



Theban Settlement Patterns Rasha Soliman

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Abstract

Thebes with its archaeological diversity is of great historical and architectural value. The changes in the settlement patterns show the development of political and social system. The findings help in reconstruction of the patterns of the ancient communities. Researches are taking place on settlement pattern data that has been used to make deductions about social, political and religious organizations of the ancient cultures. Hence, the study of changes in settlement patterns becomes a study of the development of the social and political organization.

Religious buildings may expose ritual behaviour, while community constructions can provide helpful information showing the community's adaptation to its physical and cultural environments. The actual buildings, the sites, the group of sites must form some type of a regional network that reflects different aspects of the social and political organization of complex societies. It is worth considering the natural landscape of Thebes and its political rise that occurred due to the promotion done by royalty, as well as the elite through their cemeteries, and mortuary temples

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Introduction:

Throughout time, Egyptologists know more about the realm of death and the afterlife than they do about many aspects of living communities. To demonstrate this, from find that there are more texts, more funerary objects, and more bodies and tombs studied than there are objects related to the living societies. Accordingly, archaeology has helped in the study of Egyptian mortuary behaviour and patterns related to living communities and their settlements.

When using the term "settlement", archeologists are not always right to talk of a place is small as being the centre of both administration and life. Trigger defines "settlement patterns" as "*the order which the members of a society observe in their utilization of space.*"¹ These changes in the settlement patterns show the development of political and social system. The findings help in reconstruction of the patterns of the ancient communities. Hence, the study of changes in settlement patterns becomes a study of the development of the social and political organization. Another definition for Settlement Archaeology is "*the study of social relationships using archaeological data.*"² He believes there are three sources for this data, namely, individual buildings, community layout and zonal patterns.

Researches are taking place on settlement pattern data that has been used to make deductions about social, political and religious organizations of the ancient cultures. Religious buildings may expose ritual behaviour, while community constructions can provide helpful information showing the community's adaptation to its physical and cultural environments. The actual buildings, the sites, the group of sites must form some type of a regional network that reflects different aspects of the social and political organization of complex societies.

Tringham's (1972) concept of "settlements" is to differentiate archaeological sites which have houses and domestic activities, temples or cemeteries, for which she used term "ritual sites".³ Groups of settlements can be studied as a "community pattern" in a region or distributed in a specific geographical area and these include clusters of activities. Topography is known to highlight the

¹ B. G. Trigger, *History and settlement in Lower Nubia*. Yale University, 1965, 2, 8, 9.

² B.G. Trigger, "Settlement Archaeology – its goal and promise", *American Antiquity* 32/2, 1967, 151.

³ R. Tringham, "Introduction: Settlement patterns and urbanization", in *Man, Settlement and Urbanism*. (U.K., 1972), xix, xxii.



common alignments over long distances. Moreover, yet to some degree, the marginal agricultural settlements have surely influenced the official planning. The latter repeat the construction of the same building and use the same planning for the internal layout of these buildings. There is a well known assumption that during the Old Kingdom, Egypt's culture and centralization were very much interconnected.

Settlement Landscape

Studying settlement landscape is alluring but confusing due to the overlap of culture and society, time and history, nature, social and spatial standards, the meaning and what it is connected to it. Landscapes are created through space and time, and they are a result of more than one element; a number of people, history and geographical location. Certain landscapes in the Egyptian Nile Valley are believed to be of importance because they have sacred events of religious significance taking place at these sites, with human involvement, along with symbolic elements of the natural topography of these sites.

The social, economic and political elements are the major elements that affect the nature of human settlements, but it is always necessary to keep in mind that the Ancient Egyptians had their own beliefs about the nature of the world. One of the theories points out that government offices and especially the temples dominate the land, as well the assets on which the economy depended. Because these temples need artisans and craftsmen, these towns became part of the government centre-temple town matrix.

Town or urban planning is known as the human response to the environment by the direct adaptation of physical space.⁴ Urbanism is known from the presence of settlement patterns which changes through time and space. Archaeologically, the conceptual basis and the practical operations of planning can be recognized in the regularity of architectural remains in patterns that are repeated within the site or at other sites within the same region.⁵

The magnificence of the ancient Egyptian civilization was developed as a cause of several reasons, one of which is the formation of towns. These towns were characterized by commercial, industrial, military and especially religious activities. Thebes with its archaeological diversity is of great historical and

⁴ J. B. McLoughlin, *Urban and regional planning: A systems Approach* (London: Charles Hammond Ltd., 1978), 28, 29.

⁵ P. Lacovara, *The New Kingdom Royal City*. (London and New York, 1997), 1.



architectural value. It is worth considering the natural landscape of Thebes and its political rise that occurred due to the promotion done by royalty, as well as the elite through their cemeteries, and mortuary temples. Unfortunately, the preservation condition and the short history of settlement archaeology in Egypt have not salvaged and recorded many settlements for the early periods.

Textual records have also provided the size and the distribution of the settlement. Thus, Butzer (1976) was able to count a total number of 217 ancient population centers through the entire of Egypt.⁶ Obviously there were a number of settlement types, the archaeologists were able to distinguish them from the functions and activities that were conducted amongst the population and in each settlement separately. The division of these settlements was done according to hierarchy: a city, a large town, a small town and a large village.

In the ancient Egyptian language the determinative for the word *nywt* is found in two forms either with orthogonal or axial patterns. This is evidence of the presence of axial town planning in Egypt since the dawn of history, along with the orthogonal plan as in the sign.⁷ There is a tendency to try and differentiate between the use of the words 'town' and 'city'; which has been regularly confused. The towns were probably the size of a village nowadays, whilst an administrative 'capital' of a province could have been a little larger. Thebes was naturally considered a city. Noteworthy, Butzer's list was biased for the large settlements because the small settlements were of no religious or administrative importance and therefore rarely recorded.

Theban Spatial Relationships

Previous studies investigate the spatial relationships of groups of materials, namely, artifacts that are of the same work area, a room or more that defines a dwelling, a number of houses known as a town, and a series of military towns define trade networks or frontiers. However, the investigation of the relation between Theban settlements across its landscape and not just "settlement archaeology" is still in its infancy. The outcome of the distribution of the sites was important as it showed the charting of change through the shifting of the sites through time, through river shifts and the different adoration of the Theban deities resulting in an interrelationship between temples, and accordingly the settlements.

⁶ K. W. Butzer, *Early Hydraulic Civilization in Egypt*. (USA, 1976), 110.

⁷ A. Badawy, "Orthogonal and Axial Town Planning in Egypt", *ZS* 85, 1, 12.



The exact origin of the history of the Theban nome remains a mystery because of the large amount of palimpsest added through the different eras, destroying, adding or changing the older constructions. Thebes' oldest traces of a settlement are stone tools mostly found at the edge of the cultivation, such as at El Tarif, dating back to the Middle and Upper Palaeolithic periods; these tools are mere proof that the Theban region had activities since 90,000 to about 10,000 BCE and were found at these locations because of the water deposition.

By the Neolithic era people settled in the Valley, and thus was the beginning of the dynastic civilization. On the eastern bank, at Karnak, an excavation discovered fragments of ceramic and stone vessels dating back to the Naqada I and II eras. Whilst on the western bank, recent excavations discovered the possibility of an archaic temple on the so-called Thoth Hill. As for discoveries of the Old Kingdom, there were two mudbrick mastabas found at el Tarif, a distinct location arousing the possibility of a settlement right across at the site of Karnak. This could have not been just a coincidence.

There were other towns such as Naqada and Hierakonpolis that were known to have been political and religious sites during the predynastic times. The Naqada settlement introduced Middle Palaeolithic industries as the richest remains of the Thebaid nome.⁸ When dating a large number of the sites of the Theban nome, archaeologists turn back to the objects and artifacts that have been discovered. Dating back to the Old Kingdom is an unfinished granite pillar of Userkaf that caused the belief that Karnak could have originally been founded at that date. Second, the Karnak list of kings includes the names of seven rulers that date back between the 4th and 6th dynasty. The kings were Snefru, Sahure, Niuserre, Djedkare, Teti, Pepi I, and Merenre; therefore, it would seem more likely that these kings had some monuments or a developed temple in the Old Kingdom at the site of Karnak.

The town at Karnak goes way beyond being a small, vague, and provincial town on the east bank of the Nile. The exact beginnings of the town are unknown but certainly a concentration of settlement had developed by the Old Kingdom times both at the site of Karnak and Luxor across from the Old Kingdom cemeteries of El Tarif and El Khokha. Clearly, these were important sites of Thebes at the time, but no clear evidence of settlements has been discovered. However, the

⁸ K. W. Butzer, "Archaeology and Geology in Ancient Egypt" in *Geomorphological analysis permits reconstruction of the geography of prehistoric settlement*, Vol 132, No. 3440, 1960, 1619,1620.



eastern and western locations being connected could have not been coincidental.

Thebes began as a loosely linked series of settlements on both the east and the west banks of the Nile. Since early times it was foreseen as a series of clustered houses or settlements that were built nearby several temples. Clearly these sites were arranged at the centres of population on both the east and the west banks of the Nile. We came to understand this from a papyrus at the British Museum, on the back of a late Ramesside papyrus of an unknown king Bmp 10068 and Bmp 10054 are texts describing the New Kingdom settlements located south of the mortuary temple of King Seti I extending past the Ramesseum, and all the way up to the temple of Medinet Habu. These settlements cluster in the region of the temples. It is believed that such closeness would support the operation of the temples. The text gives the number of settlement concentrations total up to nearly 180 houses on the western bank. The papyrus indicates that there are clusters by the temples of Ramesseum, Qurna but those by the Medinet Habu temple were more concentrated because it was believed to be the centre of administration of the Theban necropolis. When other temples of the New Kingdom were not mentioned in these texts, it caused the belief that they were the most active temples in the late New Kingdom times. Maybe this papyrus had only mentioned the settlements by the edge of the desert, whilst there definitely were more located within the enclosures of the temples. The professions of the people who lived in these dwellings were priests, craftsmen, farmers and administrators. Strangely, there is neither mentioning of the village of Deir el Medinah, nor of any dwelling located by the river.

Another papyrus that analyzes the patterns of the Upper Egyptian settlements is the Wilbour papyrus that has a much wider geographical importance. It has evidence of the evaluation of land plots for taxation purpose during the reign of Ramses V but only in Middle Egypt. Gardiner refers to the location of the temples and towns in charge of the administration, giving an unattainable number of close to 416 settlements that were used as survey points. Even Helck's reconstruction was not convincing when he had excluded the possibility given by Fairman to the settlements along the waterways and beside the river. The analysis of the settlement patterns found in the Wilbour papyrus will surely help in allocating the region's centres of administration.⁹

⁹ A.H. Gardiner, *The Wilbour Papyrus*. 4 Vols. Oxford, 1948.



Geographical Information Systems

Some of the sites have survived time till the moment, some are accessible while others are inaccessible; but there is a possibility to locate most of them, pinpoint them on a map and maybe even excavate them. From maps it is possible to deduce the spatial patterns and their behaviour of shifting. To analyze spatial information, Geographical Information Systems (GIS) technology is of great potential. At the beginning GIS technology may seem as a modification in technique and not a theoretical improvement aiding in analysis.

Unfortunately, early scholars used incomplete and unclear maps of the preceding archaeologists instead of the actual settlement. However, modern archaeologists have the advantage of more thorough surveys of certain areas, although they still do not provide all the details about the destroyed sites and only excavations can uncover the true dates of the sites and the possibility that two settlements could have been inhabited at the same time. In analyzing the connected aspects of Theban settlements we can examine continuities and changes in the site over time forming a palimpsest of settlements.

Ancient geography of the Nile

The geography of the Nile changed as a result of the formation, erosion, or merging of islands and even the islands became attached to one side of the Nile. For example, the Nile in the Theban region has shifted approximately two to three kilometers over a thousand years. Recent geo-archaeological studies concluded that at the site of Modern Luxor the Nile had shifted westwards. This rate of shifting was established with the records of maps over the past 200 years. It also takes about 200 years to have formed a channel around an island of one km wide. Therefore, if the formation of an island takes the same time, then the rate of shifting would be a km in every 400 years or about 2.5 kms in every 100 years. However, if the river was tracked at such rates, then today the levee would have been at its westernmost. Recent studies of this river shifting show persistency in the region of Modern Luxor. The migration headed toward the eastern bank caused the sites to be surrounded by the river.¹⁰ As a reflection, did this shifting remain consistent in one direction or did it alternate?

Today's Egyptian survey topographic maps of scale 1:50,000 confirm that the mentioned waterfronts are at present related with the landscape features of the irrigation canals, the boundaries of the fields, and especially the roads which were located on the deserted river levees. These levees were known to be less

¹⁰ L. Meskeil, *Private Life in New Kingdom Egypt*. (U.K., 2002), 23.



affected by the annual flood because of their high position. Clearly, nowadays there are modern riverbanks located close by the sites of the temples of Armant, El Tod, Karnak, Montu temple, and Medamoud.¹¹

It was first noted that near the banks, small islands were being formed. The channels have switched routes, such as northwest of Karnak. There was even a halt in certain constructions that were located at the edges and this was confirmed by aerial photography, as well as, through geology analysis.¹² Satellite images explain the Upper Egyptian floodplain from maps of the area.¹³ This data demonstrates the course and migration of the Nile over the years. Almost every aspect of the Ancient Egyptians life was, in some way, affected by the Nile. Even the planning of a city or a town was done in the same way. Egyptologists use present day maps to try and resolve the many disagreements concerning the precise nature of the shifting of the Nile as well as the scarcity of research.¹⁴ That is why there still remains misinterpreted analysis of some of the ancient monuments and settlements.

The slow shift of the Nile, and the annual flood alluvium deposited sites that are buried nowadays. Levels of the Nile floods help in the determination of the history of the Egyptian culture. There is a quay-like structure located in front of the first pylon and close by North Karnak, which was thought to have canals connecting it to the river. It was thought that at that point the Nile flooded reaching approximately to a height of about 74m.¹⁵ Maurice Pillet strongly defended the belief of a waterway that might have connected Medamoud to the latter quay mentioned at North Karnak.¹⁶

One of the worst results of having most of the Egyptian settlements located in the flood plain is their disappearance and other several reasons, such as, agricultural and industrial projects, the determination of living traditions to

¹¹ J. M. Bunury, A. Graham, M. A. Hunter, "Stratigraphic Landscape Analysis: Charting the Holocene Movements of the Nile at Karnak through Ancient Egyptian Time." *Geoarchaeology: An International Journal*, Vol. 23, No. 3, 368-9.

¹² J. K. Hillier, J. M. Bunbury, A. Graham, "Monuments on a Migrating Nile", *Journal of Archaeological Science* 34. 2007, 1012,1013.

¹³ J. M. Bunury, A. Graham, M. A. Hunter, *op-cit.*, 2008, 355-6,368-9.

¹⁴ J. K. Hillier, J. M. Bunbury, A. Graham, *op-cit.*, 2007, 1011-1015

¹⁵ B. Kemp, D. O'Connor, "An Ancient Nile Harbour. University Museum excavations at "Birket Hâbu"". In *The International Journal of Nautical Archaeology and Underwater Exploration*. 1974, 3.1,101-136.

¹⁶ A. Graham, J. Bunbury, "The ancient landscapes and waterscapes of Karnak", *Egyptian Archaeology* 27, 20-24.



certain sites over time, and even the continuous reconstructing of and above the settlements. Unfortunately, most ancient settlements of any period are currently way below modern towns and villages. Nevertheless, certain settlement sites of different types and sizes have barely survived till today. Some have disappeared into the floodplain without being excavated, while, others are only indicated by partial remains above the flood plain surface. Butzer believes that the Egyptian floodplain connected human beings to their environment which influenced the patterns of land use, the progress of irrigation, and the spatial distribution of settlements.¹⁷

Even at the edge of the desert, there was evidence of predynastic cemeteries but with no related settlement sites, which made us understand that they had been built on a levee either in or adjacent to the floodplain and that is why the settlements that have endured time were naturally found on higher locations. The majority of the predynastic settlements that were discovered are located on soft, unstable deposits; such as, Mermide, Hierakonpolis, Armant, and Maadi were all located on silts while Abydos was built on sandy Nile gravels.¹⁸ Thus, when examining a contour map of the Nile Valley, and the banks of the Nile, it is interesting to observe the levee formation along the thousands of years. These levees or sandy islands provided space for the settlements due to their high location, seclusion from the annual flood, and especially its closeness to the Nile allowing access to transportation.

However, the settlements of the dynastic era were set due to ecological elements. The land was formed laterally comprised of the fertile alluvium caused by the yearly flooding, the desert at the edge of the floodplain and followed by the cliffs. Thus, the settlements usually stood at the edge of the floodplain, and they were destroyed due to moisture, or the shifting of the Nile riverbed. Furthermore, settlements were remodeled and palimpsests of settlements were built on top of each other. Nevertheless, the unreachable levels of settlements are located below the modern town or even worse in the floodplain remains. As for the reachable large enough sites, they luckily were photographed by satellites. Analytical theories have been made about the location and emergence of these sites. Texts show that the major town mounds

¹⁷ K. W. Butzer, *op-cit.*, (USA, 1976), 110.

¹⁸ K. W. Butzer, "Archaeology and Geology in Ancient Egypt" in *Geomorphological analysis permits reconstruction of the geography of prehistoric settlement*, Vol 132, No. 3440, 1960, 1617-24.



of the Middle Kingdom centers or cemeteries were removed in modern times to be used as a fertilizer or even for modern development.¹⁹

Difficulties face archaeologists when they try to determine the specific type of a settlement that came first including finding out whether the area was formerly populated as a village, but later on became a town and ended up being a city. Even further, was this a form of proto-city settlement?²⁰ It is believed that temples and mortuary temples were the sites usually chosen by the priests and courtiers to settle around. The rest of the community occupied the vicinity but most probably were not living in an enclosed town or village.²¹

Once by one, sacred landscapes in the Egyptian Nile Valley have been researched but not as part of the whole environment. The evolution of certain societies and the choice of location to construct their buildings were usually for political or religious and economic reasons. However, few scholars believe that little or no attention was paid to the geographical environment. The issue that comes to mind is why the preference of one site over the other to perform their religious rituals and have ceremonial constructions built?

Karnak

One of the first temples to have been built on an island or a mound was Karnak but when the river shifted the site had grown and the temple was given the opportunity to be enlarged. In 1906, Legrain suggested that in between the 3rd and the 8th pylon of Karnak, southwards, there was a swamp or a river side that was present even before the 12th dynasty. Noteworthy, this was also present at the site of the temple of Montu at North Karnak, and was also reachable from the water. While identifying the ancient landscape sediment, it went to a depth of between 5 and 10 meters long and led to prove that the ancient city mound of Karnak was located on an island. The Nile had shifted its direction north west and caused the formation of islands in the area. The architectural set up around the Amun temple during the Middle Kingdom is still unknown to us because the layers of this era have only been preserved in certain areas. There is a possibility that the settlement could have had the urban style of El Lahun with a rectangular network of roads and blocks of houses.

During the Middle Kingdom era, there was a highly developed bureaucracy that was clearly reflected in the organized planning and layout of the settlements,

¹⁹ J. Richards, *Society and Death in Ancient Egypt, Mortuary Landscapes of the Middle Kingdom*, (U.K., 2005); Karl W. Butzer, *ibid.*, 1624

²⁰ D. J. Brewer, E. Teeter, *Egypt and the Egyptians*, (U.K., 2007), 60.

²¹ B. J. Kemp "The early development of towns", *Antiquity LI*, 1977b, 186.



usually in square grid patterns. Thebes could be one of the towns where town planning occurred. By the New Kingdom, the area had developed more physically surrounding the temples that were being built, added to or even rebuilt. Physically the towns and cities had grown out from the main temple areas, such as, Karnak and Madinet Habu.

Close by Karnak a single large house had its walls rebuilt several times, but ultimately, it was leveled to the ground. Peculiarly a construction comprised of small compartments and no entrance doors or access was thought to be a pedestal for a more than one storey heavy construction. When locating the orientation of the house to be towards the cardinal points, with a pedestal that supported the front of the house. North of this house, a large mud-brick construction was discovered laid on thick yellow sand foundations. Moreover, in a room in the corner a platform made out mudbrick was found but still remains of unknown function to date. This building had been given a lot of attention, causing the belief that it has either a cultic function or belonged to an owner of high status. As for the part within the city wall on the eastern border of the city, it was built by Senusert I. Other scholars believe that another similar wall lies to the north of the Amun precinct and it was considered the Northern border of the city. There is a possibility that this part had never been occupied.

The IFAO has conducted excavations towards the north of the temple of Amun, and has interestingly found settlement remains in the temple of Montu. The soil has indications of mudbrick walls that prove the continuation of constructions of houses towards the north. This was mere evidence that an expanded habitation site was enlarged significantly to the north and east of the 12th dynasty temple of Amun. This was not the only settlement because beneath the New Kingdom ground level of the Temple of Mut, some Middle Kingdom and Second Intermediate period houses have been also recovered.

Furthermore, it is believed that New Kingdom Karnak was built on the oldest city mound and that to the east of the Sacred lake, behind the seats of the Sound and Light show lays a large, well planned building that has columns and believed to be probably a palace. At the same time, on the northern edge lies the corner of a similar building. If this zone seems to be of the Middle Kingdom, then it is possible that it could be a different but larger edition of Kahun.

In the south axis of the New Kingdom Amun temple, in the courtyard between the 9th and 10th pylons, there were walls of houses that were found along with circular grain silos and small storerooms. Turning back to the pottery found, it dates back to the Middle Kingdom and the Second Intermediate period. From the latter discoveries scholars assumed that this city could have been about one kilometer in length.



North of the Amun temple at Karnak and west of the temple of Montu, at an area named the 'house of the cow', more Theban houses were located. The site was named in honour of the sacred cow, mother of the sacred bull of Thebes. It is believed that the inhabitants of this area were of a lower status, namely mortuary workmen or low positions that had served in the Amun temple. Thus, Thebes can be considered an example of a Middle Kingdom city that had been occupied by different levels of the society.²²

The relation between the settlements and sacred sites

The ancient permanent sacred structures like the temples and their surrounding enclosures were originally built on a level that was lower than the surrounding houses. It was the original level which the temples were built since the first construction and rebuilt consequently on the same ground level but that was not what happened to the temporary housing. The houses were thought to have been built layers on top of each other. These mudbrick houses must have been decayed or destroyed over time and then rebuilt several times over the centuries, resulting in a ground level for the residential area that was higher than the stone temples. The temples appeared to have sunk into the ground due to the palimpsest of housing surrounding it.

The Karnak constructions of the 12th and 13th dynasties noticeably stand out in terms of orientation in comparison to the later constructions. This is due to that the constructions have the same orientation as the Amun temple which was built by Senusert I. When turning back to the Middle Kingdom houses in the vicinity, it is realized that they were built even before the temple because they never altered their locations to give space for the construction of the temple. They remained intact while the temple was being built. Interestingly, in the area of Pre-Akhenaten buildings it was found it is roughly aligned true north along with the buildings of the temple of Montu. The idea of the orientation being the same caused D. Redford to agree that the settlements had pre-dated the temples, maybe even all the way back to the Old Kingdom era.

The temple districts were better planned especially that the outlay of the temples were basically symmetrical, having walls surrounding them. The temples had wide avenues that led to the entrances prepared for the ceremonial processions. It is believed that a large number of the temples had been surrounded by an empty space, which eventually had dwellings grow onto its outer temple walls. The alignment of these temple district settlements had already been predetermined maintaining common alignments even though at

²² B. J. Kemp, *Ancient Egypt, Anatomy of a Civilization*. (U.K., 2005), 225



far distances. The buildings have been planned model units including the plan of the internal layout of the construction.²³ The location of these settlements was part of a network that was connected to a religious cult of a deity or a royal figure. However, both the main cult and the landscape were considered one of the major elements to have played a part in the location of the settlements.

When tracing the archaeological evidence, two separate situations need to be distinguished. First, if the temple has a new foundation and is the only reason for the presence of a settlement and second, if the area is depending on anything else but the temple for a living. An example of the latter is the temple town of Karnak at Thebes which has houses very close to the enclosure wall of the temple.

Clearly, the complexity of the Egyptians state would have mandated carefully planned and organized urban centers in order to function properly;²⁴ and the establishment of the Divine King would have also left its mark on architectural patterning of the court community as it has in other societies.²⁵ The best remaining Theban example of a royal residential city was built by Amenhotep III at Malqata south of his mortuary temple to serve as a site for his Sed festivals, as well as, to welcome the guests that came for such festivals. It was named the 'house of joy'. This royal city is by far the largest discovered royal city reaching a size of 80 acres. A man made harbour "Birket Habu" aimed to facilitate provisions and services to the city. It measures 2.6 km wide and only a km long with a 15 m high mark and has an extension to the east to allow the entrance of the Nile water. To recognize its massive size, it is noted that it piled up a total of 1,000,000 cubic meters of material to cut the lake.²⁶

Theban Settlements on the western bank

Malqatā palace complex was a residence that had gone through several stages of rebuilding during which, structures were added and the whole complex needed to be reoriented. The palace had a symmetrical plan and has a long narrow hall that ran along the axis of the structure. It was situated in the south west corner of a large enclosure wall that also contained storerooms, courts and smaller constructions. Nowadays, half of that vast area lies below the modern

²³ B. J. Kemp, *ibid.* (U.K., 2005), 194, 201.

²⁴ B. Trigger, 'The Evolution of Pre- Industrial Cities: A Multilinear Perspective, "in *Mélanges offerts à Jean Vercoutter*, ed. F. Geus and F. Thill (Paris: Éditions Recherche sur les Civilisations, 1985), 342-353.

²⁵ *ibid.*, 346.

²⁶ E. P. Uphill, *Egyptian Towns and cities.* (UK, 1988), 54-5.



cultivation and settlements, thus, remains in the process of excavation. After the first constructions of the king's palace, the original orientation of the palace needed to be skewed slightly to align with the Amun temple and the North palace.²⁷ South of the Amun temple, a square platform that was called a pavilion was thought to be a barque shrine. The only unplanned but enclosed area at Malqata was the village. It was located on the low desert edge and had only one entrance that was accessed by the help of steps and a ramp. The houses of this village had their walls decayed and damaged; but their foundations were never taken out during the addition of the next layer of housing.²⁸

Between the temonos wall of Ramses III's Madinet Habu temple, and a large restraining enclosure wall, there were houses for temple officials, royal buildings and a garden. Interestingly, this great complex comprised three palaces. The inner enclosure wall had been jammed by the amount of houses and magazines for the priests and the founders of the complex. There were two groups surrounding the temple enclosure from all sides except for the eastern side. These were separated from the temple by a stone paved road that went all around the temple.

While excavating by the little temple of Amun, on the western bank on the edge of the desert, lays a settlement that grew significantly to become one of the suburbs of the Malqata complex but today it lies beneath the cultivation. Furthermore, there is another settlement below the north palace and even a second settlement lies on the shallow valley; an extension of the 'south village'. The Malqata complex appeared to be built in an unplanned manner, especially with a different group of constructions located at uneven spaces. This interpretation is untrue because the site is of immense size and the main buildings are aligned to form a large plan. The plan is thought to mainly connect Birket Habu and the complex of Malqata.

This western settlement was a continuation for a new living quarter of Thebes that included a harbour and palace buildings. The site has an uneven nature and that is why it is deduced that it was only a suburb for the suppliers of services, goods and skills to the mortuary temple communities, in addition the new palace. In later times, this large residential city had been deserted and

²⁷ B. Kemp and D. O'Connor, *op-cit.*, (1944); 112-25.

²⁸ A Lecture by D. C. Patch.



each temple ended up having a small palace of its own. Today this district has shrunk to what is only the site of the temple of Ramses III at Medinet Habu.

Similarities between Eastern and Western palaces

At Karnak, the palace *Vn Ipt šwt*²⁹ dates to the reign of Hatshepsut; it was believed to be a temporary palace which is thought to be a sacred structure used as a temple or a chapel that without doubt at one point must have sheltered the sacred barque of Amun.³⁰ This was known from an expression found "head of a wave" or "head of a canal" which was certainly marking the T basin or lake that serves the god's sacred barque.³¹ The basin shaped as the letter "T" branches out on the western side but during that era, the 3rd pylon had already been constructed and undoubtedly the quay had been in a remote location. Noteworthy, barque shrines were found both at the site of Malqata and Karnak arousing the possibility of ritual networking. The palace is not any different to any other New Kingdom palace, however, it is located to the left of the temple but its exact location and size are still unknown. It is believed that this palace had been most probably destroyed by the late 18th dynasty when Amenhotep III started the construction of the 3rd pylon.³²

Theban Nome

In the northern region of the Theban nome at the site of the temple Medamoud; a complicated plan of two axes that are perpendicular to each other was built. In the second axis Middle Kingdom temple is located. The later part of the temple was set in a large scale to form a rectangular hall as the colonnaded court. The sanctuary had two Osirid pillars flanking it and its court. However, there are scholars that believe that the complex was changed to a fortress to guard northern Thebes because at both the south and south-east sides of the temple many annex constructions were found including storerooms, granaries, stables and houses.

In the annex of the temple, the priests' houses were built south of the Middle Kingdom temple. There are also another six houses of three groups and magazines erected in the temple's area. Each pair of houses had the same architecture and design. As an example, interestingly one of these groups used the plan of the pavilion of King Djoser of the 3rd dynasty.

²⁹ E. Otto, *Topographic des Thebanischen Gaus, Unt.* 16, 25-26.

³⁰ M. Gitton, "Le Palais de Karnak", *BIFAO* 74, 1974, 63-73; A. Gardiner, *JEA* 39 (1953),

25.

³¹ *wi3 (n) to itrw* *JEA* 38, 1952, 21, n. 3.

³² M. Gitton, *op-cit.*, 63-73



Cemetery spatial development

Theoretically, ancient complex societies cannot be defined nor measured. To give an explanation of its origins Hassan (1993) assumes that the population of Thebes is estimated to be 20,000 – 40,000 and that Thebes would have no more than 36,000 people. This estimation was derived from calculating the percentage of the urban population in correlation with the rural population.³³ It is necessary to have more excavation data to give an accurate number of the population.

Cemeteries and settlements interact with each other closely with burial and habitation taking place at each separately and accordingly. The cemeteries included several reused tombs that were caused by the increase in the number of houses showing the stable growth of individual settlements and their connection to a certain cemetery. Hence, there are factors affecting the population estimate, which include the number of cemeteries and sites on both banks of the Nile, as well as, the successive religious and political events affecting the population and the sequence of occupation of a certain cemetery and its related settlement.

Cemeteries have the potential for locating the concentrates of the population in certain areas or in provincial capitals. But this can take place when these sites are totally excavated and fully surveyed to provide a complete analysis of the settlement patterns in relation to the cemeteries. Mortuary rituals and social stratification are directly related to each other in terms of structure and complexity. Moreover, these mortuary clusters are an exhibit of mortuary patterns expressing the social status of the owners of the tombs. The town with the temple centre was the one to have authority and thus a ranking system with burial patterns.

Complicated patterns of tomb re-use have been found in the Theban necropolis since 1500 BCE. It was common to re-cycle older monuments possibly because of their location and also to cut short expenses. Within the same necropolis, there were clusters of tombs that were connected to each other either by family ties or by profession. The higher slope of Sheikh Abd el Qurna was occupied by the high officials. Some of these high officials were allowed to be buried in the same area with the ruler they had served. The lower positions prepared tombs

³³ F. A. Hassan, "Town and village in ancient Egypt: ecology, society and urbanization," in *The Archaeology of Africa. Food, metals and towns.* (ed.s) T. Shaw, P. Sinclair, B. Andah and A. Okpoko. (London, 1993). 563, 564.



in the upper enclosure, especially that this site was encouraged by its high quality of limestone formation helping the nobles return back to carved reliefs.

However, with re-cycling, it is unknown if some of the tombs had only the burial of the person for whom the tomb was cut or were they re-used.

During the New Kingdom times, high officials were privileged to have prime locations for their burial. Later eras changed to having mass burials and had either little inscriptions or none, proving to be of a much lower status. This trend had existed since the Old Kingdom times, and scholars named it "democratization of burial". However, little has been discovered on the location of the burial for the common people.

Some scholars believe that these cemeteries could be the weak point of settlement archaeology. Worth noting is that the majority of the settlements remaining have a certain function, such as pyramid towns, fortress towns, workmen's villages and settlements that serve a god's temple. Unfortunately, theoretical records of ancient Egyptian settlements are quite insufficient.

When analyzing the burials of Armant that date back to the pre-dynastic times, it showed that the older burials were arranged to the south of the cemetery, close by the fields, and the later burials were located on the northern side of the cemetery. This spatial distribution of burial has not helped in comparing the numbers of the deceased to the number of the living, since there is no data based on the settlement size and the number of houses. To date, there are elite burials discovered, which meant that all the people owned bed burials.

Turning back to the site of El Tarif where the famous Royal Saff tombs were rock cut; it is natural to find them oriented east-west, in the direction of the town across on the eastern bank at the site of Karnak. The axis of these 11th dynasty tombs points directly towards the center of the 11th dynasty settlement. It must have been located between the Montu temple and the Middle kingdom temple of Amun at Karnak.³⁴

³⁴ H. E. Winlock, "The Theban Necropolis in the Middle Kingdom", *AJSL* 32, 1915, 20.



Conclusions:

The work that has been done on the Egyptian settlement distributions is only now providing researchers with the preliminary conclusions; it is still premature to make concluding statements. However, the basic form of early Egyptian settlements was a rough shape and enwalled village. As for the planned cities with an urban sprawl that occurred around larger centers such as Thebes. These sprawls resulted in the formation of a number of semi-urban residential districts for the elite and the commoners.

Although Thebes was known to be a traditional city, yet its function was both earthly and divine; Amun, the supreme god was in a solar form and believed to be the cosmic ruler. The royal palace and the temples were connected to each other and were connected by the celebration of the festivals, such as, the Opet or the festival of the Valley. The whole city was involved, the palaces, the temples and possibly even the cemeteries. It is for this reason that Amun and the king who were believed to be the cosmic ruler and the earthly ruler that were united to celebrate the mutual understanding and power revitalization of the world.

Rulers thought that with the construction of funerary buildings, temples and palaces, pyramids cities and fortresses towns, that they would all be planned as a ritual network city. The non royal cults were given the opportunity to gain political and ideological economic control when a large number of different sizes of temples had spread all over Egypt. These temples were built in honour of the virtuous actions of the king resulting in the formation of a sacred landscape all over the country.

In short, space is a reflection of a religious, social impact and function of the ancient archaeological sites, including settlements, temples and cemeteries; causing the strong belief that architecture shaped the human daily actions. In Egyptian archaeology, studies of settlements have been usually dependent on mortuary evidence and not on the settlements' remains. Archaeologists have been attracted more to the best preserved remains. The main elements of settlement patterns depended on the location, orientation, and arrangement of the buildings.



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ملخص البحث

يهتم البحث بتطور أنماط الاستيطان بمدينة طيبة والتغيرات التي طرأت عليها من أهمها التطور العمراني من حيث التأثير السياسي والاجتماعي الذي أدى الى الامتداد العمراني. وقد ساعدت الأكتشافات الأثرية في تصور إعادة بناء الأنماط العمرانية ، كذلك ساعدت الأبحاث في إلقاء الضوء على النواحي السياسية والاجتماعية والدينية في الحضارة القديمة لمدينة طيبة وبالتالي دراسة التغيرات التي اثرت على الأنماط العمرانية من النواحي الاجتماعية والسياسية.

وتوضح المباني المقدسة دلائل تعكس الناحية البيئية. و بالفعل فإن هذه المباني المقدسة والمواقع الأثرية مجتمعة تشكل منطقة متكاملة مترابطة تعكس المظاهر المختلفة للمنظومة السياسية والاجتماعية لهذا المجتمع المتكامل وأنه من المهم أن نضع في الاعتبار الطبيعة الجغرافية لمدينة طيبة. كذلك الإزدهار السياسي للملوك وعلى القوم من خلال الجبانات والمعابد الجنائزية الخاصة بهم.