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A SYMBOLIC LANDSCAPE OF MEMPHIS: LANDSCAPE, MONUMENTS, PEOPLE AND THE GODS

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2005

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~ABSTRACT~

A SYMBOLIC LANDSCAPE OF MEMPHIS:
LANDSCAPE, MONUMENTS, PEOPLE AND THE GODS

This thesis examines the ancient Egyptian symbolic landscape of Memphis to the end of the Old Kingdom, circa 2100 BC. The principal research objective is to examine what monuments mean and evaluate them within the context of an existing symbolic system, in contrast to the traditional functional explanations that describe a monument’s purpose in terms of how the landscape was used and exploited. It also considers myths, legends and place names as a means to understand the cultural landscape.

This thesis is principally structured in three parts. The first part covers the recent work done on reconstructing the ancient landscape of the Memphis region. The objective is to describe the region in terms of its natural topography and geology to gain an insight into the ancient perception of the landscape. A literature review chapter discusses the most recent research in areas of landscape, pyramid studies and related subjects. Theoretically, this thesis uniquely approaches Egyptology from a symbolic landscape perspective, where monuments, landscape and people are all active participants in the society, in a constant reflexive and interpretive relationship. The objective here is to gain an understanding of how landscape and monumental architecture influenced the ancient Egyptians and, in turn, how the Egyptians used architecture as a symbolic expression.

The data source for this research is based on published literary sources and personal fieldwork. This work is presented in a series of tables, which include the temporal and spatial distribution of archaeology in Memphis, pyramid site inter-visibility, pyramid locations and relative distances and material types used in pyramid construction. The qualitative and quantitative analysis of this material is evaluated to interpret the natural and cultural landscape of Memphis. The conclusions illustrate how Memphis was sacred before the monuments were built, through the cultural appropriation of the local topography and ancestor acknowledgement.
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~INTRODUCTION~

This thesis came about after several years of study in the Egyptian Archaeology program at UCL. After three and a half years of research, I had grown disillusioned and tired with traditional approaches to the study of Egyptology. Even though I was studying at the Institute of Archaeology, I was not using any of the approaches to archaeology that my colleagues were using. I would listen to conversations about theoretical concepts that I had never heard of and would immediately dismiss them as not being appropriate for my work. For a long time, I was of the opinion that theory was irrelevant to Egyptology. But as the years progressed, I was growing increasingly frustrated and could not understand why I was struggling with the interpretation of my material. At the suggestion of a friend, I picked up a book on theoretical archaeology and immediately devoured each and every page; this was exactly what was missing from my research.

I conceived this thesis one afternoon while sitting in the basement of a Starbucks coffeehouse, directly opposite the British Museum. I was reading Matthew Johnson’s *Archaeological Theory: an Introduction* (1999), using my latte-stained napkin to take notes. As I read, I began to think about ways in which this sort of thinking could be used in an Egyptian context. Two hours later, I had read several chapters and left feeling incredibly inspired. I consulted some colleagues who were ‘into theory’ and they suggested a few other authors for me to read, such as Richard Bradley, Michael Parker Pearson, and Christopher Tilley. All of these authors were prehistorians, writing in the context of Neolithic and Bronze Age Britain. I could not help but wonder if a similar approach could be used in Egypt. Obviously, there were marked differences but I became aware of the structure of their arguments and the theoretical framework being used. These authors were discussing some issues I felt were lacking in traditional Egyptology, issues such as how monuments were situated within the greater landscape and the archaeology of natural places.
In particular, I was most influenced by the works of Richard Bradley. Bradley’s first book was entitled *Altering the Earth* (1993), where he discusses monumental architecture as being a physical and experiential restructuring of the landscape; once a monument has been built, present and future generations now have to negotiate it. How did the monument change the perception of the landscape? Did monuments give new meanings to places? Bradley also included the natural surroundings of the monuments to help understand their placement, as he surmised that the placement of monuments was a deliberate act. Bradley also discussed how monuments created a sense of place and a social identity among the people who built and lived among the monuments. The whole concept of landscape and monumentality had captivated my interest.

Michael Parker Pearson’s work on death and mortuary practices (1993, 1999) was immediately obvious for me to use, considering the funerary context of the majority of finds in the Memphis region. Parker Pearson turned the perception of death and mortuary rituals upside down, in my opinion, where he emphasised how these ‘death rituals’ were more of the benefit for the living and not for the dead. For example, a tomb will physically ‘mark’ the landscape as a place, which will carry various connotations to the people living and negotiating this landscape. From this perspective, I was able to re-think how the Memphis landscape gradually transformed itself from an unmarked space to one cluttered with thousands of royal and private graves- a national necropolis, a place where kings made their mark for all eternity.

I started to get interested in how an area could be transformed into a meaningful place through constant use and re-use of a site. People would repeatedly visit a particular place and anchor memories and events to specific places in the landscape. Through time, these places would transform and become ‘marked’ with burials, houses or some other form of human construction. Once this had occurred, a place would be forever altered. But one thing I also noticed is that these associations and meanings are fluid and were re-interpreted by subsequent generations of people living and experiencing the landscape.
Meanings are never fixed and this single idea fascinated me in reconsidering the tradition of pyramid building in Old Kingdom Memphis.

Richard Bradley wrote two other books that also inspired my work, entitled *The Archaeology of Natural Places* (2000) and *The Past in Prehistoric Societies* (2002). Bradley discussed how monuments could have been perceived as past relics, if we consider that there is no difference between a 'natural' and a 'cultural' monument, or landform, with the dissolution of the nature/culture divide. Also, he discusses the significance of quarries, suggesting that certain places in the landscape may hold special significance and thus to remove stone from it may carry extra meanings, especially when later incorporated into monumental architecture. It was this extra level of meanings that I was most interested in, and I became curious about whether a similar thing had also occurred in ancient Egypt.

The other author that inspired me was Christopher Tilley and his work with phenomenology. From his book, *A Phenomenology of the Landscape: places, paths and monuments* (1994), I began to understand the meaning and order of places, as well as the inter-visibility of monuments. Tilley explained how phenomenology could be used to re-create the sensual experience of being in the Neolithic landscape by illustrating what could and could not have been visible and the order of monuments. Tilley emphasised the significant relationships between monuments and their physical settings and stressed the dissolution of the nature-culture divide (see also Tilley 1996; Tilley *et al.* 2000). This got me to think about the physical attributes of Memphis and how this perception may have been culturally altered with the construction of pyramids. I also began to wonder what would be visible (and equally invisible) from the perspective of each pyramid site. How did pyramids physically change the experience of being in the Memphis landscape?

All of this got me thinking about the landscape of Memphis: What did the pre-pyramid landscape of Memphis look like? How did the first settlers in Memphis perceive their natural surroundings? How did people respond to their topography? The Egyptians were such keen observers of their natural world that it seemed obvious that the monuments were a
further expression of these observations. And the Memphis landscape is filled with several striking geological and geographical features: the narrow, constricting Nile valley with the white limestone cliffs of Tura, the imposing rock outcrop near the Citadel, the natural springs on the east bank, and the wind-carved desert landforms. Was there any means of understanding the way in which the Egyptians perceived the landscape? I started to think about the possibilities of the cultural appropriation of the natural landscape and was optimistic that it was possible, and thus began to construct this thesis.

When I started to look through the Egyptology literature, I noticed that there was a long tradition of occupancy in Memphis before a pyramid was built. This started me thinking about the different ways that people could have been using and engaging with this landscape prior to pyramid construction. Was there anything inherently in the landscape itself that encouraged or influenced people to live and bury their dead here? And was this area chosen as the national capital and royal necropolis? I was aware of all the standard answers for the site selection of Memphis but I wanted to explore these questions from a different perspective, to explore the symbolic possibilities and associations with the landscape.

The other issue that I was becoming aware of was the gradual accumulation of monuments. Even though I had been studying this necropolis for quite some time, I had never really realised just how long it would have taken for all the monuments in Memphis to been built. By the time the last pyramid was built 500 years later, the first pyramid may have been in relative ruin. During this 500-year period, something was always being built. What was it like to be in Memphis during the Old Kingdom? Every generation or two, a new pyramid was built and probably hundreds of private tombs were continually being constructed. I became aware that Memphis was a palimpsest landscape, constantly being written, re-written and even over-written.

But more than anything else, one question plagued me: Why were the majority of pyramids built in this one stretch of desert? It seemed to me that there were several
other suitable places to build pyramids, such as the areas near the Fayium. I also began to wonder about the types of materials used in their construction. If these monuments were materialisations of cosmological principles, representing divine kingship and royal authority, then perhaps an examination of pyramid locations, the stone sources and colours and their uses in the monuments extract an extra layer of meaning? Now armed with this arsenal of theory, I decided to tackle the Egyptian material and see what sort of answers I could find if I asked a different set of questions.
CHAPTER 1

LANDSCAPE OF MEMPHIS:
ITS CHARACTERISTICS, PROBLEMS AND ISSUES

The area known as Memphis has a higher density of Royal pyramids of any other place in Egypt. Memphis stretches for 30 kilometres along the River Nile and along the west bank, 26 King's pyramids were built within a 500-year span. More than how the pyramids were built, I am concerned with exploring the possible social motivations behind choosing Memphis as the royal necropolis. Why was the area of Memphis selected for pyramid building over any other location in Egypt? Was there anything special or significant about this landscape? These questions are central to this thesis and will be explored in great detail.

The landscape of the Memphis region may appear timeless to a modern traveller, but to an archaeologist, Memphis has thousands of years of human history etched into its surfaces and hidden under the sands. From the first pit grave in 5500 BC to the modern urban development, each cultural addition has permanently changed the landscape of Memphis by adding a new layer of memory, altering the ways people interact and engage with it.

It may be inappropriate to assume that the same awe that inspires us about the pyramids must have also existed in the past. But what if it did? It may seem obvious to say that the pyramids are large and imposing monuments, as they clearly are. This thesis aims to explore the experience of being in the Memphis landscape during the time when the Old Kingdom pyramids were built. I am curious to understand how these monuments were perceived and interpreted by the people who lived during their construction.

1.1 "MOVABLE" LANDSCAPE

One of the first steps in re-creating the Old Kingdom landscape is to understand the way in which it may have looked during the time it was occupied. One of the most striking qualities of the Egyptian landscape is its dynamic characteristic – it is constantly

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changing. By virtue of the Nile Valley being a riverine floodplain, it has been called a “movable landscape” (Hassan 1997). There is a constant change in the location of water channels, river banks, basins, mounds (areas of dry land) and paths through processes of aggradation and degradation all depending on the volume and velocity of the annual inundation, seasonal rains and desert wind storms. Each of these natural influences could physically alter the landscape virtually overnight. The effects could restrict, or open, movement in the valleys, and through the deserts, as paths and access would constantly change. The seasonal variations also affected settlement patterns and the distribution of early villages. In a riverine environment, cities, towns and villages were dynamic, constantly “redeveloping and reclaiming the newly created riverfront at each stage” (Jeffreys 1999a: 253). Everything within this landscape, the settlements, the people and the topography itself was dynamic and fluid. The only things that were constant and permanent were the mountains and the monuments.

The annual inundation occurred towards the end of July, when the Nile valley was covered under a blanket of water. The level of the floods was variable and it was unknown how much, or how little, to expect in a year. Areas of high and dry ground were the most valuable insurance against flooding, and were favoured for housing and animal husbandry. From bank to bank, there was a variable depth of water that made all areas of high ground appear like little islands.

Flash floods were unpredictable and sporadic. The deserts are cross-cut with east-west valleys. These are water channels from air-borne waters, leaving large depressions in the desert plateau. Occasionally in periods of flash floods, these wadis would rage full of water bringing large boulders, coarse gravel and pebbles along with the floodwaters (el-Sanussi and Jones 1997: 248). These floods left large deposits on the river’s embankment, and these slightly altered the local topography (Jeffreys and Tavares 1994: 158). Additionally, the unpredictability and force of these waters would destroy any structures or other objects that stood in thier path. Some of these natural events had the capacity to remove structures
and physically alter the surroundings. Could these events have changed people’s perception of the landscape and the ways in which people moved within it?

The Memphis landscape was dynamic in its natural state, prior to cultural modification. These natural influences make it challenging to reconstruct the ancient landscape, yet some recent work has been able to estimate the level and topography of the valley floor during the Old Kingdom. The original Old Kingdom ground level around Abu Rowash is thought to be at 13.15 m ASL, based on excavated material (Jones 1995: 93) and similarly at Giza, Old Kingdom archaeological material has been found between 13 and 16 m ASL (el-Sanussi and Jones 1997: 242) in the Nile valley.

This landscape dramatically changed due to the gradual accumulation of Nile silts from the annual inundation, which has been estimated at 10 – 13 cm per year in the Memphis area (Jones 1997: 108). “The ground level expected in the third millennium would have been approximately 13 - 14 m ASL (Jeffreys and Tavares 1994: 158). If this were considered as fact, then any monument on the desert plateau would be at considerably higher elevation (i.e. more prominent). On the eastern side of the Nile (in Memphis) are the massive (pre-alluvial) deposits laid down by Wadi Hof and Wadi Digla fans. Jeffreys has suggested these outwash fans would have prominent features on the east bank and they probably created a “bottleneck” by restricting movement in the valley to just 3 km (Jeffreys 1996: 292; Jeffreys and Tavares 1994: 158).

The position of the Nile is not static and has changed considerably since the Early Dynastic periods. The Nile has been moving eastwards for the past 10,000 years (Jones 1997). Jeffreys’ work suggests that the river was much closer to the western desert escarpment, some 4 km west of the river’s current location (Jeffreys and Tavares 1994: 157). It is believed that the one of the modern canals, the Bahr Libeini, is an early relic of the Nile (Giddy 1993: 191; Jeffreys and Tavares 1994: 155; Kees 1961: 147). Recent work by M. Jones has suggested that the apex of the Delta “was situated considerably further south than its present location” (1997: 111) by an estimated 20 km, and possibly as close as 6
km north of the Mit Rahina mound (Jeffreys 1999a: 254).

Research conducted on the ancient landscape has concluded that the western desert had started to encroach on the fertile fields as the river moved progressively east (Jeffreys and Tavares 1994). Jones has suggested that the area around Abu Rowash had a “four to five kilometer wide sandy, semi-arid plain between the valley edge and the desert hills to the west” (1995: 89).

1.2 THE MEMPHIS REGION

The focus of this study is in the north, Lower Egypt, an area known as Memphis. The topography of Memphis is unique, in contrast with the other regions in the country. Memphis is the narrowest point of the Nile valley, north of Aswan, where it is not wider than 5 km (Jeffreys 1996: 292). At this point, the Nile Valley proper ends and opens up into the broad and flat Delta region (Kemp 1989: 8). There is no access either to or from Egypt, via the Nile, that does not pass through the Memphite region (Jeffreys 1999a: 254). Several of the trade desert routes also pass through here. Memphis is either the first thing seen as the Nile valley is entered or it is the last thing seen on the way out. The physical constriction of Memphis is significant for later interpretations, as well as the constricted movement of people.

Memphis has been the capital of Egypt since the beginning of Pharaonic history, yet the origin of this city is shrouded in legend and myth (e.g. Giddy 1993: 190; Kemp 1995: 680; Wenke 1986: 20). Most written sources will mention something about the significance and importance of Memphis as the first capital city of a unified Egypt. I do not intend to question these facts about Memphis as the capital but rather focus on why this specific location was selected.

The history of Memphis is long and complex and has been of interest to scholars for over 2,000 years. Volumes have been written about the history and great myths of the city, however the origins as ancient Egypt’s capital are still unknown. Traditionally,
Memphis was considered to be a single location, situated east of the Saqqara necropolis (e.g. Edwards 1947; Kemp 1989: 36; Wilkinson 1999: 359; Verner 2001: 62), where the remains from the later periods have survived. This area is known today by its modern Arabic town name, Mit Rahina. Typically, the boundaries of greater Memphis are defined based on funerary architecture, as covering a distance of 30 kilometres, from Abu Rowash in the north to Dahshur in the south.

It has often been proposed that Memphis was chosen for the location of the capital city because of its strategic location at the juncture between Upper and Lower Egypt and its strategic ability to control trade by river and by desert routes (e.g. Kees 1961: 147-157; Kemp 1977: 194; Malek 1997: 91; Lehner 1997: 7; Smith and Jeffreys 1986; Trigger 1983: 54-55; Wilkinson 1999: 357-362). Campagno (2003) summarises the three ‘reasons’ for selecting Memphis as the location of the capital city as being ideological, political-military, and for the exploitation of potential economic resources.

When Egypt became unified under a single authority, Kees thought Memphis was the best location for the first capital city as it could monitor the conquered lands and people (1961: 148). The location was a “politically opportune location for the state’s administrative center” as it offered “ready access to both parts of the country” (Wilkinson 1999: 359). Memphis provided political control, where Malek suggests that Memphis was established as an administrative, commercial and a defensive centre “conveniently situated between the Delta and the valley” (1997: 91). From Memphis, the activities of the ‘rebellious’ northern territories could be monitored and any uprisings could be more effectively controlled than if the capital was further south in Upper Egypt.

Campagno suggests an ideological reason behind Memphis’ location was that it represented “the point of equilibrium between both complementary halves – a privileged space for the residence of the god-king, who was guarantor par excellence of cosmic balance” (2003: 155). Memphis was called t3-wy ‘balance of the Two Lands’ (Kees 1961: 150). With the
royal epithet being “Lord of the Two-Lands” of Upper and Lower Egypt, Memphis was the obvious location for the capital of a unified country (Trigger 1983: 77).

In a location closer to the Delta, Memphis controlled the trade routes to and from Asia, and thus controlled the raw materials and manufactured goods. Kees says that “trade was a royal prerogative” (1961: 139), since the kings controlled the resources and maintained the trading relations. “The desire to monopolise foreign trade may have been one of the primary factors behind the political unification of Egypt. The route along the Nile valley is not likely to have been accidental” (Wilkinson 1999: 360). Memphis effectively became the centre of communication and transport. Memphis was able to control both domestic and international trade, which Wilkinson suggests is an “essential requirement for a state-directed, redistributive economy” (1999: 359).

What brought people to this region over any other area? Why did people choose to settle here? These questions have been answered by the typical array of suggestions of controlling trade and the abundant availability of local resources (such as limestone), as discussed above. But I want to take this a bit further and ask a different set of questions. Could the Egyptians have perceived this landscape as symbolic in some way? The Egyptians saw their world through the eyes of their gods; every element of the physical world that surrounded them was embedded with symbolic meaning. The sun was Re and the moon was Thoth; the earth was Geb and the sky Nut (Allen 2003: 23). “Nature was not something distinct from the gods” (Assmann 2001: 63). There were real phenomena and this common belief was what identified these people as Egyptian.

Today, we make a distinction between a natural and cultural landscape. Our natural world is filled with geology, biology and botany and the cultural landscape is that which we have created and built. These perceptions are a result of post-renaissance Western philosophy and may not adequately represent the ancient worldview. We should not assume that their perception of the world was the same as ours. “Landscape is an entity that exists by virtue of its being perceived, experienced, and contextualised by people” (Tilley 1994).
Architecture can embed certain specific meanings in society through the control of people and their encounters with the world around them. But this is not a one-way relationship, as people interact with both natural and cultural features. The Egyptians did not have a science-based distinction between natural and cultural – for them, it was the same thing.

A review of Gardiner’s Onomostica (1947) indicates that no word for landscape existed in the language; instead, they used descriptive words, such as iw island, nhb fresh land, tni tired land or knr, agricultural land. There were more general terms such as desert dsrt, sky pt, and mountains dw. The Egyptian word for ‘land’ tḥ was used to also reference the ‘earth’, which included the sky (Allen 2003: 23). An entire lexicography could be done on the use of Egyptian symbols to represent their physical world but unfortunately, it cannot be addressed here.

Aside from later examples, the early Egyptians left no maps. “Ancient Egyptian representations of the world appear to have been limited mostly to symbolic images of the cosmos intended for sacred purposes” (Harvey 2003: 81). One aspect of the Egyptians’ understanding of their environment was known from the actions of the gods, where mythology was re-created in material form.

1.3 THE EGYPTIAN PERSPECTIVE

One question to ask is: What was the Egyptians perception of their landscape? They did not consider themselves to be separate from nature. Their ideology was expressed in burial customs, which emphasised rebirth and a life beyond death. The world was alive with gods, present in everything that we would call “inanimate”. The Egyptians were keen observers of their environment and these observations were reflected in their own culture. The sun was not an inanimate celestial orb but the body of Re who was born each morning in the east. During the day, Re sailed on his solar bark through the sky and would die each evening in the west. During the night, Re would journey through the underworld only to be reborn again, in the east, at dawn. This myth gave meaning to the

~12~
eastern and western horizons. The east bank was for the living, where the sun rose, and the west bank was for the dead, where the sun set (Wilkinson 1994: 65). “The Egyptian ideal held that a cemetery should be situated on the Western Desert margin” (Seidlmayer 2002: 267). Although this is not accurate for every settlement and cemetery, it does represent a symbolic reality.

The Egyptians mimicked their environment, imitating life in art and architecture, such as detailed, coloured tomb and temple depictions of plants and animals, and stone columns modelled after papyrus or lotus bundles. However, my objective here is to gain an understanding of the meaning of things and to understand the motivation behind specific choices and selections.

1.3.1 Dualistic Attitude

The Egyptians identified their landscape in two halves: the broad, flat Delta and the long, narrow Nile Valley, flanked by desert on both sides. Today, these areas are referred to as Upper and Lower Egypt, where Lower Egypt is in the north and Upper Egypt in the south. Each half of the country had unique iconographic representations. A papyrus plant symbolised the north, and the sedge the south. The Y-shape of the Nile and the Delta can be compared with each of the three plants common in the Nile valley “the palm tree, the lotus and the papyrus. Upper Egypt is the trunk or stem; and the Delta is the palm frond, the lotus blossom, the Fayum is the bud” (Lehner 1997: 12).

The landscapes of Upper and Lower Egypt are strikingly different from each other, which was recognised by the Egyptians as evident in the titles of the kings. As “Lord of the Two Lands”, the kings were represented by geographically specific crowns, a Red Crown for Lower Egypt and a White Crown for Upper Egypt (Hassan 2001: 17). Similarly, a sacred goddess protected each land: a cobra for the north and a vulture for the south. According to Brewer and Teeter (1999: 17) the Egyptians saw their world in four geographically distinct areas, “formed by the imaginary intersection of the river and the east-west passage of the sun, that is, the river flowed from the valley to the Delta, and the sun rose
over the Eastern Desert and set behind the Western Desert.” Each geographic region influenced the local inhabitants in a different way. This dualism played into the Egyptian cosmology, with the east-west passage usually representing death and the south-north passage representing life. This cosmology even played out in architecture, where temple (living) buildings were orientated on a north-south axis and funerary architecture (death) were oriented on an east-west axis (Wilkinson 1994).

One natural phenomenon that seems to have made a dramatic impact on the ancient Egyptian way of thinking is the annual inundation. Every year, around the month of July, the Nile Valley floods for about 10 weeks. This flood “transforms the country into a long shallow lake, towns and villages remaining on low islands linked by causeways” (Kemp 1989: 10). In October, the waters begin to recede, leaving behind a thick layer of rich and fertile silt. This continuous and predictable agricultural cycle may have symbolised death and rebirth. A great deal of the ideology is connected with rebirth, usually with a fertility theme. During the inundation, the floodwaters would often assume different colours. In June and July, at the beginning of the inundation, the water would appear green as a result of the “brief efflorescence of myriad minute organisms” (Brewer and Teeter 1999: 23). In August, the water would look red due to the amounts of rich red earth. Often, the Egyptians associated the colour black with fertility mimicking the black silt colour left behind after the inundation. These themes will be explored in depth at a later point.

1.3.2 Names

The Greeks named Egypt Aiguptos, after the Egyptian word ḫwt-ḥ3-pṯ. “In antiquity, the Nile Valley was called Kemet, the ‘Black Land,’ in reference to the rich agricultural plain. It was conceived as being composed of Two Lands: Ta-mehu, the north, and Ta Shehau, the south” (Brewer and Teeter 1999: 20). The deserts, both east and west, were collectively called Deshret, the ‘Red Land’. Other modern names are also different, such as the Nile. When the Nile was not in flood, it was called ḫtrw, meaning “the seasonal one”. During the inundation, the Nile was called ḫpȝ, representing the river god Hapy. “Everything was oriented to the river and to its flow northwards to the sea” (Butzer
2001: 550). In the Egyptian vocabulary, ‘north’ meant ‘to go downstream’ and ‘south’ meant ‘to go upstream’ (Allen 2003: 23). Rice (1990: 14) has noted that ‘right’ and ‘left’ were equated with ‘east’ and ‘west’, “the orientation being determined by standing on the river’s bank and facing the direction of its flow”. The Mediterranean was known as the “very green” and the Red Sea known as the “very black” (Ball 1942: 3).

1.3.3 The Egyptian World

How did the Egyptians view their own world? They did not have a scientific approach to their geography; rather all natural phenomena were viewed as gods (Allen 1997: 120). According to the Egyptians, their country lay at the centre of the cosmos, a living entity, with the Nile at its centre. For the Egyptians, “their own land was the centre of the universe, and their experience of this land coloured their perceptions of the universe as a whole” (Allen 2003: 23). They thought of the earth and sky as flat plates with projections that touched each other at the extremities (Allen 2003: 23).

The following description is taken from Sir Gaston Maspero in 1895.

“The Ancient Egyptians pictured the universe as a sort of box, between elliptical and rectangular in shape, having its greatest diameter from north to south. The earth, with Egypt at its centre, formed the flat or slightly concave bottom of the box, while a continuous chain of mountains formed the sides and ends, and the sky the top. They supposed a great celestial river to flow continually round and round the earth; from near the eastern peak via the south to near the western peak the celestial river flowed between open flat banks, but from near the western peak via the north to near the eastern peak its course lie within a deep valley filled with dense shadows. The Nile was regarded as branching off from the celestial river, its waters descending to the earth in a great waterfall at the point where the celestial river made its southern bend. Hence the south represented for the Egyptians the
principal cardinal point, by which they orientated themselves, placing sunrise to their left and sunset to their right. They imagined the sun, moon, and planets to be gods, carried along on separate boats which sailed at different rates round the earth on the waters of the celestial river”.

(c.f. Ball 1942: 1-2; see Figure 1.1)

Figure 1.1. A conceptual reconstruction of the Egyptian universe. From Ball 1942: 4, fig. 1.

Life in Egypt centred on the Nile, thus in the Egyptians’ world view, the sky was composed of water (sky-ocean) and these waters surrounded the earth. “The Egyptian perception of itself was defined by the Nile” (Allen 2003: 23). The sun god would sail on his solar bark around the earth each day. As he travelled northwards from the east, the land would be covered in sunlight. The sun would set as the sun god sailed southwards towards the west, plunging the world into darkness. There were three elements to the earth: the sky, the earth and the Duat (Allen 1988: 5-7; 1997: 114; 2003: 25). The Duat has been explained as the place where the sun goes before it rises or after it has set in the horizon.
but the light is still visible. In a tomb dating from 1290-1279 BC, an inscription above the sky goddess Nut reads:

“The upper side of this sky exists in uniform darkness, the limits of which… are unknown, these having been set in waters, in lifelessness. There is not light… no brightness there. And as for every place that is neither sky nor earth, that is the Duat in its entirety”.


1.4 CONCLUSION

The area of Memphis has unusual topography that stands apart from the rest of the country. Its topographical features are unique and are visually striking. There is a different sense of being while in this space; as the valley becomes increasingly narrow, one may feel a bit constricted. When one is in the valley, looking up at the pyramids on the plateau, it is not hard to imagine that this is the place where man meets the gods; where the pyramids touch the sky, where death and the netherworld join.

The extant evidence therefore suggests that the topographical features of Memphis were deliberately chosen because of their cultural meaning and significance. Humans rarely accept their world as it is; they actively seek to modify and change it. They want to understand how and why they exist. They seek answers from their ancestors and from the landscape. “The lived landscape is filled with the voices and the wisdom of those that have gone before” (Edmonds 1999: 155). What would the Memphite landscape look like if there was no division between a geological feature and a cultural one? This thesis will therefore explore the consideration that the natural topography provided the first “monuments” of Egypt and it was these natural elements that the later funerary architecture was actually trying to mimic.
CHAPTER 2

LITERATURE REVIEW

The questions of why and how the pyramids were built and who constructed them has both intrigued and plagued scholars for centuries, consequently generating more than 150 years worth of literature. In this chapter, I discuss and review some of the Egyptological literature regarding the current thoughts and theories about the Old Kingdom pyramids of Memphis. Special attention is paid to the positions of pyramids in the landscape, their site selection and the various motivations behind their construction. Views about the reasons for pyramid placement range from pragmatic explanations to those governed by religious motivations. How the pyramids were built is also another great theme prevalent in the academic literature, as well as the different ideas regarding pyramid meaning, function and purpose. The objective here is to present the existing beliefs and theories about pyramids and to highlight the potential gaps within this body of research and how my research may potentially fill this void.

With regard to the Old Kingdom pyramids of Memphis, the greatest challenge is in understanding their changing locations. The 25 pyramids of Memphis cluster in seven areas, Dahshur, south Saqqara, Saqqara, Abusir, Zawiyet el-Aryan, Giza and Abu Rowash, yet there is no obvious pattern or regularity to their placement. Pyramid site locations changed with time and succeeding kings are infrequently buried in the same location as their predecessor. For example, the four kings of the Third Dynasty built pyramids in three different locations, Saqqara, Zawiyet el-Aryan and Abu Rowash. Similarly irregular are the seven Fourth Dynasty kings who were buried in five separate places, Dahshur, south Saqqara, Zawiyet el-Aryan, Giza and Abu Rowash. This section will examine the different ideas concerning pyramid location and the possible motivations behind their changing location.
2.1 PYRAMID SITE SELECTION

Pyramid placement does not appear to have any obvious or consistent pattern. The pyramids are distributed throughout a 30 km area and cluster in certain areas. Various scholars have made logical and practical suggestions but no single reason can account for all pyramids, as there always seems to be an exception. In this section I will examine some of the prevailing ideas about pyramid placement, such as dictated by geology, topography and resource availability. This discussion also focuses on the location of the capital city and the royal residence, suggesting that changes in one can account for changes in the other.

2.1.1 Geology and Topography

Some scholars, such as Verner, believe that pyramid site selection was very important, yet we are still “trying to decide what actually influenced it” (2001: 70). There seems to be no consistent method or reasoning behind the clusters of monuments. Some have explained their locations as a result of pragmatics. According to Edwards (1947), pyramid construction must have had some standard prerequisites. By evaluating the surrounding topography, Edwards suggests that a pyramid must not be too far from the river or major canal, for reasons of stone transport. They must also be above the level of the flood plain and on a stable rock platform. Based on the pyramid clusters around Memphis Edwards speculates that pyramids must be on the west side of the floodplain, as close as possible to the royal palace and within the proximity of the capital city.

Kemp supports these ideas by suggesting that a geologically stable site was the first factor in site selection, one that is “suitably flat, firm and unencumbered” (1983: 87; 1989: 132). Kemp maintains that the site’s geology and topography were structural constraints and pyramid sites were not “blank pages on which the architects had a free hand to design and to lay out the buildings of their choice” (1989: 130). Sites like Giza and Abu Rowash were chosen because they provided “stable natural plateau surfaces for building on this scale in these materials” (Quirke 2001: 90). Some would even say that the Egyptians did
not have much choice for pyramid construction that the pyramids had to be where they are because there was no other suitable place for them. Once the area started to be built up, kings were “forced by the geology of the West Bank of the Nile Valley to move further south” (Quirke 2001: 90).

Although stable geology was important, it was not the exclusive deciding factor. If a culture decides to build a monumental structure, then surely the ideological motivation will override initial topographical adversities (Goedicke 1995: 35). The plateau on which Snefru built his two pyramids at Dahshur is thought to have an unstable foundation (Edwards 1999b: 211; Lehner 1997: 102). Other pyramids, such as the Step Pyramid at Saqqara, are not considered to have the most suitable foundation, due to a poorer quality limestone. Additionally, Userkaf’s pyramid at Saqqara is thought to be in a somewhat awkward location, not being on stable ground and “would seem to argue against providing a suitable site for a royal funerary complex” (Hart 1991: 146). Although Saqqara may have had a lower quality limestone, the greatest density of Old Kingdom pyramids was built here. Thus, it does not seem that geology and convenience were the only reasons for pyramid site selection.

2.1.2 Resource Availability

Various authors believe that the availability of limestone was a determining factor in pyramid site location (e.g. Kemp 1989: 132). “Some Egyptologists believe that the choice of site for the construction of pyramids was determined by the very practical consideration of proximity to limestone quarries” (Verner 1994: 24). A suitable site should be close to a good quality local limestone source, as well as being able to geologically support the weight of the monument (Malek 1994: 113). Arnold (1991: 159) claims that Memphis was chosen for pyramid building because of the availability of first-class limestone. The archaeology has shown that the core of each pyramid was constructed from locally quarried material and was cased with limestone blocks brought from Tura and granite blocks from the Aswan quarry (Arnold 1991; Lehner 1997).
However, these opinions have been criticised, as there are several other contributing reasons and explanations for pyramid placement. Limestone cannot be the only reason for choosing a site as the same quality and type of limestone is available throughout the region. “After all, limestone occurs almost everywhere in the area of the Memphite necropolis and the technical difficulties involved in obtaining it and transporting it to the building site did not vary substantially between the different places chosen” (Verner 1994: 24). If one site is as good as another in terms of its resources and access, then limestone cannot be the primary motivation behind site selection.

The other underlying assumption made is that a site must have easy access for the movement of stones and other goods. The Khufu pyramid at Giza is located in the north-eastern corner of the plateau, which Goedicke claims is “not a convenient spot” to build a colossal monument (1995: 34) due to the steep plateau shelf to the north and east. When assessing monumental architecture, “the principle of least effort does not apply” (Trigger 1990: 124) and should not be considered. Malek suggests that when considering the “enormous ideological significance of the pyramids” (1994: 113), it is impossible to reduce the decision-making to a single functional purpose. Thus, saying that the pyramids are in one location because of the proximity to a decent quarry site or access to the river should not be viewed as a significant deciding factor. Although pyramids may appear to have a practical function, their scale is often out of all proportion to the apparent motivations for building them. Thus, although these functional explanations are equally valid influences for a pyramid site, there might be alternative, perhaps an ideological narrative embedded within the place itself.

2.1.3 Capital City and Royal Palace

Another hypothesis regarding pyramid placement is the proximity to the capital city and the royal palace. Lehner calls the pyramid cluster the “capital zone” (1997: 7). Edwards (1947), among several others, cites the boundaries of the capital city as being from Abu Rowash in the north to Dahshur in the south, which is a direct correlation with pyramid placement. Erman (1894: 170) first suggested that pyramid location might be dependant
upon the royal palace and his notion is still supported (Kemp 1983: 87, Malek 2000: 99, Verner 2001: 70). Malek suggests “the location of the royal palaces and the availability of a suitable building site near the pyramid of the King’s predecessor may have played a part in the decision” of where to build a pyramid (2000: 99). This raises the question of kinship relations and the idea that pyramid clusters designate family units. Perhaps “the changing locations really represent a regular resiting and rebuilding of the royal palace” (Kemp 1983: 87), which was believed to have changed with every new king.

The greatest difficulty with this proposal is that no Old Kingdom royal residence has ever been archaeologically discovered. Thus, the argument might even be turned on its head, where the royal residences were secondary to pyramid locations. Goelet (1982) conducted a lexicographical study of the contextual use of the word “palace” in the Old Kingdom and observed that the word “palace” had five different meanings and uses, each of which had a distinctly different function. Some of these may have actually been different buildings in separate locations but whether or not these buildings were all within the same palace complex or were geographically separate is undetermined. At the present time, there is no way of knowing, taking into account the complete lack of contemporary palatial architecture.

2.2 PARIPATETIC PYRAMIDS

In addition to questions relating to the location of individual pyramids, issues surrounding repeated changes to the sites chosen for pyramid construction need to be addressed. Malek (1994) questions why pyramid locations are so scattered but concludes that it is not haphazard and meaningless. The pyramids are not in any sort of chronological or geographical order (Figure 2.1), so perhaps there is another motivation. “The idea that the distribution of pyramids is governed by definable ideological considerations is attractive” (Malek 1994: 113). The irregular locations have generated lengthy debates without much resolve. However, there are four different proposals about peripatetic pyramids, 1) site congestion and overcrowding, 2) incomplete pyramids, 3) family clusters, and 4) visibility to the sun temple at Iunu, or Heliopolis (after Malek 2000: 99).
2.2.1 Site Congestion and Over-Crowding

The idea about site congestion suggests that there was “insufficient amount of space remaining in the previous tomb area” (Verner 2001: 70), that would force the succeeding king to relocate. The kings of the Third Dynasty are thought to have shifted the locations of their tombs further north because Saqqara was already considered to be congested (Murnane 1983: 148). This trend is believed to have set a precedent for the Fourth and Fifth Dynasties, where there was a constant shift in burial locations, to include Saqqara, Abusir, Zawiyet el-Aryan, Giza, and Abu Rowash. Some sites, such as Giza, may have been geologically unable to physically support the construction of a fourth pyramid.
Quirke maintains that the Giza plateau was “entirely covered by the monuments” of the previous kings and there was “no space there for a further full pyramid complex” (2001: 128). This situation might have also been true at Saqqara during the Sixth Dynasty when “Teti may have exhausted the topographical opportunities for pyramid complexes in Central and North Saqqara” (Lehner 1997: 157), thus forcing Pepi to build further south. Aside from the king’s pyramid, the site is also littered with tombs for the officials and priests, thus further restricting available land for future construction (Malek 1994: 113).

2.2.2 Incomplete Pyramids

Some have suggested that incomplete pyramids may have influenced the location of pyramids. Several kings had begun construction projects but they had died before the structure had been completed. As Goedicke (1995) and Spence (2000) have suggested, it was one of the first priorities of every new king to begin constructing his funerary monument. Ten of the 25 pyramids built in Memphis were not finished, thus leaving the landscape littered with unfinished pyramids. Every king who took the throne during the Old Kingdom had the intention to construct a funerary monument. Incomplete pyramids are thought by Malek (1994: 111) to be an undesirable site location for the succeeding king, and he may have wanted to build on a pristine site and not on a pre-existing construction site. However, as this suggestion might be valid at Giza, Zawiyet el-Aryan and perhaps Saqqara, it is not the case at Abusir, as there are five sequential pyramids at Abusir of which three were incomplete (Verner 1992). It is unclear to me whether or not a king was interred in an incomplete monument or if the monument was hastily completed for the royal burial.

2.2.3 Family Clusters

The third suggestion to explain pyramid location is the possibility of family relationships and/or religious-political motivation. For example, having a pyramid erected near the oldest step pyramid in Saqqara, might also have to do with family relationships (2001: 70). For example, the pyramid of Userkaf at Saqqara may have been chosen “to bask in the
repute and grandeur of Djoser’s Step Pyramid” (Hart 1991: 146). Similarly at Abusir the family of Neferirkare had “their own enclosed family cemetery” (Verner 2001: 70), believed to maintain family ties. However, reconstructing Old Kingdom lineage is problematic as Quirke warns that we should not consider the family relations between the Old Kingdom kings as “we have virtually no sources for the single events or the family ties” (2001: 127), with the exception of textual sources recorded hundreds of years later. Based on the archaeological evidence and chronological sequence of kings, Malek (1994: 111) dismisses the idea by saying that new pyramids were intentionally distanced from the previous king.

2.2.4 Inter-Visibility and Map Lines

There is an idea that pyramid placement may have a relationship with visibility to the sun temple at Iunu (Figure 2.2). Iunu is located on the east bank of the Nile and is not visible from all pyramid sites, which Jeffreys suggests may be “instrumental in the choice of location of monumental architecture” (1998:65). To account for the pyramids that are invisible from Iunu, Jeffreys studied the royal names (titularies and epithets) and monument location and dismissed the first two Step Pyramids of Netjerykhet and Sekhemkhet as not having an affinity with the sun-god (1998: 67). Quirke maintains that pyramid site location was determined by the visibility with Iunu, as being “the original motivation - to locate the royal burial place within site of Iunu” (Quirke 2001: 89). Goedicke has dismissed this notion claiming that a line can be drawn from Iunu to a number of other random sites and does not explain specific site selection (2000: 406).

Some scholars have examined the visual relationships between monuments and have drawn map lines using the monument’s topographic position and orientation. Some of these map lines appear to be significant and have been evaluated for their intentionality. For example, Goedicke questioned the location of the three Giza pyramids and concluded that the location “is not incidental, but is due to specific ideas” (1995: 32). The south-east corners of all three Giza pyramids are in alignment and if a line was drawn then it would point directly to the Twelfth Dynasty obelisk at Iunu (Goedicke 1995: 39; 2000: 403).
The location of this later obelisk is believed to be in the same approximate location of an earlier Old Kingdom monument.

Figure 2.2. Pyramid inter-site visibility from lunu. From Jeffreys (1998: 70, fig.3).

Goedicke further supported the relationship between monuments and the solar cult when he observed the alignment of the Khufu pyramid at Giza and the later Fifth Dynasty sun temples at Abusir. “When one draws a line from the pyramid through the ‘sun-temple’ and extends this line northwards, it exactly hits the pyramid of Khufu” (1995: 46).
Similarly, if a northward line was drawn from Userkaf’s pyramid at Saqqara, it will pass through the Niuserre pyramid and both sun-temples. It would be tempting to think that this was a deliberate alignment, especially a line with three points, culminating at Iunu. Goedicke concludes that a “line defined by three points cannot be considered a projection of modern geomancy, but has to be recognised as intentional” (2000: 406). The question remains to what degree was this intentionality rationalised by the ancient Egyptians.

In considering deliberate site locations, some have suggested that placement had a significant relationship with other monuments. Some of these relationships are ground alignments while others centre on visibility. Malek theorises that there are three possibilities for positional relationships of pyramids, 1) visible orientation towards a local cult centre, such as Iunu, 2) a relationship with existing monuments, and 3) an astronomical alignment. “None of these require a ‘master plan’; the relationship might have been built up gradually” (1994: 109). Malek observed a conceivable positional relationship between the three Giza pyramids and speculates that this might have also been the case at other complexes within the region (1994). Malek suggests that the relationship between monuments may be ideological, where “the pyramids were ideological statements just as much as they were royal tombs” (1994: 109). Most of this work has been done in attempt to answer the question, ‘why are pyramids where they are?’ and although none of these proposals are conclusive, they are equally valid positions based on observation and historical facts.

2.2.5 Choice of Pyramid Location

A common theme throughout this discussion about peripatetic pyramids seems to be that pyramid sites were consciously ‘chosen’ by the ruling king, or by someone in high command. Spence estimates that after the second year of reign, the new king would have chosen a suitable site, had it levelled and performed the pyramid alignment ceremony (2000: 320). This statement implies that pyramid location was a choice determined by the king. Goedicke has created a scenario where the king floated up and down the Memphis Nile Valley after his accession to the throne, pondering on which site he would like to
put his pyramid (1995: 32). There is 20 km separating Giza from Saqqara, where there are numerous suitable locations flanking both sides of the Nile, which could have been used for setting up a pyramid. If pyramid placement was “merely a reflection of personal aesthetic choice” (Goedicke 1995: 34), then what made one spot more desirable than another?

2.2.6 Religious Allegiance

Evaluating the positions of the various Old Kingdom pyramids, Goedicke (2000) notes that their positions differ according to a changing allegiance to the gods. Djedkare-Isesi’s pyramid is said to have broken the Abusir chain by moving to Saqqara, from where the cult of Osiris is said to emerge (Goedicke 2000: 408). Similarly, Khufu and Djedefre chose their sites in relation to the cult of Re. However, the anomaly of Shepseskaf’s mastaba at south Saqqara is as yet unsolved and it “is tempting to regard it as a sign of religious uncertainty, if not crisis” (Malek 2000: 97). Other possible reasons to take into consideration, such as ancestral use and sacred land use.

2.3 HOW WERE THE PYRAMIDS BUILT?

Much attention has been paid to how the pyramids were built, in addition to where and why they were built. There are hundreds of books and articles published on this subject, each person arguing from the same basic set of assumed ‘facts’. In this section, I discuss briefly some major themes of pyramid construction to illustrate that the mode of construction is equally relevant as the where and why of construction.

The details of construction (Arnold 1991; Clarke and Engelbach 1990) have been discussed at great length, such as the quarrying of stones, preparing the site for building, orienting the structure transporting and hauling the blocks, ramps, the inner core, use of mortar, etc. Edwards (1947) regrets that there are no surviving records on the methodology of pyramid construction but is thankful for the tools and technical marks left by early masons and builders.
First published in 1930, the book *Ancient Egyptian Construction and Architecture* includes a chapter entitled, *Preparations Before Building*, where the authors describe how a model of the finished monument was designed by the architects and approved by the king (Clarke and Engelbach 1990: 46). Detailed tomb plans have survived from later periods but nothing dating to the Old Kingdom. The techniques and methods in monumental architecture are the focus of this book, without any attention given to why they were built in the first place. Similarly, chapters entitled *Preparing the Site* (Isler 2001) and *Construction and Purpose* (Edwards 1947) tend to focus on technical aspects of surveying, levelling, and alignment.

### 2.3.1 Orientation

Some say that the pyramids are oriented to the stars, while others claim that they were solar monuments (Edwards 1947; Isler 1989; 2001). Magdolen discusses the cardinal orientation of pyramids but is concerned with “how the sides of the pyramids were orientated” rather than exploring the significance of the orientation itself (2000: 491). Ritual and ceremony are the usual explanations, involving the king and the goddess Seshat in a ritual known as “stretching of the cord” (Edwards 1947: 197-198; Magdolen 2000: 493; Park 1998). Spence (2000) has convincingly discussed the stellar orientation of the Giza pyramids. A pyramid’s north entrance points to the North Star, the eternal star (Verner 2001: 45) and all four corners match the cardinal directions. The accuracy of the orientation to the cardinal directions impressed Aldred, who claims that “their geometrical precision may have owed much to the influence of architects of Heliopolitan origin” (1965: 55).

However, the Egyptians themselves were not clear about either a solar or stellar significance. Each pyramid had its own name and Quirke (2001) has used these pyramid names to identify both solar and stellar references. For example, Snefru’s pyramid has a solar-based name, *Snefru rises*, while others (only two examples) have stellar names, such as *Starry sky of Djedefra* (Quirke 2001: 116). The pyramidion, known as the *bnbn*, is the
pyramid's capstone. The root of the word is probably *wbn*, meaning 'to shine', in reference to the to the sun and not to the twinkling of stars (Quirke 2001: 117). Whether these structures were were precisely orientated using the sun or the stars, would be a challenging, if not impossible question to answer.

2.3.2 Organisation

There is some discussion about the organisation of a large-scale national pyramid project. The Egyptians were “perfectly capable of successfully completing the pyramids” (Malek 2000: 101) because of the country’s prosperity, available labour pool and high standard of management. Pyramid building had a profound effect on the economy, where some would even say that it was “essential for the growth and continued existence of Pharaonic civilization” (Kemp 1983: 86). Mendelssohn suggests that in the process of building a pyramid, the state had become increasingly centralised (174: 197). Some have suggested that the organisation and management of pyramid construction is more challenging than the completed structure (e.g. Kemp 1989: 130; Malek 1986: 65-86; 2000:101-104). People have taken the time to estimate the extent of the necessary workforce (Hawass 1996; Wenke 1990: 383-384) and the full extent of national organisation (Eyre 1987; Malek 1986) required to support such a large-scale project. The purpose of pyramid building was to “engage a large number of people in a common task” and that the building of the pyramid was more significant than the actual monument itself (Mendelssohn 1974: 179, 196). A national project requires the ability of the state to cope with the consequences of pyramid construction, as well as having the ability to raise a stone structure of large and technological perfection.

2.3.3 Inventing a Pyramid

In addition to how the pyramids were built, there is also a question of who first conceived the idea and what did it mean? There is an underlying assumption that one person was solely responsible for the technological innovation behind pyramid construction, as if this were not an evolution of a collective ideology but rather a single innovative idea. “There
must have been in the prehistoric age unknown geniuses of the order of a Newton or an Einstein, whose thought and imagination reached out beyond their time and transformed the life of mankind” (Aldred 1965: 65). Imhotep was the chief architect responsible for designing Djoser’s Step Pyramid at Saqqara. He was also a priest in Heliopolis, making him the logical link between religion and practice. Some even attribute Imhotep with the invention of stone architecture (Aldred 1965: 68). In later times, Imhotep was deified, celebrated as an astronomer, architect, physician, writer and sage.

Yet others believe that the Egyptians themselves did not “invent” monumental architecture but rather it was brought over from Mesopotamia (Isler 2001: 90). Quirke (2001: 115) summed it up well by saying “these monuments are not easily reduced to a single theme”. The Egyptians did not leave records of their motivations behind pyramid building, so we are left to gather clues from various bits of fragmentary evidence.

2.4 WHY WERE PYRAMIDS BUILT?

After having reviewed the possibilities for pyramid placement and the technicalities of how pyramids were built, the other major area of discussion is why the Egyptians build them. Why pyramids were build has been integrated into discussions with the evolution of the state (e.g. Kemp 1983; Trigger 1990), economic prosperity (Malek 1986), the development of kingship and the rise in the cult of Re’ (Quirke 2001). There is no exclusive reason given for monumentality. Scholarly opinions vary between politics, economics, social, and religious motivations, but it is generally accepted to be some combination thereof.

2.4.1 Political Motivation

Trigger suggests that conspicuous consumption reinforced a developing royal authority and pyramids were built just because they could be, as a blatant display of human and natural resources (1990). It is suggested that this allowed the elites to physically and symbolically separate themselves from the population. As a public display of power
and prestige, the pyramids represented the epitome of kingly control and influence. The evolution of pyramids is often rationalised as an ideological evolution and the gradual increase in political power (Trigger 1990). Working from an earlier suggestion, Lehner (1985) has suggested that pyramid volume could be used as an index of royal resource control. Kemp suggests that pyramids were not just built for their “positive economic or social effects” but rather that theology and the “display of power” are legitimate enough justifications for pyramid construction (1983: 87).

2.4.2 Social Motivation

More than just the pyramid structure itself, the entire funerary complex is thought to be a “highly symbolic mirror of the state’s ideology” (Loprieno 1999: 37). Monumentality is also explained as an expression of divine kingship (Malek 2000: 101). In regards to Djoser’s Step Pyramid complex, Arnold suggests that the monumental size and pyramidal shape offer new ideas about kingship (1991: 42).

The king was meant to rule forever, alongside the gods, thus he was to have an indestructible and enduring monument. It has been speculated that the king’s mummy was never to be disturbed, as the king was a “mediator between humans and the world of the gods” (Verner 2001: 27-28). Therefore, it is deemed imperative to construct a tomb that no one could disturb for all of eternity, “a structure that could be damaged neither by the ravages of time nor human hands in times of unrest” (Verner 2001: 27-28). The conception of these monuments is thought to represent immortality, both from contemporary textual sources and the enduring qualities of stone. There was a transition from the use of perishable materials (mud, reeds and palm) to construction in stone, which is described as a desire to house the dead king in a structure that would last forever (Aldred 1965: 68).

But some scholars have taken this argument a bit further, saying that it was both in the interest of the State and of the people to care for the king for eternity (i.e. Kemp 1989, Verner 2001). If the king was eternally cared for, then so were the people.
“The building of pyramids and the enduring worship of the dead pharaoh became the top priority of the ancient Egyptian state. The architectural and religious development that ultimately led to the royal tomb in the form of a pyramid was an inseparable part of the process of shaping and strengthening the oldest strongly centralized Egyptian state. In this context the pyramid comes more than just a royal tomb; it becomes a symbol of the ruler’s historical and state-building role, the symbol of the state and of the order the Egyptian gods established when they created the world”

(Verner 2001: 28-29).

2.5 PYRAMID IDEOLOGY

Pyramids as tombs were “dwelling places for eternity” (Jánosi, 1999: 27), a belief grounded in an ideology of the afterlife, that the soul of the deceased would live for eternity. There is both inscriptive and archaeological evidence to support these ideas, although Jánosi admits that this is an oversimplification (1999). Some private tombs at Saqqara may resemble domestic buildings in their architecture and stone imitations of organic materials, such as reed columns (O’Connor 2000; Verner 2001: 24). Many have commented that the first pyramid, the Step Pyramid of Djoser at Saqqara, is an exact replica of the royal palace (e.g Stadelmann 1996), although this is just speculation. The pyramid is viewed as a house of the gods, “a union of heaven and earth that glorifies and transforms the divine king and ensures the divine rule” (Lehner 1997: 35). Hawass suggests that the pyramid complex had a ritual function for the deified king more than just being a platform for the royal funeral (1995). It was a place where “the myth of kingship could have been celebrated” (Hawass 1995: 259). The pyramid complex was where the dead king would magically transform, be reborn and ascend to heaven to live eternally in the divine realm. Thus, the architecture had deliberate placements, alignments and orientations, each corresponding to complex understandings of their universe.
(O’Connor 1999). Thus it could be suggested that these buildings within the pyramid complex are a mirror of the ancient Egyptian worldview (Verner 2001: 45).

2.5.1 Meaning of the Pyramid Shape

In a world that is filled with water, places of high ground gained certain amounts of importance and meaning. In the Egyptian creation accounts, the world was surrounded by water and from it emerged the primeval mound, where the first god appeared and created all life (Allen 1988). This mound is a common theme in Egyptian mythology and was known as the high hill, where the king “ascends the primeval mound to meet and be recognised by God in his form as the sun- the implication being that the mound symbolised the world mountain” (Isler 2001: 109). Utterance 222 of the pyramid texts says “stand upon it, this earth which issued from Atum, this spittle which issued from Khoper; come into being upon it, be exalted upon it, so that your father Re’ may see you” (Faulkner 1969: 49). Quirke (2001) suggests that these concepts may be the underlying ideology behind the pyramid shape, where the kings constructed a human-made mountain, to rise up and be met by the sun-god, Re. The pyramid shape re-created the mythical primeval mound of creation and thus had the power to raise the dead (Allen 1988), symbolically giving the king rebirth into the afterlife (Verner 2001: 28, 45). “As the image of the primeval mound, the pyramid is, therefore, a place of creation and rebirth in the Abyss” (Lehner 1997: 35).

2.5.2 Solar Significance

The pyramids are thought to have had considerable solar significance, where Isler has called pyramids “solar mountains” (2001: 110) and true pyramids were “symbols of the sun” (Kemp 1989: 62; Lehner 1997: 34). The Fifth Dynasty Pyramid Texts describe how the sun’s rays were a ramp for the kings to ascend to heaven (Lehner 1997: 35).

Goedicke (1995: 45) claims that there is an overall solar orientation at Giza demonstrated by their orientation towards Junu, as discussed above. Furthering this suggestion,
Goedicke claims that on the evening of the summer solstice, the sun sets directly between the pyramids of Khufu and Khafre at Giza (1995: 45). This corresponds with the Egyptian hieroglyph for ‘horizon’ showing a setting sun between two ‘mountains’.

Although the direct religious significance was not recorded, Quirke proposes that on the basis of monumentality, “the Step Pyramid may be the first great monument equating the single earthly king with a single power in heaven, the sun” (2001: 120). Furthermore, Quirke (2001: 120) observes that Djoser is the first to associate the sun-god Re with himself, using the name Hesyra, ‘he whom Re favours’, as one of his official names and there is archaeological evidence at Heliopolis with an inscription bearing Djoser’s cartouche. Through time, the importance of the cult of Re did not wane, as “there are no group of kings more solar than the 4th Dynasty” (Quirke 2001: 127), considering the introduction of the cartouche, the ‘son of Re’ titulary, the solar boat pits, the Sphinx and the emergence of the true pyramid in the Fourth Dynasty.

2.6 CONCLUSION

This chapter has summarised the major works about how and why pyramids were built. However, despite the tremendous amount of research that has been dedicated to the study of pyramids, I still find that a few issues have not been considered, such as dialectical relationship between the monuments and the landscape. Most studies have centred on the pyramids and the immediate topography but do not inclusively consider a wider landscape perspective that may be gained from a different theoretical position. It is possible that the natural landscape was as an active participant in determining site location and the pre-pyramid history of the site. The continuous site history has not been collectively studied; rather the focus has been more on individual periods. The repeated use of sites may be significant and I will examine the use and re-use of specific sites to illustrate the possible meaning of the site itself.
This discussion about how the pyramids were built is to deconstruct the argument that the academic emphasis has been on the 'how' the pyramids were built more than 'why'. Admittedly, there is some excellent work on this subject but perhaps it deserves more specific attention. My objective is to examine secondary landscape use and the ideology of building materials to illustrate that these issues have been overlooked and may offer more information regarding the meaning and significance of the monuments. The final section about pyramid ideology highlights how pyramids have been thought about in the past, yet there is greater symbolism that was absent in the above discussion. Natural topographical features, historical land use, inter-site visibility, deliberate choices of materials and colours may have contributed significantly to the meaning of pyramids. The next chapter will review the current archaeological literature on the various landscape theories and discuss the potential applications of these theories within an Egyptian context.
CHAPTER 3
SELECTED REVIEW OF LANDSCAPE THEORY

Is it possible to reconstruct the ancient Egyptians perception of their lived environment? It may seem obvious that not every society conceived of their world from the same perspective as we do. Ingold suggests that the landscape can only be known to those who dwell within it (2000: 193). But can the ancient world-view be recovered?

In an attempt to answer this question, I will introduce several ideas borrowed from studies of Neolithic and Bronze Age Britain and continental Europe. For over a decade, various scholars have attempted to gain understandings of the landscape and how perceptions and experiences of the landscape are altered through monumental architecture (e.g. Barrett 1994; Bender 1995; Bradley 1993; Thomas 1991; Tilley 1994). This thesis aims to answer larger questions about natural places in the landscape, the intentionality of building materials and the placement of monuments. These questions will be addressed using the theoretical framework discussed in this chapter.

The palimpsest nature of the constructed Memphis landscape is addressed here in great detail. The analysis begins with the earliest traces of human occupation (c. 5500 BC) and asks what would Memphis look like before the pyramids were built? The analysis is modelled after Bradley, who asks “how far is it possible to study the ancient landscape when the monuments are stripped away?” (2000: 14). The valley floor of Memphis was criss-crossed with irrigation canals, agricultural fields, dense palm groves and areas of high ground with animals grazing. Large Predynastic and Early Dynastic tombs were built on both sides of the river and settlements presumably were also to the east. These constructions physically ‘mark’ Memphis as a cultural landscape over 2,800 years before the first pyramid was built. It is this single concept that I want to emphasise and explore. I would like to reconstruct, as far as possible, the potential meanings and interpretations the ancient Egyptians may have held about Memphis, prior to 2686 BC. I will focus my analysis on the natural and constructed landscapes, including material from both funerary
and occupation contexts. This chapter will address the various theoretical approaches to landscapes, questioning its utilisation its social perception and 'sacredness', and the social implications of a constructed landscape.

3.1 LANDSCAPE DEFINITIONS

The way in which landscape studies have been discussed in prehistoric European contexts have been rarely used in Egyptological studies (except Jeffreys 1998, 1999a; Montserrat and Meskell 1997; Richards 1999). Yet, there are many insights to be gained from this approach. To begin with, it is necessary to define what landscape means in the context studied here. There are a variety of definitions for landscape, as the word itself has varying connotations and interpretations, as each is dependent on the observer. Landscape can “mean the topography and land forms of a given region, or a terrain within which people dwell” (Thomas 2001: 166). This could include all aspects of the physical landscape, such as the mountains, the river, the desert and the valley. Typically, landscape is a visual term alluding to what can be seen, “a visual construct” (Tilley 1999: 180). Other scholars have defined landscape as “the result of social construction of space, containing a bundle of practices, meanings, attitudes, values” (Hodder et al. 1995: 239). Yet, most scholars agree that landscapes can be socially created, where meaning and recognition is assigned to familiar features, stemming from social ideologies.

Typically, the sorts of questions asked by landscape studies have not been explored in Egyptology, such as the lived, experienced and embodied landscape. I have reviewed the Egyptological literature (see Chapter Two) and concluded that, in general, the landscape is perceived by scholars from a rational and materialist point of view, seeing it as a set of resources available to human exploitation. The importance of Memphis is usually in reference to its strategic location to control trade (e.g. Kees 1961) and the abundance of locally available building materials, namely limestone (e.g. Arnold 1991; Lehner 1997). Post-processual theorists reject this position, claiming that this functional and positivist position may not be an accurate representation of the past but rather a result of our
own cultural interpretation. Johnson suggests that landscapes are “viewed in different ways by different peoples” (1999: 103) and there is no universal, blanket interpretation of landscapes, as each landscape is created within the confines of a culturally specific ideology. Landscapes are ideologically loaded and had unsaid meaning and significance to the people who lived within them. “The way that people moved around and used the landscape affected their understanding of it” (Johnson 1999: 103). Thus landscape is not static but rather a dynamic environment constantly changing from human interactions and natural forces.

3.2 NATURE – CULTURE DIVIDE

The above definitions and understandings of landscape are vastly different from pre-existing notions. Since the Enlightenment, our Western understanding of landscape is as a science that can be classified, analysed and quantified. Landscape is the soils, the mountains, the climate, the rivers, etc. Thus, landscape is geological, geographical, topographic, and conclusively inanimate. This inanimate perception of our physical surroundings is a cultural construct, dividing people from the world ‘out there’; the natural versus the cultural world (Tilley et al. 2000). This divorce between people and our world is an exclusive opinion of Western philosophy. “The notion of landscape perception is founded in the splitting of human beings into an inner and an outer person” (Thomas 2001: 171). It would be a gross oversight if we assumed this idea was also true in the past. Thomas argues that by studying the soil types, the climate history and land forms, we are attempting to gain high-tech knowledge that the past people may never have known (2001: 171). Through this acquired knowledge, we try to understand “how these phenomena might have been perceived by past people” (Thomas 2001: 171). By taking this position, modern landscape interpretations have essentially banished all meaning from the material world.

Thus, this discussion proceeds assuming that the Egyptians lived in the landscape and not just with it, the reverse of which is a potentially major mistake in our modern
understandings of Egyptian culture and society as a whole. We, as Western scholars, are the ones who divorce culture from nature (Tilley et al. 2000), as a result of our own Cartesian philosophy. The Cartesian conception of spatiality assumes that space is homogeneous, measurable and “an inert stage or setting for human actions” (Thomas 2000: 491). The German philosopher Martin Heidegger is responsible for flagging the nature-culture split with his concept of “an embodied experience of the world” (c.f. Bender 1998: 37), being-in-the world and dwelling. Tilley suggests that humans do not just look at landscape but rather are active participants, being in the landscape (1994). In such a scenario, the division between nature and culture disappears.

The landscape is not a stage or a backdrop for cultural activities to happen on. Rather, the landscape is culture as much as building a pyramid is deemed a cultural activity. “There is never a landscape, always many landscapes. And landscapes are not passive, not ‘out there’, because people create their sense of identity… through engaging and re-engaging, appropriating and contesting the sedimented pasts that make up the landscape” (Bender 1998: 25). By combining anthropology and archaeology, we can “move beyond the sterile opposition between the naturalistic view of the landscape as a neutral, external backdrop to human activities, and the culturalistic view that every landscape is a particular cognitive or symbolic ordering of space” (Ingold 2000: 189). It is from this perspective that the pre-pyramid landscape of Memphis is being interpreted.

When the nature-culture barrier is removed, the landscape can be regarded as animated, as Thomas suggests that humans can be involved in a reciprocal relationship with their landscape (2001: 175). From the perspective of an animated landscape, what would the world look like? Everything would be assigned cultural characteristics. For example, the topography assumes certain names, identities and biographies, whereby the process of naming places and topographic features assigns a culturally specific meaning to the world. Only to us are these views considered “myths” but these stories were very real to the people who lived there. Tilley associates an identity with an embodied landscape recognising that it had “emotions, memories and associations derived from personal and
interpersonal shared experience” (1999: 177). If we can capture the landscape in this light, then was meaning and symbolism embedded in the landscape?

3.3 THE EMBODIED LANDSCAPE

By dissolving the nature-culture barrier, it is hoped to better investigate the world the ancient Egyptians lived in through their social ideology. Landscapes can be read as a palimpsest of human activities, where “it embodies the traces of people’s past activities” (Bender 1998: 6). This palimpsest approach for interpreting landscapes, seeing that it has been temporally “over-written”, through several thousand years. Each “new edition” (i.e. the addition of new mortuary monuments, temples and settlements) of the “landscape text” will permanently alter the landscape enough to demand a new and different interpretation and interaction. A palimpsest of human action is like a chronological catalogue of human interference, where people continually construct sacred and secular architecture, further augmenting the landscape. This study traces the constructed landscape from the very beginning (c. 5500 BC) and stops with the construction of the last Old Kingdom pyramid (c. 2181 BC). The intention is to illustrate the palimpsest nature of Memphis and demonstrate the possible changing perceptions through monumental architecture.

As a palimpsest, the landscape acquires a social biography, where the landscape is nothing more than an index of biographies of those who have lived before. The landscape is understood from the stories related from their ancestors where certain features and places assume identities. “Places have meanings bound up with the individuals who inhabit them” (Tilley 1999: 178). To the people who dwell in the local area, the landscape has always had ancestry. “Ancestors may have formed the land, or emerged out of it, or cleared the wilderness and created fields and gardens. In each case, the landscape provides a continuous reminder of the relationship between the living and past generations” (Thomas 2001: 175). The landscape is composed of a living record of the “lives and works of past generations who have dwelt within it, and in so doing have left there something of themselves” (Ingold 2000: 189).
There is abundant mortuary and settlement material in the Memphis area dating to the Predynastic and Early Dynastic periods, suggesting a long established cultural history prior to pyramid construction. The greatest point of interest for me is why did Memphis have the greatest density of Old Kingdom pyramids? Before the pyramids dramatically and permanently altered the landscape, was there anything present in the Memphis landscape that may have influenced the decision to make Memphis the national royal necropolis? Chapter Five will discuss the spatial and temporal development of Memphis and highlight landscape ancestry and palimpsest constructions.

3.4 SACRED LANDSCAPE

Recent works have concluded that symbolic places were created from associations from the past. Tilley proposes that no perception of place can exist without memory (1999: 178) and Thomas regards the landscape as providing a “continuous reminder of the relationship between the living and past generation” (2001: 175). The long-term use of places creates histories that exist for members of a community (Thomas 2001: 175). Bradley asks how societies could remember “their origins and earlier histories in the absence of documentation” and proposes “that prehistoric groups maintained close links with the places where past events had happened and with forms of architecture and material culture, which had been inherited from antiquity” (Bradley 2002: 8). These ideas are suggesting that long-term use accumulates collective knowledge and memory of an area (Alcock 2002). Places are deemed sacred as places where the gods reside or the origins of mythical events. These theories will be explored in Chapter Six, by examining the myths, places and names all associated with Memphis and early cultural activity.

The sacred city of the sun god Re is just outside the northern border of Memphis. The Egyptians knew it as Iunu, the Jews as On, the Arabs as ‘Ayn Shams and the Greeks as Heliopolis (as the modern Cairo suburb is known today). Heliopolis is continually referred to in later creation myths and origin texts. Could any of these myths have earlier roots? Similarly, the Ptah temple on the mound of Mit Rahina has often been considered as the
origins of Memphis (Kees 1961). The origin myths describe the creation of the world as an island emerging from the primeval waters of chaos (Allen 1988). On this mound, the creator god Ptah fashioned all human life (Sandman Holmberg 1946). The mound of Memphis is completely surrounded by water during the inundation months, giving it an island-like appearance. Is it a coincidence that this creation myth and the Memphis mound are in the same place? Or perhaps there is something a bit more deliberate, or maybe even sacred, about this location?

There are a few other origin myths about Memphis, the most common is a story from Manetho and Herodotus that speaks of the first king of a unified Egypt, Menes. But what about before that? A human presence was known in Memphis long before the legendary king Menes arrived, circa 3100 BC. The Turin Papyrus records that before the first king there was an entire series of gods that are said to have ruled Egypt for thousands of years (Malek 1982; Uphill 2003). Thus, the Egyptians' concept of their history is divinely derived by suggesting that the gods lived in Memphis long before the humans did. To the Egyptians, the gods established the monarchy and only the king could maintain and defend cosmic order and divine justice (Verner 2001: 22). These “myths” may have formed a social identity, anchored to a specific place, namely Memphis (Allen 1988; Sandman Holmberg 1946).

Sacred places are created through their associations with a mythical past and by attaching these myths to specific topographical regions. Notions of a mythical ancestry thus contribute to the creation of a sacred space, reinforced through later cultural activity (Alcock 1993: 172).

“To say a specific place is a sacred place is not simply to describe a piece of land, or just locate it in a certain position in the landscape. What is known as a sacred site carries with it a whole range of rules and regulations regarding people’s behaviour in relation to it, and implies a set of beliefs to do with the non-empirical world, often in relation to
the spirits of the ancestors, as well as more remote or powerful gods or spirits”

(Carmichael et al. 1994: 3).

Montserrat and Meskell (1997: 183-184) further this idea by saying that landscape cannot be discussed in vacuo but needs to be contextualised and understood that each context is embedded with specific meanings. Thus, sacredness of an area is unique and is a cultural construction (Alcock 1993: 172).

3.5 SACRED MONUMENTS

I would like to fully develop the idea of Memphis as a sacred landscape that was culturally ‘marked’ as sacred through monumental architecture. Could Memphis have been sacred before pyramids were built? The issue here is to question if these structures have developed out of places with an already established significance. When the wider settings of monuments are considered, then it begs the question as to what was already present in the natural features that was important to the people who came before. Both Bradley (2000) and Tilley (1994) support the notion that monuments are deliberately placed in response to sacred geography in Neolithic Britain. Parker Pearson (1999: 132-134) suggests that tombs can be used as territorial markers that physically mark the past. Possible origins of monumentality will be discussed in detail and the location, shape and materials used are questioned as a potential temporal continuum from ancestral memory. Monumental architecture is not only defined by what was built but by the intentions and interpretations of those that built and used it.

Perhaps now it can be concluded that most monuments originated out of a long tradition of using a specific location. “The important point is to recognise that monuments cannot be considered in isolation” (Bradley 2000: 41). This is probably the single theme of this dissertation. The pyramids are so rarely integrated into a greater landscape context. These landscape issues are unique in Egypt and have been inadequately addressed (aside from
Jeffreys 1998, 1999a; Montserrat and Meskell 1997; O’Connor and Quirke 2003; Richards 1999). The monuments cannot be studied independently of the landscape. Tilley’s (1994) approach is to consider the setting and orientation of the monument in its greater natural landscape context, including the proximity to water sources, hills, mountains and specific rock outcrops. Thus, I am employing a similar contextual approach that includes all the natural topography, funerary architecture, temples and settlements.
This study aims to understand the Egyptians' use of space in the Memphis region by questioning how and why certain places were selected over others and examining all possible symbolic and functional motivations. These objectives are achieved through an assessment of the archaeological material that preceded pyramid construction and the relationship between the archaeology and the natural topography.

4.1 RESEARCH METHODOLOGY

The methodology of this research is a combination of 1) an Egyptological literature search of published excavation reports and other written sources, 2) phenomenology fieldwork and 3) readings of topographical maps. In the literature search, I created a database of information regarding a site's earliest and latest use dates and the geographical distribution of material. These databases aim to highlight broad regional trends of chronology, density and distribution of archaeological materials. Thus, certain details have been deliberately omitted to isolate these trends and patterns. Details not included in this research include grave goods, body orientation, inter-site temporal and spatial relationships, and specifics regarding architectural features, such as number of chambers, wall decoration, names and titles of individual tomb owners. The phenomenological analysis of inter-site visibility was based on fieldwork observations and projected reconstructions in an attempt to re-experience being in the Memphis landscape. The visibility between sites is examined as well as the relative distance between selected features and monuments. The map reading analysis was done on paper with a scale ruler to spatially complement the phenomenological reconstructions with elevations. Certain criteria were selected for the monumental analysis, such as geographical arrangement, building materials, and place names, will be discussed in detail below. The collected material is presented here in the form of Microsoft Excel charts and can be broadly categorised in three groups.
of 1) Predynastic and Early Dynastic archaeology, 2) inter-site visibility, and 3) royal pyramids.

### 4.1.1 Chronology

The traditional divisions Egyptologists have imposed on early Egyptian chronology are the temporal divisions of Predynastic, Early Dynastic and Old Kingdom (after Baines and Malek, 1980; Malek, 2000: 89). These divisions are characterised by changes in genealogy or technological practices (i.e., ceramics and architecture). The temporal parameters are here limited to the period from the early Predynastic to the end of the Old Kingdom (5500 BC- 2185 BC). Memphis was settled and used as a private necropolis during this period and later developed into the royal necropolis of the Old Kingdom, a tradition that continued for another 2,000 years. The purpose here is to explore all possibilities that led up to pyramid building and not to consider the effects in later periods. The dynastic chronology follows Adams and Cialowicz (1997: 5) and Wilkinson (1999: 27).

The Egyptians did not know what Kingdom they lived in or even in which dynasty. But they would have known who was king and what season it was, as this was their concept of "real time", or reality (Assmann 2002). It seems unlikely for an Egyptian individual to have been aware of the subtle differences between the Predynastic and Early Dynastic. This thesis attempts to take a different temporal approach by looking for patterns and trends in the archaeological record without being distracted by the traditional dynastic divisions. This approach does not assume a cultural continuity but rather recognises culturally dynamic changes in material culture and monumental architecture.

### 4.1.2 Presentation of Research

The presentation of material is arranged in geographical order, according to the sequence in which the sites would appear while travelling north on the Nile. Typically, sites are either arranged north - south or according to a chronological order of kings (e.g., Kemp, 1989: 21). I see this perspective as more representative of how Western scholars view
Egypt and its history, rather than how the Egyptians may have viewed the landscape. The geographical order was deliberately chosen to challenge these norms and to change the perception of how we view Memphis and to be more conscious of an ancient Egyptian perception. Although we may see this as an ‘upside-down’ or ‘backward’ order of sites, it might just allow for an awareness of the area that may not have been noticed previously.

4.1.3 Boundaries of Research Area

The geographical boundaries of the area studied are the southern sites of Dahshur and Wadi Garawi and the northern sites of Abu Rawash and Heliopolis. On the west bank, the southern pyramid of Dahshur and the northern pyramid at Abu Rawash are considered as boundaries of Memphis (after Baines and Malek 1980). This boundary also coincides with the boundaries for the first Lower Egyptian nome of Memphis. Heliopolis (ancient Iunu) is included within this study even though it is located north of the Memphis border, and is the nome capital for the second Lower Egyptian nome. Heliopolis was a major Old Kingdom religious cult centre and is therefore relevant to this survey. It may be important to consider the possible relationships that Heliopolis had with Memphite landscape and architecture.

Any pyramids and monuments located outside this defined region of Memphis are not included in the analysis (Figure 4.1). This includes the Fourth Dynasty pyramid of Snefru (or Huni?) at Meidum, as it is located 45 km south of the southern Memphis border. The Meidum pyramid is deliberately excluded on the basis of its location, despite its relevant place within the Old Kingdom chronology. The Fayium pyramids are situated within a physically different landscape than Memphis, which also includes the other minor provincial pyramids, such as Seila (Lehner 1997: 139).

4.1.4 Place Names

The place names used in this study are all modern Greek and Arabic names, as most of these sites are colloquially known today. These names were originally assigned to the
archaeology from their proximity to local Arab villages, or were already in existence and have remained as the identifying place name. These modern names are not always a true reflection of the ancient place names, although they often can have similarities (Gardiner 1947). When looking at the landscape, it must be considered that not all these modern place names survived from antiquity. The original Egyptian place names will therefore be investigated later in the study. My purpose in analysing the ancient place names is to understand the way in which the Egyptians identified and named their surroundings and
the possible implications for the use of space. I will look at both positive and negative information, what is named and what is unnamed.

The identification of pyramid sites will be done in one of two ways, either by its site name or by the name of the king. In Egyptology, a royal funerary monument is generally identified by the king who built it or by the monument's location, if the owner is unknown. However, the ancient Egyptians probably knew each pyramid by its individual name. These pyramid names are less familiar to a general audience and are not the traditional method for pyramid identification. Throughout this thesis, I refer to pyramids either by their modern place name or by their owner.

4.2 ARCHAEOLOGY

A database was created (Table 5.1) to identify time-depth associations of sites with specific topographic features and to relatively quantify the density and quantity of archaeological material. The aim of this was to place the archaeology in a larger landscape context and illustrate spatial relationships between the topographic site selections. The material in this database relates to four general categories, 1) settlement remains, 2) special buildings (i.e. temples), 3) private burials, and 4) royal burials. These categories were selected because they represent the four gross categories of archaeological material in Memphis during these early periods.

The sources used to compile this database will be discussed in greater detail in Chapter Five. The material presented in this database represents the presence and absence of temporally specific archaeology. As is the case with archaeological material, it can often be difficult to identify, due to a poor state of preservation, or may be temporally uncertain. Thus, question marks (?) in the database represent inconclusive material; the question marks indicate that something could quite possibly be present but its exact date remains undetermined. The database is divided into eight chronological segments, more for the purpose of our understanding of temporal activities than actual divisions recognised by

~50~
the ancient Egyptians. In general, archaeologists (e.g. W. F. M. Petrie) used relative sequence dating based on ceramic types, other material artefacts, architectural features and inscriptions, usually through association with a king's name, if present. Some of the structures presented here are in such a poor state of preservation that their dating is nearly impossible, given that all that remains is a blank, empty chamber with no indication of ownership or contemporary material. This material is accommodated with a No?, representing a lower probability of a feature, as opposed to a Yes?, where the feature is most likely present but not with absolute certainty. Similarly, a Poss. is the possibility of a structure that is chronologically uncertain or of undetermined ownership, but its presence is worth mentioning. In some cases, such as the Yes? for settlements in the south Saqqara and Mit Rahina area, the evidence is known from textual sources or known from sedimentological evidence, but domestic architecture has not yet been found. Thus, the question marks are just indicators of a possible presence.

The sites are grouped in generalised geographic categories, which will include minor sites. For example, the Third Dynasty royal structure at El Deir is located just outside Abu Rawash and will be classified as being within the Abu Rawash area. Other places, such as Saqqara, have three distinct areas, each of which were used in different times, for different purposes. Thus, I have divided Saqqara into three parts: north, middle and south. Similarly, Ma’adi has been traditionally subdivided into south and north, and Tura has likewise been divided into three separate areas. I have chosen to group these sites geographically because of their relative proximity to each other and contemporary nature of the archaeological finds.

I have made several assumptions about the ownership of certain structures and monuments, using the most recent arguments and discussions. The details of supporting evidence for each structure are beyond the scope of this research. Most structures are dated either stylistically or through associated finds. I am fully aware of these debates and am using these structures simply to illustrate extensive land-use and the possibility of monumental architecture that predates Old Kingdom pyramids.
4.3 PHENOMENOLOGY

Recently, some archaeologists have adapted a phenomenological approach that attempts to re-create a sensory experience in the landscape. "Phenomenology is concerned with aspects of past human experience that cannot be addressed by traditional archaeological methods" (Hamilton et al. forthcoming). Phenomenology is an established archaeological methodology (e.g. Johnson 1999: 114; Hodder 1999: 132) and, in the context of this research, follows the methods set out by Bender, Hamilton and Tilley (1997), Hamilton et al. (forthcoming), and Tilley (1994). Much work has centred on highly visual and monumental constructions, focusing on the sense of sight (e.g. Bender, Hamilton and Tilley 1997; Cummings and Whittle 2003; Tilley 1996), where studies are concerned with "what can be seen from specific view points at the monuments, changes in visibility [and] journeying to and between monuments" (Hamilton et al. forthcoming). This sort of methodology is relatively new and has not yet been studied in an Egyptian context.

The phenomenological study used in this research is a result of personal fieldwork between 1995 – 2002, for a total of 15 ½ months, where I visited all (but one) pyramid sites within the region, several times each. I took photographic records and detailed notes of individual sites, documenting the visibility between sites and the surrounding landscape. I was sensually aware of the landscape and absorbed the landscape from several different perspectives, gathering information by walking to, from, and around the monuments. Permission to visit Dahshur in 1995 was granted from Dr. Zahi Hawass, Director General of the Supreme Council of Antiquities, during a time that it was inaccessible to tourists. I was unable to visit Zawiyet el-Aryan as it was closed to the public due to a military base in the immediate vicinity. Many of the east-bank sites are completely destroyed and/or overrun by urban development. It is challenging to have a sense of what this area may have looked like when one’s view is regularly obstructed by a labyrinth of tall, modern structures. Table 4.1 was created in attempt to have absolute figures of distance and heights between monuments and selected features, to better support the phenomenological study.
<table>
<thead>
<tr>
<th>Pyramid Owner name</th>
<th>Pyramid base (m ASL)</th>
<th>Valley (m ASL)</th>
<th>Valley m ASL (adjusted)</th>
<th>Distance to escarpment (m)</th>
<th>Distance from Bahr el-Leibini (km)</th>
<th>Distance to next pyramid (south)</th>
<th>Distance to next pyramid (north)</th>
<th>Distance to NW corner of Pharaoh Temple (km)</th>
<th>Distance to Obelisk at Heliopolis (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bent Pyramid</td>
<td>57</td>
<td>21.6</td>
<td>17.6</td>
<td>1600</td>
<td>3.5</td>
<td>None</td>
<td>1.8 km</td>
<td>1.8 km</td>
<td>8</td>
</tr>
<tr>
<td>Red Pyramid</td>
<td>57</td>
<td>21.6</td>
<td>17.6</td>
<td>2000</td>
<td>3.2</td>
<td>1.8 km</td>
<td>3.2 km</td>
<td>120 m</td>
<td>6.5</td>
</tr>
<tr>
<td>Shepseskaf</td>
<td>46.8</td>
<td>20.4</td>
<td>16.4</td>
<td>600</td>
<td>1.3</td>
<td>3.2 km</td>
<td>None</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>Pepi II</td>
<td>52.5</td>
<td>20.4</td>
<td>16.4</td>
<td>900</td>
<td>2.6</td>
<td>120 m</td>
<td>1.1 km</td>
<td>4.1</td>
<td>32.7</td>
</tr>
<tr>
<td>Merenre</td>
<td>48.5</td>
<td>19.6</td>
<td>15.6</td>
<td>900</td>
<td>2.6</td>
<td>1.1 km</td>
<td>480 m</td>
<td>3.7</td>
<td>32</td>
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<tr>
<td>Djeikare - Iesisi</td>
<td>30.2</td>
<td>19.8</td>
<td>15.6</td>
<td>300</td>
<td>2</td>
<td>1.3 km</td>
<td>390 m</td>
<td>3.1</td>
<td>31.5</td>
</tr>
<tr>
<td>Pepi I</td>
<td>52.2</td>
<td>19.8</td>
<td>15.8</td>
<td>400</td>
<td>2</td>
<td>390 m</td>
<td>1.3 km</td>
<td>2.3</td>
<td>31.3</td>
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<tr>
<td>Sekhemkhet</td>
<td>60</td>
<td>19.1</td>
<td>15.1</td>
<td>830</td>
<td>3</td>
<td>1.3 km</td>
<td>200 m</td>
<td>4.1</td>
<td>30.3</td>
</tr>
<tr>
<td>Unas</td>
<td>56</td>
<td>19.1</td>
<td>15.1</td>
<td>840</td>
<td>2.8</td>
<td>200 m</td>
<td>300 m</td>
<td>3.9</td>
<td>29.9</td>
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<tr>
<td>Djosar</td>
<td>55</td>
<td>19.5</td>
<td>15.5</td>
<td>720</td>
<td>2.9</td>
<td>300 m</td>
<td>200 m</td>
<td>4</td>
<td>29.6</td>
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<tr>
<td>Userkaf</td>
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<td>19</td>
<td>15</td>
<td>530</td>
<td>2.7</td>
<td>200 m</td>
<td>300 m</td>
<td>4</td>
<td>29.3</td>
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<tr>
<td>Teti</td>
<td>58</td>
<td>18.5</td>
<td>14.5</td>
<td>170</td>
<td>2.5</td>
<td>300 m</td>
<td>2.2 km</td>
<td>3.8</td>
<td>29.1</td>
</tr>
<tr>
<td>Raneferef</td>
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<td>19.1</td>
<td>15.1</td>
<td>500</td>
<td>2.7</td>
<td>2.2 km</td>
<td>50 m</td>
<td>6.8</td>
<td>27.8</td>
</tr>
<tr>
<td>Neferirkare</td>
<td>52</td>
<td>19.1</td>
<td>15.1</td>
<td>400</td>
<td>2.8</td>
<td>50 m</td>
<td>30 m</td>
<td>6.6</td>
<td>27.6</td>
</tr>
<tr>
<td>Niuserre</td>
<td>47</td>
<td>19.1</td>
<td>15.1</td>
<td>210</td>
<td>2.5</td>
<td>30 m</td>
<td>150 m</td>
<td>6.5</td>
<td>27.4</td>
</tr>
<tr>
<td>Sahure</td>
<td>37</td>
<td>18.9</td>
<td>14.9</td>
<td>200</td>
<td>2.3</td>
<td>150 m</td>
<td>100 m</td>
<td>6.8</td>
<td>27.2</td>
</tr>
<tr>
<td>Shepseskare</td>
<td>38.2</td>
<td>18.4</td>
<td>14.4</td>
<td>210</td>
<td>2.5</td>
<td>100 m</td>
<td>200 m</td>
<td>7</td>
<td>27.2</td>
</tr>
<tr>
<td>Userkaf Sun temple</td>
<td>41.4</td>
<td>18.4</td>
<td>14.4</td>
<td>250</td>
<td>2.4</td>
<td>200 m</td>
<td>600 m</td>
<td>7.2</td>
<td>27.2</td>
</tr>
<tr>
<td>Niuserre Sun temple</td>
<td>34.6</td>
<td>19</td>
<td>15</td>
<td>140</td>
<td>2.5</td>
<td>600 m</td>
<td>4.3 km</td>
<td>7.9</td>
<td>26.8</td>
</tr>
<tr>
<td>&quot;Layered&quot; Khaba</td>
<td>53</td>
<td>18.5</td>
<td>14.5</td>
<td>113</td>
<td>2.6</td>
<td>4.3 km</td>
<td>1.5 km</td>
<td>12.3</td>
<td>25.2</td>
</tr>
<tr>
<td>&quot;Unfinished&quot; Nebka</td>
<td>48</td>
<td>18.3</td>
<td>14.3</td>
<td>124</td>
<td>2.5</td>
<td>1.5 km</td>
<td>4.4 km</td>
<td>12.9</td>
<td>25.1</td>
</tr>
<tr>
<td>Menkaure</td>
<td>80</td>
<td>18.2</td>
<td>14.2</td>
<td>420</td>
<td>2.7</td>
<td>4.4 km</td>
<td>200 m</td>
<td>17.5</td>
<td>24</td>
</tr>
<tr>
<td>Khafre</td>
<td>80</td>
<td>18</td>
<td>14</td>
<td>680</td>
<td>2.3</td>
<td>200 m</td>
<td>180 m</td>
<td>17.5</td>
<td>23.5</td>
</tr>
<tr>
<td>Khufu</td>
<td>80</td>
<td>17.8</td>
<td>13.8</td>
<td>460</td>
<td>1.9</td>
<td>180 m</td>
<td>7.7 km</td>
<td>17.7</td>
<td>23.1</td>
</tr>
<tr>
<td>Djedefre</td>
<td>157.2</td>
<td>17</td>
<td>13</td>
<td>900</td>
<td>4.2</td>
<td>7.7 km</td>
<td>None</td>
<td>25.8</td>
<td>24.6</td>
</tr>
</tbody>
</table>

Table 4.1 Estimated height of monuments and the distance between monuments and topographic features. Data measured from maps published by French Ministère de l’Habitat et de la Reconstruction (1977/1978).
The inter-visibility between the east and west banks (see Tables 6.1 and 8.2) were reconstructed from travellers' accounts, since most of the area is invisible today. Dominant topographical features, including the pyramids themselves, are further hidden behind a thick haze of air pollution. My personal experience of this region has left me intimately aware of this landscape, which prompted questions which were then complemented by a 1977/1978 topographical map series published by the French Ministère de l’Habitat et de la Reconstruction.

The phenomenology study was limited to pyramids and does not include the Early Dynastic structures or private burials. These were omitted because of the poor visibility of these monuments today, as the desert and the modern urbanisation has consumed many of these early tombs. Tables 6.1 and Table 8.2 are inter-visibility charts compiled from fieldwork and maps to highlight different vantage points and visibility patterns from the east and west banks. Table 8.2 illustrates the visibility of pyramids from other pyramid sites. Table 6.1 records the visibility of pyramids as seen from the east bank sites. These charts will be used to question deliberate placement of sites, proximity to natural features and to assess any importance or significance of inter-site visibility.

The last phenomenological study presents a visual perspective and attempts to re-create a physical experience, highlighted in Table 4.1. The figures in this table represent the distance in kilometres between features, which were determined using a scale ruler and the elevations were read off the 1977/1978 French maps. The level of the valley floor has all been adjusted by subtracting 4.0 m from the current level. Butzer (1976) has estimated a mean average of Nile sediment accumulation at 1.0 m per millennium. Thus, 4,000 years ago the level of the valley floor may have been approximately 4.0 m lower than its current state. The purpose of Table 4.1 is to consider the physical effects the actual height difference of pyramids was when contrasted with the ground level of the valley, and to get an overall impression of the distances between sites, where monuments cluster and to highlight some general trends about pyramid placement. This table can also emphasise
the actual size and visibility of monuments, as they may have been experienced within the landscape.

Phenomenological reconstructions of pyramids were based on the assumption that if a pyramid's construction had begun, there was an intention to complete it. While knowing that 10 of the 25 pyramids are incomplete (see Table 8.1), the visibility is based on what the situation would have been if every pyramid was complete. It is assumed that each pyramid was built in one attempt. It was supposedly started when the king took the throne and was left in whatever state of completion at the time of the king's death. Every king within this time frame is thought to have had a pyramid, even though there are a few kings (i.e. Userkare) without a known pyramid. Some pyramids were in various stages of "incompleteness", varying between 10% (barely started) and 90% (almost finished). For example, the Menkaure pyramid at Giza and Merenre pyramid at south Saqqara were very nearly complete when the king died, thus their overall size and shape survives. In contrast, the Shepseskare pyramid at Abusir has a rock-cut burial chamber and barely five courses of superstructure (Verner 1992, 2000).

When evaluating the sequence of pyramids, the issue of incompleteness must be considered. Should these incomplete monuments be conceived as completed structures, as they were originally intended or as incomplete as they were left in antiquity? Ten of the 25 pyramids being investigated here are incomplete, as every king who sat on the throne for more than four years had some trace of a pyramid. Although there are several pyramids in the region that are still unidentified (without a verified owner), I want to consider all pyramids as complete, assuming that a king began construction with the intent to complete his monument. A king's first priority upon taking the throne was to choose a pyramid location and it is this motivation behind site selection that is being investigated here. Each king's motivation may have varied but it seems clear that the site was chosen with the end pyramid 'product' in mind, despite the unpredictability of the king's mortality. Incomplete (or abandoned) pyramids need to also be considered since the subsequent builders needed to accommodate them as incomplete.
4.4 ROYAL PYRAMIDS

The tables of royal pyramids included in this study are arranged in geographical order. The Second Dynasty material is excluded from these charts due to the incomplete or destroyed nature of their present condition, leading to some uncertainty regarding their ownership. The series of pyramids ends in the Sixth Dynasty with Pepi II. Although the sequence does not end here, as pyramid building continued into the Middle Kingdom (circa 2040 – 1640 BC) (Baines and Malek 1980: 9), I have chosen to end the discussion with King Pepi II, because in the 150 years that follow his death, as far as we know only one king of the Eighth Dynasty attempted to build a pyramid (Lehner 1997: 164). The pyramids included in this study are the 26 built in Memphis during the Old Kingdom.

The information presented in these tables (Table 7.1, 8.3) was compiled from the most recent pyramid studies, such as Arnold (1991), Lehner (1997), Verner (2001), and various entries from the *Encyclopedia of the Archaeology of Ancient Egypt* (1999). The purpose of these tables is to illustrate the patterns of monument placement and to assess any possible motivations or meanings. The chart includes the Dynasty of each king and the approximate length of reign. Little is known of the Second Dynasty kings and their reigns, thus marked with a question mark (?). As mentioned previously, the Second Dynasty structures are here identified by king’s name instead of by the structure’s name. Recent debates and excavations have questioned the ownership of many Second Dynasty structures at Saqqara. However, for the purpose of this study, I am associating Khasekhemwy with the Gisr el-Mudir, Hetepsekhemwy and Ninetjer with the galleries under the Unas’ causeway, Sened with the galleries under the Step Pyramid complex and Peribsen with the L-Shaped enclosure, based on architectural evidence and associated finds. Many of the ‘facts’ presented here are disputed and I had to make an assessment of which features to include and dismiss. For example, following Dodson (1996; 1998) and Swelim (1983), I have named Huni as the owner of the ‘Brick’ pyramid at Abu Rawash and Sanakhte with the large enclosure at el-Deir, near Abu Rawash. Furthermore, I have dismissed Swelim’s (1988) notion of a ‘dry mote’ around the Step Pyramid, as the notion does not appear to
be widely accepted. Based on the most recent work at Abu Rawash, I have considered the pyramid of Djedefre as a ‘complete’ monument (Valloggia 2003).

4.4.1 Building Materials

The building materials used in pyramid architecture are presented here in Table 7.1. The Second Dynasty kings have been left out of this table since some of the superstructures are missing or are too incomplete to analyse. The purpose is to assess the ideological motivations for selection of building certain materials. I have only selected four variables for analysis, the outer casing stones used in pyramid construction, the sarcophagus, the burial passage and the burial chamber. The information in Table 7.1 is assembled using the same pyramid studies (e.g. Arnold 1991; Bard 1999; Lehner 1997; Verner 2001). These have been selected for reasons of preservation, in that each variable survived in most pyramids. Each pyramid complex has literally hundreds of architectural features that could be studied for their use of stone. However, variable preservation and the various stages of completion, combined with impartial excavations, makes comparing multiple variables overly challenging. For example, not every pyramid owner had enough time to build a mortuary temple and only a few valley temples have been archaeologically recovered. There is no basis of comparison with inconsistent information and thus I have limited the architectural features to just these basic four.

The patterns of stone use will be evaluated in terms of their colour and their quarry source, as well as the presence and absence of other stone materials. How, why and where the stones were used within the monument are also considered.
~CHAPTER 5~
MEMPHIS BEFORE THE PYRAMIDS

The purpose of this chapter is to elucidate how the Memphis region was occupied for several thousand years before a pyramid was ever built. It has been suggested that a space is rarely "blank" or empty; it all has an earlier history from the people who passed before, no matter if these people were hunters and gatherers, sedentary agrarians or the "civilised" people of the emerging Egyptian State. They are all people who were living and creating meaning for themselves. Perhaps originally the functional purpose of the landscape contributed to settlement and cemetery choices. Some places may have been selected for their proximity to natural springs for drinking water or areas of high ground to avoid destruction from the annual floodwaters. Through time, however, these places acquired meaning to hundreds of generations of people who lived and moved through this landscape. The landscape accumulated a biography, a narrative of lives and events of ancestral activities. These narratives gradually developed into myths and legends, ascribed to natural places and prominent topographical features. Eventually, the community began to bury their dead, thus physically altering the landscape with a visible tomb. Borrowing an idea from Neolithic Britain (Parker Pearson 1999), I introduce the concept that tombs were used as physical landscape markers, delineating sacred ancestral spaces. Tomb site selection was never random or arbitrary; it was deliberate and may have carried heavy symbolic significance. Where and why specific sites were selected within the Memphis region is examined below.

There are various books and articles that discuss Egypt's prehistory (e.g. Hoffman 1980; Midant-Reynes 2000) and this prehistory will not be repeated here. The parameters of my research are limited to Memphis and will only discuss regionally relevant material. In looking at the distribution of pyramids, the one thing that seems to stand out is that none of these pyramids were built on "virgin" land. West-bank pyramid sites, from Saqqara to Abu Rawash, have a pre-existing necropolis. Could these early cemeteries have been a predetermining condition in pyramid site selection? If so, then the early occupation of Memphis was significant in determining land use and the creation of sacred space.
5.1 THE EARLIEST OCCUPATION

Below is a map illustrating the earliest phases of occupation in the Memphite region (Figure 5.1). This map is followed by a list of sites that are described in order from south to north, from east to west, as discussed in Chapter Four. I have chosen to order the sites by geography, rather than chronology, as the sites would appear if one were travelling down the Nile. Each site is described from the oldest to the youngest; some begin in the Paleolithic (8000-5000 BC) and end in Third Dynasty (2612 BC), the beginning of the so-called 'Pyramid Age' of the Old Kingdom.

Figure 5.1. Map illustrating the earliest occupation sites of Memphis.
<table>
<thead>
<tr>
<th></th>
<th>Early Predyn</th>
<th>Late Predyn</th>
<th>Protodyn</th>
<th>Dyn 1</th>
<th>Dyn 2</th>
<th>Dyn 3</th>
<th>Dyn 4</th>
<th>Dyn 5</th>
<th>Dyn 6</th>
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</thead>
<tbody>
<tr>
<td>Dates BC</td>
<td>5500 - 3500</td>
<td>3500 - 3200</td>
<td>3200-3050</td>
<td>3050-2890</td>
<td>2890-2686</td>
<td>2686-2612</td>
<td>2613-3502</td>
<td>2502-2360</td>
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<td>0</td>
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5.1.1 Dahshur

The site of Dahshur has two Old Kingdom pyramids, both attributed to king Snefru of the Fourth Dynasty. This site has very little Predynastic or Early Dynastic material, although Jeffreys and Tavares (1994) include the area of Dahshur in their survey of the Early Dynastic sites of Memphis. “The recognised Early Dynastic sites in the Memphis area are all cemeteries, stretching from Abu Rawash in the NW and Heliopolis in the NE to Dahshur is the SW and Helwan in the SE” (Jeffreys and Tavares 1994: 143). However, the authors do not discuss the archaeological material at Dahshur to support an Early Dynastic presence. The only mention of Early Dynastic material comes from De Morgan (1895: 8), who mentions Early Dynastic tombs north of Snefru’s pyramid. In a recent conversation with the director of excavations at Dahshur, S. Seidlemayer, he suspected that Early Dynastic was indeed present at Dahshur but had not yet been discovered (Pers. comm. 2004).

5.1.2 Helwan

The early east bank sites near Helwan were named after the nearby village. Within the generalised area of Helwan, I include three distinctly different locales, 'Ezbet el-Walda, Ma'sara and Tura. The archaeological materials from these sites are contemporaneous with each other and are relatively close together.

Ezbet el-Walda and Ma'sara

There are over 10,258 tombs in this area (Saad 1969: 5), making it one of the largest cemeteries in Egypt. The dates range from the Proto-dynastic to the early Old Kingdom. None of the burials are royal, but some of the tomb owners have titles associated with royal family members, such as the ‘King’s Wife’, ‘King’s Daughter’, and the ‘King’s Son’ (Wilkinson 1996). There are limestone mastabas dating to the Third Dynasty (Jeffreys and Tavares 1994: 153; Köhler 1998, 2000) and more recent excavations suggest a possible Fourth Dynasty date (Köhler 2004).
Further to the north is a large Predynastic settlement known as Ma’adi (see section 5.1.7 below). H. Junker proposed that the settlement of Ma’adi was the prehistoric city Iunu, of which Helwan was its principal cemetery (cf. Saad 1947: 170; 1969: 9, 11). Junker hypothesised that a prehistoric Iunu near Helwan was abandoned and re-located to its later location, 30 km to the north (Saad 1969: 9), after losing importance to Memphis in the First Dynasty. Saad follows the translation of the name Helwan, claiming that Helwan is an Arabic corruption of Her-Iwnw, which is an old Egyptian name meaning ‘south (above) of Iunu’ (1969: 11). Saad also hints at the probability of the Helwan occupants building chapels dedicated to the Nile god Hapi (1969: 77), although no temples have been archaeologically recovered. It is possible that some sort of ‘temple’ or religious association was present in this area, but it did not survive archaeologically. It seems unlikely that a cemetery this large was not associated with a city or settlement.

*Tura (2km south of Ma’adi)*

H. Junker excavated about 600 graves dating between 3400 – 3050 BC and some to the Third Dynasty (circa 2686- 2612 BC) (Hendrickx and van den Brink 2002). Some Ma’adi culture burial ceramics were found during road construction, dating to 4000 BC (Mortensen 1991: 35-36; 1999c: 851). No settlement evidence has yet been discovered (Mortensen 1999c: 852) but the sheer number of graves, combined with the Ezbat el-Walda cemetery, suggests a very large community of over 10,000 families. A second cemetery was found near Tura, with over 200 graves dating between 3050 – 2890 BC (Hendrickx and van den Brink 2002; Mortensen 1999c).

*5.1.3 Saqqara*

Activities from the Paleolithic and Predynastic have left faint traces at Saqqara (D. Jeffreys, pers. comm 2003), but the heaviest use of the site was in the Early Dynastic (Smith 1997: 380-382). There is an extensive private cemetery with tombs from the first three Dynasties located along the desert escarpment in northern Saqqara (Emery 1961;
Jeffreys and Tavares 1994; Tavares 1999; Wilkinson 1999). Smith suggests that there is no reason to think that the Archaic cemetery did not extend southwards and even perhaps under the Teti necropolis (Smith 1997: 381), after De Morgan’s 1897 map showing Early Dynastic tombs present all the way through the Abusir wadi. Recent work by Mathieson and Tavares (1993: 25; see also Mathieson et al. 1995) has shown evidence of structures in areas left ‘blank’ by De Morgan. Although the dates of these structures are still to be determined, it is believed to be an extension of the Old Kingdom mastaba field.

In the central western area of Saqqara, there is a large underground temple dedicated to the Apis Bull, known as the Serapeum. This area has 231 First Dynasty tombs, dating between 3050-2890 BC (Jeffreys and Tavares 1994: 150), thought to be contemporary with king Den, and perhaps had ritual associations (Roth 1993: 48; Wilkinson 1999: 240). The extent of these ritual activities will be discussed below.

There are two incomplete structures that are believed to date to the Second Dynasty date, the so-called Gisr el-Mudir and the “L”-Shaped enclosure. These structures are both located in prominent positions on the escarpment and were probably visible from Abusir in the north, northeast. The recovered ceramics and the structural form date the Gisr el-Mudir to the end of the Second Dynasty, possibly to the early Third Dynasty (Mathieson and Tavares 1993; Mathieson et al. 1997; Tavares 1998: 1136).

There are a series of underground galleries to the east of the Unas pyramid where seals of two Second Dynasty kings were found (Lauer 1937: 112-113). There are Second Dynasty rock-cut galleries under the northwest corner of the Djoser Step Pyramid complex that are thought to be remnants of an earlier monument (Jeffreys and Tavares 1994: 150; Redford 1986 134; van Wetering 2004). Thus, a total of four massive rock-cut galleries were discovered under later Old Kingdom monuments, without any surviving superstructures, although Murno (1993) believes that a superstructure may have stood in the area near the Unas causeway. These structures are thought to belong to two or three kings of the Second Dynasty, based on numerous seal impressions and stone vessel inscriptions.
Smith (1997: 382) proposes that the large quantity of First Dynasty stone vessels found in the subterranean galleries are from a contemporary royal funerary monuments judging from the royal names and the quality of craftsmanship. "If this is correct, these monuments could have been in the immediate vicinity" (Smith 1997: 382). Tavares suggests that the seal impressions provide sufficient evidence to "attest to contemporary building activity by Khasekhemwy and Sanakht at Saqqara" (Tavares 1998: 1137).

The galleries underneath the Step Pyramid are believed to have once had superstructures that were destroyed during the construction of the pyramid (Dodson 1996; Redford 1986: 134; Roth 1993: 43, 48; Tavares 1998: 1137; Wilkinson 1999: 240). It is possible that Djoser’s monument might be a later interpretation of a pre-existing structure, or possibly attempted to incorporate the earlier symbolism into its architecture (see Roth 1998; O’Conner 2002). Some Early Dynastic mud-bricks have been found re-used in the Step Pyramid complex (Tavares 1998: 1137; van Wetering 2004), further suggesting the presence of some Early Dynastic structures in the area. The re-use or reconstruction of a monument on this place denotes this place as possessing a hallowed history and biography, since it is clearly not "virgin" ground.

5.1.4 Abusir (Pr-Wṣr)

Paleolithic human activity is known in the area behind the Abusir pyramids (Krejci 2001: 468). Svoboda (1993: 170) even suggests that the lithic material might be the remains of a paleolithic settlement, although this contradicts the statement by Goelet, who suggested "no activity previous to the 5th Dynasty has been attested in the immediate vicinity" (1999: 80).

5.1.5 Abu Ghorab

Abu Ghorab has up to 100 tomb constructions dating to 3200-2890 BC (Jeffreys and Tavares 1994: 146; Lecant and Clerq 1990: 357; 1991: 183). Borchardt found several
Predynastic palettes in the area of the royal monuments (cf. Krejci 2001: 469-470, n. 11). Further north is an Early Dynasty cemetery, with at least 66 burials from 3050-2686 BC (Radwan 2000).

5.1.6 El-Omari

This is a site of an extensive Epipaleolithic and Neolithic settlement (Jeffreys 1999b: 367). The lithic material has a range from Paleolithic to the Neolithic (Debano and Mortensen 1990). The excavations reveal that El-Omari was occupied for 200 years, from 4,600 – 4,400 BC, extending over an area 750m by 500m (Debano and Mortensen 1990: 13). F. Hassan recorded a radiocarbon date to 4110+/-260 BC (cf. Bard 1994: 19). People could have been here as early as ca. 5000 BC, as early hunter and gatherers could no longer depend on hunting and were “forced to move to the Nile Valley where they could supplement their diet with fish” (Debano and Mortensen 1990: 78). All the evidence suggests that the area was continuously occupied and there is nothing to contradict the idea that these people had descended from a Final Paleolithic community (Debano and Mortensen 1990: 82). There is a suggestion that this site was strategically chosen for its location between two main access routes to the Red Sea and the Sinai, the Wadi Garawi and the Wadi Hof (Debano and Mortensen 1990: 78).

There are mentions of a contemporary settlement located up on the Gebel Hof (Debano and Mortensen 1990: 9; Hayes 1965: 120; Mortensen 1999a: 592). This phase of the el-Omari settlement is thought to be contemporary with the final occupation. This mountain is 100 m above the valley floor and is a significant vantage point over the entire region, where “it does seem to be in a privileged location; for its view, its protection against the northerly wind and its relative coolness in summer” (Debano and Mortensen 1990: 79). The whole community may not have lived on the mountain top, “but the stone tools are of the same types found in the plain indicating perhaps that the locality did not serve some specialized function” (Debano and Mortensen 1990: 78-79). It is not an easy place to keep livestock so it is assumed that “the site served as a guard, or observation outpost” (Debano and Mortensen 1990: 79)
The area around el-Omari has a concentration of natural springs of sweet and sulphur water (Attia 1955; Jeffreys 1999b: 367-368; Mortensen 1999a: 592). Early flint tools were found in association with the springs (Debono and Mortensen 1990: 8). As El Omari is the oldest, continuously occupied areas in the region, it is possible that the presence of a fresh water spring influenced later site location (see below Chapter Six, section 6.1). The location of the Paleolithic Nile would possibly have been 5 km further west than its current location (Jeffreys and Tavares 1994). The location of el-Omari on the east bank would have made the Nile an impractical primary water source, and thus dependent on an alternative water source. It would then not be a coincidence that the springs gained sacred significance, as the early settlers were dependent upon them for a drinking water source.

_Wadi Digla (1km south of Ma’adi)_

Wadi Digla is the contemporary Predynastic cemetery for the Ma’adi settlement, dating between 3800 – 3500 BC (Hendrickx and van den Brink 2002). It has 471 human burials (Rizkana and Seeher 1990: 97) and 14 animal graves (Bard 1994: 21).

### 5.1.7 Ma’adi

Ma’adi, named after the local village, is one of the largest predynastic settlements known in the Memphis region, covering an area over 40,000 sq. m (Bard 1994: 19). The settlement debris is scattered over an area of 1300 x 100-130 m (Bard 1994: 19; Seeher 1999: 455). Ma’adi is both a settlement and a cemetery, located on a Pliostocene terrace between the mouth of two wadi’s (Bard 1994: 19). The ceramic evidence dates the site to between Nagada I to late Nagada II (Bard 1994: 20), circa 3,900-3,500 BC (Seeher 1999: 458). There are 76 graves in the cemetery next to the Ma’adi settlement (Bard 1994: 21; Hendrickx and van den Brink 2002) and three graves in the settlement itself (Rizkana and Seeher 1990: 97). The cemetery was continuously used through the Early Dynastic period and into the Third Dynasty (Jeffreys and Tavares 1994: 145). The culture of Ma’adi is different from contemporary Ma’adi-Buto traditions of both Upper and Lower Egypt and is thought to have been a local development, ensuing from the Neolithic (Seeher 1999: 458). There are
two small cemeteries associated with the Ma'adi settlement, with a combined 95 graves that date to 3050-2686 BC (Hendrickx and van den Brink 2002).

5.1.8 Babylonia; Fustat; Old Cairo (Ancient Kher-aha)

There is only one single rock-cut Early Dynastic tomb recorded here (Jeffreys and Tavares 1994: 145). This area is just south of the most prominent topographical features within the region, colloquially known as the Citadel rock, after the Citadel mosque built by Mohamad Ali. It is a large limestone protrusion jutting out of the hills. Kher-aha is mentioned in the pyramid texts as being the location of the mythical battle between the gods Horus and Seth (Faulkner 1969: 212; see below Chapter Six, section 6.5).

5.1.9 Zawiya El-Aryan

There is an Early Dynastic cemetery south of the incomplete pyramid of Khaba (Hendrickx and van den Brink 2002: 346-402). Dunham (1978: iii, ix) mentions that there were about 300 graves from 3200-2686 BC. There are at least four large Third Dynasty mastabas on the north side of the pyramid (Jeffreys and Tavares 1994: 146; Lehner 1996). This is also the site of two royal pyramids, dating to the Third and Fourth Dynasties.

5.1.10 Giza

*Nazlet el-Batran*

Martin (1997) discusses a turn-of-the-century report from L. Covington noting as many as 39 tombs dating to the First to the Third Dynasties that are located in the area that skirts the southern Giza gebel. Daressy (1905) first mentioned a First Dynasty cemetery, as did Petrie (1907) and Kromer (1991) who excavated this site and determined that it had been continuously used from the Third to the Fifth Dynasties. These tombs also include three large Early Dynastic mastabas (Lehner 1985: 155). Early Dynastic ceramics were also recovered in this area (Jeffreys and Tavares 1994: 145), but from the surface context of these ceramics, it is nearly impossible to determine if the area was settled or used as a cult.
site. Quite often, Giza's (pre)-history before the pyramids is overlooked, as if nothing was in the area before Khufu and the Fourth Dynasty. Petrie mentions that Giza "did not become first occupied by the Pyramid kings, but that it had a continuous history as a cemetery from the beginning of the 1st Dynasty" (cf. Martin 1997: 284). The issue of pre-pyramid activities at Giza has also been recently examined by Reader (2000, 2001), who proposes an Early Dynastic date for the Sphinx solar temple based on erosion and morphology of temple blocks.

Some isolated Predynastic ceramics (Ma'adi culture) have been found at Giza (Bard 1994: 21; el-Sanussi and Jones 1997; Mortensen 1985) and some traces of an early 'settlement' south of the Menkaure pyramid causeway (Bietak 1979: 114, n. 35). The lithics and ceramics recovered from here suggest that there may have been a Predynastic – Early Dynastic settlement in this area that was later destroyed by the construction of the pyramid (Bard 1994: 21; Bietak 1979: 114). The suggestion of a Ma'adi culture settlement in the area around Giza (el-Sanussi and Jones 1997; Mortensen 1985), in combination with the cemetery chronology, would suggest that the site had been in continued use through the construction of the pyramids.

**Kafir Ghattati**

Engles (1990) published some fieldnotes from George Reisner's 1924 Giza excavation. There were 11 graves dating to 3150-2686 BC. These are located just north of the Giza pyramids, between the Mena House Hotel and Abu Rawash (see also Hendrickx and van den Brink 2002: 350).

**5.1.11 Abu Rawash**

Four Early Dynastic cemetery clusters are located on the edge of the modern Abu Rawash village, with a total of 398 graves (Hendrickx and van den Brink 2002; Jeffreys and Tavares 1994: 144). Most of these graves date from the Protodynastic Period to the Second Dynasty and are thought to have been contemporary with the large cemetery at

Dodson (1998: 30) attributes a large enclosure (330 x 170 m with a 20 m central square) to the first king of the Third Dynasty, Sanakht. It is speculated that this may be an enclosure wall with a mound-structure, similar to other Second and Third Dynasty royal funerary monuments (Dodson 1998: 30). This monument is just north of the modern Abu Rowash village, at a site known as El Deir. One km to the south is an early mud-brick pyramid or a large mastaba. (Edwards 1999a: 82). Swelim (1987: 91-95) speculates that this is an early pyramid and was built by the last king of the Third Dynasty, Huni. The identifications of these earlier structures is slightly problematic, but if they prove to be true, then it would indicate a royal presence at Abu Rawash previous to Djedefre, who is usually considered to be the first and only king to use the site.

5.1.12 Heliopolis (Ancient Iunu)

There are over 200 Predynastic burials located 5km north-northeast of Gebel al-Ahmar (Jeffreys and Tavares 1994: 144; Mortensen 1999b: 366), 73 of these burials date to Nagada I- early Nagada II (4000 - 3200 BC) (Bard 1994: 19). Dog and goat burials were also found with ceramic grave goods (Bard 1994: 19). The graves are contemporary with the Ma’adi culture and the Wadi Digla cemetery (Debono and Mortensen 1988: 49). The cemetery is located on the 30 m contour line, which facilitates long-distance visibility, and which is the same height of the contemporary sites of Ma’adi, Helwan, and Tura (Debono and Mortensen 1988: 50). No settlement has been found associated with the Heliopolis cemetery, but Debono and Mortensen presume that the location was no further than 500m to the northwest (1988: 50). This site gains religious importance in the Third Dynasty, when the earliest traces of the sun-cult are found from a temple structure dating to the reign of Djoser (Smith 1949: 133-137). The Predynastic cemetery is slightly to the north of the later temple site; these two sites are in distinctly separate locations.
5.2 EARLY DYNASTIC SETTLEMENT DISTRIBUTION

The Palaeolithic site of el-Omari and the Predynastic site of Ma'adi represent some of the earliest material in the area. There is some indication of an Early Dynastic settlement contemporary with the cemeteries of Helwan and north Saqqara. Enough Early Dynastic pottery has been recovered to allow Jeffreys (1997: 2) to “predict with reasonable confidence that unmixed deposits of this date… lie directly over archaeologically sterile clays which run up to the cliff face”. The drill core results from the Survey of Memphis indicate that an Early Dynastic site would have been confined to the west and opened up to the northwest of the modern Mit Rahina ruin field (Giddy 1993; Giddy and Jeffreys 1991: 6). Jeffreys and Tavares (1994: 159) have concluded that an early settlement would have been defined in the west by predicting the location of the Old Kingdom Nile. Jeffreys (2000: 26) suggests that the Early Dynastic town was located closer to the elite tombs at north Saqqara, thus placing a settlement just south of the Abusir pyramid complex (Wilkinson 1999: 243). This Early Dynastic site lies in the valley floor between the First and Second Dynasty cemeteries of north Saqqara and Helwan (Giddy et al. 1990: 13; Giddy and Jeffreys 1991: 6). It is now possible to conclude, with some certainty, that a relatively large settlement was present during the Early Dynastic period parallel to the Saqqara-Abusir escarpment. Although Predynastic remains have not yet been found, Wilkinson predicts future excavations around Memphis will reveal a settlement dating from around 3600 BC (Wilkinson 1999: 359).

In conclusion, there is an immense distribution of settlement and funerary material in the Memphis area that predates pyramid construction. All of this archaeological evidence illustrates extensive regional land usage. Nearly all of the later pyramid sites were initially used as cemeteries in the Early Dynastic period, with the exception of Dahshur. The high density of earlier material implies that the landscape may have been highly valued, perhaps even considered hallowed ground, prior to the Old Kingdom. The scattered distribution of material and high grave densities also implies a large group of people. For example, the Helwan cemeteries had over 10,000 individuals buried within a 400-year period, or longer. This is just one example of the regional Memphis necropolis.
If we were to add all the Memphis regional graves together we would end up with over 20,000 graves. D. O'Conner (1972) suggests that cemeteries could represent 10% of the total Old Kingdom population, which has been previously estimated at 1.2 million people (Butzer 1976; Hassan 1993). The question here is what attracted so many people to one specific place in the country, when other places may have been equally suitable? What made Memphis a more desirable place to settle and bury the dead than any other place within the country? Granted, there are plenty of settlements and cemeteries in the Delta and in Upper Egypt but nothing can compare in relative densities.

5.3 CULTIC ACTIVITY?

Recently, there have been suggestions of cultic activity at Saqqara dating to the Early Dynastic period. The Gisr el-Mudir is a large stone-built rectangular structure with contemporary Second Dynasty ceramics (Mathieson and Tavares 1993; Mathieson et al. 1997; Mathieson 2000), without any obvious structure within the walls, leading to speculations about the possibility of a cultic function, rather than a funerary one (Tavares 1998; van Wetering 2004). Another L-shaped ‘enclosure’ lies west of the Step Pyramid complex, with limestone and mud-brick walls that measure up to 370 m by 240 m (Mathieson 2000: 36). The structure has been heavily disturbed by later construction but van Wetering (2004) proposes a Second Dynasty date, to king Peribsen, thus pre-dating the Gisr el-Mudir. If these theories prove true, then the land use history of Saqqara may have been greater than previously believed. The recent work by University of Pisa (2003) has comprehensively assembled all published material relating to Saqqara, which confirms an abundant Early Dynastic presence.

Roth (1993: 48) suggests that Saqqara was attractive to the Second Dynasty kings “because of the presence of some favored deity or an illustrious ancestor in the non-royal cemetery”. Smith (1997: 381) postulates about the possibility of an early ‘cult area’ at Saqqara. Further, W. Kaiser advocates that the concentration of tombs around the Serapeum could [maybe] represent an early royal cult (cf. Roth 1993: 98, n. 48; Wilkinson 1999: 239). Van Wetering (2004) and others have suggested that this area was
sacred to Sokar, because of its later associations (Gaballa and Kitchen 1969). Textual references, such as the Fifth Dynasty Royal Annals, (see Wilkinson 2000) that indicates the construction of cultic structures, which may be interpreted as the building of these earlier temples. The implications are that the area first had religious associations and later became a dedicated necropolis.

If cultic activity can be proposed for the Saqqara, and other Memphite areas, then it may suggest that Memphis was sacred to the gods before it was employed as the royal necropolis. The suggestion of cult temples implies that the landscape was deemed to be the home of a specific god, significant enough to construct a temple in their honour. In the next section, I will investigate this idea by assessing whether place names give identity to a specific site and will gain an insight into how the landscape may have been perceived and understood from their perspective. I will also explore the so-called “creation texts” to better understand how their world was created, what it was called and how it embodied aspects of the gods. All of this will attempt to contextually re-construct the ancient Egyptian cultural landscape.
In recurrent ethnographic examples, outstanding natural features, such as large rock outcrops, natural springs, rivers, or islands, might be identified in cultural traditions as creations of the gods or ancestors in different cultures (Bradley 2000; Parker Pearson 1999: 157). Such features can take on individual culturally specific meaning and possess a mythical biography (Tilley 1994; 1999: 171), and embody a narrative of lives and events of ancestral activities. Cumulative narratives can create myths and legends, attributed to natural places and prominent topographical features. These landscape features physically denote places as a record of past events, and will anchor a biography to a specific place, giving it meaning and importance.

In *Symbol and Magic in Egyptian Art* (1994), Wilkinson has dedicated an entire chapter to the “Position and Placement: The Symbolism of Location”. Orientation and location are “one of the most important symbolic aspects of Egyptian art” (1994: 60), which applies to the position of temple scenes as well as the placement of temples and other buildings. Certain geographical places were considered as areas of “sacred or symbolic locations of religious and mythical importance” (1994: 61). Symbolism that alludes to geographical places was attributed to other places throughout the country, where certain gods were said to have associations with specific sacred areas (Richards 1999).

Egyptian Neolithic and Predynastic inhabitants embedded their landscape with ancestral memory. They left stories, preserved as myths and legends that identified each place with past events, marking the area with burials. Their impact on Memphis forged individual and collective biographies and shared histories. Tilley (1999) suggests that the act of naming a place is to give it an identity and to remember ancestral activities.

Human perception of the landscape is social and in this context I am referring to the pre-monumental landscape, as there is no avoiding a pre-human landscape. In order to
understand people’s engagement with the natural landscape and to gauge the possible motivations behind site selection, we need to examine how the landscape may have looked before it was culturally altered with monumental architecture. I wish to investigate whether the shape, location and visibility of natural features contributed to later monumentality, such as the building of temples and the location of cemeteries. However, before issues of monumentality can be approached, it is necessary to explore the evidence for cultural appropriation of natural places. In this chapter, I aim to explore the myth, name and archaeology of five different natural places. First, I will consider the relationship between the settlements of Helwan and el-Omari with their lithic scatters around natural springs. Second, the cultural appropriation of a wind-carved rock exposure at Giza and its links with ancestral memory will be explored. Third are the white limestone cliffs of the western and eastern mountains, the name ‘White Walls’ and their location. Fourth, there will be an analysis of the Ptah temple on a natural mound (Mit Rahina) in the Nile valley and its association with the later traditions of creation myths. Lastly, I focus on the massive Citadel Rock outcrop and its possible association with the mythical fight for the kingship. These features were selected for analysis because of their visual prominence in Memphis and are used as a point of discussion.

6.1 MINERAL SPRINGS

On the east bank of the Nile are the settlements of Helwan and el-Omari. Westward routes towards the Nile, either from the Red Sea or the Sinai, would have to cross through one of the natural valleys of Wadi Garawi, Wadi Hof, or Wadi Digla. Debono and Mortensen (1990: 78) suggested that this was a strategic location for trade and was deliberately chosen to control access between the Nile valley and desert routes. As this may be true, I would like to investigate another motive for settling in this area: water.

The location of the Predynastic Nile in Memphis would have possibly been 5 km further west of its current location (Jeffreys and Tavares 1994). Thus, the location of east bank settlements could have made the Nile a less practical primary water source, despite a
presumed network of canals and river tributaries. Water was available from the desert wadis but there were also natural springs in proximity to the early settlements.

The east bank has several natural water springs, “though none are as important of those of Helwan” (Gardiner 1927: 129). The majority of these springs are located in the foothills of the Tura Mountains, on an elevated plateau above the level of the Nile (Attia 1955; Browne 1878: 396; Hamroush and Zied 1990; Jeffreys 1999c: 367-368; Mortensen 1999c: 592). There are three different types of water that surface in the springs: thermal, sulphuric and mineral. Twenty three thermal and sulphur springs have been recorded around Helwan, with temperatures ranging between 23-34° C (Attia 1955: 66, Table H). The distributions of the sulphur waters are restricted to the south and southwest region of Helwan, while the springs to the north were used for drinking purposes (Attia 1955: 70; Hamroush and Zied 1990: 90, n. 28). These springs are likely to be of Eocene origin and there may have been up to 10 water springs in the area surrounding el- Omari (Debono and Mortensen 1990: 78; Hamroush and Zied, 1990: 90). The flow rate of the sulphur spring was estimated at 260-700 m³ per day (Attia 1955: 70).

6.1.1 Votive Offerings

It is possible that adequate sources of drinking water were highly valued and were deemed as sacred places or dwelling of the gods. Bradley (2000: 27) has noted that in archaic Greek contexts, certain kinds of locations were associated with appropriate deities. Specific deities can demand a particular sort of terrain over another, as there can be a defined jurisdiction of certain gods. “The peculiar character of some of these places is emphasised by the ways in which people treated them” (Bradley 2000: 27) and by what they left behind. In Roman Gaul, cult places were connected with springs, with “no traces of monumental architecture” and are recognised by the objects left in or around the spring as offerings (Derks 1998: 138).

These ideas concerning the relationship between deities and natural features may be applicable for consideration in Memphis. We have no confirmed idea whether or how the
spring waters were exploited in earlier times of Egypt but it may be no coincidence that most of the springs are associated with Neolithic flint scatters (Browne 1878; Hamroush 1991). The early interpretation of the flints was that they were “the actual places where the weapons and instruments were manufactured” (Browne 1878: 400). The flints are associated with all three types of springs and more “flakes were found in clearing out some of the other springs” (Browne 1878: 407). It is also entirely possible that the sulphur water may have had healing and medicinal properties, as it did in the 1850’s, when bath houses were built to exploit the waters (Attia 1955: 51-52).

Certain substances were valuable because of their mythical associations or unusual characteristics. In this case, we can imagine how the sulphur springs may have smelled or how steam rising from the thermal springs looked. Gods are often considered to reside in these natural places and physically occupy the feature. To visit the east bank springs was like being in the presence of a god, especially in a desert environment like Egypt where drinking water was precious. These springs are unique in this landscape as they only occur on the east bank and not the west (Attia 1955). A geological slope making the east bank higher than the west can perhaps explain the presence of springs on one side of the river rather than the other. But to the Egyptians, the presence and absence of water would have further supported the east-west life-death dichotomy, which will be further discussed in the following chapter.

The archaeological significance of these springs is their relationship with the flint tools. In the absence of monumental architecture, perhaps there was a deliberate placement of stone tools as votive offerings to demarcate sacred space. Perhaps the springs were the focus of attention and the offerings were left to maintain and secure precious water sources. When we acknowledge that places of natural significance are recognised by the offerings left behind (Bradley 1993; 2000), it is possible that the Neolithic flints found in association with the springs were deliberately left as offerings, giving the water a symbolic character.
6.1.2 Water Symbolism

In Egypt, the element of water is valuable in a desert environment, but also potent for its symbolism of life and fertility (Wilkinson 1994: 94-95). Pure and clear spring water may have been viewed as a purifying substance, which later became an important practice in ritual activities. Water was a "symbol of purification and acceptance, and also life, renewal, and fertility" (Redford 2002: 344). Water assumed regenerative and rebirth properties that probably derived from observing the annual inundation, where the parched land became lush and fertile once again. "The rise and fall of the waters were supposed to allude to death and resurrection" (Lurker 1974: 96). Ritual libations used this metaphor of reanimation to 'give life' and 'feed' statues and make offerings to the deceased. "In the pyramid texts a purification bath for the deceased is often mentioned whereby one was guaranteed not only cleanness but also new life" (Lurker 1974: 98).

6.2 GIZA: SPHINX ROCK

A prominent feature on the pre-pyramid landscape at Giza is the east facing 'sphinx rock', located on the eastern edge of the Giza plateau. By examining the geology of the sphinx head in relation to the original ground level, it appears that the head of the sphinx would have been a natural feature before the body was carved in later antiquity (Figure 6.1). In its original state, the Giza landform may have looked similar to the images in Figure 6.2. El-Baz (1992: 17, 24) has argued that these wind-carved landforms are common desert features and would have been familiar to prehistoric people.

Figure 6.1. The head would have been a natural feature protruding out of the ground before the body of the sphinx was carved. Image after Reader 2001, Figure 6.
El-Baz suggests that Egyptian engineers were familiar with these figures and shapes from their awareness of desert environs, but “they also must have realized that the shapes that they encountered were no accident” (2001: 45). It seems very probable that this feature would have looked rather human-like in its unaltered state.

In a book entitled *The Past in Prehistoric Societies*, Bradley (2002) discusses how prehistoric people had a very keen awareness of their ancestral past. Without entering into the discussion of time and past people’s perception of time (e.g. Gosden 1994; Thomas 1996), it is necessary to state that people have always had a past and a history (Bradley 1998a, 2002). Whether this cultural history is fact or legend, it was real to those who heard it. In the absence of documentation, Bradley suggests that the way in which societies remember and identify themselves is through maintaining “close links with places where past events had happened and with forms of architecture and material culture which had been inherited from antiquity” (2002: 8). Bradley has suggested an interpretation whereby prehistoric people may interpret ‘natural features’ as structural ruins or relics of their ancestral past. There may be an “inability to distinguish between the remains of a building from natural rock formations” (Bradley 1998a: 20). Our guides for understanding prehistoric perceptions of landscape are from figured material (i.e. palettes, rock art, painted pottery, bone and clay figurines). This concept has been much used for
perched rocks versus Neolithic megalithic structures in Europe. Neolithic communities may have interpreted the landscape according to their own sets of understandings, where rock formations may resemble ruined buildings and/or animal shapes. It is possible that these ruins may have represented a link with the ancestral past and certain prominent landscape features might have even have acquired special meaning. Not only were the ruined rock buildings identified with the past but also "they were incorporated into newer structures as they provided a source of social power" (Bradley 1998a: 13).

Another way in which people remember is through material culture, which includes buildings, monuments and landscape. One premise of post-processual archaeology has been that material culture is a means of communication that is culturally understood and meaningfully constituted (e.g. Hodder 1989; Tilley 1991). Shapes, colours, materials and locations all have symbolic meaning, within a specific cultural context. If we apply this discussion to the cultural appropriation of natural landforms, then the perception of landforms as ruined monuments may have been acknowledged as meaningfully constituted material culture by early communities. "People did not make artefacts or build structures according to a traditional format because they were unable to think of anything else. Rather, they did so as one way of adhering to tradition and maintaining links with what they knew of their past" (Bradley 2002: 11). Thus mimicking landforms in monumental architecture was a means of constructing social identity through its connection with the past.

6.2.1 Ancestral Memory

If we relate these ideas to Giza, we can consider how the inhabitants of Predynastic times culturally appropriated the sphinx rock, as a relic left by their ancestors. The feature probably looked rather human-like in its unaltered state and may have been perceived as something deliberately shaped in the past and left in ruin through time. If these ideas are further expanded to consider that the Eastern and Western deserts were also cultural landscapes, how could these landforms have been perceived? It does not seem
unreasonable to suggest that these ‘natural’ landforms were viewed as ruined structures left by distant people. Ultimately, the Egyptians may have seen these landforms as cultural constructions left behind by their ancestors (Figure 6.3).

![Image of natural, wind-carved landforms that resemble the Giza sphinx. Images from el-Baz 1992; 2001.](image)

Perhaps the Egyptians imitated these landforms to honour their past and reinforce a sense of identity, by legitimising their past. The rock may have even influenced people’s choice in settling and burying their dead. Giza may have acquired sacred significance in the Predynastic, as being a place used and altered by their ancestors. The sphinx rock may have been interpreted as a “monumental relic” left and re-interpreted by people in the Predynastic Period. I suggest that this east-facing rock played a significant role in selection of Giza as an early necropolis.

6.3 THE WHITE WALLS OF MEMPHIS

One early name of the main settlement area of Memphis was the ‘White Walls’. This is usually interpreted to mean that there was a distinctively white human-made wall. It is traditionally believed that a physical wall surrounded the capital city, which was both plastered and painted white or built from white material, such as limestone (Edwards 1971). The meaning and location of the White Walls has been the subject of much debate (Gardiner 1947; Gauthier 1925-26; Love 2003; Malek 1997; Montet 1957; Sethe 1905), yet remains unresolved. This section will discuss the three textual references to an early ‘wall’ and argue that the ‘wall’ may actually have been a metaphor for the white limestone cliffs.
6.3.1 ‘Circuit of The Walls’

The first mention of a wall is found on the Palermo Stone, an Old Kingdom document known as the ‘royal annals’. The inscription on the second register describes a “circuit of the walls” (𓊑𓊑𓊑𓊑𓊑𓊑𓊑 pfr-h3 lnh), attributed to the First Dynasty king Djer. Wilkinson (2000: 92-94) translates the text as a “circumambulating [or] circuit of the wall” and interprets it as a ceremony that presumably was held in Memphis, where the king would walk or run around the walls of his capital as a part of his coronation ceremony (Wilkinson 1999: 210). It is thought that the king would run the perimeter of the capital city to symbolise the entire country, although Serrano admits, “it is impossible to confirm if the allusions on the Palermo Stone referred to Memphis or another place” (2002: 40).

The kings of the Second Dynasty occupied Memphis, as we know from traces of their structures. The ‘circuit of the walls’ could be in reference to any wall so long as it possessed royal symbolism, such as the walls encircling the royal palace. The ‘circuit of the wall’ ceremony may have been “more related to the symbol and definition of the sacred space” (Serrano 2002: 41) than to an actual ritual activity. Considering the nature of these early texts, it is difficult to conclude if such a ritual actually ever happened at all. The term ‘wall’ is extremely vague and considering there is no structural evidence for the Early Dynastic or Old Kingdom city of Memphis, or any original remains of early temple buildings, it is tenuous to assume that this name was in reference to a specific constructed wall. These claims are based on an architectural feature that has not yet been recovered. There is no archaeological evidence to substantiate the received notion that a white wall surrounded the city of Memphis, although there is no doubt that a substantial urban settlement was located here.

6.3.2 Ptah ‘[He who is] south of his wall’

The second reference to Memphis having a wall comes from the epithet of the Memphite patron deity, Ptah, whose name 𓊑𓊑𓊑 transcribes to “he who is south of his wall” (Erman and Grapow 1926: 95; Gardiner 1947: 124; Sandman Holmberg 1946). This epithet is
recorded on the Palermo Stone in the eleventh year of Neferirkare’s reign and is found in a Fifth Dynasty tomb of Persen at Saqqara (Wilkinson 2000: 179-180). This again suggests some sort of a wall in or around Memphis.

6.3.3 The White Walls

The third wall reference is from a seal in the Abydos tomb of Khaskhemwy (Petrie 1901: Pl. XXIII, 193) that names ‘Memphis’ as [ ][ ] inbw-hd, or “White Walls” (Figure 6.4). The White Walls is the name assigned to the Lower Egyptian Nome of Memphis but is spelled the same when in reference to the city or town. Both locations are written as variants of each other, without any clear distinction of a specific locale. Evidence from Egyptian urban archaeology suggests that some cities and towns were walled (Bietak 1979; Kemp 1989). This notion is further supported by the hieroglyph for ‘village, town or city’, ⲩ nwt, which is interpreted as an ideogram for a walled city with two crossroads (Gardiner 1957: 498, O49). The greatest confusion with the hieroglyphic writing of White Wall is that neither the town nor the nome was spelled using the ⲩ nwt determinative during the Early Dynastic or Old Kingdom; they are both written the same, [ ][ ] inb-hd. This may explain why the name of the city is often confused with the name of the Lower Egyptian nome, as the constriction of the valley and the visibility of the cliffs may determine the extent of the nome.

![Figure 6.4. Sealing from the Tomb of Khasheshemwy at Abydos. From Petrie 1901, Pl. XXIII: 193.](image)
In considering all of these sources, there is a curious absence of the name \textit{inb-\textit{hd}} in contemporary Old Kingdom documents, such as the Pyramid Texts and the Royal Annals. There are several other places named within the region but none specifically mention a place called \textit{inb-\textit{hd}}. The absence could be explained, as there is no need to name the region that one occupies, or from about which the documents were written. However, this could imply is that there was no one single area with the designation \textit{inb-\textit{hd}}, lending credibility to the concept that the name is a regional designation and not a specific town or city.

If we consider that assigning a name to a place is to assign the place meaning and identity (Tilley 1999: 177), coupled with the absence of archaeological evidence for a wall, then the name ‘White Walls’ may be referring to something else. As the name suggests,
the White Wall is in some way a defining feature for the area. The limestone cliffs that
flank the Nile valley extend the entire distance of the region of Memphis, dropping off
at the northern and southern boundaries, giving the impression of being surrounded by a
great ‘wall’. Both Gardiner (1947: 130) and Helck (1974: 148-149) mention that *inbw-
hd* was within the boundaries of the Memphite nome, which include the limestone cliffs
of Tura.

Thus, the ‘White Wall’ name could be a reference to the white limestone cliffs and not
to a human-made structure, making these cliffs a landscape metaphor for the ‘wall’.
An Islamic traveller, Ibn Sa’id, first mentioned this idea in the thirteenth century CE,
when he described Fustat as a “white city with al-Muqattam overlooking it like a wall”
(cf. Jeffreys 1999a: 15). Jeffreys asks, “could the same geological simile have been
used for the older ‘white wall’, as viewed against the backdrop of the western or eastern
cliffs?” (1999a: 15).

6.3.4 Landscape Metaphor

In his book entitled *Metaphor and Material Culture*, C. Tilley (1999) describes the
cultural appropriation and metaphorical use of natural landscapes. Tilley suggests
that, on “a very basic metaphoric level”, places have individual names, just like people.
“Cultures differentially name the kinds of places (streams, mountains) and specific places
that are significant to them” (Tilley 1999: 178). Place names are like pictures, having
the “capacity to evoke full and accurate images of the places to which they refer” (Tilley
1999: 181). It is not difficult to conceive how the early settlers of Memphis, in Helwan,
El-Omari, and Ma’adi, who were living against the backdrop of these massive limestone
cliffs, identified and named this area according to what they saw, what they experienced,
and what was meaningful to them. The name survives through the Predynastic until it
first appeared in writing during the Second Dynasty, which suggests a living memory of
place. “There is no perception of place and landscape without memory” (Tilley 1999:
178).
In other words, I support the idea that the white limestone cliffs of the eastern mountains were a landscape metaphor for the ‘white walls’ that flanked the district. Indeed, the hieroglyph ♦ does refer to an artificial feature and not a landscape feature but I maintain the possibility of a landscape metaphor, where the hieroglyph was used for lack of any other sign.

The idea that such a landscape feature could serve a symbolic metaphor was not unique to Memphis. One example is the Qurn in the Valley of the Kings, where a pyramid-shaped mountain towers 150 metres above the valley below (Romer 1988: 16). It is thought that this mountain is one geographical reason for locating the royal tombs in this specific valley, as the mountain symbolically provided the pyramid ideology and the association with the god Re (Weeks 1999: 828). New Kingdom pharaohs did not build pyramids because the natural pyramid-shaped mountain maintained the pyramid metaphor sufficiently to substitute for a man-made structure. I follow the suggestion of a similar phenomenon for Memphis, where the white limestone cliffs were a landscape metaphor for the ‘White Wall’ that gave Memphis its name.

However, this interpretation cannot account for the epithet of Ptah, ‘he who is south of his wall’. Under the above definition, the Ptah temple at Mit Rahina would still be located within the boundaries of ‘the wall’, not south of it. But if a section of the eastern cliffs are considered, and not the entire mountain range, then the Ptah temple would indeed be south of this section. A natural valley, the Wadi Digla, divides the cliff in two halves, separating the Moqattam Hills from the Tura Hills. The limestone ‘wall’ behind the early settlement between Helwan and Ma‘adi would have been very prominent and highly visible to the people who lived there. Perhaps, to the first regional occupants, the Tura Hills were appropriated as a ‘white wall’ (Figure 6.6) and were exploiting it for building stone. This section of cliffs is also the most evident and visible from the west bank, from Saqqara to Abu Ghorab. D. Jeffreys has also mentioned that desert escarpment of the west bank would also have served as a ‘cliff’, adding to the notion of a wall on both banks of the river (pers. comm. July 2003).
These concepts may be further developed by suggesting that the walls were a metaphor for an enclosure, symbolically akin to the funerary enclosures of the Early Dynastic. Serrano proposes that Early Dynastic “enclosures were used as sacred places” and that the “function of an enclosure is to... define the sacred area” (2002: 29). Another suggestion is that the walls of an enclosure had a symbolic purpose as a transition between chaos on the outside and the cosmos on the inside (cf. Serrano 2002: 29, n.298). Grimal discusses the ‘symbolic entity’ of the White Walls, suggesting that in the Early Dynastic period, each geographical area was surrounded by “a sacred area characterized by the divine precinct, upon which was superimposed the power of such symbols as the White Walls (Memphis)” (Grimal 2001: 40-41). Grimal terms this area as ‘religious geography’ that would later dictate political organisation, based on religious hierarchy. Thus we can consider that the entire Memphis region was flanked by an ‘enclosure’, being physically
surrounded by the natural ‘walls’ of the western and eastern hills. Memphis is the
narrowest part of the valley in Lower Egypt, located at the juncture of the ‘Two Lands’
and thus loaded with ideological symbolism. Given the symbolic importance of the
enclosure, this wall could have designated the entire Memphis region as sacred space,
where the White Walls were the original monument of Memphis.

6.4 MIT RAHINA: MOUND OF CREATION

As discussed in Chapter One, the Nile valley is physically characterised by areas of
high and low ground. Typically, areas of high ground are sought for animal grazing
and settlements as they are beyond the reaches of the annual floodwaters. Thus, natural
mounds and islands are perceived as desirable places of land and were culturally
appropriated. In a valley that is submerged under a blanket of water for three months of
the year, it is not surprising that the Egyptian creation myths describe all life beginning
on an island (Allen 1988). Old Kingdom creation myths describe the primeval mound
of creation emerging out of the waters of chaos (Clark 1959: 35 ff). “The appearance of
the primeval hill from the primeval waters denoted the emergence of the world” (Lurker
1974: 96). The city of Memphis became associated with, and personified as, the primeval
hill. The centre of the universe and the cosmic world was on this island, where all life
began (Clark 1959: 67).

6.4.1 Ptah, the Creator

Central to the creation myth is the god Ptah, the patron god of Memphis (Sandman
Holmberg 1946). The earliest images of Ptah come from a stone bowl of the First and
Second Dynasty site of Tarkhan (Petire et al. 1913) and the earliest epithet of Ptah is
in the Fifth Dynasty (Wilkinson 2000: 180). Herodotus claims that the legendary king
Menes created Memphis whose successor supposedly built a Ptah temple (Lloyd 1976;
Malek 1997: 90). The textual sources are incomplete and very fragmentary for the Old
Kingdom. The most common creation account is the so-called Shabaka Stone, or the
Memphite Theology (Lichtheim 1973: 51 ff). This text was written in the Twenty-fifth

~87~
Dynasty, claiming to have been transcribed from a worm-eaten scroll. Ptah has less than five mentions in the Pyramid Texts but there are two priests of Ptah in the Fifth and Sixth Dynasties (Wilkinson 1999: 293) and two possible mentions of Ptah on the Palermo Stone from the First and Fifth Dynasties (Wilkinson 2000: 105).

The earliest known cult use of Mit Rahina was in relation to Ptah (Malek 1997: 90; Wilkinson 1999: 293), however no in situ archaeology from the Early Dynastic or Old Kingdom has been recovered (Giddy 1993; Jeffreys 1985). The Survey of Memphis team has found re-used Old Kingdom temple blocks believed to have been from an earlier building but nothing of its original structure or foundation has survived (Jeffreys 1985). It is also possible that these blocks were re-used from temples is Saqqara and not from an earlier structure on Mit Rahina. A Ptah temple did exist during the New Kingdom, possibly as early as the Middle Kingdom, but so far unconfirmed, and was in continual use through the Ptolemaic period. There is no structural evidence for a Middle Kingdom Ptah temple (Jeffreys 1985; Malek 1997) but there are textual references of a place name, hwt-k3-pth (Caminos 1954: 150-152; 333-337), which has been interpreted as an early temple. Ptah is known in Memphis from the earliest periods, marking the land as the centre of the universe, the cosmic beginning, but the location of an earlier temple is still unknown.

6.4.2 A Sacred Mound

Bradley (2000) has suggested that places are often attributed to specific gods because of the way an area looks or the attributes it may have. In Egyptian mythology, life was created on an island and it may not be a coincidence that the topography of Memphis is a perfect match with the creation accounts, considering that Mit Rahina is one of several islands, or mounds, in the course of the Nile. Bradley suggests that mythologies are created to explain natural features, as if it has always been that way (2000). In Classical archaeology, there are “significant relationships between the physical configuration of the places where temples and sanctuaries were built and the gods to whom they were dedicated” (Bradley 2000: 25).
Temples themselves are heavily loaded with symbolic meaning (O' Connor 1991) and some later texts mention how temples also emerged from the waters of chaos (Reymond 1969). Sacred lakes were common architectural features in later periods but perhaps the symbolic relationship between water and temples had begun earlier. What better way to represent and preserve the sacred ideology than by building a temple on a large, natural mound that will be surrounded by water during the inundation? The Ptah temple could have been built on some suitable ground on the east bank or possibly the west bank, but instead the temple was built on a natural mound in the Nile. In other societies, Bradley (2000) suggests that natural features were deliberately selected for their shape or location to harness the power embedded within, so could Mit Rahina have been selected for similar reasons? Mit Rahina was a perfect location to maintain and promote the myth of chaos and to physically illustrate the king's divine power and control. Building a Ptah temple at Mit Rahina embodied all of these beliefs by combining the powers of a sacred location, a myth and divine kingship.

6.5 CITADEL ROCK

The Citadel Rock is the most eminent rock outcrop in the entire Memphis region. This outcrop protrudes out from the Moqattam limestone cliffs such that visibility to the north is prohibited from the south. The Citadel was built in the twelfth century by Salah al-Din and in the nineteenth century, a ruler of Egypt under the Ottomans, Mohammad Ali, built his mausoleum within it. There are earlier tenth century foundation walls in this same location but no significant Dynastic foundations have yet been recovered. The Citadel Rock towers 150-200 m above the valley floor, over an area known in antiquity as Kher-aha (Figure 6.7). In the Ramesside period, these hills were referred to as “the mount of Kher-aha” (Hamza 1937: 16). Kher-aha is the area extending westward from the foot of the limestone cliffs. The Citadel Rock, as a dominant landscape feature, is itself not being investigated for its possible sacred significance, rather its association with the site Kher-aha.
6.5.1 Kher-aha: The Place of Battle

The Old Kingdom name Kher-aha was written $\text{𓊫𓊜𓊣}$ with a battle shield and mace head, both of which are military weapons (Gardiner 1947: 131 ff). Kher-aha has been translated to ‘the place of fighting’, the ‘place of arms’ (Gardiner 1947: 131), the ‘place of battle’ (Goedicke 1998: 113), or the literal translation of ‘that which is under war’ (Hamza 1937: 242) or ‘...under fighting’. According to Gardiner (1947: 135), the earliest textual evidence for this name comes from the Pyramid Text, utterance 550.

"Get back, great Black One! Crawl away into Hr-h3, into that place where they crawled" (Faulkner, 1969: §1350).

The ‘they’ in this text is thought to refer to Horus and Seth in reference to the mythical battle for control over the throne, where Horus was to fight Seth to avenge his father Osiris’s death (Griffiths 1960; Mercer 1942). This region then became the ‘boundary’ between Horus and Seth. The battle can be viewed as a fight for political control and the legitimate right of kingship. The first written accounts of the myth occur in the pyramid texts although Mercer (1942: 75) suggests that it may have had its origins in the First Dynasty.
A textual reference to an inventory in ‘the House-of-Horus-and-Seth’ was recorded on the Royal Annals (Wilkinson 2000: 152, 165), suggesting there was once a structure bearing this name. Wilkinson interprets ‘the House-of-Horus-and-Seth’ as being connected with the royal palace (2000: 165), but this is equally uncertain, as no Early Dynastic or Old Kingdom royal palace has been archaeologically excavated in the Memphis area.

Kher-aha is also mentioned on the Palermo Stone, “the gods of Kher-aha”, in relation to the first year of the Fifth Dynasty king, Neferirkare (Wilkinson 2000: 172-174), associated with the mythical battle between Horus and Seth, occurred in this place. The location of Kher-aha has been interpreted as Old Cairo, or Babylon to the Romans, where “Babylon was the main cult centre of the Heliopolitan ennead”, implying the presence of a temple or a shrine (Wilkinson 2000: 174, see also Gardiner 1947:135-136). In the sixth year of Userkaf’s reign during the Fifth Dynasty, the Palermo Stone mentions the occasion of a sixth-day (snwr) festival, which Wilkinson interprets as having taken place in Kher-aha (2000: 155). This conclusion is supported by Pyramid Text utterance 493, “…at the sixth-day festival in Kher-aha” (Faulkner 1969: §1062). There is no archaeological evidence to support a shrine or cult temple in this area, contemporary with the Early Dynastic or Old Kingdom, yet this textual evidence does imply ritual activity.

Kher-aha is later mentioned in a Twenty-Fifth Dynasty stela of Pi’ankhy (Goedicke 1998). Pi’ankhy travels to Kher-aha to leave an offering for “the ancestral gods in mastabas, the ancestral gods in subterranean graves (and for) the gods in it” but there is no reference to a temple in this location (Goedicke 1998: 111-112). Pi’ankhy travels here to leave an offering so that the gods may grant him military success (Goedicke 1998: 113). This suggests that Kher-aha maintained a military association, as it became a burial ground for military heroes. Hamza suggests that Kher-aha flourished because of “its religious and military importance” (1937: 16). It could also be concluded that the association between the name Kher-aha and the location near the Citadel rock had not changed. If this area to the north of Fustat later became a special burial ground for military heroes, could it possibly have gained its original significance during the Old Kingdom, from the mythical battle between Horus and Seth?
The majority of the archaeological evidence from Fustat dates to periods later than the Early Dynastic and Old Kingdom, aside from one Archaic tomb (Boghady 1932; Hamza 1937: 16). No early temples or shrines have been found. The only cultic material dates to the Twenty-Sixth Dynasty, including some statues, a red granite sphinx, some decorated limestone blocks and a red granite column fragment (Hamza 1937). From this material, the excavator assumed the presence of a sun-temple, dedicated to Atum and no more than these artefacts were ever found. There are further textual references to a temple being located in this vicinity from a New Kingdom stela of Rameses II, which claims there was a ‘Temple of Re’, a ‘Temple of the Ennead’ and a ‘Temple of Hathor’ (cf. Hamza 1937: 240). None of these temples have been found but these later textual sources do seem to imply that a temple may have once been present here. Although none of these textual references are contemporary with the Early Dynastic or Old Kingdom, the later use of the site may imply that Kher-aha was considered sacred from an earlier time.

6.5.2 Sacred Ground

Bradley (2000) suggests that natural places do not necessarily have to contain archaeology to demonstrate its use and significance in the past. "Natural places have an archaeology because they acquired a significance in the mind of people in the past" (Bradley 2000: 35). Aside from a single Early Dynastic tomb (Boghady 1932), the lack of early archaeology around the Citadel rock could suggest symbolic associations for the rock as a natural feature. It is possible that quarrying activities in later antiquity (and through to modern times) in this area may have altered this site beyond its original state, or possibly there was a genuine lack of archaeology dating to the periods in question. In the context of archaic Greece, Edlund noted that "the local place name may suggest the presence of a cult" even when there is no visible evidence (1987: 47). Is it possible that the Fustat area was deliberately avoided? It is therefore possible that this area was deemed 'sacred ground', on the basis of an absence of archaeology and the association with the mythical battle of Horus and Seth, ensuing in the site name of Kher-aha. Since there is no impact on the outward appearance, the means of identifying these natural areas is by the remaining
evidence or deliberate avoidance. In the case of the Citadel Rock, a lack of archaeology may indicate that this area was revered as too sacred to have any built structures, thus only used for festivals. Although the land use changed, the military associations and the ‘fighting’ name have remained constant for over 2,000 years.

The Citadel Rock may have had significance in its relation to activities associated with monuments. I have established that Kher-aha was an area of ritual activity but its location between Mit Rahina and Iunu might be highly significant. Kher-aha may have been on a processional route, as a path used in pilgrimages to and from Iunu, linking the temples as well and the location from which all Old Kingdom pyramid sites are visible.

Jeffreys (1998: 70, Fig. 3) has made an observation on pyramid site inter-visibility from the perspective of Iunu (Figure 6.8). Looking up-river from Iunu, the Citadel rock prevents any visibility south of the Abu Ghorab sun temples. But what if the perspective was changed from Iunu to Kher-aha (Figure 6.9)?
At this point on the east bank, everything within the region is visible, including the Ptah temple and every pyramid site (Table 6.1).

<table>
<thead>
<tr>
<th>Pyramid Sites:</th>
<th>Dahshur</th>
<th>S.Saqqara</th>
<th>Saqqara</th>
<th>N. Saqqara</th>
<th>Abusir</th>
<th>A.Ghorab</th>
<th>Z. Aryan</th>
<th>Giza</th>
<th>A.Rawash</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Bank sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helwan</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Tura</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>El-Omari</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wadi Digla</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ma'adi</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fustat (Kher-aha)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Heliopolis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Key: Visible: X  Invisible: 0

Table 6.1 Visibility of pyramids from the east-bank sites

6.5.3 Pathways

In addition to the visibility between sites is the physical connection by means of a pathway. The ‘Road of Sep’ connected Iunu to Kher-aha, then across to Mit Rahina known from a Ramesside stela (Hamza 1937: 240) and the Twenty-Sixth Dynasty Pi’Ankh’s stela (Goedicke 1998) (Figure 6.10). Could this road have been present in the Early Dynastic and Old Kingdom, at the time when both temples were first built? “A sacred road across this Desert seems to have linked together these Heliopolitian cities from very early times” (Hamza 1937: 240). This road, probably originated at Heliopolis “owing to its religious importance”, passed over the Moqattam Hills to arrive at Kher-aha (Hamza 1937: 240), but equally could have begun at either the Ptah temple or the sun temples, depending on the religious orientation at the time.

I am not using these textual references to conclude that this road existed in the Old Kingdom but it does seem highly likely that some sort of a path, either physical or conceptual, connected these major temple sites. The earliest material at Iunu dates to King Djoser in the Third Dynasty (Smith 1946: fig. 48) and gained this site more prominence in the Sixth Dynasty under Teti. There are multiple references to Iunu in the Pyramid
Texts so there is a strong possibility that it may have existed as a pilgrimage site, thus necessitating a ceremonial pathway. The path may have functioned as a processional route for priests and/or pilgrims.

Pathways are more than just a means to connect point A with point B. Paths can be a metaphor for "patterns of activity and social organization. A path may be a way of doing something as method, technique, pattern or strategy" (Tilley 1994: 30). Furthermore, paths can create and maintain social links and communication between groups and individuals. Aside from the obvious ‘path’ of the Nile River through Memphis, and network of canals, there may have been footpaths that ceremonially linked important places.
It may seem obvious to state that ‘paths connect places’ but there may be an underlying significance in where paths lead, what can be seen and the sequence of visibility. “The points linked by paths share sets of common elements - sacred stones, trees, artefact depositions, names and titles referred to in myths and stories and linked to the activities of ancestors who stopped on the journey which created the path” (Tilley 1994: 30). Thus a pathway through the valley floor of Memphis would physically connect a series of myths: the creation myth of Ptah at Mit Rahina, Horus and Seth at Kher-aha, and the solar cult of Re at Iunu. “Stories acquire part of their mythic value and historical relevance if they are rooted in the concrete details of locales in the landscape, acquiring material reference points that can be visited, seen and touched” (Tilley 1994: 33). Consider the path as a physical narrative, where the story unfolds as the individual moves through the landscape.

Richards (2000) has argued that movements are choreographed in relationship to the landscape and monuments, directing and leading people to specific places in British prehistory. A journey along a path can be claimed to be a cultural act, following the footsteps inscribed by the ancestors (Tilley 1994: 31). The visibility (and invisibility) of sites should be evaluated when considering movement and activities in the valley. Places are to be “read and experienced in relation to others” (Tilley 1994: 31) and thus what can and cannot be seen is an important understanding of the landscape. With regards to (in)-visibility, once Iunu was reached, only the northern half of the Memphis region is visible, leaving the southern portion unseen (Table 6.1). This includes the ‘White Walls’, probably the Ptah temple at Mit Rahina and the monuments at Saqqara. These are the areas where there was intensive activity in the Early Dynastic period. Perhaps the invisibility with the earlier monuments was deliberate to create a new solar ideology.

6.6 CONCLUSION
These examples illustrate how the natural topography may have been culturally appropriated. The act of naming gave a place an identity and biography to specific
landforms. Myths were a means to ‘explain’ an ancestral past. The early settlements of Helwan and el-Omari share similar locations on high, upper valley terraces. At Helwan and el-Omari, the white limestone cliffs provided a tremendous backdrop and an ever-present feature in the landscape. Perhaps these cliffs gave people the impetus to think about them in a special way, thus they were named the ‘White Walls’. The Sphinx Rock at Giza was seen as a relic of the past, creating an ancestral memory. The size, shape and location of Mit Rahina gave Memphis a cosmic beginning, as Memphis had created its place in the cosmos, where the Ptah temple was at its centre. A processional route connected the two temples of Memphis, and passed through an area of sacred ground, made sacred through myth.

None of these sites are here by chance or random placement. Each landform had symbolic meaning before architecture was built. None of these locations are silent, but were imparted with symbolic associations and were culturally appropriated. Myths, names and biographies all contributed to creating a collective social identity and may have also played a part in determining later pyramid site location.
CHAPTER 7

IDEOLOGY OF BUILDING MATERIALS

"And so the gods entered into their bodies of every kind of wood, of every kind of stone, of every kind of clay, of every kind of thing which grows...."


As discussed in the previous chapter, the white limestone cliffs of Memphis were culturally appropriated and defined Memphis as a sacred landscape. This idea is extended here to follow how and why certain materials were used in the construction of the royal funerary monuments. The act of removing and moving stone materials is questioned for its cultural significance. As pyramids are heavily loaded with symbolism and ideology, it is therefore relevant to consider the use of stone in monumental architecture in this way.

In this chapter, I examine the types of stones used, the source and origin of materials, colour symbolism and explore any possible meanings behind natural resources and their use in funerary monuments.

Traditionally, functional and economic motivations are cited as being the principle reason behind exploitation of limestone for the construction of monuments in Memphis. It is commonly understood that pyramids were made of limestone because good quality stone was abundantly available from local resources (e.g. Arnold 1991; Aston et al. 1999: 40; Edwards 1947; Lehner 1997: 206; Lucas and Harris 1962: 52). The widespread availability of limestone "meant that it was often quarried in the immediate vicinity of where it was needed" (Aston 1994: 37), and these stone resources contributed to pyramid placement (e.g. Aston et al. 1999: 6; Lehner 1985). It is not my intention to dismiss these pragmatic reasons but to explore the possible symbolic uses of stone in Old Kingdom monumental architecture.

It is true that it was economically unfeasible to construct massive stone monuments from any other material than limestone. However, it is insufficient to conclude that limestone was used simply because it was there. This position ignores any symbolism or meaning
that may have been ascribed to the stones themselves. Indeed, limestone is the primary material but there were also deliberate choices for other materials, such as basalt and red granite, which may have had more meaning than an elite ability to exploit luxury materials.

7.1 AN EMBODIED LANDSCAPE

The ancient Nile bisected the country into two noticeable halves: east and west. The geographical divisions were reflected in the ancient Egyptian culture and natural phenomena were incorporated into mythology and religious beliefs (Brewer and Teeter 1999: 25). The most striking natural phenomena associated with the east and west are the rising and setting of the sun. The Egyptians had a solar theology (Assmann 2001: 55) where the god Re was at the top of the Old Kingdom Heliopolitan pantheon. The solar cult was a major influence on society (Hornung 1996; Quirke 2001). Mythical stories were created to understand observations regarding the solar cycle. Thus the combination of myth and landscape topography resulted in an east-west duality of life and death (see also Chapter One, section 4.1).

Every Old Kingdom pyramid is built on the west bank (Arnold 1991: 153), in the domain of death. The Re-Atum temple at Iunu was on the east bank of the Nile. The earliest settlements in the Memphis area are the east-bank sites of el-Omari and Ma’adi (although both these sites also had cemeteries). Up until the Third Dynasty, both sides of the river were being used as cemetery sites but afterwards, the majority of subsequent tombs were placed on the west bank. There are exceptions to this ideological ‘rule’ but the paradigm remained: the east was for the living and the west was for the dead.

According to Assmann (2001: 55-67), the Egyptians had a nature-based religion, where they had a social interpretation of nature. Through religion, the Egyptians personified the landscape and all of its features, ascribing agency to natural forces. “Nature was not something distinct from the gods” (Assmann 2001: 63). Assmann describes the Chapel
of Seasons in the Fifth Dynasty sun temple of Niuserre as being a “textbook of natural history” (2001: 56), where the sun god is given “creative will”, literally providing for all of humankind. The landscape was ascribed with human characteristics and was described in texts as an active participant. Assmann asserts that natural events are explained as acts of gods and the seasonal rhythms are “moved by divine creative will” (2001: 59, 61). “The deities were themselves these natural elements and phenomena. The Egyptians did not view their gods and goddesses as beyond nature but rather in nature and thus as nature” (Assmann 2001: 64). Thus it is possible to conclude that the gods embodied the physical world and their divine characteristics were transferred to materiality. Is it then possible to consider raw materials as ‘possessing’ divine attributes (see Aufrère 1991)?

7.2 IDEOLOGY OF BUILDING MATERIALS

In some instances, structures made of particular substances can evoke particular meanings. Pinch has suggested, “the material from which magical objects were made might have its own symbolic role” (1994: 81). Wood describes how materials used in Early Dynastic funerary architecture “sometimes had symbolic associations by virtue of their geographical source or natural properties” (1987: 70). Wood (1974) examined the 30 triad statues found in the mortuary temple of Menkaure at Giza and determined that the geographical source of the stone matched the region depicted in the statues. Perhaps there is an ideology of building materials in which natural resources are given to have ascribed qualities based on their source and their colour. These examples illustrate how choices of materials can possess an ideological symbolism.

In Chapter Two, I discussed the symbolic importance of the pyramid shape as evoking the primeval mound of creation. To place the deceased under this mound was to symbolically ‘plant’ the body in the earth “like new seedlings on the first mounds of earth to emerge from the annual Nile flood, he would rise again” (Lehner 1997: 72). If this much symbolic consideration was given to the shape of the funerary monument, then equal attention must have been given to the materials used in its construction. This analysis
is concerned with the choice of building materials, when skill and resources are equally available. What makes one material any more or less desirable or suitable than another? In the Early Dynastic period, tombs and temples were constructed using both mud bricks and limestone, sometimes in combination. The re-analysis of the Early Dynastic tombs at Helwan has shown that the skill to exploit stone was present, even if at a basic level (Köhler 1998, 2000; Wood 1987). “The motivation and technical ability for the construction of tombs built entirely of stone existed in the First Dynasty” (Wood 1987: 69) but stone tombs were not common until much later. Wood concludes that although the skills and resources were available for both limestone and mud brick, brick was the preferred for “the sanctity of the material” and that “religion was probably the only force powerful enough to retard the development” of stone (1987: 70).

The practice of stone construction changed dramatically in the Third Dynasty when the Step Pyramid was built for Djoser at Saqqara, representing the first royal funerary structure built entirely out of stone. However, the Giser el-Mudir has several courses of limestone rubble masonry and its construction is attributed to the Second Dynasty (Mathieson and Tavares 1993; Mathieson et al. 1995; Mathieson et al. 1997). From the Third Dynasty onwards, there was a clear change in the tradition of building materials. Royal funerary monuments were built of stone and domestic living structures were made of mud brick, including the royal palace. Wood suggests it is possible that mud bricks were used in domestic structures because it physically removed a piece of the Nile alluvium and placed it into a living structure, while maintaining its ‘living’ properties and black colour symbolism. A similar question could be asked regarding the use of limestone in funerary monuments for its everlasting, ‘eternal’ properties. One contributing factor for the use of stone, as Lurker suggests, is that “stones were seen as a symbol of durability, of eternity” (1974: 117) and were a physical image of durability, immovability and perhaps immortality.

Perhaps the character of the gods may have been associated with the selection of building materials. Raven suggests specific materials were used for funerary or magical purposes
due to their "supernatural character" (1988: 237). The Egyptians mimicked what they saw in the world around them, by using materials from sacred places, assigning a greater meaning and visual recognition to their monuments. "The inundation deposited the alluvium from which bricks were made. The Egyptians might have regarded bricks as manifestations of divine beneficence and as assurance of regeneration of eternal life" (Wood 1987: 70). Perhaps when Nile silts are used to make mud bricks, properties of the earth god will manifest when these bricks are used for domestic purposes, taking the life-giving properties into the dwelling itself. There would be tangible access to the gods while physically occupying a constructed space. According to Aufrère, the purpose of building a monument was to "produce something long-lasting and effective, designed to maintain divine life" (2001: 158). Every feature was designed to increase its potential efficiency. "The divine is everywhere showing itself in the most unexpected forms, even... in essential minerals like metals and precious and non-precious stones" (Aufrère 2001: 158).

If this scenario is possible for the use of mud brick, then perhaps the same could also be true for limestone. Was there any symbolism in the removal of limestone from the desert and its use in mortuary construction? Burial chambers were cut into the living bedrock to physically place the dead body underground, in the underworld realm of the gods. I suggest that natural resource exploitation was conscious and deliberate, in addition to a choice based on local availability or abundance. In the case of Egyptian temples, every stone building "probably owed its particular appearance and character to a particular mythological event, which underlines its individual use in building; for it was thought that the use of a particular material implies a deeper meaning" (Aufrère 2001: 159). The deliberate use of stones was to evoke what we call 'sympathetic magic'.

7.3 SIGNIFICANCE OF QUARRIES

The Egyptians went to great lengths to quarry and transport stone, but why were specific stones used in preference over others? During the Old Kingdom, the Egyptians quarried
and transported other hard stones, such as basalt and red granite from distances of over 900 km (Aston et al. 1999). There are abundant examples of these materials being used in art and architecture (e.g. Arnold 1991). However, just because these stones were being used “from the earliest periods it cannot be seen simply as the result of the utilization of a plentiful material, since scarce, difficult to obtain, and extremely hard stones were often used when more common and easily worked varieties could have sufficed” (Wilkinson 1994: 88). The fact that specific stones were used, sourced from great distances, suggests that cultural factors outweighed practical considerations.

In a European context, Bradley (2000) suggested that Prehistoric quarries were known to have symbolic associations, as being the place where the gods reside. Often, the removal of stones from a specific area was meaningful, especially when these stones were then moved and incorporated into the structures that became the fabric of the mortuary landscape. Rather than describing the ways in which materials were used in the construction of funerary monuments, perhaps what was important was where the stones were from and what was taken away (Bradley 2000: 35). When considering these notions in an Egyptian context, is it conceivable that the Tura limestone quarry had symbolic meaning associated with rebirth, due to its location on the east bank? Perhaps there can be an association between the quarry and the white stones, as the Memphis area was called the ‘White Walls’, and the ‘wall’ in question was the limestone cliffs where the stones were quarried. In this case, the materials that were removed physically transformed into the fabric of the mortuary landscape of Memphis.

In the previous chapter, I suggested that Memphis was a sacred place created from ancestral memory and the cultural appropriation of the natural landscape. Continuing on with that idea is to suggest that the materials themselves were ascribed spiritual and ancestral qualities. Using an example from Neolithic studies in Ireland, Cooney observed, “the extraction of stone provides a mechanism for the appropriation of the land and its ancestral/spiritual meaning” (1998: 109). Furthermore, Cooney suggests “extracting stone from the earth can therefore be seen as providing a contact with the spirit or
ancestral world” (1998: 110). Thus, mining and quarrying stones physically removed the powers of the gods and/or the ancestors that were embedded in the stones themselves. In Egypt, Aufrère suggested that the mineral universe was evoked by transferring stone from one location to another (1991; 2001: 158-159). Building a monument with spiritually charged stones could possibly enhance the significance of a structure. Old Kingdom stone monuments were a movement of stones, but not just any stones, specifically Tura limestone.

7.3.1 Casing Blocks

Externally, pyramids were built with two types of stone - the core masonry and the outer casing blocks. Every pyramid had a local west bank quarry close to the construction site (Aston et al. 1999: 40; Lucas and Harris 1962: 52) and often the natural terrain was incorporated into the structure’s core. The outer casing blocks came from the east bank quarries of Tura, which here also includes Ma’sara (Clarke and Engelbach 1990: 12). Limestone was used from the time of the First Dynasty tombs at Saqqara and Helwan and the Tura quarries were exploited from the Fourth Dynasty onwards (Lucas and Harris 1962: 51-53). Every pyramid is cased with fine white Tura limestone (Edwards 1947: 211; Lehner 1999: 639), including the Menkaure pyramid at Giza (Lucas and Harris 1962: 53). The core of the pyramid’s structure varied with irregularly shaped blocks and rubble, made with poorer quality limestone (Arnold 1991; Lehner 1997). Similarly, some Middle Kingdom pyramid cores were constructed of mud brick. “During the Old and Middle Kingdoms, Egyptian builders used better quality Tura limestone and Aswan granite only for visible parts of their buildings” (Arnold 1991: 164). These core blocks were never meant to be seen, being hidden under the casing stones; the pyramid’s core construction was less important than the casing stones. “Since core masonry made up the greater percentage of the building volume, the transport efforts could be much reduced if only casing blocks had to be brought from greater distances” (Arnold 1991: 164). Again, this economic reason is valid but the symbolic use of specific limestone should not be overlooked. The visible part of the pyramid was faced with Tura limestone.
7.3.2 The White Wall

The Tura limestone quarry is a dominant landmark and a significant feature of the sacred geography (see Chapter Six, section 3.4). The white limestone cliffs were the defining landscape feature, especially the section of the eastern mountains between Wadi Hof and Wadi Digla. These hills defined Memphis and gave it the name, ‘White Wall’. Consider again the argument that the ‘wall’ was a metaphoric enclosure wall that demarcated the sacred space of Memphis. Using stones from the ‘wall’ would give an intimate connection between the material out of which the pyramid was constructed and the material characteristics of that place. It follows then to physically remove a piece of this ‘wall’ and incorporate it into a funerary structure had supreme significance.

I propose that Tura was a symbolically charged location. The quarry was part of the ‘wall’ of Memphis. A cultural motivation seems to clarify why Tura was selected when there were so many areas of the Eastern Hills to choose from. Some have argued that the stone was selected for quality (Aston et al. 1999: 6), which is unquestioned, but perhaps the desired ‘quality’ in this case is synonymous with the symbolism of the ‘wall’, the defining characteristic of Memphis.

The mineral world was evoked by transferring “the desert to the Nile Valley in the form of stone quarried from the Libyan and Arabian mountains, in which the power of the Nile floor hollowed out caves and rock shelters - the residences of the God on the border between the two worlds” (Aufrère 2001: 158-159). The pyramid’s limestone core was taken from a local, west bank quarry; the outer casing was quarried from the east bank. Thus the pyramid’s core and outer casing physically and metaphorically combined both worlds into one. Taking stones from the east, the metaphorical realm of the living and burying oneself underneath them sympathetically evokes the magic of rebirth, renewal and eternal life. It seems that what was of paramount significance was to literally remove a stone from the domain of rebirth and physically incorporate it into the funerary structure, under which the deceased body was placed. By physically placing the dead body under
these stones is to surround and encircle the deceased within the layers of regenerating properties (Roth 1998), invested within the limestone itself.

7.4 COLOUR OF MONUMENTS

The building of the Egyptian pyramids required detailed and careful planning so the deliberate use of stones should not be overlooked. Some recent papers (e.g. Baines 2000; Robins 2001; Spence 1999) have explored aspects of colour symbolism and monumental architecture in Egypt. Typically, the use of building materials has often centred on how stones were quarried, transported and moved to build the pyramids (see Chapter Three), rather than the stones' symbolism, meaning and/or colour. Some have shown (e.g. Verner 1994; 2001) how certain materials were deliberately used for their colour, such as basalt or alabaster floors and red granite columns, to further the symbolic representations of the cosmos. The deliberate use of coloured stones possibly enhances the religious content of the monuments, yet to disregard the symbolic features of religious architecture, such as pyramids, is to ignore the very fabric of their construction. In this section, I have borrowed some ideas from European contexts to understand ways in which specific stones were used in monumental architecture, where the materiality of the stones may have enhanced the monument's meaning.

In studies of the Neolithic in Northwest Europe, there is an awareness of the use of stones and colour in megalithic architecture (e.g. Jones 1999; Jones and MacGregor 2002; Lynch 1998; MacGregor 2002; Tilley and Bennett 2004). Lynch believes that there is an "appreciation of the aesthetic qualities of ancient architecture" (1998: 62), which relates to the monuments' setting in the natural landscape. Colour cannot be understood on its own, as it requires an understanding of the social landscape. The contrast of colours and textures, which was recognised for the Irish Neolithic tombs (Lynch 1998), suggests "colours are perceived and understood... as a series of contrasts" (Jones and Bradley 1999: 114). In France, Scarre notes that the juxtaposition of two materials may have been "taking up the colours of the land and seeking to release or tap into the special powers
of qualities” of the stones themselves (2002: 236). “This analysis argues for a colour symbolism derived from the natural landscape” (Scarre 2002: 236). A consciousness of colours creates and sustains meanings to convey social values expressed through material culture (MacGregor 2002: 141). “The colours deployed in material culture have a range of physical, emotive and conceptual elements to their meaning” (MacGregor 2002: 142). Additionally, colour can provide metaphorical meaning by “condensing the physical properties of objects” (Jones and Bradley 1999: 113). In this section regarding the colour of stones, I wish to examine the innate colours of natural materials, where coloured stones may have been carefully selected for monument construction because of their particular qualities.

7.5 EGYPTIAN COLOUR SYMBOLISM

The colour of stone is another layer to the ideological use of materials (Aufrère 1991). “To the Egyptians, the word ‘colour’ meant the same as ‘substance’, of which colour was not an accidental but an integral part” (Lurker 1974: 41). Colours were used to make a symbolic statement (Wilkinson 1994: 104-125). Colour and materials were combined to give expression to symbolically constructed meanings (Robins 2001: 291). Every colour had its own special value in the Egyptian reference system, which was capable of evoking special meanings and purposes when used in particular contexts (Aufrère 2001: 158; see also Baines 1985). For example, black skin in statuary was to signify the king’s renewal and transformation (Robins 2001: 293). Manniche suggests that the black image of Queen Ahmosi Nefertari embodies the concept of regeneration (1970: 11-19). Robins also mentions that red stones were used in royal statuary to emphasise the solar aspects of kingship (2001: 292). Similarly, white clothing was worn for ritual purposes and some temple floors had white calcite (or alabaster) floors to stress sacred purity. It should also be mentioned that some poorer quality vessels were painted to imitate more prestigious stones (Aston 1994) and traces of paint were also found on statues. However, the Old Kingdom pyramids were not known to have been painted so the exterior stone colours would represent deliberate choices.
Beyond the sources of the materials, the colours of stone can possess highly potent symbolism. According to Spence (1999), textual and archaeological evidence suggests that the Egyptians had three primary colours, white, red and black. Scarre notes that this colour triad is “common to almost all studies of colour symbolism” (2002: 237) and consistently appears in other archaeological contexts (Jones and Bradley 1999: 113). Table 7.1 is a brief survey of four elements common to every pyramid, outer casing blocks, sarcophagus, burial corridor and burial chamber. For each, I have selected three coloured stones to examine: white limestone, red granite and black basalt.

7.5.1 White Limestone

Typically in Egyptian studies, white symbolises cleanliness, ritual purity, sacredness and sanctity according to Egyptologists (Lurker 1974: 129; Wilkinson 1994: 109). White was a solar colour (Wilkinson 1994: 116), as the “sun was said to ‘whiten’ the land at dawn” (Robins 2001: 291). White was an expression of “earthly omnipotence” because of its lack of colour and was a “means of denoting sacred things like the ‘White Wall’, i.e. Memphis” (Lurker 1974: 129). The most basic term for limestone was ‘white stone’ (Aston 1994: 36; Verner 2001: 62) and the ‘white’ in the name ‘White Walls’ is in reference to the limestone. Some have suggested that white stones were used to case the pyramids so that they would ‘gleam’ and sparkle in the sunlight like gold. “The use of light-reflecting white limestone to case pyramids was almost certainly significant given their complex stellar and solar iconography and the importance of light-emission as an attribute of celestial bodies” (Spence 1999: 116).

7.5.2 Red Granite

Red granite statuary was known as early as the First Dynasty in Abydos. Red granite was not quarried prior to the Fourth Dynasty, after which it was used throughout the Old Kingdom (Lucas and Harris 1962: 51, 57). The quarry source for this stone was over 900 km south of Memphis and the use of it was restricted to royalty. Red granite was widely
used in pyramid building for lining burial chambers and passages and “occasionally for exterior facing” (Aston et al. 1999: 36). As previously discussed, limestone was the most common casing stone type so neither a structural or functional explanation can account for the use of red granite casing over limestone, unless it had cultural significance.

<table>
<thead>
<tr>
<th>King's name</th>
<th>Outer Casing Stones</th>
<th>Sarcophagus</th>
<th>Burial passage</th>
<th>Burial chamber</th>
</tr>
</thead>
<tbody>
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<td>Snefru (Bent)</td>
<td>Tura Limestone</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snefru (Red)</td>
<td>Tura Limestone</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shepseskaf</td>
<td>Tura Limestone + 1 course red granite</td>
<td>“dark stone”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pepi II</td>
<td>Tura Limestone</td>
<td>Black Granite</td>
<td>Red granite</td>
<td>Limestone</td>
</tr>
<tr>
<td>Merenre*</td>
<td>Tura Limestone</td>
<td>Basalt</td>
<td></td>
<td>Limestone</td>
</tr>
<tr>
<td>Djedkare-Iseis</td>
<td>Tura Limestone</td>
<td>Basalt</td>
<td>Red Granite</td>
<td></td>
</tr>
<tr>
<td>Pepi I</td>
<td>Tura Limestone</td>
<td>Black sandstone</td>
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</tr>
<tr>
<td>Sekhemkhet*</td>
<td>Tura Limestone</td>
<td>Alabaster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unas</td>
<td>Tura Limestone</td>
<td>Basalt</td>
<td>Red Granite</td>
<td>Alabaster and limestone?</td>
</tr>
<tr>
<td>Djoser</td>
<td>Tura Limestone</td>
<td></td>
<td>Red Granite</td>
<td></td>
</tr>
<tr>
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<td>Tura Limestone</td>
<td>Basalt</td>
<td>Red granite</td>
<td>Tura Limestone</td>
</tr>
<tr>
<td>Teti</td>
<td>Tura Limestone</td>
<td>Black Graywacke</td>
<td>Red Granite</td>
<td></td>
</tr>
<tr>
<td>Raneferef*</td>
<td>Tura Limestone</td>
<td>Not found</td>
<td>Unlined; incomplete</td>
<td>Unlined; incomplete</td>
</tr>
<tr>
<td>Neferirkare*</td>
<td>Tura Limestone + 1 (or more) course red granite</td>
<td>Not found</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niuserre</td>
<td>Tura Limestone</td>
<td>Unknown</td>
<td></td>
<td>Limestone</td>
</tr>
<tr>
<td>Sahure</td>
<td>Tura Limestone</td>
<td>Basalt</td>
<td>Red granite entrance and Limestone interior</td>
<td>Red Granite</td>
</tr>
<tr>
<td>Shepseskare*</td>
<td>Tura Limestone</td>
<td>Not found</td>
<td>Unlined; incomplete</td>
<td>Unlined; incomplete</td>
</tr>
<tr>
<td>Nebka*</td>
<td>Tura Limestone</td>
<td>Red Granite</td>
<td>Red Granite</td>
<td>Red granite and Limestone</td>
</tr>
<tr>
<td>Khaba*</td>
<td>Tura Limestone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Menkaure*</td>
<td>16 courses red granite + Tura Limestone</td>
<td>Basalt</td>
<td>Red Granite</td>
<td></td>
</tr>
<tr>
<td>Khafre</td>
<td>1 course red granite + Tura Limestone</td>
<td>Black Granite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khufu</td>
<td>Tura Limestone</td>
<td>Red Granite</td>
<td>Red Granite</td>
<td></td>
</tr>
<tr>
<td>Djedefre</td>
<td>20 courses of red granite + Tura Limestone</td>
<td>Red Granite</td>
<td>Red Granite</td>
<td>Red Granite</td>
</tr>
</tbody>
</table>

* Marks incomplete monuments

**Table 7.1.** Chart illustrating the use of stone in royal funerary monuments, in geographical order. Information from (Arnold 1991; Lehner 1997).
Red was a potent colour, possessing attributes of life and death, protection and regeneration. Red symbolised the sun and was associated with fire, blood, the desert and the god Seth (Robins 2001: 292; Wilkinson 1994: 106). Depending on the context, red could embody both positive and negative meanings (Robins 2001: 293). In regards to the colour of stones, “red granite had solar significance, because of their colors, and they could be used to invoke the regenerative properties of the solar cycle” (Robins 2001: 292).

Red granite casing blocks were first used by Djedefre at Abu Rawash in the Fourth Dynasty (Table 7.1). As a solar stone, the use of red granite corresponds with the growing importance of the solar cult of Re, as Djedefre is the first king to use the titulary ‘Son of Re’ and incorporate Re into his name, Djed-ef-Re (Quirke 1990: 25). After Djedefre, four other pyramids have the bottom courses in red granite with the upper blocks in white. Red and white were opposites and “when placed in juxtaposition to each other, they were an expression of wholeness and perfection” (Lurker 1974: 41). Spence suggests that juxtaposition between red and white stone is the point of contact between the two cosmological realms: the living and the dead (1999: 115). “Red stone was also frequently used for false doors, which formed the focus of Egyptian mortuary cult and provided a symbolic point of contact between this world and the hereafter” (Spence 1999: 116). One possible interpretation for the use of red granite casing is that it physically illustrates the symbolism of the cosmos.

The Egyptian concept of Duat is the transitional stage when the sky turns reddish pink before the sun rises over the eastern hills and just after the sun sets on the western horizon (Allen 1988; 2003). In the cycle of life, death and rebirth, the Duat is an in-between phase that occurred before the body was reborn at dawn and descended into the netherworld after sunset. This metaphoric concept was taken from solar observations and the colours of the sky at sunrise and sunset. In the context of pyramids, the red band of granite encompassing the bottom of the pyramid could be explained in these terms.
Additionally, the hieroglyph for pyramid, *mr* △, “is almost always represented as a white (e.g. limestone) pyramid standing on a small black line (e.g. the earth): (Verner 2001: 460). One polychrome version of this hieroglyph comes from an Old Kingdom tomb of Ptahhotep at Saqqara, “which indicates that the lower portion of the pyramid was cased with red granite” (Verner 2001: 460). Some have suggested that the red band may signify that the pyramids were painted but Lehner also agrees that the red band depicted in the hieroglyph represents the red granite casing at the base of some pyramids (1997: 34). Alternatively, the red band may symbolize the reddish colour of the desert surface. The word for desert, dšrt, translates to ‘Red land’ and is thought to be an ideogram for the reddish-brown hue of stones covering large areas like Saqqara (Murno 1993).

Red granite was also used to line pyramid burial corridors and chambers and was occasionally used for the royal sarcophagus (Table 7.1). Pyramid burial chambers often needed casing stones “as a protective measure against collapse because it often has to penetrate layers of loose sand and desert conglomerate” (Arnold 1991: 164). As this may be true, why was granite selected when there were other hard stones to choose from, such as basalt? Spence (1999) suggests that red granite represented a transitional area.

Domestic architecture also uses this colour symbolism. In the New Kingdom, it was common for the walls to be white-washed with a red band at the bottom and a mud brick floor. White walls, red band and black floor are combined to represent a cosmological balance. Thus, incorporating this white and red colour scheme into monumental architecture would be visually understood, representing the same cosmological balance.

None of these features, the corridor, the chamber or the sarcophagus, was ever intended to be seen by anyone. The interior of the pyramid was not public space to any living being, not even the highest priest was allowed access. Arnold suggested that red granite was used “only for visible parts of their buildings” (1991: 164), but that is clearly false in the case these features. Why go to the effort of lining a chamber with highly expensive material if no one was ever going to see it, unless there were intrinsic properties within the
stones themselves? In the case of red granite, I propose that it was deliberately selected for its protective colour symbolism, representing the transition to the netherworld.

7.5.3 Black Basalt

In Egypt, black was a positive and powerful colour, "linked with growth and regeneration", and was "particularly favoured in magic" (Pinch 1994: 81). Black symbolises death and the underworld but could also represent resurrection, with its symbolic association with the black Nile silts, the colour of life and fertility (Wilkinson 1994: 109; Wood 1987). Hence, black is commonly associated with the god Osiris, ruler of the netherworld (Lurker, 1974: 34; Robins 2001: 291).

During the Old Kingdom basalt was commonly used in Memphis for pyramid temples and sarcophagi (Aston et al. 1999: 24). Basalt outcrops occurred throughout the Memphis region, from Abu Rawash past Giza and through to the Fayum further south but the primary Old Kingdom basalt quarries were at Widan el-Faras in the Faiyum (Bloxam and Storemry 2002). On the east bank of Memphis, basalt occurred north and northeast of modern Cairo but "despite basalt's availability at numerous localities, only one ancient quarry is known", located at Wadi Faras in the northern Fayum, where work began as early as the Fourth Dynasty (Aston et al. 1999: 23). This suggests that there are other sources of local basalt but the Fayum site was deliberately and specifically chosen for its quality and possible symbolism of rebirth.

Black basalt could symbolise the black, life-giving Nile mud (Aston et al. 1999: 24). As statuary, black stones evoked the "regenerative qualities of Osiris and the underworld" (Robins 2001: 291). As paving blocks, basalt had "potent associations of the colour with fecundity and renewal" (Spence 1999: 115). "Why go to the additional trouble and expense of bringing basalt for paving Khufu's upper temple floor, rather than using local material, or even bedrock?" (Hoffmeier 1993: 120). Hoffmeier explains this as having "some religious or mythological significance" in the use of black stone and suggests that basalt stones were used to represent death and the rejuvenating attributes of Osiris.
Thus, when presented with a choice of materials, basalt was chosen over other stones for its quality as a hard stone and the colour association with Osiris and rebirth.

Eleven of the fifteen sarcophagi listed in Table 7.1 are made of basalt or some other black stone. Surrounding the deceased with black allowed the deceased to become one with Osiris. “Black stone seems to have been considered a particularly potent symbolic substance” (Wilkinson 1994: 110). The sarcophagus was placed inside the burial chamber, again, in an ‘invisible’ location, where no one was to ever see it. The invisibility of the stone usage suggests that the material itself held value greater than quality alone, where the properties of the stone were magical for the deceased placed within it.

7.6 CONCLUSION: SYMBOLIC ARCHITECTURE

This chapter has illustrated the potential for highly symbolic embedded meaning in pyramid construction. There is deliberate choice in where the stones were quarried to maintain links with the ancestors and cultural identity. Materials themselves had metaphoric qualities entangled with religion and myth, which added additional meaning and symbolism to the structure itself. Both the origin of the stone and its colour can greatly enhance the significance and meaning of the monument. For example, the significance of the stone’s colour and the place of origin may have enhanced meaning to the use of stones in monumental constructions. Limestone may have been used because of its local availability and abundance but that is not to say that it was devoid of meaning and symbolism. White, red and black were potent colours in Egyptian ideology and those meanings were expressed in the deliberate use of hard and soft stones. Importing stones from great distances for their use in internal structures, not to be seen, supports the idea that symbolic factors were paramount in the choice of building materials. The issue of visibility is less important since the decoration was for the benefit of the dead. The use of stones added an extra dimension of symbolism and meaning to an already heavily loaded and visible monument, such as pyramids.
~ CHAPTER 8 ~

MONUMENTS AND LANDSCAPE

The discussion about pyramids has been intentionally left until the very end to emphasise the amount of cultural activity that preceded their construction and to illustrate how much more there is to discuss within this region than just pyramids. Pyramid construction is one aspect of a constantly reflexive and interpretive cultural structure, but for the sake of this research, the Old Kingdom is the temporal stopping point before the following First Intermediate Period and the second major phase of pyramid construction in the Middle Kingdom. The previous chapters illustrated the spatial distribution of settlements and cemeteries, the degree of time depth, and the cultural appropriation of local topography. These events contribute to an ongoing reflexive tradition that is constantly being socially re-evaluated, where pyramid builders may have considered the past when building in the present, with intentions for the future.

In Chapter Three, I discussed at length the possible motivations for the choice of pyramid locations. These include geological suitability, site access, availability of good quality limestone, and the proximity to a royal palace. Reasons for the constantly changing locations have been attributed to breaks in kingship, incomplete structures, visibility with Iunu sun temple and/or the possible change in the royal palace. Any of these possibilities are equally valid as answers to the persistent question of pyramid site location. However, I suggest another interpretation for site location concerning previous site use attributed to the ancestors. If kings were consciously choosing their pyramids sites (Goedicke 1995; Spence 2000), then why not honour their past to strengthen their present political situations?

My symbolic approach is not concerned with the function and purpose of pyramids but with their meaning. The location of Memphis was not only a "conspicuously strategic" position (Campagno 2003: 155) but it also was 'conspicuously symbolic', heavily imbued with cultural ideals and cosmological significance. As demonstrated in Chapter Seven,
there is more to the use of limestone than just its availability, abundance, quality and transportability. Religious monuments such as pyramids were symbolic expressions of the sacred landscape, embodied with social significance. Pyramids are not simply a gross display of wealth (e.g. Trigger 1990). Instead, they demonstrate a developing ideology, heavily laden with symbolic meaning. Their placement on the west bank is deliberate, as is their distribution from south to north. The location, shape and visibility of pyramids each reflect conscious choices. It is also possible that the act of pyramid building was more important than the completed structure.

8.1 MARKING THE SPACE FOR THE DEAD

The landscape was permanently marked by burials from the first communities to engage in mortuary practices. The selection process for burials is never random or arbitrary; it is deliberate and quite often carries heavy symbolic significance (Parker Pearson 1999). Using a place to house the dead permanently augmented the perception of the landscape, from the very first burial. “Each stone erected... would have marked individual biographies and an altered understanding of the landscape” (Richards 1996: 193). I have previously demonstrated how the natural landscape was appropriated and why specific sites were selected within the Memphis region by examining the significance of place. This then allows for a discussion regarding mortuary practices in terms of space and the use of that space.

A natural space is converted into a cultural place “through a physical transformation. Once a monument has been built in a particular space, that space can never again be interpreted in the same way as before” (Thomas 1991: 30). Pyramids permanently altered the Memphite landscape and changed the way in which people negotiated their world. These monuments visually dominated the physical space and in so doing presumably had some sort of emotional impact. Pyramids were more formalised and a later expression of earlier burial traditions but were more visually imposing than previous mortuary architecture.
Hence, the experience of the area had significantly and permanently changed from the time of their construction.

But before the pyramids were built, Memphis had a long tradition of social, religious and funerary land use (see Chapter Five). Memphis was a sacred landscape before pyramid construction and pyramids were just one aspect of a reflexive tradition of Egyptian funerary architecture. The boundaries of the collective distribution of pyramids may have delineated large-scale sacred space through their monumentality. Since pyramids were made of stone, it could be said the “people wished to create an enduring record of a set of fixed cosmological principles; setting memories in stone” (Cummings 2003: 38).

8.2 SACRED SITES: ACKNOWLEDGING THE ANCESTORS

In my view the evaluation of the Memphis region as a cultural continuity is a unique approach, as this approach is usually discussed from the perspective of social evolution (Bard 1992; Bard and Carneiro 1989). I disagree with the notion that the chronological progression and development of monumental architecture represents a steady and progressive evolution of social ideals. Instead, I emphasise that the ideology of death and burial may be understood in terms of a reflexive and interpretive dialectic, that is to say constantly being re-interpreted generation after generation. Monuments can be considered to be reflexive since people create their constructed environment and then are later influenced by those creations. The objective here is to explore the palimpsest nature of the Memphis landscape, of how the land was used, interpreted and culturally appropriated, leading to the eventual construction of pyramids over 2,000 years after the first regional burials.

The distribution of pyramids is displayed in Table 8.1 and when this data is compared with the material in Table 6.1, it is evident that none of the pyramids were built on ‘virgin’ land, with the possible exception of Dahshur. The west-bank pyramid sites, from Saqqara to Abu Rawash, all have traces of earlier activity dating from the Predynastic and/or
Early Dynastic periods. These early cemeteries may have predetermined the selection of sites for pyramids, providing locales of established funerary traditions. Thus, the early occupation of Memphis is highly pertinent in the creation of sacred space and determining land use. In this way, the landscape of Memphis was a landscape of memory, as discussed by Alcock (2002) and Bradley (2002).

To say that every pyramid site had a pre-existing tradition implies secondary landscape use. At Saqqara, there is evidence to suggest that Second Dynasty buildings were destroyed or partially demolished in the process of constructing the Step Pyramid (Tavares 1998: 1137, Wilkinson 1999: 242). Similarly at Giza, it has been proposed that Predynastic and/or Early Dynastic material was cleared away in creating the pyramid platforms (Mortensen 1985: 147). There are two possible royal structures at Abu Rawash that precede the Fourth Dynasty royal pyramid (Dodson 1998; Swelim 1987). Other pyramid sites, such as Abusir and Zawiyet el-Aryan, have traces of First and Second Dynasty tombs, again with the exception of Dahshur. Thus, pyramids were secondary activities at these sites. Here, Thomas’ idea that “a secondary monument was used to distort the original meaning of the site” (1991: 38) might be pertinent. Chapter Five demonstrated the interpretation and use of pyramid sites had changed through time, illustrating the dynamics of symbolic meaning. These sites had always been sacred but the outward expression of this symbolism had temporally changed through the different types of burial monuments. The re-use of a site with the construction of a secondary monument denotes this place as possessing a hallowed history and biography, since it is clearly not ‘virgin’ ground.

Secondary landscape use forges links with an ancestral and mythical past that highlights the concepts of ‘sacred’ within a landscape. Richards suggests that the ways in which specific sites were used was “heavily influenced by a perceived relationship between the living and the dead, the past and the present” (1996: 195). This relationship with the past may illustrate a concept of the past and secondary monuments were built in honour of older traditions (Bradley 2002: 85). The monuments of Memphis were built in areas that already had significance or were distinctive natural places that were held in local
mythology. The chosen location for pyramids is clearly influenced by earlier traditions, since these sites each had a pre-pyramid history. Although each pyramid site may have already been established, it is not to overlook the impact of subsequent monumentality and the negotiation of the landscape.

<table>
<thead>
<tr>
<th>King’s name</th>
<th>Dyn</th>
<th>Approx.Years of Reign</th>
<th>Royal Burial Location</th>
<th>Finished or Unfinished?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snefru</td>
<td>4</td>
<td>24</td>
<td>Dahshur (South)</td>
<td>Finished</td>
</tr>
<tr>
<td>Snefru</td>
<td>4</td>
<td>24</td>
<td>Dahshur (North)</td>
<td>Finished</td>
</tr>
<tr>
<td>Shepseskaf</td>
<td>4</td>
<td>5</td>
<td>S. Saqqara</td>
<td>Finished</td>
</tr>
<tr>
<td>Pepi II</td>
<td>6</td>
<td>94</td>
<td>S. Saqqara</td>
<td>Finished</td>
</tr>
<tr>
<td>Merenre</td>
<td>6</td>
<td>9</td>
<td>S. Saqqara</td>
<td>Finished</td>
</tr>
<tr>
<td>Djedkare-Isesi</td>
<td>5</td>
<td>32</td>
<td>S. Saqqara</td>
<td>Finished</td>
</tr>
<tr>
<td>Pepi I</td>
<td>6</td>
<td>34</td>
<td>S. Saqqara</td>
<td>Finished</td>
</tr>
<tr>
<td>Sekhemkhet</td>
<td>3</td>
<td>8</td>
<td>Saqqara</td>
<td>Unfinished</td>
</tr>
<tr>
<td>Unas</td>
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<td>33</td>
<td>Saqqara</td>
<td>Finished</td>
</tr>
<tr>
<td>Djoser</td>
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<td>19</td>
<td>Saqqara</td>
<td>Finished</td>
</tr>
<tr>
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<td>7</td>
<td>Saqqara</td>
<td>Finished</td>
</tr>
<tr>
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<td>6</td>
<td>32</td>
<td>N. Saqqara</td>
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</tr>
<tr>
<td>Menkahor</td>
<td>5</td>
<td>?</td>
<td>N. Saqqara ?</td>
<td>Unfinished</td>
</tr>
<tr>
<td>Raneferef</td>
<td>5</td>
<td>3</td>
<td>Abusir</td>
<td>Unfinished</td>
</tr>
<tr>
<td>Neferirkare</td>
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<td>20</td>
<td>Abusir</td>
<td>Unfinished</td>
</tr>
<tr>
<td>Niuserre</td>
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<td>28</td>
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</tr>
<tr>
<td>Sahure</td>
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<td>12</td>
<td>Abusir</td>
<td>Finished</td>
</tr>
<tr>
<td>Shepseskare</td>
<td>5</td>
<td>7</td>
<td>Abusir</td>
<td>Unfinished</td>
</tr>
<tr>
<td>Nebka</td>
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<td>25</td>
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<td>3</td>
<td>4</td>
<td>Zawiyet el-Aryan</td>
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</tr>
<tr>
<td>Menkaure</td>
<td>4</td>
<td>18</td>
<td>Giza</td>
<td>Unfinished</td>
</tr>
<tr>
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<td>26</td>
<td>Giza</td>
<td>Finished</td>
</tr>
<tr>
<td>Khufu</td>
<td>4</td>
<td>23</td>
<td>Giza</td>
<td>Finished</td>
</tr>
<tr>
<td>Djedefre</td>
<td>4</td>
<td>8</td>
<td>Abu Rowash</td>
<td>Finished</td>
</tr>
<tr>
<td>Huni?</td>
<td>3/4</td>
<td>4?</td>
<td>Abu Rowash</td>
<td>Unfinished</td>
</tr>
</tbody>
</table>

Table 8.1. South-north geographical distribution of pyramids and the finished state of the funerary monument.

8.3 PYRAMIDS FOR THE LIVING

The placement of the dead can imply more about the people who buried them, than the dead themselves (Parker Pearson 1993: 203). Some have suggested that the dead are deliberately placed in highly visible structures to be remembered and to forge collective
memories of the past (e.g. Alcock 2002: 26, Bradley 2002). A tomb can represent more
to the society that constructed it, than about the deceased placed within it. In this manner,
the dead are buried for the benefit of the living and require burials in certain locations
(Parker Pearson 1993: 203; see also Barrett 1994). This theory was generated from social
anthropology and applied to Northwest Europe, but if we take this perspective, what does
the Memphis funerary landscape indicate about the people who lived within it? I propose
that this landscape was sacred first to gods and subsequently developed into a national
necropolis.

Areas in the landscape are sacred to the dead and are clearly distinct from the living.
In Old Kingdom Memphis the dead were buried in the western desert and the living
settled in the Nile valley. Thus some would argue that this phenomenon was dictated
by topography; it would be inconvenient to construct houses for the living in the desert
because of the impractical distance to the agricultural zone or water source. Similarly, it
would not be practical to bury the dead in the fertile fields of the Nile Valley where they
might be subjected to periodic flooding and consume precious agricultural resources.
However, when considering monumental funerary architecture, a seemingly functionless
activity and blatant expenditure of natural and human resources, convenience should not
be regarded as the primary deciding factor. There is another, more symbolic, motivation
driving monumental architecture that belies functionalist explanations.

When a monumental structure is first conceived, it “requires a clear idea of the spatial
representation which is to be achieved. This will obviously be dependent upon the use
for which the building is envisaged. To produce a recognizable and appropriate form
the construction will necessarily draw on established social, and therefore, cosmological
principles of order” (Richards 2000: 544). Monumental architecture is not only defined
by what was built but by the intentions and interpretations of those that built and used it.
To build anywhere other than the west bank would possibly upset this order.
8.4 VISIBILITY

It should not be overlooked that the pyramids were situated in highly visible positions on the desert plateau. Most of the Early Dynastic mastabas at Saqqara are placed along the 55 m contour line, “making them highly visible from the cultivation” (Tavares 1998: 1138). From a standing position in the valley floor, this perspective would make the monuments at least 15 metres higher in elevation, reinforcing their dominating appearance. Bradley suggests that the scale of monuments change the character of a place by making these places more visible from lower ground (Bradley 2000: 106). If we assume that every pyramid was built with the intention to complete it, as mentioned in Chapter Four, then it can be assumed that each pyramid is visible from the other. Table 8.2 demonstrates how every west bank pyramid was within visible distance from the others. Two examples of pyramid inter-visibility are illustrated in Figures 8.1 and 8.2, where distant pyramid sites can be seen from each other. The northernmost pyramid at Abu Rowash was built on a natural elevation of 157 metres above sea level, giving it an accentuated height advantage, in addition to the estimated pyramid height of 57-67 metres, making it visible from the southernmost site of Dahshur (see Table 6.1).

The Memphis region is the narrowest point of the entire Egyptian Nile Valley, north of Edfu. There is no access either in or out of the Nile Valley that does not pass through Memphis. Hence this location does seem to be the most visible for constructing a powerful ideological symbol. Constructing monuments in highly visible places could create “a spatial and temporal order” (Richards 2000: 445). Pyramids were highly visible and could be seen from most places within the Memphis region, unless one was very close to the valley edge where one’s sight would be obstructed by the desert escarpment. In some cases, Bradley mentions, “sacred sites were also meant to be seen from one another” (2000: 106). Being in the Memphis landscape was a visual experience. Placing the pyramids in this area was an intentional effort to control the ways in which particular spaces were interpreted: what was seen, how it was seen and in what order was highly structured. In some other instances, monumental architecture was a “potent medium for controlling people” where the “manipulation of social space enables an element of control
to exist in the everyday transactions of life" (Richards 2000: 544). The negotiation of social space was drastically altered once the landscape was littered with pyramids. I am not suggesting a ‘master plan’ for pyramid placement that was predetermined, only that pyramids were the landmarks of deified kings, delineating sacred burial sites.

### PYRAMID INTER-SITE VISIBILITY

<table>
<thead>
<tr>
<th>Site name</th>
<th>Dahshur</th>
<th>S. Saqqara</th>
<th>Saqqara</th>
<th>N. Saqqara</th>
<th>Abusir</th>
<th>A. Ghorab</th>
<th>Z. Aryan</th>
<th>Giza</th>
<th>A. Rowash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dahshur</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. Saqqara</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Saqqara</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Saqqara</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abusir</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>Z. Aryan</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
</tbody>
</table>

Key: Visible: X  Invisible: 0

**Table 8.2. Pyramid Inter-site Visibility**

![Image illustrating the degree of pyramid inter-site visibility.](image)

**Figure 8.1.** Image illustrating the degree of pyramid inter-site visibility.

This photo (Figure 8.1) is looking south towards Giza from the Djedefre pyramid at Abu Rawash. In the far distance are small outlines of more pyramids. The haze and pollution of modern Cairo has obscured this perspective. Photo from Lehner 1997: 121.
This second image is taken from Saqqara looking north. In the foreground are the three visible pyramids of Abusir. In the background are the three pyramids at Giza. Had the two Zawiyet el-Aryan pyramids been completed, they would be seen between both sets of pyramids shown here. Also, if Djedefre's pyramid at Abu Rawash was still complete, then it would likely be visible in the distance behind Giza. Photo taken from Lehner 1997: 145.

Figure 8.2. Image illustrating the degree of pyramid inter-site visibility.

As highly sacred symbols, it was a top priority for every king to build his own monument. This may account for the number of unfinished monuments (42%), since what was important was the act of building more than the structure's completion. Every king that came to the throne in the Old Kingdom was expected to build a pyramid, or at least start one. It was not always the case that a succeeding king would complete his predecessor's pyramid, although there are a few instances where the previous monument was completed with lesser materials and in haste. This can lead us to the conclusion that perhaps it was the process and performance of construction that was more critical than the completion or form of the monument. What was important was that each king built a pyramid and the project existed for its own sake. Perhaps people were engaged in the pyramid project as a "religious experience, the result of which was intended to last forever. By their toil a specific place in the world was given a permanence and sharper physical definition through monumental constructions" (Richards 1996: 193). In this way, every member of
society was engaged with the project to some extent and the construction of the monument “helped to build the fabric of society” (Bradley 2002: 82).

8.5 MONUMENTS AND THE LANDSCAPE

The monumental architecture of Northwest Europe is thought to have a relationship with the landscape by monuments mimicking the natural topography. Bradley (1998b) discusses this relationship whereby the “monument encapsulates the qualities of the surrounding area” and imitates the existing understandings of that location. “Such monuments may appear to be built at the heart of the prehistoric landscape, but at the same time they may also be important symbols: representation of that landscape as a-whole” (1998b: 122). The phenomenon was observed with Neolithic monumental architecture in Orkney, where the monuments “echo the characteristic features of the surrounding landscape” (Bradley 1998b: 122). The height of the standing stones “mirrors the height of the distant hills” and reflects the natural bowl in which they were located (Bradley 1998b: 122). By imitating their physical locations, the structures reproduced nature and “might have provided a metaphor for the wider landscape” (Bradley 1998b: 123).

What sort of implication does this approach have for Memphis? When this idea is used to interpret the Memphis landscape, we may understand pyramid placement better. It is possible that the west bank pyramids are mirroring the height of the east bank Moqattam hills. When considering the height of the eastern hills in contrast to the west, the east is more dominant and imposing. So perhaps the pyramids visually ‘balanced-out’ both sides of the river, although keeping in mind that the perceived height will increase with proximity. Now, if one were to stand in the middle of the valley, one would have the experience of being between two visually equal ‘walls’. It would enhance the concept of a ‘wall’ surrounding both sides, to a greater extent. These gleaming white structures were made from the very fabric of the landscape itself. The creation of these monuments would encapsulate the qualities of the surrounding area and might summarise in massive form any existing understandings of that landscape. The pyramids are directly opposite
the eastern limestone cliffs, following the natural contours (see Figure 2.1). Perhaps the pyramids were placed on the west bank to mimic the eastern hills, as a microcosm of the landscape, imitating the mythical shape of the primeval mound and the solar constitution of the pyramid.

8.5.1 Origin of Monumentality: Pyramid Shape

Old Kingdom monumentality is dominated by the pyramid shape, with the exception of one late Fourth Dynasty royal mastaba (Table 8.3). The first two dynasties of pyramid building (Dynasties Three and Four) saw no consistency in the size or slope of the pyramids. This changed in the late Fifth Dynasty when they were all more or less the same base size, height and slope. Yet the one feature that remained constant was the pyramidal shape. Hodder (forthcoming) has suggested that in Neolithic architecture a repeated form can be viewed as a means of retaining an event or as an attempt to duplicate it. Table 8.3 illustrates how the basic architectural form of pyramids was constantly repeated for over 150 years.

The repeated architectural form can be indicative of social memory by mimicking earlier structures and maintaining the same basic form (height, base, and slope) of the overall pyramid structure. The kings of Sixth Dynasty experienced an economic decline and political rivalry, where the legitimacy of the ruler was being challenged (Kemp 1983; Malek 2000), eventually leading to King Teti’s assassination (Kanawati 2003). These kings issued royal decrees to reinstate the mortuary cults of their ancestors, already 200 years in the past, as an act of political legitimization. However, it is also possible that the funerary architecture mimicked earlier forms to further reinforce the ancestral connections and to politically strengthen a weakening central authority.

The consistency of the pyramid structure maintained ideological continuity and repeatedly gave the same experience to the people encountering them (e.g. Cummings 2003: 32). “The differences in architectural form may not actually be significant to understanding how these places were perceived by people” (Cummings 2003: 33). As mentioned in
Chapter Six, the early hunter-gatherer settlers in the Nile Valley may not have known the difference between a human-made monument and a ‘natural’ one, in the absence of modern geological knowledge (cf. Bradley 1998a; Tilley et al. 2000). Thus, they may not have understood the morphological differences in architecture.

<table>
<thead>
<tr>
<th>King's name</th>
<th>Shape</th>
<th>Height</th>
<th>Base</th>
<th>Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djoser</td>
<td>Pyramid</td>
<td>60 m</td>
<td>121 x 109 M</td>
<td>Stepped</td>
</tr>
<tr>
<td>Sekhemkhet</td>
<td>Pyramid</td>
<td>70 m ?</td>
<td>120 m</td>
<td>Stepped</td>
</tr>
<tr>
<td>Sefru (south)</td>
<td>Pyramid</td>
<td>128.5 now was 105 m</td>
<td>183.5 m</td>
<td>54.27 bend 43.22</td>
</tr>
<tr>
<td>Sefru (north)</td>
<td>Pyramid</td>
<td>104 m</td>
<td>220 m</td>
<td>43 22'</td>
</tr>
<tr>
<td>Khufu</td>
<td>Pyramid</td>
<td>150 m</td>
<td>230 m</td>
<td>52</td>
</tr>
<tr>
<td>Djedefre</td>
<td>Pyramid</td>
<td>57 - 67 m</td>
<td>106 m</td>
<td>48 - 52</td>
</tr>
<tr>
<td>Nebka</td>
<td>Pyramid</td>
<td>indeterm.</td>
<td>200 x 180 m</td>
<td>indeterm.</td>
</tr>
<tr>
<td>Khafre</td>
<td>Pyramid</td>
<td>143.2 m</td>
<td>215.2 m</td>
<td>53 7'</td>
</tr>
<tr>
<td>Menkaure</td>
<td>Pyramid</td>
<td>65 m</td>
<td>102 x 104 m</td>
<td>51 20'</td>
</tr>
<tr>
<td>Shepseskaf</td>
<td>Mastaba</td>
<td>18 m</td>
<td>99.5 x 73 m</td>
<td>70</td>
</tr>
<tr>
<td>Userkaf</td>
<td>Pyramid</td>
<td>49 m</td>
<td>73 m</td>
<td>53 7'</td>
</tr>
<tr>
<td>Sahure</td>
<td>Pyramid</td>
<td>48 m</td>
<td>78.75 m</td>
<td>50 11'</td>
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<tr>
<td>Neferirkare</td>
<td>Pyramid</td>
<td>72 m</td>
<td>105 m</td>
<td>53 7'</td>
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<tr>
<td>Shepseskare</td>
<td>Pyramid</td>
<td>indeterm.</td>
<td>65 m</td>
<td>indeterm.</td>
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<tr>
<td>Raneferef</td>
<td>Pyramid</td>
<td>indeterm.</td>
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<tr>
<td>Niuserre</td>
<td>Pyramid</td>
<td>51.5 m</td>
<td>78.9 m</td>
<td>51 50'</td>
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<tr>
<td>Djedkare-Iseis</td>
<td>Pyramid</td>
<td>52.5 m</td>
<td>78.75 m</td>
<td>52</td>
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<tr>
<td>Unas</td>
<td>Pyramid</td>
<td>43 m</td>
<td>43 m</td>
<td>56 18'</td>
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<tr>
<td>Tetti</td>
<td>Pyramid</td>
<td>52.5 m</td>
<td>78.5 m</td>
<td>53 7'</td>
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<tr>
<td>Pepi I</td>
<td>Pyramid</td>
<td>52.5 m</td>
<td>78.5 m</td>
<td>53 7'</td>
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<td>Merenre</td>
<td>Pyramid</td>
<td>52.5 m</td>
<td>78.5 m</td>
<td>53 7'</td>
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<tr>
<td>Pepi II</td>
<td>Pyramid</td>
<td>52.5 m</td>
<td>78.5 m</td>
<td>53 7'</td>
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Table 8.3. Chronological order of kings and the dimensions of their funerary monuments.

Throughout this paper, I have argued that monumentality is a consequence of the cultural appropriation of natural landforms. With regard to pyramids, I maintain this position and suggest that pyramid-shaped desert landforms were regarded as ruined monuments of the ancestors. Using this shape in funerary architecture is an acknowledgment of the distant past as well as legitimising the political authority of the monument builder (Bradley 2002). People mimicked these landforms to maintain a time-honoured tradition,
which they believed had been marked with monumental architecture of their ancestors. El-Baz (1981, 2001) has suggested that desert landforms, such as these two examples in Figures 8.3 and 8.4, could have inspired the Egyptians to build pyramids. Indeed, the natural pyramid-like desert landforms were not uncommon to early hunters and gatherers, who may have been familiar with the landforms common in the Western deserts.

Figures 8.3 and 8.4. These are two photographs from the Western Desert illustrating natural pyramid-like landforms. (Photographs by the author).
However, I am not suggesting that these natural landforms were the only influences on pyramid construction, but it is not unreasonable to propose that these landforms were also culturally appropriated as ruins left by the distant ancestors and relics of the distant past. Neolithic archaeology has been recovered out in the areas of the Western Oasis so we know that the early Egyptians would have seen and experienced these natural landforms, although a direct correlation between the natural and cultural forms is indeed tenuous. However, there are Old Kingdom reports of expeditions to the Western Deserts so it remains a possibility that these natural ‘structures’ of pyramid and sphinx-like shapes had entered their consciousness. These expeditions may also account for the lack of monumental pyramid shapes and/or sphinx statues in the first two dynasties (Pers. comm. D. Jeffreys, August 2004). It is worth emphasising the Egyptians’ awareness of these natural landforms and the possibility that they were appropriated as ancestral ‘ruins’ and later mimicked in monumental architecture.

8.5.2 Centre Of The World

Parker Pearson has suggested that tombs can mark territories as ‘centres of the world’ (1999: 134). Others have argued that tombs of the dead are boundaries of worlds (e.g. Bender et al. 1997). In the Orkney islands of Scotland, Richards agrees, saying, “through monumentality [stone circles] created a spectacular landscape, which acted as the centre of their world” (Richards 1996: 206). A few of the creation myths are centred on Memphis (Allen 1988; Sandman Holmberg 1946), where life was created on an island. It is not a coincidence that the Memphis region is a topographic match with mythical creation accounts. Pyramids are a metaphor for rebirth by representing the ‘primeval mound’, compounding the symbolic qualities of the natural and constructed landscape. Pyramids were not put in this region exclusively as a demonstration of wealth or for strategic socio-political control (contra Trigger 1990). Rather, it was the landscape of Memphis that first embodied the cosmic ideology, which in turn led to the development of a capital city, a royal necropolis and monumental architecture. The landscape was first viewed as sacred and the monuments were a further expression of that symbolic relationship.
Pyramids were created from a rich context of meanings, mythologies and memories. The effects of these monuments may have created certain experiences for the people using them. “Monuments represent the realisation of complex networks of ideas and memories, merging fundamental cosmological principles within localised settings” (Cummings 2003: 39). Pyramids represented the creation of the world, the cosmos and the developing pantheon of gods. Pyramids symbolised divine kingship and the authoritative power of the crown through its monumentality. Pyramids are hugely powerful religious monuments, especially in a society that does not distinguish between nature and culture, where these structures are powerful tributes to the gods and places where the gods reside. Pyramids brought tangible access to divinity, while physically manifesting a symbolic landscape. These monumental pyramids reinforced the centre of the world. It is no wonder that Memphis was the capital city and remained so for another 2,000 years.

8.5.3 Boundaries

As the capital city, Memphis was the national centre of political, economic, social and religious activity. Memphis is physically located at the boundary between Upper and Lower Egypt and is the first nome of Lower Egypt. There are many references to Memphis as being the place ‘of the Two Lands’ (Allen 1988), as physically and metaphorically uniting a divided country. Now, when we factor in the location of the largest funerary monuments in the entire country, a completely different perspective of landscape use appears. Now we can see Memphis also as a symbolic landscape, where pyramids mark the boundaries of the cultural landscape as dominating symbols of power and ideology.

Although I am not supporting the notion of a ‘master plan’ for pyramid placement, I would agree that the pyramids are the so-called boundaries for the region of Memphis (cf. Jeffreys 1998). The idea of ‘boundary’ is in itself meaningful, as it both defined and limited the area of sacred space. Boundaries can be defined by the topography or by built structures but can only become a boundary “in relation to the activities of the people (or animals) for whom it is recognised or experienced as such” (Ingold 2000: 192-193). The landscape boundaries of Memphis are the eastern and western deserts and the Nile
valley. The southern and northernmost pyramids define the boundaries of the Memphite necropolis during the Old Kingdom; therefore it would appear that the northern and southern pyramids visually represent the boundaries of Memphis. This also coincides with the constriction of the floodplain. Both of these ‘boundary pyramids’ were built in the Fourth Dynasty, by Snefru in the south and Djedefre in the north, although the concept of ‘boundary’ had existed previously. It is possible that later generations viewed these pyramids as ‘boundary markers’, physically marking the boundaries of the sacred landscape.

8.6 REFLEXIVE USE OF MEMPHITE SPACE

This chapter has summarised the proposal that monumentality was heavily influenced by an established cultural tradition of Memphis. Instead of a social evolution that resulted in pyramids, I suggest a reflexive social spiral, where landscape, monuments, people and the gods were in a constantly dynamic and interpretive relationship. Each one of these aspects continually influenced each other through time. I have discussed the dialectics between people and the landscape, but in a society without a distinction between nature and culture, then the gods are inseparable from this equation. Equally, natural landforms are viewed as ruined structures built by the ancestors and cannot be divorced from culture. In this regard the landscape, monuments, people and the gods are all part of the same reflexive relationship.

The funerary landscape slowly and gradually built up over a period from 3500 – 2185 BC. Each phase of burial activity reinforced a long-standing ancestral tradition. During that time, there were great changes in the economy, politics and religion, each of which potentially impacted monumentality in some way. Pyramids were not just ‘invented’ by Imhotep, as some creative and clever individual who was suddenly inspired and thought up the idea of pyramids for his king (contra. Aldred 1965: 65). Pyramids were the result of a long, pre-existing cultural tradition, anchored in the ancestral past. Pyramids permanently marked the west bank of Memphis space as sacred with these highly symbolic structures.
Egyptological research appears to be entering a new paradigm, focusing on how the pyramids built Egypt rather than how the Egyptians built the pyramids. This thesis furthered the notion that pyramid construction contributed to the creation of social identity and ideology by examining the pre-pyramid landscape of early Memphis, from a purely symbolic approach. Building from over 50 years of research concerning the pragmatics of pyramid construction (see Chapter Two), this thesis focused on the lesser-known symbolic associations of the Memphite landscape, such as the cultural appropriation of local topography, the naming of places, secondary landscape use, deliberate choices in building materials, and the experiential relationship between sites. The culturally constructed landscape is then integrated into the ancient perception synonymous with the natural topography. Each of these issues may have significantly contributed to the meaning of pyramids. The accumulation of this material suggests that the deliberate placement of monuments could be viewed as an act to acknowledge the ancestors and legitimise power.

Chapter One set the scene of Memphis and questioned why Memphis had the greatest density of Old Kingdom pyramids. Several recent works in sedimentology and environmental studies have attempted to re-create the physical landscape as it may have appeared during the Old Kingdom. I emphasised the ancient Egyptian landscape perspective by discussing the various words and terms they used to describe the world around them. More that anything else, I deliberately restricted my materials to those that were contemporary with the Old Kingdom, so that this work was not influenced by New Kingdom or later texts or sources. The objective was to maintain as much of a genuine perspective as possible, although other materials may have been equally applicable. All of this was done in an attempt to answer the question of how the Egyptians perceived the world they lived in and why they chose to settle and bury their kings in Memphis.
Chapter Two was a synopsis of the recent literature regarding pyramid site selection, peripatetic locations, construction, organisation, motivation, orientation, and ideology. Given all this research, I found that the landscape perspective had not been adequately addressed and I also wanted to place more emphasis on the questions of social and symbolic motivations behind pyramid construction, rather than how, when and by whom. Admittedly, the theoretical approach employed here is new and indeed experimental but it is hoped that this sort of thinking can be expanded into further research. Whether or not the results are fully convincing, I believe that the questions were worth asking and provided a new insight into the ancient Egyptian perspective.

The conceptual framework was borrowed from studies in Neolithic and Bronze Age Europe, where scholars have been engaged in the discourse of sacred landscapes, phenomenology, monumentality, memory, use of place and space. The idea is to re-animate the ancient landscape and situate our understandings of past activities within a context of an embodied landscape. We should not view construction activities with just a functional purpose but as situated within a landscape of social memories. If we accept that ‘monuments’ are both ‘natural’ and ‘cultural’, then we can perhaps understand the ancient perspective of the physical world. Landscape archaeology has emerged as a relatively new sub-discipline in archaeological circles and it is now important to explore these theories within an Egyptian context. Some exciting new works of this kind have emerged in Egyptology and it is hoped that the landscape topic will be further expanded in the following years.

One intention of this thesis was to illustrate the degree of cultural activity that preceded pyramid construction. The purpose here is to examine two ideas: 1) the landscape was sacred before it was used for pyramid building and, 2) the patterns of Predynastic and Early Dynastic land use and how it may have influenced later pyramid placement. Over 1,000 years of life and death were represented in Memphis before the first pyramid was built, as there is substantial archaeological material to suggest long-term occupation and sedentary communities. It is suggested here that these early communities of Egyptians

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had created specific symbolic associations with the landscape, where meaning and cultural
significance were gained from repeated use. Memphis was thus ‘marked’ hundreds of
years before a pyramid was ever built.

Chapter Six discussed the various ways that Egyptians viewed their physical environment,
where the topography was represented in the myths and anchored to real places. We
may understand people’s engagement with the natural landscape to gauge the possible
motivations behind site selection, by examining how the landscape may have looked
before it was culturally altered with monumental architecture. Perhaps the shape and
location of natural features contributed to later monumentality, such as temple buildings
and the placement of cemeteries. Examples of how myths, place names, and archaeology
can demonstrate the cultural appropriation of natural places were cited. For example, the cultural
appropriation of the rock exposure at Giza may have contributed to later site development
through possible links with ancestral memory. The defining characteristic of Memphis
may have been the eastern cliffs, which acted as an encompassing ‘wall’ metaphor, from
which Memphis later derived its name, White Walls. The similarities between the ‘mound
of creation’, mentioned in the Memphite creation texts, and the Mit Rahina mound are
surprisingly comparable. Similarly, the battle of Horus and Seth and Kher-aha, ‘the place
battle’, appear to represent myths anchored in the landscape, supported by an absence of
early archaeology.

It is possible that a Twenty-Sixth Dynasty sacred pilgrimage pathway, ‘Road of Sep’, was
also present during the Old Kingdom. The path connected three significant places, Ptah
temple, Kher-aha and Iunu. If we follow the Memphis myths from south to north, the
creation myth begins with the mound of creation at Mit Rahina. The path then progresses
to Kher-aha, the place where there was a battle for control over the throne, a battle for
kingship. From Kher-aha the path leads to Iunu, a temple dedicated to Re and divine
kingship. It would appear that these three places physically connect these three myths,
following the emergence of kingship.
The intention of Chapter Seven was to highlight alternatives to the standard pragmatic reasons for the exploitation of natural resources by examining the social and symbolic meanings in choices of stones. There is more to the argument of stone quarrying than local availability, access and quality of material. The ideology of building materials illustrated the potential for understanding meanings for the specific uses of stones. The cultural significance of moving stones from places or areas invested with (mythical) meanings gives greater symbolism to the materials when incorporated into monumental architecture. For example, the colour of stones can enhance the existing symbolism as well as the regional origin of the materials. If we accept the Egyptian view that nature was not separate from the gods (Assmann 2001), then it is feasible to say that to take a piece of the earth is to also take a piece of the gods. That extra level of meaning would greatly enrich the symbolism of any structure.

I have proposed that Memphis was a sacred landscape before pyramid construction and pyramids were just one aspect of a reflexive tradition of Egyptian funerary architecture. Pyramids may have delineated large-scale sacred space through their monumentality. Since pyramids were made of stone, it could be said people wished to create an enduring record of fixed cosmological principles; setting memories in stone. It could also suggest that monumentality was considered the appropriate medium with which to inscribe social memories. Memphis was sacred first to the gods and reinforced through monumental architecture. Memphis was intentionally chosen as a national capital and royal necropolis to legitimate royal authority and to secure political control.

As highly sacred symbols, the construction of monuments was a priority for every king. This may account for the amount of unfinished pyramids, since what was important was the act of pyramid building more than the structure's completion. Presumably, each Old Kingdom king had intended to build his own pyramid and it was known, but uncommon, for a succeeding king to complete his predecessor's pyramid. This leads to the suggestion that perhaps the performance of construction was more critical than the final outcome. In the 500 years of the Old Kingdom, something was always being built, be it a pyramid,
a mastaba or a temple. And no matter where one stood within this ancient landscape, a pyramid was almost always visible. The experience of being in Memphis was visually dominated by kingship.

At the conclusion of this research, I am left with many more questions than I was able to address, such as the role of social memory and the life histories of monuments. The subject of memory and monumentality is popular in other studies of megalithic architecture and provides insights into the ways in which these monuments were used, disused and re-used by subsequent generations. Also, borrowing from works in literature studies is the notion of reception theory; of how monuments were ‘read’ by the ‘audience’ who experienced them, both at the private and public level. There are the issues of power, control and ideology can be greatly enhanced using some recent works in anthropology and archaeology. I am also interested in words - how the Egyptians themselves named and labelled their physical world. What symbols were used to describe the landscape and what do those symbols mean? In this work, I was only able to address the pyramids, but it would be worthwhile also to examine the pyramid complex as a whole, including the mortuary temples, and the corpus of private mastabas or the Memphite necropolis in its entirety. I would be curious to see if any patterns or trends result from the inter-relationships in the mastaba fields or with the temple structures. Further studies on the materiality of stone are also of interest, as they can add a further layer of meaning and visual recognition to the monuments. It is hoped that future works will address these subjects, as well as others, within an ancient Egyptian context.
~REFERENCES~


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