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## **Tell Heboua I (*Tjarw*) – North Sinai**

### **Recent discoveries from the 26<sup>th</sup> Dynasty**

**Elsayed Abd el-Alim**

**Faculty of Archaeology- Ain Shams University, Egypt**

**sayed.abdelalim@arch.asu.edu.eg**

**Abstract:** On the eastern bank of the Suez Canal in northwestern Sinai, at the site of Tell Heboua I near the actual town of el-Qantara East, the excavations have revealed a religious complex of Saite period consisting of *temenos*, temple, ceremonial palace, and a casemate foundation platform. This paper aims to shed new light on the architectural elements that appeared in Tell Heboua I, and prevailed in many contemporary deltaic sites during the 26th Dynasty.

**Keywords:** Tell Heboua – North Sinai – Saite Period – Pelusiac branch.

## **Tell Heboua I (*Tjarw*) – Sinaï du Nord**

### **Nouvelles découvertes de la 26eme dynastie**

**Elsayed Abd el-Alim**

**Faculté d'Archéologie - Université Ain**

**Shamssayed.abdelalim@arch.asu.edu.eg**

**Résumé:** Sur la rive orientale du canal de Suez au nord-ouest du Sinaï, dans le site de Tell Heboua I près de la ville actuelle d'el-Qantara Est, les fouilles ont révélé un complexe religieux de la période saïte composé de *temenos*, d'un temple, d'un palais cérémoniel et d'un soubassement à caissons. Cet article vise à mettre en lumière certains éléments architecturaux découverts dans le site de Tell Heboua I et qui ont prévalu dans de nombreux sites deltaïques contemporains au cours de la 26ème dynastie.

**Mots clés:** Tell Heboua – Sinaï du Nord – Période Saïte – Branche pelusienne.

## Introduction:

The site of Tell Heboua is located at the eastern end of the Nile Delta, on the northern limit of the present administrative province of Ismailia, on the eastern bank of the Suez Canal, approximately 4 km northeast of the town of el-Qantara East. The archaeological zone in fact consists of four sites: Tell Heboua I, II, III and IV. (Fig. 1) The sites of Heboua I and II are the largest of the four sites. It should be noted that the sites of Tell Heboua during the 18<sup>th</sup> dynasty occupied a large area consisting of four main agglomerations, but during the 19<sup>th</sup> dynasty and Saite Period, the occupation concentrated in Tell Heboua I and Tell Heboua II. In the current state of excavations conducted in the four sites, the stratigraphy of Tell Heboua I is much older than the other sites, since it goes back to the Middle Kingdom, the Second Intermediate Period, New Kingdom and the Saite period (26<sup>th</sup> Dynasty). On the other hand, and unlike the site of Tell Heboua I, in the site of Tell Heboua II, the oldest levels that had been reached dated back to the New Kingdom and then the last occupation level goes back to the 26<sup>th</sup> Dynasty.



Fig. 1. Map of North Western Sinai indicating the sites of Tell Heboua [reproduced after Anne Minault-Gout, Nathalie Favry, and Nadia Licitra, *Une résidence royale égyptienne, Tell Abyad à l'époque ramesside*, Paris, 2012, fig. 2].

## Discoveries from the Saite period at Tell Heboua I\*

The Excavations conducted on the site of Tell Heboua I\*\* allowed us to discover the urban architecture of Saite period, well-known along the Nile Valley and especially from contemporary sites of Lower Egypt. Tell Heboua I was investigated and excavated by the Egyptian Antiquities Organization missions from 1984 onwards under the direction of Mohamed Abd el-Maksoud. A massive fortress has been revealed which is dating to the New Kingdom and some installations of the Second Intermediate Period.<sup>1</sup> Since 2004, excavations have focused on the southwestern part of the site; where there remains of a religious complex surrounded by a massive (*temenos*) wall 10 m wide, occupying most of the south-western corner of the city. It includes a large, rectangular temple, oriented east- west, a smaller palace oriented north-south and a casemate foundation platform.(Fig. 2) The excavations also yielded a rich collection of Egyptian and imported pottery (Greek, Cypriot and Levantine), as well as many objects of different materials.<sup>2</sup>

During excavation campaigns in the southwestern part of Tell Heboua I, several structures were excavated, revealing buildings surrounded by a 10 m wide enclosure wall built of mud bricks. Two segments of this wall without bastions, considered to delineate a *temenos*, have been discovered in both southern and western sides. Concerning the southern segment; the excavations have uncovered a wall oriented east-west; its length is 120 m. The wall has a thickness of 10 m, and preserved on a height of 11 courses of mud bricks visible on the eastern part of about 1.35 m deep. No foundation trenches were observed in this southern part. The wall is built of mud bricks of various materials: either a black clay mixed with shells, or a mixture of clay and sand that has a yellow color, the mud bricks are of different sizes (40-43x20-23x10-12cm).

Regarding to the western segment of the *temenos*, immediately after a right angle towards the north, we find the western segment of the enclosure wall; it is oriented north-south, its estimated length is 112 m, its width varies between 8.25 m in the north and 10 m in the south. This western segment of the enclosure is preserved to a height of only 3 courses of mud bricks. It is built of three kinds of bricks: black bricks with considerable quantity of shells, yellow bricks made up of a mixture of clay and a large

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\* The discoveries at the site of Tell Heboua I presented here are the subject of a doctoral thesis defended at Sorbonne University in February 2019 under the direction of Professor Dominique Valbelle.

\*\* In this regard, the author would like to convey his sincere thanks to director of the mission Dr. Mohamed Abd el-Maksoud, former Secretary General of Antiquities, and all the members of the mission as well.

<sup>1</sup> Mohamed Abd el-Maksoud, "Un monument du roi 'Aa-sh-r' Nhsy à Tell Haboua (Sinaï- Nord)", *ASAE* 69 (1983): 3-5; Mohamed Abd el-Maksoud, "Une nouvelle forteresse sur la route d'Horus. Tell Heboua 1986 (Nord- Sinaï)", *CRIPEL* 9 (1987): 13-16; Mohamed Abd el-Maksoud, *Tell Heboua: enquête archéologique sur la fin de la deuxième période intermédiaire et le nouvel empire à l'extrémité orientale du delta*. (Ministère des Affaires Etrangères, Editions Recherche sur les Civilisations, Paris. 1998a); Mohamed Abd el-Maksoud, "Tjarou, porte de l'orient", in *Le Sinaï durant l'antiquité et le moyen âge. 4000 ans d'histoire pour un désert*, eds. D. Valbelle and Ch. Bonnet (Paris, Errance, 1998b): 61-65; Mohamed Abd el-Maksoud and Dominique Valbelle, "Tell Héboua-Tjarou. L'apport de l'épigraphie", *RdÉ* 56 (2005): 1-44.

<sup>2</sup> Elsayed Abd el-Alim, "Tell Heboua I et II. Enquête archéologique sur deux sites de la frontière orientale de l'Égypte à l'époque saïte" (PhD diss., Sorbonne University, 2019).

quantity of sand, and white bricks made up of calcareous sand. These bricks measure (40-42-43 x 20-32 x 10-12 cm).

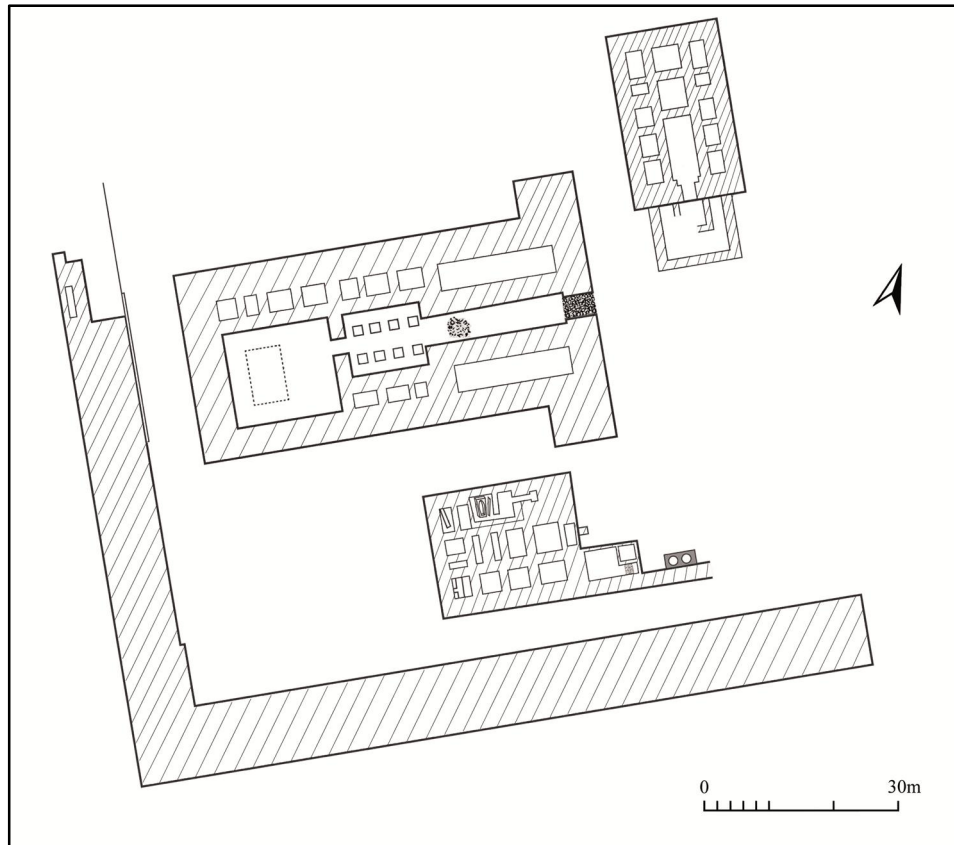


Fig.2. Schematic plan of the constructions of the 26<sup>th</sup> Dynasty located at the southwestern corner of the Tell Heboua I. Enclosure wall (*temenos*)

The enclosure walls were the dominant element of the urban landscape. The discovery of enclosure wall in Tell Heboua I allows us to improve our knowledge about religious architecture in Egypt during the Saite period, particularly in the North Sinai region.<sup>1</sup> In fact, it is difficult to precisely determine the total area of the surrounding walls, due to incomplete status of the enclosures. The size and layout of the mud bricks respect the characteristics of the architecture of the constructions of the Saite period in Egypt.<sup>2</sup> The nature of the site and the architectural features correspond to those observed at other sites in Egypt. The proportions of this *temenos* are similar to those built, especially in the Delta during the 26<sup>th</sup> and 30<sup>th</sup> dynasties.

At Tell Dafana, the perimeter wall was 14.5 m thick and delimited an almost rectangular space of 625 m from north to south and 380 m from east to west. Traditionally, this site has been interpreted as a fortress for the Greek mercenaries

<sup>1</sup> Elsayed Abd el-Alim, "Tell Habua: new discoveries from the Saite period", *Egyptian Archaeology* 56 (Spring 2020): 10-15.

<sup>2</sup> Alan Jeffrey Spencer, *Brick Architecture in Ancient Egypt* (Warminster: Aris & Phillips, 1979a), 92, 108.

mentioned by Herodotus.<sup>1</sup> Indeed, the material discovered inside the enclosure walls such as the armor scales, arrowheads and metal objects, which refer to a military function. However, the architectural characteristics of this masonry and the discovery of an Egyptian temple inside the enclosure, allow us to revise this interpretation and to consider it as a Late Period *temenos*. The comparison with the construction discovered at Naukratis for example and with the other late *temenoi* of the Delta confirms this interpretation.<sup>2</sup>

From the same period, at Tell Nebesheh, the enclosure walls excavated by F. Petrie, with the entrance, which he attributed to the reign of Amasis, presented an irregular quadrangular plan, oriented towards the east, measuring 213 m in the north, 208 m in the south, 177 m in the west and 205 m in the east. The thickness of the enclosure is 9 m for the southern section, 10 to 13 m for the eastern section, 10 to 11 m for the northern section and 10 to 16 for the western section.<sup>3</sup>

According to recent excavations carried out at Tell el-Maskhoutha by an Italian team, it can be seen that the *temenos*, oriented north-south, surrounding a space of about 200 m by 250 m, has a thickness of 13 m, while an internal or crossing wall (*mur de refend*) of 7.5 m thickness, dividing the quadrangular in the northern part.<sup>4</sup> It is noted that mud bricks of the northern enclosure wall have obviously laid in convexo-concave courses.<sup>5</sup>

On the site of Tell el-Balamoun, it is observed that the inner enclosure, which dates from the Saite period, has a north-south orientation, similar to that of Tell Heboua I. It forms a quadrilateral of about 350 m of each side. The thickness of the walls, which is a little greater, varies from 11.80 m to 12.50 m.<sup>6</sup>

In the north of the Delta, the *temenos* of Bouto, has an irregular plan, delimited a space of 220 to 250 m from east to west and 130 to 180 m from south to north. The width of the wall varies between 17 and 25 m.<sup>7</sup>

In the Western Delta at the site of Kom Firin, which is located 10.5 km west of Naukratis, the enclosure walls delimited an area of 480 by 390 m. They do not retain all their thickness, which was at least 5.10 m.<sup>8</sup>

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<sup>1</sup> *The History of Herodotus*, trans. G. C. Macaulay (London, New York: Macmillan and Company, 1904), II: 30.

<sup>2</sup> François Leclère, *Les villes de Basse Égypte au Ier millénaire av. J.-C. analyse archéologique et historique de la topographie urbaine*, BdE 144 (Le Caire: IFAO, 2008), 516-18.

<sup>3</sup> W. M. Flinders Petrie, *Tanis II – Nebesheh (Am) and Defeneh (Tahpanhes)*, (London: Egypt Exploration Society. Excavation Memoirs 4, 1888), 9, pl. 14.

<sup>4</sup> John S. Holladay, *Tell el Maskhuta. Preliminary Report on the Wadi Tumilat Project 1978-1979, Cities of the Delta III*, American Research Center in Egypt Reports, Vol. 6 (Malibu: Udena Press, 1982), 21-22, pls. 37, 50, fig. 13; Edward Naville, *Store-City of Pithom and the Route of the Exodus* (London: Egypt Exploration Society. Excavation Memoirs 1, 1885), 2, 3, 10 (map 2); Jean Clédat, "Notes sur l'isthme de Suez", *BIFAO* 18 (1921), 184- 85.

<sup>5</sup> Personal communication with Giuseppina Capriotti Vittozzi, director of the Italian mission at Tell el-Maskhoutha, whom I thank for this new information. Avril 2018.

<sup>6</sup> Alan Jeffrey Spencer, *The Excavations at Tell el-Balamun (1991-1994)*. (London: British Museum Press, 1996), 26, pl. 1.

<sup>7</sup> M.V. Seton-Williams, "The Tell El-Farâ'in Expedition, 1968", *JEA* 55 (1969): 9.

<sup>8</sup> Neal Spencer, *Kom Firin II, The Urban Fabric and Landscape* (London: British Museum Research, 2014), 159- 61.

At Memphis, on the left bank of the Nile, an enclosure wall surrounded the palace of Apries. It is quadrangular in shape and measures 410 m by 540 m with a thickness of 11 m.<sup>1</sup>

In summary, we therefore observe that the *temenos* of Tell Heboua I corresponds to those of the Delta. We note in fact that the *temenoi* of the Late Period acquire gigantic dimensions. (Table 1) They have technical characteristics including the layout of the brick in pan bedded courses, and the masonry itself needed large quantities of mud bricks.

Sites	length	width	thickness
Tell Heboua I ( <i>Tjarw</i> )	112 m incomplete	120 m incomplete	9 to 11 m
Tell Dafana	625 m	385 m	12 to 14.5 m
Tell Nebesheh/Tell Fara'on	208 m (south) 213 m (north)	177 m (west) 205 m (east)	9 m (south), 10-13 m (east), 10-11 m (north), 9-16 m (west)
Tell el-Maskhouta	250 m	200 m	9.5 m
Tell el-Balamoun	375 m (east) 350 m (west)	360 m (south) 340 m (north)	11.80 to 12.50 m
Tell el-Fara'in (Bouto)	180 m (north) 130 m (south)	220 m (west) 250 m (east)	17 to 25 m
Kom Firin	480 m	390 m	5.10 m
Mit Rahina (Memphis)	540 m	410 m	11 m

Table 1. Dimensions of the *temenoi* of Lower Egypt

<sup>1</sup> W. M. Flinders Petrie, *The Palace of Apries. Memphis II* (London: British School of Archaeology in Egypt and Egyptian Research Account 17, 1909), pl. I; Leclère, *Les villes de Basse Égypte*, 65.

## The Temple:

At the highest point of the site of Tell Heboua I, in the southwestern part of the city and inside the *temenos*, excavations have revealed the remains of a religious complex, which occupies most of the southwest corner of the site. This complex includes a large temple of classical plan built in mud bricks and oriented east-west, another building of more modest size oriented north-south, erected partially on previous constructions dating from the New Kingdom. This complex can be considered as the oldest mud-brick religious complex built in the Sinai Peninsula during the Pharaonic period.

Since 2004, extensive excavations have focused on the southwestern part of the site, revealing a temple, oriented east-west measuring 61.60 m long by 28.20 m wide with an area of 1737 m<sup>2</sup>. Excavations were carried out in front of the temple where the remains of the mud brick pylon were found to the east and west of the temple axis. The main entrance is opened in the pylon, its width is 4.20 m and leading to the central courtyard which was entirely paved with limestone blocks. During the clearing of the pavement of the entrance, we discovered the remains of an octagonal column of limestone that was reused in this floor; this part measures 1 m in height by 28 cm in diameter; it preserves the remains of hieroglyphic inscriptions mentioning the name and epithets of King Ramses II. This undoubtedly confirms that the temple was built over earlier remains dating back to the New Kingdom.

This central corridor extends from east to west over 10.80 m, directly attached to the main entrance following the main axis of the temple, leading to the hypostyle hall. This corridor was paved with limestone blocks, some elements of which were still *in situ* in some parts. Two lateral rectangular rooms measuring 17 m long by 4 m wide, located to the north and to the south of the central courtyard.

The hypostyle hall, located directly behind the central courtyard, is paved with mud bricks of gray color (mixture of clay, lime, sand and shells measuring 24 x 11 x 8 cm). This hall has an almost square shape, 10 m long by 11.60 m wide. There are eight square pits (four on each side) measuring 1.20/1.40 x 1.60/1.80 m and filled with sifted yellow sand, these negatives were intended for column bases, as we found fragments of limestone in these pits. Six lateral rooms surrounding the hypostyle hall from the northern and southern sides, they are of different sizes and obviously intended as annexes for the temple.

A door located to the west of the hypostyle hall of about 2.60 m wide, opens into a large hall, almost square in shape, measuring 15.80 m long by 14.20 m wide. It occupies most of the western part of the temple. This room is bordered, to the north, by a series of four annexes. The excavations have revealed, inside this room, the negative of a rectangular construction measuring 6 m by 8 m, containing numerous fragments and chips of limestone mixed with yellow sand of 20 cm deep. This pit is located in the sanctuary, which seems to belong to a great base of a limestone naos placed almost in the axis of the temple.

In order to study the method of construction of the various walls, to identify the successive levels of archaeological remains prior to the Saite temple and to determine the depth of these occupations down to virgin soil, several sondages were carried out. However, the most important one is executed against the north embrasure of the main

door of the temple, to the right of the entrance; it is measuring 5 m by 1.20 m and 2 m deep, oriented east-west and has five levels as follow: (Fig. 3)

- Level 1 consists of the wall of the north mole of the pylon of the Saite temple, built of mud bricks composed of a mixture of clay and shells; it is kept on two to three brick courses.
- Level 2 is represented by a layer of limestone chips from the remains of the door, its thickness varies between 2 cm and 15 cm.
- Level 3 is formed by a layer of sand that filled the pit about 2 m high, on which the vestiges of the paving of the main entrance remained.
- Level 4 is materialized by a wall prior to the Saite period, built of mud bricks and made from a mixture of clay and shells, preserved on eighteen courses of mud bricks and corresponded to a height of 2 m.
- Level 5 consists of a layer of sand and rare pieces of burnt animal bone.

This test shows several phases of occupation, it is clear that the temple was built on earlier remains, perhaps dated to the New Kingdom.



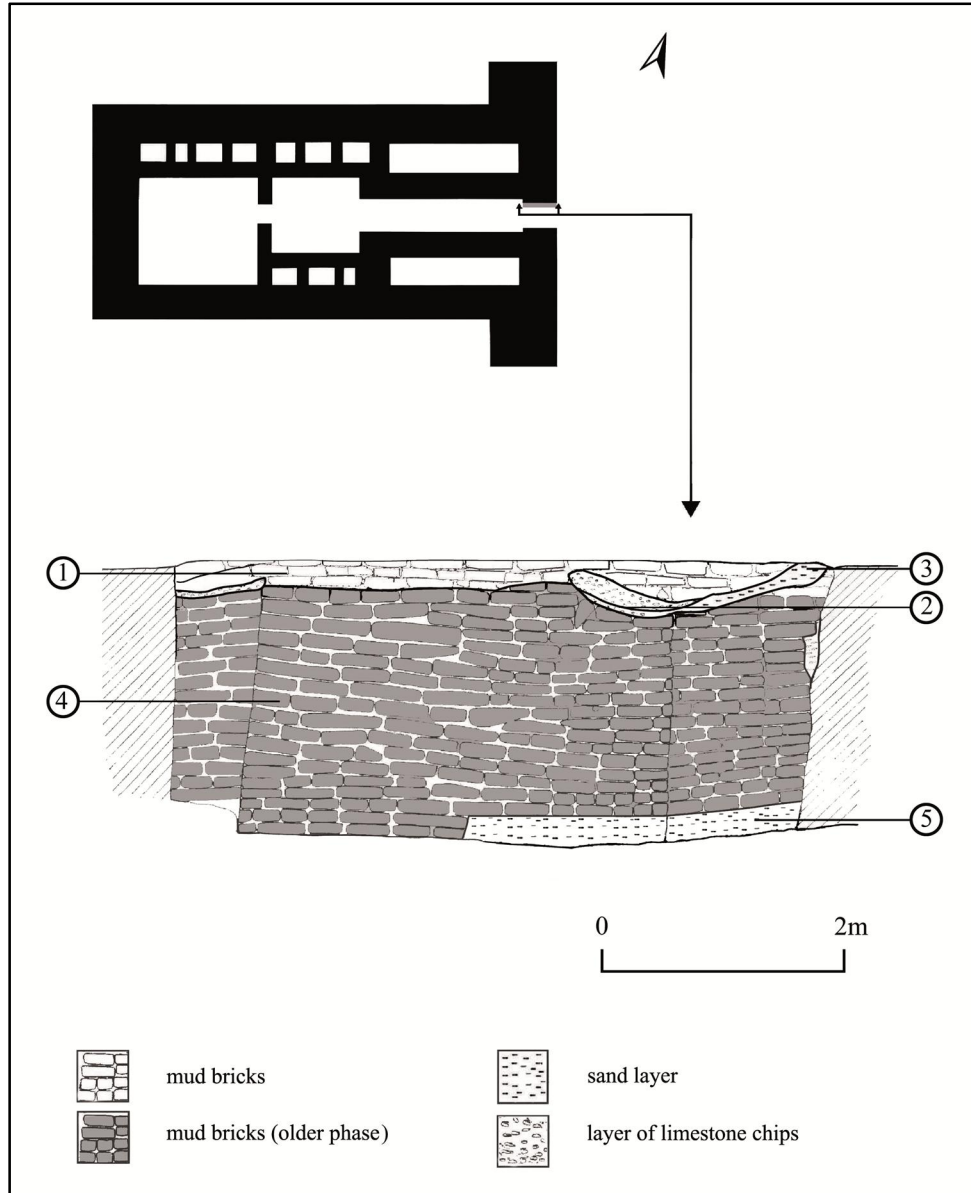


Fig.3. Trial trench carried out in the entrance of the temple indicating the stratigraphy and the older phase of the constructions

The temples formed above all the cultural core and constituted the heart of the agglomerations by their monumental character and their influence on the spatial organization. It seems that this building was replaced, during the Saite period, one or more temples built during the 18<sup>th</sup> Dynasty and during the Ramesside period: in the middle of the facade, many limestone blocks were scattered, among which, some fragments of reliefs; in particular, a fragmentary octagonal column reused in the paving of the main entrance bears the name of King Ramses II. (Fig. 4) This building is the first temple of the Saite period discovered in the Sinai Peninsula. It reflects the interest of the Saite kings for this border town where they had a religious center built. The temple, of classical plan, takes the shape of (T). From an architectural point of view, it resembles

the plans of the temples of the Late Period in certain regions of the Delta, such as the temple C of Tell el-Balamoun<sup>1</sup> and the temples of Khonsu and Horus at Tanis.<sup>2</sup>



Fig.4. Photo and drawing (by the author) of a fragment of an octagonal column of Ramses II found reused in the 26<sup>th</sup> temple floor (Inv. SCA 1126)

The temple had a mixed architecture, brick and stone. The rear part was occupied by a few blocks and flakes of limestone, which may have been part of a naos whose superstructure has disappeared.<sup>3</sup> The stone elements of the masonry have completely disappeared, apart from a few fragments of the limestone paving still in place on the central axis.

The temple of Heboua I undoubtedly occupied an important place in the religious and cultural geography of the region. But to what god was it dedicated? In this regard, we must follow the study conducted by D. Valbelle about the discovery of a cachette at

<sup>1</sup> Spencer, *The Excavations at Tell el-Balamun*, pl. 32 (Temple C).

<sup>2</sup> Philip Brissaud, “Les Fouilles dans le Secteur de la nécropole royal (1984-1986)”, *CahTan* I (1987): 35, fig. 20.

<sup>3</sup> Many temples at this time had hard stone naoi, see: Guenther Roeder, *Naos. Catalogue général des antiquités égyptiennes du Musée du Caire, Nos 70001 – 70050* (Leipzig: Breitkopf & Härtel, 1914).

Tell Heboua I.<sup>1</sup> One can wonder if it could correspond to the temple of Horus of Mesen attested in the epigraphic documentation. It was the main regional cult until the Greco-Roman period, well known in later times in the leontocephalic form.<sup>2</sup> Thus, the Edfu texts mention a '*lion, like Horus slaying his enemies, sacred in the dwelling of Horus of Mesen*' (Edf. I, 334,10) and '*the lion which presides over Tjarw*' (Edf. III, 232.15), the guardian of the eastern border against potential enemies.

This leonine form of the god probably dates back to the Second Intermediate Period, as shown by the discovery of a leontocephalic statue at Tell Heboua I,<sup>3</sup> as well as the particular spelling of *Tjarw* on a stela from the Serabit el-Khadim dating from the reign of Ramses II, which evokes the shape of the walking lion.<sup>4</sup> A limestone slab dating from the co-regency of Thutmose III and Hatshepsut, associating the Horus of *Tjarw* and the Horus of Mesen, confirms the presence of a temple of this god in the New Kingdom.<sup>5</sup>

The general plan of the temple and the general features of its masonry are characteristic of the Saite period, as illustrated by the comparison with that of Tell Dafana where a large mud-brick temple measuring 181 x 76 m was discovered. It consists of three successive courtyards arranged along a central axis. At the northern limit of the third courtyard, the sanctuary must have been located, but the latter has not yet been excavated. Traces of round pits lined with mud bricks in the first and second courtyards may indicate the positions of the bases of the columns, unless they mark the location of tree pits.<sup>6</sup>

A similar plan to that of Tell Heboua I has been identified at Tell el-Balamoun, less than 20 km south of the Mediterranean coast, 5 km west of the current arm of Damietta. The excavation revealed the remains of the foundations of a temple (C) facing north, approximately towards the center of the northern section of the enclosure. The T-shaped temple, measuring 54 m long and 18.50 m wide, was preceded by a massive pylon.<sup>7</sup> Four foundation deposits inscribed with the name of King Psammetichus I discovered at the corners give a precise dating for the temple.<sup>8</sup>

An additional archaeological and topographical situation is attested at Tell Nebesheh, about forty kilometers west of Tell Heboua I, on the north-west bank of the ancient

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<sup>1</sup> Abd el-Maksoud and Valbelle, *Tell Héboua-Tjarou. L'apport de l'épigraphie*, 7.

<sup>2</sup> Adolphe Gutbub, "Remarques sur les dieux du nome tanitique à la Basse-Époque (suite)", *Kémi* 17 (1964): 43; Christiane Zivie-Coche, "Statues et autobiographies de dignitaires. Tanis à l'époque ptolémaïque", in *Tanis, Travaux récents sur le Tell Sîn el-Hagar 3* (Paris: Éd. Cybèle, 2004): 312-14.

<sup>3</sup> Abd el-Maksoud and Valbelle, *Tell Héboua-Tjarou. L'apport de l'épigraphie*, 7, pl. III.

<sup>4</sup> H.D. Schneider, "Gleanings in the Egyptian Collection at Leiden I, Four Stelae", *OMRO* 52 (1971): 8-21, fig. 4, pl. IV, 2; Claire Somaglino, "*Du magasin au poste-frontière dans l'Égypte ancienne: étude lexicographique du vocable*" (PhD diss., Sorbonne University, Paris, 2010): 649.

<sup>5</sup> Dominique Valbelle, Mohamed Abd el-Maksoud, and J.-Y. Carrez-Maratray, "Ce nome qu'on dit tanite", *EtudTrav* 26 (2013): 700-02.

<sup>6</sup> Mohamed Abdel-Maksoud *et al.*, "The Excavation of 2009 at Tell Dafana", in *Tell Dafana Reconsidered: The Archaeology of an Egyptian Frontier Town*. eds. Francois Leclère, Allan Jeffery Spencer *et al.* (London: British Museum Research Publication 199, 2014), 131.

<sup>7</sup> Spencer, *The Excavations at Tell el-Balamun*, 46-50, pl.21.

<sup>8</sup> Spencer, *The Excavations at Tell el-Balamun*, 47-8, 84-7.

Pelusiatic branch of the Nile.<sup>1</sup> On the plan of F. Petrie,<sup>2</sup> there are two religious buildings: the large main temple, dated provisionally from the Ramesside period,<sup>3</sup> rectangular in shape (63.50 m by 28 m), oriented east-west along the main axis of the enclosure. The secondary temple dating to the Saite period, also rectangular in shape (24 m x 14 m), faces south, perpendicular to the main temple.

At Mendes, the foundation wall of the sacred area from the Saite period, rectangular in shape (29.40 m by 36.60 m),<sup>4</sup> contained four monolithic granite naos dating from the reign of Amasis, on the north.<sup>5</sup> Although the general plan of the Temple of Mendes is attributed to successive earlier periods,<sup>6</sup> a room, which seems almost square, was added later by King Amasis, under the 26<sup>th</sup> Dynasty, in order to house the four naos dedicated to the various deities. This room is very similar to the sanctuary of the great temple of Tell Heboua I, which contains a pit that seems to belong to the arrangement of a possibly square monolith, we would thus have the base of a limestone naos placed almost in the axis of the temple.

In the center of the Delta, the temple of Athribis consisted of a large rectangular hall measuring 30 m by 15 m, built of fairly large mud bricks (48 cm x 21 cm x 10 cm), oriented north-south, the façade facing south and the northern rear wall was slightly thicker than the side walls.<sup>7</sup> This arrangement is identical to that of the back (western) wall of the Temple of Tell Heboua I and the northern wall of the Temple of Tell Dafana.

Despite the variations in size, shape and orientation of the main temples of the Saite period in the Deltaic metropolises, it should be noted that the architectural characters of these sanctuaries, their general plans and their positions within the *temenoi*, nevertheless have real similarities. Most temples had massive masonry such as pylons and mud brick side walls of large module. It is also observed that the use of limestone blocks was limited to pavement and columns, in addition to the naos, which was likely to be made of various stones.

### **The Palace:**

A geophysical prospection, carried out in collaboration with the Faculty of Sciences of the University of the Suez Canal, enabled us to detect vestiges buried underground,<sup>8</sup> corresponding to a modest size structure of rectangular shape measuring 26 m by 16,70

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<sup>1</sup> I.A. Mustafa, "Tell Fara'on-Imet", *BCE* 13 (1988): 14-22.

<sup>2</sup> Petrie, *Tanis II*, pl. XIV.

<sup>3</sup> Nicky Nielsen, Valentina Gasperini, and Mandy Mamedow, "Preliminary Report on the First Season of the Tell Nabasha Project, Autumn 2015", *AgLev* 26 (2016): 65.

<sup>4</sup> Donald P. Hansen, "Mendes 1965 and 1966. I. The Excavations at Tell el Rub'a", *JARCE* 6 (1967): 6, pl. 2.

<sup>5</sup> Karen L. Wilson, *Cities of the Delta: Preliminary Report on the 1979 and 1980 Seasons. Mendes* (American Research Center in Egypt Reports: Undena Publications, 1982) 7.

<sup>6</sup> Donald B. Redford, "Report on the 9<sup>th</sup> Season of Excavation at Tell el-Rub'a/Mendes", *ASAE* 75 (1999-2000): 18, fig. 2.

<sup>7</sup> B. Ruszczyc, "Le temple d'Amasis à Tell Atrib", *EtudTrav* 9 (1976): 119-22. No. 2.

<sup>8</sup> H. E. Shendi and Akram. M. Aziz, "Discovery of an ancient pharaoh's temple on the Horus military road, Northern Sinai, Egypt", *Arabian Journal of Geosciences* (Impact Factor: 1.22); 3(3) (2009): 249-55.

m, oriented north-south, like most ceremonial palaces.<sup>1</sup> The building is opened to the south and included three rectangular halls located on the main north-south axis of the building and the last room was probably designed as a throne room, in addition to several rooms of more modest dimensions distributed symmetrically on each side.

In front of the entrance of the building, on the south side, the excavations revealed an esplanade; a construction built in mud bricks, which leans against the facade of the building. These walls delimit two almost square-shaped spaces measuring 8 m by 10 m and 4.5 m by 5.20 m, preceding the main entrance. We observed that this construction, filled with many limestone chips, and rests on a layer of sand, where there was also a fragment of the base of a quartzite column. The walls of the exterior foundations reach 10.50 m by 13.50 m with a thickness varying between 1.70 m and 2.50 m, while the interior space measures 6.20 m by 6.60 m, with a thickness 1.10m. This construction can be interpreted as an esplanade, which still occupies the space located in front of the temple, forming the vestibule or the entrance to the palace, and also extending in the same axis as the palace. One could also restore a colonnade on the exterior wall, due to a column base found there. The interior space might then be occupied by a porch.

It is essential to consider this monarchical structure in itself, but it is also essential to place it in its urban context, in connection with the temple. This type of building is erected according to the strong connection it has with the temple: this is where the monarchical worship is celebrated.<sup>2</sup> It is from there that the king leaves to go to the temple and returns there at the end of the ceremonies.

To compare this palace with other contemporary buildings, the only examples available are that of Apries in Memphis and that of Sais, although they might differ in function. The Palace of Apries in Memphis is built along a central north-south axis, its dimensions were given by F. Petrie, even if more recent works tend to extend its surface.<sup>3</sup> It may have been used as a residential palace rather than a ceremonial or administrative palace. With regard to the palace of Sais, no archaeological remains have been discovered. It can therefore only be reconstructed from the writings of ancient authors and the descriptions left by travelers and scholars who visited the site between the end of the 18<sup>th</sup> century and the beginning of the 20<sup>th</sup> century.<sup>4</sup> The first description of the city of Sais is that of the Greek writer and traveler Herodotus who spoke of a large and marvelous royal palace.<sup>5</sup> However, the interpretation of this construction as a real palace is not conclusively proven. The plan of G. Wilkinson proposes to see there rather remains in mud bricks guarded by two towers, he also reports traces of fire on the

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<sup>1</sup> Charles Bonnet, "Palais et Temple dans la Topographie urbaine, les exemples du Bassin de Kerma", *RdE* 45 (1994): 47.

<sup>2</sup> László Török, *The Kingdom of Kush, Handbook of the Napatan-Meroitic Civilization*, (Leiden: Brill, 1997), 518.

<sup>3</sup> B. Kemp's general plan appeared to be larger than Petrie's, and the palace extended to the south side. See: Barry J. Kemp, "The Palace of Apries at Memphis", *MDAIK* 33 (1977): fig. 1.

<sup>4</sup> Jean-François Champollion, *Lettres écrites d'Égypte et de Nubie en 1828 et 1829* (Paris, 1833), 49-53; John Gardner Wilkinson, *Modern Egypt and Thebes I* (London: Cambridge University Press, 1843), 183-87.

<sup>5</sup> Macaulay, *The History of Herodotus*, II: 129-130 and 163; François Leclère "La ville de Saïs à la Basse Époque", *Égypte* 28 (2003): 26; Penelope Wilson, *The Survey of Saïs (Sa el-Hagar) 1997-2002*, (London: Egypt Exploration Society. Excavation Memoir 77, 2006), 35-9.

eastern mound.<sup>1</sup> He wonders about the identification of these remains as those of a palace: '*perhaps on the site of the palace*'.<sup>2</sup>

Deprived of comparable examples from the same period, we must therefore refer to the ceremonial palaces of the New Kingdom. These are also oriented along a north-south axis and, in most cases, they are placed perpendicular to the main temple.<sup>3</sup> The same spatial relationship of palace and temple can be seen in the millions of years complex of Ramses II at the Ramesseum and Ramses III at Medinet Habu. In both cases, there was a small ceremonial palace next to the first courtyard.<sup>4</sup> In the Eastern Delta, at the site of Per-Ramses, the magnetic prospection revealed a palatial complex.<sup>5</sup> It extends over 300-400 m from west to east and 150-200 m from north to south.<sup>6</sup> This complex included a palace that seems to have had its main access on the southern side.<sup>7</sup> Similarly, the ceremonial palace of Merenptah in Memphis,<sup>8</sup> measuring 110 m by 30 m, oriented south-north, is composed of a succession of courtyards and halls with columns leading to the throne room.<sup>9</sup>

To the south-east, a few hundred meters away, at the site of Tell Heboua II, we discovered a religious and palatial complex of two phases from the New Kingdom, which testifies to a new development of the city on a larger scale during this period. It is oriented east-west and consists of several successive columned halls with rooms arranged around.<sup>10</sup>

If we compare the palaces of the New Kingdom (that of Merenptah at Memphis, that of Ramses II at Per-Ramses and that of Ramses II at Tell Heboua II), they all seem to present plans similar to that of the ceremonial palace of the Saite period of Tell Heboua I, despite the difference in size and period. The presence of a Ramesside palace at Tell

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<sup>1</sup> Leclère, *La ville de Saïs à la Basse Époque*, 18, fig. 5.

<sup>2</sup> Wilson, *The Survey of Saïs*, 58.

<sup>3</sup> David O'Connor, "City and Palace in New Kingdom Egypt", *CRIPEL* 11 (1989): figs.1, 2 and 4.

<sup>4</sup> John Baines, "Palaces and Temples of Ancient Egypt", in *Civilizations of the ancient Near East*, I ed. Jack M. Sasson, (New York: Charles Scribner's Sons, 1995), 309.

<sup>5</sup> Edgar Pusch, "Piramesse", in *The Oxford Encyclopedia of Ancient Egypt*, Vol. 3, ed. Donald B. Redford. (Oxford: Oxford University Press, 2001), 48-50.

<sup>6</sup> Edgar Pusch, "Vorbericht über die Abschlusskampagne am Grabungsplatz Q IV 1997", *AgLev* 9 (1999): 21, fig. 2; Josef Dorner, "Die Topographie von Piramesse- Vorbericht", *AgLev* 9 (1999): 79, plan. 2.

<sup>7</sup> Manfred Bietak and Irene Forstner-Müller, "The Topography of New Kingdom Avaris and Per-Rameses", in *Ramesside Studies in Honour of K.A. Kitchen*, ed. M. Collier and S. Snape (Bolton: Rutherford Press Ltd, 2011), 42.

<sup>8</sup> Rainer Stadelmann, "Tempelpalast und Erscheinungsfenster in den Thebanischen Totentempeln", *MDAIK* 29 (1973): 235, n. 81.

<sup>9</sup> Bertha Porter, Rosalind Moss, Ethel W. Burney, and Jaromír Málek, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings*. (Oxford: Griffith Institute, Clarendon Press, 1927-1952) vol. III/2, 856; David O'Connor, "Mirror of Cosmos: The Palace of Meremptah", in *Fragments of a Shattered Visage*, ed. Edward Bleiberg and Rita E. Freed. (Memphis: Memphis State University, 1991), 178, fig. 1; Hourig Sourouzian, *Les Monuments du Roi Mérenptah*. (Mayence: Philipp von Zabern, 1989), 37-9.

<sup>10</sup> Mohamed Abd el-Maksoud and Elsayed Abd el-Alim, "Les magasins royaux récemment découverts à Tell Heboua II – le khétem de Tjarou", in *Tell el-Herr. Varia I, NeHet* 7 (2023): 1-41. (Forthcoming).

Heboua II during the New Kingdom justifies the reconstruction of a palace with the same functions at Tell Heboua I by the Saite rulers.

These palaces played a major role in the daily worship of the king, they were the place of the monarchical celebrations, with the throne replacing the naos of the deity. Thus, we can see that the Saite kings followed the architectural and ritual practices of the palaces of the New Kingdom, in terms of spatial organization inside the city and perpendicularity with respect to the main temple.

### **Casemate foundation platform:**

One of the most interesting and intriguing buildings of the Late Period which is called casemate building that had been introduced in many ancient sites during the Late Period, particularly in the Lower Egypt. The term “casemate” comes from storage cells or dungeons existed in the Medieval European castles. In Egypt, casemate construction was used for the cellular mud bricks foundation platforms.<sup>1</sup>

Inside the southwest corner of the *temenos* and south of the temple, the foundations of an almost square-shaped building cover an area of 20.20 m by 18.70 m. It is oriented east-west and its axis is parallel to the temple. This building is built of mud bricks measuring (42/40 x 20 x 10 cm) of brown color, and composed of a mixture of clay and sand with a small amount of shells. The preserved remains are reduced to the levelled surface of a basement consisting of a network of outer thick walls measuring 1.80 m to the east, 2.40 m to the west, 2.30 m to the north and 3 m to the south. These walls delimit rectangular and square rooms of various dimensions in an almost symmetrical way, as well as annexes intended for bread ovens that testify to its exploitation for the preparation of offerings. The outer walls have concave courses with a clear dip from the center to the raised corners. We could therefore deduce that these foundations were built in curved courses (pan bedded courses) and rest on a thin layer of sand surrounding the whole building. As for the entrance, it is situated in the center of the eastern wall of the building. During the 2015 excavations, we noted the remains of a ramp attached to the eastern side and extending eastward, but unfortunately, it was much damaged. We also note that some annexes are located to the east of the building. They consist of a room, a courtyard and two ovens. These annexes and the workshop equipped with ovens occupy the same level as the building and follow the same orientation.

Stairwell: Located to the north of entrance vestibule and occupies the northeastern corner of the building whose massive mud bricks still in the floor. It is obvious that it was leading to the upper storeys.

Burial vault and its sarcophagus (Fig. 5): It is probably after the partial abandonment of the building that a large burial vault and its antechamber are dug in the foundations of the building. They occupy the location of a former room of the building, a particularly important room to the north, next to the staircase at the north-east corner. This monumental tomb has a narrow entrance on the eastern side (70cm wide), its stone threshold overflowing the pavement of the antechamber of 3.60m long by 1.70m width. The bricks of the floor of the antechamber rest on a layer of sand. It was in the south-

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<sup>1</sup> Elsayed Abd el-Alim, “the Casemate Foundation Platform of Tell Heboua I, North Sinai”, in *The Delta Survey Workshop: proceedings from Conferences Held in Alexandria (2017) and Mansoura (2019)*, eds. A. Wahby and P. Wilson. (Oxford: Archaeopress Publishing Ltd, 2022), 165-174.

west corner of this room that an access door to the vault was to be found. A slab of limestone belonging to the door that was still existing. A room was dedicated for the sarcophagus, it is 3.70m long by 2.70m wide, and it is like the antechamber, carefully paved with mud bricks. The monolithic limestone sarcophagus was discovered looted, the skeleton disappeared and the flat lid was reversed. The tomb measures 2.32m by 1.17m, while the inferior cavity is 1.94m by 70cm. A monolithic sarcophagus of the same character was found in the center of the site of Tell Heboua I more than twenty years; it was deposited in a layer of sand without any superstructure.<sup>1</sup>



Fig.5. Burial vault and its and its limestone sarcophagus, cut into the northern section of the casemate platform (photo taken by the author)

The annexes: To the east of the building, the excavation allowed us to clear some elements close to its access; these are annexes intended for the service of the building, probably for the preparation of offerings (bread, meat or beer). In the southeastern corner, outside the building, we have uncovered an extension of the southern wall. This segment consists of two adjacent walls; one outside is measuring 1.40m thick, while the outer wall is about 1.10m. In the space constituted by this extension and the facade of the building, we found a rectangular shaped building or a small courtyard measuring 7.75m long by 4.50m wide. This complex has at its northeastern corner a small room of square plan measuring 2.20m. To the south of this small room is a large slab of limestone of 1.70m by 1.50m. This slab could have been used as a slaughterhouse for cutting meat. East of the courtyard. We have also cleared two ceramic ovens, embedded in a massive mud brick. These two ovens must have served for the needs of building

<sup>1</sup> Abd el-Maksoud, *Tell Heboua*, 93.



and they were certainly used to produce bread. The large slab of limestone should have been used by butchers in order to prepare the meat. These elements are indicative of the economic vocation of the building, which allows us to interpret it as a place of preparation, consecration and storage offerings. This was to be an essential aspect of the operation of the casemate building for the offerings, which is well attested for a *chenâ-ouâb* or pure stores.

**Function of the building:** With regard to the function of this type of building, the interpretation is controversial and has been the subject of various explanations; for E. Naville, it could only be stores, mentioned in the Bible, built by the Hebrews at Pithom.<sup>1</sup> But the idea of grain silos had already been rejected by A. Gardiner<sup>2</sup> and TE Peet who think that the storehouses he discovered are probably only the foundations of a construction similar to those found in Naukratis and Dafana.<sup>3</sup> F. Petrie proposed a military interpretation of these buildings because of the massive buildings of Naukratis<sup>4</sup> and Dafana,<sup>5</sup> and their height and their access ramps as well. However, this idea was refuted by F.W. von Bissing in the absence of evidence on the presence of soldiers. He saw Naukratis as a storage complex or treasure associated with a temple, a more reasonable hypothesis.<sup>6</sup>

Other studies have made it possible to better understand the function of these buildings, in particular that of Cl. Traunecker.<sup>7</sup> In fact, the inscriptions of the doorjambs on Psamtik building at Karnak define the building as a place of preparation, consecration and storage of the offerings necessary for the divine cults: *chena ouâb*, "pure store",<sup>8</sup> or "peripteral temples".<sup>9</sup> Of course, it seems clear to us that this analysis is the most reasonable and acceptable for the function of this construction. It is also the opinion of J. Yoyotte<sup>10</sup> and B. Muhs<sup>11</sup> who classify the casemate buildings among the buildings to be interpreted as places of preparation, consecration and storage of the ritual offerings.<sup>12</sup> It is necessary to consider the edifice of Tell Heboua I as another example of these pure stores according the new architectural and archaeological results obtained. This may explain the presence of soft sand around the building, which accentuated the pure appearance of the building.

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<sup>1</sup> Naville, *Store-City of Pithom*, 10.

<sup>2</sup> Alan H. Gardiner, "The Geography of the Exodus: An Answer to professor Naville and Others", *JEA* 10 (1924): 96.

<sup>3</sup> Thomas Eric Peet, *Egypt and the Old Testament*. (Liverpool: University Press of Liverpool, Hodder & Soughton, 1922), 86.

<sup>4</sup> W. M. Flinders Petrie, *Naukratis I*, (London: Egypt Exploration Society. Excavation Memoirs 3, 1886), 8.

<sup>5</sup> Petrie, *Tanis II*, 53-4.

<sup>6</sup> F. W. von Bissing, "Naukratis", *BSRAA* 39 (1951): 59.

<sup>7</sup> Claude Traunecker, "Les "temples hauts" de Basse Epoque. Un aspect du fonctionnement économique des temples", *RdE* 38 (1987): 147-62.

<sup>8</sup> Traunecker, *Les temples hauts*, 149.

<sup>9</sup> Alan Jeffrey Spencer, "The brick foundations of Late Period peripteral temples and their mythological origin" in *Glimpses of Ancient Egypt. Studies in Honour of H.W. Fairman*. eds. J. Ruffle, G. Gaballa and K. Kitchen (Warminster: Aris & Philips, 1979b), 132-37.

<sup>10</sup> Jean Yoyotte, "Les Contacts entre Egypte et Grecs (VIIe-IIe Siècles avant J.-C): Naukratis, ville égyptienne", *ACF* (1994-1995): 681.

<sup>11</sup> Brian Muhs, "The Great Temenos of Naukratis", *JARCE* 31(1994): 112.

<sup>12</sup> Leclère, *Les villes de Basse Égypte*, 137.

Thus, we can say with certainty that this type of buildings has been attested in the region of North Sinai at Tell Heboua I, and has been dated to the twenty sixth dynasty according to the material and pottery discovered in it.

### **Casemate foundation platform of the first millennium (Figs. 6 and 7)**

In the middle of the seventh century B.C., several types of these buildings appear in particular in the Delta; at Tanis,<sup>1</sup> Tell el-Balamoun,<sup>2</sup> Naukratis<sup>3</sup> and Dafana<sup>4</sup>; some contemporary examples of this category also exist in Upper Egypt.

The closest comparable example to the building of Tell Heboua I is that of Tell Dafana where there are two casemate buildings; the largest one has 43 m of each side,<sup>5</sup> but it is the small one that interests us since it is about the same size as that of our building of Tell Heboua I. According to Petrie, the small building, located northeast of the main building, measured about 21.50m from east to west and 22.50m from north to south, the mud bricks used in the construction vary between 40-43 x 20-22 x 12-13cm. The outer faces were made in slightly curved foundations, reinforced on several levels by a series of wooden beams installed at regular intervals. The access is on the south side, by a ramp.<sup>6</sup>

Other examples of this type of building are also attested in Lower Egypt: in Tanis in particular, during the last indigenous dynasties and at the beginning of the Ptolemaic period, two casemate buildings had been detected. The largest is a vast rectangular shaped of mud bricks occupying an area of 32m x 50m. The inclined exterior walls are laid in pan bedded courses. The ramp is adjacent to the south wall.<sup>7</sup> While the other building, located to the west of the previous one, is of a modest size with a square plan of about thirty meters. Its rooms are deeply founded. It is also equipped with an access ramp contiguous to the south wall.<sup>8</sup>

At Tell el-Balamoun, in the eastern Delta, in the south-east corner of the *temenos* is occupied by a mud bricks cellular platform covering an area of about 54.15m by 61.10m. It consists of thick exterior walls about 5.50m wide delimiting many rooms distributed symmetrically, without communication between them and filled with, broken bricks and splinters of limestone. The exterior walls have concave walls, characteristic of curved courses constructions. There are some holes in the walls, which

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<sup>1</sup> J.-L. Fougerousse, "L'édifice en Briques Crues", in *Les nouvelles fouilles de Tanis 1929-1932*, ed. Pierre Montet, (Paris: Les Belles lettres, 1933), 76-88; Philip Brissaud, "Rapport sur la campagne d'automne 1995 (XLI<sup>e</sup> campagne)", *BSFFT* 9 (1995): 26.

<sup>2</sup> Spencer, *The Excavations at Tell el-Balamun*, 51-62.

<sup>3</sup> Petrie, *Naukratis*, 24-6 and 32-4.

<sup>4</sup> Petrie, *Tanis II*, 48-61.

<sup>5</sup> Petrie, *Tanis II*, 53.

<sup>6</sup> Francois Leclère and Alan Jeffery Spencer, *Tell Dafana Reconsidered : The Archaeology of an Egyptian Frontier Town* (London: British Museum Research Publication 199, 2014), 15.

<sup>7</sup> Pierre Montet, "Les nouvelles fouilles de Tanis", *CRAIBL* 76 no. 3 (1932): 230-31; Fougerousse, *L'édifice en Briques Crues*, 76-88; Philip Brissaud, "La structure elliptique: un aménagement énigmatique, contemporain des tombes royales", in *Tanis. Travaux Récents sur le Tell Sâh el-Hagar* 2. eds. Philip. Brissaud and C. Zivie-Coche, MFFT 1997-2000, (Paris: Éditions Noësis, 2000), 95, fig. 3.

<sup>8</sup> Pierre Montet, "Les fouilles de Tanis en 1933 et 1934", *Kêmi* 5 (1935-1937): 15; Philip Brissaud, "Tanis", *DossArch* 213 (1996): 68; Brissaud, *La structure elliptique*, 95, fig. 3.

indicate the probable presence of reinforcements of wooden beams. The access is via a ramp extending about 60m long, contiguous to the north-west corner of building.<sup>1</sup>

Another example very similar to that of Tell el-Balamoun is at Naukratis where F. Petrie unearthed a vast square platform, which he called "*The Great Mound*". The building was approximately in the center of the southern half of the *Temenos*.<sup>2</sup> It was still preserved, at the time of Petrie, at a height of 10m. It is composed of forty-one cells, without entry or communication between them.

Similarly, an example of this type of construction was recently excavated at Tell Buweib, about 20km northwest of Tanis. A 33.50m platform has been discovered. It contains twenty-four cells of different shapes and sizes. The outer walls are 4.20m thick and are built in slightly concave bases using large mud bricks (36-38 x 18-19 x 10-12cm).<sup>3</sup> According to the pottery found in this building, J. Spencer dated it between the eighth and seventh centuries B.C.<sup>4</sup>

This type of structure was also attested in the Memphite region since similar constructions were discovered at Abu Rawach. Macramallah revealed square-shaped building, 20m wide; the measurements of mud bricks are (39-44 x 19.5-22 x 10-14cm) which compose the concave layers.<sup>5</sup> Although this construction was dated from the Middle Kingdom, J. Spencer thinks that it could be attributed to the late period, since the dimensions of the bricks were then exceptionally large.<sup>6</sup>

These structures are not limited to the Delta and have also been identified in Upper Egypt. Some buildings of mud brick foundations are attested at Karnak in the precinct of Amon, south of the sacred lake. A rectangular mud bricks construction (55.50m by 45.50m)<sup>7</sup> was constructed at the 26<sup>th</sup> Dynasty and renovated during the reign of Achoris at the 29<sup>th</sup> Dynasty.<sup>8</sup> It has twenty four storage rooms, separated by two main corridors. A ramp led to its west gate.<sup>9</sup> It should be noted that the building housed an open-air construction at its north-east corner, of which a pierced mooring block was perhaps used to attach the slaughtered animals<sup>10</sup>; this reminds us of the same architectural situation in the annex of the platform of Tell Heboua I, which also has a slaughterhouse perhaps revealing the function of this kind of building.

Outside the Nile valley, in the Oasis of Bahariya, one of these buildings was attested at Qasr'Allam, where a cellular foundation platform of the eighth/seventh century B.C., was excavated. The building, which is accessed by a ramp on the west side, measures 40m by 29m.<sup>11</sup>

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<sup>1</sup> Spencer, *The Excavations at Tell el-Balamun*, 51-9.

<sup>2</sup> Petrie, *Naukratis*, 8 and 24-6.

<sup>3</sup> Alan Jeffery Spencer, *The Delta Survey 2009-2015*. (London: Egypt Exploration Society. Excavation Memoir 112, 2016), 16-7.

<sup>4</sup> Spencer, *The Delta Survey*, 24.

<sup>5</sup> M. R. Macramallah, "Une Forteresse du Moyen Empire à Abou-Rawach", *ASAE* 32 (1932): 167-68.

<sup>6</sup> Spencer, *The brick foundations of Late Period*, 107.

<sup>7</sup> Claude Traunecker, "Essai sur l'histoire de la XXIXe dynastie", *BIFAO* 79 (1979): 411 and 426; Traunecker, *Les temples hauts*, fig. 3A.

<sup>8</sup> Traunecker, *Essai sur l'histoire de la XXIXe dynastie*, 423.

<sup>9</sup> Traunecker, *Les temples hauts*, 147-48.

<sup>10</sup> Traunecker, *Les temples hauts*, 148.

<sup>11</sup> Frédéric Colin, "Le «Domaine d'Amon» à Bahariya de la XVIIIe à la XXVIe dynastie: l'apport des fouilles de Qasr 'Allam", in *La XXVIe dynastie. Continuités et Ruptures*. Promenade saïte avec Jean Yoyotte. ed. D. Devauchelle (Paris: Cybèle, 2011), 63.

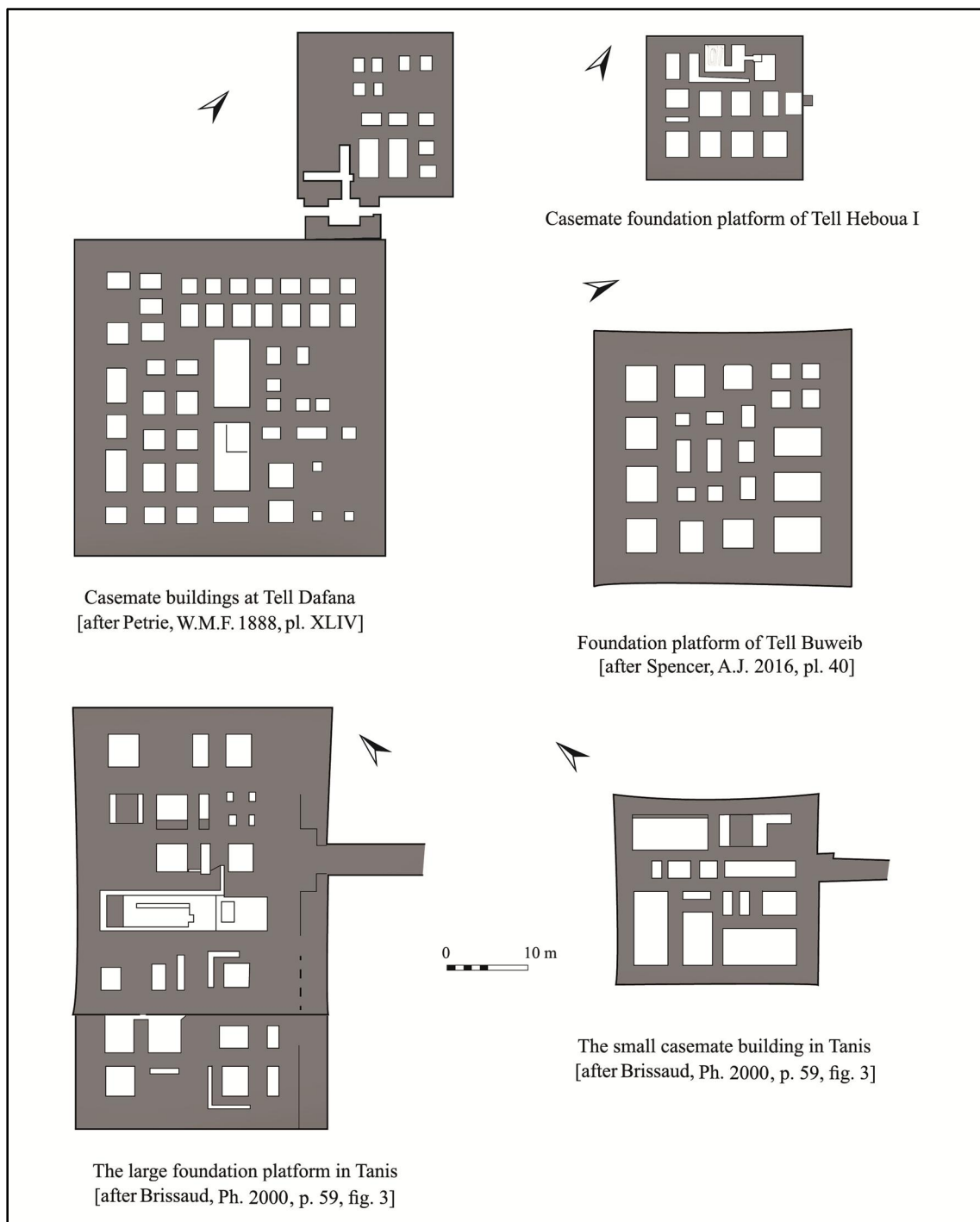


Fig.6. Compared selection of Late Period casemate buildings in Delta (drawing by the author).

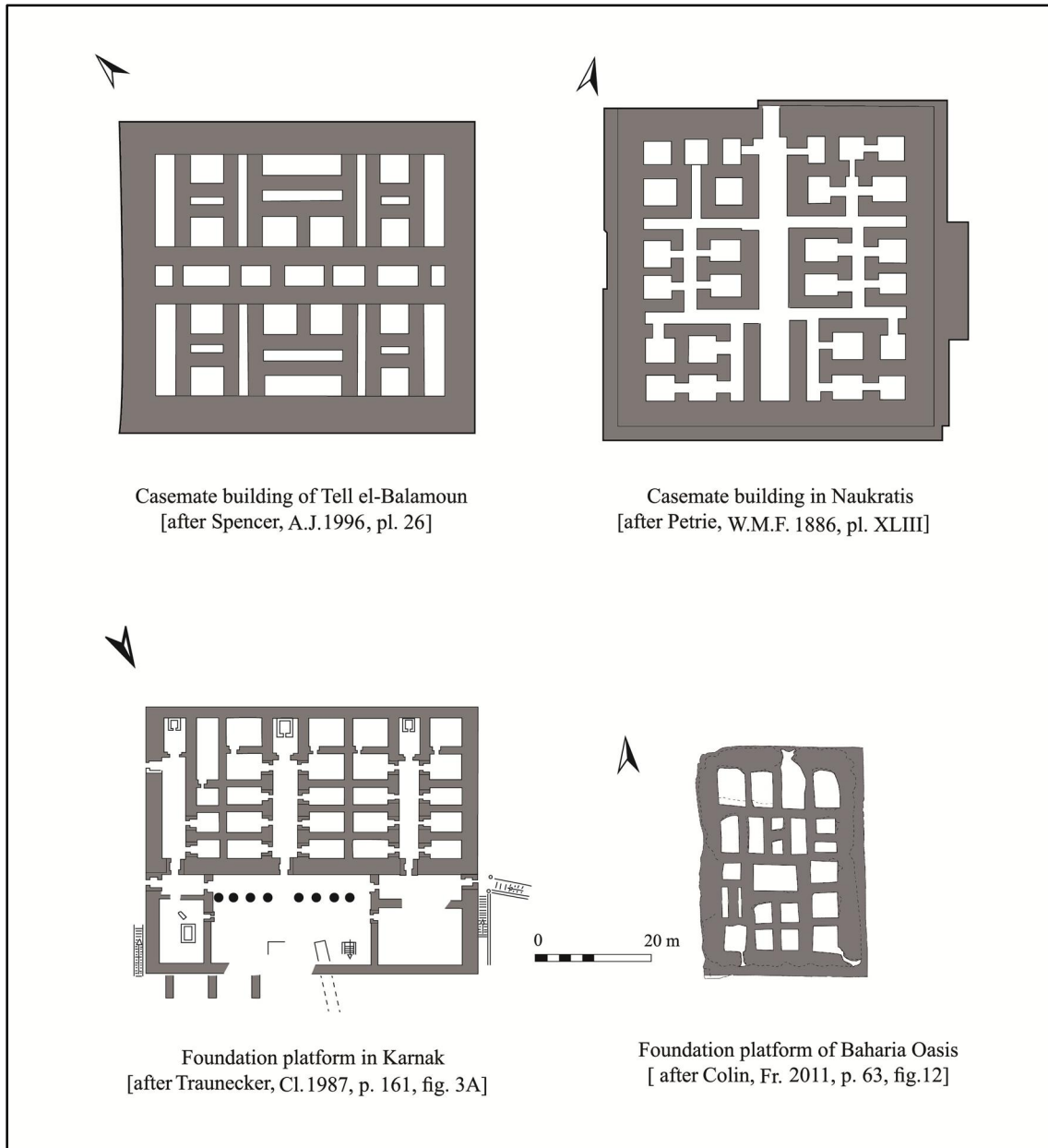


Fig.7. Compared selection of Late Period casemate buildings in Delta, Nile Valley and Oasis (drawing by the author).

## The material culture

Due to its geographical location, North Sinai is a particularly important region for the study of the commercial networks between Egypt, Palestine and the Aegean world in the Late Period. This region offers a continuous land route to western Asia and sea routes to the Greek islands. Indeed, the material culture of late occupation in northern Sinai reflects cultural exchanges between various civilizations in the eastern Mediterranean. The study of the pottery assemblages of Tell Heboua I sheds new light on the material culture at the beginning of the Late Period. It includes significant pottery artefacts that illustrate several types previously studied and provides useful additional data for the Saite period in north-western Sinai. The pottery assemblages collected during the excavations confirm a dating of the occupation phases between the 7th and 5th centuries B.C., with most of the material belonging to the 26<sup>th</sup> Dynasty.

The excavations in different sectors of the site yielded large quantities of local Egyptian pottery of the Saite period. The major types of common alluvial clay ceramics include various kinds of food containers and tableware. There is also coarse ware of domestic and artisanal nature, such as basins, oven lids and three-legged stands. Containers for the transport or storage of various foodstuffs come in the form of large storage jars. Cooking vessels are represented by hemispherical bowls, lids, spherical and cylindrical jars. Tableware, probably for local use, such as plates, dishes, cups and goblets is also attested, as well as some forms for more specific uses, such as censers, torches, miniature vases and pigeon pots. (Fig. 8) Some marl clay vessels were also found, almost all of them small containers, such as pitchers, carinated bowls and flasks. Oases clay has been identified, used in the manufacture of small flasks.

These finds can be compared to those from Saite sites in Upper and Lower Egypt. On the whole, the characteristic material of Tell Heboua I appears markedly homogeneous and allows comparisons with material from other contemporary sites in the Delta, like Tell Dafana, Tell el-Maskhouta, Tell el-Balamun, Naukratis, Buto, Tell el-Kedoua, Mendes, Kom Firin and Plinthine; in the Memphite region: Saqqara and Abusir; in the Theban region of Upper Egypt: Qurna, Karnak-North, the chapel of Osiris Wennefer Neb-Djefau near the temple of Ptah; and at the southern end of Egypt at the site of Elephantine.

The site of Tell Heboua I has revealed several artefacts of foreign origin. Among the main imports are commercial amphoras of Phoenician origin used in sea trade, known as 'torpedoes'. In addition, wine containers from the Aegean world are well represented. From northern Ionia: Chios and Klazomenai; from southern Ionia: Samos and Lesbos. (Fig. 9) Cypro-Levantine goods were common, and include Basket-Handled jar types and flat-based bowls. This rich collection of Greek, Cypriot and Levantine pottery illustrates a well-known development and the extension of commercial relations throughout the entire eastern Mediterranean Basin, especially after the Saite kings pursued a foreign policy that freely opened up to the Greek world.

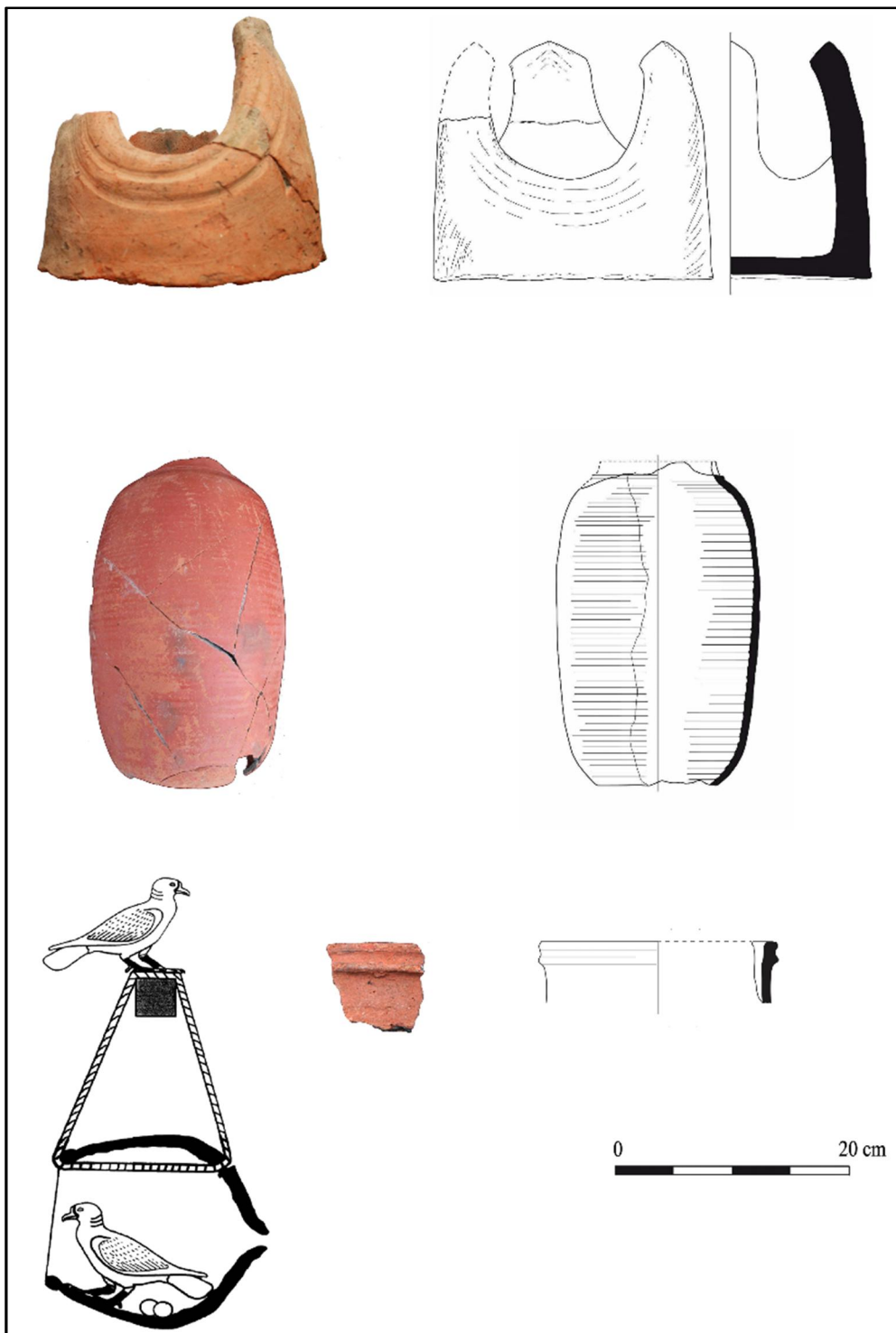


Fig.8. Local pottery of saite period found in Tell Heboua I and a sketch showing the installation of the pigeon. The sketch after [T. Sagory, “Note sur une forme originale de poterie de la Troisième Période Intermédiaire: le Nichoir Suspendu”, *BSFFT* 14 (2000): fig. 26].

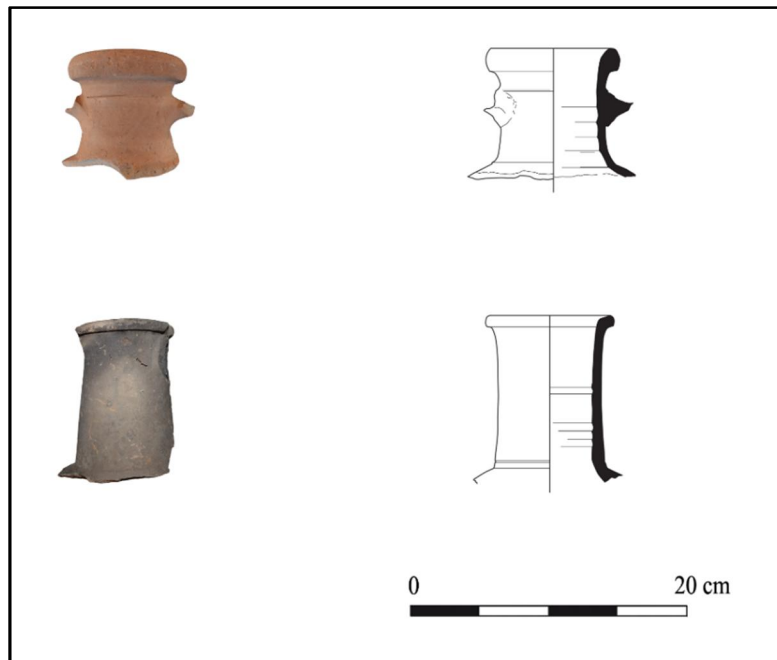


Fig.9. Imported pottery containers from the Greek islands (top: from Samos/samian zoeest amphora, bottom: from Lesbos).

Many small artefacts have been collected at the site; the objects were obviously related to specific cultic aspects (Figs. 10 and 11) and economic activities. They were scattered among large amounts of copper slag. These finds clearly suggest a local workshop producing copper and bronze tools and weapons. Excavations have yielded bronze arrowheads, weaving weights made of limestone and bronze, lead-fishing sinkers, and human and animal figurines made of clay and limestone. These artefacts have their clearest parallels in other contemporary sites, which effectively provide a glimpse into the material culture of the Saite period in northwestern Sinai.



Fig.10. Bronze amulettes of the gods Osiris and Harpocrates





Fig.11. Faience amulettes representing different forms of eye of Horus (*wedjat*)

### Conclusion:

At the easternmost end of the Delta, some archaeological sites were founded at the time of the rise of the 26<sup>th</sup> dynasty such as Tell Dafana, Tell Heboua I, Tell Heboua II, Tell el-Ghaba and Tell el-Kedoua. Their installation was in order to control the border region of the Ways of Horus, which facilitated the passage of countless military expeditions and commercial caravans from the Nile Delta to Asia. In addition, some sites from the Saite period reoccupied the locations of important ancient sites of the New Kingdom and retained the same strategic position. For example, Tell Heboua I and Tell Heboua II, which controlled, guarded Egypt's northeastern border and protected the land route to Palestine. Thus, the presence of remains dating back to the Saite period constitutes a major contribution to the history of the eastern border of Egypt before the occupation of the region by the Persians. We can now say with certainty that the site of Tell Heboua I played an important role as military, religious and administrative center of the eastern Nile Delta. They may have continued a strategic function similar to the one they had during the New Kingdom, since it was situated at the site of the former frontier town of *Tjarw*, at the beginning of the coastal road linking Egypt to Palestine.

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