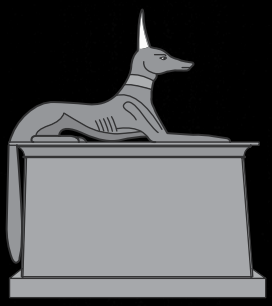
CHAPTER 8



The New Kingdom

Contents

INTRODUCTION

The defeat of the Hyksos and the Kerma kingdom in the early New Kingdom led to greatly expanded Egyptian control of foreign regions to the northeast and farther south – through warfare. The 18th and 19th Dynasties were the age of Egypt's empire, and in Nubia temple towns were founded as far upstream as the Fourth Cataract. It was a cosmopolitan age with much trade and exchange between the major states in the Near East and Aegean, and opulence is apparent, especially in royal and elite burials in western Thebes. The pyramid as a royal tomb disappeared by the New Kingdom, however, and kings were buried in hidden rock-cut tombs in the Valley of the Kings.

Beginning in the 18th Dynasty cult temples were built mainly in stone (and added onto). A major beneficiary of Egyptian conquests was the Temple of Amen-Ra at Karnak. Huge royal mortuary temples were also built across the river in western Thebes.

The well-preserved town at Deir el-Medina, for workers in the royal tombs and their families, has provided important settlement data, as has Akhenaten's briefly occupied capital at Tell el-Amarna. Akhenaten's focus on the cult of the god Aten produced the so-called Amarna revolution, but his wide-ranging reforms scarcely outlived his reign. His successor, Tutankhamen, abandoned Amarna and was buried in Thebes, in a small but lavishly furnished tomb.

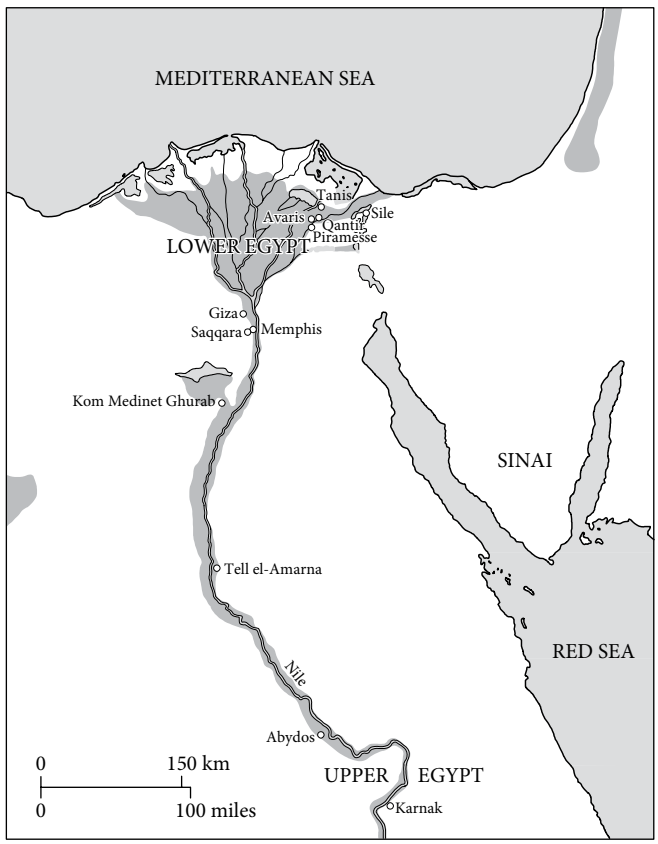
Although the great pharaoh Rameses II fought the Hittites, the other superpower of the time, at Qadesh in Syria, and later concluded a peace treaty with them, in the 20th Dynasty Egypt lost its empire in southwest Asia. The 20th-Dynasty kings, all but one of whom were named Rameses, continued to be buried in the Valley of the Kings, but at the end of this dynasty most of the Theban royal tombs were robbed. The New Kingdom was succeeded by a dynasty of kings of uncertain ancestry ruling at Tanis in the northeastern Delta, and a kind of theocratic state at Thebes.

An Introduction to the Archaeology of Ancient Egypt, Second Edition. Kathryn A. Bard.

8.1 The New Kingdom: Overview

Although warfare with the Hyksos began no later than Kamose, the last king of the Theban 17th Dynasty, it was Ahmose, the founder of Manetho's 18th Dynasty, who defeated the Hyksos in northern Egypt and followed them into southern Palestine, where he laid siege to their fortress of Sharuhen. Ahmose also campaigned in Nubia against the Kerma state, as did his successor Amenhotep I. At South Abydos in the vicinity of the huge complex of Senusret III (12th Dynasty; see 7.5), Ahmose erected several monuments, including a large pyramid and mortuary temple complex, to the west of which was a smaller pyramid shrine for his grandmother Tetisheri. But the king's rock-cut tomb was located farther west at the foot of the limestone cliff.

The early 18th Dynasty was a time of consolidation of power and the re-establishment of Egyptian kingship. The seat of government was moved to the north at Memphis, but little urban architecture has survived from Memphis or other New Kingdom cities (with the exception of Tell el-Amarna in Middle Egypt). Although temples (and their towns) were built throughout Egypt, no major New Kingdom temple north of Abydos has been preserved, with parts of these temples reused in later structures. This also must have occurred



Map 8.1 Major New Kingdom sites in Egypt.

in southern Egypt, where a number of temples were probably destroyed to make way for bigger Greco-Roman ones (see 10.5).

The major surviving temples from the New Kingdom are located at Karnak and Luxor, the cults of which were central to the ideology of kingship. At Karnak Amenhotep I renewed a program of royal construction – in what would become the largest cult center in Egypt for the next 1,500+ years. Although the location of his tomb is uncertain, Amenhotep may have been the first king of the New Kingdom to build a separate mortuary temple – a practice that most kings of the period would follow. Reliefs from this temple have been found near Dra Abu el-Naga in western Thebes.

Thutmose I, of unknown parentage, succeeded Amenhotep I and was the father of (the future ruler) Hatshepsut. With his military activity in Nubia the Kerma state was finally ended, and Thutmose I then took his army northward to Syria-Palestine. New to the Egyptian army in the New Kingdom were the horse and chariot, introduced into Egypt under the Hyksos. Although Nubia would remain in Egyptian control through the New Kingdom, control of the petty states in Syria-Palestine and confrontation with the larger states to the north and west would prove more problematic. As a result, a trained full-time army was maintained, with a professional management that was capable of organizing and supplying major campaigns abroad, where garrisons also had to be maintained. There were also army reservists who could be mobilized when needed, and after their service veterans were often given farms in Egypt or positions on royal estates. These and other rewards helped to promote loyalty to the king, as did the ideology of the king as war leader. The heir to the throne was often the commander-in-chief of the army in the king's name, but to secure the line of succession other royal sons were often excluded from positions of power in the army or government.

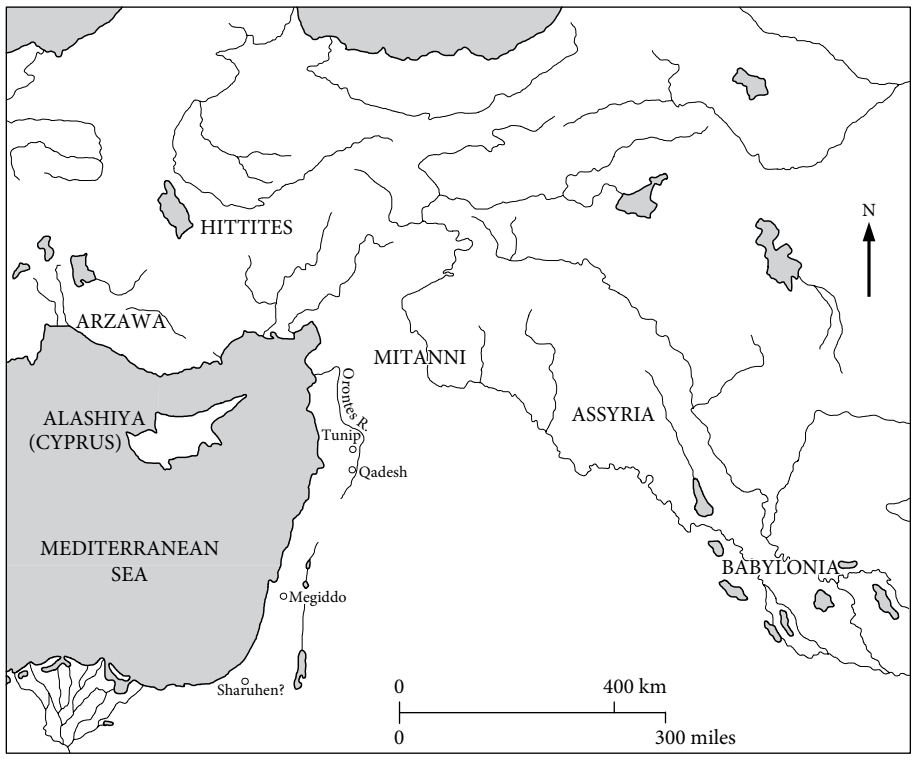
Thutmose I is the first king of the New Kingdom with a known tomb in the Valley of the Kings. Construction of pyramids for the royal tomb had ended, and for increased security the locations of the New Kingdom royal tombs were intentionally hidden. Thutmose I also built a mortuary temple in western Thebes, known only from mention in texts.

During the New Kingdom the "Festival of the Valley" was held yearly, when the royal mortuary temples were visited by priests carrying the shrouded portable statue of Amen from his sanctuary at Karnak on a model ship. Through homage to the ancestral line of kings, integrated with the cult of Amen, the festival reinforced the central role of Egyptian kingship. It also provided the occasion to honor the non-royal dead buried in western Thebes by participants who made offerings and banquets for their dead ancestors, ideologically linking the god's cult, kingship, and state officials – in life and in death.

Royal women became increasingly important in the 18th Dynasty, as did the office of "God's Wife of Amen," which Hatshepsut held. Following the probably brief reign of Thutmose II, Hatshepsut, who was his half-sister and wife, became regent for her stepson and nephew Thutmose III (the son of a secondary wife of Thutmose II). Hatshepsut, however, took on the trappings of king and ruler. Her reign was not one of major military campaigns – which reached new heights when Thutmose III became sole ruler – and she built many monuments in Egypt and Nubia. While most of her constructions at Karnak were obliterated by later kings, Hatshepsut's well-known temple at Deir el-Bahri, where a seafaring expedition to Punt was recorded, is the first well-preserved royal mortuary temple of the New Kingdom.

Thutmose III's 17 military campaigns in Syria-Palestine included a long siege of the fortified town of Megiddo. His lists of conquered peoples (of the north and south) are on Karnak's Sixth Pylon, with a schematized scene of the king smiting these enemies on the Seventh Pylon. Texts known as the "Annals of Thutmose III," describing his campaigns, were carved on walls surrounding the bark shrine at Karnak (for the cult statue which was carried in processions on a model bark). As a result of his conquests, Egypt controlled Palestine and parts of southern Syria, as well as major trade routes in the eastern Mediterranean. Egypt's chief rivals were the kingdom of Mitanni in northwest Syria, and the city-states of Qadesh and Tunip, on the middle and lower Orontes River, respectively. The coalition centered on Qadesh was defeated in Year 42 of Thutmose's reign. Children of subjugated foreign chiefs and princes were sent to Egypt to be educated, which helped maintain control of these regions, as did Thutmose's marriages to Asiatic royal women.

As a result of ideological reciprocity between the king and the god Amen, who was believed to confer Egyptian military success abroad, the Temple of Karnak greatly benefited from foreign tribute, trade, and war booty. Thutmose III's Festival Hall is the largest of several monuments that he erected there. In western Thebes, he built a temple to Amen at Medinet Habu (begun under Hatshepsut) and a small temple at Deir el-Bahri above those of Mentuhotep II and Hatshepsut. Thutmose III's mortuary temple is located at Sheik Abd el-Qurna and his large tomb is in the Valley of the Kings. Monuments were also built at a



Map 8.2 Kingdoms and city-states in southwest Asia during the Late Bronze Age (New Kingdom).

number of other temples in Egypt during his reign, and in Nubia as far upstream as Gebel Barkal below the Fourth Cataract (with the actual frontier farther upstream at Kurgus, near the Fifth Cataract).

At the former Hyksos capital of Avaris (see 7.11), a large palace was built and decorated during the reigns of Hatshepsut/Thutmose III and Amenhotep II where fragments of Minoan-style frescoes have been excavated. Military campaigns in southwest Asia continued under Amenhotep II, but the campaigns of his successor, Thutmose IV, were brief. Both kings actively constructed monuments throughout Egypt, including Amenhotep's temple and stela at the Giza Sphinx, and Thutmose's "Dream Stela" between the paws of the Sphinx (see 6.5).

Foreign conquests required not only military control but also civil organization, under the offices of "Governors of Northern Lands," and the "Governor of Southern Lands"/"King's Son of Kush." In Egypt the government was organized under the Northern Vizier and the Southern Vizier. Offices of the (two) "Overseer of the Treasury," "Overseer of the Granaries of Upper and Lower Egypt," and "Overseer of Cattle" were involved with the economic life of the state and were responsible for collecting and storing taxes, paid in grain, cattle, and other products, and corvée labor. There were mayors at Memphis and Thebes, the two major centers of the kingdom, and also mayors at nome centers and some larger towns. Mainly judicial in function for both civil and criminal cases, *kenbet* councils existed throughout the country, with two "great" councils in Memphis and Thebes. The *Medjay*, not the army, operated as local police in Egypt. At the royal court a chancellor and chamberlain directed operations, and a chief steward oversaw the royal estates/lands. Although the king is depicted in temple reliefs as the sole person before the gods, there were two major religious offices: the high priest of Amen and the high priest of other gods.

With the long reign of Amenhotep III an unprecedented era of wealth and prosperity is evident – at least for the elite who had richly decorated tombs located in western Thebes and the Memphis region. One military campaign took place in desert regions to the east of Nubia, but relations with Near Eastern polities were through diplomacy (including a treaty with Mitanni), royal marriages to foreign princesses, and a kind of elaborate gift exchange.

In control of vast resources, Amenhotep III constructed monuments throughout Egypt and Nubia as far south as Gebel Barkal. His temple at Soleb, above the Third Cataract, is one of the finest in Nubia. To the south at Sedeinga, a smaller temple was dedicated to Amenhotep's chief wife Tiy.

Amenhotep III's major surviving works in Egypt are concentrated at Thebes. On the east bank at Luxor he dismantled an earlier 18th-Dynasty temple and constructed a large temple in sandstone (to which Rameses II later added a peristyle court and pylon). At Karnak Amenhotep built the temple of Mut to the south of the Amen temple, and another temple to the north that was later dedicated to the god Montu. The main temple was enlarged, creating a new entrance, the Third Pylon, from which the procession of the Opet Festival began. This was a yearly festival in which the barks of Amen and the king, along with the barks of Mut and Khonsu, were taken from Karnak to Luxor. Taking place during the flood season, this festival was associated with the Nile's fertility. The festival, which reaffirmed the ruler's earthly role as king and his cosmic role as son of Amen-Ra, is depicted in reliefs showing dancers and musicians in much merry-making.

Figure 8.1 The Colossi of Memnon.

In western Thebes Amenhotep III built a large palace complex at Malkata, next to which an enormous harbor was excavated. Except for the two huge seated statues of the king, known as the Colossi of Memnon, little remains standing of his mortuary temple which originally contained hundreds of statues (Figure 8.1). His tomb was built in the western part of the Valley of the Kings. The importance of Amenhotep's chief wife Tiy is seen on a number of his monuments, and she continued to be a significant force in the early reign of her son Amenhotep IV.

In his early years as king, Amenhotep IV erected four shrines to an obscure solar deity, Aten, at East Karnak, the cult center of Amen-Ra. Subsequently, the king changed his name to Akhenaten, which means "Beneficial for Aten," and moved his capital to a site in Middle Egypt, now known as Tell el-Amarna. Akhetaten ("horizon of Aten") became the cult center for this deity, with Akhenaten's sole focus on the worship of Aten, whose son was the king. The well-preserved city contained large temples to Aten, as well as palaces, residences of elite and artisans, a workmen's village, and tombs carved in the eastern cliffs. During the brief time that Akhetaten was occupied, major changes also occurred in temple architecture, art styles and subject matter, language use (Late Egyptian; see 2.2), and the mortuary cult – probably the greatest indication of Akhenaten's theological revolution.

During the Amarna Period the cults of other deities were ignored, which meant that they were cut off from royal/state support, and this had serious economic repercussions throughout Egypt, especially at Thebes. Turning against the Amen cult, Akhenaten later ordered that the name of the deity be hacked off monuments. But with Akhenaten's death, his religious revolution ended.

Most historical reconstructions place at least one ruler between Akhenaten and Tutankhamen, whose name was changed (from Tutankhaten) when the Amarna Period ended. One of Akhenaten's daughters by his chief wife Nefertiti, who also featured prominently in the Aten cult, married the child king Tutankhaten, probably Akhenaten's son by another wife.

Early in his reign, this king returned to Memphis, and the powerful cult of Amen-Ra once again became the major focus of state religion. Akhetaten was abandoned by the court, and Akhenaten's monuments were later dismantled or defaced by royal agents. Tutankhamen died at about age 18, and was buried in a small but lavishly furnished tomb in the Valley of the Kings. Ay, possibly a brother of Akhenaten's mother, Queen Tiy, briefly became king, and the 18th Dynasty ended with the reign of Horemheb, a general who had also been regent for Tutankhamen.

Rameses I, the first king of the 19th Dynasty, was Horemheb's vizier and a military commander, but was not of royal birth. He ruled for a little more than a year, followed by his son Sety I. Major building programs were undertaken at the important cult centers, especially Karnak, where work continued on the huge Hypostyle Hall, begun under Horemheb. At Abydos Sety constructed a large temple for the god Osiris and the principal deities of the land. The king list carved in this temple, which does not include Hatshepsut, Akhenaten, Tutankhamen, and Ay, is a major source of information for the kings from the 1st Dynasty up to Sety I's reign (see 2.9).

Sety I's son Rameses II was the second longest reigning king in ancient Egypt (67 years) – a major reason that so many of his monuments are found throughout Egypt. (He also usurped cartouches of earlier kings on their monuments.) At Karnak Rameses completed the enormous Hypostyle Hall, and built an entrance quay on the west that was connected to the Nile. At Luxor he added a large forecourt and pylon to Amenhotep III's temple. In Nubia, Rameses's most impressive monument is the pair of rock-cut temples of Abu Simbel.

Both Sety I and Rameses II campaigned in Syria-Palestine and Nubia, while Libyan tribes began to be a problem to the northwest. With renovated Middle Kingdom forts and settled populations living in temple towns, Nubian campaigns were to secure mining areas (especially for gold) and quell indigenous rebellions. The Egyptians also raided areas beyond their control farther south. Nubians were drafted into the Egyptian army (and served abroad), and some were taken as slaves. Chiefs' sons were sent to Egypt. Living in Egyptian temple towns, some Nubians became acculturated – and by the end of the 18th Dynasty the indigenous C-Group culture had disappeared. Centered on cult temples, the Nubian towns housed government officials, temple priests and personnel, and military personnel (although evidence of settlements has not been found around all temples). Nubian administration was organized into two major regions: Wawat in the north and Kush in the south, with provincial capitals at Aniba and Amara.

Some temples in Egypt had land and trading rights in Nubia, granted to them by the crown, thus both state and temple exploited Nubia economically in the New Kingdom – for its mines and quarries, and trade of costly raw materials which passed through Nubia from Punt and regions to the south. Decorated with pharaonic reliefs and inscriptions, the monumental stone temples in Nubia were impressive symbols of Egyptian power – and deterrents to local people – in an effort to control the region ideologically.

In Syria-Palestine, more formidable military efforts were needed than in Nubia, and support of Egyptian armies that were sometimes sent there would have required large-scale logistics. Both Sety I and Rameses II fought the other major power, the Hittites, in Syria. Although Rameses depicted his victory over the Hittites at Qadesh on his major monuments, the king barely managed to escape his foe's forces. The battle was not a decisive victory for either side, and territory fought for by the Egyptians remained in Hittite control. Seventeen years after the Battle of Qadesh a later Hittite king, Hattusili III, facing conflict with the Assyrians, concluded a peace treaty with the Egyptians – actually a kind of non-aggression pact.

In the northeast Delta at Qantir, Rameses founded a new capital, Piramesse, which was closer to Egypt's border fortress at Sile and the problematic vassal states in Syria-Palestine. During the 21st Dynasty many of the stone monuments in Rameses's city were removed, and reused when the capital was relocated to Tanis. Although the monuments were missing at Qantir, German archaeologist Edgar Pusch has found evidence of stables, and a chariot garrison at the site is known from texts. Also excavated at the site is evidence of a huge bronze production facility, where Hittite workmen and Egyptians made Hittite-type shields (after Rameses's battle at Qadesh).

Both Sety I and Rameses II were buried in impressive tombs in the Valley of the Kings, and the beautifully decorated tomb of Rameses's chief wife Nefertari is in the Valley of the Queens. An enormous tomb (KV 5) was also prepared for sons of Rameses II: with a number of wives, this king fathered over 100 offspring. Rameses II's fallen colossal statue in granite, at his mortuary temple in western Thebes, the Ramesseum, provided the subject for Percy Bysshe Shelley's poem "Ozymandias," a corruption through Greek of the king's prenomen "User-ma'at-Ra."

Because of Rameses II's very long life, he outlived 12 elder sons, and was finally succeeded by his son Merenptah, who was probably quite old by then. After Merenptah, three other kings ruled briefly, and the 19th Dynasty ended with the reign of a female ruler, Tausret. This queen was the chief wife of Sety II and became regent for her step-son Saptah, whose mummy has one shortened leg – perhaps the result of polio. Tausret outlived Saptah to become sole ruler for only two years.

The village of Deir el-Medina in western Thebes, which housed the workers who built and decorated the royal tombs, was founded in the early 18th Dynasty and occupied throughout the New Kingdom (except during Akhenaten's reign). Although some houses existed outside the settlement, most of the workers lived with their families inside the walled village. Several shrines and two cemeteries were also located outside the settlement. The planned village was densely populated, with typical houses consisting of four to six rooms, with a small open court for cooking in the back. A staircase led to the roof area, which was also utilized. All of the villagers' needs were provided by the state: food, water, firewood, other raw materials, and tools for their work. During the 20th Dynasty, the earliest known strike was recorded (the Turin Strike Papyrus) when tomb workers from the village refused to go to work because they had not received their rations.

The 20th Dynasty, which began with the short reign of Sethnakht followed by the reigns of nine kings named Rameses (III through XI), was a time of major problems both at home and abroad. The tomb workers' strike occurred near the end of the reign of Rameses III,

who also foiled an assassination conspiracy originating in his harem. Rameses III faced several invasions of foreigners and by the end of his reign Egypt no longer had a large empire in Syria-Palestine. The king won major battles against the Libyans in regnal Years 5 and 11, and in Year 8 he fought off a coalition of "Sea Peoples." These peoples were part of a large migration of displaced groups moving in the eastern Mediterranean later in the 13th century BC, which had caused the collapse of a number of Late Bronze Age states. The Sea Peoples, together with Libyans, had also threatened Egypt during Merenptah's reign. Different groups of Sea Peoples are named on the reliefs of Rameses III's mortuary temple at Medinet Habu, including the Peleset, from which the name of the place where they settled, "Palestine," is derived.

Increasingly in the 20th Dynasty sources of royal income became directly controlled by temples, including land, foreign trade, and mining and quarrying expeditions. The Great Harris Papyrus in the British Museum, which is about 40 meters long, lists Rameses III's donations to Egyptian temples. This papyrus demonstrates the great amount of land owned by temples (about one-third of all cultivable land), especially the Temple of Amen at Karnak. The Wilbour Papyrus (reign of Rameses V) is informative about temple-owned land in Middle Egypt that was rented out to different people, providing a direct source of temple income.

Economic problems in Egypt included inflation in the later 20th Dynasty, especially of the value of emmer wheat and barley in relation to units of copper and silver, as documented by Egyptologist J. J. Janssen. From the reign of Rameses IX there is documentation of trials of tomb robbers, demonstrating a breakdown of sociopolitical control. Although tomb robbing took place in all periods, such records are exceptional. At the end of the dynasty there was a famine and Thebes was troubled by marauding Libyans. Thefts from temples and palaces also occurred then. The Theban royal tombs began to be robbed, and the royal mummies, stripped of their precious ornaments, were subsequently reburied in two locations: a tomb near Deir el-Bahri, and in side chambers of the tomb of Amenhotep II – where they were found in the late 19th century.

Civil war broke out between the high priest of Amen and the viceroy of Nubia, which was finally quelled by Rameses XI's army under General Piankh, who may later have assumed the roles of vizier and viceroy of Kush and high priest of Amen at Thebes. With Rameses XI's death, Piankh's son-in-law and heir, Hrihor, also took the royal titles, while a king named Smendes ruled in the north. Thus, the New Kingdom ended with divided control of Egypt.

The Early New Kingdom

8.2 Early New Kingdom Architecture: Ahmose's Abydos Pyramid Complex, the Thutmosid Palace and Harbor at Tell el-Daba, and the Theban Mortuary Temples of Hatshepsut and Thutmose III

In the New Kingdom Abydos was once again an important cult center. As the ruler of a reunified Egypt, Ahmose chose Abydos for a monument which associates him with the god Osiris, and as a commemorative site for females of the royal family. Beginning in 1993,

Stephen Harvey has been excavating in South Abydos where Ahmose's monuments were constructed. The site was first investigated in 1898 by the Egypt Exploration Society when Ahmose's pyramid was found by Arthur Mace. In 1902 Charles Currelly located a terraced temple over 1 kilometer away from the pyramid, as well as a small mud-brick shrine for the king's grandmother Tetisheri, a subterranean shaft tomb, and a town and small cemetery.

Ahmose's pyramid is now a mound of sand and stone debris, ca. 80 × 80 meters and 10 meters high. Many fragments of reliefs were found that originally decorated the pyramid temple. Some of these are from battle scenes with Asiatics (with the earliest known images of horses) – probably depicting Ahmose's victory over the Hyksos. Harvey also located a previously unknown temple dedicated to Ahmose's chief wife, Queen Ahmose-Nefertari. Excavations of the town, where temple priests, personnel, and workmen probably lived, have uncovered evidence of bakeries, which fed the workers. A huge wall ca. 90 × 60 meters which surrounded the town was located with a magnetometer, an on-ground remote sensing device used to locate buried archaeological remains.

At the site of the earlier Hyksos capital of Avaris (Tell el-Daba) there is evidence from the early 18th Dynasty of a military base with camps for Egyptian soldiers and associated storerooms, including large granaries. Also associated with this occupation are pit burials of horses and young males – soldiers who died at the camp, including some Nubians in the Egyptian army, identified by the presence of Kerma domestic wares. A large walled palace complex of the early 18th Dynasty (probably from the joint reign of Hatshepsut and Thutmose III) has also been excavated there by Manfred Bietak. Covering an area of ca. 5 hectares, the complex consisted of three palaces (F, G, J), a large court, a large villa to the east of the largest palace (G), and a complex of storerooms to the south of Palace F. In the (ancient) dumps of Palace F fragments of frescoes on polished lime plaster, an Aegean technique, have been found and pieced together, revealing Minoan-style designs and motifs, such as acrobats leaping on bulls. The larger Palace G (160.6 × 79.2 meters), where some fragments of Minoan-style frescoes were also found, was built on top of a 7-meter high podium. This palace was entered via a ramp leading into a large columned courtyard, behind which were a columned portico and vestibule. In the palace's interior were a columned throne room, a possible sanctuary, and the private quarters – which included two apartments and a toilet.

Bietak has also found evidence at Tell el-Daba of two large harbors. Harbor 1 (ca. 450 × 400 meters), located next to the city of Avaris, was in use during the Middle Kingdom and Second Intermediate Period. To the south, Harbor 2 was located next to the Hyksos palace. Both harbors continued to be used throughout the 18th and 19th Dynasties, and Bietak has identified the site as that of Perunefer, the principal naval base of the New Kingdom.

The only well-preserved royal mortuary temple of the early 18th Dynasty is that of Queen Hatshepsut at Deir el-Bahri, which had associations with the goddess Hathor (Figure 8.2 and Plate 8.1). Built next to and strongly influenced by the temple of the 11th-Dynasty king Mentuhotep II (see 7.3), who reunified Egypt to found the Middle Kingdom, Hatshepsut's temple takes full advantage of its spectacular natural setting in a semicircular bay in the cliffs. Investigations were first conducted there by Auguste Mariette, and from 1893 to 1904 by Édouard Naville (for the Egypt Exploration Fund), who, working with Howard Carter,

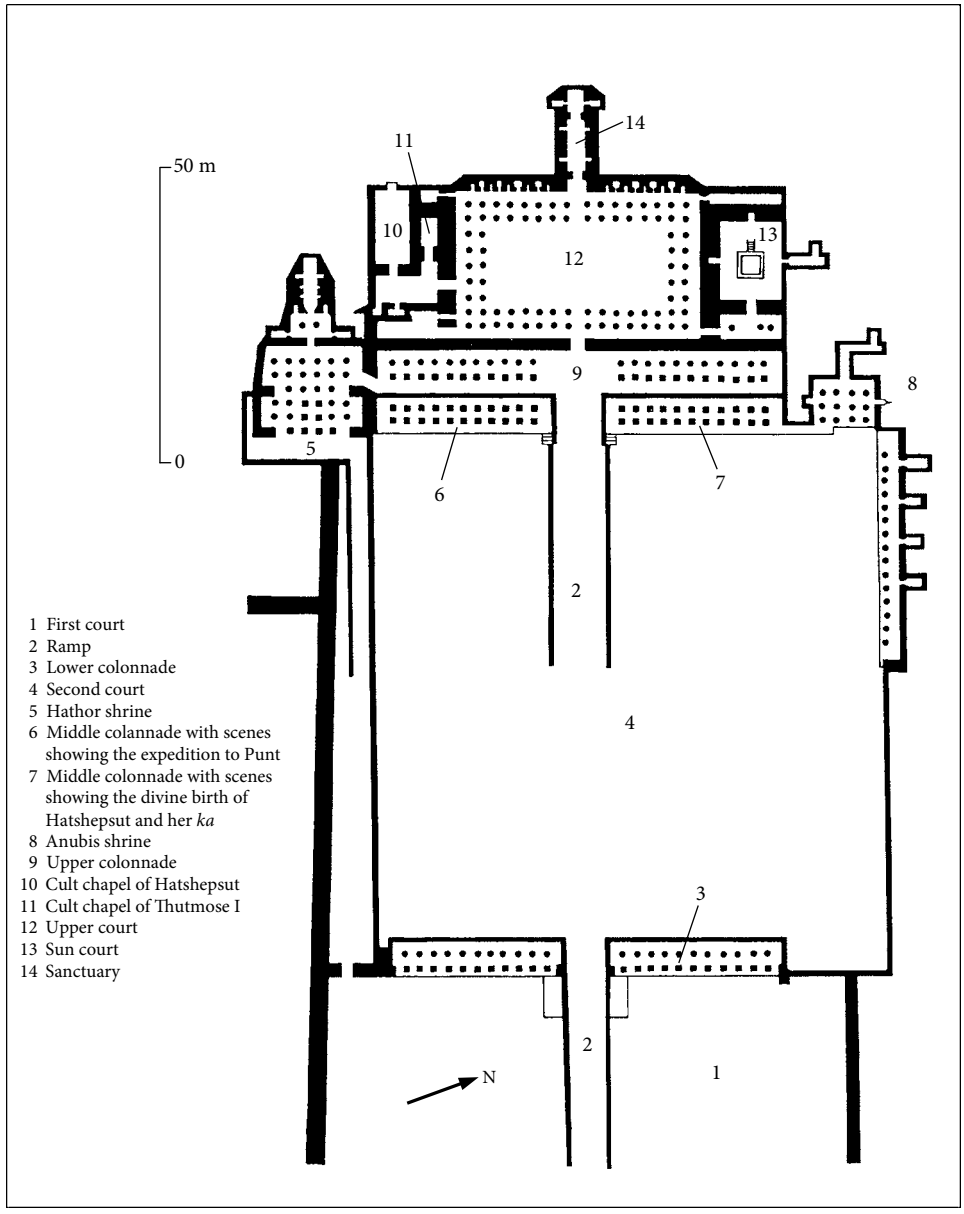


Figure 8.2 Plan of Hatshepsut's mortuary temple at Deir el-Bahri. Source: Gay Robins, *The Art of Ancient Egypt*. London: British Museum Press, 1997, p. 126. Used by permissions of the Trustees of the British Museum.

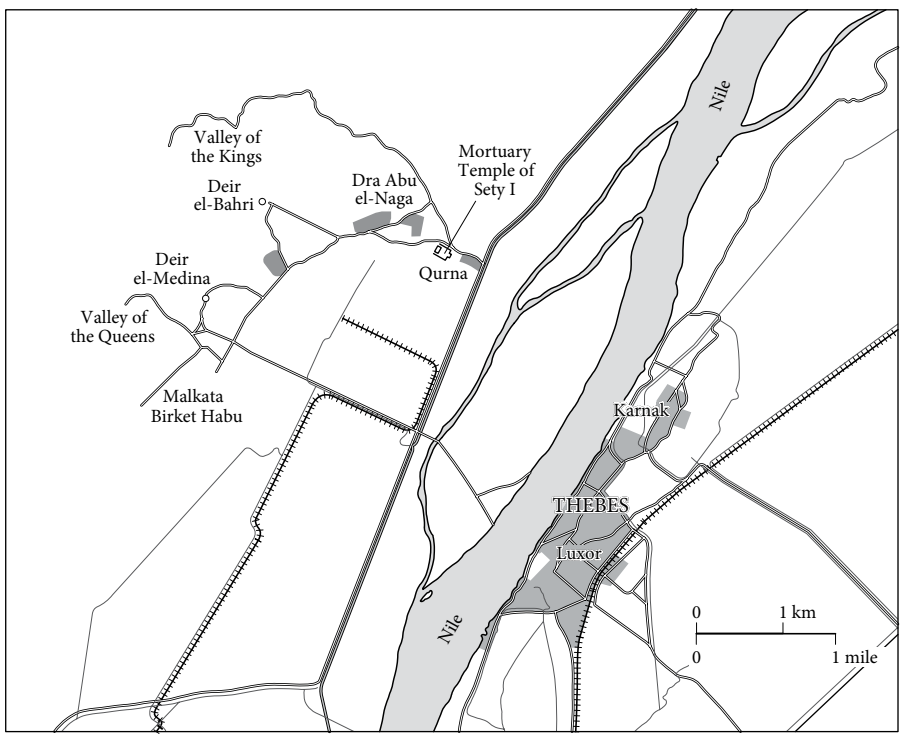
recorded the temple's reliefs and architecture, extensively published in seven volumes. Since 1961 the Polish Centre of Mediterranean Archaeology (of Warsaw University) in Cairo has been restoring and recording the temple architecture, painted reliefs, and inscriptions.

Originally connected by a causeway to a valley temple, now lost, is a walled lower court with a western colonnade. From this a ramp leads to the second level with the temple's large

second court. A second ramp then leads to the third level, with an upper colonnade, pillared upper court, and sanctuary, which was modified in Ptolemaic times. The sanctuary contained a stand for the bark of Amen-Ra, which was brought there during the Festival of the Valley. Shrines include those to Hathor, Anubis, and Amen, and an open solar court. Temple mortuary chapels were dedicated to Hatshepsut and her father Thutmose I. On the north side of the middle colonnade are reliefs of Hatshepsut's divine birth, which, as inscriptions indicate, legitimized her rule. As king, Hatshepsut is depicted in most of the temple's reliefs and statues as a male. Intentional destruction of the king/queen's cartouche, inscriptions, and statues occurred after her death, when Thutmose III finally reigned by himself.

The famous Punt reliefs are on the south side of the middle colonnade (Plate 8.2). The composition depicts the successful Punt expedition, of which Hatshepsut was undoubtedly proud, including the seafaring journey there and back. Scenes in Punt show indigenous houses, animals, and people, including the "Chief of Punt, Parahu" and his very heavy wife. Gold ingots and other raw materials of Punt are given to the Egyptian soldiers/sailors, who also return to Egypt with live incense trees carried on shipboard in pots. The logistics required to traverse the Eastern Desert, navigate the Red Sea, and return to Thebes, while supplying food and fresh water for the humans (and trees), makes this expedition a truly remarkable feat (see Box 7-A).

Senenmut, the official (and probable architect) who oversaw the construction of Hatshepsut's magnificent temple, built a chapel overlooking the temple and a tomb beneath



Map 8.3 Map of New Kingdom sites in the region of western Thebes.

the temple's first court. Perched on the rock above Hatshepsut's temple is a similar though smaller temple built by Thutmose III, with three levels with colonnades reached by ramps. The temple was destroyed by a landslide in the late New Kingdom, and much of what remained was removed for reuse in other monuments. It was discovered by the Polish archaeologists in 1962, and they have reconstructed temple scenes from the remaining fragments of painted relief, now in the Luxor Museum. Thutmose III also built a mortuary temple within the floodplain to the southeast of the Deir el-Bahri temples, but not much remains of this temple.

In the New Kingdom a few private individuals were also granted permission to build mortuary chapels in western Thebes. The largest of these non-royal mortuary temples was built for Amenhotep son of Hapu, to the west of the mortuary temple that he constructed for his king, Amenhotep III. Considerably larger than the nearby mortuary temple of Thutmose II, Amenhotep son of Hapu's temple consisted of a sanctuary, entered through two pylons and courts, the first of which contained a large pool surrounded by trees.

8.3 Amenhotep III's Malkata Palace

In the New Kingdom kings built smaller residences throughout the country, where they stayed as they traveled. At Medinet Gurob near the entrance to the Faiyum region Thutmose III built what may have been a kind of retreat near a harem palace for senior royal women, which also housed a weaving industry. Barry Kemp has reconstructed two of these small royal "rest houses." A kind of 18th-Dynasty hunting lodge was located near the Giza Sphinx, and to the south of Amenhotep III's palace in western Thebes at Malkata (at Kom el-'Abd), the king built a small rest-house that was used for chariot exercise.

Amenhotep III's large Malkata palace was built for his first *sed*-festival in regnal Years 29–30. In 1888 Georges Daressy did some initial exploration of the site, and the palace was first systematically excavated in the early 20th century by British Egyptologist Percy E. Newberry and the American Robb de Peyster Tytus. Later excavations in the 1970s were conducted by David O'Connor and Barry Kemp, and a Japanese expedition from Waseda University, Tokyo, which also located a ceremonial construction for the king's *sed*-festival at Malkata South.

At Malkata Amenhotep erected a main palace surrounded by an enclosure wall, which was rebuilt, probably for later *sed*-festivals (which were celebrated in Years 34 and 37) (Figure 8.3). According to Kemp, use of the palace was ceremonial, while O'Connor thinks that it also functioned as an administrative center. The main palace contained throne rooms, colonnaded reception and audience halls, courts, and private suites. There were also storerooms, kitchens, work rooms, and quarters for officials. Three or more subsidiary palaces were also built near the complex for members of the royal family, and to the north was a temple of Amen. High officials were housed in nearby villas and there was also a workmen's village ("North Village") to the west of the North Palace.

The mud-brick palace was lavishly decorated with colorful frescoes – even in the storerooms. For example, in the great central hall the floor was covered with scenes of a papyrus marsh from which arose 16 columns ending in capitals of lotus buds. Painted on the steps to the king's throne were bound enemies and bows, which he would have trampled symbolically. The king's suite

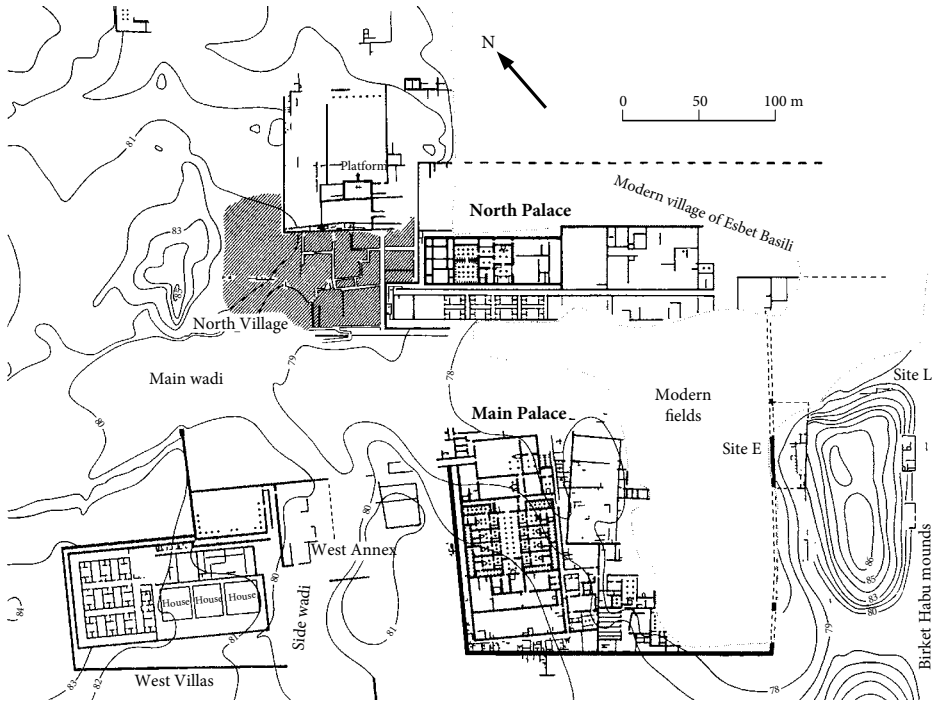


Figure 8.3 Plan of Amenhotep III's Malkata palace complex. Source: B. J. Kemp, *Ancient Egypt: Anatomy of a Civilization*. London: Routledge, 1989, Figure 74. Copyright © 1989 by Routledge. Reproduced by permission of Taylor and Francis Books UK.

contained various private rooms, including a bathroom and bedroom with a raised bed platform. An antechamber there was painted with bulls' heads and rosettes in a spiral design.

An enormous artificial lake, now called the Birket Habu, was excavated for ceremonial use and was later expanded to an area ca. 2 × 1 kilometers. Some of the excavated soil from the lake was used to make a base for Amenhotep III's mortuary temple to the northeast, of which little remains. During the king's *sed*-festival, the lake was the setting for rituals involving ceremonial barges, which were towed, as described in a text in the Theban tomb of Kheruef (TT 192), one of the high royal officials.

Inscribed jar labels excavated in and around the Malkata site span a period from Year 8 of Amenhotep III's reign to Horemheb's reign, but it is uncertain if the site was used during the Amarna Period. The jar labels indicate royal provisioning, not only for the large ceremonies that took place there periodically during Amenhotep III's reign, but also for state workers and personnel who built and cared for the site.

About 1 kilometer from the Malkata site are the remains of Amenhotep III's mortuary temple, where only the Colossi of Memnon, which originally flanked the temple's first pylon, can be seen today. Much more is now known about this temple as a result of the recent work of the Colossi of Memnon and Amenhotep III Temple Conservation Project, under the direction of Hourig Sourouzian, which has focused on conservation, excavation, documentation, and study of the site. The dimensions and plan of this huge temple are now

documented, and statues, reliefs, and texts which decorated it have been excavated – including over 60 statues of the goddess Sekhmet. This temple and the Malkata complex clearly demonstrate the impressive monuments that Amenhotep III left in western Thebes.

8.4 Tell el-Amarna and the Amarna Period

Before Amenhotep IV moved his court to the new capital at Tell el-Amarna in Middle Egypt, he erected four shrines at East Karnak. Although his father Amenhotep III had constructed major temples at Luxor and Karnak, dedicated to the cult of Amen-Ra, his son's shrines in the Amen temple precinct at Karnak honored the sun-disk deity Aten. The new cult established by Amenhotep IV, who subsequently changed his name to Akhenaten to honor this deity, was later regarded as heresy. Akhenaten's Karnak monuments were dismantled and blocks of relief from these shrines were used as fill in later constructions at Karnak and Luxor, where they have been found in the course of restoration work in the later 19th and 20th centuries. Decorated with reliefs and inscriptions, thousands of recovered blocks formed a kind of enormous jigsaw puzzle to reconstruct for the Akhenaten Temple Project, directed by Donald Redford (University of Toronto and now Pennsylvania State University).The project included excavations at East Karnak to determine the architectural context of the reliefs from foundation remains. The preserved Karnak *talatat* blocks have now been cleaned and documented in a database by the ARCE Talatat Project, with data recorded for over 15,500 blocks including details of the reliefs and texts.

Akhenaten's Karnak reliefs display the early forms of his radically new Atenist religion, which could not have pleased the priests of the nearby Amen cult. Aten is depicted as a sun-disk with rays ending in human hands, which extend the hieroglyph for life (*ankh*) to the king and his queen Nefertiti (Plate 8.3). With the change in religion, there was also a change in art style. The king is depicted in a bizarrely mannered style, with bloated belly, wide hips, fleshy breasts, and a thin elongated face with large lips and bulbous chin. Colossal statues of the king, in the same style and with cartouches carved on his arms and torso (also an innovation), were originally in a court at East Karnak. The shrines were erected quickly, made possible by the innovation of the so-called *talatat* blocks of sandstone used to decorate the monuments, which were small enough so that one workman could carry one block on his shoulder.

It has been suggested that Akhenaten suffered from a glandular disease which deformed his body, as seen in the early sculpture, but Nefertiti is depicted in the same exaggerated style. Both the king and queen are also known in sculpture of a highly realistic style, including the famous Nefertiti head in Berlin (Plate 8.4). Since Akhenaten's mummy has not been identified, such a theory cannot be tested on his physical remains, and an art style alone cannot demonstrate a medical problem.

Relief scenes from East Karnak include the king's *sed*-festival, which was celebrated quite early in his reign, in Year 2 or 3. The royal couple also perform the ritual of presenting offerings to Aten, while scenes honoring the other important deities are absent. Many temple scenes are of the king and queen in daily life, albeit of a ceremonial nature within the context of temple and palace, such as riding their chariots and making appearances at a special palace window (the "Window of Appearances"). Other reliefs include scenes of workmen building the temple – all of which are a radical departure for temple decoration that would

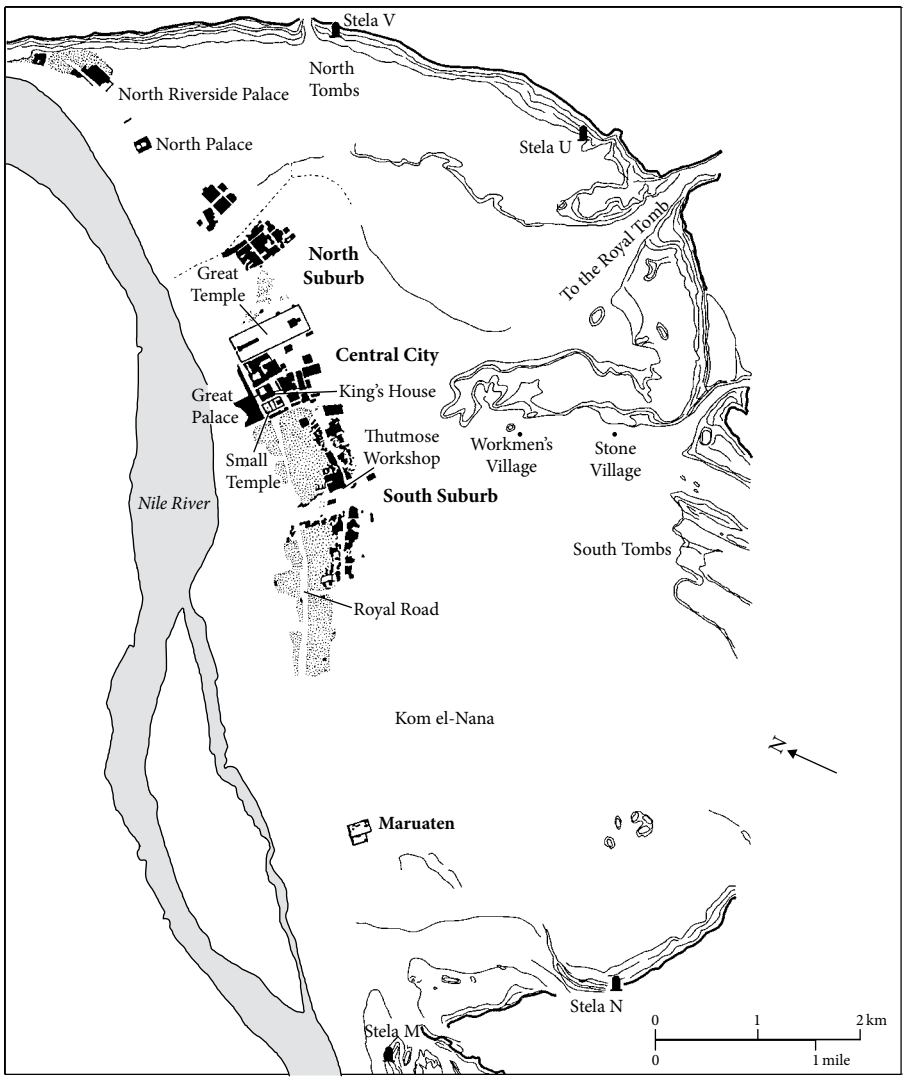


Figure 8.4 Plan of the city of Akhetaten (the site of Tell el-Amarna), including the eastern tombs. Source: illustration by Peter Der Manuelian (after Barry Girsh, in Dorothea Arnold, *The Royal Women of Amarna*. New York: Metropolitan Museum of Art, 1996, Figure 13). R. E. Freed, Y. J. Markowitz, and S. H. D'Auria (eds.), *Pharaohs of the Sun. Akhenaten. Nefertiti. Tutankhamen*. Boston: MFA Publications, an imprint of the Museum of Fine Arts, Boston, in association with Bulfinch Press/ Little, Brown, 1999, p. 15. © Museum of Fine Arts, Boston.

be repeated later at Amarna. The importance of Nefertiti in the Aten cult is clear, and one whole monument at Karnak was devoted to her without Akhenaten.

Akhenaten's later monuments were located at Akhetaten (Tell el-Amarna), the capital he founded on the east bank in Middle Egypt, which also became the cult center of Aten (Figure 8.4). Given the usually poor preservation of ancient settlements in Egypt, Amarna's

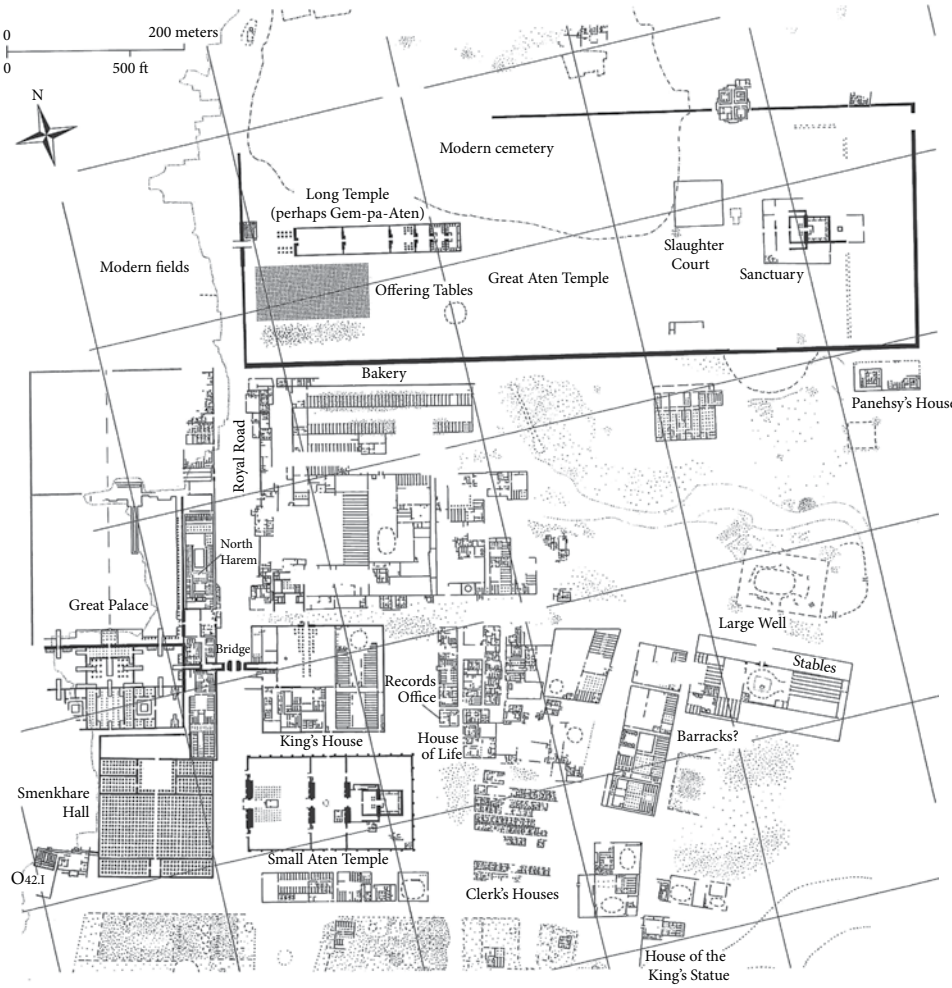


Figure 8.5 Plan of the central city of Akhetaten. Source: Barry Kemp, *The City of Akhenaten and Nefertiti: Amarna and Its People*. London and New York: Thames & Hudson, 2012, p. 38, Figure 1.10. Reproduced by permission of Barry Kemp.

remains are exceptional. The site was surveyed in the early 19th century, and Flinders Petrie conducted the first extensive excavations there in the 1890s. From 1901 to 1907 Norman de Garis Davies carefully copied scenes and inscriptions from tombs and boundary stelae. German archaeologist Ludwig Borchardt excavated at the site before World War I, which is why the famous head of Nefertiti is in the Egyptian Museum in Berlin. Since 1977 Barry Kemp has been systematically investigating the site for the Egypt Exploration Society, which also sponsored excavations there after World War I.

The city of Akhetaten, which covered an area of ca. 440 hectares, had no surrounding wall. Although it was a special purpose city, it nonetheless provides an example of Egyptian urban planning (Figure 8.5). The city was organized with a core center planned on a grid, with administrative buildings and residences of different sizes extending southward to the

River Temple. To the north were the North City, North Suburb (with ca. 300 houses), and two palaces. To the east was a walled workmen's village (with ca. 70 houses), and unfinished rock-cut tombs for high officials were in northern and southern groups in the eastern cliffs. The Royal Tomb was located up a central wadi in the eastern cliffs.

The city was occupied for about 11 years during Akhenaten's reign, and abandoned by the court early in Tutankhaten/-amen's reign. Some occupation continued there in the 19th Dynasty, when the Amarna stone temples were dismantled and statues smashed (probably during the reign of Rameses II), but mud-brick buildings were simply left to decay. The site was briefly reoccupied in Roman times, and in Coptic times monks lived in some of the northern tombs, one of which became a small church.

The central city contained the largest temple and palace. With an enclosure wall ca. 730 × 229 meters, the Great Aten Temple was entered on the west from the Royal Road. Within this huge enclosure were two main stone structures: the Sanctuary on the east, and the Long Temple to the west. The latter consisted of a columned court and a series of open courts with offering tables and sanctuaries, to the south of which were over 900 open-air offering tables. The Sanctuary has also been reconstructed by Kemp as an open-air temple. Two courts contained numerous small altars, with the temple's high altar in the second one. The Sanctuary represents a new style of temple architecture, with the innermost room open to the sun, instead of a dark closed sanctuary for the god's statue. As depicted in Amarna reliefs, Akhenaten and Nefertiti honored Aten at this altar, piled high with food.

To the south of the Great Temple were associated structures, including over 100 baking rooms where many sherds of bread molds were found, as well as the official residence of the high priest and "Keeper of the Cattle of Aten," Panehesy (where bones of butchered cattle found during the original excavations in 1926 have recently been retrieved from the excavation dump and studied by zooarchaeologist Phillipa Payne). There was also a small private palace (the "King's House"). According to Kemp, this palace was associated with the largest granaries at Amarna (ca. 2,000 square meters) – suggesting royal and not temple control of basic staples for the king's officials. A small temple (the "House of Aten"), was possibly some kind of royal mortuary temple, and to the east of this were administrative buildings, including the so-called Records Office, where the Amarna Letters were found (see Box 8-A). Farther east were possible quarters for the military police and stables for horses.

To the west of the Royal Road, which was spanned by a triple-arched bridge, was the Great Palace, much of which has been destroyed by later cultivation. On the east side were rooms of the so-called North and South Harems, a garden court with a pool, and many storerooms. This part of the palace was colorfully painted, including a columned portico with pavement scenes of a papyrus marsh full of birds, with fish swimming in a rectangular pool. The palace had a large courtyard around which were colossal royal statues, and associated buildings, all in stone, probably for special receptions and ceremonies. To the south was an enormous hall with 510 mud-brick columns in 30 rows.

To the south of the central city was a residential area, the Main City, which Kemp characterizes as "a series of joined villages." House compounds there included that of the sculptor Thutmose, where Nefertiti's head and other royal sculptures were found. Large circular wells, each with a spiraling ramp, were located throughout this part of the city.

Box 8-A The Amarna Letters

The Amarna Letters were found by peasants at the site of Amarna in 1887, before proper excavations had begun there. Unfortunately, a number of tablets were lost before they were recognized for what they are: Egypt's diplomatic correspondence with the major and minor powers in southwest Asia. Over 380 tablets are known from Amarna, mostly dating to the reign of Akhenaten and coming from a royal archive. But a few tablets are from the latter part of Amenhotep III's reign and possibly the early years of Tutankhamen's reign.

The letters were written on clay tablets in cuneiform script, and a few also have inked hieratic (Egyptian) notes of scribes recording their receipt at Akhetaten. Cuneiform was used to write a number of different languages in southwest Asia for about 3,000 years. The language in most of the Amarna cuneiform texts is (middle) Babylonian, of a regional form used in the diplomatic correspondence of the ancient Near Eastern powers of the Late Bronze Age.

The letters provide a wealth of information about Egypt's foreign affairs. Some of the correspondence was with the kings of independent states: Assyria, Babylonia, Hatti (the Hittites), Mitanni (northern Syria), Arzawa (southern coastal Anatolia), and Alashiya (Cyprus). Egypt definitely had the upper hand in these negotiations – of valuable "gifts," craftsmen, and royal women sent to Egypt, mainly in exchange for Egyptian gold. Letters from the small polities of coastal Syria and Palestine that were under Egyptian control are more about administrative matters, and there are many requests for Egyptian military aid – painting a picture of squabbling self-interest and petty conflicts.

Barry Kemp has suggested that possibly there was a kind of international scribal school in or near the Record Office at Amarna, as suggested by a cuneiform "vocabulary" text on one of these tablets, with Egyptian words written (phonetically) in cuneiform signs in a column on the left and their equivalents in Babylonian on the right. Three fragments of cuneiform tablets have also been found in houses at Amarna – possible evidence of a Near Eastern official in residence at Amarna, or in the case of a tablet with a sign list, an Egyptian learning to read Babylonian.

The letters also provide some information about the increasing success of the Hittites in extending their territory from central Anatolia into northern Syria, at Egypt's expense. A note can be added on the end of the Amarna Period. A widowed Egyptian queen (probably Tutankhamen's) wrote a letter to the Hittite king Suppiluliuma stating that there was no king ruling in Egypt. She asked for a Hittite prince to be sent to Egypt so that he could become king. This, of course, would never have been accepted by Egyptian officials and aspirants to the throne. The Hittite prince was assassinated on his way to Egypt, and the last rulers of the 18th Dynasty, Ay (briefly) and (General) Horemheb, were not the descendants of Akhenaten or Tutankhamen.

Large houses were next to small ones, and although there was a hierarchy of house sizes, which suggests a hierarchy of socio-political status at Amarna, there were not exclusive neighborhoods only for high-status families.

Amarna houses were walled mud-brick residences within a brick enclosure wall. The large house of the vizier Nakht had 30 rooms (many of which were only a few square meters in area), but even he, as one of the highest ranking government officials, lived in a significantly smaller dwelling than the palaces of the royal family. A typical large house at Amarna had a small entrance room, a columned reception hall, and a living room with an elevated platform where the owner (and his wife?) sat. This part of the house had a raised ceiling, with windows just below the roof line. There were also private quarters with bedrooms and a bathroom. A staircase led to the roof, which may have been used in warm weather, but the larger houses may have had upper stories. Private shrines with reliefs of Akhenaten and Nefertiti worshipping Aten, sometimes set within a garden, have been found at some Amarna houses.

Barry Kemp has described the basic elements of an Amarna house compound, which included circular grain silos in a court (but some houses also had larger vaulted rooms for grain storage). That grain was stored in private houses indicates some economic independence from the crown, which did not provide sustenance for all the inhabitants at Amarna, and probably private land holdings of such individuals. Cooking took place in ovens and hearths outside the house, and animals were kept in sheds. Trees and possibly vegetable gardens were also associated with some houses. Larger houses were also where small-scale production facilities were located, including weaving and potting. Artisan's workshops could be within the compound or just outside the walls. With no public sewage system, garbage and waste were dumped outside the houses, often near the public wells.

The eastern Workmen's Village was organized much more rigidly along five north–south streets, with about 70 small houses, including one for an overseer. Unlike the city of Akhetaten, the village was surrounded by a thin wall. Arranged in six blocks, the houses consisted of a hall or court, living room, and two small rear rooms and a back staircase to the roof. Upper rooms may have been added by the inhabitants.

The state must have provided water, grain, and basic materials and tools to the workers. Animal pens were located outside the village, where there is evidence of a pig industry. Pigs were butchered and the meat was salted and packed in jars, probably to supplement the villagers' income. A number of mud-brick chapels, not associated with graves, were also located outside the village and may have been used by families for commemorative rituals. According to Frances Weatherhead, the chapel wall paintings avoided the Amarna style, and other deities were commemorated, including Amen and Isis (whose cults were ignored by Akhenaten). Painted figures of Bes, probably a protective household deity, are also known from houses at Amarna, including the Workmen's Village (and at Deir el-Medina; see 8.11).

More than 1 kilometer to the southeast of the Workmen's Village was the Stone Village, with an associated cemetery to the southeast. First located in 1977, the village was excavated beginning in 2005 under the direction of Anna Stevens and Wendy Dolling. Although the stone-walled houses in this village were more informal in plan than those of the Workmen's Village, the village was probably for a permanent population. The many basalt chips

excavated in the village are the debitage from tool making, suggesting that desert-based workers engaged in stone quarrying and/or tomb cutting lived there.

About 2 kilometers to the south of the Stone Village was another cemetery, the South Tombs Cemetery, with non-elite burials of the Amarna Period. Studies of the skeletal remains began in 2006 by the Amarna Bioarchaeology Project team (and later field school) from the University of Arkansas. Initial results demonstrate that a large proportion of the humans buried there had short life spans. There is also evidence for childhood nutritional deficiencies and work that involved high risks of injury.

Unlike the geography at Thebes, the elite Amarna tombs were in the cliffs to the east of the city. The Royal Tomb and four unfinished tombs were located farther east in the "Royal Wadi." Although unfinished and robbed, the royal tomb still had smashed pieces of a sarcophagus in a pillared hall. According to Egyptologist Geoffrey Martin, who studied this tomb, one room may have been intended for Nefertiti's burial. Relief scenes in rooms which open off the tomb stairway include a royal woman's funeral, perhaps the result of the death of one of Akhenaten's daughters during childbirth.

Located in two groups to the north and south of the Royal Wadi, most of the Amarna rock-cut tombs were unfinished when the city was abandoned by the court. In the desert near the northern tombs were three so-called desert altars, which Kemp suggests may have been built for some kind of short-term royal celebration.

Many of the reliefs that decorate the Amarna tombs are in poor condition, in part because of the poor quality of limestone in which they were carved. Pre-Amarna Period tombs have relatively few religious scenes and texts, which are missing in the Amarna tombs (with many more in post-Amarna Period tombs). But traditional scenes of the tomb owner, his offices, and his estates, are missing at Amarna. Thus, even in the mortuary cult there were major ideological changes at Amarna. Osirian themes, concerning the most important Egyptian afterlife beliefs, are absent in these tombs. Many tomb scenes focus on the royal family and their activities, especially scenes honoring Aten. Very detailed scenes show the architecture of the palace, Great Temple, and other buildings (as on many *talatat* blocks) – which has also helped archaeologists to better understand the plans and functions of these buildings. But interpretation of these scenes is not simple because they are not straightforward plans or elevations.

Also found in reliefs from Amarna tombs and other monuments is a change in subject matter. The royal family is frequently depicted in intimate scenes of familiarity. One fragmentary stela even has Nefertiti seated on Akhenaten's lap, and the king is often shown holding or kissing his small daughters (Figure 8.6). Such scenes are not known before or after the Amarna Period, and seem undignified compared to traditional scenes of the idealized god-king. Possibly Akhenaten had ideological reasons for such depictions of the royal family. Scenes of the army parading along the Royal Road at Akhetaten (and not in battle) are also common. Given the major economic problems that must have arisen when the many gods' cults (and their priesthoods and temple personnel) were no longer supported, Akhenaten certainly needed the support of the military during his 17-year reign.

Another of the many changes that occurred during the Amarna Period is the use in texts of Late Egyptian, which was the vernacular of the time. For traditional reasons, Middle

Figure 8.6 Fragmented relief of Akhenaten with Nefertiti on his lap holding two princesses. Source: © RMN-Grand Palais (Musée du Louvre)/Franck Raux.

Egyptian, which was no longer the spoken language, continued to be used in official and religious texts, but Amarna texts are written in a form of Late Egyptian. The "Hymn to Aten," which is found inscribed in Amarna tombs, describes an omnipotent and universal god, the creator of all living things – which is also depicted in a lively and naturalistic style in reliefs from Karnak. A number of images in this hymn are paralleled in the 104th Psalm in the Old Testament.

Akhenaten has sometimes been called the world's first monotheist, and even Sigmund Freud wrote a book about this: *Moses and Monotheism*. But Akhenaten's religion had a dual aspect: the celestial Aten, and the worship of the god through his son Akhenaten (and Nefertiti). Thus, there was a certain remoteness to the sun-disk Aten, who unlike other Egyptian gods was not depicted in an anthropomorphized image. As noted above, the changes that occurred were cultural, not only religious, and the reforms were of such an all-encompassing nature that they probably emanated directly from Akhenaten.

The Amarna Period is a fascinating though brief time that produced extraordinarily beautiful art and decoration – and a royal capital that has been extensively investigated by archaeologists. It is both ironic and fortuitous that because of so much intentional dismantling and reuse of stone from Akhenaten's monuments a great deal of information about this unique period has been preserved.

8.5 The Amarna Aftermath and Tutankhamen's Tomb

Late in Akhenaten's reign Nefertiti was possibly named Akhenaten's co-regent (Neferneferuaten), and their oldest daughter, Meritaten, was named her father's "consort" – not a wife but the most important female in the court. Meritaten married Smenkhkara (of

uncertain parentage), who ruled briefly(?) after Akhenaten's death, but with his death Tutankhaten became king at age 8 or 9. Tutankhaten, who was probably Akhenaten's son by another wife (Kiya?), married Ankhesenpaaten, perhaps 12 years old, the third daughter of Akhenaten and Nefertiti and probably her husband's half-sister.

By Year 3 of Tutankhaten's reign the court had returned to Memphis, and the Amarna "revolution" was over. Highly debated is whether Akhenaten's mummy was brought back to Thebes and buried in a small tomb in the Valley of the Kings (KV 55), but the mummy of an unidentified male in this tomb is too young to be that of Akhenaten. A gilded wooden shrine, originally made for Akhenaten's mother Tiy, was also found in this tomb, along with burial equipment that had been planned for a secondary wife of Akhenaten's, Kiya.

Tutankhaten's name was changed to Tutankhamen, and a royal edict was issued, which was inscribed on the "Restoration Stela." The stela describes Egypt during the previous reign as a country that had been abandoned by the gods. To restore order, the old cults, especially that of Amen-Ra, were reopened, new cult statues were made, and revenues that had previously gone to the Aten cult were directed to other temples throughout Egypt. Although not stated on the stela, the destruction of Akhenaten's monuments also began at this time.

It is unlikely that the young Tutankhamen implemented these changes himself; he was probably manipulated by high court officials and priests of the traditional cults. One official who may have been instrumental in the subsequent events was Ay, possibly a brother of the boy-king's deceased grandmother Tiy (chief wife of Amenhotep III and mother of Akhenaten). Although a tomb had probably been started for Tutankhaten at Amarna, it was abandoned and another one was prepared at Thebes but remained unfinished at the time of his death.

Tutankhamen was an insignificant king, famous today only because his small cluttered tomb was found mostly intact in 1922 with huge amounts of gold artifacts (see Box 8-B), unlike all other royal tombs of the New Kingdom. Although there is evidence that ancient robbers had penetrated the tomb twice, they must have been caught or stopped before much could be stolen or damaged, and the tomb was resealed by officials. Much smaller than other royal tombs of the 18th Dynasty, Tutankhamen's tomb (KV 62) was not planned for his burial, but was quickly adapted for it when the young king died. Its discovery by Howard Carter is truly one of the great stories in modern archaeology.

Because of Carter's meticulous care in recording all the artifacts in the tomb *in situ*, by drawings, notes, photographs, and a numbering system, the context of each item found in the tomb is known. If the tomb had been extensively robbed in antiquity most tomb goods would have been lost, with the gold melted down for reuse. If the tomb had been robbed in recent times, tomb goods would have been sold to antiquities dealers piece by piece, and the true arrangement of the king's burial would remain unknown. Fortunately, the "wonderful things" in Tutankhamen's tomb that Carter found and then recorded were carefully packed and sent to the Egyptian Museum in Cairo, where generations of visitors to Egypt (as well as scholars) have marveled at this great discovery.

Box 8-B Howard Carter and Lord Carnarvon: The discovery of Tutankhamen's tomb

In 1901 George Edward Stanhope Molyneux Herbert, fifth Earl of Carnarvon, was in a car accident in Germany, which left him frail and unhealthy. His doctor recommended wintering in warmer climes and in 1903 he went to Egypt, where he took up Egyptology as a kind of hobby. The next year, realizing that he needed a trained professional, Lord Carnarvon hired Howard Carter, who had been working in Egypt since 1891. Their collaboration would ultimately lead to one of the greatest archaeological discoveries in the world.

In the years before World War I Carter excavated a number of private tombs in western Thebes and in early 1915 he began excavating in the Valley of the Kings, the concession for which had been previously held by a wealthy American from Newport, RI, Theodore Davis. With Lord Carnarvon in England, Carter's exploration of the Valley of the Kings was curtailed by World War I until 1917. For the next five years he searched in the Valley for Tutankhamen's tomb with no success, and in 1922 Lord Carnarvon decided to end his financial support. But at Highclere Castle, Carter said that he would personally fund a final field season, to excavate in one last area in the Valley. Relenting, Lord Carnarvon agreed to fund the work.

On November 1, 1922, Carter began digging in an area where in 1920/21 he had stopped working because all he found were the huts of workmen employed constructing the tomb of Rameses VI. Three days later, on November 4, his workmen uncovered the top of a rock-cut stairway. The next day more steps were cleared, revealing a plastered wall covered with stamped cartouches. Covering up the steps, Carter then sent a telegram to Lord Carnarvon in England about a "wonderful discovery … congratulations."

Taking a ship from Southampton, Lord Carnarvon arrived by train in Luxor with his daughter on November 23. Work at the newly discovered tomb began the next day, when more clearance of the plastered wall revealed the cartouche of Tutankhamen. The plaster-covered stone blocks, which were removed, opening into a descending corridor. At the end was another plastered wall, also stamped with cartouches. Puzzled, Carter made a small hole in this wall and inserted a candle – late in the afternoon of November 26. Looking into what would be called the tomb's Antechamber, Carter felt hot air escaping. He would later write: "presently, as my eyes grew accustomed to the light, details of the room within emerged slowly from the mist, strange animals, statues, and gold – everywhere the glint of gold" (Figures 8.7 and 8.8).

But not long after the king's burial chamber had been opened Lord Carnarvon was bitten on his cheek by a mosquito, and he nicked the bite while shaving. The opening became infected, and he developed pneumonia. Antibiotics had not yet been discovered, and the earl, frail since his auto accident, died in Cairo on April 5, 1923 at age 57.

There were no curses written anywhere in Tutankhamen's tomb, however, as was rumored in the press. Unfortunately, Lord Carnarvon's death created a number of problems with the Egyptian authorities in 1924, but Howard Carter would eventually spend a number of years with a team of experts and workmen, recording, photographing, conserving, packing, and clearing Tutankhamen's tomb. It was the discovery of a lifetime, and he died at home in London in 1939, at age 65.

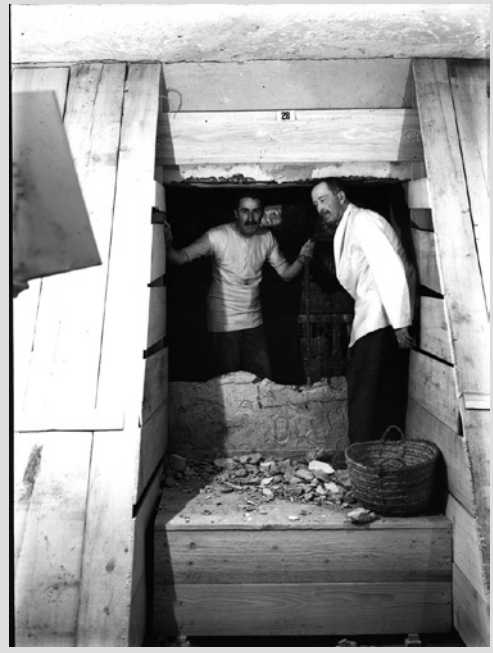


Figure 8.7 Howard Carter and Lord Carnarvon in Tutankhamen's tomb. Source: © Griffith Institute, University of Oxford.

Figure 8.8 View of the antechamber of Tutankhamen's tomb, taken in 1922. Source: © Griffith Institute, University of Oxford.

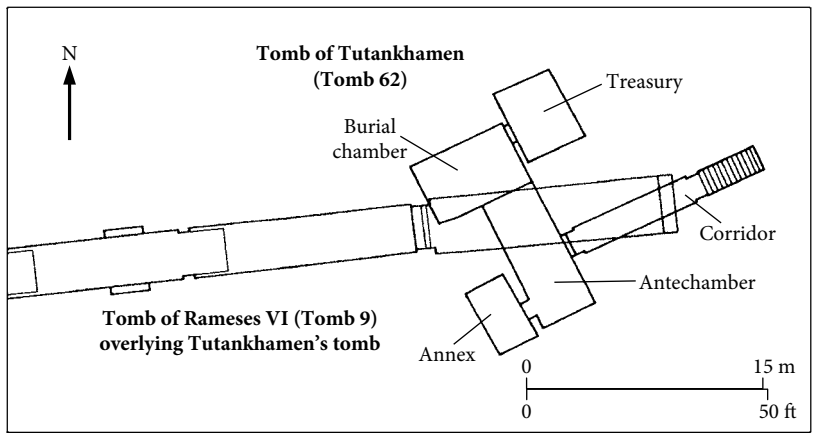


Figure 8.9 Plan of Tutankhamen's tomb (KV 62), overlain by part of the tomb of Rameses VI (KV 9). Source: Drawn by Tracy Wellman. From Nicholas Reeves, *The Complete Tutankhamun*. London and New York: Thames & Hudson, 1990, p. 55.

The tomb consists of four small rooms entered from a long corridor at the bottom of 16 steps cut into the limestone bedrock (Figure 8.9). The first is the so-called "Antechamber" in which there were three large beds, disassembled chariots covered in gold foil, travertine vessels, and various stools and boxes. Also found in the Antechamber was the famous Golden Throne, with an inlaid scene on the back of the king being anointed by his wife with perfumed oil (Plate 8.5). Above the royal couple is the Aten sun-disk – indicating that the throne was made at the end of the Amarna Period. Names of both the king and the queen in the cartouches on the throne had been altered to read "Tutankhamen" and "Ankhesenamen," but one cartouche on the outer arm still reads "Tutankhaten."

To the west of the Antechamber in Tutankhamen's tomb is the smaller "Annex," found packed with a disorderly lot of furniture, wine jars, travertine vessels, and 116 baskets with fruit. On the north side of the Antechamber was the sealed entrance to the Burial Chamber, flanked by two wooden statues of the king with a gold-covered headdress, kilt, and jewelry, holding a gold mace and striding with his walking stick. The Burial Chamber is the only decorated room in the tomb with mortuary inscriptions and scenes of the funeral and of Tutankhamen with gods of the afterlife, especially Osiris.

Tutankhamen's mummy was placed within a series of four gold-covered shrines bolted shut, with only a narrow space between the outermost one and the walls of the burial chamber (Figure 8.10). It took Carter eight months to carefully dismantle the shrines, inside of which was a quartzite sarcophagus. Within the sarcophagus were three nested coffins. The outer two coffins are made of wood covered with gold foil, and the innermost coffin is of solid gold. Covering the mummy was a solid gold mask of the king wearing the *nemes* headdress (Plate 8.6). Within the many layers of linen wrappings, the mummy was covered with over 100 pieces of jewelry, amulets, and ornaments, mostly in gold – and something very rare for the time, a gold-handled dagger with an iron blade.

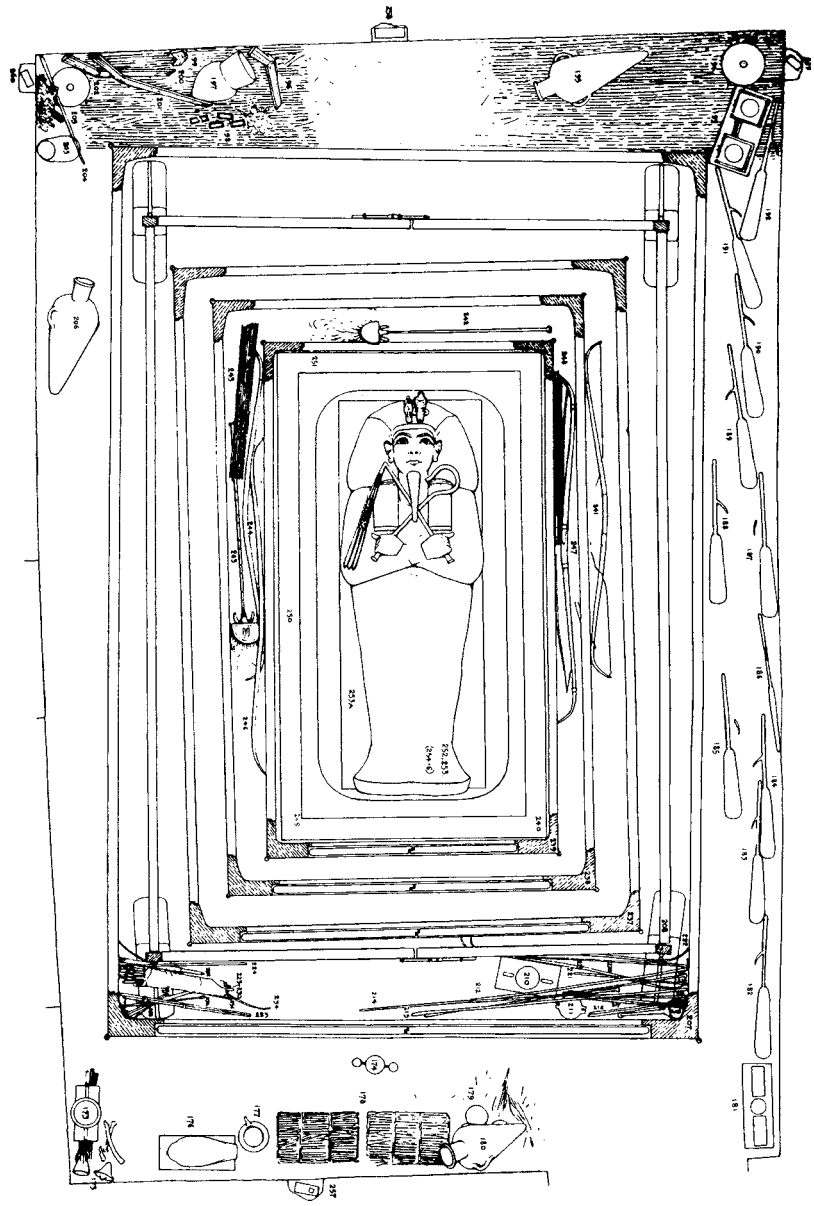


Figure 8.10 Plan of Tutankhamen's burial chamber, with four shrines, sarcophagus, and coffins. Source: Nicholas Reeves, *The Complete Tutankhamun*. London and New York: Thames & Hudson, 1990, p. 85. Reprinted by permission of the Griffith Institute.

The Treasury, opening to the north of the Burial Chamber, was protected with a crouching statue of the jackal-god Anubis on a portable shrine, covered in a linen shroud. There were many boxes in this room along with model boats, but the most important artifact was the gold-covered canopic shrine containing a travertine chest

with the king's embalmed viscera in small gold coffins (Plate 8.7). Two mummified fetuses were also in small coffins in an undecorated box in the Treasury, perhaps from miscarriages of Tutankhamen's wife Ankhesenamen.

The amazing finds in Tutankhamen's tomb can only be briefly discussed here. Aside from the large artifacts described above, Tutankhamen was buried with just about everything he would need in life. Clothing includes linen garments, and even underwear in the form of triangular loincloths. Twenty-seven pairs of gloves were found, including a small pair used by the king as a child. Materials for sandals range from gold to beaded leather and woven papyrus. One box contained the king's shaving equipment, and there are sets of writing equipment with pens, pen cases, and a papyrus burnisher.

Musical instruments include ivory clappers, sistra, and trumpets made of silver or copper alloy. There is an inlaid ebony game board for *senet*, and another one for the "game of 20 squares." A tiny coffin nested within three larger coffins contained a braided lock of hair, which, according to the inscription, had belonged to Tutankhamen's grandmother, Queen Tiy. Sixteen bows were found throughout the tomb, and other weapons include clubs, throw-sticks, daggers, and swords. Numerous vessels are made of pottery, travertine, faïence, glass, silver, and gold.

Real food in the tomb includes pieces of beef, sheep/goat, geese, ducks, loaves of bread, and seeds of emmer wheat and barley. Lentils, chick peas, and peas were also found. Flavoring for the king's food includes garlic bulbs, juniper berries, coriander, fenugreek, sesame seeds, and black cumin – as well as two jars of honey. Whole fruits were found in baskets, including persea, dates, sycamore figs, and grapes/raisins – and there were also watermelon seeds. Twenty-six of the wine jars found in the tomb had hieratic inscriptions, many of which identified the type of wine inside, its date (regnal year of Tutankhamen), where it came from – and even the name of the chief vintner. Bouquets of real flowers had been left in the tomb, and a wreath of (imported?) olive leaves and blue flowers was found on top of the king's outermost coffin.

A CT scan of Tutankhamen's mummy in 2005 revealed a kneecap fracture, which possibly became infected and was the cause of his early death. Then in 2010 an analysis of Tutankhamen's DNA (along with that of ten other, presumably blood-related, mummies) was published in the *Journal of the American Medical Association*, one result of which was that Tutankhamen's DNA showed genetic evidence of a malaria infection, as well as some anatomical variants, such as an incomplete cleft palate (which had been identified earlier in the CT scan). These results have been challenged by a number of scientists, however: some questioned the technique of DNA analysis used on these mummies (genetic fingerprinting), while others believe that there was not sufficient DNA left in Tutankhamen's mummy for the results to be valid.

After Tutankhamen's death, Ay briefly became ruler and was buried in a larger tomb in the (west) Valley of the Kings, perhaps the one originally intended for Tutankhamen. General Horemheb, who became the last ruler of the 18th Dynasty, had earlier built a beautifully decorated tomb at Saqqara (see 8.10), but as king he was buried in the Valley of the Kings. Ay's mortuary temple in western Thebes was later usurped by Horemheb.

New Kingdom Temples

8.6 Restoration of the Traditional Gods: Sety I's Abydos Temple

Destruction of Akhenaten's monuments continued in the 19th Dynasty, and restoration of the old cults included the construction of new monuments to Egypt's gods. At Abydos, the important cult center for Osiris, the god who judged all in the afterlife, Sety I built a large temple to the south of the earlier Kom el-Sultan temple to Khentiamentiu/Osiris (in which the earliest artifacts are from Early Dynastic times) (Figure 8.11). Sety's temple, which was also worked on by Rameses II, was cleared in the 19th century by Auguste Mariette. To the north of his father's temple, Rameses also built for himself a comparable but smaller temple decorated on the outside with scenes of his Battle at Qadesh.

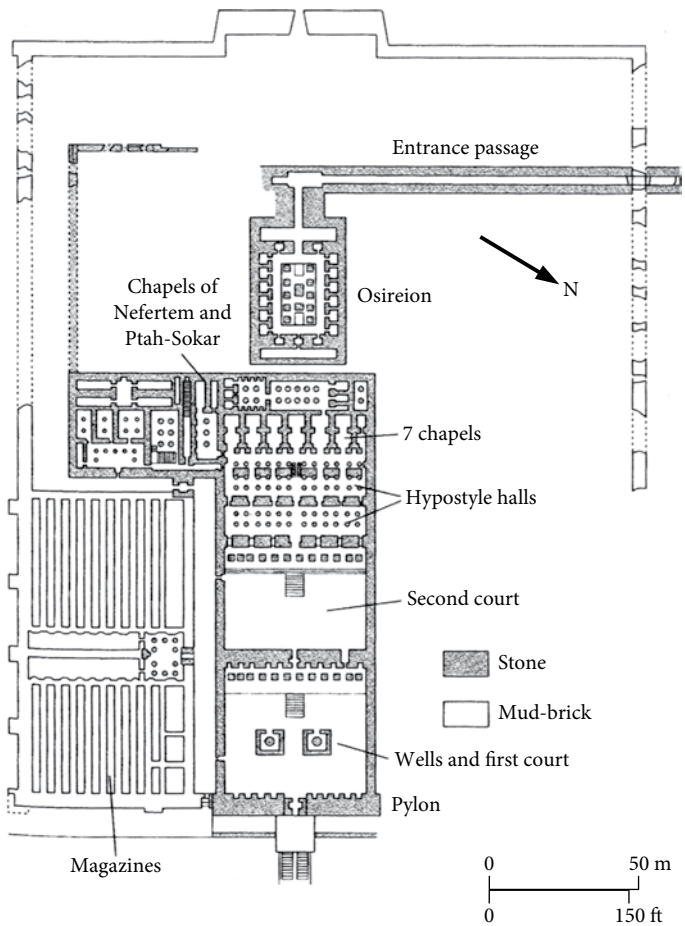


Figure 8.11 Abydos, plan of the Temple of Sety I/Rameses II. Source: Drawn by Philip Winton. Richard H. Wilkinson, *The Complete Temples of Ancient Egypt*. London and New York: Thames & Hudson. 2000, p. 147.

Sety I's Abydos temple originally had two forecourts, with a large pylon fronting the first one, next to which was a large block of long narrow storerooms. These structures are in ruins today and the entrance to the present temple begins at the second portico. Behind this portico are two transverse hypostyle halls, with seven bark chapels in the rear of the temple dedicated to the deified Sety I, Ptah, Ra-Horakhty, Osiris, Isis, and Horus, with Amen-Ra's chapel in the center. Behind these chapels is the Osiris complex, with three chapels at each end and two columned halls. The reliefs in the Osiris complex are about the life and death cycle of the god, and, according to Rosalie David, rituals were held there only once a year, relating to the annual festival of Osiris. The ground plan of the temple forms an unusual "L," with an addition to the south of the seven chapels including chapels of two important Memphite gods, Nefertem and Ptah-Sokar. In this area of the temple is Sety's famous king list, which excludes the "illegitimate" rulers of the Amarna Period and its aftermath.

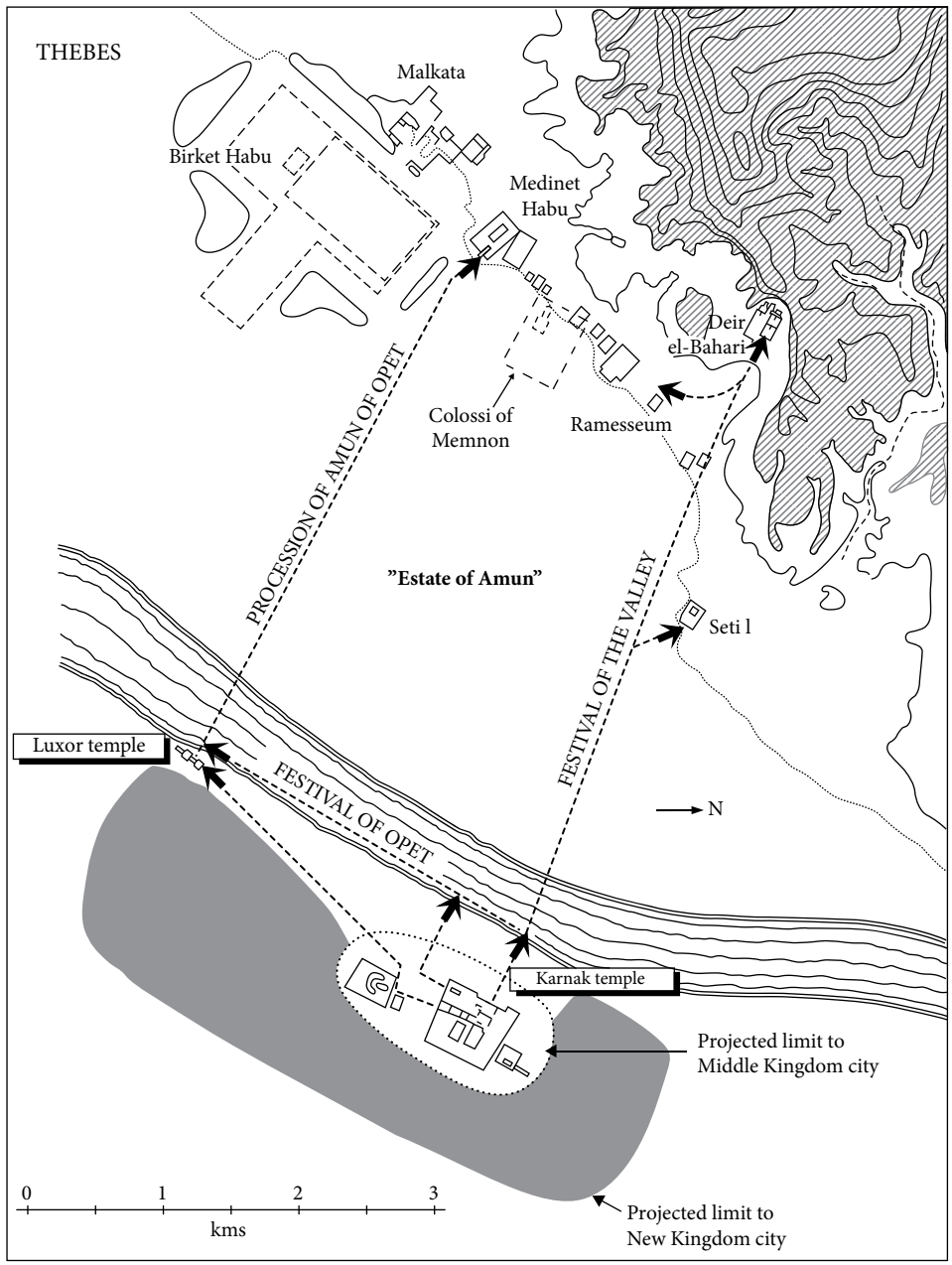
A second structure was also built by Sety I (and partly decorated by King Merenptah), behind (west of) and aligned to his L-shaped temple. This is the so-called Osireion, a symbolic tomb of Osiris. Massive red granite piers were built on top of a platform, around which was a trench for water. The passage leading to it is decorated with mortuary compositions, as in a royal tomb, and the Osireion seems to have been a variation of the plan of a royal tomb, but with some unique features.

8.7 The Temples of Karnak and Luxor in the New Kingdom

Karnak and Luxor were the major foci of royal temple construction in the New Kingdom, both before and after the Amarna Period. On the east bank of the Nile, the Temple of Karnak, centered around the cult of the god Amen, became the largest temple in Egypt. In the Egyptian pantheon, Amen, which means "the hidden one," had become associated with the Heliopolitan sun god Ra at the beginning of the Middle Kingdom. Amen-Ra was the supreme "king" of all gods, and the earthly king was Amen's son and "beloved of Amen," and the intermediary between gods and humans.

The Theban triad of gods consisted of Amen, Mut, and Khonsu, and within the Amen precinct is the Temple of Khonsu, begun by Rameses III of the 20th Dynasty. About 350 meters to the south of the Amen precinct is the precinct of the temple of Amen's consort Mut, which was mainly built by Amenhotep III and Rameses III. Hundreds of black granite statues of the lion-headed goddess Sekhmet have been unearthed in the Mut precinct during the last two centuries. The most recent excavations there have been conducted by an expedition of the Brooklyn Museum and Johns Hopkins University. Also at Karnak, immediately to the north of the Amen precinct, is the precinct for a temple which was dedicated to Montu, an ancient hawk or falcon god of the Theban area, in the later New Kingdom.

Dedicated to "Amen of Luxor" (Amenope), the Temple of Luxor was the southern destination of the Opet festival (Figure 8.12). Construction of most of the present temple was done by Amenhotep III, who dismantled earlier works there. Aligned toward the Karnak temple from north to south, Amenhotep's temple proceeded from a colonnade with 12 huge columns, with capitals in the shape of an open papyrus, which was added to the temple later in his reign. In front of the colonnade was an entrance flanked by two colossal statues of the king. Reliefs on colonnade walls, including scenes of the Opet festival, were carved later



Map 8.4 Map of Thebes, the "Estate of Amen," in the New Kingdom, showing the main temples and processional routes. Source: B. J. Kemp, *Ancient Egypt: Anatomy of a Civilization*. London: Routledge, 1989, Figure 97. Copyright © 1989 by Routledge. Reproduced by permission of Taylor and Francis Books UK.

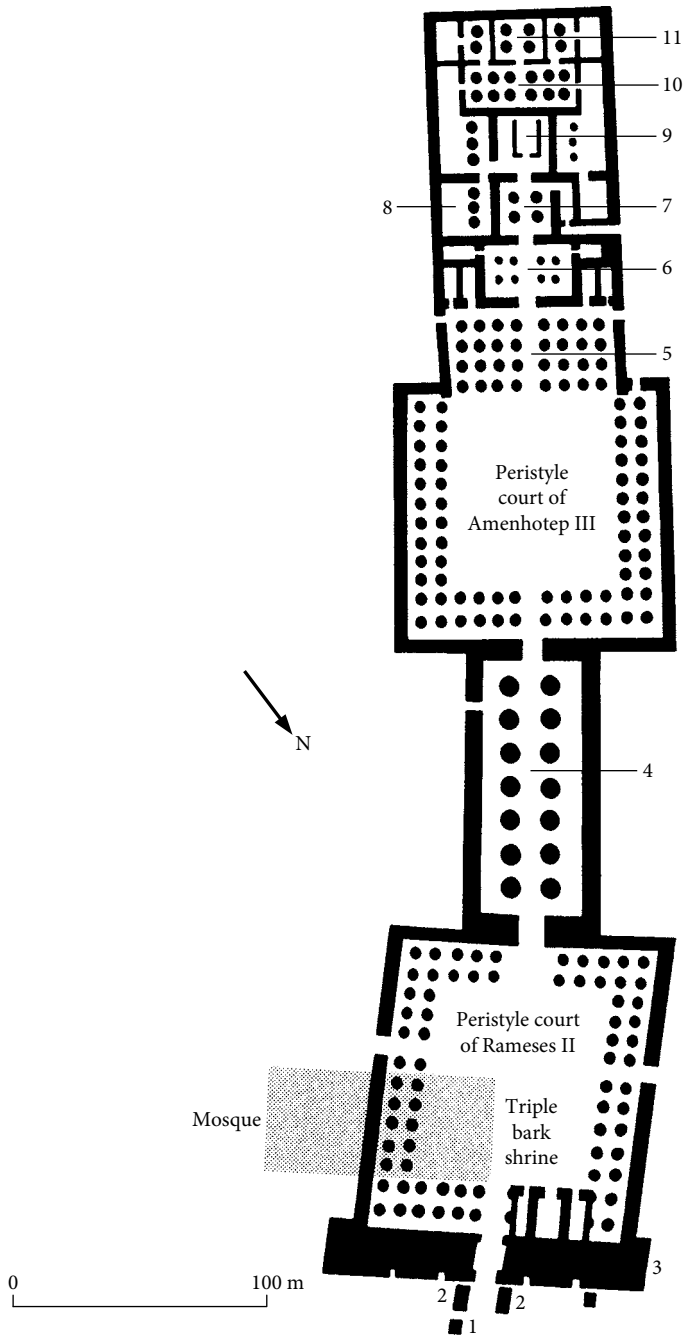


Figure 8.12 Plan of the Temple of Luxor: (1) obelisk, (2) seated colossi of Rameses II, (3) pylon of Rameses II, (4) colonnade of Amenhotep III, (5) hypostyle hall, (6) first antechamber, (7) second antechamber, (8) "birth room," (9) bark shrines of Amenhotep III and Alexander the Great, (10) transverse hall, and (11) sanctuary of Amenhotep III. Source: N. Strudwick, and H. Strudwick. *Thebes in Egypt: A Guide to the Tombs and Temples of Ancient Luxor*. London: British Museum Press, 1999, p. 68. Reproduced with permission of The Trustees of the British Museum.

during the reigns of Tutankhamen and Ay, but were usurped by Horemheb. To the south of the colonnade were a large peristyle court around which were two rows of columns, a hypostyle hall, and two columned halls which led to the bark shrine. To the south of the bark shrine and closed off from it were a transverse columned hall and Amenope's sanctuary, where the god's statue stood on a large altar.

During the reign of Rameses II, a large peristyle forecourt was added to the north of Amenhotep III's pylon, and Rameses converted an earlier bark station for the Opet procession into a triple shrine for Amen, Mut, and Khonsu. On the north side of this court Rameses built a huge pylon, fronted by seated colossal statues of the king and by his two obelisks, one of which was removed in 1835–1836 and now stands in Paris, in the Place de la Concorde. More scenes of Rameses's Battle of Qadesh are found on this pylon.

Extensive recording and study of the reliefs and inscriptions of the Luxor temple colonnade have been conducted by the Epigraphic Survey of the Oriental Institute, University of Chicago. Recently a number of *talatat* blocks of relief, used as fill in the second pylon of the Luxor temple, have been identified as originally coming from one of Akhenaten's Karnak buildings (see 8.4). These blocks were then reused and recarved with new scenes during Tutankhamen's reign for his own mortuary temple, which was subsequently dismantled under Horemhab. The Epigraphic Survey has identified scenes in these reliefs as battles of Tutankhamen in Nubia and Syria.

Unlike the Temple of Luxor, the main orientation of the Karnak temple is east–west (Figure 8.13), from which the bark of Amen would travel to the royal mortuary temples on the west bank in the Festival of the Valley. From the Karnak temple there was also a series of pylons and courts aligned north–south, leading to the processional route to Luxor of the Opet Festival. Although Middle Kingdom structures have been identified from foundations (and the reconstructed bark shrine of Senusret I; see 7.5), the standing architecture there today dates to the New Kingdom and later.

Kings of the early 18th Dynasty built structures at Karnak, many of which were dismantled later in the dynasty. The Fourth and Fifth Pylons in the current numbering system, erected by Thutmose I, were at the entrance to the central cult area. Hatshepsut later erected two huge obelisks between these pylons, and scenes of transporting them by barge from the Aswan quarries are found in her Deir el-Bahri temple. Thutmose III later built a wall to hide his stepmother's two obelisks, but the northern one, which is 29.5 meters high and weighs over 300 tons, still stands there today. To the south of these he added the Seventh Pylon, flanked by his own obelisks.

Thutmose III's Festival Hall at Karnak was erected to the east of the sanctuary and a large court with remains of the Middle Kingdom temple. With an entrance on the southwest of a large hall with four rows of columns, there is no axial procession through this temple to the Amen sanctuary, which is off to one side. Carved in the "Botanical Room" of Thutmose's hall were scenes of foreign fauna and flora, which have been identified by French Egyptologist Natalie Beaux. The majority of the plants depicted are from regions in the eastern Mediterranean, but there are also ones from northeast Africa and a few now found only in sub-Saharan Africa.

Major construction in the later 18th Dynasty occurred during the reigns of Amenhotep III and Horemheb. Demolishing a court of Thutmose II, Amenhotep III erected the Third Pylon, and began the Tenth Pylon, to the south of which he created an avenue of

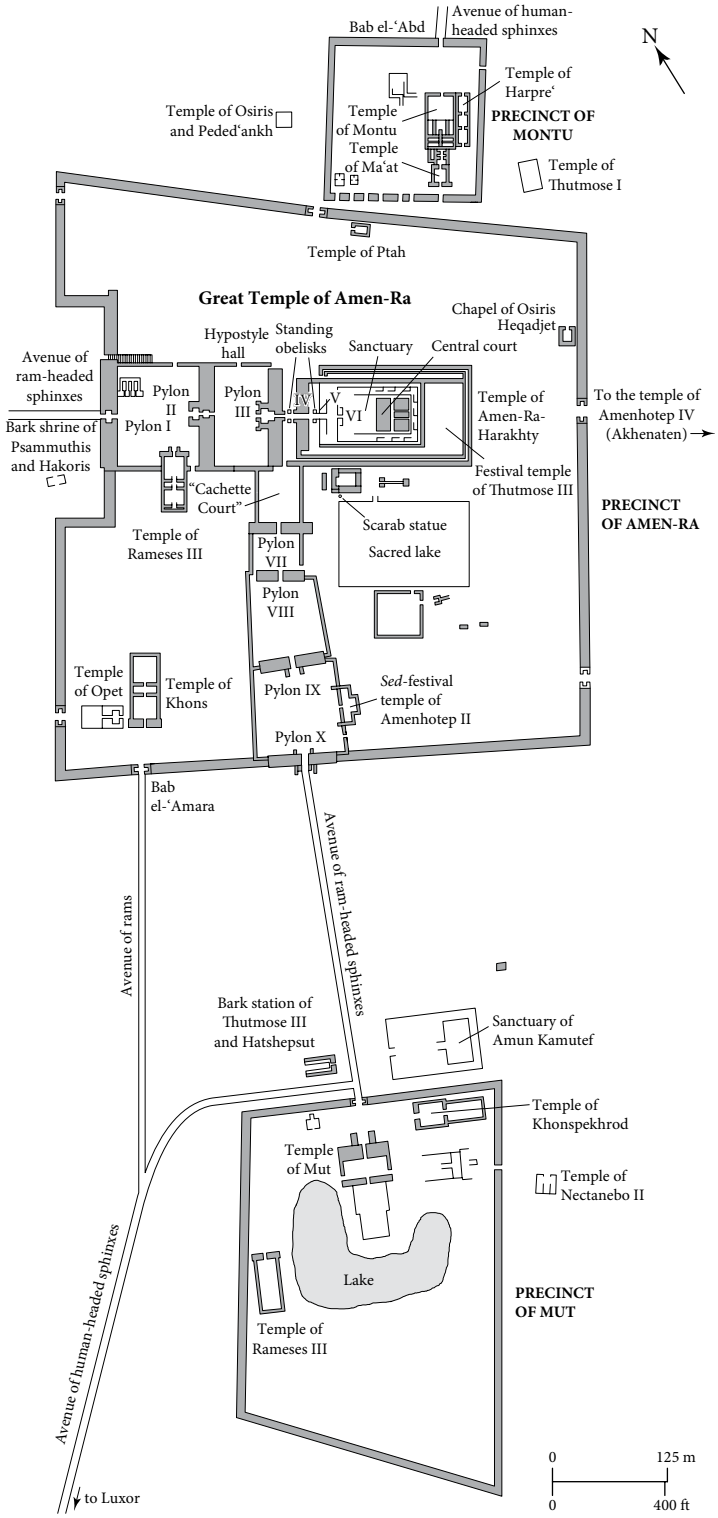


Figure 8.13 Plan of the Temple of Karnak. Source: Drawn by Philip Winton. Richard H. Wilkinson, *The Complete Temples of Ancient Egypt*. London and New York: Thames & Hudson, 2000, p. 155.

ram-headed sphinxes. Blocks from Thutmose II's court and other re-erected buildings are now in an open-air museum at Karnak. After Akhenaten's reign, *talatat* blocks from his East Karnak shrines to Aten were reused when Horemheb built the Ninth and Tenth Pylons to the south, and the Second Pylon on the west. To the east of this series of courts and pylons was the Sacred Lake (ca. 120 × 77 meters), which supplied water for temple rites. This was where priests bathed before their morning rituals. As the sun rose at dawn over the Sacred Lake, which symbolized the primeval waters, the act of creation was repeated each day.

During the 19th Dynasty, the great Hypostyle Hall was built between the Second and Third Pylons by Sety I and Rameses II (Plate 8.8). A total of 134 columns are in this hall, with capitals carved as open or closed papyrus plants. Flanking the center aisle are 12 taller columns (21 meters high), with clerestory windows on top of a lower row of columns. Exterior walls of the hall are covered with reliefs, including scenes of Sety's battles in Syria, and Rameses's Battle of Qadesh.

Later New Kingdom construction at Karnak included a triple bark shrine of Sety II's to the west of the Second Pylon, the entrance to the temple then. To the south of the entrance Rameses III built a small temple – really a very large bark stand – oriented north–south.

For much of the 20th century excavations, restoration, and architectural studies at the Temple of Karnak have been conducted by the Centre Franco-Égyptien, and the Epigraphic Survey of the Oriental Institute of the University of Chicago has recorded temple inscriptions and reliefs.

8.8 Ramessid Mortuary Temples

As in the 18th Dynasty, several kings of the Ramessid Period (19th–20th Dynasties) built mortuary temples in western Thebes which were connected by ritual to the temples of Luxor and Karnak (Figure 8.14). The first of these was built by Sety I (and finished by Rameses II) in the north at Qurna. The plan of this temple, which has been excavated by the German Archaeological Institute, Cairo, would continue to be used in more elaborated form into the 20th Dynasty. Two courts were entered through pylons (mostly built of mud-brick), leading to a portico and a columned hall, to the west of which were bark shrines for the Theban triad (Amen, Mut, and Khonsu) and the innermost sanctuary. Flanking the hypostyle hall to the south was a chapel for Sety's father Rameses I, who only ruled for two years and thus did not build his own mortuary temple, and to the north a long chapel for the sun cult. To the south of the first court was a small palace, probably for ritual use only, first seen at Thebes in the mortuary temple that was begun by Ay and usurped by Horemheb (at the end of the 18th Dynasty). In Sety's temple there were also long narrow storerooms to the north, between the outer walls of the temple proper and the enclosure walls of the temple precinct.

At Sheikh Abd el-Qurna, almost 2 kilometers to the southwest of Sety's mortuary temple, is that of his son Rameses II, now called the Ramesseum. Enclosing an area of 210 × 178 meters, Rameses's mortuary temple was much more grandiose than that of his father. For the first time there are two pylons made of stone, both of which had reliefs with scenes of the Battle of Qadesh. In the first court was the gigantic granite statue of the seated king, now toppled, but originally ca. 20 meters high and probably weighing over 1,000 tons (Figure 8.15). Quarried in Aswan, it is one of the largest monolithic sculptures ever erected.

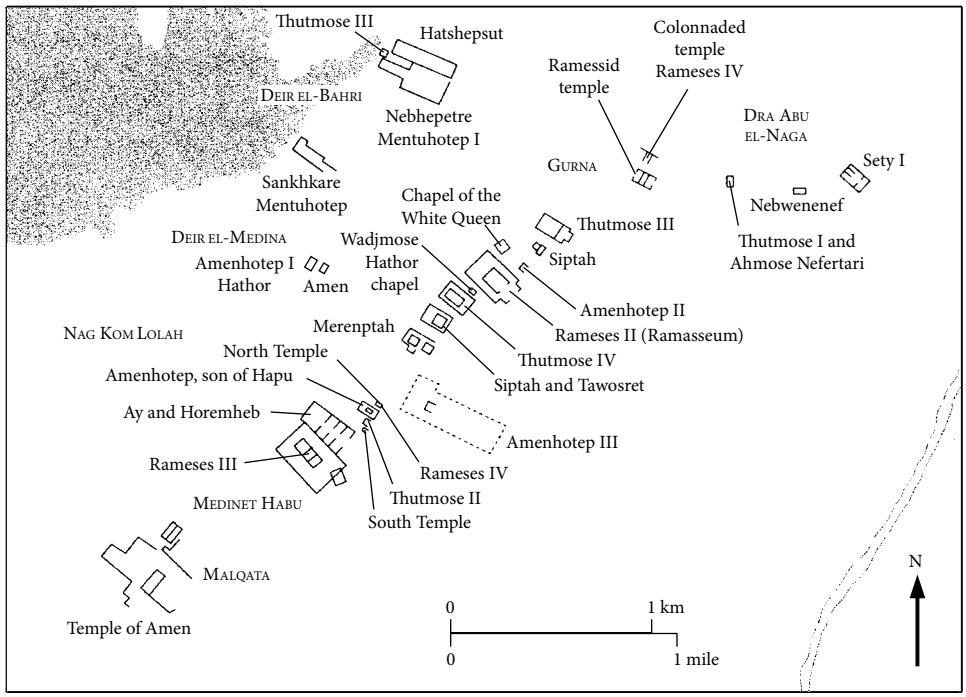


Figure 8.14 Map/location of the (royal) mortuary temples of western Thebes. Source: J. Baines and J. Malek. *Cultural Atlas of Ancient Egypt*. Oxford: Andromeda, 2000, p. 91.

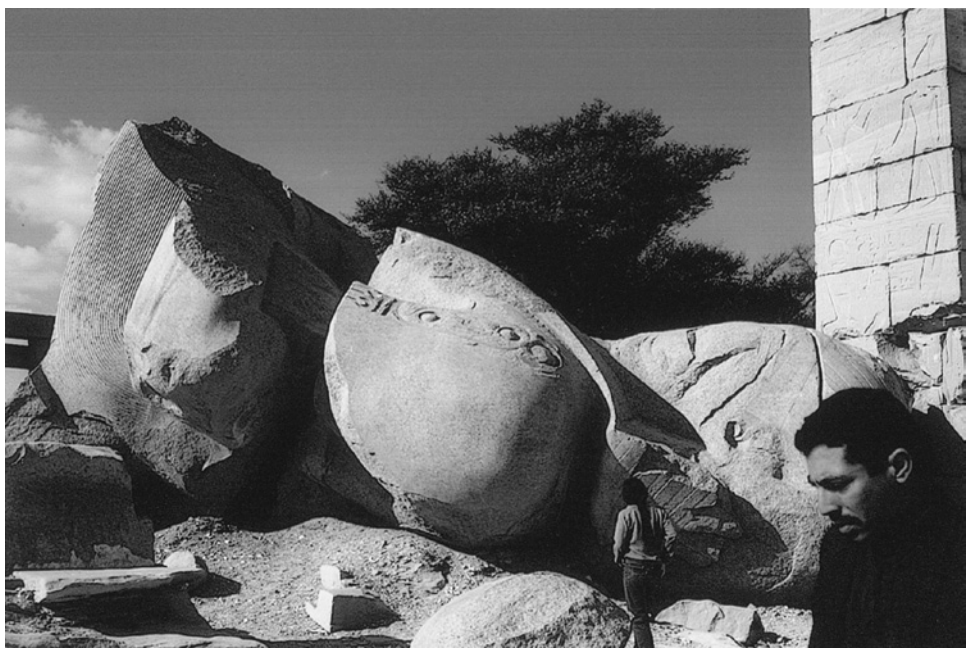


Figure 8.15 The Ramesseum with fallen colossus of Rameses II.

The main temple was actually a long parallelogram in plan, with a number of columned halls, the largest of which (hypostyle) had 48 papyriform columns. Three small columned halls led to the innermost part of the temple, now badly destroyed. A small contiguous temple on the northern side of the main temple was dedicated to Rameses's mother Tuya and his chief wife Nefertari.

Although much of the Ramesseum's stonework was dismantled for reuse in later times, much of the vast network of mud-brick storerooms is still standing around three sides of the temple, some even with sections of vaulted roofs. The storerooms were probably used as granaries, although other uses would have been possible. Barry Kemp has estimated that if all of the Ramesseum storerooms were filled to capacity (an unlikely event) they could feed 17,000–20,000 people for a year. In the New Kingdom, large temples such as the Ramesseum were an important part of the economic infrastructure of the state, acting as centers of tax collection and redistribution.

The best-preserved (and partially restored) Ramessid mortuary temple was built by Rameses III at Medinet Habu (Figure 8.16). First investigated in 1859 by Auguste Mariette, the temple was systematically excavated by the Oriental Institute, University of Chicago, under the direction of Uvo Hölscher, beginning in the 1920s. Study and recording of the temple's reliefs and inscriptions were conducted by the Oriental Institute's Epigraphic Survey.

Two mud-brick walls surrounded the Medinet Habu precinct, with the northern wall abutting Horemheb's mortuary temple. Originally canals connected Rameses III's temple to the river, and a quay was built near the eastern entrance. The temple precinct was entered through the fortress-like High Gate; an earlier, 18th-Dynasty temple (the "Small Temple") to the north has a slightly different axis. There was also an elaborate western gate to the temple precinct, but this may have been only for temple personnel. Constructed of stone, the eastern High Gate was decorated with reliefs, including scenes of the king symbolically trampling on Egypt's many enemies, and in upper rooms there are "harem scenes." During the 20th Dynasty the temple was the administrative center of western Thebes, and mud-brick administrative buildings were located around the main temple structure. The many storerooms/granaries to the north and west of the main temple are also evidence of its redistributive function.

The main temple is fronted by an enormous pylon carved with scenes of the king smiting his enemies with a mace. On the temple's north wall are reliefs and inscriptions of Rameses's battles with the Libyans (regnal Years 5 and 11) and with the Sea Peoples (Year 8). To the south of the first court was a symbolic palace with a "Window of Appearances" opening from the audience hall. The palace also contained private apartments, one of which had a small throne room, bedroom, and bathroom.

Similar in plan to the Ramesseum, the main temple was entered through two porticoed courts. To the west of the second court were two hypostyle halls, one with 24 columns and the second with eight. At the rear of the temple was a bark shrine for Amen, behind which was a room that Hölscher called the "Holy of Holies," with a large false door. This part of the temple is not well preserved, but reliefs in chambers to the north and south of the innermost sanctuary identify chapels to various deities.

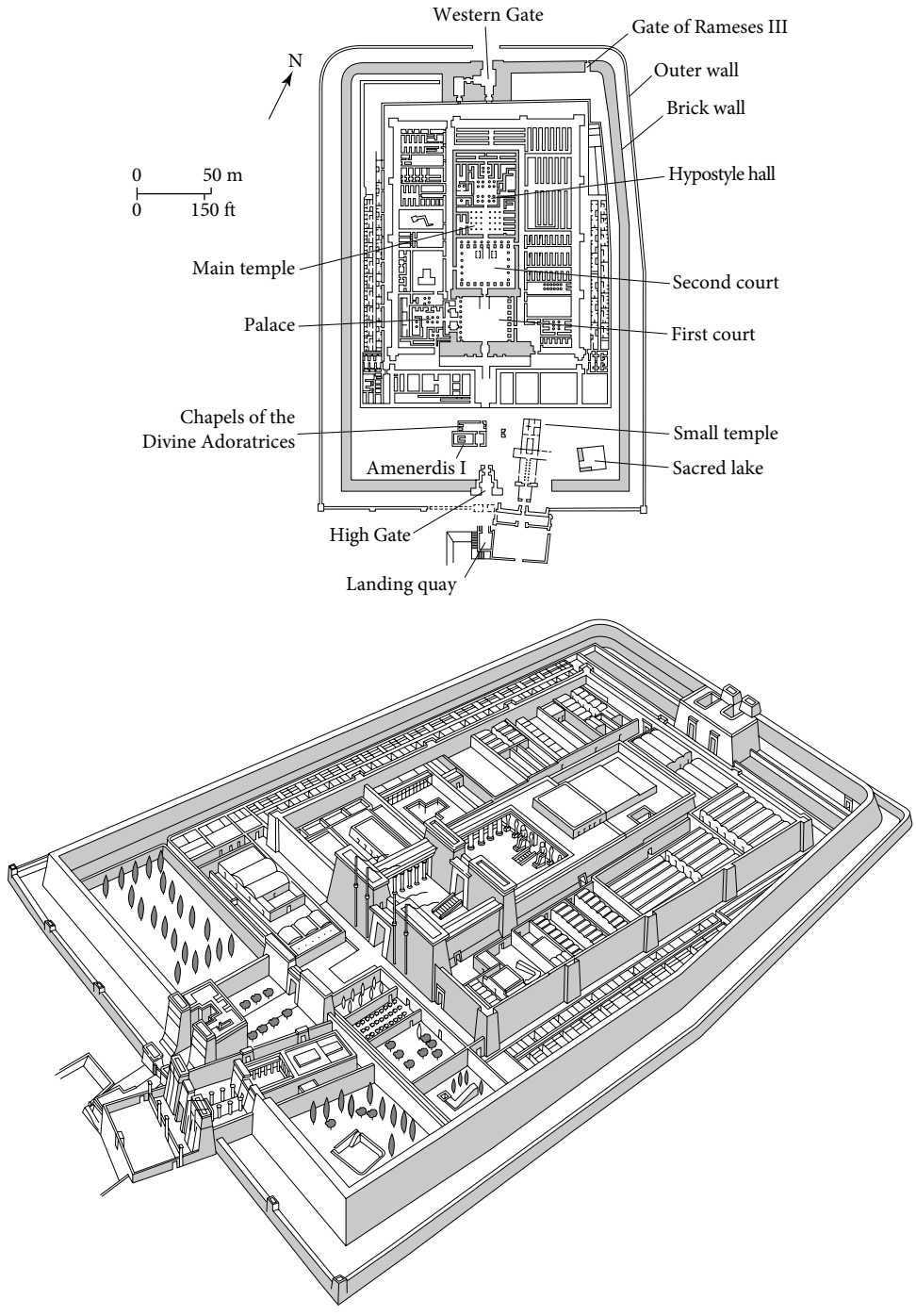


Figure 8.16 Plan of the temple complex at Medinet Habu. Source: Drawn by Philip Winton. Richard H. Wilkinson, *The Complete Temples of Ancient Egypt*. London and New York: Thames & Hudson, 2000, p. 193.

With unsettled conditions at the end of the New Kingdom, Medinet Habu became a fortified settlement, and tomb workers from Deir el-Medina were relocated there. Gradually much of the temple was taken over with settlement, and in the first millennium BC only the Small Temple was used for ritual of the Amen cult.

Royal and Elite Tombs

8.9 Royal Tombs in the Valley of the Kings and Valley of the Queens

For security reasons the royal tombs of the New Kingdom were in hidden locations to the west of the royal mortuary temples. The kings were actually buried in two valleys, most in the East Valley (KV) and a few in the West Valley (WV), together known as the "Valley of the Kings." While most earlier work in the Valley of the Kings involved tomb clearance, since the 1970s the Theban Mapping Project of the American University in Cairo, under the direction of Kent Weeks, has been systematically mapping tombs there, in addition to undertaking stratigraphic excavations and tomb conservation (Figure 8.17a–d).

With the exception of Tutankhamen's mummy, mummies of the New Kingdom kings had been robbed of their valuable jewelry and placed in two caches. One cache of royal mummies was found in side chambers in the tomb of Amenhotep II, whose stripped down mummy was in a reused coffin (not his own) in his sarcophagus. From the end of the 20th Dynasty onward the royal burials were systematically robbed, probably by the Theban rulers to provide state funds. The mummies were later rewrapped and relabeled (sometimes with other relevant information about when and where this was done), and then reburied minus their valuable jewelry in the two caches.

The other cache of royal mummies was found at Deir el-Bahri in the family tomb of Panedjem II, the High Priest of Amen-Ra, dating to the late 20th/early 21st Dynasties. In the 1870s this tomb was being looted by a local family, with artifacts sporadically going to antiquities dealers in Cairo. When this activity was revealed to the Egyptian authorities, the robbers were caught and the royal mummies (and remaining tomb goods) were shipped downriver to Cairo, where they can now be seen in the royal mummy collection of the Egyptian Museum. The 40 mummies in the Deir el-Bahri cache included kings of the 18th, 19th, and 20th Dynasties, but also royal women, and even an 18th-Dynasty "royal nurse" named Rai. The mummy of the 17th-Dynasty Theban king Taa shows evidence of a violent death, probably from battle with the Hyksos (see 7.13).

The first king with a known tomb (KV 20) in the Valley of the Kings was Thutmose I. His sarcophagus was found in another, much smaller tomb (KV 38), which was probably made for him by his grandson Thutmose III, following the demise of Hatshepsut, who probably made a second, larger burial chamber in KV 20 to include her own sarcophagus with that of her father. About 200 meters long, this tomb was entered via a long and sinuous descending passageway and series of stairs excavated in the bedrock. Hatshepsut's original tomb, before she became king, was carved into the face of a sheer cliff about 1.5 kilometers to the northwest of the Valley of the Queens. To enter this tomb, which was being robbed, Howard Carter had himself lowered by rope 42 meters down the cliff face in 1903.

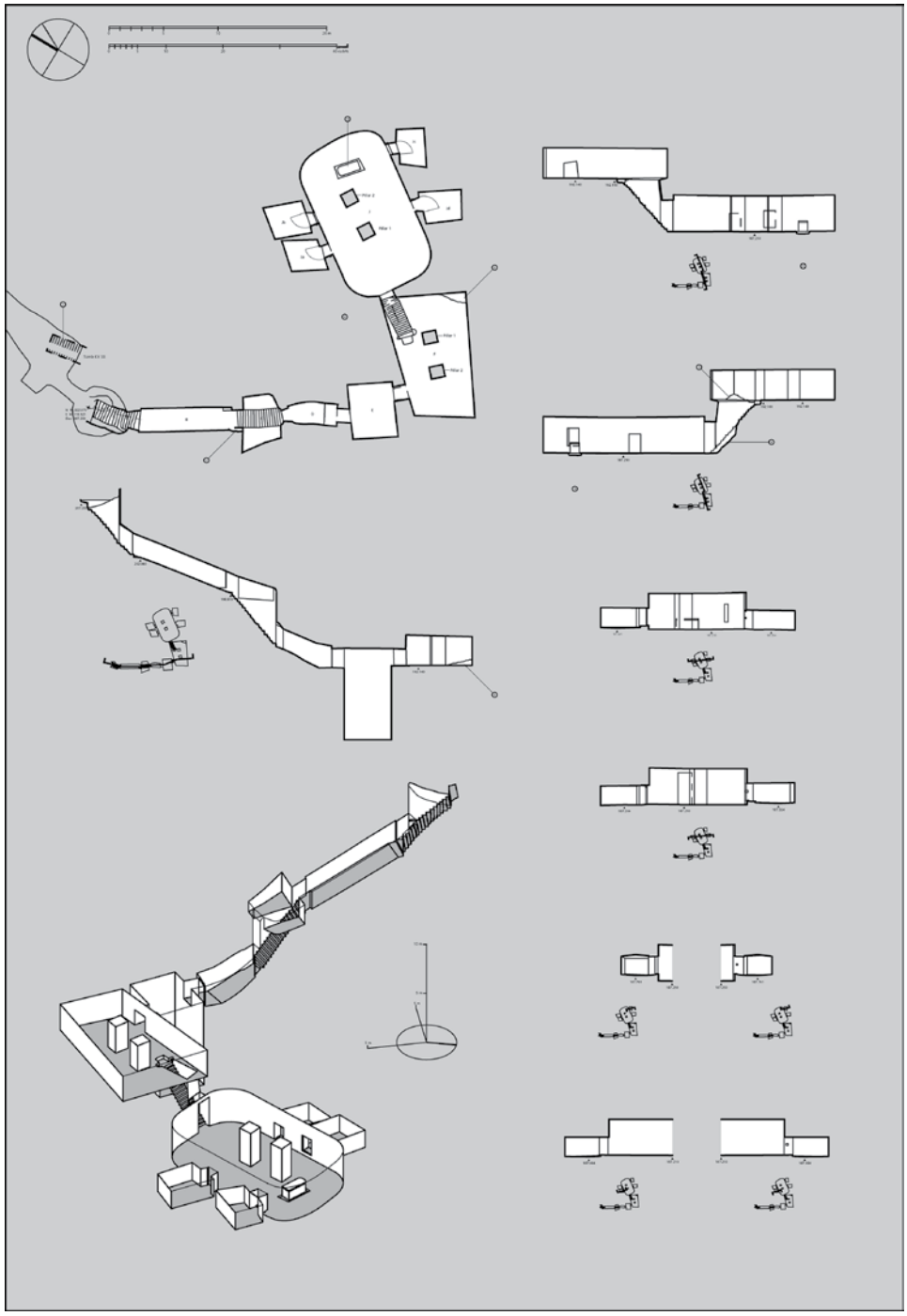


Figure 8.17(a) Theban Mapping Project plans of tombs in Valley of the Kings: Tomb of Thutmose III (KV 34, including KV 33). Source: Theban Mapping Project. www.thebanmappingproject.com/

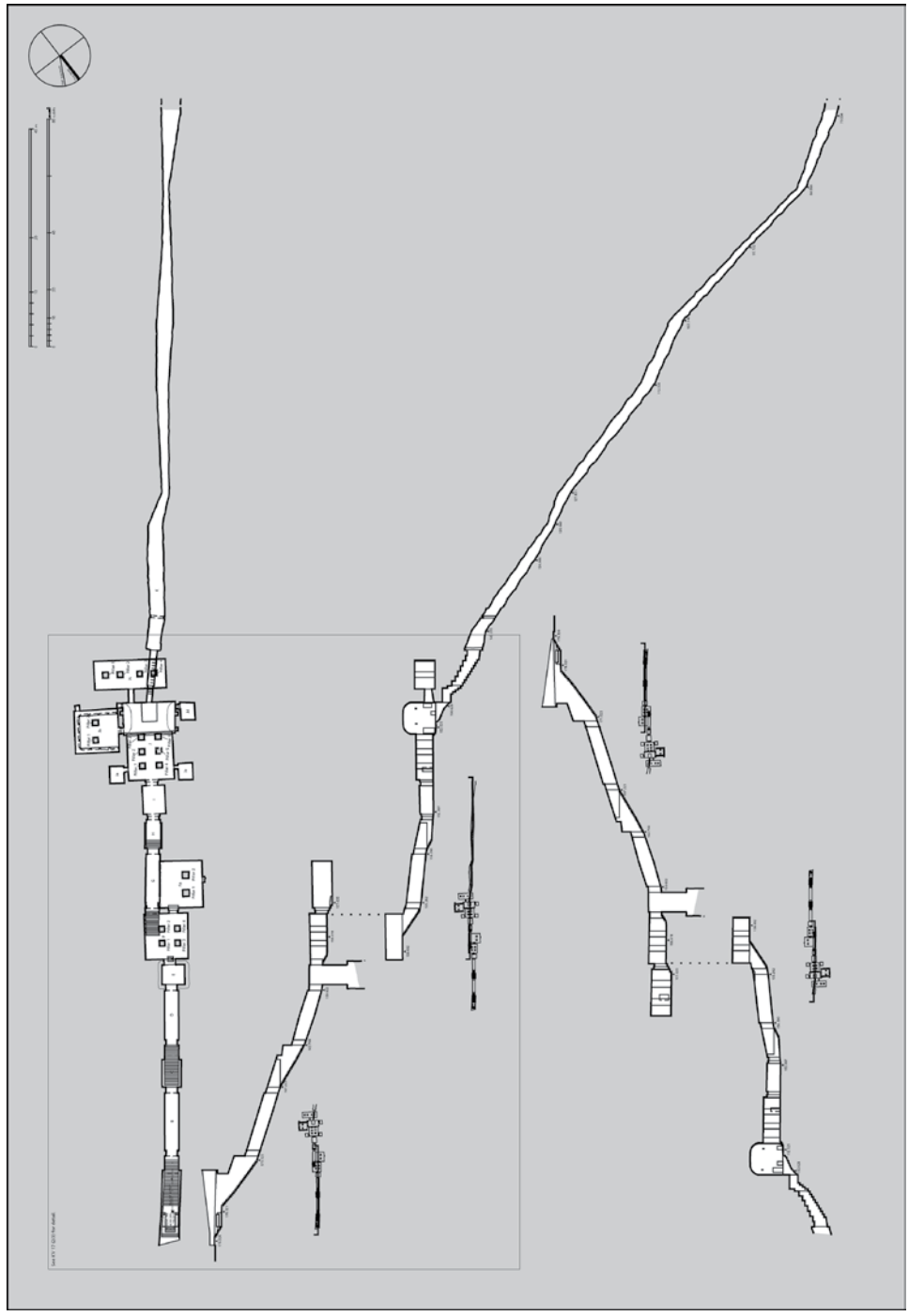


Figure 8.17(b) Theban Mapping Project plans of tombs in Valley of the Kings: Tomb of Sety I (KV 17).

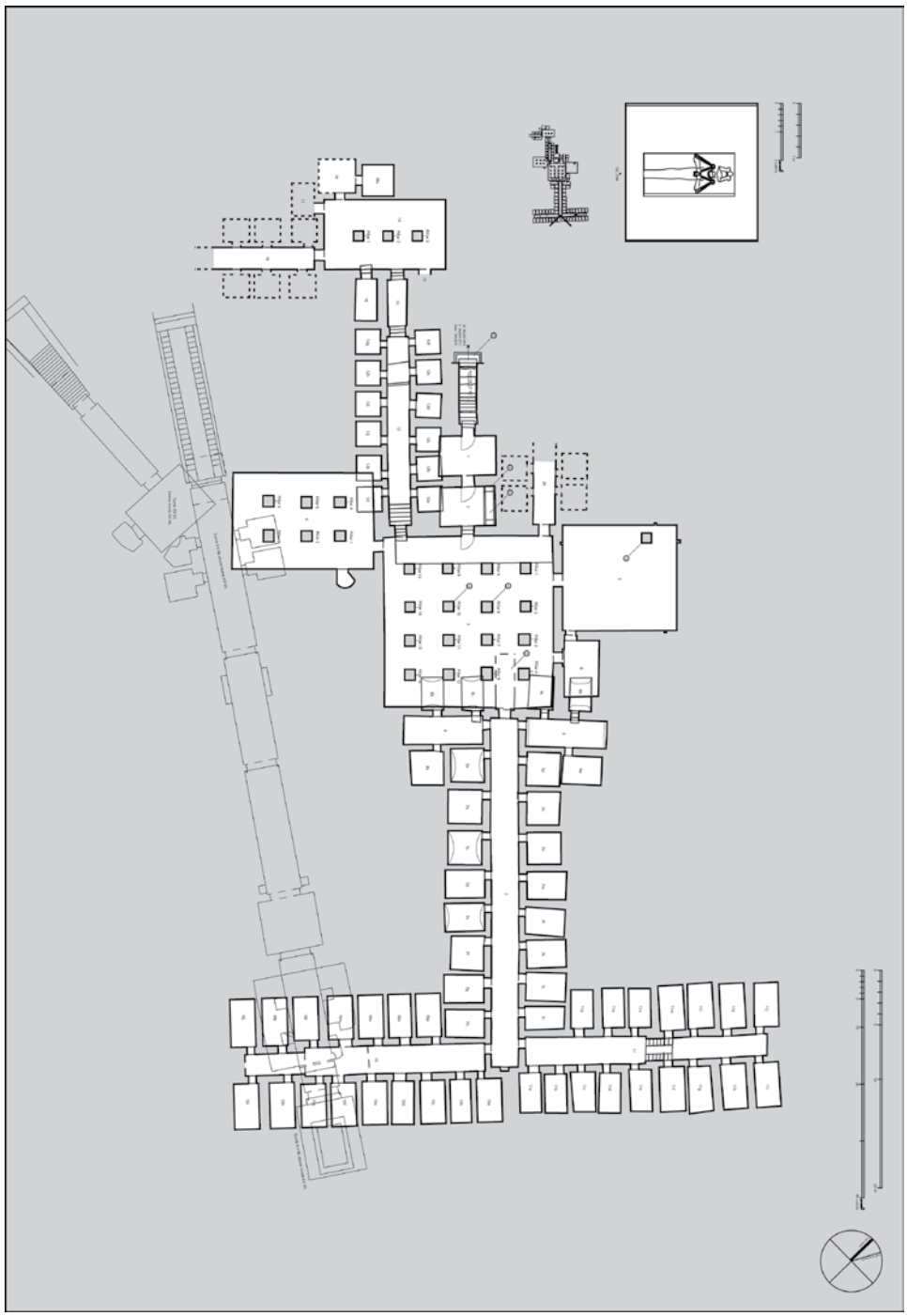


Figure 8.17(c) Theban Mapping Project plans of tombs in Valley of the Kings: Tomb of Sons of Rameses II (KV 5).

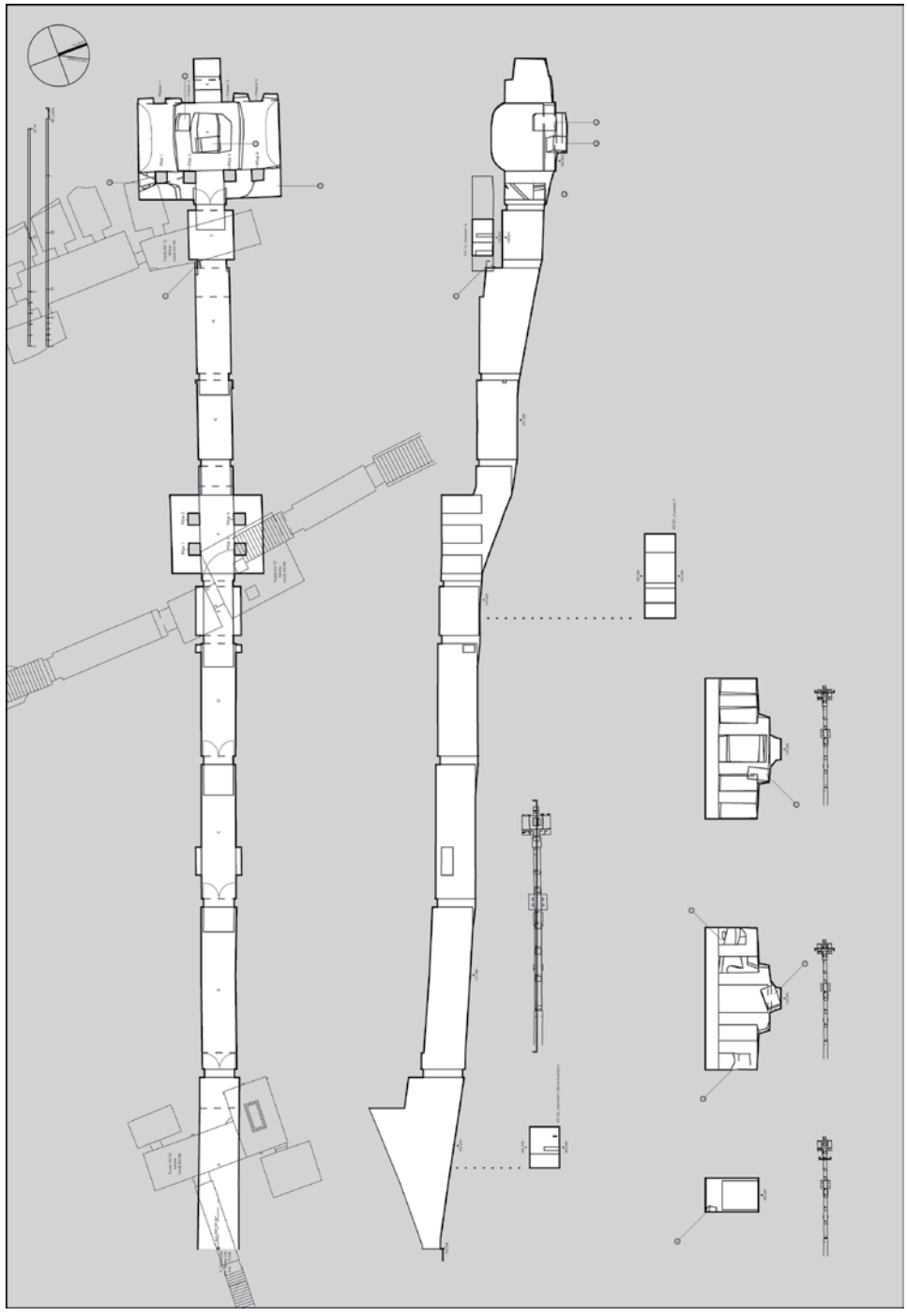


Figure 8.17(d) Theban Mapping Project plans of tombs in Valley of the Kings: Tomb of Rameses V/VI (KV 9).

Thutmose III's tomb (KV 34; Figure 8.17a) was a larger version of that of his grandfather. At the end of a series of corridors and stairs was a ritual shaft, to the north of which was a vestibule. More stairs led to the pillared burial chamber, which contained a red quartzite sarcophagus. Mortuary compositions painted on the walls of the early 18th-Dynasty royal tombs describe the voyage of Ra through the 12 hours of the night, and his rebirth at its end. Beginning with Thutmose III's tomb, scenes of the king with different deities were painted on the pillars. In the later tombs of Thutmose IV and Amenhotep III, the plan is more formal, with a long straight corridor which makes a 90° turn at a pillared hall. Another long corridor leads to an antechamber, and turning 90° again, the pillared burial chamber is entered, off which are rectangular subsidiary rooms.

Following the Amarna Period (see 8.5), the Theban tomb of King Horemheb (KV 57) consists of a series of corridors and stairs, aligned linearly, leading to a vestibule and a six-pillared hall, with the burial chamber at a lower level. For the first time, mortuary texts and scenes are carved in relief, much of which was left unfinished. The mortuary composition known as the Book of Gates (the gates of the hours of the night through which the deceased traveled) appears for the first time in Horemheb's burial chamber.

Probably the most impressive royal tomb of the 19th Dynasty is that of Sety I (KV 17; Figure 8.17b), discovered by Giovanni Belzoni in 1817. Belzoni recorded the colored reliefs and paintings of the fully decorated tomb in watercolors, and in 1821 an exhibit of the tomb opened in London to great acclaim. The Litany of Ra, a set of invocations to the sun god, appears in this tomb, and astronomical scenes were found on the vaulted ceiling of the burial chamber. Sety's sarcophagus, which was covered with texts of the Book of Gates, was also brought to London, where it is displayed in Sir John Soane's Museum. Unfortunately since its discovery, Sety's tomb has suffered much damage, especially from flooding, which had damaged much of the tomb of Sety's son Rameses II (KV 7). Excavated into higher bedrock, the tomb of Rameses's successor (and thirteenth son), Merenptah (KV 8), was better preserved. It contained a series of four nested sarcophagi, three of granite and the innermost one of travertine, as reconstructed by Egyptologist Edwin Brock. Tomb KV 5 (Figure 8.17c), which has been investigated since 1987 by Kent Weeks, was an enormous tomb for a number of Rameses II's many sons (although two of Rameses's sons were buried in known tombs in northern Egypt). With well over 100 chambers and corridors – and possibly more yet to be found – it is the largest known rock-cut tomb in Egypt.

In the 20th Dynasty Rameses III took over the tomb of his father, Sethnakht, who only ruled for two years. The tomb (KV 11) was greatly expanded and has a new mortuary composition, the Book of the Earth, in the burial chamber. Rameses V and Rameses VI were buried in the same tomb (KV 9; Figure 8.17d), which is covered with well-preserved mortuary texts and scenes. The tomb of the last king of this dynasty, Rameses XI (KV 4), was unfinished, and mostly undecorated. This tomb did not contain a sarcophagus, and it is unlikely that the king was buried there. The tomb was cleared by an expedition of the Brooklyn Museum in 1979 and identifiable remains of burials of previous kings suggest that their mummies were taken there to be stripped of their valuables.

Two recent discoveries in the Valley of the Kings have not been of royal burials. In 2005 the Amenmesse Project, directed by Otto Schaden, found a chamber (now named KV 63), near Tutankhamen's famous tomb, which contained seven coffins and large storage jars,

many still sealed, with materials used for mummification. In one of the jars were the many fragments of a broken bed, probably used in the mummification process, and Coffin G contained a small (42-centimeter-long) "coffinette" covered in gold leaf. In 2011 an undisturbed burial dating to the Third Intermediate Period, identified on the inscribed coffin as that of Nehemes-Bastet, a "Chantress of Amen," was found by a team from the University of Basel. This coffin and a small wooden stela had been buried in an earlier New Kingdom tomb, as evidenced by sherds of 18th-Dynasty pottery still there, that had been disturbed to make the later burial.

The "Valley of the Queens" ("Wadi el-Malikat" in Arabic), also in the Theban hills, was used for burials of principal queens and a number of princes and princesses in the 19th and 20th Dynasties, with two main groups of tombs dating to the reigns of Rameses II (on the northern slope) and Rameses III (on the southern slope). The Ramessid tombs were constructed and decorated by workmen from Deir el-Medina. There is also evidence of some 18th-Dynasty tombs in the valley, but they were undecorated and of non-royal persons. In the Third Intermediate Period and Late Periods robbed tombs in the Valley of the Queens were reused for family burials of local temple personnel. In Roman times the tombs were reused for burials of human and animal mummies – and piles of over 100 human mummies have been found in several tombs. The Valley of the Queens was first systematically excavated in 1903–1905 by an Italian expedition from the Egyptian Museum, Turin, under the direction of Ernesto Schiaparelli and Francesco Ballerini. Since 1984 investigations have been conducted there by the Egyptian Center of Documentation and the French National Center for Scientific Research (CNRS).

Rameses II's mother Queen Tuya (QV 80) and several of his daughters were buried in the Valley of the Queens, but probably the best known tomb is that of his chief wife Nefertari (QV 66; Plate 8.9). Because of damage from underground water, the tomb remained closed for the late 20th century, but its beautifully painted scenes, cut in relief on the plastered walls, were restored by a joint project of the Getty Conservation Institute and the Egyptian Antiquities Organization, and it is now open. Nefertari's tomb is decorated with scenes of the queen before different deities relevant to her journey in the afterlife, and texts from the Book of Gates and the Book of the Dead (see Box 8-D), which are very rare in kings' tombs. In the early 20th Dynasty five sons and two wives of Rameses III were buried in the Valley of the Queens, with vivid painted scenes and texts found in several of these tombs, especially that of his son Amenherkhopshef (QV 55).

8.10 Elite Tombs at Thebes and Saqqara

In the New Kingdom, the highest officials of the kingdom were buried either in Saqqara near the seat of government (beginning with the reign of Thutmose III), or in Thebes, the most important cult center. In the west Theban hills at Sheikh Abd el-Qurna, southeast of Hatshepsut's Deir el-Bahri temple, are the rock-cut tombs of a number of officials of the earlier part of the 18th Dynasty. Later 18th-Dynasty private tombs are located to the east of the earlier ones, while a number of Ramessid tombs are between el-Khokha and Dra Abu el-Naga. Although raised relief would have been the most desirable tomb decoration, this depended on the owner's means and the quality of rock in his tomb.

Box 8-C Mummification and the study of human remains

There is evidence of efforts to preserve the body before the beginning of Dynastic times, and the techniques of mummification evolved over many centuries. By New Kingdom times the mummification process achieved a high degree of preservation and some procedures became standardized for those who could afford it.

The greatest attention was given to the royal mummies, as evidenced in the two caches from Thebes of kings' mummies, although these were all stripped of the valuables originally placed within their linen wrappings. According to most accounts, the techniques of mummification reached a high point during the 21st Dynasty.

Written accounts of mummification are known from later in the first millennium BC (Herodotus and Diodorus Siculus), but mummies themselves provide evidence of the variations practiced. The first part of the mummification procedure was done on an embalming table in the *Per-nefer* – the House of Mummification. After breaking the ethnoid bone between the eye sockets, the brain was removed by a long hook. Internal organs were then removed, from the liver to the lower intestines, through an incision in the left abdomen. The lungs were also removed, but the heart (believed to be the seat of intelligence and emotions) was left in the thorax. What remained internally was then cleansed and packed with materials to preserve the form, and the entire body was covered with dry natron (sodium carbonate and sodium bicarbonate), which desiccated the remaining tissue. The lungs, liver, stomach, and intestines were embalmed and wrapped separately and then placed in four "canopic containers," each guarded by one of the four sons of Horus, whose heads were represented on the jar lids.

After about 40 days the body was taken to the *Wabet* (House of Purification) for the final procedures, which included washing it with water and filling the cavities in the brain and torso with materials soaked in resin. The abdominal incision was sewn up, the nasal cavity was filled, and sometimes pads were included under the eyelids. Treatment of the body surface included rubbing with a mixture of cedar oil and preservatives, and a final coating with hot resin. The last step in the process was wrapping the mummy in many layers of linen strips, between which protective amulets were placed. The entire process took about 70 days.

Most of what was left after mummification was muscle tissue and bones, and many infectious diseases which may have been the cause of death cannot be diagnosed from these remains. But a number of mummies have been studied with X-ray images, and tissue can be rehydrated, revealing evidence of disease such as smallpox, schistosomiasis, and intestinal parasites.

In the 1970s James Harris, an orthodontist at the University of Michigan, X-rayed the royal mummies in the Cairo Museum, finding evidence of trauma (both ante- and post-mortem), arthritis (rheumatoid and degenerative), poliomyelitis, dental abscesses, and other defects and diseases. X-rays have also revealed arteriosclerosis in the mummies of four Ramessid kings. The mummy of a priestess Makara was thought

to have been buried with her child, but when X-rayed the small bundle turned out to be a baboon!

Fortuitously, age/sex information of mummies can be obtained through radiography without unwrapping them and performing autopsies, as can the placement of amulets within the linen bandages. Mummies can also been studied with CT (computed axial tomography) and MRI (magnetic resonance imaging). DNA studies of gene sequencing using mummified tissue is also being done, but with questionable results (see 8.5).

Box 8-D The Book of the Dead

Collections of mortuary texts known as the Book of the Dead bore the ancient title of Book of Going Forth by Day – for the deceased's going forth in the world of the dead. Individual examples consist of a series of spells inscribed on papyri, which were often placed in or on the coffin of the deceased.

The earliest known mortuary texts, the Pyramid Texts, which were inscribed in the late Old Kingdom, were carved on the inner walls of pyramids and had a royal context (see 6.10). In the Middle Kingdom transformed and expanded versions of these mortuary texts are found painted on coffins of private individuals (the Coffin Texts; see 7.1), but some examples of these texts have also been found on papyri. In the New Kingdom and later, mortuary texts for private individuals were written on papyri (and other media).

The goal of the spells in the Book of the Dead was to help the deceased to overcome successfully various foes and dangers in the afterlife, and the judgment before Osiris – in which the deceased's heart was weighed against the feather symbolizing *ma'at* (truth). An ideal result was an eternal existence in the "Field of Reeds" (Elysian Fields). There are hymns to Ra and Osiris. One set of spells is known as the "negative confession," in which the deceased swears to a court of 42 gods that he/she has not committed a great number of sins. The Book of the Dead was usually illustrated with a number of painted vignettes, as can be seen in the well-known New Kingdom papyrus of the scribe Any in the British Museum (Plate 8.10).

Especially appealing to the modern eye are a number of painted Theban tombs belonging to officials of the 18th Dynasty. Although the upper part of the tomb of Sennefer (TT 96), who was mayor of Thebes during the reign of Amenhotep II, is inaccessible, a steep rock-cut stairway leads to two well-preserved subterranean rooms (Plate 8.11). The tomb's colorfully painted ceiling includes representations of a grape arbor. In the antechamber are scenes of processions of priests and servants carrying offerings and tomb equipment. Paintings completely cover the walls of the burial chamber, including scenes of Sennefer's funeral and mortuary rites, offerings to Osiris, the (post-mortem) pilgrimage to Abydos by boat and return to Thebes, and the worship of Osiris and Anubis with texts from Chapter 15 of the

Book of the Dead. On the chamber's four pillars are scenes of Sennefer being given offerings by a woman named Merit, possibly his wife, and rituals performed by mortuary priests.

The tomb of Rekhmira (TT 100) is of unusually large size, with a transverse hall opening off an exterior courtyard, and a long high chapel ending in a false door, above which is a carved niche. But there is no burial chamber or shaft leading to one (or perhaps it has not been found). Rekhmira was Thutmose III's vizier and governor of Thebes. Scenes of religious rites pertaining to the transition to the afterlife are found in the tomb, but there are also animated scenes of craftsmen, such as sculptors, goldsmiths, carpenters, and stone masons, working for the Temple of Amen. Temple workers are shown making mud-bricks and rope, carving stone vessels, and casting bronze artifacts. In the transverse hall are the well-known scenes of foreign tribute brought to Egypt, including tribute bearers from the Aegean and Syria, the latter with gifts of horses (Figure 8.18). There are also

Figure 8.18 Detail of a painting in the 18th-Dynasty Theban tomb of Rekhmira (TT 100) at Sheikh Abd el-Qurna showing Nubians bringing a giraffe and long-horned cattle as tribute. In the lower register Syrians bring horses, an elephant, and a bear. Source: Werner Forman Archive.

Figure 8.19 Relief of a banquet scene from the 18th-Dynasty tomb of Ramose (TT 55).

Nubians and other Africans bringing not only gold, ebony, incense, elephant ivory, and exotic hides, but also live wild animals. A giraffe is painted with a monkey climbing up its neck, and there are leopards, and baboons – and some domesticated animals including dogs and long-horned cattle. Like other high officials, Rekhmira depicted his role in the government; but such scenes and their associated hieroglyphic texts also give insight into foreign relations and the international economy of this period when Egypt controlled vast territories abroad.

Agricultural scenes, of plowing and hoeing, broadcast sowing, harvesting, threshing, and winnowing, are found in a number of 18th-Dynasty tombs, including those of Nakht (TT 52) and Menna (TT 69), who were both government scribes/officials. The unfinished tomb of Ramose (TT 55), vizier and governor of Thebes during the reigns of Amenhotep III and Amenhotep IV, contains both reliefs and paintings. Demonstrating the high quality of elite art during this opulent period are the exquisite low reliefs carved on the east wall in the tomb's large hypostyle hall (with 32 columns), including scenes of a funerary banquet (Figure 8.19). There are also painted scenes of the funeral, and lines of tears run down the faces of female mourners. The decoration in this tomb changes from what might be called a classic high style of the mid-18th Dynasty to Akhenaten's Amarna style, showing the rapidity of this major cultural transition.

Although most of the Theban private tombs were robbed in antiquity, a few survived with a number of grave goods intact, including many items of daily life – furniture, jewelry, cosmetic artifacts, tools, and cloth – and *shawabti* (servant figurines) to serve the deceased. The burial was in a coffin with the viscera preserved in containers placed in

canopic chests. The remarkable preservation of artifacts in some tombs associated with Deir el-Medina will be discussed below (see 8.11). Recent conservation efforts in tombs, such as Nigel Strudwick's work in the tomb of Senneferi (TT 99), have also uncovered artifacts, often found in fragments. In Senneferi's subterranean tomb two ivory adzes used in the Opening of the Mouth ritual have been found along with fragments of a papyrus and a linen mummy shroud inscribed with texts from the Book of the Dead. This tomb was extensively reused in post-New Kingdom times (21st through 26th Dynasties), when six shafts were cut in the tomb chapel. Thousands of fragments of later burial equipment have also been recovered.

At Saqqara high officials built a number of tombs dating to the 18th and 19th Dynasties (later ones are known from texts). Since 1976 French archaeologist Alain-Pierre Zivie has been excavating rock-cut tombs in cliffs along the eastern edge of Saqqara, in the area of the "Cemetery of Cats," where thousands of sacred cat mummies (Late Period) were left as votive offerings. The tomb of Netjerwymes, with a pillared courtyard and rock-cut chapel, belonged to an important official whom Rameses II sent as a diplomatic envoy to the Hittites. Zivie has also found the tomb of Tutankhamen's wet nurse, Maya, and that of Raïay, an official of Akhenaten, whose reliefs and texts reflect both the Atenist religion and the post-Amarna Period restoration of the mortuary cult of Osiris.

A large group of free-standing tombs at Saqqara, dating to the later 18th Dynasty (especially the post-Amarna Period) and 19th Dynasty, is in the area to the south of the Unas pyramid causeway. First located in the 19th century, tombs in this area have been systematically investigated beginning in 1975 by a joint British/Dutch expedition, and beginning in 1999 by a Dutch expedition (Leiden Museum and Leiden University).

Resembling small-scale temples, the late 18th-Dynasty tombs consisted of a walled mudbrick superstructure with one or two courtyards and chapels, covered with finely carved low relief in limestone. Earlier Old Kingdom mastabas in this area were dismantled, and their subterranean burial chambers were often remodeled and reused. Tombs include those of General Horemheb before he became the last ruler of the 18th Dynasty, and Maya, Tutankhamen's Overseer of the Treasury (Figure 8.20). Reliefs of the reign of Akhenaten in the tomb of Meryneith, Steward of the Temple of Aten in Memphis, were destroyed in the post-Amarna Period.

State Towns and Settlements

8.11 The Workmen's Village and Tombs at Deir el-Medina

Deir el-Medina, by far the best preserved settlement in the Theban region, was where workmen employed in the royal tombs in the Valley of the Kings lived with their families. Begun in the early 18th Dynasty, perhaps during the reign of Amenhotep I, the village was occupied until the late New Kingdom, with the exception of the Amarna Period, when it was partly or wholly abandoned. A number of artifacts from the site were sold to collectors in the 19th century, and in 1886 the spectacular unrobbed tomb of the workman Sennedjem (TT 1) was found and subsequently cleared by the Egyptian Antiquities Service. Excavations

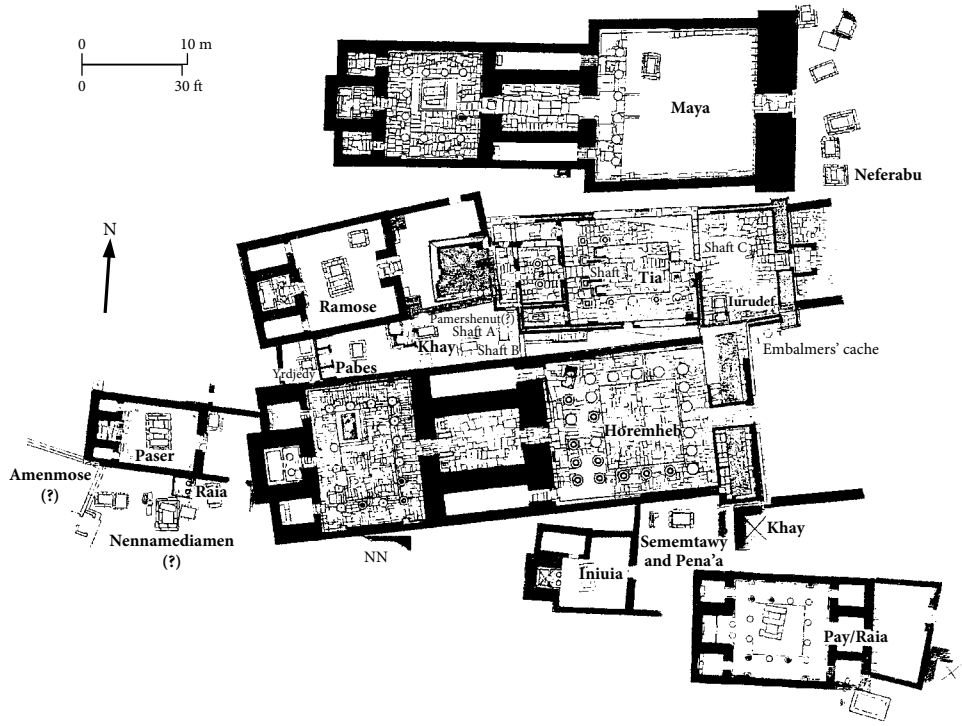


Figure 8.20 Plan of several New Kingdom tombs at Saqqara, including those of Horemheb and Maya. Source: Ian Shaw (ed.), *The Oxford History of Ancient Egypt*. Oxford: Oxford University Press, 2000, p. 288.

were later conducted at the village site, from 1906 to 1909 by Ernesto Schiaparelli (Egyptian Museum, Turin). German Egyptologist Georg Möller briefly worked at the site in 1913. After World War I (and until 1951) excavations were conducted there by the French Archaeological Institute, Cairo (IFAO), under the direction of Bernard Bruyère, with some subsequent reinvestigation of the site.

Remains now visible at the site date to the 19th Dynasty, when the settlement was expanded. With 68 houses in the final phase, the village covered ca. 5,600 square meters. The settlement was walled in stone, with one entrance on the north, outside of which a few houses (and possibly administrative buildings) were located. A second gate on the west side led to the principal village cemetery. The long, narrow houses, made of mud-brick with lower walls and foundations of stone, were laid out along a main north–south street and several east–west alleys (Figure 8.21).

Village houses were entered through wooden doors framed in wood or limestone, and the lintels were sometimes inscribed with the house owner's name. Although there is evidence of remodeling (as households grew and/or changed in composition), a fairly standardized house plan is seen, usually with four to six rooms aligned linearly, including an open-air back court where the cooking and food preparation were done. Houses varied in size from 40 to 120 square meters. One of the inner rooms usually had a single wooden

Figure 8.21 Plan of the village of Deir el-Medina. Source: A. G. McDowell, *Village Life in Ancient Egypt: Laundry Lists and Love Songs*. Oxford: Oxford University Press, 1999, p. xvii.

column resting on a stone base, which supported a higher roof and clerestory windows that would have let in light and air. The houses were one story high, with a stairway to the roofed area in the back court. The roof would have provided additional space for household activities, including sleeping during the warmer months.

In the first room of a number of houses (opening onto the street) Bruyère excavated what he called a *lit clos*, which may have been a bed structure used for giving birth. But this interpretation is problematic: ancient Egyptian women gave birth in a squatting position, not lying down on beds. (See 7.7 for evidence excavated at the South Abydos settlement of a "birthing brick.") Lynn Meskell, an anthropologist/archaeologist at Stanford University, suggests that the first room in the house was a shrine and the cultic domain of household women. Non-domestic artifacts in this room, such as offering tables, statues, and stelae, support Meskell's hypothesis, and the walls were often decorated with images of the male dwarf god Bes, a protective household deity. Meskell also proposes that the larger columned room, which she calls the "divan room" because such structures were found in this location, was the domain of men's relations. Sometimes wall decoration in this room included painted false doors, and the presence of other ritual artifacts suggests a focus of (male) ancestor ritual. In such small houses, however, it would be unlikely that any space was used exclusively for a single purpose.

Some of the 18th-Dynasty workmen's tombs were to the east of the village, and cut into the bedrock below these tombs were many pits containing the burials of infants, neonates, and fetuses. Burials of adolescents were located midway between the infant and adult burials, suggesting spatial differentiation in the cemetery by age. The great number of infant burials points to a high rate of infant mortality (which is found in almost all premodern populations), as well as social recognition symbolized by the intentional burial in a cemetery of even the youngest villagers.

On the valley slopes to the west of the village were tombs of the 19th and 20th Dynasties. The general plan of these tombs consists of a pylon gate, walled courtyard, and chapel, either a rock-cut or free-standing vaulted structure, with a small mud-brick pyramid above. The subterranean burial chambers were entered from a vertical shaft in the courtyard or chapel. The tomb of Sennedjem contained 20 burials of three generations of his family, but only nine were in coffins, including those of Sennedjem, his wife, and their sons- and daughters-in-law (Plate 8.12). Whereas this tomb contained tools and household items (including metal razors), and real food (breads, eggs, dates, dom palm nuts, and emmer wheat), the earlier 18th-Dynasty tombs in the eastern cemetery had more furniture (beds, chairs, boxes, and baskets). The later Ramessid Period tombs also contained more ritual equipment for the afterlife, such as amulets, *shawabti*s, and tools for the Opening of the Mouth, which Meskell thinks reflects a shift of focus from the world of the living to the world of the afterlife.

Construction and decoration of the Deir el-Medina tombs, and tomb goods, would have been obtained by barter and exchange of work and crafts done by the workers on their days off. Although these burials could be considered "middle class," they belonged to a special group of royal artisans and their families, and it is unclear how typical they were of burials below the level of government officials.

To the northeast of the village is a Ptolemaic temple of the goddess Hathor, built over an earlier stone temple to the goddess from the reign of Rameses II. Next to this temple are the remains of an earlier Hathor temple built by Sety I. Also to the north of the village are a number of mud-brick shrines, consisting of a walled court, one or two columned halls, and a sanctuary usually with three cult chambers for the cult statues. Another group of shrines cut in the bedrock is found on the route from the Deir el-Medina village to the Valley of the Queens, where village workmen were also employed. Associated with these cave shrines, which were dedicated the god Ptah and the snake goddess Meresger, are stelae of the workmen and their officials.

Box 8-E Daily life of the Deir el-Medina workers

Because of a wealth of texts associated with the workmen's village at Deir el-Medina, much more is known about life there than would be evident solely from the archaeological evidence. Texts include official documents on papyri (generally fragmented), and thousands of ostraca, made of limestone chips or potsherds.

The Egyptian week consisted of ten days and workmen in the royal tomb spent eight of those days there, camping at night in huts at the top of the ridge along the path to the Valley of the Kings, possibly to be in closer proximity to their work site. The Scribe of the Tomb, appointed by the vizier, issued rations to the workmen and kept daily records of attendance and absence, which, aside from special holidays, could be granted for sickness and sometimes for personal reasons, including work on the family tomb. In the royal tomb the workforce was divided into right and left crews, each headed by a foreman and three other officials/assistants. Workmen's tools and materials were supplied by the state and there is even a record of turning in copper chisels to be resharpened or reforged.

Because of the villagers' employment and state support, the village was a very atypical one, which can also be seen in the high rate of literacy among the male workers there. Tomb draftsmen, officials, and scribes for the many different records kept in the village all needed to know how to read and write, but there is also evidence that some ordinary workmen learned these skills. Although textual evidence is lacking for a school per se, many texts found at Deir el-Medina were learners' copies made of various works – including religious hymns, classical works of Middle Kingdom literature, and New Kingdom instructional literature. Papyri from a private library belonging to a scribe and his descendants were found in the west cemetery, and other such collections probably existed.

There are records from the late 20th Dynasty that some villagers were involved in very serious state crimes – the robbing of royal tombs. Although local cases were heard by a village court, criminal cases were tried elsewhere, including the vizier's office. Some cases were also decided by oracle – of the deified King Amenhotep I. Probably the most egregious crimes were committed by a man named Paneb in the late 19th Dynasty. Threatening his adopted father, a work foreman, Paneb may have murdered him and then became foreman through bribes. As foreman, Paneb stole stone from the royal tomb and misappropriated the time of workmen for his own family tomb. He was also accused of robbing villagers' tombs and sleeping with the wives of several workmen while his son slept with their daughters. But justice eventually triumphed and Paneb and his son were sent off to do hard labor in mines in the Wadi Hammamat (presumably until they died there).

For an excellent presentation and translation of the Deir el-Medina textual information, see Andrea McDowell's *Village Life in Ancient Egypt* (1999).

Box 8-F Love songs

A few of the Ramessid ostraca from Deir el-Medina (and a vase in the Cairo Museum) contain parts of texts known as the "Love Songs." More complete versions of these songs/poems have been found on three papyri: the Papyrus Chester Beatty I and the Papyrus Harris 500 in the British Museum, and the Turin 1966 Papyrus in the Egyptian Museum, Turin. While many inscriptions of the New Kingdom are from mortuary or temple contexts, the Love Songs provide insights into the feelings of the ancient Egyptians, outside the spheres of ritual and work.

Translated as poems (which may have been sung), the Love Songs were taken from what was probably a large body of secular lyric poetry. They transcend the cultural and temporal gap between ancient Egypt and the modern world, describing feelings of longing, lust, ecstasy, romantic and erotic love, and physical desire – the same emotions that we all have felt and that are expressed in contemporary songs and poems.

The Love Songs celebrate the fullness of life, contradicting the mistaken notion that the ancient Egyptians were obsessed with death and preparations for the afterlife. Images in the poems are of life in the Nile Valley – in papyrus marshes full of flowers and colorful birds, and in villages and gardens with palm and sycamore trees. Fragrances of flowers, perfumes, and incense are described, as are the sweet tastes of wine, honey, and dates – enriching the poems with sensual delights.

An example of a song from the Papyrus Harris 500, translated by Michael Fox (1985), is included here:

Your love is mixed in my body,
  like …
[like honey(?)] mixed with water,
  like mandragoras* in which gum is mixed,
    like the blending of dough with …
Hasten to see your sister,
  Like a horse (dashing) [onto a battle]field,
like a …
  … its plants
while heaven gives her love,
  like the coming of a soldier(?),
  like …

*The word for some kind of fruit is translated as "mandragoras," a kind of aphrodisiac, but this translation is not certain.

All of the villagers' basic needs, including clothing, firewood, water, and food (emmer wheat and barley, meat, fish, and vegetables) were supplied by the state as payment, on a monthly basis. Since the village lacked a source of water, even the villagers' laundry was state provided: laundry was picked up in the village and washed by launderers along the

Nile. An attempt to locate well water near the village is seen in the excavation of the Great Pit, to the east of the Ptolemaic temple. Entered by a spiraling stairway, the pit was excavated to ca. 50 meters deep, but groundwater was never reached and the work was abandoned.

Like tomb goods, many household items, especially furniture, were made by village craftsmen in their spare time and obtained by villagers through barter and exchange. Goods were also obtained by reciprocal gift giving and loans. Such transactions occurred 500 or more years before coinage was introduced into Egypt, but Egyptologist J. J. Janssen's studies indicate a more sophisticated economic system in operation in the village, where a wide variety of transactions are shown to have occurred, including set prices, loans, and credit.

In order to study the price history of the period, Janssen compiled texts from Deir el-Medina ostraca (and some papyri) which contained economic information – about the value of many types of food, animals, raw materials, and manufactured goods (such as clothing, furniture, containers, tools, and tomb goods). It was not possible to date some of these texts, but the ones that could be dated were mostly from the 20th Dynasty, some of which could be assigned to specific reigns. There were also some texts of 19th Dynasty date. Prices were calculated in terms of *deben* (standardized weights) of copper, but also silver and (rarely) gold. Another system of prices was to give an equivalent value for a commodity in a measure of grain. With such data, Janssen could then demonstrate a sharp rise in the prices of grain (emmer wheat and barley) in the mid-20th Dynasty, with those prices halved by the end of the dynasty.

8.12 Nubian Temple Towns

Outside of Egypt proper, there is evidence of extensive New Kingdom settlements, as stone temples were built throughout Nubia. With the Kerma kingdom vanquished in the early New Kingdom, Egyptian control of Nubia expanded southward from Wawat (Lower Nubia) beyond the Second Cataract into Kush (Upper Nubia). Most of the Middle Kingdom forts in Nubia were restored, but some were abandoned after the conquest of Kush. Fortresses which continued to be occupied, such as at Buhen, Mirgissa, and Semna, were extensively renovated, including the construction of new temples, and at Buhen a large settlement expanded outside of the earlier walls. Except during the short reign of Tutankhamen, Nubia was administered by high officials in fortified temple towns – Lower Nubia from Aniba, a fort built to the north of the Second Cataract during the Middle Kingdom, and the whole region between the Second and Third Cataracts in Upper Nubia from Amara, in a region where agriculture could sustain the town's inhabitants. Extra-mural towns also developed later around these two administrative temple centers.

At Tombos, 10 kilometers downstream from Kerma, a town was established with an associated cemetery containing ten pyramid tombs, similar in style to those known in western Thebes in the New Kingdom, which were built for high-status Egyptian officials living there. Excavations by Stuart Tyson Smith have also revealed a middle-status cemetery with Egyptian-style burials – with Egyptian grave goods and evidence of mummification. But Smith has also excavated four Nubian-style burials of women at Tombos. Although most of the associated grave goods were Egyptian, these four burials were in flexed positions with

the head to the west – as opposed to the Egyptian burials there in which the bodies were extended and lying on the back with the head to the east. This evidence suggests that although Tombos was an Egyptian town with Egyptians, including high-status officials, living there, some of the population consisted of Nubians who were able to symbolically retain some of their beliefs associated with death and burial, as well as their ethnic identity.

Inscriptions of two Thutmosid kings (I and III) have been found between the Fourth and Fifth Cataracts (at Kurgus upstream of Abu Hamed), but more extensive evidence in

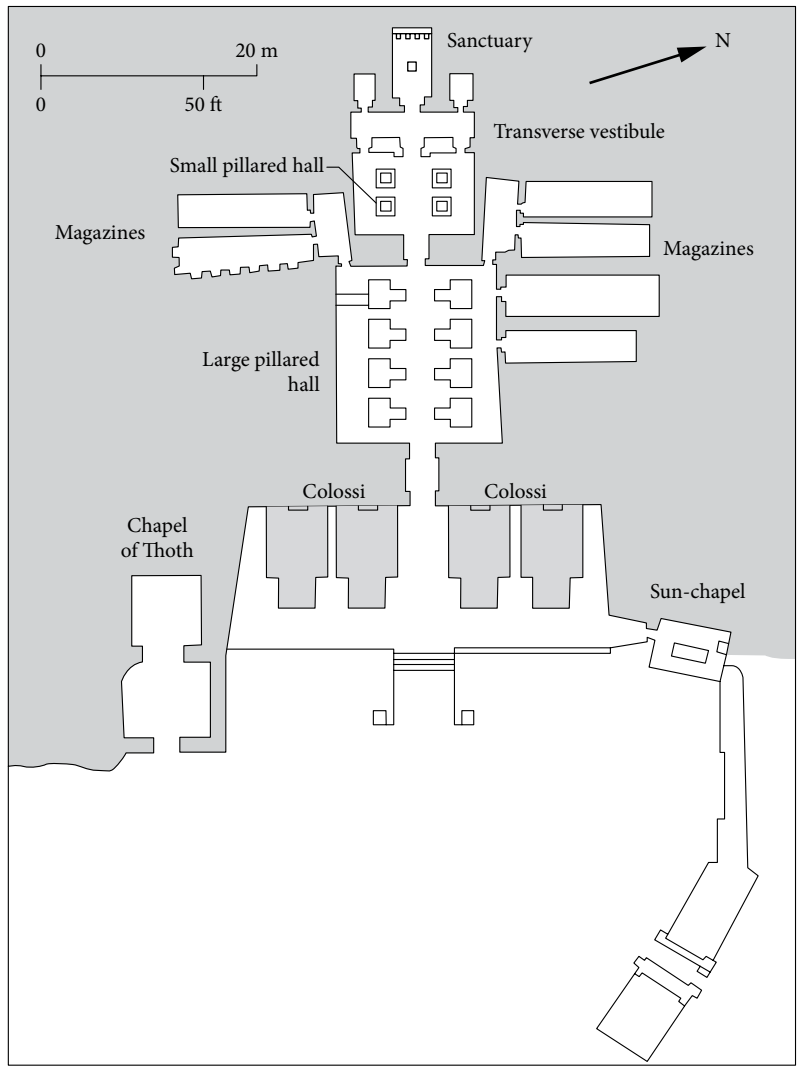
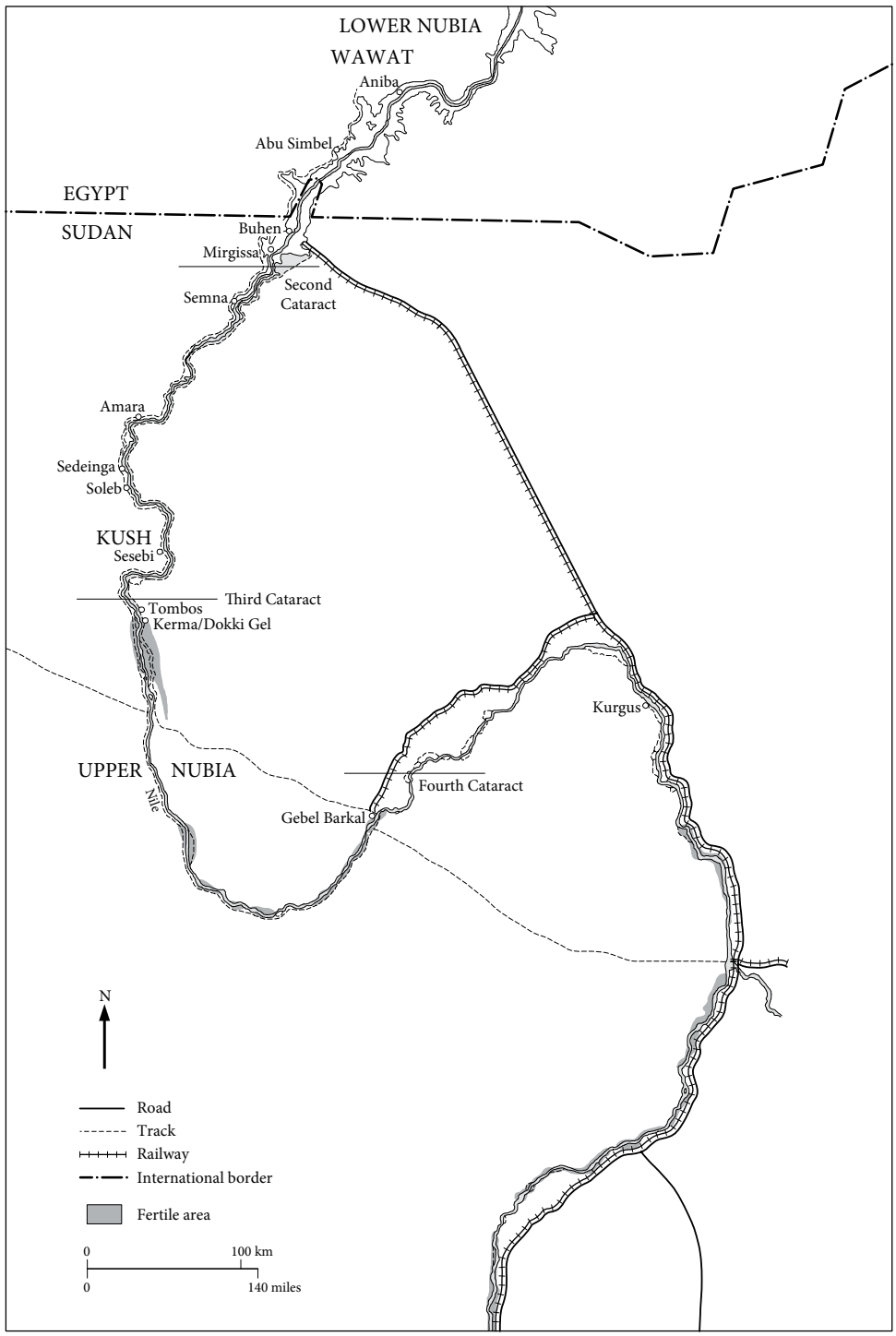


Figure 8.22 Plan of Rameses II's rock-cut temple at Abu Simbel in Lower Nubia. Source: Drawn by Philip Winton. Richard H. Wilkinson, *The Complete Temples of Ancient Egypt*. London and New York: Thames & Hudson, 2000, p. 223.



Map 8.5 Sites and regions in Upper and Lower Nubia during the New Kingdom.

the far south is located downstream from the Fourth Cataract at Gebel Barkal, where Thutmose III set up a victory stela and erected a temple to the god Amen. During Akhenaten's reign, Amen's name was erased from earlier inscriptions and *talatat* blocks have been found at Dokki Gel, near Kerma, where an Aten temple had been erected. In the post-Amarna Period a new Amen temple (B 500, beneath which was Thutmose III's temple) was begun at Gebel Barkal and was later greatly expanded by Sety I and Rameses II. Inscriptions mention a settlement and fort at Gebel Barkal, but remains of these have not been located.

The construction of imposing temples in Nubia helped to reinforce ideological control there through the cults of Egyptian gods. Although a number of temples were built in or near fortified towns in Nubia, some temples, such as Rameses II's famous rock-cut monument at Abu Simbel, have no evidence of nearby settlements (Figure 8.22; Plate 8.13). In the 1960s this temple was rescued from flooding by an enormous UNESCO project when the Aswan High Dam was built. The living rock from which the temple was carved, including a façade with four seated colossal statues of the king (21 meters high), was sawed up into huge blocks and reassembled on higher ground, where the artificial mountain behind it is held up by a huge interior concrete dome. The smaller rock-cut temple to the north, with four standing statues of Rameses II and two of his chief queen Nefertari, was also rescued. Some of the reliefs in the main temple depict Rameses's campaigns in Syria and Nubia and are symbolic of the role of the Egyptian king abroad.

More recent work on temple towns in northern Sudan includes re-examination of the walled town of Sesebi (ca. 100 kilomters downstream from the Third Cataract), which was constructed early in the reign of Akhenaten. The town, which includes two temples, blocks of storerooms, and domestic structures, as well as cemeteries outside the town wall, was first excavated by the Egypt Exploration Society in the 1930s. The new project (University of Cambridge), which is directed by Kate Spence and Pamela Rose, includes delineating the plan and decoration of the main temple with its well-preserved crypt. Beneath Akhenaten's temple, there is evidence of an earlier construction, and Napatan ceramics (see 9.4) within the town demonstrate later reoccupation in the first millennium BC.

At Amara West, which was also excavated earlier by the Egypt Exploration Society, Neal Spencer (British Museum) has been directing new excavations and survey of a well-preserved town of the early Ramessid period. The 2008 magnetomer survey revealed a previously unknown western suburb with some large villas. When excavated, one of the villas contained rooms for large-scale grain processing and bread making. Within the walled town there are similar buildings to those found at Sesebi: a temple, large-scale storage facilities and houses. Names/titles found on door jambs and lintels from a large house within the town have identified it as the residence of the Egyptian deputy of Kush.

Egyptian control of Nubia ceased at the end of the New Kingdom. Gebel Barkal would later become the nucleus of an indigenous kingdom, the Napatan state, which arose there in the 10th–9th centuries BC. By the 8th century BC kings of this state became the rulers of both Egypt and Nubia.