Topic: The nature of urbanism in Ancient Egypt

by

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Introduction

Trigger's main components in arguing for a pluralistic approach to Egyptian urbanism are grounded in the Early State Model (Renfrew 1975) and Johnson's (1973) principle "that ... a [state] administrative hierarchy ... consists of three or more levels" (Trigger 1985, 345). These levels equate to Hassan's model of village, town (secondary administrative centres) and the country's capital, wherein limitations on distances between villages are imposed by transportational constraints. However, topographical and ideological considerations are also determinative in settlement placings, as well as in the internal structure of settlements. There is no such thing as *the* typical predynastic of dynastic complex settlement. Each site has to be investigated with regards to its geographical setting and historical background, with atypical sites like Elephantine best equipped to shed light on typical processes and their implications.

The construction of urbanism

Although ancient Egypt was once described as a "civilization without cities", contrary archaeological evidence has mounted as increasing numbers of settlement sites have been surveyed and excavated. Settlement archaeology began taking off in Egyptology in the 1970s and was manifested particularly in the innovative research projects at El-Amarna (Kemp 1977a), Elephantine (Seidlmayer 1996) and Hierakonpolis (Fairservis 1972, Hoffman 1982, 1984), amongst other sites [Figure 1]. These programmes were partly designed to answer the question of what do we know about ancient Egyptian cities, towns and villages apart from their architectural details.
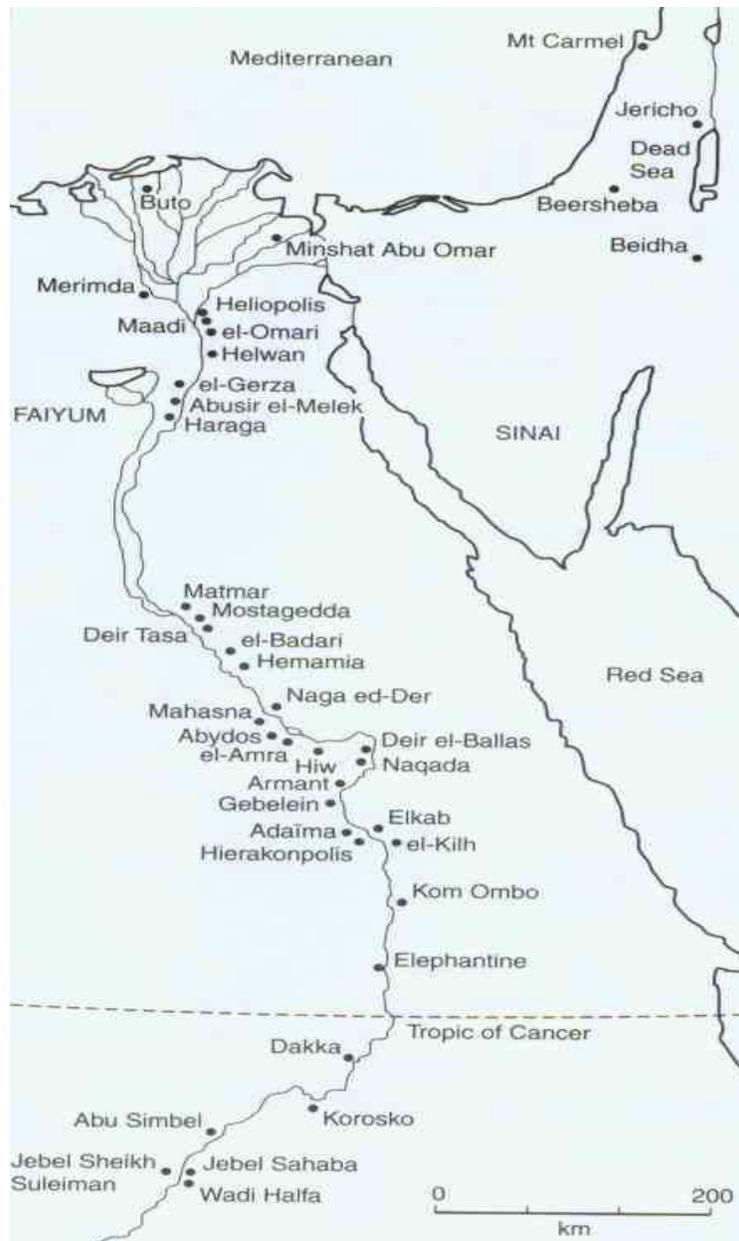
Figure 1. A map of the Nile Valley from the Delta to Wadi Halfa, displaying the locations of predynastic sites. *From (Midant-Reynes 2000).*

Arriving at a clear-cut, cross-culturally acceptable definition of a city is problematic. While Hassan (1993) proposes an explanatory model based on settlement size, distance and population, this is an arbitrary definition applicable only to dynastic Egypt. However, ancient cities are unique in deriving a substantial portion of their income from their rural hinterland. Moreover, inhabitants of ancient Sumer and pre-Hispanic Mexican settlements engaged in varied agricultural pursuits, as do many contemporary West African Yoruba communities (Trigger 1972). As such, a broad-

based model can take as its basis that a city is a unit of hierarchical settlement performing specialised tasks with an interactive hinterland network. This also has the advantage of distinguishing urban communities from smaller predecessor Neolithic villages with internal consumption of resources.

In a study of the character and origins of Chinese cities, it was noted the evidence for the earliest urban forms comprised not "a settlement that is dominated by commercial relations, a primordial market, or…one that is focused on a citadel, an architectural fortress, but rather a ceremonial complex" (Wheatley 1971, 225). While Wheatley's argument is ideological, with the attendant difficulties of determining religious priority over commercial and subsistence remains, and ignores the functionally complex nature of agricultural-based settlements (Price 1995), he does raise the interesting problem of different regions of the world having their own distinctive history of urbanisation.

Urbanisation began as early as 5000 B.C. during the Ubaid period in southern Mesopotamia, where walled cities were sometimes so densely positioned along the waterways they were within sight of each other (Pollock 2000, Rothman 2001). Peripheral settlements also had fortified garrisons nearby for protection. The typical Sumerian city was comprised of three parts: the inner city (*libbi ali*, Akkadian), outer city or suburb (*uru.bar.ra*) and the harbour (*kar*) (Oppenheim 1969). The harbour was the hub of commercial activities, while the city itself was comprised of several quarters, including the palace, the temple and private housing. The palace and temple inter-operated as "internal-circulation organisations" centred on the ruler, with resources from the sanctuary beneficial to both the elite (overland trade) and commoners (available economic resources) (Oppenheim 1969). Over 80% of early Sumerians lived in cities, including many farmers seeking protection (Trigger 1995). The available economic resources enabled the cities to support specialised craft production (Peregrine 1991) and facilitated commercial exchanges between the settlements and their hinterlands, thus encouraging the growth of markets. It has been estimated that 10-20% of the population was non-food producing (Trigger 1995).

These developmental differences in urbanisation, as expressed through evolving nature and functions, are the underlying premise of Wilson's (1960) claim that ancient Egypt did not possess cities until the New kingdom. Wilson's biological metaphor

assumes what Kemp (1977, 186) has termed "an intuitive appreciation of culture in which archaeology has little place", and narrowly defines the concept of urbanism on the basis of Mesopotamian size and style.

Wilson's evaluation does not differ fundamentally from the rationale presented for the development of Egyptian settlements by Helck in his *Handbuch der Orientalistik* (Helck 1975). Both models are based on varying Egyptian religious texts from different periods and an interpretative approach which excludes towns due to the "spiritual" foundations of Egyptian society. Helck's model postulates that the hospitable nature of the Nile, with numerous inlets ships could trade from, precluded an impetus for the agricultural communities to develop into cities. Citing Buto and Sais in the Nile Delta (Syro-Palestinian trade), and Thinis and Coptos in the Nile Valley (trade access to the Red Sea) as variants proving the rule, Helck hypotheses that people remained in small villages throughout the Predynastic, Early Dynastic and Old Kingdom periods. The Old Kingdom is held as consisting of state domains comprised of villages, with the major settlements being provincial cult temples and royal mortuary temples for officials and priests. Even the New Kingdom, under this model, continues this pattern of non-urbanisation, with nome centres reserved for administrative purposes.

The problem with using the religious Pyramid and Coffin Texts to inform on the nature and degree of urbanism, as per Wilson and Helck, is that the ancient Egyptian designations for their own settlements tends to be overlooked. There was no distinction made in the Old Kingdom between towns and other settlement forms (Bietak 1979). Instead, two classificatory ideograms, *hwt* and *njwt*, designated walled settlements. *Njwt* informs of a walled, round settlement, which Old Kingdom Hierakonpolis and Elkab can be cited as examples of. *Hwt* is a walled, rectangular construction which is reminiscent of the funerary fortresses at Shunet al-Zabib, Hierakonpolis and Saqqara (Bietak 1979). Moreover, royal funerary domains use the designation *hwt* and private domains, *mjwt*. Settlements were thus portrayed by the Egyptians as seats and instruments of power. Although words such as *whjt* (village) and *dmjw* (town) make an appearance in later times, the list of towns in the Twenty-First Dynasty Onomasticon Amenemope contains examples of settlements with no definitive character and where *dmjw* is used to also refer to shrines or sanctuary localities (Bietak 1979).

Thus the philological evidence gives a picture of a society without a recognisable settlement pattern of administrative and ideological centres functioning too as socio-economic hubs across the landscape. The excavations of predynastic Egyptian sites, particularly in the last three decades, have given lie to the claim that, contrary to Mesopotamia, Egypt developed as a nation without the preliminary step of city-states (Kemp 1989, Midant-Reynes 2000, Shaw 2000).

Ancient Egypt constitutes one of the earliest but not the only type of pre-industrial civilisations, whose foundations rested upon the creation and control of agricultural surpluses through exploitative relations in a hierarchy of endogamous classes (Trigger 1995). The symbols used to conceptualise this dominant relationship were drawn from the ideological sphere of religion, namely that of the State cult as opposed to local provincial deities. Hassan (1993) postulates that the ideological and social context of agriculture and trade differed from the mercantile economies of the pre-industrial Middle Ages in Europe. Citing Gudeman, Hassan regards the Bemba's (northern Zambia) system of production to be a more appropriate model for the integrated dynamics of pharaonic Egypt: "The Bemba do not aim to accumulate a surplus over the years, and they do not believe that reinvestment is necessary to assure and increase future productivity. Technological change also has no place…for farming practices, as taught by the ancestors, need no revision." (Gudeman 1986, 101)

Thus, "the emergence of towns and cities in early agricultural states was predicated upon the amount of resources that could be commanded by the chief or king. To view towns and cities in any light other than that of dominance, mediation and control (cf. Wheatley 1972) misses the most crucial ingredient in the structure of early urban societies. Morphologically, the early urban settlements were distinguished from other settlements by relatively higher population density, a relatively high proportion of people engaged in non-agricultural activities, including an "urban elite" holding managerial power, and a population aggregation greater than that of the largest village" (Hassan 1993, 557). Such non-agricultural activities would have included defence, administration, trade, manufacturing, religion and personalised interactions. These activities may be reflected in a territorial state spatial organisation with settlements hierarchical in character, tending towards activity boundaries being defined and the activities themselves becoming the domain of specialists (Bietak

1979, Trigger 1972). Thus activities would be focal in nature, designed to take advantage of the scaled settlement patterns (Trigger 1972) relating the city to its hinterland (Trigger 1985) and to minimise the fluctuations in agricultural yield, caused by the unpredictability of the Nile flood levels, through food transportation networks.

Hassan's (1993) definition of "capital cities", referring to national capitals (for example, Memphis and Thebes), "town" to nome capitals and "village" to rural settlements, is applicable to later dynastic Egypt. However, his model fails to demonstrate their appropriateness for both late Predynastic (Nagada I – III) and Early Dynastic Egypt. Hassan (1993) discretely broaches this problem when stating that a structure of twenty-two nomes was fixed by Fifth Dynasty times; however, nome boundaries were mobile (Love 2003). Because his model for the spacing of settlements is dependent upon population estimates generalised over the time span of dynastic Egypt and a hierarchical structure of administrative and redistributive sizes for settlements, its inherent inflexibility renders it problematic for the developing nucleated city-states of the predynastic and the evolving manifestations of the territorial Pharaonic State.

Bietak (1979) defines four additional characteristics for distinguishing between settlement types: (1) Artificially-planned towns such as Amarna (Kemp 1977a), Piramesse and probably Early Dynastic Memphis; (2) Gezira-towns, which predominate in the Delta (e.g. Buto and Tell Ibrahim Awad); (3) Levee-towns, built on the top of high levee-banks; and (4) Tell-towns. A comprehensive inventory of 217 cities, towns and fortresses was compiled from Egyptian textual sources and analysed by Butzer (1976). His category "city" refers to Luxor-Karnak and Memphis, the two national metropoleis. The small and large centres were defined as market redistributive nodes for agricultural, economic (crafts, harbours), residential and religious (cult centres with connected wide-ranging temple estates) activities (Butzer 1976). As noted earlier, the Egyptian terminology for settlement categories is loose and inconsistent, which results in modern Egyptological categorisations as being inherently functionally based.

Affinities between settlements and regions

Changes in settlement patterns are likely reflective of larger-scale changes in the society (Patch 1991). The period of state formation, at the end of Nagada IIIb, is characterised by a process of accelerated nucleation which has its origins at least as far back as Nagada II [Table 1, Figure 2]. Although the first known town is Merimde in the Nile Delta at 5000 B.C. [Figure 3], and other Lower Egyptian predynastic cemeteries and settlements such as Maadi (Rizkana and Seeher 1989), Buto, el-Omari and Kafri Hassan Dawood amongst others are being excavated (Midant-Reynes 2000, Van den Brink 1988, Van Wetering and Tassie 2003), the fullest available evidence for tracing this phenomenon remains the Hierakonpolis, Armant, Nagada and Abydos region.

Nagada I	38o0 – 3500	Nagada IIa-b	3500 – 3400
Nagada IIc	3400 – 3300	Nagada IId1	3300 – 3250
Nagada IId2	3250 – 3200	Nagada IIIa1	3200 – 3170
Nagada IIIa2	3170 – 3120	Nagada IIIb1	3120 – 3080
Nagada IIIb2	3080 – 3050	Nagada IIIc1	3050 – 3000
Nagada IIIc2	3000 – 2920	Nagada IIIc3	2920 - 2845

Table 1. Upper Egyptian predynastic pottery sequences, with dates in cal. B.C. *After (Wilkinson 1996)*, using Kaiser's (1990) revised sequence and Hassan's (1984) radiocarbon chronology.
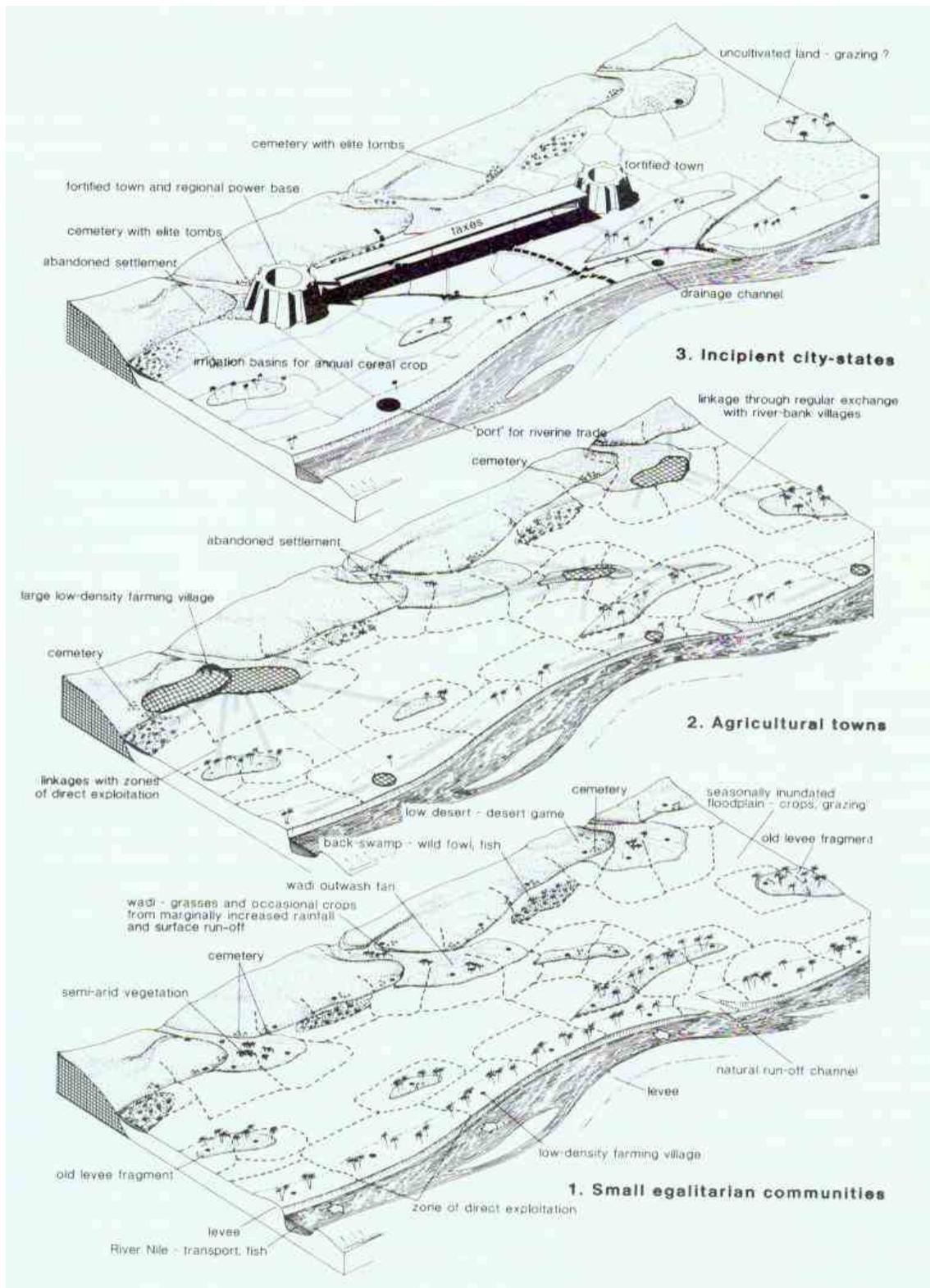
Figure 2. The hypothetical "game play" model, with its political and environmental variables, for the advent of city-states. *From (Kemp 1989, 33).*
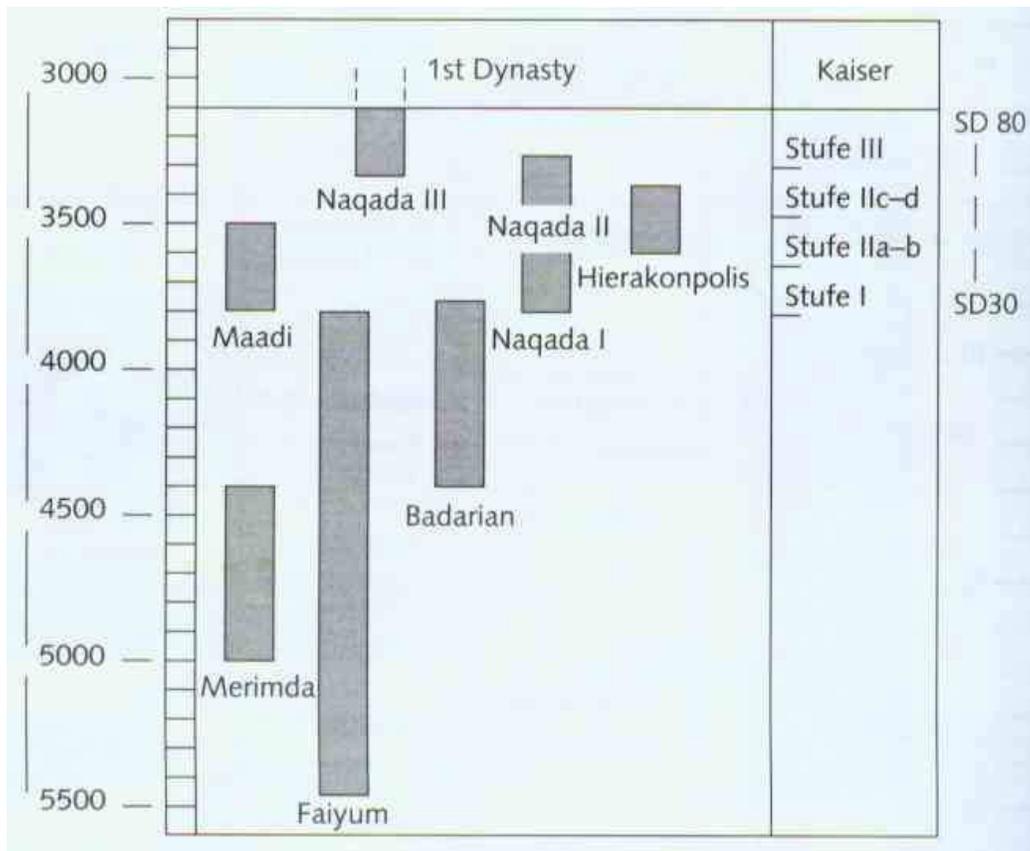
Figure 3. Kaiser's and Petrie's sequences alongside a chronology of predynastic cultures.
From (Midant-Reynes 2000, 264).

The phenomenon of low-density villages nucleating into walled towns is paralleled to a degree by Armant, where desert-edged villages disappeared and a town is evidenced in the Early Dynastic period (Kemp 1977b). Near Abydos, the cemeteries of Salmany, Hawashim and Naga el-Mashayikh were abandoned at the end of the predynastic, while Naga ed-Deir was temporarily abandoned (Wilkinson 1996). Thus settlement nucleation occurred in this region as well, with the populations of the smaller villages attracted by the economic and physical security provided.

Butzer's (1976) figures demonstrate that throughout the dynastic period the Egyptian population numbers were denser between Aswan and Qift, and between the Faiyum and the head of the Delta. The Delta and the southern wide floodplain were more sparsely populated. While concerns over transport costs must have been a consideration (Hassan 1993), it is evident that social and political factors also played significant roles. Other determinants include relationships between population density

and floodplain size: despite ecological and political variables, density was greater in narrower than broader floodplain segments (Butzer 1976). The narrower floodplain was more manageable, with basins four times smaller on the eastern bank of the Nile which Butzer (1976) proposes explains the preferential location of the nome capitals on that bank. Yet, as can be seen from Figure 4, the nome capitals were evenly spread on both the western and eastern banks. As such, the Nile formed a developmental barrier affecting the development and spacing of settlements. Elkab, on the opposite bank to Hierakonpolis [Figure 1], was one of the first dynastic urban centres and came to eclipse Nekhen in the New Kingdom (1550-1069 B.C.), being the capital of the third nome of Upper Egypt (Shaw and Nicholson 1997).
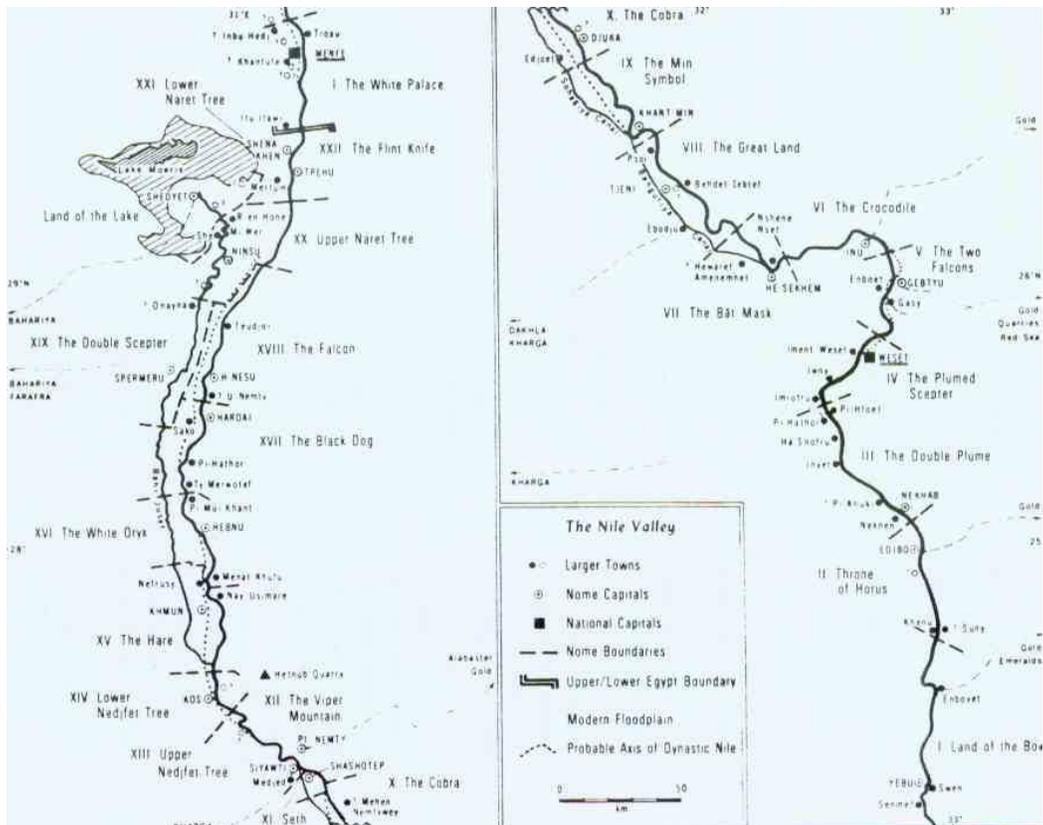

Figure 4. Locations and distribution of Dynastic settlements, excluding villages. *From (Butzer 1976, 78)*

The shifting of importance invested in dynastic settlements is also reflected in the movement of some settlements themselves. Mit Rahina is typically equated with ancient Memphis (Smith and Jeffreys 1986). Despite the large scale, monumental architecture dating from the Middle Kingdom onwards, no *in situ* Early Dynastic or

Old Kingdom remains have been located. While possibly later occupational activity (Giddy et al. 1990) and/or sebakh-diggers may be responsible for this discrepancy, it has been argued that early Memphis was a mobile capital located close to the pyramid complex being constructed by the particular pharaoh at the time in the Memphite necropolis, Lower Egyptian Memphite nome (Lehner 1997, Love 2003). Love bases her hypothesis on scattered remains from Giza, Abu Rowash, Abusir, Saqqara and Dahshur as well as on linguistics. The Greek-derived name Memphis stems from *Mn-nfr* meaning "Pepi is firm[ly established] and well" (Gardiner 1947). Thus Lehner (1997) has referred to the necropolis as a "capital zone", a non-nucleated 30 km stretch [Figure 5].
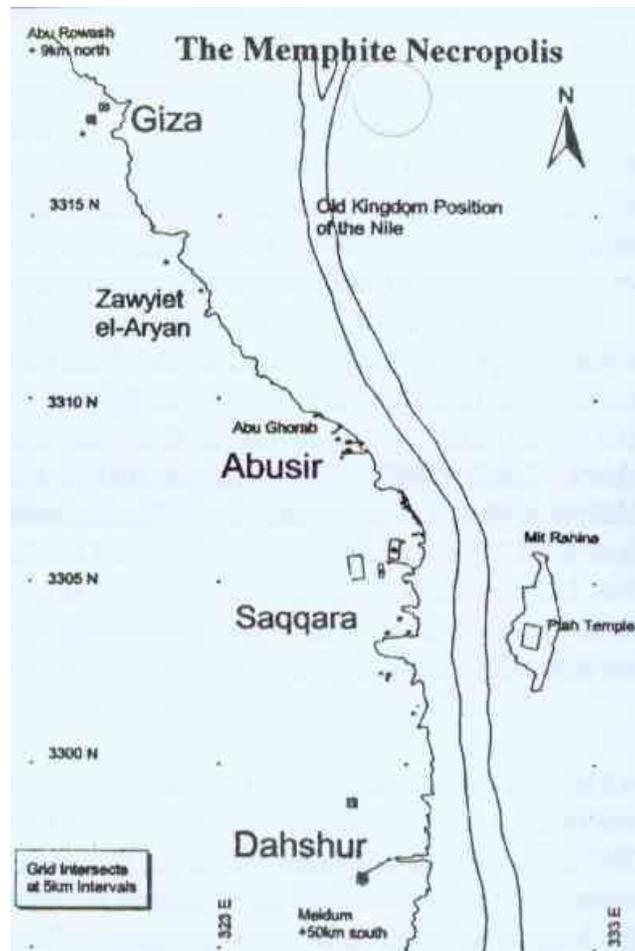

Figure 5. Old Kingdom Memphis as a mobile entity in a 30 km area. From (Love 2003, 82)

Assmann (1989: 65) described New Kingdom Egypt as "the exact imitation of cosmic government on earth". O'Connor (1993) has applied this concept to royal cities such

as el-Amarna and Thebes, suggesting that these cities were laid out to replicate and function as the cosmos. The temples were the reciprocators of the cosmic power, channelled to the citizens through the palaces and thus maintaining the relationship between the city and the cosmos, and the pharaoh and his people (O'Connor 1993).

In this hypothesis, Amun-Re at Thebes was the cosmic ruler of a cosmic and secular entity. The administrative palace and the temple were linked, but O'Connor (1993: 582) pushes the limits of his hypothesis by postulating "the residential palace, like Amun-Re's horizon, was perhaps remote from the city proper". His hypothesis is more solid for al-Amarna (Kemp 1977a) where the residential palace is located at the northern edge of the settlement, mirroring the sun-Disc's emergence at the cosmos' edge, the eastern horizon (*akhet*). The pharaoh and the Disc join in sacred union in the city centre, before the pharaoh continues on to govern in the "secular city".

A view from the periphery

Elephantine straddles the contact zone between Egypt and Nubia, serving as a focal point for sub-Saharan through the "Nubian corridor" (Adams 1977), particularly during the late predynastic. It was separated by a river channel, into an eastern and smaller western islands, until the First Intermediate Period (2160-2055 B.C). Although access to the earliest settlement is limited, Nagada IIc or IId remains have been uncovered in front of the temple of Satet (Kaiser et al. 1995) and secondary deposits may indicate occupancy earlier in Nagada II. The post-holes indicate reed-huts and mudbrick architecture is evident from the period of state formation. However, the earliest preserved architecture is from Dynasty I (Kaiser et al. 1988), with a niche between granite boulders housing a sacred temple.

A fortress was constructed in the First Dynasty, with walls three metres high, with no regard for the existing settlement which did not incorporate the temple within its boundaries. As a consequence, the sanctuary's entrance was moved to the north-eastern corner. Reconstruction work ensured the temple also lost a large portion of its foreground to the fortress. These policies were in line with the military and economic actions taken by the early Pharaonic rulers, resulting in the collapse of the Nubian A-

Group. However, Second Dynasty reinforcement resulted in the settlement and temple being included in the fortification, with further building activity early in the Third Dynasty.

The temple, a hut-like mudbrick sanctuary, was not rebuilt during the Old Kingdom in any form of architectural refinement characteristic of the period. Instead, neglected, it was Intef II (2112-2063 B.C.) of the Eleventh Dynasty who first erected a sanctuary and included inscribed architectural elements, thus infusing state importance with the local cult (Seidlmayer 1996). Earlier, Merenre (2287 – 2278 B.C.) and Pepi II (2278-2184 B.C.) of the Fifth Dynasty had their visits to the temple recorded in rock inscriptions, while Pepi I (2321-2287 B.C.) donated a granite *noas*. These factors were due to the formal style of the early court being adopted at unequal pace (Kemp 1989): pre-formal levels characterise provincial architecture, with the "early formal" style being adopted during the Middle Kingdom.

The temple of Satet can be regarded as the main temple during the Old Kingdom on Elephantine, as reinforced by her title *nt.t-3bw* ("Mistress of Elephantine") (Seidlmayer 1996). The similarities between Early Dynastic royal funerary monuments and the early Hierakonpolis temple (O'Connor 1992), the chapel of Djoser (2667-2648 B.C.) at Hierakonpolis and a royal Second Dynasty stela at Hathor's temple in Gebelen, coupled with the lack of post-predynastic monumental art at Coptos, provides evidence of royal court cults appropriating places of ideological significance for divine kingship. However, no significant traces of Third and Fourth Dynasty activities are visible in Upper Egyptian temples. While there is limited evidence from the Fifth Dynasty, royal presence was entrenched significantly from the Sixth Dynasty onwards. Three stages can thus be inferred (Seidlmayer 1996):

- Early Dynastic pharaohs erected several temples connected specifically to the ideological foundations of divine kingship.
- Third, Fourth and most of the Fifth Dynasty pharaohs withdrew royal activity from the provincial sanctuaries.
- Some care for the local cults was established during the Fifth Dynasty and continued into the Sixth Dynasty, with the pharaohs eager to have *k3*-houses for their own cults attached to them.

Thus there were significant differences between court and provincial cultures, with the royal court by-passing the indigenous organisation and ideological nuclei until late in the Fifth Dynasty. This is further reinforced by the official building complex on Elephantine, dated by pottery analysis to have been built late in the Third Dynasty (Seidlmayer 1996) and situated forty metres north of the small step pyramid. Occupation was abandoned for most of the Fourth Dynasty, as attested by the lack of pottery with vertical dividing lines, and only re-established later on with workshops.

The small step pyramid, in the north-west of the site, probably had a cult place in front of its north face, like other Third Dynasty pyramids. A conical granite block, with the inscription "Diadem of Huni", is believed to have derived from the cult shrine (Seidlmayer 1996). Other pyramids are found at Seila and Zawjet el-Mejtin, away from important early centres. Even the pyramids near Abydos, Edfu and Hierakonpolis are situated some distance away. Seidlmayer (1996: 124) hypothesises these monuments "served to make explicit and intelligible the ideological background of the economic demands of the state on a local level", through a mapping of the royal cult on the topography.

As the royal funerary domains continually expanded through the Old Kingdom, they increasing became centralised around provincial temples. Pepi I, whose *naos* at Elephantine may have derived from a refurbishment of the temple, built numerous k3-houses which served to transfer forms of monumental art to provincial sanctuaries. This transfer extinguished the independence of the pharaoh by attaching him to the local deity temples.

Conclusion

The emphasis placed on philological analysis is a legacy of Egyptology's humanistic origins, with the special emphasis placed on philology, and art and political history. Although some studies of everyday life were undertaken (Drower 1985, Erman 1894, Wilkinson 1857), such research avenues remained peripheralised. This legacy of failing to draw upon anthropological expertise and research, except through the efforts

of anthropologically-trained archaeologists in the predynastic (Adams 2000, Bard 1987, 1992, 1994, Fairservis 1972, Hoffman 1993, Wenke 1989, 1991, Wenke et al. 1988), led to a failure to understand that explaining similarities is methodologically and theoretically as important as illuminating unique differences.

Detailed contextualised study, accepting the principle of cultural evolution, undercuts the alternative notion of cross-cultural regularity of human behaviour (Binford 1962), acknowledges new forms of society and behavioural patterns arise and provides the backdrop against which to contextualise the particular economic, ideological, social and pragmatic aspects of ancient Egyptian civilisation. O'Connor (1993) combines Egyptian texts with archaeological data to further inform the available evidence on the Egyptian's world-view about the inter-relationships between city, state and the cosmos through examining not only temples but also the internal layout of palaces and towns.

O'Connor fails to adequately develop his cosmological hypothesis to account for population numbers and spatial interrelationships between cities, towns and villages, and for the spacing of the settlements in the landscape. Hassan's (1993) functionalist model fails to adequately account for the ecological variability of the Nile floodplain. The fundamental principle of versatility and state ideology sometimes superseding functional constraints is clearly evident when viewed from peripheral sites like Elephantine. Instead, it is most plausible to conclude that ancient Egypt was a territorial state with a plurality of hierarchical settlements distributed across its landscape constrained and reinforced by ecological, mobility, logistical and ideological considerations.

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