

## Large Mud Brick Enclosures of Egyptian Temples

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A mud brick  Dbt has been regarded as a sturdy, reliable building material throughout history because it is flexible enough to be adapted to the building requirements, made of a mixture of mud, sand and water mixed with a binding material such as straw and then pressed into moulds<sup>1</sup> (These moulds of which we have some actual examples) and let them dry in the sun.<sup>2</sup> Stone was generally reserved for tombs and temples while bricks were used even for royal palaces, fortresses, the walls of temple precincts and towns<sup>⊗</sup><sup>3</sup>, and for subsidiary buildings in temple complexes

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<sup>1</sup> On the famous scene of foreign slaves as brick makers, in the Tomb chapel of Rekhmire, Full bibliography is in: PM, I, 211-12; Davies, Rekhmire II, 54-60, pls. 58-60; N. Davies, The Tomb of Rekhmire at Thebes, pl. LVIII; from "The satire of The Trades"; Lichtheim, Literature I, 186. and later Exodus 1:14 denote that it was a difficult craft.

<sup>2</sup> Fired clay tiles   gAS Wb, V, 156,7; Used in streets in Middle kingdom fortresses in Nubia; B. Kemp, "Soil (Including Mud Brick Architecture)" in: Ancient Egyptian Materials and Technology. Nicholson, Paul T., and Ian Shaw (eds.), Cambridge University Press, 2006, p. 79 = AEMT; Spencer stated that burnt bricks were used in Ramasside buildings in special circumstances Spencer, A.J. a Brick Architecture in ancient Egypt, Warminster, 1979, p. 5.

<sup>3</sup> The fortified walls and somewhat rounded shapes imply the city; E. Uphill, Egyptian Towns and Cities, Oxford, 2008, p. 7.

This book surveys the main kinds of Urban settlement and towns planning that existed in ancient Egypt before the Hellenistic period; Charles Gates, Ancient Cities, The Archaeology of Urban life in the Ancient Near East and Egypt, Greece and Rome, Routledge, 2003, p. 101; B. Kemp, "The early development of towns in Egypt" Antiquity 51, 1977, pp. 185-200; Kemp, Barry, "Temple and town in ancient Egypt", in Ucko et al., pp. 661, pp. 666-66.

The Egyptians referred to most cities as niwt or dmi, niwt usually refers to unplanned cities that grew naturally, such as Memphis and Thebes, while dmi can be translated as settlement and usually refers to towns that were laid out along a plan;

Uphill, op.cit; J. Van Leep, *Is Hieroglyphic Sign niwt a village with Cross-roads?*, GM 158, 1997, pp. 91-100; J. Monnet-Saleh, *Fortresses, ou Villes-Protégées Thinites?*, BIFAO 67, 1969, pp. 173-187; J. Wilson, *Buto and Heirakonpolis in the Geography of Egypt*, JNES 14, 1955, 209-236; S. Seidlmayer, *Town and State in the Early Old Kingdom: A View=*

papyrus Sorbonne 276 refers to the use of old bricks for the rebuilding of storehouse showing that the re-use of bricks was common practice. I will try through This study to provide an answer for why mud brick massive structures were around almost all Egyptian temples ?

Spencer stated that the most important word was *inb* <sup>4</sup> used at all periods (mud bricks or stone).

*Inb*  show buttressed<sup>5</sup> enclosure enclosure – walls and used to describe many different types of wall<sup>6</sup>, but it was frequently used to refer to the walls of the temples, especially the large brick enclosure-walls around the temple complex. and the general view was called *Hwt* ,  temple, administrative district, the function of the *Hwt* has been discussed in great detail which varied in its meaning according to the word added to *Hwt* like:  *Hwt-aAt* as for the temple it may reflect its estates.<sup>7</sup>

Throughout much of their history, ancient Egyptian city-dwellers lived surrounded by ramparts, and even villages were at times walled in.<sup>8</sup> The practical and symbolical function of the walls in early towns very important topic, cities like el-Kab on the east bank of the Nile River and the older Nekhen (Kom el Ahmer) can be cited as examples of *Hwt* walled cities so densely positioned along the waterways.<sup>9</sup> The seven cities in Tehnu

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=from *Elephantine*. In J. Spencer, (ed.) *Aspects of Early Egypt*. London: British Museum Press, 1996, pp.108-127.

<sup>4</sup>P. Spencer, *The Egyptian Temple: A Lexicographical Study*. Kegan Paul International, 1984; Wb I, 94, 15

<sup>5</sup> As for buttressed *arwt-Tkrw* and it is different than curved wall or wavy wall see:

D. Arnold, *The Encyclopedia of Ancient Egyptian Architecture*. Translated by Sabine H. Gardiner and Helen Strudwick. Edited by Nigel and Helen Strudwick. Princeton University Press, [1994] 2003, p. 63, p.256.

<sup>6</sup> P. Spencer, *op.cit.*, pp. 260-264.

<sup>7</sup> Moreno Garcia, *Hwt et le rural égyptien du IIIe millénaire économie, administration et organization territoriale*, Paris, 1999, pp. 36-37.

<sup>8</sup> B. Williams, "*Security and the problem of the city in the Naqada period*", in: P.Silverman, ed., 'For his Ka - Essays in memory of K.Baer' 1994, pp. 271-83.

<sup>9</sup> About the role of temples in early dynastic Egypt see: =

palette(CG 14238)<sup>10</sup> appear to be associated with the following hieroglyphic characters within the square-shaped city walls

(Gardiner nos. O15  & O36 ). Not all towns were surrounded by walls. But with memories of bad old times when kings were too weak to enforce order, local nobles fortifying their population centres. The national capitals, Memphis and Thebes, were generally not fortified. But in the 8th century BCE Memphis was surrounded by ramparts which Piye had to overcome.

The temple complexes which frequently had extensive storage space filled with the produce of the temple estates and the gifts of the kings were well protected. Early Dynastic pharaohs erected several temples connected specifically to the ideological foundations of divine kingship.<sup>11</sup> Early depictions refer to temples show a sort of enclosures to determine the sacred area (pl.2). Seven monumental brick constructions have been discovered not far west of ancient town and temple of Osiris at Abydos (so-called funerary enclosures at Abydos): two of them still stand to a height of 10-11 m and enclose spaces of about 65 × 122m (Pl.1) . These structures consisted of large, rectangular

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=J. Baines, "Temples as symbols, guarantors, and participants in Egyptian civilization" In: S. Quirke (ed.), "The Temple in Ancient Egypt. New Discoveries and Recent" Research London: British Museum Press, 1997, pp. 216-41; F. Friedman, "The ceremonial centre at Hierakonpolis Locality HK29A" in: A.J. Spencer (ed.) Aspects of Early Egypt, London: British Museum Press, 1996, pp.16- 35; B.J Kemp, Ancient Egypt. Anatomy of a Civilization, London and New York: Routledge, 1989, pp. 31-46, 65-83; O'Connor, D. "The status of early Egyptian temples: an alternative theory". In: R. Friedman and B. Adams (eds.) The Followers of Horus. 1992, Oxford: Oxbow, pp.83- 98; For the history of the buildings constructed during Dynasties 1-2 see: J. Lauer, "Le premier temple de culte funéraire en Égypte", BIFAO 80(1980), pp. 45-67. And especially in "preformal" temples and royal funerary monuments; A. Jimenez-Serrano, Royal Festivals in the late Predynastic period and the first Dynasty, Oxford, 2002.

<sup>10</sup> Francesco Raffaele, "Tehenu Palette", from web article *Corpus of Egyptian Late Predynastic Palettes*, accessed 8 June 2007

<sup>11</sup> S. Seidlmayer, "Town and State in the Early Old Kingdom: A View from Elephantine". In J. Spencer, (ed.) Aspects of Early Egypt. London: British Museum Press, 1996, pp.108-127.

brick walls the possibility that the tradition of this monuments might have been much earlier than the reign of Djer.<sup>12</sup>

-The ruined nature of Egyptian temples from the Middle kingdom and rarity of divine temples make it difficult to determine its original shap. Remains of Middle Kingdom divine cult complexes with stone architecture have been found at Tod, Medinet Madi, and Medamud.<sup>13</sup>In Karnak a rectangular mud brick wall encircled the Middle Kingdom temple of Senusret I<sup>14</sup>, and the precinct can be imagined to have extended west at least to the position of the present fourth pylon.<sup>15</sup>The brick size was standardized , 30 by 15 by 7.5 cm during the Middle Kingdom but the size of the middle kingdom walls are still unconfirmed.<sup>16</sup> As for mud brick construction occurred during the reign of Senwosert III Originally, a rather conventional royal cult complex was constructed at Dahshur consisting of a square enclosure with the royal pyramid. An inner stone wall and an outer brick enclosure wall were provided with bastions and recesses.

- From the New Kingdom onwards builders seem to have begun to understand better the forces at work inside very thick masses of brickwork and to have adapted their techniques. The building of large temple enclosure walls was included amongst the pious

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<sup>12</sup>B. Shafer, in: B. Shafer,(ed.), *Temples of Ancient Egypt*, Cornell University press, 1997, p. 32; D. Oconnor, "*New Funerary Enclosures (Talbezirke) of the Early Dynastic Period at Abydos*", JARCE 26(1989), 51-68.

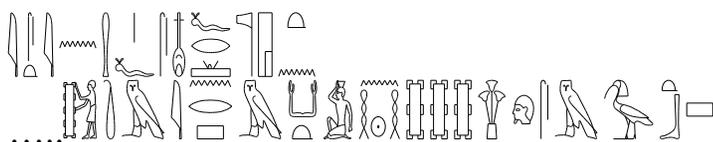
<sup>13</sup> For information on pre-New Kingdom temples and discussions of their significance, see: Kemp, op.cit, pp. 65-83.

<sup>14</sup> Other works initiated by Senusert I: Middle kingdom Court, White Chapel.

<sup>15</sup> Gabolde, Le "grand château d'Amon" de Sésostriis Ier à Karnak: la décoration du temple d'Amon-Ré au Moyen empire. Mémoires de l'Académie des inscriptions et belles-lettres tome 17. Paris,1998; Charloux, Guillaume, Karnak au Moyen Empire, l'enceinte et les fondations des magasins du temple d'Amon-Rê. Cahiers de Karnak XII (2007), pl. IV , pp. 191-225, 809-813. Papyrus Reisner I Records of a building Project in the Reign of Sesostriis I. Boston( Museum of fine Arts).

<sup>16</sup> Graindorge, Catherine "*Der Tempel des Amun-Re von Karnak zu Beginn der 18. Dynastie*" in *Ägyptologische Tempeltagung: Würzburg*, 23.-26. September 1999, vol. 5. Wiesbaden: Harrassowitz Verlag. (2002), pls 1-4.

acts of kings and formally commemorated as such, at least from Eighteenth Dynasty onwards such as this text:



ist in Hm.f snfr Hwt tn.... kd.ti m inr m kAt n nHH inbw HA-tp m Dbt

"Now it was his majesty who beautified this temple .... Built of stone as a work of eternity, the walls around it in brick".<sup>17</sup>



wD Hm.i pd sS Hr Hwt-nTr Tn m mAwt saHa.ti m inr Hd-nfr n rwDt inbw HA-tp.s m Dbt

"my majesty ordered the cord to be stretched over this temple anew, it being built of good white sandstone, the walls around it in brick".<sup>18</sup>

As for karnak enclosures, the original built by Senusert I, modified by Thutmose III, modified by Nectanbo I, Thumose III mentions the destruction and rebuilding of an enclosure wall of the temple of Karnak in a stele The Thutmose III was 6m thick with exterior bastioned spaced every 17m. A recently discovered stela of Ramesses III records his repairs on the wall.<sup>19</sup>

- Mortuary Temple of Ramses III is surrounded by a massive mud brick enclosure, the complex thus had the look of a fortress.<sup>20</sup>

<sup>17</sup> P. Spencer, The Egyptian temple , p. 263; Urk., IV, pp. 1294, 14-1295,4.

<sup>18</sup> P. Spencer, op.cit; Urk., IV, p. 765, 14-16.

<sup>19</sup> Digital Karnak, Enclosures and Gates.

<sup>20</sup> In the Roman period wavy walls were sometimes imitated in stone without any technical need (such as Dendara, Philae, Kalabsha).

Nectanebo I initiated an enormous project of building mudbrick enclosure walls around several temple compounds<sup>21</sup>, often to be finished by Nectanebo II. The Amun temple was enclosed with new massive precinct walls, significantly reorganizing the sacred space. The precinct wall, shaped like a huge trapezoid and standing over 21 meters high, encircled the Amun temple at the first court in the west, the small temple of Ptah in the north, the obelisks of Ramesses II in the east, and the tenth pylon in the south. Extra space was given in the southwest corner to include a temple of Opet<sup>22</sup>. The wall's irregular shape may have been designed to respect the location of important preexisting buildings around the temple, the strange angle of the northern and southern sides of the wall may have corresponded to the orientation of the urban areas around the temple<sup>23</sup>. At Tanis, in the area of the Amun temple, a new wall was built, which was much more substantial than the one made by Psusennes. The temples of Mendes and Tell el-Balamun were likewise protected with large temenos walls.<sup>24</sup> In late temples these walls frequently had alternating concave and convex courses of bricks, so that the top of the wall undulated vertically. This pattern may have been meant to evoke the mythological waters of chaos (wavy wall).<sup>25</sup> There would be many more aspects to be discussed, I can only discuss three main points about the function of this huge mud brick walls around temples :

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<sup>21</sup> The discovery of stamped bricks can often be extremely useful for dating a structure.

<sup>22</sup> D. Arnold, *Temples of the last pharaohs*. New York: Oxford University Press, 1999, pp. 115-118.

<sup>23</sup> Carlotti, Jean-François, *L'Akh-menou de Thoutmosis III à Karnak : étude architecturale*. Paris: Recherche sur les civilisations, 2001, pl. 1.

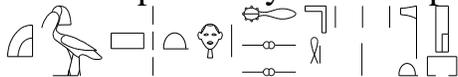
<sup>24</sup> C. Zivie-Coche, *Late period Temples*, in Willeke Wendrich, *UCLA Encyclopedia of Egyptology*, Los Angeles. <http://digital12.library.ucla.edu/viewItem.do/ark=21198/zz000s3mkp,Version !, May 2008, p.9>.

<sup>25</sup> D. Arnold, *op.cit*, p. 256; J. Golvin, "*Essay d'explication des murs à assis courbes*", in: *Comptes rendues de L'Académie des Inscriptions* 58, 1990, pp. 905-946

### Firstly: Archaism

the possible relationship of the site of the enclosures with the early temple of Khentyamentyw and, possibly, with the Early Dynastic **settlement** of Abydos.<sup>26</sup>

In the frequent scene the king moulded the first mud brick shoveled sand into the trench<sup>27</sup>, brick making tools and other foundation offerings at the same hole The title foundation ritual is accompanied by the inscription:



sxt Dbt Hr Xsy Knbt Hwt -nTr

"Making bricks at the four corners of the temple"<sup>28</sup>

Another texts implies that the order of the temple was established in antiquity by Imhotep.



Hw.n.f HA-tp.sn m inb pn r ifdw 4 nn pXr-n ifdw 4 mi nty-r  
Sfdw n sSm Hmt-nTr ir n Hry-tp Hry-Hb ii-m-Htp wr sA pth

He (King Ptolmy IX) protected around them with this wall on four sides going around the four sides according to the book of the planning of the Temple which was made by the chief lector priest, Imhotep, the great, son of Ptah.<sup>29</sup>

<sup>26</sup> Cf.B.Kemp, in: *MDAIK* 23, 1968; id., in: *Antiquity* 51, 1977; O' Oconnor, *The Status of Early Egyptian Temples*, pp. 85-86.

<sup>27</sup> To establish purity and to form a boundary between the mud bricks and the ground water.

<sup>28</sup> Spencer, op.cit, p. 5.

<sup>29</sup> PM, VI, 165(324-326); Colin, M.-E. (2003): The Bark Sanctuary Project: Further Investigation of a Key Structure in The Egyptian Temple, in: Z. Hawass (eds.) in collaboration with L. P. Brock *Egyptology at The Dawn of the Twenty-First Century: Proceedings of the Eighth International Congress of Egyptologists*, Vol. II, Cairo: American University in Cairo, Press, p. 182.

These previous examples and more<sup>30</sup> imply that the ancient Egyptians might have followed certain books while building the temples. Copies from the book of the temple are found in Upper Egypt. Besides, the plans of the temples that resemble the description mentioned in the Book of the Temple<sup>31</sup> such as Edfu, Dendera, and Kom Ombo. Reymond suggests that the book mentioned in Papyrus Vindob has a Memphite origin. Additionally, pointed to the possibility that such a document with a great importance could not be formulated in a provincial town<sup>32</sup>, for example the temple of Edfu was built using measurements of the mythological texts whose origin is difficult to establish and that those texts were derived later from the real measurements of the temple in order to create a suitable ancestor for it.<sup>33</sup> B. J. Kemp sees that these measurements could either be used for much earlier temples or were a symbolic number game created by the priests.<sup>34</sup>

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<sup>30</sup> Other texts from the temple of Dandera ascribes the plan of the temple to the reign of king Pepi I; S. Cauville, Dendara V-VI. Traduction: Les cryptes du temple d'Hathor, Vol. I, OLA 131, Leuven- Paris: Uitgeverij Peeters, , 2004, p. 426-463; to king Khufu; op.cit, pp. 480-881.

<sup>31</sup> The book of the temple dated back to the Roman Period, seems to have been considered as a general guide book to build a temple for any god, but it seems to give the headlines but not in details. J. Quack has been working on a project to collect and study all the different copies (most important kept in the library of Suchas temple at Fayum). J. Quack, Die Überlieferungsstruktur des Buches vom Tempel, in: S. Lippert, M. Schentuleit (Hg.), Tebtynis und Soknopaiou Nesos. Leben im römischen Fayum, Wiesbaden 2005, pp. 105-115.

<sup>32</sup> E., Reymond, The Mythical Origin of the Egyptian Temple, Manchester: Manchester University Press and New York: Barnes & Noble, 1969, pp. 318-319.

<sup>33</sup> C. Rossi, Architecture and mathematics in ancient Egypt, Cambridge: Cambridge University Press, 2003, p. 166.

<sup>34</sup> B. Kemp, Ancient Egypt anatomy of a civilization, London, Routledge, 1989, p. 101; Finnestadt, R. Temple of the Ptolemaic and Roman Periods: Ancient Traditions in New Contexts, in Temples of ancient Egypt, ed. B. E. Shafer, Ithaca & New York: Cornell University Press, 1997, p. 196; Rossi, C. Architecture and mathematics in ancient Egypt, Cambridge: Cambridge University Press, 2003; J. Quack, "Der historische Abschnitt des Buches vom Tempel", in: J. Assmann, E. Blumenthal, Literatur und Politik im pharaonischen und ptolemäischen Ägypten, BdE 127, Kairo, 1999, pp. 267-278.

## Secondly : Practical purpose

- The names of the Mansions of Millions of Years and other temples of the New Kingdom are occasionally written within the picture of a fortified enclosure, certainly with intension of stressing their continuity with the ancient fortresses of the gods.<sup>35</sup> Most non- ceremonial building in temple complexes remained brick-built throughout new kingdom and late period, it is important to distinction between the stone temple building proper and the brick building in the enclosure around it .

Most of the populace was excluded from direct participation in ceremonies and forbidden to enter a temple's most sacred areas. The mud brick wall provides a sacred space to the commoners access to be near even from outer stone walls of the temple. Within the enclosure wall, three zones of increasing sacredness were defined. From the perimeter inward extended a large open courtyard, the area of tertiary sacredness. Therein were located priests, quarters, small shrines, gardens, workplaces, and a pond for ritual lustrations, could go through a door or gateway(Karnak has 11 gateways) into the zone of secondary sacredness, the open-air court's within the walls of the temple. proper; on some ritual occasions, at least during the New Kingdom, representative commoners were admitted as well.<sup>36</sup> by the side doors the commoners *rekhyet* (the king's subject) access to the temple's shrines in this sacred area.<sup>37</sup> An inscription from the fore court of the temple of Khnum at Elephantine states: "He (Amenhotep II) made this for his father Khnum, who dwells Elephantine. He

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<sup>35</sup> B. Kemp, "fortified towns in Nubia. In *Man*" in: P.J. Ucko, R. Tringham and D.W. Dimbleby(eds.) , Settlement and Urbanism, London , 1972, pp. 651-6.

<sup>36</sup> P. Peter, "*Veils, votives, and marginalia: the use of sacred space at Karnak and Luxo*". In: P. Dorman, and B. Bryan(eds.).Sacred space and sacred function in ancient Thebes, Studies in ancient Oriental civilization 61, Chicago: Oriental Institue of the University of Chicago, 2007, pp. 51-83; E. Teeter, "Popular Worship in Ancient Egypt". *KMT* 4 (2), Summer 1993, pp.28-33; Shafer,op.cit. p.5.

<sup>37</sup> The occurrence of the *rekhyet* formula " all lands and all countries are at the feet of this perfect god(the king)whom all the gods love and all the *rekhyet* adore"; K. Griffin , Links between doorways and the *Rekhyt* in ancient Egypt, 105.

made a festivals hall in order that all the rekhyt people may see that which he makes for him"<sup>38</sup>

At times populace related messages to priests to deliver to the temple deity; at other times they expressed their piety in the parts of the temple that they could access. Courts, doorways, and hypostyle halls might have spaces designated for public prayer. Sometimes people directed their appeals to the royal colossi, which were believed to act as divine intermediaries.<sup>39</sup> More private areas for devotion were located at the building's outer wall, where large niches served as "chapels of the hearing ear" for individuals to speak to the god "Ramesses who hears the prayers".<sup>40</sup>

- To easily enlarge the temple by expanding a divine cult complex, a king resolved the tension creatively, transcending old limits and establishing new ones, for example a rectangular mud brick wall encircled the middle kingdom temple of Senusert I removed and replaced by a high wall and gate with a double columned portico in the early 18<sup>th</sup> Dynasty.<sup>41</sup>

- The space between the mud brick walls and the stone one play an important role in administrative and economical life in ancient Egypt. This similarity is reflected in the Egyptian term

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<sup>38</sup>id, The Rekhyt Bird, in: Ancient Egypt, vol.7 no.2 Issue 38, October, 2006, p. 48.

<sup>39</sup> Dunand, Françoise; Christiane Zivie-Coche *Gods and Men in Egypt: 3000 BCE to 395 CE*. Translated by David Lorton, (2005) [2002], Cornell University Press, pp. 112-113.

<sup>40</sup> L. Bell, "Divine kingship and the Theology of the Obelisk cult in the temples of Thebes" in: *Ägyptologische : Würzburg, 23-26-September 1999*, vol.5, 2002, p. 17; To this should be added the rooms identified by C. Traunecker, "Le Château de 'Or' de Thoutmosis III et les magasins nord du temple d' Amon", *CRIPEL* 11(1989), 109-110; P., Prand, "Votives and Marginalia: the use of sacred space at Karnak and Luxor", in: P. Dorman, and B. Bryan(eds.), *Sacred space and sacred function in ancient Thebes*, Studies in ancient Oriental civilization, 2007, pp. 60-61.

<sup>41</sup> G. Catherine , "Der Tempel des Amun-Re von Karnak zu Beginn der 18.Dynastie". In: Horst Beinlich (ed.), *Ägyptologische Tempeltagung: Würzburg, 23.-26. September 1999*, Vol. 5, ed. Ägypten und Altes Testament 33 Wiesbaden: Harrassowitz Verlag, 2002, pp. 83-90.

for the temple lands and their administration, *pr*, meaning "house" or "estate".<sup>42</sup>

### **Thirdly: The enclosure looks to an element of the temple mythology :**

- The ancient Egyptian considered mud bricks as a sacred item where special bricks served as directional markers for building plans or religious artifacts. And the bricks were a symbol of birth Meskhenet was the goddess of childbirth and the creator of each child's ka she was sometimes depicted as a brick with a woman's head <sup>43</sup> In ancient Egypt women delivered babies while squatting on a pair of bricks known as birth bricks.<sup>44</sup> Temples with their rectangular sacred area was separated from the surrounding secular space by outer mud brick enclosure wall, they were seen symbolically as boundary providing essential protection against the forces of disorder, temples were fortresses against chaos.

- Each temple was thought to stand upon the primeval mound of creation, newly emerged from the waters of Nun and the undulations of the wall convey the watery environment<sup>45</sup> such as karnak enclosure, and Deir el-Medina<sup>46</sup>, and in relatively late temples, the mud bricks of enclosure walls, shaped and molded

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<sup>42</sup> Spencer, P., op.cit, p. 17; J.Janssen, "The Role of the Temple in the Egyptian Economy During the New Kingdom." In: E. Lipiński(ed.), State and Temple Economy in the Ancient Near East, vol. 2,1979, pp. 505–15.

<sup>43</sup> R.Wilkinson, The complete gods and goddesses of ancient Egypt. London: Thames & Hudson,2003, pp. 152–153.

<sup>44</sup> A. Roth, C. Roehrig, Magical Bricks and the Bricks of Birth, JEA 88,2002, pp. 121-39.

<sup>45</sup> Spencer, A.J, "The brick foundations of Late- Period peripteral temples and their mythological origin" In: J. Ruffle, C.A. Gaballa, and K.A. Kitchen(eds.) Orbis Aegyptiorum Speculum: Glimpses of Ancient Egypt, Studies in Honor of H.W. Fairman, Warminster Aris and Phillips, pp. 132-7.

<sup>46</sup> An example at Deir el-Medina preserves battlements and a walkway along the top, and these actually retain the undulations of bedding-planes of the individual sections of the wall and so emphasized that the were integral to its appearance ; Golvin, J.C. and Hegazy, El.,s, Essai d' explication de la forme et des caractérisques générales des grands enceintes de karnak, Cahiers de Karnak, IX: Editions recherché sur les Civilisations, Paris, 1993, pp. 145-60.

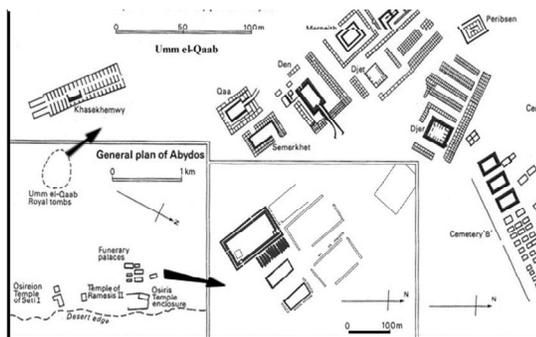
from the formless slime of the Nile, were arranged in wave like courses alternately concave and convex(pan bedding), clearly symbolizing the waters of Nun.<sup>47</sup>

**The results suggested in this study can be summarized as follows:**

I would support those who essentially devote the mud brick enclosures for practical as mud brick were a staple of construction due to their ease of production and architectural versatility , a borders and as a sort of fortification to protect the temple's treasures which the temple behold, where the walls look like the walls of a fortress. And this fortification is not only symbolic because if it was so two rows of bricks were enough. mud brick walls also determine the sacred area around the stone temple even wavy wall(pan bedding) prevent the bricks cracking because it was not a technique of building construction till the end of the New kingdom and the other mythological and archaism purposes we must but it in our consideration.

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<sup>47</sup> Shafer, op.cit, p. 5; see A. Rosalie, Religious at Abydos, Warminster: Aris & Phillips, 1973, p. 3; Frank Teichmann, Der Mensch und sein Tempel: Agypten, Stuttgart,1978, pp. 171, 180; Hornung, Idea, into Image, pp. 118-19.



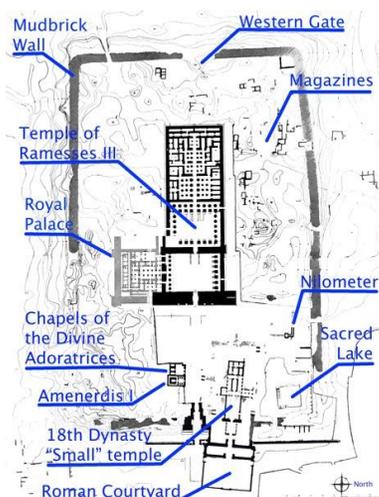
Pl. 1 Abydos enclosures

B. Trigger, in: Trigger, Kemp, O, Connor, Lloyed, Ancient Egypt: S social History, 1983, fig.3.2



Pl.2 -Mud brick enclosure in the temple of Neith  
Detail from the Aha-plaquette

Martin Ziermann, Stadt und Architektur im Alten Ägypten. - von den Anfängen bis zum Beginn des Neuen Reiches (3200 bis 1550 v. Chr.)  
20.8.2001, p.3 on line



Pl. 3 Habu Temple

<http://www.ancient-egypt.co.uk/medinet%20habu/index.htm>