Egypt's Invisible Walls

City walls invite functionalist explanations. It is at first sight easy to deduce why they were built. Where contemporary written and pictorial evidence survives, however, the subject begins to take on a cognitive dimension. Did people at the time really perceive them as we are apt to imagine? The subject has been extensively discussed in the context of medieval Europe where contemporary pictures and contemporary accounts can be set against the architectural remains themselves. City walls were built for status and symbolism as much as for protection. The following collective discussion of the subject in the context of Egyptian history, both ancient and medieval, seeks to follow the same approach: to confront the documentation of the changing practice of urban walling with evidence that represents the mindset of the day. For the time of the Pharaohs the subject is complicated — and made more rewarding as a consequence — by the immense effort which the Egyptians also devoted to walled enclosures around prominent religious buildings. Here the temptation for us is to create a separate category from walled settlements, but on a basis that could be quite misleading. Although the dichotomy between the sacred and the profane is apparent in the construction of walls, meanings change and the distinction is far less apparent in the subsequent use of these enclosures. In medieval Egypt the massive walls of Cairo, parts of which are still an impressive sight, also turn out to be a poor guide to how urban defence was generally perceived at that time. As is ever the case in archaeology, the relationship between the minds of the present, the minds of the past and the objects of reflection forms a subtle and complex triangle.

Introduction

Barry Kemp

The building of encircling walls at urban sites has been a recurrent activity across cultures and across centuries to the extent that a recent book on the theme — City Walls: the Urban Enceinte in Global Perspective, edited by James D. Tracy — contains nineteen separately-authored local studies, extending from prehistoric North America to China. Not for the first time in treatments of the history of urbanism, ancient Egypt is made to stand out as an exception:

Ancient Egypt had no walled towns, apparently because the pharaohs 'relied upon a regional defense provided by powerful fortresses erected at

CAJ 14:2, 259–60 © 2004 McDonald Institute for Archaeological Research DOI: 10.1017/S0959774304210162 Printed in the United Kingdom.

the only two major access routes into the country, the eastern delta approaches and the Upper Nile valley in Nubia (Tracy 2000, 72).

On first reading this my reaction was to organize a refutation. Over several centuries in the earlier periods a pragmatic urban walling tradition did develop in Egypt comparable to what is found in other parts of the world. Yet in truth, this is only part of the picture. Some of the most striking evidence for encircling walls in Egypt, built on a large scale and sometimes to distinctive designs, is associated more with palaces and temples. In not surrounding what appear to us to be towns were they therefore less publicly beneficial? Might it be the case that, either by edict or by wider assent, the general populace was rated as less deserving of protection than kings and gods? And protection against what?

In the study of societies one can espouse the direct, no-nonsense approach of proximate motive.

In many of the papers in City Walls there is an implicit acceptance that they are a response to fears of attack by armed groups. In the quote about ancient Egypt the link is quite explicit, and the quote within the quote comes from a work by a military historian (John Keegan). Walls go up because people are afraid of being robbed and murdered. But the things that people do are often not that simple. The building of large walls can draw upon a complex psychology of communication which is rooted as much in ideology as in the world of daily reality. It is to be expected that princes and burghers in medieval and Renaissance Europe did take a pragmatically calculating attitude when deciding whether or not to wall their city. In other cultures and especially in much earlier periods, however, other factors might have occupied a greater share of the attention and weighed more heavily than defence against human enemies when the decision was taken to invest resources in large-scale walling. A long-term change in relative values in this matter is a distinct possibility and certainly worthy of investigation. Moreover, the walling of towns for defence has its risks. It represents a gamble which, if it fails, can unleash upon the community retribution far worse than if it had been left open, and it can provoke the hostility of rulers who otherwise would be the community's natural protectors. It also belongs to a particular view of warfare in which siege and open combat are equal alternatives. Not all societies think this way.

The topic is by no means a marginal one. A useful way of viewing any society is to look at the priorities it embraces in the expenditure of resources. Even if large-scale walling is not at the top of the list it can nevertheless be a major burden on the community. Some of the *City Walls* papers illustrate the great, sometimes almost crippling expense, of erecting city defences (Tracy 2000, 71; Wolfe 2000). For ancient Egypt it has been estimated that the walls of the Egyptian fortress of Buhen in Nubia, built around 1970 BC, required 4.6 million bricks (Emery *et al.* 1979, 40). Whilst this is only one-fifth of the number estimated for the near-contemporary brick pyramid of Senusret III (24.5 million: de Morgan 1895, 47, n. 3), Buhen was one of a chain of such forts built at that time.

Beyond this, however, the topic concerns the broader cognitive issue of architectural containment and how it is perceived, both by the various segments of the society of the day, and by ourselves as we seek to interpret the evidence. The ensuing review of the ancient Egyptian evidence draws upon the work

of colleagues at Cambridge whose researches deal directly with the subject though in different ways. The first section, by Nadine Moeller, is intended to dispel the notion that a basic form of urban walling was alien to Egypt. Yet it remains true that the evidence favours the earlier periods, primarily the third millennium BC, which in consequence emerge as more 'normal' in this respect. Even so the motivation requires careful consideration. The third millennium contains a major fault-line in Egyptian history. Much of the period is (from our perspective) a history of centralized rule, perfected in the building of the pyramids at Giza, in which stability through orderly administration, a strong sense of loyalty and obligation, and a system of law prevailed. For a time towards the end of the Old Kingdom, however, power at the centre weakened as provincial governors grew bolder. They attempted to enlarge their territories at the expense of their neighbours, and internal warfare ensued, ended when the boldest family of all, that of Thebes, took control of the whole country and re-established strong kingship. We might approach the third millennium expecting to find that these manifest changes to internal stability were reflected in the appearance of provincial towns.

Over the same period, however, there also developed a distinctive architecture of enclosure walls which was less directly linked to urbanism. Thereafter at provincial towns the old pragmatic tradition of the urban enceinte seems to have stalled. It is perhaps in this respect that ancient Egypt differs from the stereotype that walling is an expression of fear. The section by Kate Spence explores the form and meaning of these alternative directions. It highlights the difficulties of reaching a consensus as to what the containment of communities by walling is really about. It leaves us with a somewhat puzzling landscape in the first millennium BC when armies posed real threats within the Nile valley. I have added a section of my own at this point which addresses our own tendency to simplify or even avoid discussion altogether through the use of strong descriptive labels, in this case 'temple enclosure'. The culture of pharaonic Egypt is so distinctive as always to invite the view that it represents collectively solutions to the problems of existence from which it is difficult to draw general lessons. The final paper, by Alison Gascoigne, looks at Egypt at a time long after the fading of the ancient culture when, it might be imagined, Egypt returned to a pattern of community life more in the mainstream of history.

Evidence for Urban Walling in the Third Millennium BC

Nadine Moeller

A tradition of enclosure walls developed in Egypt very early on. Until recently the evidence was primarily artistic, in the shape of depictions on several late prehistoric palettes of symbols representing enclosed areas of square layout with rounded corners and numerous external buttresses (Kemp 1989, 50; Spencer 1993b, 53; Fig. 1). These images seem to depict walled inhabited settlements, and they belong to artistic compositions that also portray fighting and other violence; and together such scenes are often seen as reflecting local struggles along the road of state formation. Archaeology in the nineteenth and twentieth centuries was slow to provide excavated counterparts. A major reason for this neglect was that many settlement sites in Egypt have been destroyed or rendered relatively unattractive by the industry of the sebbakhin, local diggers and contractors who reused ancient mud bricks and ancient earthy fill as fertilizer. In more recent decades, however, field archaeology has started to put the study of early settlements in Egypt on a more secure footing. Yet even now the evidence remains meagre and unevenly distributed. In particular it favours the southernmost part of the country where several important settlement sites have survived to a greater extent than have those further north, and have been subject to long-term exploration.

The most thoroughly investigated case, which also contains some of the earliest definite evidence for the appearance of towns, is Elephantine, an island situated at the southern frontier of ancient Egypt. Excavations by the German Archaeological Institute since 1969 have established a well-dated sequence for the development of the settlement and its enclosure walls from Early Dynastic times onwards (Ziermann 1993; Seidlmayer 1996b). During the 1st Dynasty a fortress of square layout with sides 51 m in length and towers at the corners was built in front of the sanctuary belonging to the local village. Its walls were double, separated by a 1-metre-wide gap in which small transverse walls were placed at regular intervals. The total width amounted to 2.4 m. The small chambers created by the gap between the two walls were accessible and used for habitation (Zier-

CAJ 14:2, 261–5 © 2004 McDonald Institute for Archaeological Research DOI: 10.1017/S0959774304220169 Printed in the United Kingdom.

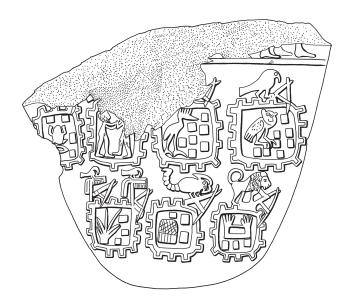


Figure 1. Early picture of walled settlements on the Tjehenu Palette (after Kemp, 1989, fig. 16).

mann 1993). In a second building phase the walls of the fortress were reinforced to a thickness of about 4.7 m and the small chambers filled up. The elaborate architecture of this fortification has been interpreted to mean that it was not a local building project but a result of control taken by the central government of the newly-unified state (Seidlmayer 1996b). This is also to be inferred from the lack of consideration given to the local sanctuary of the goddess Satet, whose space was restricted by the new building that was erected in the strategically most advantageous place overlooking the region of the 1st Cataract.

During the late 1st/early 2nd Dynasty newlybuilt enclosure walls incorporated the settlement and sanctuary, which had so far remained unwalled. This is, in fact, one of the oldest settlement enclosure walls attested in Egypt. The architecture of this extension was exactly the same as that of the fortress, which remained a separate entity though directly linked to the walls of the new town enclosure. During the following period the enclosure walls saw several phases of reinforcement resulting in a total thickness of 8 m in certain parts (Ziermann 1993, 136). The architecture was no longer uniform but displayed different characteristics in certain parts indicating that these reinforcements were added at different times. During the third major phase of settlement expansion (2nd/early 3rd Dynasty), new areas to the northeast and east were enclosed by further walls. At the same time the fortress lost its military function, becoming completely incorporated into the town and parts of



Figure 2. Tell Edfu: Old Kingdom enclosure walls (photograph by N. Moeller).

its walls being levelled. This suggests that there was a change in the organization of the garrison which was probably now manned by a combination of the local population with the former garrison. Alternatively, as we know happened at the Middle Kingdom fortress of Buhen, the initial garrison that was changed on a regular basis developed into a garrison of permanently-resident soldiers (Smith 1995, 51ff.). Further buildings outside the enclosure wall were erected during that time on the western part of Elephantine (Seidlmayer 1996a). Subsequently the layout of the enclosure walls was maintained almost unchanged until the late Old Kingdom when the settlement expanded further. During the Middle Kingdom the two originally separate parts of the island were fully inhabited and enclosed by a single newly-built wall (Kaiser et al. 1974, Abb. 3).

It is logical to think that the reason for the erection of massive walls around the settlement of Elephantine initially arose from its location at the southern border and the necessity to create a stronghold that could not only protect the border against possible attacks and function as a mean of deterrence for possible enemies but also control trade with Nubia. The continuing reinforcement of the walls until they were about 8 m thick is striking, as is the way that walling seems to have kept pace with the expansion of the town. Was there a persistent danger of attacks and raids?

If it is generally true that building walls around towns reflects insecurity, the Egyptian Old Kingdom

emerges in an unfamiliar light. For the evidence from Elephantine does not stand alone. My own research into local conditions in Egypt during the First Intermediate Period has included a fresh survey of the town mound of Tell Edfu, which became the leading town of the 2nd Upper Egyptian nome, lying one hundred kilometres to the north of Elephantine (Moeller 2003). Much of the site dates from the latter part of the Old Kingdom through the First Intermediate Period to the Middle Kingdom, thus across the crucial watershed of political and socio-economic change. The oldest part of the settlement can be seen in huge sections exposed by the sebbakhin lying close to the wellknown Ptolemaic temple (Fig. 2).

The lowest remains in this area date back, according to the sherd evidence, to the 4th/5th Dynasty. They rest on bedrock, and although some earlier occupation of the site is indicated by the past discovery of a few prehistoric graves, this fact suggests that it was only at this time — contemporary with the peak of pyramid building and thus presumably with the high point in royal authority — that a true town came into existence. Although an important part of the early town was destroyed when the temple was enlarged in the Ptolemaic Period, the visible evidence suggests that the town was walled from the outset, thus from at least the 5th Dynasty if not earlier. The walls are preserved to a height of about 4 m and have sloping sides, which is a feature also noted at Elephantine from the 3rd Dynasty onwards. As at Elephantine additional wall layers were consecutively added.

During the First Intermediate Period the town expanded to almost double its size, a trend which can be seen from the erection of new enclosure walls along the northwestern and southwestern sides of the *tell*. The old walls, however, did not go out of use: an additional wall-layer was added on the outside of the Old Kingdom enclosures (Fig. 3, F116), leaving an inner walled citadel or part of the town enclosed by the former city walls. One can speculate that this now enclosed the religious or administrative quarter of the town. These walls seem to have lost their function only during the Middle Kingdom when the whole area was levelled for new buildings. The new First Intermediate Period fortification fol-

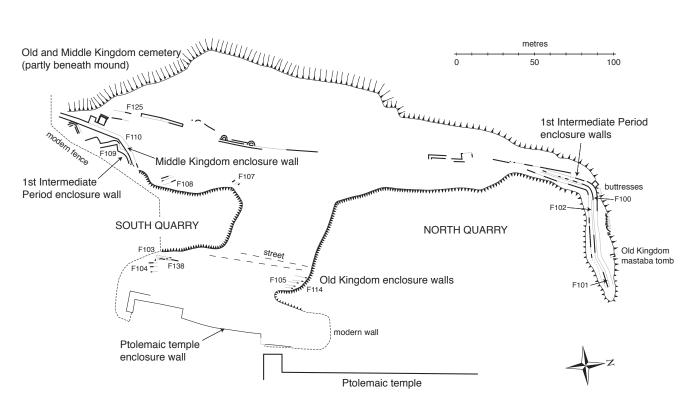


Figure 3. Plan of Tell Edfu (by N. Moeller).

lows the architectural tradition visible in the earlier walls, though with variations. In the northwestern corner traces of buttresses have been found added on the outside of the new enclosure. Within a period of about fifty to a hundred years two further walls were added on the inside, increasing the total thickness to about 5 m. At the same time parts of the Old Kingdom cemetery that lies at the southwestern end of the site were incorporated into the settlement area and some of the brick tomb superstructures re-used for the new enclosure wall. Could this indicate a need to erect new enclosure walls quickly or was it mainly a local initiative with the aim of building as economically as possible? In the Middle Kingdom another wall was erected in the same area replacing that of the First Intermediate Period. It consists of a single wall 2.5 m thick, with straight sides, which is typical for fortifications from the Middle Kingdom onwards. The style of sloping walls narrowing markedly towards the top ceased after the First Intermediate Period.

Taken as an isolated case one could argue that Edfu, like Elephantine, faced some particular danger from its location that is not expressed in contemporary written sources. The Nile valley here is fairly narrow and exposed to desert regions that we know supported populations of their own; these people in later historical periods saw the Nile Valley as a

target for raids. The first clear ancient testimony to this is the recently discovered text in a tomb at el-Kab which speaks of an invasion of the area by an alliance of peoples from the south and east (Davies 2003a,b), though this is dated to the mid-second millennium BC. The threat is implicit, however, during the Middle Kingdom when Egypt's border was extended into Lower Nubia and a line of elaborately-constructed fortresses was built in the occupied territory. A contemporary list of these 'fortresses' shows them extending 60 km to the north of Elephantine, as far as Gebel Silsila (Gardiner 1947, 10–11; also the following section by Kate Spence).

The explanation of proximate threat by outsiders could apply not only to Edfu but to the ancient towns of el-Kab, Hierakonpolis and perhaps Kom Ombo (though the evidence here is very fragmentary) all three of which lie in the southernmost region. At the first a substantial length of town wall remains, following a curving line (Fig. 4; Somers Clarke 1921; Hendrickx & Huyge 1989). Although *sebakh*-digging has removed the town deposits almost completely, the evidence again points to a date in the Old Kingdom, an important pointer being the method of construction used in the wall: two layers of brickwork tapering sharply when seen in section (Fig. 4). At Hierakonpolis, across the river to the west, the main town wall seems to have been erected between the

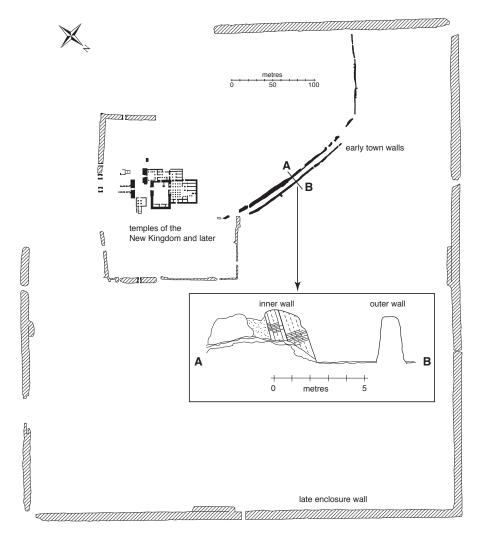


Figure 4. Early town walls at Elkab (base plan after Depuydt 1989; redrawn by B. Kemp with detail of wall elevation from personal obervation).

end of the 2nd Dynasty and the beginning of the 3rd (Adams 1995, 69). Unlike those so far considered, it follows a course of several straight lines enclosing an approximately rectangular space. Within it lay a monumental gateway decorated with recessed panelling, a decoration typical of the Early Dynastic Period. It has been interpreted as the entrance for a palace, which was surrounded by a large wall of its own separating it from the rest of the town. Although this gateway is of an earlier date than the town-enclosure wall, it is interesting to note that the northern section of the latter follows the same orientation as the palace enclosure, perhaps an indication that the origins of the town wall go back to earlier times. By the end of the Old Kingdom, Hierakonpolis had lost its prominent role as nome capital and probably

declined to a town of little importance except for its temple. Unfortunately much of the post-Old Kingdom settlement has been destroyed by *sebakh*-digging; thus it is impossible to gain any clear information about the existence of town walls during later times. The temple, which saw several phases of rebuilding, maintained its enclosure wall at least until the New Kingdom (Kemp 1989, 74f.).

The evidence for town walling in the third millennium extends, however, much further to the north. It is visible at Abydos (Kemp 1977), which provides further evidence, already clear at Elephantine, Edfu and perhaps Hierakonpolis, for a clear demarcation of different settlement quarters by internal enclosure walls. At Abydos this seems to have set the temple and its ancillary buildings within its own enclosure, although that dates from towards the end of the Old Kingdom (specifically the 6th Dynasty; Adams (1998) for houses of the Old to Middle Kingdoms situated inside the southern enclosure). Evidence for the

appearance of early towns situated further north still, and especially in the Nile Delta, remains slight indeed; at present confined, so it would seem, to the observation that at Kom el-Hisn in the western Delta, where a substantial town of the Old Kingdom lies close beneath the modern surface of the ground, a 'large enclosure wall seems to ring at least a portion of the site, evidence for which appears near the modern village in the southwestern end of the site site' (Wenke *et al.* 1988, 17; Cagle 2003, 21).

By the First Intermediate Period Egypt had a landscape ready-made for local warfare. Scenes of sieges, using in one case a wheeled siege tower, occur in tombs at this time and survived into the repertoire of the early Middle Kingdom artists (Schulmann 1964; 1982). According to the received picture of the

Old Kingdom this prior existence of walled towns would have been a fortunate accident which now served the changed needs of a time of political fragmentation. If we were to allow the archaeological evidence greater weight, however, it would create a basis for arguing that, beneath the seemingly calm surface of the Old Kingdom, local armed conflicts did from time-to-time break out within Egypt.

The question is complicated, however, by the existence of a field of symbolic connotation attached to large enclosure walls. Another of the City Walls papers explores the walling of 'contained communities' in tropical Africa (Connah 2000). In addition to defence and also to the control of the townspeople, 'some of the enclosing structures clearly had a role as status symbols; they were intended to impress and perhaps intimidate the stranger' (Connah 2000, 42). The same could have applied in Egypt of the third millennium, where the walls marking the town as a town thus distinguished it from other types of settlement such as villages. Surrounding a settlement with a wall would have given a clear signal to its neighbourhood and wider district. Thus the definition of a town or city in this time could have been made by the existence of an enclosure wall, which acted as a status symbol standing for power, influence and control over a region. In this respect it is important to note that the evidence for town walls so far comes almost exclusively from provincial capitals and, in the case of Abydos, from an important religious centre.

The question of who was responsible for erecting walls, the local community or the central government, is more difficult to answer. A possible hint comes from the architecture employed to build them. At least for Upper Egypt a certain conformity can be observed in the sloping enclosure walls on a rounded plan at Elephantine, Kom Ombo, Tell Edfu and el-Kab (though not at Hierakonpolis or Abydos). This could be an indication of centrally-organized building-work rather than primarily local initiative, although it must be conceded that, during the First Intermediate Period, it would have been the powerful local families who determined how and when to build a wall. On the other hand, the style was easy to imitate and the similarity found at different sites could represent nothing more than the homogeneity visible in many aspects of Egyptian culture at these times.

In ancient Egypt the symbolism of large walls was nonetheless consciously manipulated, and this is the subject of the next section.

Royal Walling Projects in the Second Millennium BC: Beyond an Interpretation of Defence

Kate Spence

The majority of large-scale enclosure walls constructed in Egypt in the second millennium BC were built around temples rather than towns. These walls were high and massive, sometimes with multiple enceintes, while details such as buttresses and crenellations appear to have related the design to contemporary defensive architecture. A libation basin from Memphis demonstrates clearly that a temple could be viewed as equivalent to a fortress by local inhabitants (Kemp 1989, 189–90; Jacquet 1958, 164) while the mortuary temple of Ramesses III at Medinet Habu was closely modelled on contemporary fortress construction (Arnold 2003, 93; Fig. 9). These enclosure walls often represent a very significant investment of resources but are difficult to explain as defensive. Unlike town walls, temple enclosures were not optional extras but were an essential part of the architecture of the shrine. Major cities of the New Kingdom (Thebes, Amarna, Memphis and Per-Ramesses) seem not to have been walled and nor were palace-towns such as Deir el-Ballas (Lacovara 1997, 94) and Malkata (Kemp 1989, 214) although individual royal complexes within these palace-towns were enclosed. This suggests that protection against proximate threat was not a major concern at this time and accords with what we know of the political situation for most of this period. Some temples of the New Kingdom became extremely wealthy and protection of resources would have been important, but the scale of the walls seems disproportionate to the likely level of internal threat given the strength of centralized control for most of this period. Towards the end of the New Kingdom workmen from the village of Deir el-Medina went on strike over unpaid wages and protested at the mortuary temple of Rameses II (Edgerton 1951) but, even in these unusual circumstances, there is no implication that the workmen constituted a serious threat.

Perhaps the most striking evidence that in religious contexts walls were not constructed for defence in a conventional sense comes from the Early Dynastic Period (*c.* 3100–2700 BC). Many of its kings were buried at Abydos in tombs on an isolated stretch

 ${\it CAJ\,14:2,265-71} \quad @\ 2004\ McDonald\ Institute\ for\ Archaeological\ Research\ DOI:\ 10.1017/S0959774304230165 \quad Printed\ in\ the\ United\ Kingdom.$

of desert, the Umm el-Qa'ab. There is no evidence for massive walls serving as protection around the tombs themselves (Wilkinson 1999, 232–4, fig. 7.1), although these were marked and contained rich burial goods. Yet associated with them, but separately located at some distance away, were massive rectangular mud-brick enclosures, their façades decorated with buttressed niches (O'Connor 1989, 84ff.; Fig. 5). A new enclosure was built in each reign adjacent to those of the king's predecessors: at least seven have been located to date and boat burials have also been found between the enclosures of Djer and Khasekhemwy. The enclosures must have served a ritual purpose and seem to have contained little other than one small structure (tentatively interpreted as a symbolic palace). Khasekhemwy's enclosure (the Shunet el-Zebib) has two concentric enclosure walls and a complex gateway (O'Connor 1989, 55).

In his book Sacred in the Vocabulary of Ancient Egypt (1985), James Hoffmeier has examined the etymology and semantic range of the Egyptian word <u>d</u>sr, usually translated as 'sacred' or 'holy'. From a root meaning 'to wave or brandish (a stick)' and 'to ward off (the blows of an attacker)' developed the use of the term to mean 'to separate' or 'to segregate' which in turn led to the concept of 'holy' or 'sacred', retaining 'this semantic range in usage throughout most of pharaonic history' (Hoffmeier 1985, 58). The key point here is the semantic link between segregation and sanctity. In a long discussion on the idea of sacred space in the New Kingdom he points out that the term <u>dsr</u> can be used of an individual shrine or space within a palace or of a whole precinct; he also notes the frequent difficulty in establishing whether the implication of segregation or sacredness is intended in any given context (Hoffmeier 1985, 171–98).

The wall of a temple thus provided protection against potential dangers both physical and metaphorical. More importantly, it served as a means of separating the space within from the world around it. This separation and the social exclusion it implies led to a sense of differentiation while rituals, particularly those associated with the foundation of the temple, served to establish the religious associations of the space within as differentiated from the profane world outside the walls; foundation deposits associated with such rituals are frequently found at the corners of boundary walls (Weinstein 1973, 433).

A wall does not need to be particularly high or massive to mark an area as separate and secluded, but the greater the scale of wall the greater the sense of impenetrability and differentiation created. This may be heightened by the architectural style of the

wall. In Egyptian temple (and occasionally tomb) architecture, buttressed and niched walls, sinusoidal and wavy walls and pylon entrances are all features which served as markers of the differentiated nature of the space within. As an extension of this, the architecture of impenetrable fortresses was occasionally adopted for enclosure walls, for example at Medinet Habu (Arnold 2003, 93). Multiple enclosures served further to differentiate a space located within an already differentiated space, thus heightening the sense of sanctity of the interior; this was primarily experienced through the number of gateways or liminal spaces passed through by the cult participant before reaching the sanctuary. Scale and complexity thus relate to the sanctity of the foundation and the scale of its differentiation from the nearby community rather than being proportionate to threat.

The construction of enclosure walls also played an important political role in establishing the proactive nature of royal authority. Small pyramids of the late-3rd/early-4th Dynasty have been interpreted as markers of royal authority in provincial centres (Seidlmayer 1996b, 119–27); temples in the Middle and New Kingdoms served a similar political purpose, creating a sacred place closely associated with kingship at the social and economic heart of each community, but from which a significant part of the population would increasingly have been excluded. The impregnable enclosure wall was thus the visible face of divinely legitimized authority.



Figure 5. The buttressed double enclosure wall of Khasekhemwy's mortuary enclosure at Abydos, c. 2690 BC, the Shunet el-Zebib. (Photograph by B. Kemp.)

Defensive architecture in Nubia

The evidence of temple-enclosure walls makes it clear that kings were prepared to invest heavily in construction work which was not a response to a pressing pragmatic requirement (such as proximate threat). Such an observation is hardly surprising given the long royal tradition of pyramid and temple building in Egypt, but it may also have implications for interpreting Egypt's defensive architecture. The Egyptians undertook a massive programme of fortress construction which has left an impressive series of examples in Nubia dating to the Middle and New Kingdoms. Parallels existed on Egypt's borders with the Near East and Libya (Arnold 2003, 91) but discussion here will focus on the better-known Nubian examples, initially those from the Middle Kingdom. The design of the forts is impressive and reveals the heights to which the Egyptians could develop defensive architecture when they chose to do so (Lawrence 1965, 71–88; Kemp 1989, 166–78; Manley 1996, 51; Figs. 6 & 7). Massive buttressed walls with crenellations and walkways, fortified gateways, ditches and multiple enclosures rendered the forts defensible while granaries and covered passages giving access to water ensured they were capable of withstanding sieges (Kemp 1989, 166-78). There is absolutely no doubt that this architecture is defensive and that the forts served to protect Egypt's interests and to house garrisons. Moving beyond this, however, interest lies in examining whether the architecture can be seen to be proportionate to threat and in establishing the broader political ramifications of the fortress building programme.

A recently-discovered text in the tomb of Sobeknakht at El-Kab describes an attack on Egypt by the combined forces of the Kingdom of Kush and a number of significant allies including the people of Punt even further to the south (Davies 2003a,b). At first sight the number and scale of the Nubian fortresses are made more understandable in the light of a broader African threat of this magnitude: the Kushites could muster much larger and more dangerous armies than might be interpreted from the excavated archaeological remains of their capital at Kerma (Bonnet 2001) and the dismissive tone of Egyptian royal inscriptions: 'the Nubian listens to the word of mouth, to answer him is to make him retreat ... They are not people one respects, they are wretches, craven-hearted', these the words of the Egyptian king Senusret III (Lichtheim 1973, 119). Yet at the time Sobeknakht's text was composed, the Second Intermediate Period, Egypt was not united and the control of the ruling family at Thebes was relatively weak. Even so, a group of forces representing southern Egyptian towns was able to defeat the united armies of Kush and its neighbours. This suggests that during periods of strong centralized control the Kingdom of Kush was not a match for the Egyptian army and is unlikely to have posed a major threat to Egyptian security although raiding may have been a perennial problem.

The military historian Keegan (1993, 142) has interpreted the Nubian forts as an attempt to create a buffer-zone south of the traditional Egyptian border at Elephantine while Tracy suggests that this proved a 'better and cheaper way of defending their cities [than building city walls]' (2000, 71). Texts certainly make it clear that the Egyptians had a policy of barring Nubians from entering the occupied territory other than for trade (Adams 1977, 185), and actively policed the adjacent area (Kemp 1989, 176; Smither 1945, 4). The broader political implications of the programme of fortress construction are complex, however, and are not purely defensive. The Nubian forts were designed for conditions of siege warfare, using an architecture perhaps developed in Egypt during the conflict of the First Intermediate Period and/or influenced by defensive architecture in Palestine (Arnold 2003, 91). While fortifications were constructed at Kerma itself over a period equivalent to the Egyptian 12th and 13th Dynasties (Bonnet 2001, 202), the architecture of the Egyptian forts must at least initially have seemed intimidating and impregnable to the Kushites and was presumably intended as much to impress and deter as to defend (Adams 1977, 187-8). Moreover, although the architecture of the fortresses is 'defensive', the forts actually constitute part of an aggressive policy of territorial expansion which was pursued in the Old, Middle and New Kingdoms. The primary reasons seem to have been political and economic. In the Middle Kingdom the border between Egypt and Nubia was moved to Semna and it was pushed even further south in the New Kingdom: texts of both periods glorify the strong king who expands the territory he inherits (Lichtheim 1973, 118–20) and fortresses, like stelae, serve as very visible reminders of such policies. Far from being purely a buffer-zone, the Egyptians had a particular interest in Nubian territory as they aspired to control trade routes and the rich mineral deposits of the area, in particular the gold-mining regions (Adams 1977, 183; Smith 1995, 175–6).

In the New Kingdom, Middle Kingdom fortresses such as Aniba and Buhen were reoccupied

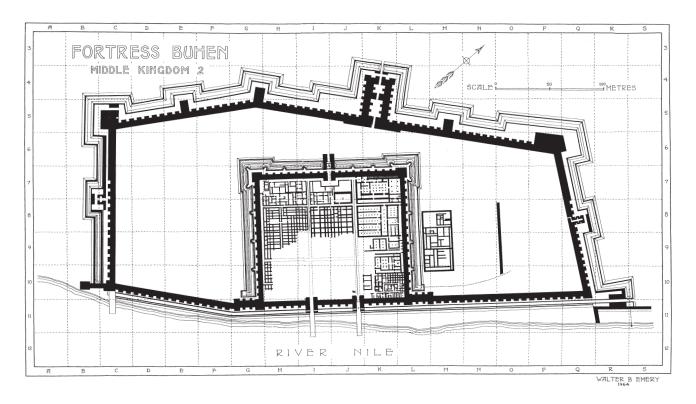


Figure 6. The Middle Kingdom fortress at Buhen, Nubia (after Emery et al. 1979, pl. 3, by courtesy of the Egypt Exploration Society).



Figure 7. The inner fortifications of the Middle Kingdom fortress at Buhen (after Emery et al. 1979, pl. 83c, by courtesy of the Egypt Exploration Society).

and enlarged (Arnold 2003, 92) and new fortified towns were built such as those at Amara West (Spencer 1997, pl. 3) and Sesebi (Blackman 1937, pl. XIII).

Following initial campaigning to overthrow the Kingdom of Kush which had become increasingly powerful in the Second Intermediate Period, territorial expansion and control of resources again seem to have been the ambitions behind activity in the region. Focus seems to have shifted from overt militarism to policies of colonization and acculturation of the local élite following the defeat of the Kingdom of Kush (Smith 1995, 175-6; Säve-Söderbergh 1991, 187). Egyptian kings undertook major programmes of temple-building in Nubia, and many of these temples were constructed within restored Middle Kingdom fortresses or in the new purpose-built temple-towns. Although New Kingdom town enclosures were not designed to be as defensible as the Middle Kingdom fortresses had been (Lawrence 1965, 88–9) they were still surrounded by very significant walls: in the case of Sesebi, around five metres thick and buttressed at regular intervals. Egyptian communities living within Nubia therefore seem to have been contained, although the implications of this are again difficult to interpret from available evidence. The walls may represent an acknowledgement of a real or perceived threat from small raiding parties (Kemp 1972, 654) or they may simply have offered the Egyptian community a segregated and privileged existence with

symbolic protection from the alien country in which they lived.

The walling of settlements within Egypt during the Middle and New Kingdoms

In the Middle Kingdom existing town walls at Elephantine and Edfu were rebuilt (Moeller 2003, 7–9; Kaiser et al. 1974, 68, Abb. 1; Von Pilgrim 1997, 17) while at Abydos earlier walls seem to have remained in use (Kemp 1977, 189). The rather irregular form of the first two suggests that there is a good chance they were locally-organized projects, but there is no way of knowing whether or not such activity had the king's backing — essential information for establishing its political significance. A number of royal or state-sponsored planned settlements also exist and these were built with enclosure walls, the most famous being the settlement at Kahun attached to the pyramid of Senusret II (Petrie 1891, pl. XIV); others are at Tell el-Dab'a (Bietak 1996, 8–10; Czerny 1999), Abydos South (Wegner 2001) and Kasr es-Sagha (Sliwa 1986; 1992). All royal planned settlements were walled and these should not be interpreted in the same category as existing settlements subsequently walled. (This distinction is much clearer in the case of the New Kingdom examples discussed below.) The walls of planned settlements were not defensible and seem to have been intended to provide a structured and controlled environment for a contained and possibly disparate community brought together for a particular project. Substantial numbers of people were relocated to construct and populate fortresses and planned towns and this must have had a significant effect on Egyptian demography, particularly in the Middle Kingdom.

Interpreting the significance of the construction of walls around existing settlements is difficult in the light of the very limited archaeological and textual evidence. It is possible that in some cases towns were walled for historical reasons because a wall had come to be considered an essential element of an important settlement. The Egyptian hieroglyph for town *⋈* niwt (a sign which is also used as a determinative (sense sign) for other settlements and even Egypt itself) is thought to represent a walled town with cross-roads (Badawy 1966, 260). Evidence from the inscription of Sobeknakht (cited above), however, places the information that the town enclosure had been destroyed within the context of the city being under threat, strongly suggesting that the wall was viewed as defensive (Davies 2003b, 52). While threats are to be expected in the 2nd Intermediate Period when this text was written, the Middle Kingdom enclosure walls were built during periods of centralized control and the idea that towns in Egypt were under threat at this time is more surprising.

It is possible that the threat was internal: the Middle Kingdom was a period of tension between the power of the king and that of provincial rulers, who had considerable wealth and local influence (Warburton 2001, 582). Kings of the period, however, were able to control significant parts of Lower Nubia and had the resources to build the Nubian forts and maintain them well into the 13th Dynasty (Smith 1995, 40). It seems rather unlikely that they would have wished or been able to invest so heavily in expanding their territory within Nubia if their control of Egypt proper were seriously compromised. The towns in question lie on the Nile route to Nubia, and supplies and troops would have passed through on their way to the fortresses.

Alternatively, the threat might have been external. Such an explanation draws on the fact that at present the most conspicuous evidence for walls comes from Egypt's border regions. Perhaps the need for town walls was an unfortunate result of the success of Egyptian foreign policy in Nubia. In the Old, Middle and New Kingdoms, Egypt made strenuous efforts to conquer Lower Nubia and to control it with fortified garrisons. This seems to have resulted in the displacement of the local population in the Old and Middle Kingdoms; some may have returned to a semi-nomadic existence in the deserts bordering the Nile (Kemp 1983, 124). As settlements in Nubia itself were heavily fortified during these periods, it seems possible that some of these people might have turned to raiding softer targets in Egypt itself from the deserts bordering the Nile Valley. Valbelle (discussed in Davies 2003b) has suggested the possibility that the many Egyptian objects found in tumuli dating to the Classic Kerma period (roughly equivalent to the Second Intermediate Period in Egypt) could derive from raids on Egyptian towns as far north as Assiut. Are the town walls of southern Egypt an indication that raiding was in fact a long-standing Nubian tradition and a real menace to Middle Kingdom Egyptians? There is certainly increasing archaeological evidence from southern Egypt for the presence from the late Middle Kingdom of small Nubian communities (Friedman 2001) although the fact that some of these Nubians were able to settle suggests that by this time their presence was tolerated.

Defences are constructed as a response to perceived rather than actual threat; if these walls were built through local initiative, as seems likely, this becomes an important issue as the response may not have been proportionate to actual threat. Reported and possibly exaggerated tales of occasional raids might engender significant fear in nearby communities. It is also possible that there was no significant threat at the time but that, in a particular psychological climate, people were concerned about their safety. Lamentations or tales of disorder representing chaos, crime and death were a popular literary art form at this time (Parkinson 2002). It may also have been in the interests of both local rulers and the king to encourage people to think that they needed protecting.

With the exception of planned settlements, we have no evidence for wall-construction around towns in the New Kingdom. While the absence of town walls at this period may indicate that defence was not considered necessary, some protection seems to have been provided by policing; the New Kingdom is usually regarded as a more militarized society than its earlier counterparts. The city of Amarna, capital of Egypt for just over a decade, is surrounded by tracks in the desert, some of which have been convincingly interpreted as patrol routes (Kemp 2002), while a number of boundary inscriptions carved into the surrounding cliffs emphasize the continuing importance of boundary in defining a site and differentiating it from the surrounding area (Murnane & van Siclen 1993, 1). The separately-located planned workmen's settlement at Amarna was, however, walled (Peet & Woolley 1923, 51–91, pl. XVI) as was a similarly isolated but dependent workmen's village at Thebes, Deir el-Medina (Bruyère 1939, pls. V & XXIX). So integral was the surrounding wall to the latter that as the village expanded so did the circuit of the wall which continued to contain the village until it was finally abandoned. By contrast the lesser and more exposed hill-top settlement which the same Deir el-Medina workmen also used remained unwalled (Bruyère 1939, pls. XXXV, XXXVI). This suggests that the enclosure around the main village must have served a purpose other than defence, most likely that of containing and controlling the inhabitants and differentiating them from others living or working in the area (also clear in the secluded locations of the villages). In both of these cases the desire on the part of the state to segregate and control the community stemmed from the workmen's knowledge of the royal tombs that they were constructing. Deir el-Medina also lay embedded within a broader set of policed boundaries which seem, to judge from administrative texts, to have

taken some form of physical shape on the ground (Ventura 1986, 174, 178), though not sufficiently massive to have left detectable remains.

Conclusions

Assumptions regularly made in interpreting archaeological evidence for defensive architecture can be shown to be unsafe in the case of second-millennium Egypt. Massive walls were not necessarily constructed as a response to proximate threat, nor was the scale of walls always proportionate to any threat that did exist. The majority of large-scale enclosure walls in Egypt were built on the orders of the king during periods of strong centralized control and military supremacy; far from being reflex responses to fear, royal programmes of wall-construction served important political and ideological purposes within Egypt and the territory it controlled. There is no doubt that the plentiful resources available to the Egyptian king (in terms of manpower and materials) and the long tradition of diverting these into building projects led to a situation in which the use of those resources did not have to be justified in terms of necessity. The link apparent between construction and necessity in some other circumstances is founded in financial constraints.

A number of further points emerge from consideration of the Egyptian material. Firstly, even when a wall is constructed for defence, it is a response to perceived rather than actual threat. Accurately assessing the political situation within which an individual or group lived can only be achieved with hindsight, even in today's world of global communication and an active media. Countless modern studies show that perceived threat and crime rates do not necessarily correlate: occasional horrific crimes can engender very significant, widespread and lasting fear while fear of the unknown can also be significant. In the absence of textual sources, correlating perceived and actual threats with architecture is difficult.

Secondly, both the reasons for building a wall and the way in which it is subsequently used are of historical importance but they are not necessarily the same. A massive enclosure wall built around a temple may subsequently have been seen as the most defensible place in an existing landscape — and therefore have been used for protection in times of proximate threat — without defence having been the reason for construction. Medinet Habu, which Kemp discusses in the following section, is a good example of this (Fig. 9).

Thirdly, the designation of 'defensive' is not as straightforward as it initially appears. Constructing a 'defensive' fortress may be viewed as a highlyaggressive act by neighbours. Similarly the act of walling a town and rendering it defensible may be viewed as aggressive by overlords or neighbours. This may be significant in considering legislation existing in the Roman Empire and medieval and pre-Modern Europe according to which permission of the emperor or king was required before constructing a town wall (Tracy 2000, 76; Bachrach 2000, 194-5; Wolfe 2000, 321–2, 337). The implicit threat in the creation of defences may often be intentional, even when 'defence' is cited as the sole reason for the activity. Modern parallels for this exist, for example in the American 'Star Wars' defence program, pursuit of which is widely viewed as an aggressive act by other nations because it has the potential to render their own 'defensive' missile systems useless.

Fourthly, because these considerations make drawing meaningful conclusions from archaeological evidence alone difficult, historical sources become increasingly important for providing key fact and context. Even if useful historical documents exist, however, the problem with interpreting such evidence is not necessarily resolved: people do not always do what they say and do not always say what they mean. While such an observation may seem banal, it is particularly important in the case of wall-construction because the expense of projects and the political impact they may have on relations with neighbours require justification. Humans have a well-attested ability to misrepresent activities and intentions where this may prove beneficial to them. This aspect of political 'spin' is very clear in New Kingdom Egyptian sources where the language of royal inscriptions describing international relations (conquest) (Lichtheim 1973, 118-20) and associated iconography contrasts sharply with the language of international diplomatic correspondence (Moran 2001, 65-6). Egyptian royal inscriptions glory in aggressive activity. This stands out because it contrasts strongly with modern codes of practice governing international relations within which defending one's own territory is acceptable while aggressively expanding one's territory at the expense of others is not (at least in principle). However, care should also be taken with documents which resonate more closely with our own concerns: fear is a remarkably useful tool in loosening purse-strings. We can rarely be sure that rulers did not use threat of attack to justify the construction of walls which were actually intended to enhance their own status or threaten neighbours. It is a mistake to assume that rulers of pre-modern and complex societies were necessarily less manipulative than our own.

The First Millennium BC: Temple Enclosure or Urban Citadel?

Barry Kemp

The first millennium BC brought warfare to the interior of Egypt on a significant scale. We have two vivid records, one written and the other pictorial. The former is a first-person narrative of the Napatan (Sudanese) king Piankhy who, having gained control of the south of Egypt, embarked in 730 BC on a methodical subjugation of the rest of the country, then under the rule of several local families (Lichtheim 1980, 66–84; Grimal 1981). During the seemingly irresistible northward progress of his army Piankhy makes frequent reference to walls with battlements and gates which could be countered with siege towers/battering rams and the erection of earthen ramps, although Piankhy himself preferred the tactic of direct storming. Within the circuit of these walls lay treasuries and granaries and, in the case of the city of Hermopolis in Middle Egypt, the palace of the local king Nemlut together with its stables for horses. The second record arose from attempts shortly afterwards by the Assyrian king Assurbanipal to wrest Egypt from the Napatans and make it an Assyrian province. A relief from his palace at Nineveh shows the Assyrian army attacking an unidentified Egyptian fortress or fortified town (Hall 1928, 44, pl. XL). What does archaeology have to tell us about these places which required serious operations by large and wellequipped armies?

The actual places which Piankhy attacked have rather poor archaeological records for the appropriate period, in the case of Hermopolis amounting to only a tiny disembodied fragment of the town (Spencer 1993a). Two of them, Tehneh and El Hibeh in Middle Egypt, are both situated on desert directly beside the Nile in naturally-defensive locations and it looks as though the small temples and the towns occupied the same walled space over a very long period, although the El Hibeh enclosure also contained a separate citadel at one end (Kawanishi 1995; Kamal 1901). Although these were atypical locations,

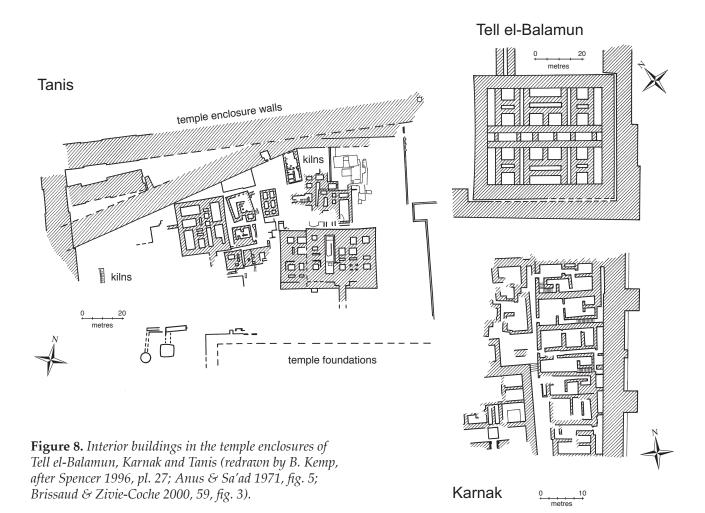
 ${\it CAJ}~14:2,271-6 \hspace{0.5cm} @~2004~McDonald~Institute~for~Archaeological~Research~DOI:~10.1017/S0959774304240161 \hspace{0.5cm} Printed~in~the~United~Kingdom.$

as we shall see they still probably represent a basic pattern. If we look further afield and expand the time-range a small number of sites can be identified which look like separate fortresses. An impressive example of the Persian period has been discovered at Tell el-Herr in the far northeastern delta, for example (Valbelle 2001). For the most part, however, where we see conspicuous walls of the Late Period they surrounded the large stone temples which, by this time, most towns and cities possessed. For this reason they attract the modern label 'temple enclosure wall'. A general idea of how, at this time, the ground of a city built out on the floodplain was apportioned comes from one of Petrie's early surveys, at Tell el-Nebesha (Tell el-Fara'on) in the eastern Delta (Petrie 1888; Mustafa 1988). The site covers an area of around 80 hectares and has three parts. One is the temple enclosure surrounded by a massive wall. Close by lay the town. Plans of parts of it show it composed of isolated squarish foundations built with thick walls capable of supporting a tower-like building, each separated narrowly from its neighbours and aligned in roughly common directions to create short lengths of straight street which nonetheless did not follow the same line for long. It is an inescapable conclusion that most of these buildings were houses, although not all them might have been. A few limestone models of houses probably of this kind show up to four storeys, with the lowest externally accessible floor, the first, reached by a lengthy flight of steps (Engelbach 1931; Davies 1929, 250, fig. 14; Stead 1986, 11, fig. 10). Houses of this type were built to last, and whether intentional or not, successfully countered the gradual accumulation of rubbish in the streets. This could build up to a thickness of several metres so that what began as a closed-off ground floor became an underground cellar. In rare better-preserved examples on desert sites one can see how narrow slit windows angled steeply upwards illuminated the interiors of these basements. The third part of Nebesha is the cemetery, which occupied a large portion of the site. Nebesha lay in the part of Egypt most open to invasion from Asia, from the armies of Persia and Assyria, yet the only sign of a major wall surrounds the temple enclosure. This seems to be a pattern repeated across the flat delta landscape. A similar division of the ground, on a larger scale, is emerging at Tanis, for example (Fig. 8; Brissaud 2000; Brissaud & Zivie-Coche 2000, 12–13, figs. 1–3).

Much excavation over the years has been carried out inside these temple enclosures. Aside from the temples themselves they were filled with large blocky brick buildings similar to those found outside

in the adjacent towns (e.g. at Tanis, Tell el-Maskhutah, Mendes, Tell el-Balamun). Mostly what they leave behind is a particularly impenetrable form of archaeology. Their thick walls cover much ground, which tends to defeat the usually modest scale of modern excavations. They were built with unusually deep foundations to support floors raised well above the level of the adjacent ground and streets, and everything above this level has usually been eroded or destroyed. In the absence of conventional floor deposits there is little scope for understanding what went on in the buildings either from the ground plan or from associated finds. More often than not even the positions of doorways are unmarked. At Tell el-Balamun one corner of the temple enclosure was occupied by the compartmented foundations of a large square building which the excavators have identified as a fort, perhaps of the 26th Dynasty (Spencer 1995; 1996; Fig. 8). The identification is not absolutely secure yet it seems to be a good working hypothesis. Although often larger, the foundation platforms found inside temple enclosures are variants of those which make up the bulk of the external towns at Nebesha and other places (including Memphis). It would seem, in fact, that foundation platforms of this kind were used for a range of building types, including the temples themselves, fortresses and houses. Since it is hard to identify another category of building it is reasonable to assume that administrative and storage buildings, including granaries, took the same form as well. In terms of building type, as represented by foundations, there is a continuum from inside to outside the temple enclosures. How can we judge whether this disguises a distinction between sacred and secular function which is lost at foundation level?

An answer can be found at a temple enclosure which fate has treated more kindly. This is Medinet Habu on the west bank at Thebes, a dry desert site where areas of well-preserved archaeological debris survived to modern times and which was occupied from the late New Kingdom to the late eighth century AD, as the Coptic Christian town of Jeme (Hölscher 1954; Fig. 9). The settlement began as nothing less than the mortuary temple of Rameses III of the 20th Dynasty. Around the temple ran a mock-fortification which also enclosed the huge magazines and a small palace. Built concentrically beyond that was a far more massive enclosure wall, the intervening space being filled with rows of houses for the temple community. By the late New Kingdom this settlement had become the administrative centre for the western half of Thebes. It was probably the residence



of the mayor of western Thebes, a family of holders of that office having tomb chapels nearby. Between the late 20th and the early 21st Dynasties the palace was rebuilt with more rooms being added, and this then served as a residence for a succession of priestly administrators. Much of the stone temple masonry survived into Roman and then Christian times, and priests had their tombs placed beneath the floor, suggesting that parts of the temple remained in use, presumably for the cult of the local form of Amun. The same enclosure also contained an older and smaller temple which continued to receive embellishments into the Roman period. The neat brick layout of magazines and houses from the time of Rameses III, however, did not last beyond the New Kingdom. It fell victim to piecemeal rebuilding which replaced the original scheme with a sea of houses and yards separated by winding alleys. The original excavators saw this as a decline in fortunes, accompanied by deliberate destructions brought on by attackers,

but a more likely reading of the evidence is that this is a classic case of the triumph of self-organization. Reflecting perhaps the more uncertain times, Medinet Habu also came to illustrate the preference after the New Kingdom for siting the tombs of important people inside temple enclosures. A portion of the housing area was cleared to make way for a precinct in one corner, and this became the site for a short row of small mortuary temples covering tomb chambers. They belonged to the God's Wives of Amun, highlyplaced female relatives of the king who held this office for just over two centuries, from near the end of the Libyan 22nd Dynasty to the Persian conquest. Other tombs in the area have fared much worse, but included one belonging to Harsiese, a high-priest of Amun in the 22nd Dynasty and member of the ruling (Libyan) family. It is a reasonable inference that the people buried in these various tombs lived in the adjacent settlement, the God's Wives perhaps the last residents of the palace beside the temple.

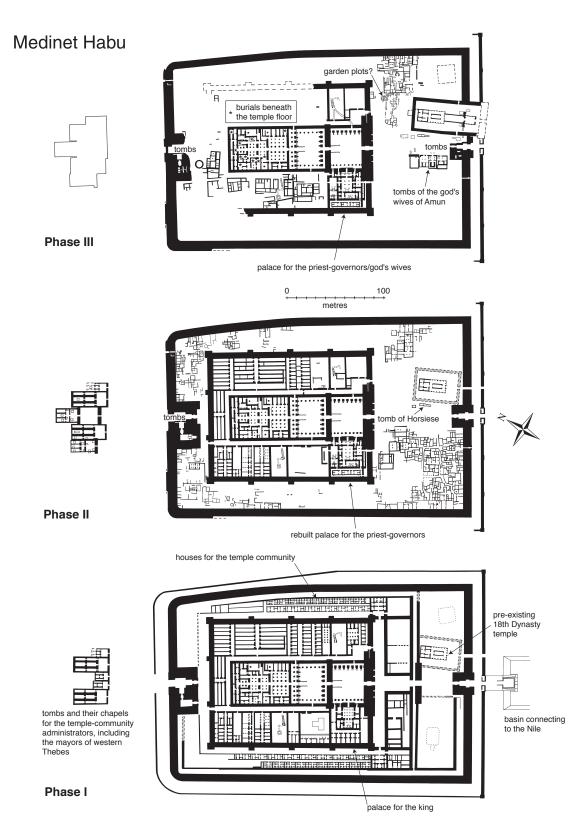


Figure 9. Three phases in the development of the temple enclosure at Medinet Habu (redrawn by B. Kemp, after Hölscher 1934). Phase I is the initial layout of the time of Rameses III (died c. 1163 BC); phases II and III are parts of a continuum of development that continued after the death of Rameses III for at least five centuries.

The period of the 25th/26th Dynasty seems to have been one of particular prosperity at Thebes. Huge tombs of the leading families, some as big as conventional temples though using much mud brick, were built some way to the north of Medinet Habu. Their owners probably lived across the river, at Karnak. It is to this time at Medinet Habu that must date a rebuilding of the town. Instead of an interlocking village sprawl the new houses were discrete rectangular blocks, separated from their neighbours and looking like closely-set architectural islands. Their walls, at around a metre in thickness and built with curving bedding planes for the bricks, were substantial enough to have supported two or more upper storeys, and the best preserved had a staircase in a corner. These are houses probably designed so that the main living-quarters were upstairs, and they belong to the same house type so frequently encountered at other sites until well into the Roman period. At this point there is a major break in the stratigraphy, and the next phase is Roman. The condition of the site, however, leaves it unclear whether this represents a major abandonment, a levelling down of the site prior to the Roman rebuilding, or inadequate evidence from which to draw a full chronological picture. There is no sign at this time of a second 'town' enclosure beside Medinet Habu. If and when houses were built outside (as they definitely were in Roman times) they were not surrounded by their

The surrounding wall at Medinet Habu was sufficiently massive to have been defensive. The evidence of arrowheads found in debris outside, of the early first millennium BC, might point to an actual attack (Hölscher 1954, 6, pl. 3A). Walls built around later temples were not only formidably thick, they were also given a highly-distinctive appearance, often built in separate sections some of which had their brick courses laid in concave beds giving them added stability in the face of attempts to undermine them. An example of the Ptolemaic period, at Deir el-Medina, still preserves some of its original top, and that is actually crenellated even though the enclosure and its temple were quite small (Golvin & Hegazy 1993). It provides a model for restoring a battlemented appearance to the tops of other similar temple enclosure walls of the first millennium BC. This was, moreover, a continuation of a tradition visible earlier in the New Kingdom (see Kate Spence's previous section).

There is one simple way of explaining why it is that temple enclosure walls of the first millennium BC have often survived as a feature of the landscape into recent times whilst separate town enclosure walls have not. This is that Egyptology has preempted discussion by creating the category 'temple enclosure' and assuming that it marked an effective separation between the sacred and the secular which the surrounding society obeyed. I would argue that the Egyptians' perception of these places was more complex and ambiguous. They saw these huge enclosures, which represent a considerable expenditure of resources, as the community's citadel containing its most precious assets, the equivalent on Egypt's flat land of an acropolis. These began with the temples but extended to the main storerooms, the residence (dare we call it the palace?) of its leader (be he a 'mayor', chief priest or local king like Nemlut of Hermopolis) and of other prominent citizens, and presumably of the local garrison, too, with its stables. All of these different buildings would have stood on the same kind of large blocky foundations. The huge platform with ramp beside the main temple at Tanis could as easily have been for a palace for the kings of the 21st and 22nd Dynasties as for another temple (Brissaud & Zivie-Coche 2000, 59, fig. 3; Fig. 8). A few of the richest and most powerful people also sometimes chose to site their tombs here too; in the case of Tanis the royal family. As part-building site for long periods and beset rather haphazardly with tall and rather severe brick buildings these enclosures would not have been neat, tidy and refreshing places. At Tanis, bronze foundries and pottery kilns lay inside the same enclosure as the temple and royal tombs, and one of the uppermost levels has preserved an area of streets and houses of the Ptolemaic Period (Brissaud 1987, 35, fig. 20). At most places the remaining part of the population, often the larger part, lived in a tightly-packed unwalled and slightly elevated town outside, but perhaps saw the great enclosure as a place of refuge at a time of emergency. Unusually at El Kab, in a sparsely populated part of southern Egypt, at least half of the huge enclosure (where the great walls were provided with internal ramps to the top) seems to have been left empty and so could have provided refuge for a scattered population or for passing caravans from Nubia or nomadic herdsmen from the eastern desert (Fig. 4).

The ambiguity of the ancient view arises from the fact that some people did sense that there should be limits of accessibility to the buildings they and their ancestors had created. This is apparent from occasional autobiographical texts of officials in charge of temples. Udjahor-resenet, who served under the Persian king Cambyses and had a particular attachment to the temple of Neith at Sais in the western delta, recorded how he gained royal permission to 'expel all the foreigners [who] dwelled in the temple of Neith, to demolish all their houses and all their unclean things which were in this temple' (Lichtheim 1980, 38). How literally should we take the term 'temple'? Does he mean the stone building itself or its whole enclosure? Since, as was clearly the case at Medinet Habu (and at Tell el-Balamun), secular buildings were regularly within temple enclosures, the former is the more likely. The offending houses, probably of a Persian garrison, would then have lain, as was customary, within the enclosure, which acted as a citadel for them, but had actually strayed inside the sacred stone building itself or perhaps had been built as lean-tos against the stone walls or even on the roof. Indeed, it would make sense to think that Udjahor-resenet, as a member of the governing class and a senior priest (and formerly an admiral), had his own residence inside the temple enclosure as well. Earlier the high priest of Amun at Karnak, Menkheperra of the 21st Dynasty, had recorded how he had removed the houses of Egyptian people installed in the court of the 'domain of Amun' (Barguet 1962, 37). Since excavation has revealed that houses and larger official-looking buildings lay at this time inside the main temple enclosure and remained there for long time afterwards (Anus & Sa'ad 1971; Fig. 8) we can infer that Menkheperra's target was localized at the stone temples proper. Again we should expect that Menkheperra himself owned a 'palace' in the temple enclosure, perhaps rather like the rebuilt example, of exactly the same period, which we have noted inside Medinet Habu. Shortly before the conquest of Egypt by Alexander, another priest, Djedher, this time at the delta city of Athribis, told a similar tale. Again the target was the houses of soldiers, this time said more explicitly to be inside the temple enclosure wall, but the tone is more generous: the owners were given land outside the enclosure and there they rebuilt their houses so that they were better than before (Daressy 1919, 148; Jelínkova-Reymond 1956).

The history of Medinet Habu after the end of the New Kingdom seems to witness the ebb and flow of secular buildings. Something of this kind is visible at Tell el-Balamun, where intrusive houses of the 3rd Intermediate Period were cleared away for temple building in the 22nd Dynasty, yet in the Persian period kilns were situated over the ruins of another of the temples. In the 30th Dynasty widespread reconstruction took place again (Spencer 1996; 1999). It was perhaps only the occasional intervention of powerful individuals sensitive to the demarcation between the secular and the sacred that prevented the

great stone temples from being permanently invaded by people hungry for opportunities to create a secure home. This cyclic process, which we would do better to regard as a normal feature of society rather than the occasional aberration, creates an explicit research agenda for excavation within temple enclosures.

In parts of the world where the inhabited land-scape is uneven, times of trouble encourage some, usually the rulers, to retreat to fortified strongholds on high places. In Greece and the Aegean it produced the 'acropolis'. This was so even at Athens until a Delphic oracle in 510 BC ordered that it should remain forever the province of the gods, unoccupied by humans. The case that I am advancing here is that in the first millennium BC Egypt's temple enclosures served the same purpose. The thickness of the battlemented walls and the platforms of its interior buildings, probably linked by raised street levels, created for many towns and cities an artificial acropolis. This was Egypt's 'urban enceinte' expressed in the cultural terms of the day.

The Late Roman and Early Islamic Urban Enceinte

Alison L. Gascoigne

It has been established in the preceding sections that settlement walls were by no means uncommon in ancient Egypt, and it is from this tradition that the late Roman and early Islamic urban configuration developed. With the incorporation of the country into the Roman empire, it was inevitable that changes would be made to its defensive situation, and the continuing Hellenization of the upper classes would alter perceptions of the urban ideal. This section will consider to what extent these forces brought Egypt into line with other eastern Roman provinces, and how the urban enceinte developed after the Arab conquest of the country in 642.

The urban ideal of the classical period in the eastern Mediterranean comprised walled, orthogonal settlements with monumental entrances and central areas of planned public architecture. This pattern was not, however, to be maintained during the late Roman and early Islamic periods. A transition to a

CAJ 14:2, 276–84 © 2004 McDonald Institute for Archaeological Research DOI: 10.1017/S0959774304250168 Printed in the United Kingdom.

more organic layout, characterized by the invasion of public space by private building, has been clearly demonstrated in Syria to pre-date the Arab conquests (Kennedy 1985). Here, the late Roman metamorphosis of the classical urban form was accompanied not by the disappearance of town walls but rather by an increased emphasis on them (Kennedy 1985, 6; Pollard 2000). This is perhaps unsurprising in the light of the weakening of imperial control over the eastern provinces and the accompanying uncertainties of life near the Persian border. For Egyptian sites, there is unfortunately an almost total lack of archaeological data relating to urban form during the Roman period. The country was not under such immediate threat of major military action as were the Syrian provinces, but textual sources record attacks and raids on various settlements by nomadic groups such as the Blemmyes throughout Egypt's history (Török 1985). The policy of fortifying desert monastic sites with walls and keep-like towers, from their appearance in the fourth century onwards, would seem to indicate problems of security at this time, at least in Egypt's outlying areas (Walters 1974, 11). For towns, though, the evidence is more equivocal.

It is clear that at the time of the Arab conquest, there were a significant number of fortified sites held against the invaders by the divisions of the Roman army undertaking the defence of Egypt. These entities seem to have comprised both walled settlements as well as self-contained forts and other enclosures situated in or around towns. Only a few examples of towns with custom-built walls can be identified, notably the classical, orthogonally planned cities of Alexandria and Antinoöpolis, founded in 332 BC and AD 130 respectively (Description vol. 4, pl. 53; Haas 1997, 375, n. 3). A section of Aswan's city wall has been excavated, and was probably built during Ptolemaic times and repaired and strengthened with towers during the second half of the sixth century AD (Jaritz & Rodziewicz 1994). Edfu was walled for much of its history: Michalowski suggests that one of the town walls surviving towards the west of the archaeological mound was constructed during the early Ptolemaic era, then repaired and strengthened with bastion towers during the Roman period (Alliot 1933, 11; Bruyère et al. 1937, 22; Michalowski et al. 1938, 7). Finally, a number of settlements in the Fayyum were walled, notably Karanis, Soknopaiou Nesos and Bakchias (Davoli 1998, 40, 92, 349). This limited number of examples would thus indicate that walling was by no means widespread in late Roman Egypt.

What, then, was the significance of these cus-

tom-built urban enceintes? As the country's capital and a classical city, Alexandria's walls indicate both the need for security and, as with Antinoopolis, its non-indigenous urban form. The features of the ideal classical city were defined by a set of ideas that were perceived to represent what a city should be and to which a high-status Hellenic settlement was expected to conform. Certainly gates were part of this design, but whether walls were, or whether they formed a pragmatic addition, is not clear. The urban form of 'indigenous' settlements, such as Edfu and Aswan, is apparently rather different, with existing enclosures, presumably defensive in purpose, being strengthened in the late Roman period. Davoli suggests that the fact that only towns near the Fayyum's desert edges were walled indicates that one intention was to protect settlements from drifting sand (Davoli 1998, 349). At no site has enough of a wall been uncovered to allow understanding of its relationship to the wider settlement, and it is thus unclear to what extent these town enclosures represent a particularly Egyptian perception of urban form. In contrast to the rest of the empire, no examples of town enclosures constructed during the late Roman period have yet been identified archaeologically. The evidence would suggest that the majority of Egyptian settlements at this time were located around existing self-contained temple enclosures rather than equipped with full enceintes. It appears there was no will or no need to fortify Egypt's towns as strongly as those elsewhere, and we must conclude that the defensive needs of the country were largely being met in other ways.

The development of civilian settlements inside existing temple enclosures, which as seen above was a widespread pattern in Egypt during the first millennium BC, still apparently represented the most usual form of urban fortification during late Roman times. With the decline and closure of Egypt's temples, more enclosed space became available for occupation, and houses were often built inside and over the walls and roof of the temple itself (Description vol. 1, pl. 49; vol. 4, pl. 3, 7). The town of Jeme, which developed inside the enclosure of the temple of Medinet Habu in western Thebes, still flourished during Roman times; the walls were ruined and built over during the late Roman and early Islamic periods, prior to the abandonment of the town in the late eighth century (Hölscher 1954, 36–7, 45; Wilfong 2002, 152–3). Other late Roman towns, such as those at Buto and Zawyet al-Sultan, were apparently unwalled but associated with earlier temple enclosures (Petrie 1904, pl. 44; pers. observ.). At Memphis, the enclosures of the temples to Ptah and Neith, in addition to a massive, fortified 'palace' mound surrounded by walls, provided security for the population. (Survey work at Memphis has found no evidence for the existence of encircling city walls but earthworks may have existed as a defence against the Nile flood as well as against invaders: Jeffreys 1985.) The late Roman town of Thebes was based largely around sizeable temple enclosures in the Graeco-Roman period (Vandorpe 1995, 216–17), while the existence of a settlement in and around the temple enclosure at Dendara has been demonstrated archaeologically (Marchand & Laisney 2000).

Temple enclosure walls, initially built to define sacred space, served as protection to the urban population. In order to defend strategic places further or to house military personnel, the imperial authorities constructed forts in or near existing settlements, both walled and unwalled. Alexandria boasted the existence of the garrison fort of Nikopolis a couple of miles outside the city walls to the east, while sixth-century sources indicate the existence of a 'castrum' at Aswan (Alston 1995, 192; Jaritz & Rodziewicz 1994). The massive fort of Babylon in Old Cairo was built to defend the apex of the Delta, and was probably surrounded by an (unwalled?) settlement (Butler 1914, repr. 1978). At Pelusium, two forts are archaeologically attested, being depicted on maps as surrounded by unwalled mounds (though the edges of the site are sinking: Clédat 1914, fig. 1; 'Abd el-Maqsoud 1985). This is of particular significance given that Pelusium formed Egypt's first line of defence against invaders; in the seventh century it apparently fell quickly to the Persians and with slightly more trouble to the poorly-equipped Arabs (Butler 1902, repr. 1978, 210–11). One of the temple enclosures in Luxor was itself rebuilt as a Diocletianic fort (el-Saghir *et al.* 1986). Forts also survive at Dionysias, al-Kab, Nag al-Hagar and Diospolis Parva/Hu, in addition to those throughout the desert reaches of the country (Alston 1995, 192–207; Petrie 1901, 54–7). Where fighters were few, the shorter walls of forts must have been a more practically defensible option than long town enceintes, and it has been suggested that such considerations were behind the general pattern of shortening town walls in the late Roman period across the empire (Liebeschuetz 2001, 51–2). It seems probable that it was settlements such as these, equipped with self-contained and partly-urbanized garrison forts but otherwise undefended, that held up the Arab advance in 641.

Archaeological evidence for urban enceintes of the late Roman period is very sparse. At the time of

the Arab conquest, however, it appears that Egypt had only a handful of towns with custom-built city walls. The urban population clearly did not feel much need to conform to classical perceptions of the city, neither was any indigenous tradition of walling widespread. The enclosing of settlements (or rather the settling of enclosures) can be seen as a pragmatic response to uncertain times rather than as a symbolic means of defining urban space; certainly, it was an efficient use of available building land. Strategic places were defended by means of forts rather than walls, a point of particular interest given the widespread walling of towns elsewhere in the empire. In the light of the pattern of urban configuration outlined above, it is interesting to consider how the passage of the *Codex Justinianus* quoted by Bachrach in his paper in City Walls, might have applied to Egypt (Bachrach 2000, 194). The relevant passage reads: 'It is unlawful to rebuild the walls of municipalities without the authorization of the emperor or the governor, nor is it legal to build anything onto or on top of them [without such authorization].' It is hard to believe that such permission was sought for and given in the case of settlements such as Jeme, where housing was built in late Roman times on top of the enclosure wall. It must be concluded that such directives only applied to or were enforced in the case of 'proper' cities such as Alexandria, and perhaps forts. The *Codex* was drawn up for the empire as a whole, and serves further to emphasize the anomalies of the Egyptian situation. Certainly some late Roman maintenance work was undertaken on defences, with repairs being carried out on the urban enceintes at Aswan and Edfu. Temple enclosure walls, however, were less well protected and commonly built over, and in certain cases their location on lower ground surrounded by high occupation mounds, as with the Ptah temple at Memphis or the temple at Bubastis, must have rather reduced their military value (Jeffreys 1985; Herodotus 2, 138).

Why were Egypt's urban defences such a low priority in comparison with those of her neighbours? It may be that the level of threat to late Roman urban centres in Egypt was perceived to be much less than in those provinces bordering the Persian empire or the lands of restive European tribes. Alternatively, the consequences of conquest were not regarded as severe enough to warrant the creation of custom-built town walls. For the Hellenized population of Syria, conquest by the Persians might have equated to the annihilation of their classical culture and values. Perhaps the Egyptians, who had in the past absorbed

Nubian, Libyan, Persian and Greek conquerors into their own political and cultural structures, were more confident of their ability to withstand such changes. The rules of medieval warfare inflicted severe punishment on towns taken by storm as opposed to by treaty. The Arabs themselves made this distinction clear in the administration of their newly-acquired empire, with surrendered land being subject to half the rate of tax payable on conquered territory, and native landowners maintaining their rights rather than being reduced to tenant status (Frantz-Murphy 1991; Noth 1984). When the expense and economically restrictive nature of urban enceintes are also taken into account, it may be that the Egyptians simply regarded them as more trouble than they were worth.

With the exception of the foundation of Fustat, there was no imposition of urban formal changes in the couple of centuries after the Arab conquest. Nonetheless, there exists a belief that during the late Roman and early Islamic periods, many cities declined and were abandoned (see for example Alston 2002; Butzer 1960). This has never been convincingly demonstrated for Egypt where urban development did not closely follow the wider patterns of the empire, and the impression of dislocation of settlement may stem as much from a poorly understood transition of urban form as from a catastrophic decline. It can be seen from Reyerson's study of the maintenance of medieval town fortifications in Europe that the expansion of prosperous towns beyond their walls is a natural development unless steps are taken to prevent it (Reyerson 2000). For some sites in Egypt, rather insubstantial archaeological evidence implies that during the late Roman and early Islamic periods there was a tendency for towns to spread over the limits of the enclosure inside which they had been based, forming looser, sprawling settlements incorporating or moving away from areas of abandoned and ruined housing. The new Arab capital of Fustat, though by no means a typical Egyptian settlement, might be regarded as encapsulating this new form of urbanism. Founded next to the walls of the fort of Babylon, it was unwalled and expanded rapidly, with plots (khittas) being assigned to different tribal groups to build on without reference to any central design. Public buildings, including the main congregational mosque, the governor's house and the diwan were located in the central khitta, but each plot also had a mosque and meeting place for local elders. Fustat incorporated vacant areas between the plots that were later built over as pressure for space grew more severe (Kubiak 1987, 70-75). At Edfu, exposed sections beneath the modern town to the south of the temple indicate an early medieval expansion of occupation down the sides of the main archaeological mound, resulting in the eventual abandonment of previously occupied quarters to the west (Gascoigne 2002). The Description map of Aswan marks the eighteenth-century settlement a considerable distance to the north of the remains of the late Roman town enclosure; the chronology of this transition is unclear but it was presumably on-going throughout much of the medieval period. This pattern would again seem to indicate that the urban population was not concerned with the need to restrict their settlements behind walls. It is hard to believe that the expansion of towns beyond their enclosures at this time, if indeed it is a general pattern, resulted from an increase in security. Rather, it must represent, as Kemp suggests above, a 'change in relative values' about urban form, and was perhaps based on the impracticability of construction on high archaeological mounds.

Eventually, the continuing insecurity of the country, in certain cases perhaps in conjunction with the pattern of urban sprawl described above, was to lead to a need for new settlement enclosures. The Arab government of Egypt thus undertook the walling of specific types of town at public expense during the ninth and tenth centuries. Raids by the Byzantine navy threatened the northern cities of the Delta, and uprisings and invasion were a constant possibility (Kennedy 1998; 'Athamina 1997). In order to counter these problems, a specific group of threatened frontier sites or areas, known as ribats, were defined and fortified ('Athamina 1997; EI2 'Ribat' and 'Thughur'). From around the eighth century, the term *ribat* was applied to specific threatened frontier settlements such as Tinnis, Damietta, Alexandria, Pelusium/Farama and Aswan. Fighters who died in defense of *ribats* had the status of *mujahidin* in the afterlife, and the occupying and settling of *ribats* was strongly encouraged. In Alexandria, Damietta and Aswan, not enough archaeological material remains accessible to trace the development of enclosure walls for the Islamic period, although it is known that the walls of Alexandria enclosed only a third of the late Roman area by the ninth century (Haas 1997, 339–40). At Pelusium, archaeological investigations have indicated early Arab activity in the fort and remains of a significant fired-brick enclosure wall and horseshoe towers can still be seen; this is not surprising since written sources tell us that Egypt's Mediterranean coast had special military status ('Abd el-Magsoud

1985; pers. observ.; 'Athamina 1997, 103). The site of Tinnis, although largely reduced to featureless mounds, remains completely uncovered by modern settlement and is the best source of archaeological evidence for the enclosure of *ribats* (Fig. 10). To what extent other such settlements would have been similarly fortified is not clear. Tinnis was already occupied during the late Roman period, being an industrial city where the production of textiles and metalwork resulted in great prosperity (Lev 1999; Gascoigne 2003). There is no indication that Tinnis was walled at this time, and accounts of the Arab conquest, during which there was a skirmish outside the town, do not describe Tinnis as requiring reduction by siege. Rather, the governor of the town was said to have led his army out to meet the Arabs on ground outside the settlement, an unlikely action in the event of there being any defensive walls (Butler 1902, repr. 1978, 353–4). It may be that the town walls built by al-Mutawwakil in 853–4 represented the first enclosure of the town (al-Magrizi, ed. 1922, 209, 212). Textual sources indicate that Tinnis had been the subject of on-going, large-scale government investment. Construction programmes by the governor 'Abd al-'Aziz al-Jarawi, who built cisterns and water installations in the early ninth century, and also by Ibn Tulun, who built cisterns and workshops during a visit in 882-3, are mentioned by Ibn Bassam al-Tinnisi in his description of his home town (Ibn Bassam ed. 1967; tr. Gascoigne 2002, appendix; Yaqut ed. 1866–71, vol. 1, 884). The expansion of settlement in the eighth and ninth centuries, at least in the southern part of the town, is attested archaeologically, and in the light of Tinnis's prosperity and the threat of the Byzantine navy, it is unsurprising that it should have become necessary to fortify the entire site. The cost of the development of the *ribat* of Tinnis was clearly covered both by local officials (al-Jarawi, using public money?) and by the caliph, with the fortifying walls unsurprisingly paid for and sanctioned by the lat-

A strong antipathy towards the building or preservation of town walls can, in fact, be seen as a feature of government policy across the Islamic world (Kennedy 2001, 185–92). Fortified towns are only desirable where the political situation is stable enough to prevent rebel factions from usurping control of strong places, and the Arab authorities of Egypt more than once had to damage or demolish town walls to prevent their being held against them by the leaders of revolts, or to punish those leaders. Sections of the walls of Alexandria were dismantled by 'Amr ibn al-'As after the uprising of the Byzantine

general Manuel in 646 (Haas 1997, 339). Alexandria was subsequently successfully invaded by Andalusian pirates, who held the town against the Arabs between 814 and 827. The rich city of Tinnis was targeted both by foreign raiders seeking plunder and also by anti-government Arab factions in need of a base, and its walls were rebuilt and deliberately demolished on several occasions. Most of a wall, presumably that of al-Mutawwakil, was demolished after a revolt of Muslim youths in Tinnis during the reign of al-Mu'izz (History of the Patriarchs tr. 1948, 133). If this account is accurate, the town would have been largely unwalled from the mid-tenth to the late twelfth centuries, after the worst Byzantine attacks of the eighth and ninth centuries but before the majority of crusader naval raids. At this point in time, the risk of Tinnis being sacked by external forces must have been perceived as less than the risk of the town and its wealth being held against the Fatimid authorities in Cairo. The enclosure visible today may be that constructed by Salah al-Din in 1181–2 (Fig. 11), although it is not clear whether he rebuilt the town walls or just the main fort. Lev suggests that the amount of money reportedly spent would not permit the full renovation of all the fortifications, and in the light of William of Tyre's description of Tinnis in 1169 as reduced to a small town, it seems unlikely that rewalling the entire settlement would have been practical (Lev 1999, 94; William of Tyre tr. 1943, bk 20, ch. 4). The non-military population was evacuated on the orders of Salah al-Din in 1192–3 to Damietta, and in 1219, crusaders were able to walk into the expensively rebuilt but abandoned fort, which they much admired (Oliver of Paderborn, in Peters ed. 1971, 97–8). In the face of continuing hostility, the fort was finally razed by the Ayyubid sultan al-Malik al-Kamil in 1227 (al-Magrizi ed. 1922, 213). Urban fortifications can here be seen as at least partly defined by the nature of the occupying military force, with the existence of a fortified enclosure at Tinnis being at various times perceived as a threat to the central government, who were unable to maintain control of it. The defence of forts was perhaps a style of warfare to which the Arabs, with their reliance on cavalry, were not ideally suited, and the retaking of a fort captured by a crusader army was not something they cared to undertake.

The *ribats* were not the only towns enclosed by the Arabs. The foundation of high-status walled settlements was widespread in early Islamic times, and in Egypt is represented by the city of al-Qahira (Cairo), founded by the Fatimid general Jawhir al-Siqilli in 969 (Creswell 1952; Bloom 2000; Warner

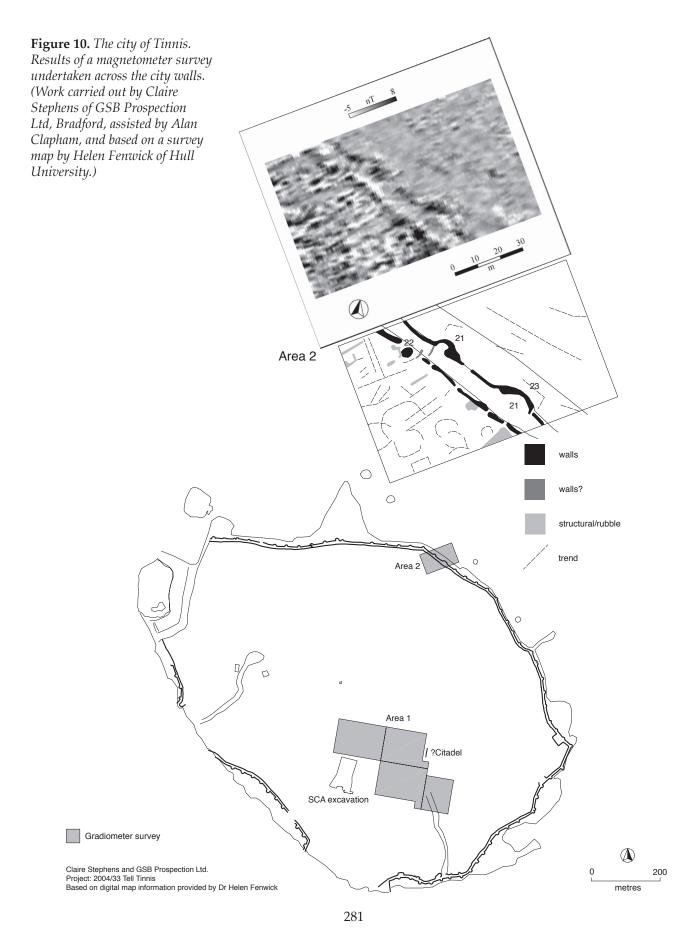




Figure 11. *The remains of the double walls at Tinnis.*

1999). Since this forms the subject of part of Bloom's article in City Walls, it will be touched on only briefly here. The first walled entity on the site since the construction of Babylon in the late third century, al-Qahira was surrounded initially by large mud-brick walls, of which nothing survives today. There has been some debate as to whether these walls were primarily defensive or intended to separate the Shiite Fatimid caliph from a hostile Sunni population and to provide a setting for court ceremonial (Sanders 1994; Bloom 2000, 229). Either way, it is significant that within eighty years of their construction, by the time of Naser-e Khosraw's visit in 1046-7, the enclosure had disappeared beneath housing, the plain back walls of multi-storey structures forming a rampart effect (Naser-e Khosraw tr. 1986, 46). Clearly, despite the threat of invasion from Syria, the walls were not protected from destruction and overbuilding by the Fatimid authorities, and the settlement can thus be regarded as another example of Islamic urban sprawl. Between 1087 and 1092, the Armenian vizier Badr al-Gamali refounded the enceinte, enclosing an area slightly larger than the original city. The ongoing conflict with the Abbasid Dynasty in Syria and other Shiite sects, in addition to an uncertain internal situation, must certainly have justified the construction of a fortified enclosure, and the walls and gates of al-Qahira comprise many features of obvious military value. In the light of the earlier fortification of the ribats, to imagine the walls of al-Qahira as purely ceremonial seems perverse, though such monumental structures must also have served to underline the strength and permanence of Egypt's new rulers, especially at a time when their

authority was called into question by disorder, civil war and famine. At its foundation, then, al-Qahira represented a self-contained fortress built to house the army, administration and associated services, within a larger unwalled settlement. Bloom himself (2000, 241–4) cites medieval authors who refer to al-Qahira as a *qasr* or *hisn*, and as such, it might be regarded as comparable in function to the fort of Babylon rather than to the town of Fustat.

The Ayyubid walls of Cairo, built by Salah al-Din and his successors, extended the later Fatimid enclosure to include the unwalled settlements of Fustat, al 'Askar and al-Qata'i', with the citadel as the

primary stronghold (MacKenzie 1992; Warner 1999; Pradines et al. 2002). Arguably, this last phase represents the only genuine town wall in the history of the Cairo urban conglomeration, the role previously occupied by al-Qahira being taken by the citadel, and al-Qahira incorporated into the wider settlement. Al-Magrizi states that Salah al-Din dismantled the town walls of ruined Antinoopolis as a source of building material for Ayyubid Cairo, the classical enceinte being recycled into an Islamic one (al-Maqrizi ed. 1922, 308). The exact disposition of settlement in Fustat at the time these walls were built is not clear, and on-going archaeological studies may clarify the situation in the future, but it is probable that the eastern reaches of Fustat away from the waterfront would already have been at least partly abandoned (MacKenzie 1992, 41-50). The Ayyubid walls enclosed an area from the river west of al-Oahira to the citadel and back to the river south of Babylon (Fig. 12). Given the expense of such a project, the enclosure of areas of Fustat that were in all probability largely ruined is notable, although the inclusion of unoccupied or abandoned sectors in settlements was clearly common during this period. Near the citadel, the Ayyubid walls were built to considerable height and great strength, in contrast to the section of the wall preserved at Fustat, which is much less massive. Whether for military or symbolic reasons, Salah al-Din clearly considered it important to enclose the entire urban area of Cairo, but the building of walls of great height around a ruined quarter did not make sense economically. Thus, the different scale of sections of the wall may represent a position of compromise between conflicting factors involved in the construction programme. Even the strongest sections of the Ayyubid wall, as Warner points out, were not long maintained in a defensible condition, being rapidly buried in high mounds of rubbish from the city. Despite its great size and strength, this structure apparently fell into ruin considerably before the earlier Fatimid walls of al-Qahira (Warner 1999).

The walls of the ribats and Cairo were paid for by the central authorities and represented the power of the ruler to protect threatened settlements from attacks coming from the north and east. As long as local officials collected taxes and maintained order, provincial towns south of Cairo were apparently of very little interest to the Arab governing élite, and few descriptions or accounts of them can be found in the written sources of the period. Some of these settlements, however, were also rewalled in the early Islamic period, despite their low status. Ibn Hawqal describes how Quft was taken and pillaged by the Buja with the massacre of part of the population in 819; he suggests

that this may have been the reason for the (re-)construction of walls at Quft, Qus and Aswan around 827 (Ibn Hawqal tr. 1964, 50; Garcin 1976, 52). This source does not, unfortunately, record whether the work was paid for by local inhabitants or by the central government. The significance of this issue can be considered with reference to the building programme carried out by al-Jarawi at Tinnis. If public money was used to cover the costs of the work, the endowment of the town with new workshops can be seen to represent governmental investment, perhaps as recognition for loyalty or as a demonstration of authority. On the other hand, if al-Jarawi used his own resources as is perhaps more probable, the construction might be seen as an attempt to raise local support for his uprising against the central authorities in 809. In the case of walls, the question of payment is even more important, since the existence of fortifications not sanctioned by the central government calls into question its authority: the citizens of medieval Germany, although able to fortify

Bahrhaffte abcontrafeheung der mechtigen und schöften Statt Alcap: o heitan Mawren/und Pasteyen/samptdem Königlichen Schlos/vind b und des Guldans/daraußman size Berlichteit leichlich mag ab

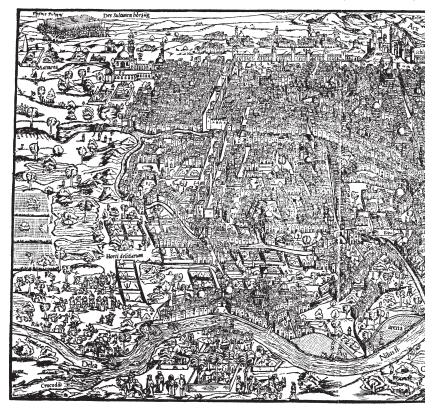


Figure 12. View of Cairo's north walls, from M. Pagano's 1549 map in the version published by S. Münster in 1574 (after Meinecke-Berg 1976, Taf. 33).

their own towns, had first to apply to their ruler for permission (Tracy 2000). There is little evidence for the widespread construction of Islamic provincial enclosures, however, and it must be concluded that the building or repair of town walls at this time was not a general or long-lived trend.

The approach to urban enceintes in Islamic times can thus be seen to be almost entirely pragmatic, and at times rather disorganized. Walls were constructed around certain threatened settlements but were not particularly widespread throughout Egypt, and were destroyed where their benefits were no longer prevalent. It is notable that expensive fortifications were not necessarily well maintained, presumably because of financial or administrative constraints or a more general antipathy towards walling, even in times of significant threat. The Arabs' policy for the defence of major Egyptian towns, when compared to that of the Romans, shows both similarities and differences. In both cases, we see the foundation by the ruling élite of high-status settlements that

never conformed completely to the existing pattern of 'indigenous' settlements. On the other hand, the distribution of walled towns is quite different under the two regimes. In Roman Egypt, temple walls and forts formed the primary types of urban fortification and were fairly evenly spread throughout the various areas of the country, including the desert. Under the Arabs, those settlements that were specially fortified were nearly all situated in the north of Egypt. These cities thus became centres for Arabization, with high levels of immigration, both military and civilian, while provincial towns were not generally walled and had much less contact with their new rulers. It can be seen, therefore, that the instigation of Arab policies of walling from the ninth century onwards, in addition to being militarily pragmatic, was symbolic of attitudes to differing Egyptian urban and social situations, and represented a significant departure in the history of Egypt's enceintes.

Final Remarks: Protecting Assets

Barry Kemp

How people have classified things is one of the defining aspects of cognitive archaeology. Here we have been looking at the most obvious physical manifestations of protection, namely large enclosure walls. A liking for them is a habit of mind, a behavioural path, which once developed is hard to break or lose. The reassurance that it brings invites retention. Walls around towns first appeared in Egypt during the period of local competition of which the emergence of the state was part, and can be explained as a reasonable means of protecting communities. Established as something which people in authority could do to impose their will on the community and to promote order, the building of enclosure walls remained a tempting option for safeguarding assets more broadly defined, whether material in the form of valuable property or less tangible in the shape of human dignity or the sanctity of divine presence. How that option was invoked on particular occasions is bound up with the complexities of choice in culture, one element of which is the thinking of the day.

One influence in ancient Egypt came from the philosopher-priests whose thinking justified the common choice of making the temple the major asset to be protected. Curious as to why certain places were

 ${\it CAJ}~14:2,284-8 \quad @~2004~McDonald~Institute~for~Archaeological~Research~DOI:~10.1017/S0959774304260164 \quad Printed~in~the~United~Kingdom.$

chosen as the locations of temples, they invented a mythology in which, in a primeval age, the sacred sites of Egypt were the places where the forces of evil in the form of serpents had been defeated by companies of divine beings. The myth tells how one form of temple which arose, specifically a solar temple, had as an integral part a large enclosure wall specifically to protect the sacred area from the evil coming from outside (Reymond 1969, 33-42, 239-45). Faced with reasoning of this kind, modern assessments of ancient strategies need to proceed with caution. Real temple enclosures, however, whatever thinking lay behind their inception, became parts of the landscape and their protective potential for lives and property at the secular end of the scale was hard to resist. The variegated histories of the 'urban citadels' of the first millennium BC illustrate this very clearly. And so an inescapable circle of modern reasoning is born, which needs to accept that different groups in society, faced with large enclosures both old and new, will have evaluated them and responded to them differently. Even the most overt military style of defensive walling of the Middle Kingdom forts in Nubia is still hedged around with ambiguities of motive and meaning.

With Christianity and especially Islam the concept of the spiritual asset changed significantly. It lost much of its material component, although as Christian monasticism in Egypt became threatened, protective walling reappeared and remains a striking feature of the few working monasteries that still survive in Egypt. In general, walling lost its position on the cultural agenda and seems not to have been a regular feature of the landscape of medieval Egypt. The story ends with the Napoleonic invasion of 1798. Following an easy taking of the walled city of Alexandria the French army headed for Cairo. Although some of the villages along the invasion route put up resistance from behind fortified perimeters (Denon 1803, vol. 1, 237, 246–9) the outcome of the invasion was decided in the open, at the Battle of the Pyramids. The huge walls of Cairo and of its massive citadel played no part in Egypt's defence.

Note

 In the original excavation reports, the second palace is also dated to the reign of Rameses III. The evidence of the name of the high priest Rameses-nakht on a threshold and, more especially, the name of the high priest Panedjem I on doorways of the second palace imply, rather, that the rebuilding had nothing to do with Rameses III but was a conversion and an improvement to serve a new generation of priestly governors of western Thebes (Stadelmann 1994 concludes similarly). The standing brickwork of the second palace was unfortunately destroyed to its foundations, unrecorded, by the 1912 excavation of T.M. Davis. The fact that it had evidently survived so well implies that the site never saw a serious rebuilding, and that the second palace remained in use for a long time.

Acknowledgements

Moeller's fieldwork was supported by the Egypt Exploration Society, the Thomas Mulvey Fund, the Field Fund (Trinity College, Cambridge), the Seven Pillars of Wisdom Trust and Christ's College Cambridge. Gascoigne's fieldwork was supported by the British Academy, the Thomas Mulvey Fund, the Chadwick Fund, Fondation Max van Berchem, the Gerald Averay Wainwright Fund for Near Eastern Archaeology, and the Barakat Trust. Kemp wishes to thank Dr Gillian Pyke for comments on his section.

Barry Kemp McDonald Institute for Archaeological Research Downing Street Cambridge CB2 3ER, UK bjk2@cam.ac.uk

> Nadine Moeller University College Oxford OX1 4BH, UK

Kate Spence McDonald Institute for Archaeological Research Downing Street Cambridge CB2 3ER, UK kes1004@cam.ac.uk

Alison Gascoigne McDonald Institute for Archaeological Research Downing Street Cambridge CB2 3ER, UK alg1000@cam.ac.uk

References

- 'Abd el-Maqsoud, M., 1985. Preliminary report on the excavations at Tell el-Farama (Pelusium): first two seasons (1983/4 and 1984/5). *Annales du Service des Antiquités de l'Égypte* 70, 3–8.
- Adams, B., 1995. Ancient Nekhen. Garstang in the City of Hierakonpolis. (Egyptian Studies Association Publication 3.) New Malden: Sia Publishing.

- Adams, M.D., 1998. The Abydos settlement site project: investigation of a major provincial town in the Old Kingdom and First Intermediate Period, in *Proceedings of the Seventh International Congress of Egyptologists, Cambridge 3–9 September 1995*, ed. C.J. Eyre. (Orientalia Lovaniensia Analecta 82.) Leuven: Peeters, 19–30.
- Adams, W.Y., 1977. *Nubia, Corridor to Africa*. London: Allan Lane.
- Alliot, M., 1933. Rapport sur les fouilles de Tell Edfou, 1932. Cairo: IFAO.
- Alston, R., 1995. Soldier and Society in Roman Egypt. London & New York (NY): Routledge.
- Alston, R., 2002. The City in Roman and Byzantine Egypt, London: Routledge.
- Anus, P. & R. Sa'ad, 1971. Habitations de prêtres dans le temple d'Amon de Karnak. *Kêmi* 21, 217–38.
- Arnold, D., 2003. The Encyclopaedia of Ancient Egyptian Architecture. New York (NY): I.B. Tauris.
- 'Athamina, K., 1997. Some administrative, military and socio-political aspects of early Muslim Egypt, in *War and Society in the Eastern Mediterranean, 7th–15th centuries*, ed. Y. Lev. Leiden: E.J. Brill, 101–13.
- Bachrach, B.S., 2000. Imperial walled cities in the West: an examination of their early medieval *Nachleben*, in *City Walls: the Urban Enceinte in Global Perspective*, ed. J.D. Tracy. Cambridge: Cambridge University Press, 192–218.
- Badawy, A., 1966. A History of Egyptian Architecture, vol. II: The First Intermediate Period, the Middle Kingdom and the Second Intermediate Period. Los Angeles (CA): University of California Press.
- Barguet, P., 1962. Le temple d'Amon-Rê à Karnak-essai d'exégèse. Cairo: IFAO.
- Bietak, M., 1996. Avaris, the Capital of the Hyksos: Recent Excavations at Tell el-Dab'a. London: British Museum Press.
- Blackman, H.M., 1937. Preliminary report on the excavations at Sesebi, Northern Province, Anglo-Egyptian Sudan, 1936–1937. *Journal of Egyptian Archaeology* 23, 145–51.
- Bloom, J., 2000. Walled cities in Islamic North Africa and Egypt with particular reference to the Fatimids (909–1171), in *City Walls: the Urban Enceinte in Global Perspective*, ed. J.D. Tracy. Cambridge: Cambridge University Press, 219–46.
- Bonnet, C., 2001. Kerma Rapport préliminaire sur les campagnes de 1999–2000 et 2000–2001. *Genava* 49, 197–218.
- Brissaud, P. (ed.), 1987. *Cahiers de Tanis* I. Paris: Editions recherche sur les civilisations.
- Brissaud, P., 2000. Aerial photography at Tanis. *Egyptian Archaeology* 16, 9–11.
- Brissaud, P. & C. Zivie-Coche, (eds.), 2000. *Tanis; travaux récents sur le tell Sân el-Hagar* 2. Paris: Noesis.
- Bruyère, B., 1939. *Rapport sur les fouilles de Deir el Médineh* (1934–35). Cairo: IFAO.
- Bruyère, B., J. Manteuffel, K. Michalowski & J. Sainte Fare Garnot, 1937. *Tell Edfou 1937*. Cairo: IFAO.

- Butler, A.J., 1902, reprinted 1978, ed. P. Fraser. *The Arab Conquest of Egypt and the Last Thirty Years of Roman Dominion*. Oxford: Clarendon Press.
- Butler, A.J., 1914. Babylon of Egypt: a Study in the History of Old Cairo. Oxford: Clarendon Press. [Reprinted 1978 in The Arab Conquest of Egypt and the Last Thirty Years of Roman Dominion, ed. P. Fraser. Oxford: Clarendon Press.]
- Butzer, K.W., 1960. Remarks on the geography of settlement in the Nile Valley during Hellenistic times. *Bulletin de la Société de Géographie d'Égypte* 33, 5–36.
- Cagle, A., 2003. The Spatial Structure of Kom el-Hisn: an Old Kingdom Town in the Western Nile Delta, Egypt. (BAR International Series 1099.) Oxford: Archaeopress.
- Clédat, J., 1914. Le Temple de Zeus Cassios à Péluse. *Annales du Service des Antiquités de l'Égypte* 13, 79–85.
- Connah, G., 2000. Contained communities in tropical Africa, in *City Walls: the Urban Enceinte in Global Perspective*, ed. J.D. Tracy. Cambridge: Cambridge University Press, 19–45.
- Creswell, K.A.C., 1952. Fortification in Islam before AD 1250. *Proceedings of the British Academy* 38, 89–125.
- Czerny, E., 1999. *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- Daressy, G., 1919. Statue de Zedher le Sauveur. *Annales du Service des Antiquités de l'Égypte* 18, 113–58.
- Davies, N., 1929. The town house in ancient Egypt. *Metropolitan Museum Studies* 1, 233–55.
- Davies, V., 2003a. Sobeknakht of Elkab and the coming of Kush. *Egyptian Archaeology* 23, 3–6.
- Davies, V., 2003b. Kush in Egypt: a new historical inscription. *Sudan and Nubia* 7, 52–7.
- Davoli, P., 1998. L'Archeologia Urbana nel Fayyum di Età Ellenistica e Romana. Napoli: Maggio.
- Denon, V., 1803. Travels in Upper and Lower Egypt during the campaigns of General Bonaparte in that Country: and published under his immediate patronage. (2 vols.) London: Longman, Rees & Phillips.
- Depuydt, F., 1989. *Elkab* IV. *Topographie*. Brussels: Fondation Égyptologique Reine Élisabeth.
- Description: Description de l'Egypte ou, Recueil des observations et des recherches qui ont été faites en Égypte pendant l'expédition de l'armée française, publié par les ordres de Sa Majesté l'empereur Napoléon le Grand, 1809–18. Paris: Imprimerie impériale.
- EI2: Encyclopaedia of Islam, Second edition, 1960–2002. Leiden: Brill.
- Edgerton, W.F., 1951. The strikes in Ramses III's twentyninth year. *Journal of Near Eastern Studies* 10, 137–45.
- Emery, W.B., H.S. Smith & A. Millard, 1979. *The Fortress of Buhen: the Archaeological Report.* London: Egypt Exploration Society.
- Engelbach, R., 1931. Recent acquisitions in the Cairo Museum. *Annales du Service des Antiquités de l'Égypte* 31, 126–31.
- Frantz-Murphy, G., 1991. Conversion in early Islamic Egypt: the economic factor, in *Documents de l'Islam médiéval*:

- nouvelles perspectives de recherche. (Textes Arabes et Études Islamiques 29.) Cairo: IFAO, 11–17.
- Friedman, R., 2001. Nubians at Hierakonpolis: excavations in the Nubian cemeteries. *Sudan and Nubia* 5, 29–38.
- Garcin, J.-C., 1976. Un centre musulman de la Haute-Égypte médiévale: Qus. (Textes Arabes et Études Islamiques 6.) Cairo: IFAO.
- Gardiner, A.H., 1947. *Ancient Egyptian Onomastica*. London: Oxford University Press.
- Gascoigne, A.L., 2002. The Impact of the Arab Conquest on Late Roman Settlement in Egypt. Unpublished PhD thesis, University of Cambridge.
- Gascoigne, A.L., 2003. The medieval city of Tinnis. *Egyptian Archaeology* 22, 25–7.
- Golvin, J.-C. & El-S. Hegazy, 1993. Essai d'explication de la forme et des caractéristiques générales des grandes enceintes de Karnak. Cahiers de Karnak 9, 145–60.
- Grimal, N.-C., 1981. La stèle triomphale de Pi('ankh)y au Musée du Caire JE 48862 et 47086–47809. Cairo: IFAO.
- Haas, C., 1997. *Alexandria in Late Antiquity: Topography and Social Conflict*. Baltimore (MD): Johns Hopkins University Press.
- Hall, H.R., 1928. Babylonian and Assyrian Sculpture in the British Museum. Brussels: G. Van Oest.
- Hendrickx, S. & D. Huyge, 1989. *Elkab* IV. Brussels: Fondation égyptologique Reine Élisabeth.
- Herodotus, *Historiae*, tr. and rev. 1996, by A. de Sélincourt & J. Marincola. London: Penguin.
- History of the Patriarchs of the Egyptian Church, tr. 1948, by A.S. Atiya, Y. 'Abd al-Masih & O.H.E. Kus-Burmester, vol. 2, pt 2. Cairo: Publications de la Société d'Archéologie Copte.
- Hoffmeier, J.K., 1985. Sacred in the Vocabulary of Ancient Egypt; the Term <u>D</u>SR, with Special Reference to Dynasties I–XX. (Orbis Biblicus et Orientalis 59.) Göttingen, Freiburg: Universitätsverlag.
- Hölscher, U., 1934. *The Excavation of Medinet Habu 1: General Views and Plans*. Chicago (IL): University of Chicago Press
- Hölscher, U., 1954. The Excavation of Medinet Habu 5: Post-Ramessid Remains. Chicago (IL): University of Chicago Press.
- Ibn Bassam al-Tinnisi. *Anis al-Jalis fi Akhbar Tinnis*, ed. 1967, by G. al-D. al-Shayyal, *Majalla al-Majma' al-'Ilmi al-'Iraqi* 14, 151–89. Baghdad: Iraqi Academy.
- Ibn Hawqal. *Kitab Surat al-Ard (Configuration de la Terre)*, tr. 1964, J.H. Kramers & G. Wiet. Beirut: Commission internationale pour la traduction des chefs-d'oeuvre.
- Jacquet, J., 1958. Un bassin de libation du Nouvel Empire dédié à Ptah. Première partie. L'architecture. Mitteilungen des Deutschen Archäologisches Institut Abteilung Kairo 16, 161–7.
- Jaritz, H. & M. Rodziewicz, 1994. Syene: review of the urban remains and its pottery. Mitteilungen des Deutschen Archäologisches Institut Abteilung Kairo 50, 115–41.
- Jeffreys, D.G., 1985. *The Survey of Memphis* 1. London: Egypt Exploration Society.

- Jelínkova-Reymond, E., 1956. Les inscriptions de la statue guérisseuse de Djed-her-le Sauveur. Cairo: IFAO.
- Kaiser, W., P. Grossmann, G. Haeny & H. Jaritz, 1974. Stadt und Tempel von Elephantine. Vierter Grabungsbericht. *Mitteilungen des Deutschen Archäologisches Institut Abteilung Kairo* 30, 65–90.
- Kamal, A., 1901. Description générale des ruines de Hibé, de son temple et de sa nécropole. *Annales du Service des Antiquités de l'Égypte* 2, 84–91.
- Kawanishi, H., 1995. *Akoris: Report of Excavations at Akoris in Middle Egypt 1981–1992*. The Paleological Association of Japan, The Egyptian Committee. Kyoto: Koyo Shobo.
- Keegan, J., 1993. A History of Warfare. London: Hutchinson.
- Kemp, B.J., 1972. Fortified towns in Nubia, in *Man, Settlement and Urbanism*, eds. P.J. Ucko, R. Tringham & G.W. Dimbleby. London: Duckworth, 651–6.
- Kemp, B.J., 1977. The early development of towns in Egypt. *Antiquity* 51, 185–200.
- Kemp, B.J., 1983. Old Kingdom, Middle Kingdom and Second Intermediate Period *c.* 2686–1552 BC, in *Ancient Egypt: a Social History,* by B.G. Trigger, B.J. Kemp, D.B. O'Connor & A.B. Lloyd. Cambridge: Cambridge University Press, 71–182.
- Kemp, B.J., 1989. Ancient Egypt: Anatomy of a Civilization. London: Routledge.
- Kemp, B.J., 2002. Resuming the Amarna survey. *Egyptian Archaeology* 20, 10–12.
- Kennedy, H.N., 1985. From *Polis* to *Madina*: urban change in late antique and early Islamic Syria. *Past and Present* 106, 3–27.
- Kennedy, H.N., 1998. Egypt as a province in the Islamic caliphate, 641–969, in *The Cambridge History of Egypt I: Islamic Egypt, 640–1517*, ed. C.F. Petry. Cambridge: Cambridge University Press, 62–85.
- Kennedy, H.N., 2001. The Armies of the Caliphs: Military and Society in the Early Islamic State. London: Routledge.
- Kubiak, W., 1987. Al-Fustat: its Foundation and Early Urban Development. Warsaw: Warsaw University Press.
- Lacovara, P., 1997. *The New Kingdom Royal City*. New York (NY): Kegan Paul International.
- Lawrence, A.W., 1965. Ancient Egyptian fortifications. *Journal of Egyptian Archaeology* 51, 69–94.
- Lev, Y., 1999. Tinnis: an industrial medieval town, in L'Égypte Fatimide: son art et son histoire, ed. M. Barrucand. Paris: Presses de l'Université de Paris-Sorbonne, 83–96.
- Lichtheim, M., 1973. *Ancient Egyptian Literature*, vol. I: *The Old and Middle Kingdoms*. Berkeley (CA): University of California Press.
- Lichtheim, M., 1980. Ancient Egyptian Literature, vol. III: The Late Period. Berkeley (CA): University of California Press.
- Liebeschuetz, J.H.W.G., 2001. *Decline and Fall of the Roman City*. Oxford: Oxford University Press.
- MacKenzie, N.D., 1992. Ayyubid Cairo: a Topographical Study. Cairo: AUC Press.

- Manley, B., 1996. *The Penguin Historical Atlas of Ancient Egypt*. Harmondsworth: Penguin.
- al-Maqrizi. *Al-Mawa'iz wa'l-I'tibar fi Dhikr al-Khitat wa'l-Athar. MIFAO* 46, ed. 1922. G. Wiet. Cairo: IFAO.
- Marchand, S. & D. Laisney, 2000. Le survey de Dendara (1996–1997). Cahiers de la Céramique Égyptienne 6, 261–98.
- Meinecke-Berg, V., 1976. Eine Stadtansicht des mamlukischen Kairo aus dem 16. Jahrhundert. Mitteilungen des Deutschen Archäologisches Institut Abteilung Kairo 32, 113-32.
- Michalowski, K., J. de Linage, J. Manteuffel & J. Sainte Fare Garnot, 1938. *Tell Edfou, 1938*. Cairo: IFAO.
- Moeller, N., 2003. Tell Edfu at the end of the third millennium BC. *Egyptian Archaeology* 23, 7–9.
- Moran, W.L., 2001. Amarna letters, in *The Oxford Encyclopedia of Ancient Egypt*, vol. 1, ed. D.B. Redford. Oxford: Oxford University Press, 65–6.
- de Morgan, J., 1895. Fouilles à Dahchour mars-juin 1894. Vienna: Holzhausen.
- Murnane, W. & C. van Siclen, 1993. *The Boundary Stelae of Akhenaten*. New York (NY): Kegan Paul International.
- Mustafa, I.A., 1988. A preliminary report on the excavation of the E.A.O. at Tell el-Fara'on 'Imet', season 1985–1986, in *The Archaeology of the Nile Delta: Problems and Priorities*, ed. E.C.M. van den Brink. Amsterdam: Netherlands Foundation for Archaeological Research in Egypt, 141–9.
- Naser-e Khosraw, *Book of Travels (Safarnama)*, tr. 1986. W.M. Thackston. New York (NY): Bibliotheca Persica.
- Noth, A., 1984. Some remarks on the 'nationalisation' of conquered lands at the time of the Umayyads, in *Land Tenure and Social Transformation in the Middle East*, ed. T. Khalidi. Beirut: American University of Beirut, 223–8.
- O'Connor, D., 1989. New funerary enclosures (*Talbezirke*) of the Early Dynastic Period at Abydos. *Journal of the American Research Center in Egypt* 26, 51–86.
- Parkinson, R.B., 2002. Poetry and Culture in Middle Kingdom Egypt; a Dark Side to Perfection. New York (NY): Continuum.
- Peet, T.E., & C.L. Woolley, 1923. *The City of Akhenaten*, part I. London: Egypt Exploration Society.
- Peters, E. (ed.), 1971. Christian Society and the Crusades 1198–1229. Philadelphia (PA): University of Pennsylvania Press.
- Petrie, W.M.F., 1888. *Tanis, Part II | Nebesheh (Am) and Defenneh (Tahpanhes)*. London: Trübner.
- Petrie, W.M.F., 1891. Illahun, Kahun & Gurob. London: Nutt.
- Petrie, W.M.F., 1901. *Diospolis Parva: the Cemeteries of Abadiyeh and Hu, 1898–9*. London: Egypt Exploration Society.
- Petrie, W.M.F., 1904. *Ehnasya*. London: Egypt Exploration Fund.
- Pollard, N., 2000. *Soldiers, Cities and Civilians in Roman Syria*. Ann Arbor (MI): University of Michigan Press.
- Pradines, S., B. Michaudel & J. Monchamp, 2002. La mu-

- raille ayyoubide du Caire: les fouilles archéologiques de Bab al-Barqiyya et Bab al-Mahruq. *Annales Islamologiques* 36, 287–337.
- Reyerson, K.L., 2000. Medieval walled space: urban development vs. defense, in *City Walls: the Urban Enceinte in Global Perspective*, ed. J.D. Tracy. Cambridge: Cambridge University Press, 88–116.
- Reymond, E.A.E., 1969. *The Mythical Origin of the Egyptian Temple*. Manchester: Manchester University Press.
- el-Saghir, M. et al., 1986. Le camp romain de Lougsor. Cairo: IFAO.
- Sanders, P., 1994. Ritual, Politics, and the City in Fatimid Cairo. Albany (NY): SUNY Press.
- Säve-Söderbergh, T., 1991. Te-Khet, the cultural and sociopolitical structure of a Nubian princedom in Tuthmoside times, in *Egypt and Africa: Nubia from Prehistory to Islam*, ed. W.V. Davies. London: British Museum Press, 186–94.
- Schulmann, A.R., 1964. Siege warfare in Pharaonic Egypt. *Natural History* 73(3), 12–21.
- Schulmann, A.R., 1982. The battle scenes of the Middle Kingdom. *Journal of the Society for the Study of Egyptian Archaeology* 12, 165–83.
- Seidlmayer, S.J. 1996a. Die staatliche Anlage der 3. Dynasty in der Nordweststadt von Elephantine, in *Haus und Palast im alten Ägypten*, ed. M. Bietak. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 196–214.
- Seidlmayer, S.J., 1996b. Town and state in the early Old Kingdom: a view from Elephantine, in *Aspects of Early Egypt*, ed. J. Spencer. London: British Museum Press, 108–27.
- Sliwa, J., 1986. Die Siedlung des Mittleren Reiches bei Qasr el-Sagha. Grabungsbericht 1983 und 1985. Mitteilungen des Deutschen Archäologisches Institut Abteilung Kairo 42, 167–79.
- Sliwa, J., 1992. Die Siedlung des Mitttleren Reiches bei Qasr el-Sagha. Grabungsbericht 1987 und 1988. Mitteilungen des Deutschen Archäologisches Institut Abteilung Kairo 48, 177–91.
- Smith, S.T., 1995. Askut in Nubia. New York (NY): Kegan Paul International.
- Smither, P.C., 1945. The Semnah despatches. *Journal of Egyptian Archaeology* 31, 3–10.
- Somers Clarke, 1921. El-Kab and the Great Wall. *Journal of Egyptian Archaeology* 7, 54–79.
- Spencer, A.J., 1993a. Excavations at El-Ashmunein III: the Town. London: British Museum.
- Spencer, A.J., 1993b. Early Egypt: the Rise of Civilisation in the Nile Valley. London: British Museum.
- Spencer, A.J., 1995. Work of the British Museum at Tell el-Balamun. Egyptian Archaeology 7, 9–11.
- Spencer, A.J., 1996. Excavations at Tell el-Balamun 1991–1994. London, British Museum.
- Spencer, A.J., 1999. Excavations at Tell el-Balamun 1995–1998. London, British Museum.
- Spencer, P., 1997. *Amarna West I. The Architectural Report*. London: Egypt Exploration Society.
- Stadelmann, R., 1994. Royal palaces of the late New King-

- dom in Thebes, in *Essays in Egyptology in Honor of Hans Goedicke*, eds. B.M. Bryan & D. Lorton. San Antonio (TX): Van Siclen, 309–16.
- Stead, M., 1986. Egyptian Life. London: British Museum.
- Török, L., 1985. A Contribution to Post-Meroitic Chronology: the Blemmyes in Lower Nubia. (Meroitic Newsletter 24.)
- Tracy, J.D., 2000. To wall or not to wall: evidence from medieval Germany, in *City Walls: the Urban Enceinte in Global Perspective*, ed. J.D. Tracy. Cambridge: Cambridge University Press, 71–87.
- Valbelle, D., 2001. A First Persian Period fortress at Tell el-Herr. Egyptian Archaeology 18, 12–14.
- Vandorpe, K., 1995. City of many a gate, harbour for many a rebel: historical and topographical outline of Greco-Roman Thebes, in *Hundred-Gated Thebes: Acts of a Colloquium on Thebes and the Theban Area in the Graeco-Roman period*, ed. S.P. Vleeming. Leiden: Brill, 203–39.
- Ventura, R., 1986. Living in a City of the Dead: a Selection of Topographical and Administrative Terms in the Documents of the Theban Necropolis. Göttingen: Vandenhoeck and Ruprecht.
- Von Pilgrim, C., 1997. The town site on the island of Elephantine. *Egyptian Archaeology* 10, 16–18.
- Walters, C.C., 1974. *Monastic Archaeology in Egypt*. Warminster: Aris and Phillips.
- Warburton, D., 2001. Officials, in *The Oxford Encyclopedia of Ancient Egypt*, vol. II, ed. D.B. Redford. Oxford: Oxford University Press, 576–83.
- Warner, N., 1999. The Fatimid and Ayyubid eastern walls of Cairo: missing fragments. *Annales Islamologiques* 33, 283–305.
- Wegner, J., 2001. The town of *Wah-sut* at South Abydos: 1999 excavations. *Mitteilungen des Deutschen Archäologisches Institut Abteilung Kairo* 57, 281–308.
- Weinstein, J. M., 1973. Foundation Deposits in Ancient Egypt. Ann Arbor (MI): Dissertation Abstracts International.
- Wenke, R.J. *et al.*, 1988. Kom el-Hisn: excavation of an Old Kingdom settlement in the Egyptian Delta. *Journal of the American Research Center in Egypt* 25, 5–34.
- Wilfong, T.G., 2002. Women of Jeme: Lives in a Coptic Town in Late Antique Egypt. Ann Arbor (MI): University of Michigan Press.
- Wilkinson, T., 1999. Early Dynastic Egypt. London: Routledge.
- William, Archbishop of Tyre. *A History of Deeds Done beyond* the Sea, tr. 1943, E.A. Babcock & A.C. Krey. New York (NY): Columbia University Press.
- Wolfe, M., 2000. Walled towns during the French wars of religion (1560–1630), in City Walls: the Urban Enceinte in Global Perspective, ed. J.D. Tracy. Cambridge: Cambridge University Press, 317–48.
- Yaqut. *Kitab Mu'ajam al-Buldan* (*Geographisches Wörterbuch*), ed. 1866–71. F. Wüstenfeld. Leipzig: Brockhaus.
- Ziermann, M., 1993. Elephantine XVI, Befestigungsanlagen und Stadtentwicklung in der Frühzeit und im frühen Alten Reich. (Archäologische Veröffentlichungen 87.) Mainz: von Zabern.