

KARNAK: SETTLEMENTS
الكرنك: المناطق السكنية

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KARNAK: SETTLEMENTS

الكرنك: المناطق السكنية

Marie Millet and Aurélie Masson

Karnak: Siedlungen

Karnak: L'habitat

At Karnak, in addition to the well known temples, there is another type of architecture: the settlements. They are a testimony of the everyday life of the ancient Egyptians for which remains have been found throughout all of the temples of Karnak. Continuous occupation from the First Intermediate Period until the Late Roman Period is well attested at different locations in the complex of Karnak. Settlements are easily recognizable by their use of brick, especially mud-brick. The artifacts and organic remains found during new excavations of settlements give us a good idea of the inhabitants and their daily life.

إلى جانب المعابد المعروفة، يوجد نوع آخر من العمارة بالكرنك، وهي المناطق السكنية، والتي تعتبر شهادة على الحياة اليومية لقدماء المصريين. ولقد عثر على بقايا للمناطق السكنية في جميع أنحاء معابد الكرنك، ويوجد دلائل كثيرة في مواقع مختلفة بالكرنك تشهد على السكن المستمر بدءاً من عصر الانتقال الأول حتى العصر الروماني المتأخر. ويمكن التعرف على المناطق السكنية بسهولة من خلال استخدام الطوب لبنائها، خاصة الطوب اللين. أن القطع الأثرية والعضوية التي يعثر عليها من خلال الحفائر الجديدة بالمناطق السكنية تعطينا فكرة جيدة عن سكانها وحياتهم اليومية.

In a presentation about Karnak, one would expect to find a discussion about the cult of deities revered in this “most sacred of places” and about their temples and chapels. However, different types of structures exist—not spectacular, usually in mud-brick—that reveal other aspects of life in the Karnak area, namely its settlements. Karnak is understood as the whole area occupied by the three temenoi: Montu, Amun-Ra, and Mut—by extension all of the current archaeological area. The notion of settlements can be defined by the construction material, the mud-brick, which was used for several types of buildings such as houses, workshops, and storehouses. The Karnak settlements, dating to the Pharaonic and later periods, have rarely been the focus of research excavations. Some mud-

and red brick remains from later periods were still present when Karnak was discovered in the modern era. M. Pillet talked about a huge population living in the abandoned Amun-Ra temenos (Pillet 1928: 145). Mainly since the 1970s, work in the complex of Karnak has revealed mud-brick remains prior to the Late Roman Period in several areas (see excavated areas on figs. 1a and 1b; cf. also a general plan for Karnak at the [Digital Karnak Project](#)). We can find as many settlements outside the religious complex as inside. There are two categories of settlements, either they are associated with the town of Thebes (with regard to the “city of Thebes,” see Kemp 2006: 264 - 267) or they are linked to some institutional installations, cultic and royal (warehouses, workshops, priests’ houses, palaces, etc.). Both types can

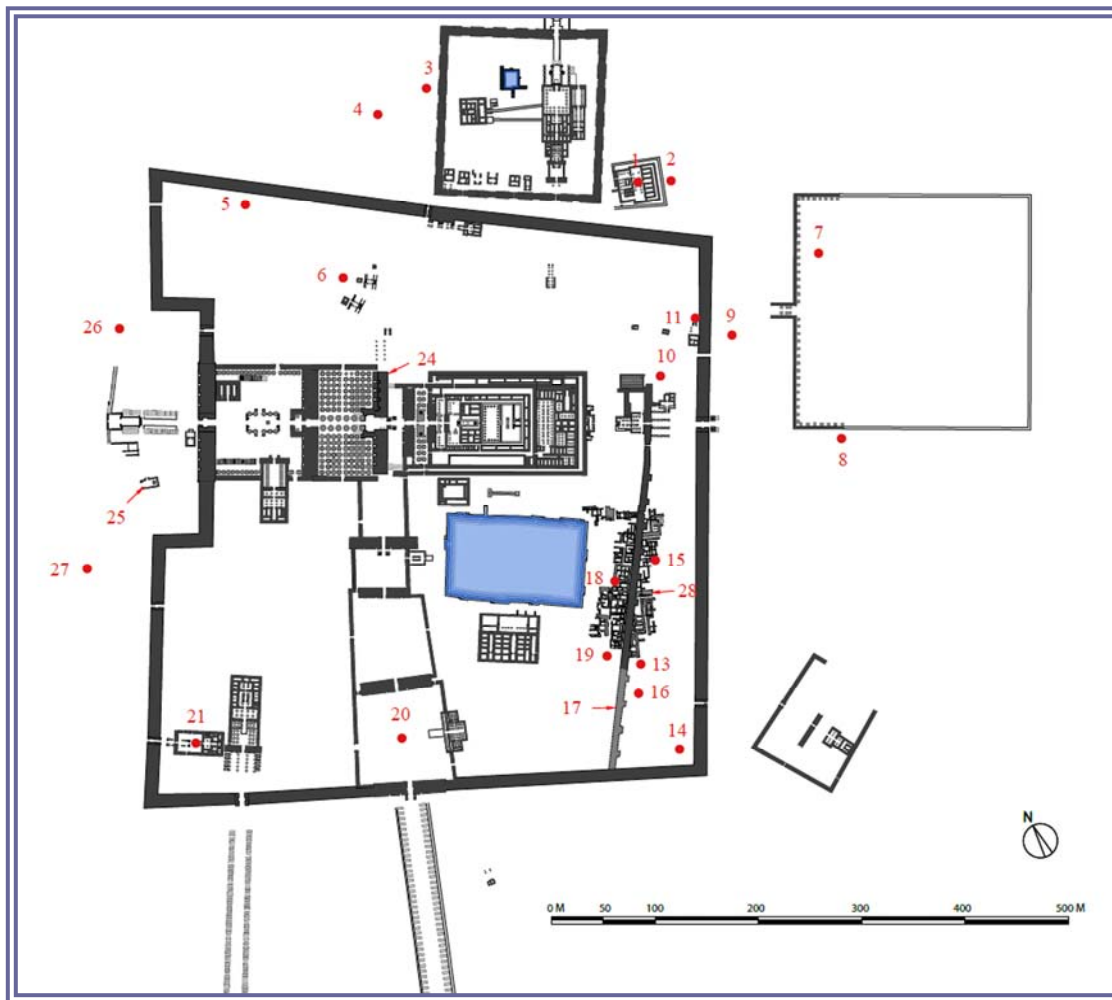


Figure 1a. Location of settlements at Karnak near the Temple of Amun, Montu's precinct, and Temple of Akhenaten.

be found within the same settlement and, as they can show the same kind of architecture, it is sometimes hard to distinguish them. In the analysis of Karnak settlements, it would be helpful to erase the actual precinct walls to understand the topography throughout the evolution of the site (figs. 1a and 1b).

Location of Settlements in Karnak

At north Karnak (Jacquet 1994, 2001), settlements dating from the Middle Kingdom until the 17th Dynasty were uncovered under and outside the treasury of Thutmose I (fig. 1a, nos. 1 - 2). This quarter is characterized by houses and workshops. From the 17th Dynasty, no more than traces of walls were preserved. During the New Kingdom, when

the Temple of Karnak was enlarged, the old town was probably partially abandoned as a living area and was covered by official and religious buildings. A renewal of private construction took place after the end of the New Kingdom. From the Third Intermediate Period until the Roman Period, domestic and craft settlements occupied the zone east of the treasury and a limited area within the treasury itself. To the west of Montu's precinct (fig. 1a, nos. 3 - 4), a sector including Late Period installations in mud-brick was cleared (Ashton and Graham 2009; Robichon and Christophe 1951: 51 - 91). The buildings may correspond to houses or to structures linked with nearby chapels. Other Late Period mud-brick structures were discovered in the northwest

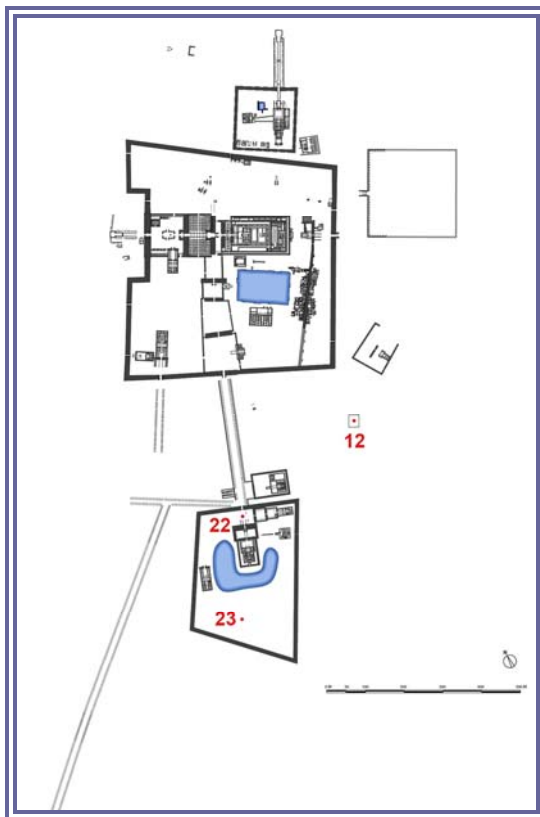


Figure 1b. Location of settlements at Karnak south of the Amun precinct, near the Temple of Mut.

area of the Temple of Amun (fig. 1a, no. 5; Béout et al. 1993; Leclère and Marchand 1995). They were located outside the temenos before the precinct was built by Nectanebo. The walls with deep foundations and the cell plan demonstrate their likely use as storerooms. This type of building may have been used in conjunction with cult activities, like the “storeroom” overhanging the chapel of Osiris *Neb-Djefau* (fig. 1a, no. 6; Coulon and Defernez 2004: 189 - 190). Buildings presenting such architectural characteristics are present in several places inside the Temple of Amun. The whole district was ravaged by fire in the Late Period (Masson 2009b). No archaeological remains of a later important occupational phase were uncovered in these areas. Nevertheless, Demotic papyri attest to the existence of a residential quarter in the vicinity of north Karnak, called “the House of the Cow,” which was mainly inhabited by necropolis workers and personnel of the

Amun Temple (Quaegebeur 1975 - 1976: 466; Smith 1972: 705 - 708).

At east Karnak (fig. 1a, nos. 7 - 9; Millet 2008; Redford 1981, 1988a), the Temple of Akhenaten was built on domestic structures, dating to Middle Kingdom and Second Intermediate Period phases. Further settlement remains have been found under the Osirian tomb (fig. 1a, no. 10) and the chapel of Osiris *Heqa-Djet* (fig. 1a, no. 11) in the temenos of Amun. This settlement, characterized by thin walls and silos, may be earlier and date from the First Intermediate Period to the Middle Kingdom (Leclère 2002: 32 - 33). Even though these structures were found in the actual temenos of Amun, defined by the Nectanebo enclosure wall, they were outside the cult area during the time of their occupation. New Kingdom settlements at east Karnak are only known from residential or storage structures dated to the Ramesside Period (Redford et al. 1991: 83 - 85). Several architectural phases of the Late Period were discovered too. Between the end of the seventh and the beginning of the sixth century BCE, the area consisted of houses and workshops (Redford et al. 1991: 75). The buildings of the 26th - 27th Dynasties show substantial foundations, which could support several floors; their plan presents a cell structure (Redford 1981: 261 - 262; Redford et al. 1991: 77 - 81, figs. 5 - 7). These features tend to be considered an indication of use for storage; however, this type of architecture seems to have fulfilled many other functions (Leclère 2008: 627 - 639). Occupation continued until at least the 30th Dynasty. During this period some reconstructions and modifications were made, but in general they followed the previous structures (Redford et al. 1991: 80 - 83). The building called *Kom el-Ahmar* (fig. 1b, no. 12), located to the southeast and always outside the precinct of the Amun Temple, had the same characteristics, thick walls with deep foundations (Redford 1981: 243 - 247, 1988b: 257 - 263, 1994). This structure, whose function is not determined, was used from the Late Period up to the Ptolemaic Period. Deep trenches helped expose several architectural



Figure 2. Southeast corner of the sacred lake in the Temple of Amun, Middle Kingdom, after the excavations in 1970.



Figure 3. Southeast corner of the sacred lake in the Temple of Amun. The enclosure wall of the New Kingdom with installations from the Middle Kingdom, built in a different orientation on the east, and the quarter of priests, built perpendicularly in regard to the wall on the west, in 2006.

phases of domestic nature from as early as the 18th Dynasty until the Third Intermediate Period (Redford 1988b: 260, 1994).

Other excavations have revealed settlements in close proximity to the east side and southeast corner of the sacred lake in the Temple of Amun (fig. 1a, nos. 13 - 19). The first remains were discovered in this area at the beginning of the twentieth century (fig. 1a, nos. 13 - 14); mud-brick walls associated with large quantities of ceramics as well as statues



Figure 4. Southeast corner of the sacred lake in the Temple of Amun. The enclosure wall of the New Kingdom with installations from the Middle Kingdom.

from the 13th Dynasty (Franchet 1917: 84; Lortet and Gaillard 1909: 107; Maspero 1912: 264) were brought to light. Rescue excavations carried out in the 1970s (fig. 2), prior to the construction of the audience seating for the sound and light show, uncovered several architectural phases of settlement (Anus and Sa'ad 1971; Debono 1975, 1982, 1987; Lauffray 1973: 313 - 318, 1979: 196 - 209, 1980: 46 - 50, 1995b, 1995c; Lauffray et al. 1971: 71 - 72; Lauffray et al. 1975: 26 - 30). Recent research excavations, conducted between 2001 and 2008 (fig. 3), have refined and clarified the results (Masson 2007, 2008, 2009a; Millet 2007, 2008). Occupation was almost uninterrupted from the First Intermediate Period until the Roman Period. From the First Intermediate Period to the 17th Dynasty (fig. 4), civil occupation was continuous (fig. 1a, nos. 15 - 16). This area, considered a part of the town, is characterized by workshops and houses. The workshops seem essentially to have been in an open area and included bakeries/breweries, but also a pottery workshop(s), a slaughterhouse, facilities for manufacturing stone tools, beads, etc. With the construction of an enclosure wall during the 18th Dynasty (fig. 1a, no. 17), the sanctuary of Amun and its surroundings were completely reorganized. From this point on, the settlement was closely linked to the activities of the temple. A housing quarter was established on the east bank of the sacred lake (fig. 5), within the limit of the enclosure wall



Figure 5. Southeast corner of the sacred lake in the Temple of Amun. General view of the quarter of priests after the excavations in 1970.

(fig. 1a, nos. 18 - 19; Masson 2009a). Apart from a hiatus at the end of the Late Period, we can follow this quarter's evolution from the Third Intermediate Period until the beginning of the Roman Empire. The inhabitants are clearly identified as priests, since door frames, stelae, and numerous seal impressions bearing the titles of priests were discovered. The priests used these houses during their cultic service, when they were isolated from their families. It was an elite community, whose needs—such as rations, furniture, and so on—were met by the Temple of Amun. During the Ptolemaic Period, the priests lived among the craftsmen: many testimonies of craft activities were uncovered (sculpture, a faience workshop, evidence of metallurgical activity, etc.).

The southwest sector of the Amun Temple, which corresponds to the area of the Opet and Khons Temples and to the courtyard between the ninth and tenth pylons, was used for cultic activities from the middle of the 18th Dynasty until the Ptolemaic Period. However, between the Middle Kingdom and the beginning of the 18th Dynasty, and later during the Roman and the Late Roman Periods, the architecture was civilian in nature (fig. 6). This was confirmed by excavations in the courtyard of the tenth pylon (fig. 1a, no. 20, fig. 6; Azim 1980; Lauffray 1979: 140 – 143). Recently, excavations in front of the Opet Temple have provided new evidence for a settlement (fig. 1a, no. 21; Charloux et al.



Figure 6. Courtyard of the tenth pylon in the Temple of Amun. Installations from the Second Intermediate Period and 18th Dynasty.

2009a, 2009b). A residential or artisanal quarter occupied this sector until the 13th Dynasty. Later it seems to have been associated with cultic buildings.

South of the Amun-Ra precinct (Fazzini and Peck 1982; Fazzini and Dijk 2007; [The Brooklyn Museum: Dig diary, Community: bloggers@brooklynmuseum](#)), in the area of the Mut Temple, mud-brick structures dating to the Middle Kingdom through the Second Intermediate Period have been found, most certainly belonging to the town of Thebes (fig. 1b, no. 22). Some remains of the Late Ptolemaic and Roman Periods were identified as living and/or large storage and cooking areas. E. Sullivan studied an urban area located south of the Mut Temple's sacred lake, likely outside of the New Kingdom precinct of the Mut Temple (fig. 1b, no. 23; Johns Hopkins University 2005; Sullivan 2007a, 2007b, fc.). This excavation uncovered remains of occupation from the late New Kingdom, Third Intermediate Period, and early Late Period. A large-scale mud-brick building dated to the 25th Dynasty was identified by the excavator as a possible short-term storage facility, built for administration by the neighboring temple entities. B. Bryan conducted other excavations (fig. 7) behind the sacred lake, which revealed contexts from

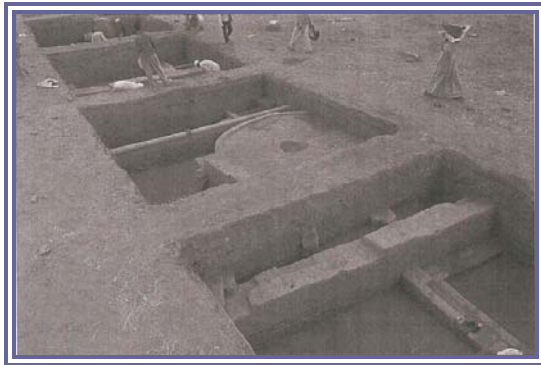


Figure 7. Mut Temple. Granary and installations from the 18th Dynasty.

the Second Intermediate Period until the early Late Period (Bryan 2008: 27 - 28). None of these excavations have yet been published thoroughly.

To the west of Karnak, no remains of the Middle Kingdom have been observed, which could indicate the limit of the habitable area. This limit could be located in the vicinity of the third pylon of the Amun Temple (fig. 1a, no. 24; Masson and Millet 2007: 666 - 667). Later, with the migration of the Nile, the temple developed westward (Bunbury et al. 2008; Graham 2010; Graham and Bunbury 2005; Hillier et al. 2007). Civil installations, mainly houses, appeared in front of the first pylon at the end of the third century BCE (Lauffray 1995a: 69). The quarter surrounding the chapel of Hakoris (fig. 1a, no. 25) was reconstructed many times until the fourth century CE (Lauffray 1995a: 86). These successive installations followed similar orientation and outlines. Current excavations by the Supreme Council of Antiquities in the western outskirts of the Temple of Amun have uncovered new settlements from the Ptolemaic and Roman Periods (fig. 1a, nos. 26 - 27; CFEEK 2007: 76 - 83).

Chronology of the Settlements

Continuous occupation from the First Intermediate Period until the Late Roman Period is well attested at different locations in Karnak. It corresponds to the foundation of the first known Amun Temple, dated to the 11th Dynasty (Gabolde 2000a: 8). However,

recent research has found some ceramic material from the late Old Kingdom associated with mud-brick structures (Millet 2008). It is unfortunately impossible to understand the nature of these structures as the evidence comes from a single deep sondage (fig. 1a, no. 16) and is presently insufficient to provide a clear picture of the broader context of the finds.

The orientation of the Middle Kingdom town is different from that of the Temple of Amun, which was established under the reign of Senusret I (Charloux 2007; Gabolde 1998, 2000b; Larché 2007: 409 - 421). Thus, the town probably predated this temple. It was planned as a square of 100 cubits (c. 51 - 53 m; Carlotti 2005: 171, 174 - 175) and was most likely inhabited by people close to power and some craftsmen possibly working for the activities connected with the temple. Southeast of the sacred lake, the excavations uncovered an enclosure wall from the Middle Kingdom (fig. 1a, no. 28; Debono 1982; Lauffray 1995b: 339). South of this wall, small structures with thin walls belonged to a residential and craft area, whereas to the north, administrative buildings were most likely located. There are parallels for these mud-brick buildings with limestone column bases in Balat and Abydos (Soukiassian et al. 2002: 14 - 17; Wegner 1998: 22 - 26).

During the New Kingdom, the sanctuary of Amun was enlarged to a great extent. Settlements from the New Kingdom are seldom preserved within the sanctuary, and there are only few remains outside of it. The sanctuary probably did not allow houses to be built nearby. Of the architectural remains presently known, most were found on the south axis of the temple, and they show the same orientation as one of the Middle Kingdom towns (fig. 1a, no. 20; Azim 1980: 161 - 162). Ceramics and objects from the New Kingdom indicate the existence of settlements also on the eastern bank of the sacred lake (fig. 1a, nos. 16 and 19). After the construction of the New Kingdom enclosure wall (fig. 1a, no. 17), the settlements within the sanctuary follow, most of the time, the

new orientation given by this enclosure wall. Despite the important change during the 18th Dynasty, the town of the New Kingdom is still very poorly known. B. Kemp (2006: 266) discussed the town's enlargement, trying to compare its surface during the Middle Kingdom and the New Kingdom. However, the recent study of the movements of the Nile linked to new archaeological investigations in Karnak tends to revise his hypothesis (Graham 2010).

The settlements of the first millennium BCE that are the best known are connected with the religious activities in Karnak. The priests' quarter mentioned above offers a good example of Third Intermediate Period and Late Period architecture. Each house varies in size (58 m² for the smallest, 176 m² for the biggest) and plan and has a well-defined boundary, even if they all stand next to each other. These contiguous houses share few typical features known from terraced houses. This functional and economical architecture can be found in many institutional programs of the Pharaonic Period (Badawy 1953, 1968: 152).

Architectural Features and Material in Karnak Settlements

Settlements use brick, especially mud-brick, as their primary building material. Unfired brick is used in the construction of the houses themselves, but also in different types of equipment like silos, ovens, cooking areas, etc. Red brick was commonly employed since the Roman Period in the Karnak settlements. However, tests indicated that most of the bricks of the *Kom el-Ahmar* building were lightly fired prior to their use (Redford 1988b: 258). Mud-brick is composed of Nile silt mixed with sand and/or straw. In general, brick composition and size do not determine the dating and purpose of the settlements' architectural remains. Moreover, reuse of mud-brick can occur: House A, one of the houses in the priests' quarter dating to its Ptolemaic phase, is made of bricks from the New Kingdom enclosure wall (Lauffray 1995b: 311).

Stone is used for some elements of construction like doorjambs, pivot holes, column bases, and clerestory windows (openings high in the wall with stone lattice work). The use of stone often indicates an official building. Although evidence of wood is scant, it was used for roofing, staircases, doors, columns, and shelving. East of Karnak, J. Lauffray discovered buildings with two colonnades with stone bases and probably wood columns (Lauffray 1995b: fig. 2b). Reuse of a column base as a pivot hole in a workshop was observed in the new excavation southeast of the sacred lake (Millet 2007: 687, pl. XIV).

In the village of Deir el-Medina, some colored coating has been preserved on the walls (Andreu 2002: 28, fig. 9), but until now, only white coating has been found in the Karnak settlements, sometimes just a coating in mud to smooth the walls.

The floors were generally a hard-packed surface. Paved floors, mainly in sandstone, are found in some late buildings during the first millennium BCE. They were usually used in a single room, especially, but not exclusively, when some culinary activities were involved. This is the case in some houses in the quarter of priests: paved rooms, located between the enclosure wall of the New Kingdom and the back of the houses, were used as a kitchen (Anus and Sa'ad 1971: 235).

The buildings could have been more than one story high, since staircases are a common feature in Karnak settlements. Some staircases may only have led to a roof. Thanks to archaeological observations, we can assume that some houses, magazines, and workshops had a basement (Desroches 1938: 20 - 21; Masson 2008; Millet 2008). Modest structures, especially in open areas, were built without foundations.

Finds and Inhabitants

The artifacts found during the 2001 - 2008 research project east of the sacred lake give a good idea of the inhabitants and their daily life (fig. 1a, nos. 16 and 19; Masson 2007,



Figure 8. Seal impression with the inscription “Divine Father of Amun, Pamiu.”



Figure 9. Toys made of clay.

2008, 2009a; Millet 2007, 2008). Sieving all the contexts through a fine sieve (1 mm mesh) provided a wealth and variety of material scarcely seen in Theban settlements. Ceramics represent the most common type of artifact. Typologies were established that enabled the dating of the buildings and installations. The majority of the ceramic material belongs to ordinary vessels, which were used for the transport and storage of liquids and commodities, for culinary activities, and the consumption of food. Ceramics for cultic use, such as incense burners, are very common in the priests’ quarter, especially in the contexts of Late and Ptolemaic Periods; it is likely though that they were often only used for domestic purposes (Masson 2009a, *fc.*). As expected in the Theban region, the imports are rare but originate from various regions: Cyprus, the Levant, Greece, the Aegean



Figure 10. Necklaces made of Nile silt clay, carnelian, and faience.

region, and Nubia. A variety of stone tools, particularly made of silex, are commonplace within the sector, such as work tables, pebble grinders, flint blades, and perforators. They attest to culinary and craft activities. Furthermore, some seal impressions (fig. 8) were also found, which have given us the names and titles of inhabitants of the town of Thebes and people working in the sanctuary of Amun (Masson 2010). Titles range from the “High Priest of Amun-Ra” (*ḥm-ntr tpy n ’Imn-Rʿ*), “Prophet” or “Divine Father of Amun” (*ḥm-ntr/jt-ntr n ’Imn*) or other deities, to those responsible for the storerooms (*ḥtm bjty jmy-r ḥtm*). Hence, settlements in Karnak represent an interesting testimony to the social classes allowed to live in the sanctuary and its neighborhood. Other categories of objects give information about daily life: for example, games, like clay toys (fig. 9) or counters, or jewelry made of faience (fig. 10), clay, semiprecious stone, or metal. Objects can also specify the social class of the inhabitant. Luxurious or elegant objects were

found in the settlements within the sanctuary. It seems that priests, or craftsmen working for the temple, had access to objects from the temple storerooms.

The study of the food remains carried out in the recent excavations east of the sacred lake indicates a great gap between the diet of the people living in the sanctuary and those who lived outside (Masson 2008, 2009a; Millet 2008). Priests and craftsmen working in the temple ate meat from animals usually sacrificed to the deities, such as beef and goose, confirming Herodotus' testimony (Herodotus 1988: II, 37, 4). The other people, at least during the Middle Kingdom, mostly ate pork and fish, food that was not admitted inside the temple, as pork and fish were very often considered too impure to sacrifice (Darby et al. 1977: 180 - 184, 380 - 383, 393 - 394) and therefore excluded from the diet of the priests. In Elephantine, pork and fish seem absent from a house linked with cultic activities related to the Khnum Temple, whereas they are present in the rest of the town (Boessneck and von den Driesch 1993: 189 - 190, 195 - 197). In the case of the quarter of priests, the multidisciplinary approach of the study has revealed that the inhabitants profited from the divine offerings. Nevertheless, they received these products raw, as their houses were sufficiently equipped for culinary activities with grindstones and pebble grinders for the cereals and seasoning, various categories of ceramic vessels for the

preparation and the consumption of food, and ovens and hearths to cook the food (Masson *fc.*). Storage facilities were, on the other hand, very scarce. This might indicate a dependence of this quarter on the offering magazines. The recent excavations demonstrated that offering magazines (Masson 2008) stood on the southern bank of the sacred lake, in the neighborhood of the quarter of priests, at least since the Third Intermediate Period, if not the New Kingdom.

The town of Thebes is far from being understood: research on settlements in the Theban region remains insufficient. However, awareness and interest in this important issue have begun to increase. Recent research excavations in Karnak and current rescue excavations on the east bank of Luxor will give crucial information about the town. The study of the movement of the course of the Nile helps understand the location and development of Thebes throughout history. Furthermore, the new methods in the study of archaeological remains provide original data on the daily life of its inhabitants, especially in Karnak. Many statements in this article are based on observations made during the recent excavations east of the sacred lake, but these settlements may represent particular cases. Thus, extended archaeological investigations are necessary to get a wider picture of the town and the everyday life in Thebes.

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A comprehensive work has yet to be published on Karnak settlements. Only excavation reports on specific areas of Karnak have been published (many of which are listed in the *References*). A general, but not updated, discussion can be found in Kemp (2006).

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