'temple' entails a rather restricted narrative. While the evidence does seem to indicate a temple function, the recognition of multiple, changing functions over what is a very long period, with accompanying transitions of spatiality and social organization, allows for the possibility of very different accounts.⁵

Such developmental, multi-functional accounts would also avoid the simplistic tendency of explaining any prehistoric artefacts, constructions, or cultural expressions whose purpose is unknown and hence mysterious, as necessarily having a ritualistic or religious function. Communal food storage, preparation and distribution, for example, is a possible function suggested by the communal quern found at one of the smaller monuments at Kordin (Trump, 1981: 73). Healing centres are another possibility (Kostof, 1985: 37). But it is in the performance of space and knowledge through the movement of people and their reading of the monuments as encoded memories, that the structures suggest a much broader and more fluid designation.

I have argued elsewhere that the apparent necessity of plans, designs, and architects for the construction of complex structures is a result of our privileging the representationalist over the performative (Turnbull, 1993b, 2002). Performativity is about 'practices, mundane, everyday practices that shape the conduct of human beings towards others and themselves in

particular sites' (Thrift, 1997, cit. Nash, 2000: 655). Here I want to consider the performance of spatiality in the orientation, the place and the shape of the monuments in the light of various turns the postprocessual or interpretive archaeologists describe as linguistic, social and cultural anthropologists as phenomenological and some sociologists and historians of science as spatial, narratological, or travelling (Bradley, 1998; Brown, 1998; Hodder, 1995; Shapin, 1998, 1995; J. Thomas, 1999; D. Thomas, 1996).

The rather positivistic approach of the processualists has been opposed by the more interpretive style of the post-processualists who have largely focused on the prehistoric landscape of Britain and Northern Europe.⁶ The only post-processualist discussion of the Maltese megaliths to date is a brief mention by Bradley who sees monuments as 'orchestrating human experience'.

[T]heir size determines movement in and around the monument, a good example is provided by the neolithic temples in Malta, the buildings are not just a series of monumental backcloths they are a series of screens To take the sequence at Hal Saflieni in its earliest phase there were seven areas of enclosed space, but only two distinct thresholds to cross. . . By the latest phase at this site the number of enclosed spaces had risen to fifty-four and there were no fewer than eleven levels of access: eleven thresholds at which entry could now be denied. Monuments may offer a sequence of experiences to some people and exclude others completely. (Bradley, 1993: 48)

This performative understanding indicates a marked commonality of views between the spatial/narratological approach in science studies and interpretive landscape archaeology. Thomas, Tilley and other post-processualists 'talk about how people move through monuments, what they see from different points, how the physical experience of the monument affects its perception' (Johnson, 1999: 114). This 'thinking through the body' is the strongly performative sense of practice which stresses the interaction between the material and the mental that is implicit in Bourdieu's view that the body 'does not represent what it performs, it does not memorise the past, it enacts the past, bringing it to life' (Bourdieu, 1991: 23, cit. Thrift, 2000: 218). It is reflected, for example, in Jean Lave's classic work *Cognition in Practice* (1988), where cognition is taken as embodied action.

One question that has concerned the processualists is the strongly marked orientation of the monuments. Their major axes all point the same way, predominantly to the south east, which implies a deliberate and common reason for favouring a particular way of locating the monuments in the landscape. Possible astronomical alignments have been considered; orientation towards the solar equinoxes is a possibility, but unlikely given their abstract nature and the difficulty of identifying them other than mathematically; orientation towards the solstices or to major standstills of the moon is unconfirmed (Serio et al., 1992). The Gozo team have taken a novel approach and suggest the major orientation is the reverse, towards the north west. They distinguish between the direction that those within the monuments face and

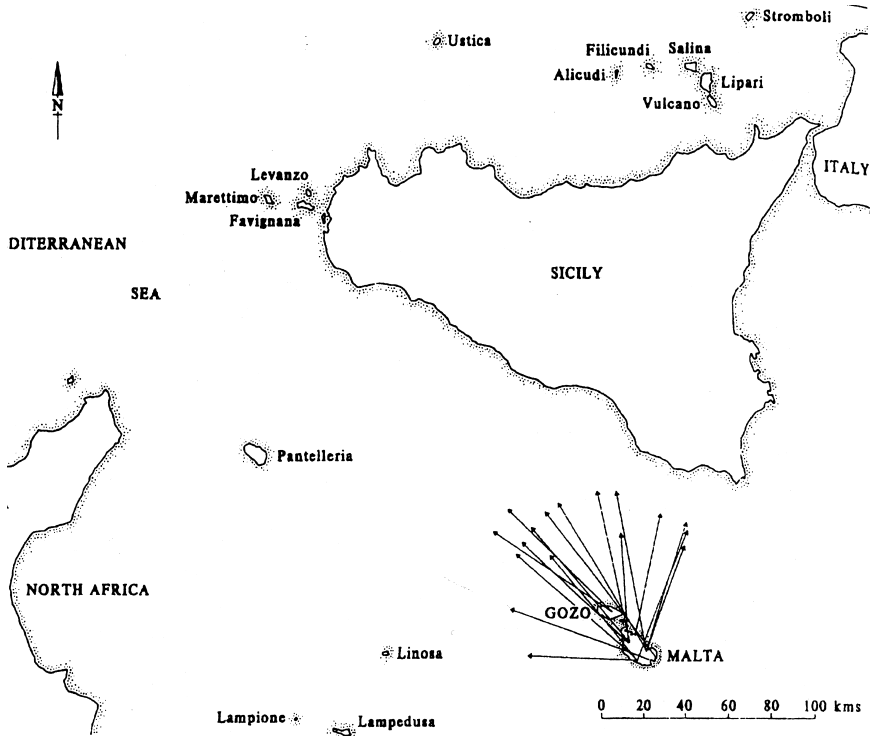


Figure 3 The Orientation of the Maltese Megaliths

the direction faced by those outside looking towards the monument, i.e. the north west: a direction which in their view, represents a longing for the ancestral homelands and the source of highly desired but no longer available materials like timber and obsidian (Stoddart et al., 1993: 15–16).

Casual inspection of the map (Figure 3) shows the majority of NW orientations seem to point towards very little, which may indicate that this abstract spatialization is at a far remove from that of the monument builders. It seems more likely to me that the southerly orientation is towards the sun and aimed at maximizing light entering the monuments, but what has not been considered is whether they are also oriented towards major obvious topographical and environmental features, valleys, hills, the horizon etc. For the post-processualist and landscape theorists the key question is, why are the monuments set in the landscape where they are? (Tilley, 1994). But as yet no work has been done on the topographical orientation, the landscape setting, or the various ways in which the Maltese megaliths could have been performed visually as viewscapes, acoustically as soundscapes, or in terms of dwelling as taskscapes.⁷

The way space is shaped by the monuments is as important as their

spatial location and orientation. Trump suggests the curvilinear, trefoil, internal form is a representation and development of rock-cut tombs found on the island, while others claim they model the body of the goddess represented in the associated figurines (Trump, 1981: 65). Development from rock-cut tombs seems plausible but such complex organic shapes are contraindicative of a plan and architect and supportive of indigenous tradition and renewal. They also speak to a different spatiality from our own, one in which space is brought into being through the movement of people through the landscape rather than through the inscription of the map or the grid. However, no work has been done on the metrology of the monuments, how the forms were generated, nor has a key question for science studies been addressed, that is the question of how the knowledge of the builders was moved and assembled.

But whatever the answers to the questions about their origins, the form of the monuments does indicate a strong spatiality. There appears to be a clear inside/outside, front/rear distinction, and the massive facades suggest directed movement and a differential access to knowledge. Internally, there seems to be progressively restricted movement within the monuments through a series of doorways, and closed off areas. The so called 'oracle holes' connecting the inner temple with intermural rooms seem to indicate a transmission of knowledge between a small insider group and a larger group on the outside (Bonanno et al., 1990). What emerges is that a characteristic of the monuments is the control of movement and knowledge. Movement or travel is central to a spatialized and performative account of knowledge and material production. The way such monuments control and direct 'movement through space constructs spatial stories, or forms of narrative understanding' (Tilley, 1994: 28).

Science studies and post-processual archaeology have a common concern with spatial history. We create space in the process of travelling through it and in creating narratives of journeys we simultaneously construct knowledge. 'Every story is a travel story – a spatial practice' (de Certeau, 1984: 115–16). In building and making monuments and artefacts we create space through dwelling in it. Spatial history is, then, the reconstruction of the narratives of our movements and 'dwellings-in', through which knowledge and space are brought into being. These movements of people have been erased in the narratives of 'imperial history' where contemporary scientific forms of spatial performance are taken for granted (Carter, 1987; Carter and Malouf, 1989).

Conclusion

This indicates that in order to gain the 'mobility' to displace such established forms of spatial performance we need to adopt theories, as Jane Jacobs has suggested, that are sensitive to movement and diverse assemblages of people and place (Jacobs, 1996:7). However, there is some further understanding of spatiality and performance required before 'spatial history' of the kind envisaged by Carter is possible.

Bruno Latour has suggestively indicated the historicity of space in his distinction between trail and networks.

Far from being primitive *terms* time and space are '*consequences* of the way we relate to one another . . . instead of a single space time we will generate as many spaces and times as there are types of relations. Thus, progressing along jungle trails will not produce the same space-times as moving smoothly along networks. (Latour, 1997: 174–5, cit. Thrift, 2000: 221)

Nonetheless within science studies there has been a general tendency to overlook movement through the landscape and its consequent effects on spatiality, possibly as a result of the emphasis on the production of knowledge. While within archaeology, though it has come to recognize the mutability of space, there has been a tendency to disregard the co-production of knowledge because of the emphasis on material culture.

What is needed in understanding the spatial co-production of knowledge and material objects, could perhaps be found in the kind of synthesis between science studies and archaeology which is implicit in the interpretive and linguistic approach to landscape archaeology and more architectural approaches to the performance of space. Christopher Tilley, for example, describes the way the English megaliths encode memory and movement.

The monuments both deployed and captured an ancestral history. Acting as mnemonic markers they coded historicity and sacred power in particular places, creating a hierarchy of valued points in the landscape on pathways channelling movement through it and sustaining knowledge of it. (Tilley, 1994: 204–5)

Thomas, for whom 'monument building is fundamental to Neolithic existence in Britain' (and plausibly by extension in Malta as well) (Thomas, 1999: 35), differentiates himself from the processualists in seeing the monuments as representing rather than reflecting the social context. The monuments 'had no single meaning. They provided a technology by which people could be reminded of different rules and codes of procedures according to the context in which they were experienced' (Thomas, 1991: 10–11; 1999: 46).

Increasingly, as the monuments grew more complex and were rewritten by being altered and added to, they served to restrict the 'movement of people to particular places, to limit posture and what could be open to view' and hence 'the ways in which a place could be experienced and read' (Thomas, 1991: 10–11). 'So a society like that of the British neolithic, engaged in structuring landscape through the building of monuments, is actually involved in the "making" of human subjects and their consciousness' (Thomas, 1999: 36).

For the post-processualists space is performative, but can we be

clearer about what this might mean? Space is a particularly popular trope. We are bombarded with mental/cognitive space, discursive space, knowledge space, social space, architectural space, object space, Euclidean/Cartesian space, dwelling space, body space, haptic space, optical space, acoustic space, personal space, existential space, network space, communications space, travelling space, narrative space, memory space, sacred space, geographic space, cartographic space, space-time, cosmological space, abstract space, mathematical space. Conceivably such spaces could be grouped as four general types; discursive, cognitive, existential, and material, but they tend to flow into each other and may be constitutive of larger general forms like social space and knowledge space. Forms which Henri Lefebvre distinguished as 'representational spaces' and 'spaces of representation' in his analysis of the spatial practices by which space is produced or performed through the interactions of bodies, objects and environments (Lefebvre, 1991: 33, 38).

The concept of performativity had its origins in Austin's linguistic theories where he identified a category of statements whose meaning was dependent on the act of their utterance in a particular context, for example 'I pronounce you man and wife'. Performativity developed a discursive component with Foucault, then came to be used in describing bodies and identity, and has now become equated with practice (Austin, 1962; Butler, 1997; Nash, 2000; Thrift, 1997). In addition to the linguistic/discursive/normative, bodily, identity, and practice aspects the key component is movement. In a kind of double moment people perform objects of all kinds, but especially buildings, by moving through and around them but buildings also perform people by constraining their movements and by making likely certain kinds of encounters between them and others (Hillier and Hanson, 1984: 6, 4; Hillier, 1996). Performance also has a more theatrical and psychological sense of role playing and a narrative sense of multiple, reflexive overlapping and conflicting actions and accounts (Briggs, 1996).⁸

An account which would enable the explanation of the materiality, discursivity and performativity of knowledge/space needs to combine narratives, bodies and movement in the linking of people, practices and places. Discursive accounts tend to leave out bodies, material accounts tend to leave out spatiality, and performative accounts to leave out knowledge. What then is the link to knowledge? Knowledge is itself deeply imbricated in space, travel and movement. Adrian Cussins (1992), for example, has rather neatly captured the spatiality of knowledge in his notion of 'cognitive trails'. He argues for a performative 'travelling account of understanding and representation that does not opt for an epistemological grounding in either of the two standard alternatives, thought or experience'. In his view, much of our 'intelligence in communicating and acting consists in our ability to *move between* alternative conceptualisations of a problem domain' – that is a cognitive trail (Cussins, 1992: 654). Cussins' invocation of a trail like that of Latour mentioned earlier allows a performative understanding of knowledge in its focus on movement through space and making connections. This

travelling perspective is also developed by Jim Clifford who sees location as an itinerary, a series of encounters and translations. Hence knowledge is acquired through dwelling and travelling (Clifford, 1997; Turnbull, 1991: 35, 2002).

The components of such a performative understanding of spatiality and knowledge through movement, narrative and trails come together in Ingold and other anthropologists' recent discussions of way finding. For Ingold 'dwelling in the world' entails movement:

not between locations in space but between places in a network of coming and going that I call a region. To know one's whereabouts is thus to be able to connect one's latest movements to narratives of journeys previously made, by oneself and others. In wayfinding people do not traverse the surface of a world whose layout is fixed in advance – as represented on the cartographic map. Rather they 'feel their way' *through* a world that is itself in motion, continually coming into being through the combined action of human and non-human agencies. I develop a notion of mapping as the narrative re-enactment of journeys made, and of maps as the inscriptions to which such re-enactments may give rise. However the building perspective enshrined in modern science splits mapping into the phases of map-making and map-using, and likewise splits way-finding into the twin projects of cartography and navigation. (Ingold, 2000: 155)

knowing, like the perception of the environment in general proceeds along paths of observation. One can no more know *in* places than travel in them. Rather knowledge is regional: it is to be cultivated by moving along paths that lead around, towards or away from places, from or to places elsewhere . . . all knowledge systems including science are integrated laterally rather than vertically . . . *we know as we go*, from place to place. (Ingold, 2000: 229)

This performative understanding of space and knowledge is also revealed in Pandya's examination of Andamanese cartography. The Andamanese understand their island's topography not in terms of location but movement through space:

Ongee [hunter and gatherers from Little Andaman] spatial categories are not given per se but rather emerge through the practice of movement. Consequently, the Ongee map is not of places in space but of movements in space. Movements from one locality to another and the sequence in which movements are accomplished become direct representations of changes in places in a space. For the Ongee, movement alone defines and constructs space: space does not define and construct movement. (Pandya, 1990: 793)

Inuit wayfinding is similarly bound to movement, knowledge and trails:

When navigating, Inuit bring all their knowledge, experience, and senses to bear on every available environmental sign and circumstance including wind direction, the set of snowdrifts, landmarks, vegetation, sea currents, clouds

and various astronomical bodies, clues are even derived from the behaviour of sled dogs and other animals.

All these elements are integrated in their knowledge of traditional routes or trails through the combination of 'their highly refined linguistic capacity to specify precisely the location of things and places' and their wide and dense network of place names (MacDonald, 1998: 162; see also Rundstrom, 1990).

Inuit today travel in the knowledge that their traditional routes have stood the test of time, are safe and efficient, avoid the hazards of thin ice, boulder fields, and make optimal use of local topography and prevailing snow conditions. (MacDonald, 1998: 189)

Widlock in his work on the wayfinding of the Hai||om Bush People finds

that performative and mental map theories fall short in one important dimension – the transmission of the knowledge.

Like other orientation strategies Hai||om dead reckoning symbolically links two constructs. However, unlike those associated with Indo-European languages it does not rely primarily on the intersecting body-centred axes of left right, front back, and unlike Western maps, Hai||om orientation is not based on a grid of latitude and longitude. Rather the Hai||om use their experience of walking speed and their memory of places along routes and complement this with their socially shared knowledge of a patchwork of landscapes that form Hai||om country. (Widlock, 1997: 322)

For Widlock wayfinding is not just a skill located in the mind of an individual, it is socially shared as gossip. In all these cultures including ours, historically and locally contingent forms of knowledge and space are coproduced in memory and movement.

What this examination of space and performance has provided is a narrative sensitized to movement and assemblage in which space and knowledge are portrayed as coproductions of the actions of the neolithic people of Malta and their monuments as they 'socialised the landscape' (Taçon et al., 1997: 961). These monuments can be reconceived as 'theatres of knowledge' in which the neolithic Maltese knowledge traditions were performed.

An essential point is that if space is performative, it has a history, and if knowledge is performative it is spatial. Neolithic experience of space was different from ours and other cultures' and was intimately related to the specific ways in which people moved through and marked the landscape (Thomas, 1999: 36). Neolithic knowledge was thus based in a different spatiality. Space and peoples' movements through it have been subject to a wide variety of historical changes especially economic and technological (Thrift, 1996). Understanding the narratives in which we explain that history

and the ways in which people, objects, knowledge and space co-produce one another provides for the possibility of envisaging ways in which knowledge/space/society could be transformed.

Notes

1. The literature is too large to cite *in toto* but examples in science studies and closely related areas include: on the 'spatial' (Shapin, 1995, 1998; Turnbull, 2000); on 'narrative' (Brown, 1998; Law, 2000; Rouse, 1996; Traweek, 1992); on the 'performative' (Nash, 2000; Thrift, 1996, 1997, 1999, 2000) and the 'material' (De Laet and Mol, 2000).
2. Renfrew makes a suggestion that Stonehenge can be seen as a theatre (Renfrew, 1997) as does Bradley (1998: 100). Museums as literal theatres of knowledge were first proposed by Samuel Quiccheberg in 1565 (see Markus, 1993) (I owe this reference to Simon Schaffer). On theatres as mnemonic repositories see Yates (1966). On spatialized knowledge, heterotopias and theatres see Foucault (1984). There is also the as yet unsubstantiated possibility that the monuments may have been not just temples but literal theatres too. The theatre-temple complexes of Roman times could provide a much later analogy (Hanson, 1959).
3. Obviously much turns on the plausibility of differing population estimates. E.g. Blouet (1984: 29) puts the population at 4000, almost a third of Renfrew's 11,000. High estimates go with a more elaborate social structure. For a discussion of the compulsion to find chiefdoms see Yoffee (1993).
4. Far too little attention has been given to one of the most important ways in which people moved, that is by sea. The absence of maritime materials from the archaeological record has led to a severe underestimation of the maritime capacities of neolithic people. 'The replicative studies of Pleistocene maritime navigation have shown decisively that the knowledge and technological skills required to sail the open sea are significantly greater than most archaeologists are capable of imagining' (Bednarik, 1999: 92). Johnstone claims Mediterranean neolithic boats were most likely built of skins stretched on frames. If this is correct it is unlikely lack of timber would have led to isolation (Johnstone, 1988). On neolithic boats outside the Mediterranean see McGrail (1998). The most 'immutable mobile' which clearly reveals the trails of early human movement is obsidian.
5. Renfrew (1973b: 549) himself points out 'what today seem impressive and coherent achievements, reflecting perhaps the conception of a single mind were often the result of accretions over many centuries', like the medieval cathedrals (see Turnbull, 1993a). This view is reinforced by Evans: 'It is also evident both from inspection and from the excavation evidence that none of the complexes was planned as a whole, but each grew by a process of alteration and addition in response to specific needs at different times' (Evans, 1996).
6. According to Hodder and Shanks post-processualists believe in theory data interdependence and pluralistic perspectives, as do some processualists and positivists, but the key divide is over method. Processualists believe the empirical method is an absolute standard for evaluating work, while post-processualists are concerned with situated interpretations and how that feeds back into the questions they pose (Hodder, Shanks et al., 1995: 38–9; Hodder, 1997: 694).
7. On viewsapes and neolithic monuments see Llobera (1996); on the acoustical properties and soundscapes see Watson and Keating (1999). For the first suggestion of an acoustic approach in Malta see Biaggi (1989). On the more general

possibility of augmenting a visual approach to landscape with sound see Roseman (1998) and Gell (1995). On song see Ingold (1993b). On taskscapes see Ingold (1993a).

8. This corresponds strongly with Hodder's views on post-processual method (Hodder, 1997).

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