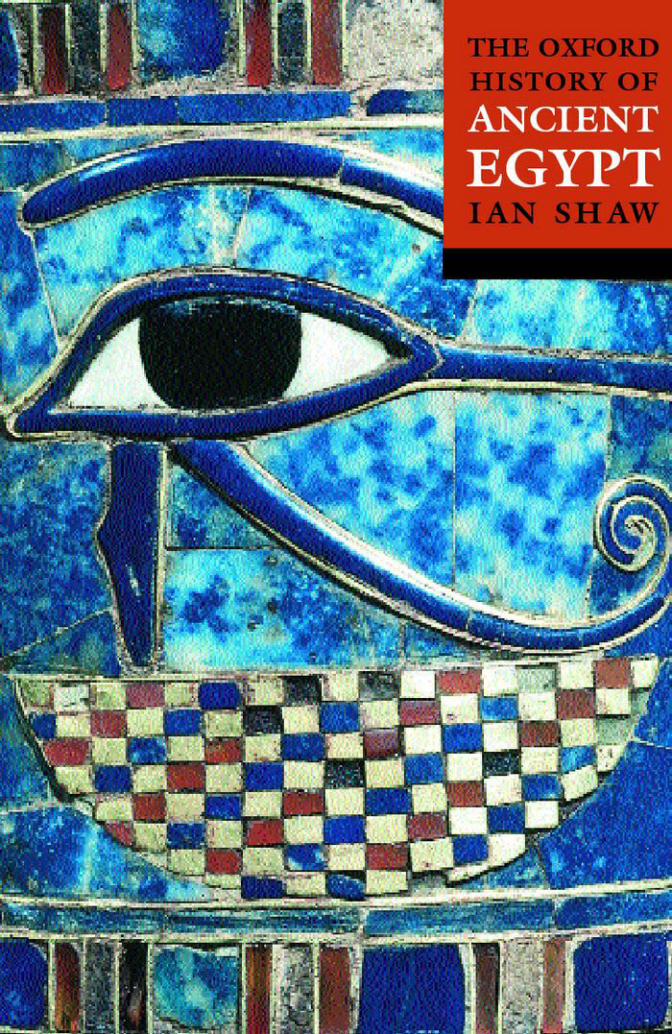

THE OXFORD HISTORY OF ANCIENT EGYPT

IAN SHAW

4

The Emergence of the Egyptian State (*c.*3200–2686 BC)

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The Naqada III phase, *c.*3200–3000 BC, is the last phase of the Predynastic Period, according to Kaiser's revision of Petrie's sequence dates. It was during this period that Egypt was first unified into a large territorial state, and the political consolidation that laid the foundations for the Early Dynastic state of the 1st and 2nd Dynasties must also have occurred then. In the latter part of this phase there is evidence of kings preceding those of the 1st Dynasty, in what is now called 'Dynasty 0'. They were buried at Abydos near the royal cemetery of the 1st Dynasty. On the Palermo Stone, a late 5th-Dynasty king-list (see Chapter 1), the presence of names and figures of seated kings in compartments in the broken top part of the list suggests that the Egyptians believed that there had been rulers preceding those of the 1st Dynasty. There is considerable debate, however, regarding such factors as the precise nature of the process of unification, the date when it took place, and the question of the origins of Dynasty 0.

State Formation and Unification

From the Naqada II phase onwards, highly differentiated burials are found in cemeteries in Upper Egypt (but not in Lower Egypt). Élite burials in these cemeteries contained large quantities of grave goods, sometimes made from exotic materials such as gold and lapis lazuli. These burials are symbolic of an increasingly hierarchical society, probably representing the earliest processes of competition and the aggrandizement of local polities in Upper Egypt, as economic

interaction and long-distance trade developed. Control of the distribution of exotic raw materials and the production of prestigious craft goods would have reinforced the power of chiefs in Predynastic centres, and such goods were important status symbols. Despite a lack of archaeological evidence, it seems likely that the larger Predynastic towns in Upper Egypt were becoming centres of craft production. Some of these centres also became walled settlements, like the South Town at Naqada, documented by Petrie.

The core area of the Naqada culture was in Upper Egypt, but, in the Naqada II phase, sites of the Naqada culture began to be established in northern Egypt for the first time. Petrie excavated a Naqada II cemetery at el-Gerza in the Faiyum region, from which he derived the term Gerzean (Naqada II) for his middle Predynastic phase. Somewhat later, Naqada culture burials are found much further north, at the Delta site of Minshat Abu Omar. Such evidence suggests the gradual northward movement of peoples from Upper Egypt in Naqada II times.

Since the major Upper Egyptian sites were located near the Eastern Desert, from which gold and various kinds of stone used for beads, carved vessels, and craft goods were obtained, they were much richer in natural resources than Lower Egyptian sites: the ancient name of Naqada is Nubt ('[city] of gold') and it is no coincidence that the largest Predynastic cemetery is located there. As cereal agriculture was practised with increasing success on the floodplain of Upper Egypt, surpluses accrued and could be exchanged for craft goods, the production of which was becoming increasingly specialized. Possibly the first southerners to go north were traders, and as the economic interaction increased they may have been followed by colonists. There is no archaeological evidence to demonstrate the northward movement of people (as opposed to artefacts), but if such migration occurred it seems more likely to have been a peaceful expansion rather than a military invasion, at least in the early stages.

A motivating factor for the expansion of the Naqada culture into northern Egypt might have been the desire to gain direct control over the lucrative trade with other regions in the eastern Mediterranean, which had developed earlier in the fourth millennium BC. But the development of the technology to construct large boats was also the key to control and communication on the Nile and large-scale exchange. Timber (cedar) for the construction of such boats did not grow in Egypt, but came from the area of the Levant now occupied by Lebanon.

As the discussion of the Maadian culture in Chapter 3 indicates, Lower Egypt was not a cultural vacuum in the fourth millennium BC, and eventually Naqada expansion would probably have met with some resistance. The archaeological evidence in the north, however, demonstrates only the eventual replacement of the Maadian culture. At Maadi itself, occupation came to an end in the Naqada IIc/d phase, while stratigraphic evidence at sites in the northern Delta, such as Buto, Tell Ibrahim Awad, Tell el-Rub'a, and Tell el-Farkha, demonstrates that there were earlier strata containing only Maadian and local wares, but above these were strata comprising only ceramics of the Naqada III culture and the later forms of the 1st Dynasty. At Tell el-Farkha a transitional layer of aeolian sand between such strata suggests the abandonment of the settlement by the local population for unknown reasons (intimidation?) and the later reoccupation of the site in Dynasty 0 by people of the Naqada culture, which by then had spread throughout Egypt.

By the end of the Naqada II phase (*c.*3200 BC) or early Naqada III, the indigenous material culture of Lower Egypt had disappeared and was replaced by artefacts (especially pottery wares) deriving from Upper Egypt and the Naqada culture. This archaeological evidence has sometimes been interpreted as an indication of the political unification of Egypt by this time, but the material evidence does not necessarily imply (unified) political organization and a number of alternative socio-economic factors might be proposed to explain this change. Given that the evidence from the élite burials in three major Predynastic centres in Upper Egypt (Naqada, Abydos, Hierakonpolis) suggests separate (and possibly competing) centres or polities during the Naqada II phase, the first unification of Upper Egyptian polities probably took place in early Naqada III times, either as a result of a series of alliances or through warfare (or perhaps through a combination of both), followed by the political unification of the north and south and the emergence of Dynasty 0 towards the end of Naqada III.

Naqada III burials in the largest Predynastic cemetery at Naqada and the élite Cemetery T are impoverished compared to the earlier Naqada II burials at this site. More than 6 km. south of these cemeteries, two large niched mud-brick tombs and a cemetery with Early Dynastic graves were excavated at the end of the nineteenth century by Jacques de Morgan. The location of this cemetery and the sudden appearance of a new style of 'royal' burial at the end of Naqada III, together with the more impoverished (earlier) burials in the cemeteries far to the north, all suggest a break with the polity centred at

South Town (located only 150 m. north-east of the large Predynastic cemetery), probably coinciding with the absorption of the Naqada polity into a larger one.

In contrast, in the Umm el-Qa'ab region of Abydos the graves in one area (Cemeteries U and B and the 'royal cemetery') evolved from fairly undifferentiated burials in early Naqada times, to an élite cemetery in late Naqada II, and finally to the burial place of the kings of Dynasty 0 and the 1st Dynasty. One Naqada III tomb, U-j, dating to *c.*3150 BC, consisted of twelve rooms covering an overall area of 66.4 sq. m. Although robbed, it contained many artefacts in bone and ivory, a great deal of Egyptian pottery, and about 400 imported jars from Palestine that may possibly have contained wine. The 150 small labels found in this tomb are inscribed with what appear to be the earliest known hieroglyphs. According to the excavator, Günter Dreyer, traces of a wooden shrine in the burial chamber and an ivory model sceptre demonstrate that this was the tomb of a ruler, possibly King Scorpion, whose estates may be listed on a number of labels. This ruler, however, probably reigned in the thirty-first century BC.

Excavations at 'Locality 6' in Hierakonpolis, 2.5 km. up the Great Wadi, revealed several large tombs, each measuring up to 22.75 sq. m. in floor area and containing Naqada III ware. Tomb 11, although looted, still contained beads in carnelian, garnet, turquoise, faience, gold and silver, fragments of artefacts in lapis lazuli and ivory, obsidian, and crystal blades, and a wooden bed with carved bulls' feet. Such a rich burial suggests that élite individuals of considerable means were being buried at Hierakonpolis, but that they were still not of the same class as the rulers at Abydos.

Whereas Naqada was politically insignificant in the Early Dynastic Period, Abydos was the most important centre for the cult of the dead king, and Hierakonpolis remained an important cult centre associated with the god Horus, symbolic of the living king. In a late Predynastic power struggle in Upper Egypt, it is possible that the Naqada polity was vanquished, whereas rulers whose power base was originally at Abydos went on to control the entire country, perhaps in alliance with less powerful élite groups (the so-called Followers of Horus) at Hierakonpolis, who were none the less in a strategic position because of valued raw materials coming from the south.

The final unification of Upper and Lower Egypt may have been achieved through one or more military conquests in the north, but there is not much evidence for this apart from scenes with symbolically military content carved on a number of ceremonial palettes

dated stylistically to the late Predynastic (Naqada III/Dynasty 0), such as the fragmented Tjehenu (Libyan), Battlefield, and Bull palettes. The interpretation of such scenes is problematic, because these artefacts are without known provenances and the fragmented scenes are symbolic of conflict without specifying real historical events.

Fortunately, three important artefacts with carved scenes relevant to this period were excavated at Hierakonpolis: the Macehead of King Scorpion, and the Palette and Macehead of King Narmer. All three of these ceremonial objects were found in or near the area described as the 'main deposit' by J. E. Quibell and F. W. Green when they excavated the temple of Horus at Hierakonpolis. They were possibly royal donations to the temple and suggest that Hierakonpolis was still an important centre at the end of the Naqada III phase. While the unification of Upper and Lower Egypt is too specific an interpretation for the scenes on the Narmer Palette, the scenes illustrate dead enemies and vanquished peoples and/or settlements. Scenes and signs on the Narmer Macehead represent war captives and booty, and conquered peoples are also represented on the Scorpion Macehead. Such scenes suggest that warfare played a role at some point in the forging of the early state in Egypt. Even if there is no evidence of destruction layers of Naqada III date at settlement sites in the Delta, warfare could still have implemented the consolidation of this early state and its expansion into Lower Nubia and southern Palestine, which occurred in the early 1st Dynasty.

From Petrie onwards, it was regularly suggested that, despite the evidence of Predynastic cultures, Egyptian civilization of the 1st Dynasty appeared suddenly and must therefore have been introduced by an invading foreign 'race'. Since the 1970s, however, excavations at Abydos and Hierakonpolis have clearly demonstrated the indigenous, Upper Egyptian roots of early civilization in Egypt. While there is certainly evidence of foreign *contact* in the fourth millennium BC, this was not in the form of a military invasion.

Ceramics from excavated strata at sites in northern Egypt and southern Palestine now make it possible to coordinate specific cultural periods in the two regions, and demonstrate continuing contact as the Maadi culture in the north was replaced by the Naqada culture. While the Naqada IIb phase corresponds to the Early Bronze Age (EBA) Ia phase in Palestine, Naqada II c–d and Naqada III/Dynasty 0 were evidently contemporaneous with the EBA Ib culture. Contact between northern Egypt and Palestine at this time was overland, as evidence in the northern Sinai demonstrates. Between Qantar and Raphia, about

250 early settlements have been located by the North Sinai Expedition of Ben Gurion University, with 80 per cent of the ceramics of Egyptian wares dating to Naqada II–III and Dynasty 0. The settlement pattern consists of a few larger core sites interspersed with seasonal encampments and way stations.

Israeli archaeologists suggest that this evidence represents a commercial network established and controlled by the Egyptians as early as EBA Ia, and that this network was a major factor in the rise of the urban settlements found later in Palestine in EBA II. Naomi Porat's technological study of ceramics from EBA sites in southern Palestine clearly demonstrates that in EBA Ib strata many of the pottery vessels used for food preparation were probably manufactured by Egyptian potters using Egyptian technology but local Palestinian clays. In EBA Ib strata there are also many storage jars made from Nile silt and marl wares, which must have been imported from Egypt. Not only did the Egyptians establish camps and way stations in the northern Sinai, but the ceramic evidence also suggests that they established a highly organized network of settlements in southern Palestine where an Egyptian population was in residence.

The importance of the Delta for Egyptian contact with south-west Asia is also suggested by enigmatic evidence from Buto. In strata of the Lower Egyptian Predynastic culture at this site, two unexpected types of ceramic were found by Thomas von der Way in the late 1980s: clay 'nails' and a so-called *Grubenkopfnagel* (a tapering cone with a concave burnished end) that resemble artefacts used in the Mesopotamian Uruk culture to decorate temple façades. Von der Way suggests that contact with the Uruk culture network may have taken place via northern Syria, as the earliest Predynastic stratum at Buto was found to contain sherds decorated with whitish stripes characteristic of the Syrian ʿAmuq F ware. The clay nails and the *Grubenkopfnagel* are not associated with any (mud-brick) architecture in the Predynastic levels, which might be expected if von der Way's interpretation were correct, but the ongoing excavations at Buto may yet provide more data on connections between the Delta and south-west Asia in the fourth millennium BC.

Both imported and Egyptian-made cylinder seals, an artefact type unquestionably invented in Mesopotamia, are found in a few élite graves of the Naqada II and III phases. Beads and small artefacts in lapis lazuli, which could only have come from Afghanistan, are first found in Upper Egyptian Predynastic graves. Mesopotamian motifs also appear in Upper Egypt (and Lower Nubia), including the motif of

the *héros dompteur* (a victorious human figure between two lions/beasts), painted on the wall of Tomb 100 at Hierakonpolis, which dates to Naqada II. Other typically Mesopotamian motifs, such as the niched palace façade and high-prowed boats, are also found on Naqada II and III artefacts and also in the rock art. The styles of these motifs are more characteristic of the glyptic art of Susa in south-west Iran than of the Uruk culture, and the fact that such artefacts are not found in Lower Egypt has raised the possibility of some southern route of contact between Susa and Upper Egypt, the nature of which is unknown at present.

In Lower Nubia there are numerous burials of the A-Group culture (which was roughly contemporaneous with the Naqada culture), and these contain many Naqada craft goods. The A-Group wares are very distinct from the Naqada ones, and Egyptian products were probably obtained through trade and exchange. It has been suggested by Bruce Williams that the élite A-Group Cemetery L at Qustul in Lower Nubia represents Nubian rulers who conquered and unified Egypt, founding the early pharaonic state, but most scholars do not agree with this hypothesis. The model that may best explain the archaeological evidence is one of accelerated contact between the cultures of Upper Egypt and Lower Nubia in later Predynastic times. Luxury raw materials, such as ivory, ebony, incense, and exotic animal skins, all greatly desired in Egypt in Dynastic times, largely came from further south in Africa, passing through Nubia. Some A-Group chiefs must, therefore, have benefited economically from the trade in raw materials, as is clearly evident from the rich burials excavated at Qustul and Sayala, but the kind of socio-political complexity attested in Upper Egypt at that date is unlikely to have occurred in Nubia. The floodplain of the Nile is much narrower in Lower Nubia than in Upper Egypt, and Lower Nubia simply did not have the agricultural potential to support greater concentrations of population and full-time specialists such as craftsmen and government administrators. The fact that the material culture of the Naqada culture was later found in northern Egypt with no Nubian elements would also seem to argue against any Nubian origin for the unified Egyptian state.

The Early 1st-Dynasty State

By *c.*3000 BC, the Early Dynastic state had emerged in Egypt, controlling much of the Nile Valley from the Delta to the first cataract at Aswan, a distance of over 1000 km. along the Nile. While the presence

of the Naqada culture is clearly evident in the Delta in later Naqada II and Naqada III times, the extension of Egyptian political control southwards during the 1st Dynasty is demonstrated by the remains of a fortress on the highest point of the shore on Elephantine Island, a region that had been occupied by A-Group peoples in Predynastic times. With the 1st Dynasty, the focus of development shifted from south to north, and the early Egyptian state was a centrally controlled polity ruled by a (god-)king from the Memphis region.

What is truly unique about the early state in Egypt is the integration of rule over an extensive geographic region, in contrast to contemporaneous polities in Nubia, Mesopotamia, and Syria–Palestine. Although there is certainly evidence of foreign contact in the fourth millennium BC, the Early Dynastic state that emerged in Egypt was unique and indigenous in character. It is likely that a common language, or dialects of that language, facilitated political unification, but nothing is really known about the spoken language, while early writing preserves specialized information that is of a very cursory nature at this point in cultural development.

One result of the expansion of Naqada culture throughout northern Egypt would have been a greatly elaborated (state) administration, and by the beginning of the 1st Dynasty this was managed in part by early writing, used on sealings and tags affixed to state goods. Archaeological evidence for state control consists of the names of 1st-Dynasty kings (*serekhs*) on pots, sealings, labels (originally attached to containers), and other artefacts found at major Early Dynastic sites in Egypt. Such evidence also suggests that a state taxation system was already in place in the early dynasties.

At Memphis the earliest archaeological strata that have so far been excavated date to the First Intermediate Period, and strata from the Early Dynastic city may be buried under much alluvium. Further west, drill cores taken by David Jeffreys have revealed both Old Kingdom and Early Dynastic pottery. Graves and tombs, however, are found in this region from the 1st Dynasty onwards; therefore it is likely that the city was founded around then. Tombs of high officials have been found at nearby North Saqqara, and officials of all levels were buried at other sites in the Memphite region. Such funerary evidence suggests that the Memphis region was the administrative centre of the state and also indicates that the early Egyptian state was highly stratified in its social organization.

In the south, Abydos remained the most important cult centre, and it has been suggested that in the 1st Dynasty the smaller Predynastic

settlements, which have left more ephemeral archaeological evidence, were replaced by one town constructed in mud brick at Abydos. The kings of the 1st Dynasty were buried at Abydos, another indication of the Upper Egyptian origins of this state. From the very beginning of the Dynastic Period the institution of kingship was a strong and powerful one and would remain so throughout the major historical periods. Nowhere else in the ancient Near East at this early date was kingship so important and central to control of the early state.

Other towns must have developed or been founded as administrative centres of the state throughout Egypt, but the spatial organization of communities was not like that in contemporaneous southern Mesopotamia, where huge cities were organized around large cult centres. On the other hand, neither was early Egypt a 'civilization without cities', as was once suggested. Egyptian towns and cities may have been more loosely organized spatially than Mesopotamian ones, and the royal residence is known to have shifted in location. Owing to a number of factors, towns and cities in ancient Egypt have not been well preserved, or are deeply buried under alluvium or modern settlements and thus cannot be excavated. Nevertheless, some archaeological evidence for the earliest towns has survived. At Hierakonpolis, an elaborately niched mud-brick façade within the town (Kom el-Ahmar) has been interpreted as the gateway to a 'palace', possibly an administrative centre of the early state. At Buto, in the Delta, a rectangular mud-brick building dating to the early 1st Dynasty, which was constructed above earlier mud-brick buildings of Naqada II and III and Dynasty 0, may be the remains of a temple within the town.

Most ancient Egyptians in the Early Dynastic Period (and all later periods), however, were farmers living in small villages. Cereal agriculture was the economic base of the ancient Egyptian state. Throughout the fourth millennium BC, villages became increasingly dependent on the cultivation of emmer wheat and barley, which was incredibly successful in the environment of the Nile floodplain in Egypt.

By the Early Dynastic Period, simple basin irrigation may have been practised, thus extending the amount of land under cultivation and producing increased yields. Unlike practically any other irrigation system in the world, salinization did not occur in Egypt, because the annual Nile flood flushed out the salts. Given that rainfall by this time was negligible, the annual flooding provided the necessary moisture at the right time of year—July and August—so that the wheat could be sown in September after the flooding receded. The species of wheat that were introduced into Egypt matured during the winter months

and could be harvested before spring, when the return of high temperatures and drought might otherwise have killed the crops. Huge agricultural surpluses were possible in this environment, and when such surpluses were controlled by the state they could support the flowering of Egyptian civilization that is seen in the 1st Dynasty.

The Royal Cemetery at Abydos

The nature of early Egyptian civilization was expressed primarily through monumental architecture, especially the royal tombs and funerary enclosures at Abydos, and the large tombs of high officials at North Saqqara. Formal art styles, which are characteristically Egyptian, also emerged in the Naqada III/Dynasty 0 and Early Dynastic periods. What is characteristically Egyptian in the monumental architecture and commemorative art (such as the Narmer Palette) is reflective of full-time craftsmen and artisans supported by the crown. Artefacts redolent of the highest quality of craftsmanship are found in royal and élite tombs of the period. Examples include a steatite disk inlaid with an Egyptian alabaster carved scene of two hounds hunting gazelles (from Tomb 3035 at Saqqara), and bracelets with beads of gold, turquoise, amethyst, and lapis lazuli (from King Djer's tomb at Abydos). A similarly high standard of craftsmanship may be observed in the ebony and ivory artefacts and the copper tools and vessels found in the élite tombs, all of which were reflective of court sponsorship. The presence of copper artefacts in the tombs was probably the result of royal expeditions to copper mines in the Eastern Desert and/or increased trade with copper-mining regions in the Negev/Sinai, as well as the expansion of copper working in Egypt.

Although it was previously thought that the 1st-Dynasty rulers were buried at North Saqqara, where Bryan Emery excavated the large mud-brick superstructures with elaborately niched façades, it is now thought by most scholars that these tombs belonged to 1st- and 2nd-Dynasty high officials while the royal cemetery in the Umm el-Qaʿab area at Abydos is the burial place of their kings. Only at Abydos is there a small number of large tombs that correspond to the kings (and one queen) of this dynasty, and only at Abydos are there the remains of the funerary enclosures for all but one of the rulers of this dynasty, as has been demonstrated by David O'Connor's excavations during the 1980s and 1990s.

What is clearly evident in the Abydos royal cemetery is the ideology of kingship, as symbolized in the mortuary cult. The development of

monumental architecture symbolized a political order on a new scale, with a state religion headed by a god-king to legitimize the new political order. Through ideology and its symbolic material form in tombs, widely held beliefs concerning death came to reflect the hierarchical social organization of the living and the state controlled by the king—a politically motivated transformation of the belief system with direct consequences in the socio-economic system. The king was accorded the most elaborate burial, which was symbolic of his role as mediator between the powers of the netherworld and his deceased subjects, and a belief in an earthly and cosmic order would have provided a certain amount of social cohesion for the Early Dynastic state.

Seven tomb complexes of the 1st Dynasty were first excavated by Émile Amélineau in the 1890s and then re-excavated more carefully by Petrie. These belong to the following kings: Djer, Djet, Den, Anedjib, Semerkhet, and Qaʿa, as well as Queen Merneith, who may have been the mother of Den and perhaps also regent during the earlier part of his reign. Not only had these tombs been plundered, but there is evidence that they had been intentionally burned. In the Middle Kingdom the tombs were excavated and rebuilt for the cult of Osiris, and Djer's tomb was converted into a cenotaph for the god. Given such a history, it is remarkable that the work of Petrie in 1899–1901 and the excavations undertaken by the German Archaeological Institute since the 1970s have enabled the appearance of the early tombs to be reconstructed. Although only subterranean chambers of mud brick remain, the tombs would originally have been roofed and may have been covered by a mound of sand before which stone stelae carved with the royal name (several of which have survived) would probably have been placed. Rows of subsidiary graves surrounded each royal tomb.

In the area to the north-east of the royal cemetery, called Cemetery B, is the tomb complex of Aha, now conventionally listed as the first king of this dynasty. Also in Cemetery B are tombs that have been identified by Werner Kaiser as those of the last three kings of Dynasty 0: Iri-Hor, Ka, and Narmer. These tombs consist of double chambers, whereas the tomb complex of Aha is made up of several separate chambers built in three stages with a number of subsidiary burials to the north-east. Although looted, a new dimension in burial can clearly be seen in Aha's tomb complex: traces of large wooden shrines are found in three chambers and thirty-three subsidiary burials contained the remains of young males, 20–25 years old, who had probably been killed when the king was buried. Near one of these subsidiary graves were the remains of the burials of at least seven young lions.

All of the other 1st-Dynasty royal burials at Abydos have subsidiary burials in wooden coffins, and this is the only period in ancient Egypt when humans were sacrificed for royal burials. Nancy Lovell, who has examined the skeletons from some of these subsidiary burials, suggests that their teeth show evidence of death by strangulation. Perhaps officials, priests, retainers, and women from the royal household were all sacrificed to serve their king in the afterlife. Crude stelae carved with the names of the deceased accompany many of these burials, which are found with grave goods, such as pots, stone vessels, copper tools, and ivory artefacts. Dwarfs (who may perhaps have been employed to amuse the king) and dogs that may have been hounds or pets have also been found in these graves. The tomb of Djer has the most subsidiary burials (338), and it is in general the later royal burials that have fewer ones. For unknown reasons, the practice seems to have been discontinued after the 1st Dynasty, and in later times small servant statues and then *shabtis* (funerary figurines) may have become more acceptable substitutes.

All of the 1st-Dynasty tombs at Abydos contained wooden shrines where the actual burial was located. The tomb complex of Djer is the largest, covering an area of 70 × 40 m. (including the subsidiary burials in rows). The royal burial was located in the centre of a mud-brick-lined chamber, measuring 18 × 17 m. (306 sq. m. in floor area) and 2.6 m. deep, with short walls perpendicular to three sides of the burial chamber, forming separate storage chambers. Although this tomb was later converted into a shrine for the god Osiris, Petrie still found a linen-wrapped arm with bracelets that apparently derived from the original burial; the arm itself no longer survives, but the jewellery is in the Egyptian Museum, Cairo.

By the reign of Den, in the middle of the 1st Dynasty, a major innovation can be seen in the design of the royal tombs: the addition of a staircase. This made it possible for the entire tomb, including the roofing, to be built during the king's lifetime, and would have facilitated the construction work in a very deep pit. In the middle of the staircase was a wooden door, and beyond this, at the entrance to the burial chamber, was a portcullis to block grave robbers. The tomb and 136 subsidiary burials cover about 53 × 40 m., and the burial chamber itself is 15 × 9 m. in area and 6 m. deep. The tomb's design and decoration are the most elaborate at Abydos: the floor of the burial chamber was paved in slabs of red and black granite from Aswan, which is the earliest known use of this very hard stone on a large scale. A small room to the south-west, with its own small staircase, may have

been an early *serdab* (a chamber where statues of the deceased were placed). Excavations by the German Archaeological Institute in the debris from earlier excavations indicate that grave goods would have included many pots with seal impressions, stone vessels, inscribed labels, and other carved artefacts in ivory and ebony, as well as inlays from boxes or furniture. To the south of the tomb chamber the unusually long subsidiary chambers contained many jars, probably originally containing wine.

In a later royal burial belonging to Semerkhet, Petrie found the entrance ramp (not a staircase as in Den's tomb) saturated up to 'three feet' deep with aromatic oil. Almost 5,000 years after the burial, the scent was still so strong that it permeated the entire tomb. In the tomb belonging to the last king of the 1st Dynasty, Qaʿa, thirty inscribed labels describing the delivery of oil were found during re-excavation by the German Institute. Most likely these oils were imported from Syria–Palestine, and may have been made from berries or resins of trees found there. The presence of such huge quantities of oil in Semerkhet's tomb (perhaps in the course of his funeral ceremony) certainly suggests very large-scale foreign trade controlled by the crown and indicates the importance of such luxury goods for royal burials.

The royal tombs at Abydos are located in the low desert (Umm el-Qaʿab). To the north-east of them, closer to the edge of the cultivation, are the funerary enclosures, called 'fortresses' by earlier excavators, where the cults of each king may have been perpetuated by priests and other personnel after the burial in the royal tomb, as was the custom in later royal mortuary complexes. The best-preserved funerary enclosure, now known as the Shunet el-Zebib, belonged to Khasekhemwy of the 2nd Dynasty. Its niched inner walls are still preserved up to a height of 10–11 m., enclosing an area of about 124 × 56 m. In 1988 O'Connor discovered a large mound of sand and gravel covered with mud brick, approximately square in plan, within the enclosure. This mound was located more or less in the same area as the Step Pyramid of King Djoser's funerary complex at Saqqara in the 3rd Dynasty (which began as a low 'mastaba' structure and only in its fourth stage was expanded to a stepped structure). Both Khasekhemwy's and Djoser's complexes were surrounded by huge niched enclosure walls, with only one entrance on the south-east.

Djoser's complex was constructed 40–50 years after Khasekhemwy's, and the mound at the Shunet el-Zebib may possibly be evidence for a 'proto-pyramid' structure or mound. It is not known if mounds were constructed in the earlier 1st-Dynasty funerary enclosures at Abydos,

but this seems likely. Thus, at Abydos the evolution of the royal mortuary cult and its monumental form can clearly be seen. By the 3rd Dynasty, the royal funerary cult came to reflect a new order of royal power, deploying vast resources and labour for the construction of the earliest monument in the world built entirely in stone.

In the early 1990s, twelve 'boat burials' were discovered by O'Connor to the south-east of Djer's funerary enclosure and just outside the north-east outer wall of Khasekhemwy's. These burials consist of pits that contained wooden hulls of boats 18–21 m. long but only about 50 cm. high. Mud bricks had been placed within the hulls and built up around the outside, forming structures up to 27.4 m. in length. The pottery associated with the boats is all Early Dynastic in date, but it is not known at present if the boats date to the 1st or 2nd Dynasty. They all seem to have been created at the same time, and possibly more boat burials will be discovered when excavations are extended in this area.

Smaller boat burials have been found associated with the Early Dynastic tombs of high officials at Saqqara and Helwan. The most famous Old Kingdom examples are the two undisturbed boats associated with Khufu's pyramid at Giza. The purpose of these boat burials is unknown: possibly the boats were actually used in a funerary ceremony or they may have been symbolically buried for the journey in the afterlife. The examples at Abydos are the earliest evidence of an association between boats and the royal mortuary cult.

The Abydos evidence demonstrates the huge expenditure of the state on the mortuary complexes—both tombs and funerary enclosures—of the 1st-Dynasty kings. These rulers had control over vast assets, including craft products from royal workshops, exotic goods, and raw materials imported in huge quantities from abroad, and probably also conscripted labour (as well as individuals who could be sacrificed for burial with the king). The paramount role of the king is certainly expressed in these monuments, and the symbols of the royal mortuary cult which evolved at Abydos were to become further elaborated in the pyramid complexes of the Old and Middle kingdoms.

The Tombs of High Officials at North Saqqara and Elsewhere

At North Saqqara there are some very impressive tombs of high officials of the 1st Dynasty, although none is on the scale of the combined monuments (tomb and funerary enclosure) which the 1st-Dynasty kings built at Abydos. Some of the North Saqqara tombs are

very substantial, and what is truly impressive are the elaborately niched mud-brick superstructures, which are missing in the royal burials at Abydos. The North Saqqara tombs were much better preserved than the Abydos royal tombs; when they were excavated, some of the niched façades still retained evidence of painted geometric designs and the burial chambers still had wooden floors. A number of the North Saqqara tombs were also accompanied by rows of subsidiary burials, but there are fewer of these than in the royal cemetery at Abydos.

It is possible that the North Saqqara tombs combined in one structure the two monumental symbols of status at Abydos: a subterranean tomb and an above-ground niched enclosure. For example, Tomb 3357, which dates to the reign of Aha at the beginning of the 1st Dynasty, is an elaborately niched superstructure surrounded by two mud-brick walls, measuring 48.2 × 22 m. in area. The substructure is divided by mud-brick walls into five large chambers, roofed with timbers, while the superstructure contains twenty-seven additional chambers for more grave goods. To the north of this is a so-called model estate with small-scale rooms, three granary-like structures, a mud-brick boat grave, and traces of a garden. The hundreds of pottery vessels found in this tomb are inscribed with the king's name and information about their contents. Although the owner of the tomb is unknown, he must have been one of the most important officials of the kingdom, as indicated not only by the size of the superstructure and its contents but also by the additional structures and the boat burial.

In the course of time, the design of these Saqqara tombs became even more elaborate, with a more complex arrangement of chambers, both subterranean and within the superstructure or the enclosure walls. As at Abydos, staircases down into the tomb were introduced at North Saqqara. Two tombs constructed later in the 1st Dynasty were designed with low, rectangular stepped superstructures of mud brick, which were later surrounded by niched walls. Emery thought that Djoser's Step Pyramid evolved from these two stepped structures, but it is more likely that the elements of the first pyramid complex derive from the funerary enclosures and royal tombs at Abydos.

Although large tombs with niched façades have been recorded at other sites (Tarkhan, Giza, and Naqada), the largest number—and those that are largest in size—are concentrated at North Saqqara. What is found at North Saqqara in the 1st Dynasty, then, is evidence of an official class of a large state. These tombs would also have been the most important monuments of the state in the north and thus were

symbolic of the centralized state ruled very effectively by the king and his administrators. That huge quantities of craft goods were going out of circulation in the economy and into tombs is indicative of the wealth of this early state, which was shared by a number of officials.

Clearly, the mortuary cult was also of great importance to non-royalty, and the elements of royal burials were emulated in more modest form in the exclusive cemetery at North Saqqara. Apart from the subsidiary burials (of retainers or servants?), there is no evidence from the 1st Dynasty at North Saqqara of smaller burials of middle and lower officials; they were buried elsewhere—for instance, in the cemetery near the village of Abusir. The North Saqqara cemetery is on a prominent limestone ridge overlooking the valley, and the presence of large, elaborately niched superstructures would have been very impressive symbols of status seen by the other classes of officials at Memphis.

Smaller tombs and simple pit graves dating to the 1st Dynasty are found throughout Egypt, which is evidence not only of social stratification but also of the importance of the mortuary cult for all classes. The simplest burials of this period are pits excavated in the low desert, such as those in the 'Fort Cemetery' at Hierakonpolis. These burials are without coffins and grave goods consist mostly of a few pots. Higher status burials were larger and supplied with a greater variety and quantity of grave goods. Sometimes such burials were lined with wood or mud brick and provided with roofs, as in the case of the graves that Petrie excavated at Tarkhan. A more elaborate grave of this type was found at Minshat Abu Omar in the Delta, where the burial pit was partitioned by mud-brick walls into two or three rooms and contained up to 125 items of funerary equipment; the largest of these graves measures 4.9 × 3.25 m. Tombs with mud-brick superstructures, such as those that George Reisner excavated in Cemetery 1500 at Nag el-Deir, are found in both Upper and Lower Egypt. Superstructures of this type, which were sometimes niched, covered a simple burial pit or more elaborate substructures with one to five rooms. In such tombs, the contracted body was found in a wooden or ceramic coffin and a great variety of grave goods accompanied the burial.

Given that most of the archaeological evidence for the 1st Dynasty is mortuary, inferences about socio-political and economic organization are mostly drawn from these data. As tells in the Delta continue to be excavated, however, more early settlement data from this period will become available. From the present evidence, a pattern can be discerned that points to the establishment of many new settlements and

their associated cemeteries on both banks of the Nile in the Memphis region, as the socio-economic centre shifted to the north by the 1st Dynasty. New sites also emerged in the eastern Delta, undoubtedly connected to increasing trade and other ventures abroad.

Expansion of the Early State into Southern Palestine and Nubia

In Dynasty 0 and the early 1st Dynasty there is evidence of Egyptian expansion into Lower Nubia and a continued Egyptian presence in the northern Sinai and southern Palestine. The Egyptian presence in southern Palestine did not last to the end of the Early Dynastic Period, but with Egyptian penetration into Nubia the indigenous A-Group culture came to an end later in the 1st Dynasty.

The source of A-Group wealth was the trade in exotic raw materials coming from southern regions through Nubia to Upper Egypt. With the unification of Egypt into a large territorial state, the Crown most likely wanted to control this trade more directly, which resulted in Egyptian military incursions in Lower Nubia. A late Predynastic scene carved on a rock at Gebel Sheikh Suliman near Wadi Halfa suggests some kind of military victory by the Egyptians, and a Nubian campaign may possibly be depicted on an ebony label from Abydos. With the display of force by the Egyptians, A-Group peoples may simply have left Lower Nubia and gone elsewhere (to the south or desert regions), and there is no evidence of indigenous peoples living in Lower Nubia until the C-Group culture, beginning in the late Old Kingdom. How Egypt controlled Lower Nubia in the Early Dynastic Period is unknown. Evidence of an Egyptian installation has been found at Buhen North, with strata which possibly date as early as the 2nd Dynasty. More secure dating at Buhen, however, is provided by seals of kings of the 4th and 5th Dynasties, and it is uncertain if there were permanent Egyptian forts or administrative/trading centres in Nubia in the Early Dynastic Period.

Fortified cities found in the north and south of Palestine have been dated to the EBA II period, which corresponds to the 1st Dynasty, a connection that depends on evidence excavated by Petrie in two royal tombs at Abydos (those of Den and Semerkhet). Petrie found sherds of an imported ware bearing painted designs, which he interpreted as 'Aegean'. This pottery has been called 'Abydos Ware', and is now known to derive from the EBA II culture of southern Palestine. In stratum III at the site of Ain Besor in southern Palestine, ninety

fragments of seal impressions of Egyptian kings have been found associated with a small mud-brick building and ceramics that are mainly Egyptian, including many fragments of bread moulds. The seal impressions are made from local clay and evidently belonged to royal officials of the 1st Dynasty. Four kings' names are attested (Djer, Den, Anedjib, and probably Semerkhet), and the ceramics and seal impressions suggest state-organized trade directed by Egyptian officials residing at this settlement for most of the 1st Dynasty. Alan Schulman, who identified the seal impressions, thinks that the site operated as an Egyptian border-control checkpoint, which would have been an early prototype for those described in two papyri dating to the Ramessid Period. Such evidence in southern Palestine is missing during the 2nd Dynasty, however, and active overland contact may have been broken off by then, as the sea trade with the Lebanon intensified. As raw materials from this region (wood, oils, and resins from coniferous trees) were imported in increasing quantities, which could perhaps only have been conveyed by sea, the land route to Palestine may have been gradually bypassed. It is probably significant that the earliest inscriptional evidence of an Egyptian king at the Lebanese site of Byblos belongs to the reign of Khasekhemwy, the last ruler of the 2nd Dynasty.

The Invention and Use of Writing

Depending on when the early state in Egypt emerged, the earliest known use of writing (in Tomb U-j at Abydos) may predate political unification of the north and south. Certainly by Dynasty 0, writing was used by scribes and artisans of the Egyptian state. Although some scholars believe that the Egyptian writing system was invented in the late fourth millennium BC, with stimulus from Mesopotamia, where the earliest writing is found, the two writing systems are so different that it seems more likely that they are both the result of independent invention.

The earliest codification of signs probably occurred in Naqada III/ Dynasty 0. Like Egyptian writing in the Dynastic Period, these early hieroglyphs consist of elements of ideographic and phonetic signs. Specific decipherments of many of the Early Dynastic inscriptions, however, remain uncertain. The use of writing by the early state in Egypt has a royal context, and was an innovation of great importance to this state. Just as a royal style of art developed as a court-centred institution following the unification, so did writing. The early state used

writing in two contexts: for economic and administrative purposes and in royal art.

The economic function of writing must have developed as more resources of the state came under royal control. Hieroglyphs appear on royal seal impressions, labels, and potmarks to identify goods and materials marshalled for and by the state, as well as on seals of officials of the state. Titles of owners of these goods and places of origin are also sometimes recorded.

Beginning in Dynasty 0, royal *serekhs* are first seen. The *serekh* is the earliest format of the king's name in hieroglyphs, comprising phonetic signs, placed inside a 'palace-façade' design that was surmounted by the image of a falcon. *Serekhs* are found inscribed or painted on jars and labels and impressed on jar sealings. Such containers were probably storage jars, for agricultural products collected by the state (perhaps as taxation), and some of these goods were traded or exported abroad through the northern Sinai to southern Palestine.

From this economic use of writing it can be inferred that there was already a functioning administrative system by Dynasty 0. Early in the 1st Dynasty, a more complex message of identification developed, and a combination of hieroglyphs and graphic art is found on labels. In the absence of texts composed of signs ordered in a format by grammar, which are not known until later, the information conveyed on labels, especially those arranged in registers, is probably to be read as a text (a year name) containing historical information. Donald Redford has suggested that the context of this information on royal labels is an annals system. The addition of the year sign by the middle of the 1st Dynasty represents a more specific system for recording regnal years than on earlier labels.

The second use of early writing was on royal commemorative art, such as the Narmer Palette. Hieroglyphs identify specific persons and possibly places in representational scenes that are symbolic of the king's legitimacy to rule. In such scenes, the king is depicted in roles, both real and symbolic, based on a new ideology: the institution of Egyptian kingship. Numerical signs, such as those on the Narmer Macehead, represent captured booty and prisoners, and are probably greatly exaggerated, as is so often the case in later Egyptian historical texts.

The iconography of power is clearly seen within the context of such royal art and includes the use of several important conventions. The king and his officials are shown in the special dress of their offices, while their conquered enemies wear next to nothing. A hierarchy of

social classes is also evident, from the large-sized king, who is followed by his smaller sandal-bearer, to his even smaller officials, to the smallest figures of conquered enemies, farmers, and servants. The king is frequently depicted trampling on his enemies, in visual puns. The early Egyptian signs do not replicate the information conveyed in the scenes, but serve as name labels for places and persons.

Part of the problem of understanding how writing developed in Early Dynastic Egypt is connected both with the types of artefacts on which early writing appears and with their archaeological contexts. Most examples of early writing are associated with the funerary cult and are not records of economic activities from settlements. Thus the early labels inscribed with hieroglyphs have been found in royal and élite tombs. From the royal cemetery at Abydos are stelae with the kings' names in *serekhs* and smaller inscribed stelae associated with the subsidiary burials. The one funerary stele with a longer text, from the late 1st-Dynasty tomb of Merka at Saqqara, is simply a list of his titles. The early state probably kept economic records of some sort to facilitate its economic and administrative control, but there is only indirect evidence of this in the form of inscribed labels.

Early Dynastic Cult Centres

Some of the inscribed labels from the 1st Dynasty bear scenes with structures that are temples or shrines, such as the walled compound for the goddess Neith in the top register of a wooden label from Aha's tomb at Abydos. Early writing also appears on some of the small votive artefacts that were probably offerings or donations to cult centres. Early Dynastic carved stone vessels were sometimes inscribed, and signs on some of these suggest that they may have come from cult centres. A number of such stone vessels may have been usurped from cult centre(s) of gods and buried in Djoser's Step Pyramid at Saqqara. Such evidence points to the existence of cult temples outside the royal mortuary cult in the Early Dynastic Period, but there is very little archaeological evidence of such architecture.

Perhaps the most impressive examples of early temple art are the three colossal limestone figures of a fertility god (Min?) that Petrie excavated at Koptos. One restored figure in the Ashmolean Museum is over 4 m. high. Stylistically, the colossi seem to date either to Dynasty 0 or the early 1st Dynasty. Buried in a deep deposit beneath the floor of the later temple of Isis and Min were figurines (possibly votive items) that are now thought to date to the Old Kingdom, but there are also

potsherds that are clearly from late Predynastic (Naqada) wares. Such evidence strongly suggests the existence of a temple or shrine at this location since Predynastic times. Given the huge size of the colossi, they were probably placed in a temple courtyard, although no remains of any early structures were found. The quarrying, transport, carving, and erection of such large pieces of stone imply large-scale (community) organization for renovating and furnishing a cult centre. Given that such expenditure of energy is much more evident in the royal mortuary cult of the 1st Dynasty, the association of the Koptos colossi with a cult centre is remarkable.

During the 1980s and 1990s, German Archaeological Institute excavations on Elephantine Island at the first cataract revealed the remains of a shrine dating to the Early Dynastic period, a fortress built during the 1st Dynasty, and a large fortified wall encompassing the town in the 2nd Dynasty. What cult was practised at this early shrine cannot be identified, but it was located beneath an 18th-Dynasty stone temple of the goddess Satet. The early shrine is very simple, consisting only of some mud-brick structures less than 8 m. wide nestled into a natural niche formed by granite boulders. Hundreds of small votive artefacts, mainly comprising human and animal faience figurines, were excavated beneath the 18th-Dynasty temple. Many of these date to the Old Kingdom, but some are Early Dynastic, including a fragment of a small statue of a seated king with a sign that has been identified as Djer's name. Such a concentration of so many votive figurines made over the course of six dynasties (*c.*800 years) suggests a craft workshop associated with this temple where worshippers and/or petitioners could obtain such artefacts to leave during their visits.

Similar figurines have been also found in deposits at Abydos, beneath an Old Kingdom structure that has been identified either as a temple of the god Khenti-amentiu or a ka-chapel of the 6th-Dynasty ruler Pepy II. Probably some of these figurines derive from an Early Dynastic temple. At Hierakonpolis, more animal figurines in faience, fired clay, and stone, which belong stylistically to the late Predynastic and Early Dynastic, have been found in Quibell and Green's 'Main Deposit,' beneath a later temple. The same archaeological context (near the Main Deposit) produced the Scorpion Macehead, the Narmer Palette, and the Narmer Macehead, as well as another ceremonial palette (the Two Dog Palette) which appears to be stylistically earlier than that of Narmer, a number of small ivories inscribed with the names of Narmer and Den, two statues of King Khasekhemwy of the 2nd Dynasty, and inscribed stone vessels made during his reign.

Structural evidence for an early temple is found in the same area, where a low oval revetment of sandstone blocks, about 42 × 48 m., encased a mound of sterile sand that had been brought to the site from the desert. This structure was made sometime between the late Predynastic period and the 3rd Dynasty; it was located within a walled enclosure, which O'Connor has suggested was a temple compound similar in design to Khasekhemwy's funerary enclosure and mound at Abydos.

If O'Connor is correct, the main Early Dynastic cult temples at Abydos, Hierakonpolis, and Elephantine have not yet been located and excavated, but what evidence there is points to the existence of cult temple compounds within towns. Such temples served a different function from those associated with the funerary complexes, which were located outside the towns. The architectural evidence of Early Dynastic Egyptian cults (of unknown deities) is much less impressive than the contemporaneous remains of temples in southern Mesopotamia. Nevertheless, town cult centres in Early Dynastic Egypt may have served to integrate society in towns and nomes in a shared belief system that was perhaps of more immediate significance to the lives of the local peoples than the mortuary cults in royal and élite cemeteries.

The 2nd-Dynasty State

There is much less evidence for the kings of the 2nd Dynasty than those of the 1st Dynasty until the last two reigns (Peribsen and Khasekhemwy). Given what is known about the early Old Kingdom in the 3rd Dynasty, the 2nd Dynasty must have been a time when the economic and political foundations were put in place for the strongly centralized state, which developed with truly vast resources. Such a major transition, however, cannot be demonstrated from the archaeological evidence for the 2nd Dynasty.

In 1991–2 the tomb of the last king of the 1st Dynasty, Qaʿa, was re-excavated at Abydos by the German Archaeological Institute, and seal impressions of Hetepsekhemwy, the first king of the 2nd Dynasty, were found in it. The German archaeologists have interpreted this find as evidence that Hetepsekhemwy completed the tomb of his predecessor and that there was no break in the dynastic succession. Where the early kings of the 2nd Dynasty were buried is uncertain, however, as there is no evidence of their tombs at Abydos. The only 2nd-Dynasty monuments at Abydos are two tombs and two

funerary enclosures that belonged to Peribsen and Khasekhemwy. There is also a large niched enclosure known as the 'Fort' at Hierakonpolis, by the entrance to the Great Wadi, which has been dated to the reign of Khasekhemwy by an inscribed stone jamb. The existence of this sole structure at Hierakonpolis cannot be explained, and it is unclear whether it was a second royal funerary enclosure for Khasekhemwy.

At Saqqara two enormous series of underground galleries, each over 100 m. long, have been found south of Djoser's Step Pyramid complex. Associated with these galleries are seal impressions of the first three kings of the 2nd Dynasty (Hetepsekhemwy, Raneb, and Nynetjer), whose names are also listed on the shoulder of a granite statue of a 2nd-Dynasty priest called Hetepdief (found at nearby Mitrahina and now in the Egyptian Museum, Cairo). The superstructures of these Saqqara tombs are entirely gone, but it is possible that two of the kings of this dynasty were buried there. Two sets of underground galleries have also been found beneath the north court of the Step Pyramid complex, and may have been created for royal burials of the 2nd Dynasty. When Djoser's monument was constructed in the 3rd Dynasty, the superstructures of the two earlier tombs would have had to be removed. Such a reconstruction of events is not impossible, given that huge quantities of stone vessels from the 1st and 2nd Dynasties, presumably usurped from earlier mortuary complexes and/or cult centres, were found beneath Djoser's complex.

The tomb of Peribsen (perhaps also known as Horus-Sekhemib) in the royal cemetery at Abydos is fairly small (16.1 × 12.8 m.). The central burial chamber is made of mud brick, unlike the 1st-Dynasty royal burial chambers, which were lined with wood. When the name Peribsen is written in a *serekh*, it is surmounted not by the usual Horus falcon (as the Sekhemib name is) but by the Seth animal, a hound- or jackal-like creature with a wide, straight tail. This dramatic change in the format of the royal name has been interpreted as representing some kind of rebellion, which was squashed or reconciled by the last king of the dynasty, Khasekhemwy, whose name appears in *serekhs* surmounted by both the Horus falcon and the Seth animal. Such a conflict may be symbolized in Egyptian mythology, as in the case of the literary tale *The Contendings of Horus and Seth*. Whether mythologies, which are known from much later texts, and symbols in the *serekhs* of two kings of the late 2nd Dynasty represent actual historical reality is uncertain. An epithet of Khasekhemwy's from seal impressions, 'the Two Lords are at peace in him', however, lends support to the theory

that he resolved some internal conflict, if 'Two Lords' can be taken to refer to Horus and Seth (and their followers).

The last tomb constructed in the royal cemetery at Abydos is that of Khasekhemwy, who was known as 'Khasekhem' earlier in his reign. It is much larger than Peribsen's, and its design is different, comprising one long gallery, 68 m. long and 39.4 m. at its widest point, divided into fifty-eight rooms with a central burial chamber made of quarried limestone. The constructed burial chamber, measuring about 8.6 × 3 m. and preserved to a height of 1.8 m., is the earliest known large-scale construction in stone. Although most of the contents were removed by Amélineau, they were well recorded, and Petrie discusses them in his 1901 publication. The funerary equipment includes huge quantities of copper tools and vessels, stone vessels (some with gold covers), flint tools, and pottery vessels filled with grain and fruit. Petrie also describes small glazed artefacts, carnelian beads, model tools, basketwork, and a great quantity of sealings. Given the large number of storerooms in this tomb, it could certainly have held more grave goods than all the 1st-Dynasty tombs in this cemetery.

High officials of the state continued to be buried at North Saqqara in the 2nd Dynasty. Near the pyramid of the 5th Dynasty ruler Unas, Quibell excavated five large subterranean gallery tombs, carved into the limestone bedrock, and he suggested that they represented a kind of house for the afterlife, with men's and women's quarters, a 'master bedroom' for the burial, and even bathrooms with latrines. The largest of the five, Tomb 2302, consisted of twenty-seven rooms beneath a mud-brick superstructure, covering an area of 58.0 × 32.6 m. The superstructures of these 2nd-Dynasty tombs were no longer elaborately niched on all four sides as in the 1st Dynasty, but were designed with only two niches on the east side, perhaps indicating places where offerings could be left by priests or family members after the burial (a design feature that would later be found in private tombs throughout the Old Kingdom).

The plans of the 2nd-Dynasty élite tombs clearly evolved from the 1st Dynasty high officials' tombs at North Saqqara. Because the Saqqara plateau was made up of good quality limestone, these 2nd-Dynasty tombs were designed with rooms for funerary goods that were excavated deep in the bedrock, where the storage rooms may have been better protected from grave robbing than when they had been located in the superstructure. The later 2nd-Dynasty tombs at Saqqara, which probably belonged to middle-level officials, are similar in design to standard Old Kingdom *mastaba*-tombs, consisting of a vertical shaft

excavated in the bedrock leading to a walled-off burial chamber. Above the shaft and chamber was a small mud-brick superstructure with two niches on the eastern side.

At Helwan, on the east bank of the Nile, excavations have revealed over 10,000 graves dating from Naqada III to the 1st and 2nd Dynasties, and probably the early Old Kingdom. These tombs were somewhat modest in size and belonged to middle-level officials. A distinctive feature of a number of the 2nd-Dynasty tombs at Helwan was the presence of a stele set in the tomb's ceiling, which was carved with a seated representation of the tomb owner, as well as his name, titles, and the so-called offering formula.

Short wooden coffins for contracted burials, which had been found only in élite tombs in the 1st Dynasty, became much more common in 2nd-Dynasty graves such as those at Helwan. At Saqqara, Emery and Quibell found 2nd-Dynasty corpses wrapped in linen bandages soaked in resin, early evidence of some attempt to preserve the actual body before mummification techniques had been worked out. Such measures were necessitated by burial in a coffin, as opposed to Predynastic burials, in which the body was naturally dehydrated by the warm sand in a pit in the desert. The increased use of wood and resin in middle-status burials of the 2nd Dynasty probably also points to greatly increased contact and trade with the Lebanese region at this time.

Conclusions

The architecture, art, and associated beliefs of the early Old Kingdom clearly evolved from forms of the Early Dynastic period. What is seen in the Step Pyramid complex of Djoser is a transformation of the Early Dynastic tombs into the first monument in the world made entirely of stone—on a truly huge scale. While this monument is also symbolic of the enormous control exercised by the Crown, such power must have been developing incrementally throughout the 1st and 2nd Dynasties, following the unification of the large territorial state in Naqada III and Dynasty 0.

The Early Dynastic Period was a time of consolidation of the enormous gains of unification, which could easily have failed, when a state bureaucracy was successfully organized and expanded to bring the entire country under royal control. This was done through taxation, to support the Crown and its projects on a grand scale, including expeditions for goods and materials to the Sinai, Palestine, the Lebanon,

Lower Nubia, and the Eastern Desert. Conscription must presumably also have been practised in order to build the large royal mortuary monuments and to supply soldiers for military expeditions. The use of early writing no doubt facilitated such state organization.

There were obvious rewards for those who were bureaucrats of the state, as the early cemeteries on both sides of the river in the Memphis region clearly attest. Belief in the benefits of a mortuary cult, where huge quantities of goods were constantly going out of circulation in the economy, was a cohesive factor that helped to integrate this society in both the north and south. In the early dynasties, when the Crown began to exert enormous control over land, resources, and labour, the ideology of the god-king legitimized such control and became increasingly powerful as a unifying belief system.

The flowering of early civilization in Egypt was the result of major transformations both in socio-political and economic organization and ideology. That such transformations were successful in the Early Dynastic Period is truly remarkable, given that contemporaneous polities elsewhere in the Near East were much smaller in territory and population. That this state was successful for a very long time—a total of about 800 years until the end of the Old Kingdom—is in part due to the enormous potential of cereal agriculture on the Nile floodplain, but it is also a result of Egyptian organizational skills and the strongly developed institution of kingship.