RIVER VALLEY CIVILIZATIONS

THE NILE AND THE INDUS 7000 B.C.E.-750 B.C.E.

3

KEY TOPICS

- Egypt: the Gift of the Nile
- The Indus Valley Civilization and its Mysteries

Two other urban civilizations flanked Mesopotamia: the Nile valley to the southwest and the Indus valley to the southeast. Scholarly opinion is divided as to whether these two cultures learned to build cities and states from the Mesopotamian example or invented them independently. Whatever the source of inspiration, the peoples of these three river valleys created separate and distinct patterns of urbanization and political life.

In Mesopotamia's Tigris—Euphrates valley, development of the physical city and the institutional state went hand-in-hand. In the Nile valley, the creation of the Egyptian state had greater significance than the growth of individual cities. In the Indus valley, we have extensive archaeological information on the cities, but we know next to nothing about the formation of the state. Until scholars learn to decipher the script and language of the Indus civilization, our knowledge of its institutional development will remain limited.

EGYPT: THE GIFT OF THE NILE

Egypt has often been called the "Gift of the Nile" because outside the valley of that great river the country is a desert. An immense, flowing ribbon of water, the Nile spans the length of the country from south to north, branching finally into an extraordinary delta as it approaches the Mediterranean. The river provides natural irrigation along its banks and invites further man-made irrigation to extend its waters to the east and west. Unlike the unpredictable floods of Mesopotamia, from prehistoric times until the mid-twentieth century C.E. a more-or-less predictable flood of water poured through the Nile valley every July, August, and September, not only providing natural irrigation, but also carrying nutrient-rich silt that fertilized the land. (As we shall see in Chapter 18, twentieth-century dam construction brought more control over the annual flood, and hydroelectric power, but also stopped the flow of silt.) Meanwhile, increased population filled in marshlands adjacent to the river bed.

The vital significance of the Nile appears in this 4000-year-old Egyptian poem:

Food bringer, rich with provisions,
himself the author of all his good things,
Awe-striking master, yet sweet the aromas rising about him
and, how he satisfies when he returns! —
Transforming the dust to pastures for cattle,
bringing forth for each god his sacrifice.
He dwells in the underworld, yet heaven and earth are his to command,
and the Two Lands he takes for his own,
Filling the storerooms, heaping the grainsheds,
giving his gifts to the poor. (Foster, p. 113)

Opposite Mohenjo-Daro, present-day Pakistan, c. 2600–1800 B.C.E. When it flourished, Mohenjo-Daro held some 40,000 inhabitants in its carefully laid-out precincts and it continued to exercise an attraction for thousands of years. The round *stupa*, or burial mound, that now crowns the settlement was built as part of a Buddhist monastery some two thousand years after Mohenjo-Daro had ceased being a city.

RELIGION AND CULTURE SOCIAL DEVELOPMENT POLITICAL DATE ■ Nagada I 4000-3600 B.C.E. Villages in Nile valley 3500 B.C.E. Hieroglyphics in use ■ Ruler of Egypt becoming godlike First use of stone in building 3000 B.C.E. Early Dynasty (c. 3000–2700) Old Kingdom (c. 2700–2181) Step pyramid at Saggara ■ Irrigation programs along Nile 2500 B.C.E. ■ Pyramids at Giza, including Great Pyramid (of Khufu) Golden age of art and craftwork First Intermediate Period Social order upset; few monuments 2000 B.C.F. (c. 2200-2050) (1991 - 1786)built (2181-1991) Country divided into principalities ■ Middle Kingdom (c. 2050–1750) ■ Second Intermediate Period (1786 - 1567)(c. 1750-1550)

hieroglyphs The characters in a writing system based on the use of pictograms or ideograms. In ancient Egypt, hieroglyphics were largely used for monumental inscriptions. The symbols depict people, animals, and objects, which represent words, syllables, or sounds.

The desert flanking the Nile valley protected Egypt from external invasion from the east and west; cataracts—precipitous, impassable waterfalls in the river—provided a buffer against Nubia to the south; and the Mediterranean provided a defensible northern border. As a result, for the first half of its 5000 years of recorded history, Egypt was usually ruled by indigenous dynasties. The rule of the kings began about 3100 B.C.E. and continued with few exceptions for nearly 2600 years, an unparalleled stretch of cultural and political continuity. These kings later were called pharaohs during the New Kingdom (see Chapter 5) after the palaces they constructed, and gradually, pharaoh became the generic name of all Egyptian kings.

Monumental structures—like the pyramids and Sphinx at Giza near modern Cairo in the north of Egypt, the temples at Karnak and Thebes in the south, and the pharaohs' tombs nearby in the Valley of the Kings—make clear the wealth, skills, and organizational capacity of ancient Egypt. Nevertheless, we know less about the physical form of Egypt's ancient cities than about those of Mesopotamia. The Nile has washed away many ancient structures and eroded their foundations. On the other hand, we know much more about the Egyptian state than almost any other. The written records of ancient Egypt, once they were deciphered, provided the institutional information.

Earliest Egypt: Before the Kings

In Egypt, as in Mesopotamia, agriculture provided the underlying sustenance for city life. By 12,000 B.C.E., residents of Nubia and Upper Egypt were using stones to grind local wild grasses into food, and by 8000 B.C.E. flour was being prepared from their seeds. (Upper or southern Egypt and Lower or northern Egypt derived their names from the flow of the Nile River. The river rises south of Egypt and flows north to the Mediterranean Sea.) By 6000 B.C.E. the first traces appear of the cultivation of wheat and barley, grasses and cereals, and of the domestication of sheep and goats. To the west, the Sahara was becoming drier and some of its inhabitants may have moved to the Nile valley bringing with them more advanced methods of cultivation.

By 3600 B.C.E. a string of villages lined the Nile River, at intervals of every 20 miles or so. The village economies were based on cereal

Figurine of bone and ivory, "Nagada I" period, c. 4000–3600 B.C.E. Egypt's rise to a mighty empire had modest roots: a string of loosely affiliated villages lining the Nile. This attractive figurine, whose eyes are inlaid with lapis lazuli, was unearthed from a tomb of this early, predynastic age. (British Museum, London)

agriculture. They were linked by trade along the river, although, since they mostly produced the same basic food-stuffs, trade was not central to their economy. The villages show little evidence of social stratification. These settlements characterized the "Nagada I" period (c. 3500 B.C.E.).

Gradually, population increased, as did the size of villages, and by 3300 B.C.E. the first walled towns appeared in the upper Nile, at Nagada and Hierakonpolis. Tombs for rulers and elites were built nearby, suggesting new levels of social stratification.

The Written Record

Writing began early in Egypt, almost simultaneously with ancient Mesopotamia, about 3500–3000 B.C.E. Egyptians may have learned the concept of writing from Mesopotamia, but in place of cuneiform, they developed their own script based on tiny pictographs called **hieroglyphs**, a word based on the Greek for "sacred carvings." Some scholars believe that hieroglyphic writing in Egypt was completely independent of the Mesopotamian invention, and possibly preceded it.

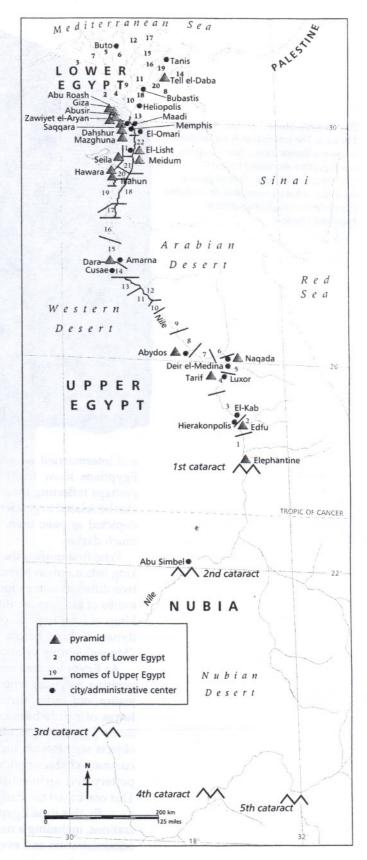
Scribes, an important and highly regarded occupational group in ancient Egypt as in Mesopotamia, later invented two shorthand transcriptions of hieroglyphs, first, hieratic script, later, the even more abbreviated form of demotic script. They wrote on stone tablets, on limestone flakes, on pottery, and on papyrus—a kind of paper—made by laying crossways the inner piths of the stalk of papyrus plants and pressing them until they formed into sheets.

As in Mesopotamia, some of the earliest Egyptian writing is notation for business and administration. Over the millennia it grew into a rich literature, including chronological lists of kings, religious inscriptions, spells to protect the dead, biographies and autobiographies, stories, wisdom texts of moral instruction, love poems, hymns to gods, prayers, and mathematical, astronomical, and medical texts. From this literature, scholars have reconstructed a substantial picture of the history of Egypt.

For the earliest 500 to 1000 years, until about 2400 B.C.E., the written records are thin. They do, however, provide a list of *nomes*, or administrative districts, suggesting the geographical organization of the Egyptian state as early as 2900 B.C.E. They also provide lists of the earliest kings of Egypt.

King lists written on stone about 2400 B.C.E., and on papyrus about 1200 B.C.E., combined with lists compiled by the Greek historian Manetho in the third century B.C.E., give the names of the entire sequence of Egypt's kings from about 3100 B.C.E, all

Land of the Nile. Stretching over 1000 miles along the Nile River, ancient Egyptian civilization depended on a strong government. The kingdom was divided into Lower and Upper Egypt, and further subdivided into *nomes* (tax districts).



The "Rosetta Stone," ancient Egyptian, 196 B.C.E. The inscription is transcribed in three different forms: hieroglyphics, a later Egyptian shorthand called "demotic," and Greek. By comparing the three, scholars were able to decipher the ancient hieroglyphs. (British Museum, London)

the way through the Persian conquest in 525 B.C.E. and the victory of Alexander the Great in 332 B.C.E. After that event we have many sources for constructing the basic chronology of Egypt's political history.

Unification and the Rule of the Kings

The king lists, records of the nomes (administrative units) of Upper Egypt, and inscriptions and designs on pottery suggest strongly that Egyptian national life and history began with the unification of the kingdom about the year 3100 B.C.E. This unity was forged from the diversity of peoples who came to inhabit Egypt. Semites from the desert to the east, Phoenicians from the sea coast, Blacks from Nubia and the heart of Africa, and Europeans from across the Mediterranean immigrated and amalgamated

into a common national stock. They recognized each other and intermarried without apparent reference to race or ethnicity. Paintings of ancient Egyptians show them sometimes pale in color, sometimes black, very often red, perhaps reflecting their mixed ethnicity. Many historians believe that the colors may also be related to gender—women, mostly relegated to household chores, were usually depicted as pale; men, assumed to be outside of the household, were often painted much darker.

Who first unified the upper and lower Nile into the single kingdom of Egypt? Most king lists mention Menes, but some cite Narmer. Some scholars believe that these were two different names for the same person. The event took place about 3100 B.C.E., but tombs of kings excavated at Abydos predate it by about 200 years. Perhaps these were kings of local regions, or perhaps unification was actually accomplished under a "predynastic" king before Menes, or unification may have been a long process and "Menes" simply symbolizes the whole process.

As Egypt became unified, the kings grew steadily more powerful, finally gaining a position as gods, who lived on earth and were responsible for maintaining *ma'at*, justice and order, throughout the kingdom. They were responsible for keeping the forces of nature balanced and for inviting the annual flooding of the Nile River that made Egyptian agriculture possible. An increase in monumental tombs and funerary objects suggests an increasing hierarchy and an uneven distribution of wealth, two common characteristics of state building. A more or less unified artistic style in both pottery and architecture after that time mirrors the unification of Egyptian politics. This era, called the Early Dynastic period, lasted about 400 years, from *c*. 3100 to *c*. 2686 B.C.E. By this time Egypt exhibited the cultural complexity associated with early civilizations, including a national religious ideology and the centralized control of political administration and even of artistic productivity.

The Gods, the Unification of Egypt, and the Afterlife

Egyptian religious mythology gives great prominence to the political unification of the country. The triumph of Isis, Osiris, and their son Horus—three of Egypt's most important gods—over disorder and evil represents in mythic terms the significance of the unification of Egypt. Osiris represented order (ma'at) and virtue; his brother, Seth, disorder and evil. Seth tricked Osiris into lying down inside a box that was to be his coffin, sealed it, and set it floating down the Nile. Isis, Osiris' wife and sister, found the box and brought Osiris back home. Seth, however, re-captured the body and cut it into fourteen separate pieces, which he scattered throughout Egypt and the eastern Mediterranean. Isis tracked down all the parts, brought them back to Egypt, reattached them, and briefly restored life to them. From the restored body, she conceived a son, Horus. Horus defeated Seth in battle and gave Osiris new life, this time as king and principal god of the underworld. In some representations Horus and Seth are seen in reconciliation, binding Egypt into a single state. Seth represents southern areas around Nagada and Thebes; Horus, less specifically, represents the north.

Horus became the patron god of the Egyptian kings, the first Egyptian god to be worshiped nationally. In painting and sculpture he is often depicted in the form of a falcon, sometimes perched on the head or shoulder of the king, sometimes atop the double crown that symbolized the unity of Upper and Lower Egypt. The kings

HOW DO WE KNOW?

Written Texts and Archaeological Excavations

Few modern Egyptian scholars had been interested in recovering the ancient past of their country, apparently because its pharaonic, polytheistic culture did not connect with their own monotheistic Islamic and Christian cultures. In Europe, however, scholars and researchers were attempting to understand the early history of this civilization. The interest in this scholarship was so great that when Napoleon Bonaparte led a French military invasion of Egypt in 1798 he brought along with his armies a contingent of scientists, literary scholars, and artists.

In 1799 one of Napoleon's officers working at a fort on the western, Rosetta branch of the Nile delta, discovered a large, black, basalt stone slab. This "Rosetta Stone" (see p. 68) carried an inscription from the year 196 B.C.E. issued by the Greek ruler of Egypt and written in three languages: the most ancient Egyptian script, hieroglyphs, at the top; demotic Egyptian, a simplified script based on the hieroglyphs, in the middle; and Greek at the bottom. The French

dispatched copies of the inscription back to Europe, where scholars were working on deciphering the Egyptian hieroglyphs. Until this time, their efforts had not been successful because they mistakenly believed that all of the hieroglyphs were ideographs, a kind of picture writing in which each symbol stood for a word or a concept. Now, however, a young French scholar of linguistics, Jean-François Champollion (1790-1832), using the Rosetta Stone to compare the ancient Egyptian forms with the Greek, which he knew, recognized that hieroglyphic writing combined several formsideographic, syllabic, and alphabetic. Once he made this discovery, he was prepared to crack the script. In 1822, after fourteen years of research, which he had begun at eighteen, he published the results of his work.

Champollion himself made only one trip to Egypt, in 1828–9. With an Italian student, he produced the first systematic survey of the history and geography of Egypt as revealed in its monuments and inscriptions. He earned the informal title of "Father of Egyptology," and in 1831 a chair in Egyptian history and archaeology was created for him at the College de France.

Archaeological excavations, primarily in search of monumental objects, began in 1858, although tomb robbing and the theft of ancient artifacts had been continuous from earliest times. The annual expeditions of British Egyptologist W.M. Flinders Petrie, beginning in 1880, introduced more scientific archaeological studies of Egypt and of Nubia, immediately to the south. By about 1900 scholars had identified the basic outlines of Egypt's history from 3600 B.C.E. to their own time. Working with both text and artifacts they could produce a doubly-rich historical record.

- Why were modern Egyptian scholars no longer interested in the ancient past of their own country? Do you find this surprising? Why or why not?
- The earliest known alphabetic writing dates to about 1900 B.C.E. Its use in place of hieroglyphic writing has been described as revolutionary, "comparable to the invention of the printing press much later." Why?
- How do written accounts and monumental architecture complement each other in giving us a more complete understanding of ancient civilizations?

believed that if they lived proper, ordered lives they would be united with Osiris after they died.

This belief in the afterlife inspired the mummification of the dead—at least of those who could afford it—and the construction of Egypt's most spectacular monuments, the pyramids, as a final resting place for the dead kings until their soul and life force emerged for their journey through the afterworld. After passing through the ordeal of judgment in the next world, the souls might also revisit these elaborate tombs.

At first believed to be a preserve of the kings alone, later the afterworld was seen as a destination also for important officials and, still later, for a larger proportion of the population. The belief in a utopian afterlife seems to have made optimists out of most Egyptians. Even those who may not have shared in this belief were urged to enjoy life in this world to the full, as this 3100-year-old song suggests:

GODS OF THE EGYPTIANS

Belief in one god (Aten, represented by the sun) was promoted during the reign of Akhenaten (r. 1353–1335), when the capital of Egypt was moved from Thebes to Amarna. At other times, the Egyptians worshiped a pantheon, whose main gods and goddesses are listed below:

Amon-Re The universal god, depicted as ram-headed

Anubis Jackal-headed god of funerals, son of Nephthus and Osiris. He supervised the weighing of souls at judgment

Hathor The goddess of love, represented either as a woman with a cow's horns or as a cow with a solar disk

Horus The falcon-headed god of light

Isis Goddess of magic and fertility; sister and wife of Osiris; as mother of Horus, she was mother goddess of all Egypt

Nephthus Sister of Isis, this funerary goddess befriended dead mortals at judgment

Osiris Ruler of the underworld and chief judge of the dead, Osiris is normally depicted mummified or as a bearded man wearing the crown of Upper Egypt and with a flail and crook in his hands

Ptah Magician and patron of the arts and crafts, Ptah later became judge of the dead. Normally represented as a mummy or holding an ankh (looped cross)

Seth The god of evil and the murderer of Osiris

Thoth The supreme scribe, depicted either with the head of an ibis or as a dog-headed baboon

All who come into being as flesh

pass on, and have since God walked the earth; and young blood mounts to their places. The busy fluttering souls and bright transfigured spirits

who people the world below and those who shine in the stars with Orion,

They built their mansions, they built their tombs—
And all men rest in the grave....

So, seize the day! Hold holiday!

Be unwearied, unceasing, alive,

you and your own true love;

Let not your heart be troubled during your sojourn on earth,

but seize the day as it passes! . . .

Grieve not your heart, whatever comes;

let sweet music play before you;

Recall not the evil, loathsome to God,

but have joy, joy, joy, and pleasure!

(Foster, pp. 181-2)

Cities of the Dead

Burial sites, shrines, and sometimes towns were based on the need to provide final, collective, resting places for the bodies of the most prominent Egyptians. As early as 3100 B.C.E., kings and members of the court were buried at Abydos, a 300-mile boat trip upriver, south of Memphis. Their tombs, called *mastabas*, were made of sun-baked mud bricks, with flat roof and sloping sides, designed to last forever. Inside the structure were the food, weapons, tools, and furniture that the king might need in the afterlife. His body was mummified and buried in an underground chamber. Abydos later became the center for the worship of Osiris.

Another group of high officials was buried in the north, close to Memphis, near Saqqara, in mud-brick tombs. Their funerary goods included copper objects and stone vessels. Over the centuries a series of burial sites grew up nearby, stretching some 45 miles along the Nile. At the beginning of the second dynasty, 2770 B.C.E., the royal necropolis, the city of tombs, was sited at Saqqara itself.



Stele from the tomb of Djet (the "Serpent King"), Abydos, c. 3000 B.C.E. Horus, in the form of a falcon, is pictured above a serpent representing Djet, the "Serpent King," and the façade of a palace (pharaoh literally meant "great house" or "palace"). (Louvre, Paris)

Women of elite families were usually buried in simple pyramid tombs, but recently the more elaborate pyramid-tomb of Ankhesenpepi II was uncovered at Saqqara and explored. She was the wife of two Egyptian kings—first Pepi I (c. 2289–c. 2255), then his nephew Merenra (c. 2255–c. 2246)—and the mother of a third, Pepi II (c. 2246–c. 2152). Although her name means "she lives for Pepi," Ankhesenpepi II seems to have gained power also for herself . She is the first female known to have a magical, biographical, hieroglyphic text—a format found frequently in the tombs of kings—inscribed in her tomb to facilitate her access to the afterworld.

Adjacent to the burial sites were the towns of the workers who built the increasingly elaborate tombs for the kings and aristocrats. Several of these workers' towns have been excavated, most notably Deir el-Medina, in the south of Egypt, near the Valley of the Queens, opposite Thebes, although it dates to a later period. Mummification was also carried out in workshops in these towns.

The Growth of Cities

Unlike Mesopotamia, Egypt has almost no existing record of independent city-states. In Egypt, thousands of small, generally self-sufficient communities seem to have persisted under a national monarchy, but within a generally decentralized economy for

The Palette of King Narmer, c. 3200 B.C.E. This slate palette, used for ritual purposes, shows the power of King Narmer, who had just united Upper and .ower Egypt. In the top register, Narmer left) inspects the bodies of dead nemies (right); at the bottom, the rength of the king is symbolized by the ull shown destroying the walls of a ty. (Egyptian Museum, Cairo)

the local production and consumption of food and basic commodities. The village economies were based on cereal agriculture, and they were linked by trade along the river, although, since they mostly produced the same basic foodstuffs, these villages traded only a little among themselves. They reveal little evidence of social stratification. These settlements characterized the "Nagada I" period (c. 3500 B.C.E.). Gradually, among the villages along the Nile, somewhat larger market towns must have grown up. Because administration, business, and transportation require some centralization, some of the villages began to house those functions. These selected villages, spaced strategically at larger intervals in the landscape, grew into larger settlements, and perhaps even into full-fledged cities.

In early dynastic Egypt, the siting of the administrative headquarters of the *nomes* would have given just such a boost to the towns in which they were located. Some settlements also hosted additional functions, including irrigation control and religious observance. The consolidation of villages into towns and towns into cities marks the beginning of "Nagada II" culture (c. 3300 B.C.E.) and the development of the site of Hierakonpolis along the Nile in Upper Egypt illustrates the process. Stretching for three miles along the banks of the Nile, Hierakonpolis ("Nekhen" in ancient Egyptian) did not have the form of a compact city, but it exercised many urban functions.

Archaeological excavations showed that the population of Hierakonpolis grew from a few hundred in 3800 B.C.E. to 10,500 by 3500 B.C.E. At least two cemeteries served the city, one for common people, another for the wealthier traders and more

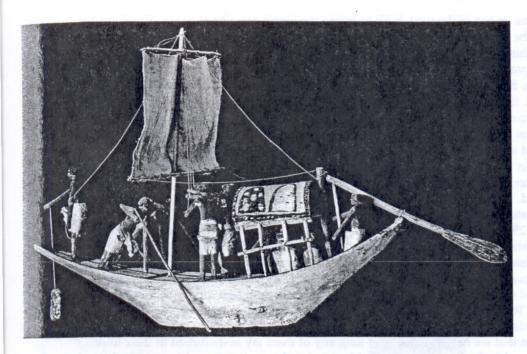
powerful administrators.

What precipitated the population growth, occupational specialization, and social hierarchy? One possibility is that local leaders introduced and implemented irrigation systems that saved agriculture and even enriched it during a period of severe drought. These changes enhanced the economy of the region and created subsequent growth and change. Indeed, Hierakonpolis seems to have been the capital from which King Menes, or Narmer, unified Egypt. The Narmer palette, a slate tablet illustrating this unification, was discovered here.

Political/administrative leaders continued to create irrigation systems along the Nile. These projects began in Old Kingdom Egypt, c. 2700–2200 B.C.E. They were expanded with the development of the Fayyum Lake region and the transfer of population to it during the Middle Kingdom, c. 2050–1750 B.C.E. New technology arose during the New Kingdom, c. 1550–1050 B.C.E., with the beginning of shaduf irrigation, which used buckets attached to a huge, turning wheel to dip into the river, bringing up water that then poured into man-made irrigation channels. The general predictability of the Nile's constant flow and annual flood meant that Egypt had fewer problems with its water supply than did Mesopotamia, but even here control of water resources influenced the formation of cities and the state.

Egypt's cities, like those of other early civilizations, had a religious base as well as an administrative one. Hierakonpolis, for example, housed a temple and prominent tombs as well as a ruler's palace. Perhaps the city flourished because its temple community and worship became especially attractive to surrounding villages. The combination of irrigation, administration, and worship built the city.

Earlier archaeological reports seemed to suggest that after unification under a single king Egyptian cities were not usually walled. The central government may have suppressed the kind of inter-city warfare that characterized Mesopotamia, rendering defensive walls unnecessary. Also, although invasions occurred from time



Wooden model of a sailing boat from Meir, Egypt, c. 2000 B.C.E. The presence of a mummy on board this Twelfth-dynasty model boat indicates that it was intended as a funerary artifact, used to symbolize the journey of the dead into the afterlife. We can glean important details about early Egyptian vessels—from the large central sail to the figures on deck, representing the pilot, the owner, and sailors working the halyards. (British Museum, London)

to time and required defensive precautions, the desert to the east and west of the Nile valley usually provided an adequate natural shield.

More recent excavations, however, question this view of open cities. The walls of some cities have been uncovered, and archaeologists are beginning to suspect that walls of other cities may have been removed and the materials used for other purposes. Excavations at El-Kab, across the Nile from Hierakonpolis, revealed a city enclosed in a wall, 1600 feet square, dating to 1788–1580 B.C.E. This wall, in turn, seems to have intersected a more primitive town, of circular or oval shape surrounded by a double wall.

Largest of all the Nile towns, presumably, were the political capitals, first in the north at Memphis, later in the south at Thebes, and occasionally at other locations. Most of the spectacular temples and monuments at Thebes today, for example, date only to the eighteenth and nineteenth dynasties, 1550–1196 B.C.E. This was a period of substantial population growth in Egypt, rising from 1.5 million to between 2.5 and 5 million people. Archaeologists cannot excavate below these monuments to reach older urban levels, and the residential buildings of that older city are probably below the current water table. They are irrecoverable.

Other types of cities completed the urban network. Trade cities, especially in the Nile delta, linked Egypt internally and to the outside world. As early as 3650 B.C.E., the city of Buto in the Nile delta near the Mediterranean served as the port of landing for shipping from the Levant (modern Syria, Lebanon, and Israel) and Mesopotamia. Further south but still in the delta, at El-Omari, many goods imported from the Mediterranean coast have also been found. In these ports, goods must have been offloaded for transshipment in smaller boats or by donkey caravans to Maadi, near Memphis. Maadi was the trade link between the delta and Upper Egypt.

Monumental Architecture of the Old Kingdom: Pyramids and Fortresses

As in Mesopotamia, the increasing power of the Egyptian state inspired the construction of monumental architecture. In the third dynasty, 2649–2575 B.C.E., King Djoser's architect, Imhotep, elaborated the rather simple mastaba into a series of stepped stone

slabs, one on top of the next, built to house the king's remains at death. This forerunner of the pyramids demonstrated an astonishing royal control over labor, finances, and architectural and building techniques. The administrative organization and economic productivity of government continued to increase, until, by the end of this dynasty, Egypt had extended its control of the Nile valley as far south as the first cataract, its classical southern frontier. At the same time, Egypt's artistic genius continued to develop the sculpture of its tombs and the sophistication of its script. The Old Kingdom had been established and Old Kingdom rulers spent fortunes constructing pyramid tombs to preserve their mummified bodies for the afterlife.

Within a half century, architects realized the beauty of filling in the steps of the multi-storied mastaba to create the simple, elegant, triangular form of the true pyramid. Kings of the fourth dynasty, 2575–2465 B.C.E., supervised the construction of the greatest pyramids in history. The 450-foot-high pyramids of Khufu (Cheops; r. 2551–2528 B.C.E.) and of Khefren (r. 2520–2494 B.C.E.), and the smaller pyramid of Menkaure (r. 2490–2472 B.C.E.), all arranged in a cluster with the Sphinx, proclaim creative vision, organizational power, and aspirations to immortality. The sculpture, reliefs, paintings, and inscriptions in the pyramids and in the many tombs of court officials and other powerful men of the time express the highest artistic achievements of the era. Tombs of queens and officials are situated in proximity to the kings' pyramids in accordance with their inhabitants' power and rank. (Tomb robbing was, however, so common that we have no idea how long any of them lay undisturbed in their tombs.) Following Menkaure, whose pyramid was already smaller than those of Khufu and Khefren, the building of such enormous monuments diminished, which may reflect a lessening of Egyptian power generally.

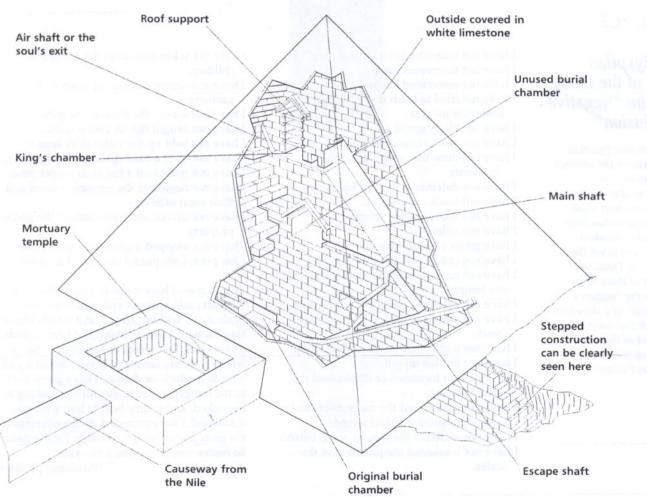
The Great Sphinx and the Pyramid of Khefren, Giza. The greatest of all the pyramids, the burial tombs of the kings, are at Giza, near modern Cairo, and date to around 2600–2500 s.c.E. The face of the sphinx—a mythological creature with a lion's body and a human head—is thought to be a likeness of King Khafre, who ruled Egypt some time after 2600 s.c.E.





Step pyramid of King Djoser, Saqqara, Egypt, c. 2700 B.C.E. This step pyramid, forerunner to the ancient architectural masterpieces at Giza, developed from the mastaba, a low rectangular benchlike structure that covered a grave. The purpose of this early pyramid, effectively a 200-foot-high ziggurat without a temple on top, was to mark and protect the underground tomb chamber 90 feet below.

Cutaway of Great Pyramid of Khufu, Giza. The rectangular plan and stepped form of Djoser's pyramid were gradually modified to become the colossal, smooth-faced monuments with which we are familiar. This pyramid is some 450 feet high on a square base occupying 13 acres and was built using forced labor.



At the height of the Old Kingdom, Egyptian trading, raiding, and mining initiatives began to extend southward into Nubia, above the first cataract of the Nile. These expeditions were protected and consolidated through the construction of the Buhen fortress at the second cataract, probably at about the time of the building of the great pyramids. That fortress, too, seems to have declined after about 2400 B.C.E., although trading and raiding expeditions continued. All of these architectural, spiritual, political, and military accomplishments date to the millennium we now call the pre-dynastic, early dynastic, and Old Kingdom.

The Disintegration of the Old Kingdom

Central authority weakened and provincial officials in each *nome*, called nomarchs, asserted their powers. They collected and kept the taxes for themselves, and their private armies ruled locally. Based on the size and records of cemeteries, the death rates seem to have increased at this time. Famine was prevalent. Apparently the Nile did not reach optimal flood heights for agriculture, and weak rulers could not create adequate irrigation works to compensate for the shortfall.

In 2181 B.C.E. the Old Kingdom fell. At first, several nomarchs held independent local power. Then two separate centers began to stand out in the contest for power: Herakleopolis in the north and Thebes in the south. This period of disunity, known as the First Intermediate Period, lasted for about a century.

SOURCE

The Egyptian Book of the Dead and the "Negative Confession"

Many ancient Egyptian texts concern the attempt to secure eternal happiness after death. A selection from these mortuary texts has been collected by modern scholars and titled The Book of the Dead. A segment of these texts presents the "negative confession" of a deceased person in the court of judgment of the dead protesting his innocence of evil and crime:

I have not committed evil against men.

I have not mistreated cattle.

I have not committed sin in the place of truth.

I have not tried to learn that which is not meant for mortals.

I have not blasphemed a god.

I have not done violence to a poor man.

I have not done that which the gods abominate.

I have not defamed a slave to his superiors.

I have not made anyone sick.

I have not made anyone weep.

I have not killed.

I have given no order to a killer.

I have not caused anyone suffering.

I have not cut down on the food or income in the temples.

I have not damaged the bread of the gods. I have not taken the loaves of the blessed

I have not had sexual relations with a boy. I have not defiled myself.

I have neither increased or diminished the grain measure.

I have not diminished the measure of land. I have not falsified the land records.

I have not added to the weight of the balance.

I have not weakened the plummet of the scales.

I have not taken milk from the mouths of children.

I have not driven cattle away from their pasturage.

I have not snared the birds of the gods.

I have not caught fish in their marshes.

I have not held up the water in its season.

I have not built a dam against running water.

I have not quenched a fire at its proper time. I have not neglected the appointed times and

their meat-offerings.

I have not driven away the cattle of the god's property.

I have not stopped a god on his procession. I am pure: I am pure: I am pure: I am pure. ...

Behold me—I have come to you without sin, without guilt, without evil, without a witness against me, without one against whom I have taken action. I live on truth, and I eat of truth. I have done that which men said and that with which gods are content. I have satisfied a god with that which he desires. I have given bread to the hungry, water to the thirsty, clothing to the naked, and a ferry-boat to him who was marooned. I have provided divine offerings for the gods and mortuary offerings for the dead. So rescue me, you; protect me, you.

(Pritchard, pp. 34-6)

SOURCE

The Autobiography of Si-nuhe and the Glorification of Court and Capital

Si-nuhe, a high-ranking official and royal attendant, fled from the Egyptian court when a new king came to the throne. Apparently he feared that his loyalty to the new ruler was suspect and his safety endangered. A skilled warrior and administrator, even in self-imposed exile he earned high positions in several Asian kingdoms. In Si-nuhe's old age, however, the king of Egypt and his family invited him back to the court so that he could spend his last years "at home" in comfort and be buried with appropriate rites.

This personal tale of reconciliation is almost certainly based on reality. Its glorification of Egypt over other countries, of the city over the countryside, and especially of the royal capital and the royal court represented the beliefs of the Egyptian elite. This account of the career and the moral personality of a court official, and of the excellence of the reigning king is an outstanding example of the autobiographies inscribed in ancient Egyptian tombs. Si-nuhe's story became one of the most popular classics of Egyptian literature, and manuscripts that include it began to appear about 1800 B.C.E. and continued to about 1000 B.C.E. One modern scholar refers to it as "the crown jewel of Middle Egyptian literature." (Lichtheim, I, 11)

Si-nuhe returned to the capital, then in the city of Lisht, near the Faiyum Lake.

So I went forth from the midst of the inner chambers, with the royal children giving me their hands. Thereafter we went to the Great Double Door. I was put into the house of a royal son, in which were splendid things. A cool room was in it, and images of the horizon. Costly things of the Treasury were in it. Clothing of royal linen, myrrh, and prime oil of the king and of the nobles whom he loves were in every room. Every butler was busy at his duties. Years were made to pass away from my body. I was plucked, and my hair was combed. A load of dirt was given to the desert, and my clothes to the Sand-Crossers. I was clad in fine linen and anointed with prime oil.

I slept on a bed. I gave up the sand to them who are in it, and wood oil to him who is anointed with it. I was given a house which had a garden, which had been in the possession of a courtier. Many craftsmen built it, and all its woodwork was newly restored. Meals were brought to me from the palace three or four times a day, apart from that which the royal children gave, without ceasing a moment.

There was constructed for me a pyramid-tomb of stone in the midst of the pyramid-tombs. The stone-masons who hew a pyramid-tomb took over its ground-area. The outline-draftsmen designed in it; the chief sculptors carved in it; and the overseers of works who are in the necropolis made it their concern. Its necessary materials were made from all the outfittings which are placed at a tomb-shaft. Mortuary priests were given to me. There was made for me a necropolis garden, with fields in it formerly extending as far as the town, like that which is done for a chief courtier. My statue was overlaid with gold, and its skirt was of fine gold. It was his majesty who had it made. There is no poor man for whom like has been done.

(Pritchard, pp. 18-22)

The Rise and Fall of the Middle Kingdom

Finally, about 2050 B.C.E., King Mentuhotpe of Thebes defeated his rivals in the north and reunited the kingdom, initiating the Middle Kingdom, c. 2050–1750 B.C.E. Trade revived, with two patterns achieving special prominence. One was the local caravan trade in spices, resins, and minerals between the Nile Delta and Palestine, across the northern Sinai desert. The other—the long distance trade carried by ship throughout the eastern Mediterranean—was commanded by royal families to bring in timber and resins, lapis lazuli, copper, and ivory for official construction and for adornment.

The fine arts and literature flourished. Among the finest literary gems of the Middle Kingdom was "The Autobiography of Si-nuhe," the narrative of a high-ranking court official who went into self-exile until, in his old age, he was recalled to the capital and awarded great honors. The story reveals not only the intrigues of the court and the royal family, but also the sharp contrast between the life of the elites of the capital and the harsh rigors of the surrounding desert.

Most important, the Middle Kingdom saw the state develop more organization and power than ever before. Egypt was administered efficiently and spread its power into Nubia and into the Middle East more aggressively than before. Egypt became an empire, ruling over more distant, foreign peoples. From this time onward, Egypt's fate

would be intertwined with the fate of its empire. The Middle Kingdom ended in part because the Nubians drove out their Egyptian conquerors, but more importantly because of the invasions of the Hyksos, or "princes of the foreign lands," who spoke a Semitic language and probably came from the north and east of the Sinai desert. The New Kingdom (c. 1550–1050 B.C.E.) would rise again as an empire by once again asserting its authority over Nubia and over large regions of Palestine and adjoining segments of Syria. These issues of empire and its significance for Egypt are discussed in Chapter 5, "Dawn of the Empires." One fascinating event from the New Kingdom period—the construction and destruction of the city Akhetaten—belongs here, however, because it highlights the symbolic importance of capital cities.

Akhetaten, Capital City of King Akhenaten

Modern excavations at Amarna on the east bank of the Nile unearthed the ruins of an ancient Egyptian capital that owed its entire existence to the idiosyncratic vision of one ruler—King Amenhotep IV, better known as Akhenaten.

Within a few years of coming to the throne, King Amenhotep IV (r. 1353–35 B.C.E.) challenged the order of ancient Egypt by adopting a new monotheistic religion. Instead of worshiping a whole pantheon of gods, he offered his devotion to a single deity—Aten, god of the solar disk (or sun). Amenhotep appointed himself mediator between his people and the god. Symbolically, he abandoned his official dynastic name in favor of Akhenaten ("he who serves Aten"). The name of Amon, principal god of the old religion, was swiftly erased from inscriptions throughout Egypt, as were the words "all gods" in certain texts.

To bolster the new order and escape the power of the hostile priesthood, Akhenaten moved his capital 200 miles north from the established center of

Thebes to an untouched site in the desert. The city that he built was named Akhetaten ("horizon of Aten"; present-day Amarna) and it was here that Akhenaten, the Great Royal Wife Queen Nefertiti, and their six daughters practiced the new religion.

The eccentricity of Akhetaten's ruler was reflected in the city's architecture, sculpture, and wall painting. Solid statements of eternity gave way to a freedom of expression that emphasized the here-and-now. Aten was worshiped in an open temple that ushered in the sun's rays rather than in the dark, austere sanctuary usually designated for worship. Residential buildings included spacious villas with large gardens and pools to house wealthy officials. In artistic expression, solemnity gave way to an unprecedented liveliness and invention. Artists showed the royal parents playing with their children or dandling them on their laps. Curious depictions of Akhenaten's drooping jaw and misshapen body capture his individuality, marking a departure from the highly stylized representations of previous pharaohs.

Akhenaten's isolated position, both geographically and intellectually, threatened the stability of Egypt's empire. When he died, Akhenaten's successors abandoned Akhetaten and later razed it to the ground. The capital returned to Thebes where the old religious and political order could resume. Subsequent pharaohs so hated Akhenaten's religion that they dismantled the city and used its building materials on other sites.

From this discussion of the varied cities of the Nile Valley with their abundance of archaeological and textual materials, we move eastward about 2500 miles to explore the earliest cities of the Indus valley with their very different structures and materials.

Sandstone statue of Akhenaten, Amarna period. Akhenaten worshiped one God, the god of the setting sun, which was represented by a winged solar disk. (Egyptian Museum, Cairo)

THE INDUS VALLEY CIVILIZATION AND ITS MYSTERIES

The civilizations of ancient Mesopotamia and Egypt never disappeared completely. Hebrew and Greek accounts and surviving artifacts, like the spectacular pyramids, kept them alive in popular imagination. Intermittent discoveries of tombs, and the thefts of their contents, added concrete evidence. Nevertheless, systematic excavating of sites and deciphering of texts did not occur in modern times until the mid-1800s.

The civilization of the Indus valley was lost almost entirely, so it is no surprise that its excavation did not begin until the 1920s and that its script is still not deciphered. The accidental discovery and systematic exploration of this long-lived and far-flung civilization is one of the great stories of mid- and late-twentieth-century archaeology.

The Roots of the Indus Valley Civilization

In 1856, the British colonial rulers of India were supervising construction of a railway between Lahore and Karachi, along the Indus River valley. As they progressed, construction workers discovered hundreds of thousands of old fire-baked bricks in the semi-desert area and used them to lay the road bed. Scattered among the old bricks, workers discovered steatite stone seals marked with artistic designs. These seals and bricks were the first clue that the area had once been home to an ancient and unknown civilization. Some were passed along to officers of the Archaeological Survey of India, and they took note of them, but formal systematic excavations began only in 1920 when John Marshall, Director General of the Archaeological Survey, commissioned his staff to survey a huge mound that rose above the desert floor where the seals had been found.

These excavations soon revealed a 4500-year-old city. They named the site Harappa, and archaeologists often used this name to designate the entire Indus valley civilization. Two years later, R. D. Banerji, an Indian officer of the Survey, recognized and began to excavate a twin site 200 miles to the southwest, later named Mohenjo-Daro, "Hill of the Dead." The two cities had many urban design and architectural features in common. Both were about 3 miles in circumference, large enough to hold populations of 40,000. With these two excavations, an urban civilization that had been lost for thousands of years was uncovered.

Before these excavations, scholars had believed that the civilization of India had begun in the Ganges valley with the arrival of Aryan immigrants from Persia or central

DATE	POLITICAL	RELIGION AND CULTURE	SOCIAL DEVELOPMENT
7000 в.с.е.			Traces of settlements; trade with Mesopotamia
3000 в.с.е.			■ Cotton cultivated
2500 в.с.е.	Height of Harappan civilization in northern India (2500–2000)		Cities of Harappa and Mohenjo-Daro
2000 в.с.е.	■ Collapse of Harappan civilization (2000–1900)	Evidence of decline in standards of architecture	
500 в.с.е.	Immigration of Aryans into India (c. 1250)		
1000 в.с.е.	Aryan immigrants reach west Ganges valley (c. 1000) and build first cities (c. 750)		Iron tools used to clear Ganges valley for agriculture (c. 1000)

Asia c. 1250 B.C.E. and the construction of their first cities c. 700 B.C.E. The discovery of the Harappan cities pushed the origin of Indian civilization back an additional 1500 years and located it in an entirely different ecological zone.

As archaeologists explored more widely in the Indus valley, they found that civilization there began earlier, lasted longer, and spread farther than anyone had suspected. Some of its roots seem to lie in a settlement called Mehrgarh, in the foothills of the Bolan Pass, that has yielded early settlement artifacts going back to 7000 B.C.E. and, with ever-increasing sophistication, coming forward to 2500–2000 B.C.E. At its height, it had major settlements as far west as the Makran Coast toward Iran, north and east into Punjab and even the upper Ganges River valley, and south and east to Dholavira in Kutch, and on to the banks of the Narmada River.

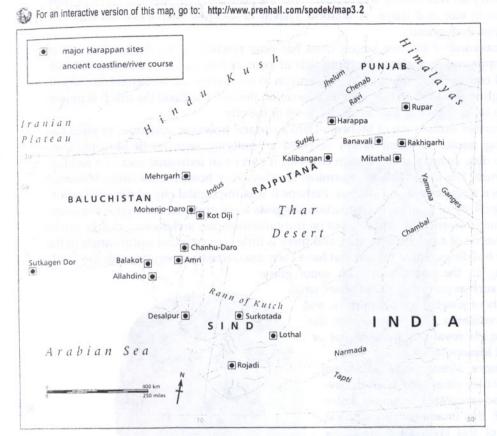
What was the relationship between this civilization and that of Mesopotamia? At first, many scholars assumed that the Indus valley people learned the art of city-building from the Sumerians and other peoples of Mesopotamia. But later scholars have argued that Harappa was not a derivative of Mesopotamia but had grown up independently. It is conceivable that the civilizations of both Mesopotamia and the Indus had a common ancestor in the settlements of the hills and mountains between them.

Written records, the key that re-opened the civilizations of ancient Mesopotamia and Egypt, are scarce in the Indus valley. The only written materials so far discovered are seal inscriptions that give only limited information. In addition, scholars have not succeeded in their attempts to decipher the script; they differ substantially in their interpretations. As a result, our understanding of Indus civilization is limited. Artifactual remains give a good representation of the physical cities and settlements, but not of their institutions. Moreover, while we can make educated guesses about the function and meaning of the remaining artifacts and physical structures from our own perspective, we do not have the words of the Harappans themselves to explain their own understanding of their civilization.

The Design and Construction of Well-planned Cities

Archaeological evidence to date reveals an urban civilization with its roots beginning as early as 7000 B.C.E. in simple settlements, such as Mehrgarh in the hills. Over the millennia, people moved down into the plains and river valley. At first, they may have moved into the forested river valley only in the colder months, herding their flocks of sheep and cattle, including the humped zebu, back to the hills for the summer. Over time they may have decided to farm the river-watered alluvial lands of the valley. They began to trade by boat along the Indus and even down the Indus into the Arabian Sea and, further, into the Persian Gulf and up the Tigris and Euphrates into Mesopotamia. Goods from the Indus valley have been found in Mesopotamia and vice versa.

Crafts and the Arts. Crafts of the Indus valley included pottery making, dyeing, metal working in bronze, and bead making. Bead materials included jade from the Himalayas, lapis lazuli from Afghanistan, turquoise from Persia, amethyst from Mewar in India, and steatite, which was found locally. All of these items suggest an active interregional trade. Small sculptures in stone, terra cotta, and bronze appear to represent priestly or governmental officials, dancing girls, and, perhaps, mother goddesses. Since there are no accompanying texts to explain exact identities, these can only be guesses. Dice and small sculptures of bullock carts were probably used as toys and games. The first known use of cotton as a fiber for weaving textiles occurred in the Indus valley, introducing one of India's and the world's most enduring and important crops and crafts.



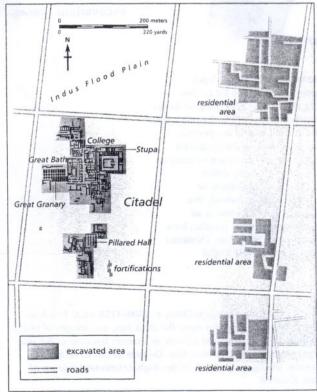
Cities of the Indus. Confined to the north and west by mountains, and to the east by desert, the Indus valley had, by 2500 B.C.E., developed a sophisticated urban culture based on individual walled cities, sharing common patterns of urban design. In terms of geographical extent this civilization was the largest in the world in its time.

Planned Cities. With an area of 150 acres, and about 40,000 inhabitants, Mohenjo-Daro was a thriving Indus city. Excavations reveal a raised citadel area, containing ceremonial and administrative buildings, and a residential quarter centered on boulevards about 45 feet wide, with grid-patterned streets, an underground sewerage and drainage system, and a range of brick-built dwellings.

Carefully Planned Cities. By about 2500 B.C.E., a thriving civilization encompassing 1000 known sites reached its apex and maintained it for about 500 years. Each of the two largest settlements, Harappa and Mohenjo-Daro, had a core area of about 3 miles in circumference, while Mohenjo-Daro also had a suburb—residential or industrial—about a mile away. Each city accommodated about 40,000 people.

Both cities share similar features of design. To the north is a citadel, or raised area; to the south is a lower town. In Mohenjo-Daro, the citadel is built on an architectural platform about 45 feet above the plain, and it measures 1400 by 450 feet. On the summit was a vast, communal bath 8 feet deep and 23 by 29 feet in area. Numerous cubicles—perhaps small, individual baths—flanked it. Adjacent to the large bath was a huge open space, identified as a granary, where food was stored safe from possible flood. Other spaces may have been used for public meetings. Fortified walls mark the southeast corner, and it appears that the entire citadel was walled.

The lower city was laid out in a gridiron, with the main streets about 45 feet wide. Here were the private houses, almost every one with its own well, bathing space, and toilet, consisting of a brick seat over a drainage area. Brick-lined drains flushed by water carried liquid and solid waste to sumps, where it would be collected and carted away, probably to fertilize the nearby fields.



Limestone dancing figure from Harappa, c. 2300–1750 B.C.E. This dancing figure displays a grasp of three-dimensional movement and vitality rare in the arts until much later periods. Human sculptures in contemporary Mesopotamia and Egypt are by contrast symbols of pure power, either immutable ideals of divinity or semidivine kingship. Indeed, this Harappan accomplishment is so extraordinary that some scholars have cast doubt on its early date. (National Museum of India, New Delhi)

The town plan was orderly and regular. Even the prefabricated, fire-baked bricks were uniform in size and shape. A uniform system of weights and measures was also employed throughout.

Excavation of the two largest cities has now reached severe limits. The city of Harappa was vandalized for thousands of years before, as well as during, the rail-road construction, and few artifacts remain to be discovered. Mohenjo-Daro sits on a high water table, and any deeper excavation threatens to flood the site. It is impossible to dig down to the foundation level of the city.

Further exploration of Mohenjo-Daro's surface, however, continues to yield fascinating results. A recent survey revealed an outlying segment of Mohenjo-Daro about a mile away from the known city. Was it part of an industrial area or a residential suburb? It is impossible to determine. The discovery, however, identifies Mohenjo-Daro as a larger city than Harappa. Perhaps it was the capital city of the civilization. The regularity of plan and construction suggests a government with great organizational and bureaucratic capacity, but no truly monumental architecture clearly marks the presence of a palace or temple, and there is little sign of social stratification in the plan or buildings. Those burials that have been discovered are regular, with the heads pointing to the north, and with some grave

goods, such as pots of food and water, small amounts of jewelry, simple mirrors, and some cosmetics. These were not the extravagant royal burials of Egypt or even of Mesopotamia.

In more recent years additional Indus valley cities have been discovered and excavated, giving a fuller idea of the immense geographical extent of this civilization. The new excavations generally confirm the



Limestone bust from Mohenjo-Daro, c. 2300–1750 B.C.E. This half-figure with horizontal slits for eyes, flat thick lips, and fringes of beard is thought to have represented a priest or shaman because of the way the robe is hung over its left shoulder. Despite its monumental appearance, the figure is only 7 inches high. (National Museum of Pakistan, Karachi)

urban design patterns of the earlier finds, but they add some new elements. The excavations at Dholavira, in Kutch, India, for example, begun in the late 1980s, revealed immense, ornamented gates at the principal entrances to the city and playing fields in the area between upper and lower cities. Dholavira was not located on a river, but in the elevated center of a small region that may have formed an island during the monsoon, when water levels around it were highest. Huge cisterns were cut into the rock of the upper city for collecting rain water in this extremely arid area. Dholavira also demonstrates a stark contrast between the relatively spacious quarters of the upper city and the more modest accommodations of the lower. Among the 20,000 artifacts uncovered, however, the extraordinary extremes of wealth and poverty of Egypt and Mesopotamia do not appear.

Questions of Interpretation. Interpretations of Indus valley artifacts stress the apparent classlessness of the society, its equality, efficiency, and public conveniences. Some interpreters view these qualities negatively, equating them with oppressively rigid governments and drab lives. While some scholars emphasize that the Harappans apparently survived and prospered for centuries, others argue that the cities changed little over long periods of time and lacked the dynamism of the cities in Mesopotamia and Egypt. With no contemporary literature to guide us, interpretation of what is found is in the eyes, and the value system, of the beholder.

We also do not know if this uniform, planned civilization had a single capital city, or several regional capitals, or no centralized political system at all. We see careful planning in the urban forms, but we do not know if the Indus valley civilization developed urban institutions for governance, trade, religion, or worship, much less the quality of any such institutions. While Egypt had a state but, perhaps, few cities, the Indus valley had cities but no clearly delineated state. Indeed, some scholars argue that the Indus valley did not create state structures at all. Was it like Egypt before unification or after unification? Was it like Mesopotamia, with numerous city-states all participating in a single general culture? All three suggestions have been made.

Until the Harappan language is deciphered, its civilization will remain mysterious: How was it organized? Why did it disperse? How did it move eastward? In what ways did it enrich its successor, the Aryan civilization of the Ganges River valley?

Legacies of the Harappan Civilization

Interchange between the resident Harappans and the invading Aryans produced new, hybrid cultural forms that we know primarily from the Aryan records. Ironically, these records are almost entirely literary and artistic. Reversing the Harappan pattern, the early Aryans have left a treasure of literature, but virtually no architectural or design artifacts.

Four legacies of Harappa stand out. First, the Aryan invaders were a nomadic group, who must have adopted at least some of the arts of settlement and civilization from the already settled residents. Second, as newcomers to the ecological zones of India, the Aryans must also have learned methods of farming and animal husbandry from the Harappans. Later, however, as they migrated eastward into the Ganges valley, they confronted

EARLY SCIENCE AND TECHNOLOGY (7000–1000 B.C.E.)

7000–6000	Pottery made in Middle East	
c. 5500	Copper, gold, and silver worked in Mesopotamia and Egypt	
. 4000–3500	In Asia and Africa, potter's wheel and kiln invented; mud bricks used; spindle developed for spinning; basket-making begins	
3500–3000	Plow and cart invented; bronze cast and cuneiform writing developed in Sumer	
3100	Reed boats in Egypt and Assyria; appearance of hieroglyphs in Egypt	
3000	Cotton cultivated in the Indus valley	
c. 2500	Wooden boats used in Egypt; ink and papyrus writing material used	
2050	First glass in Mesopotamia	
1790	Mathematics and medicine practiced in Babylon	
1740	War chariots introduced from Persia to Mesopotamia (and later Egypt)	
1370	Alphabetic script used in western Syria	
1000	Industrial use of iron in Egypt and Mesopotamia	

HOW DO WE KNOW?

The Decline of Harappan Civilization

By about 2000 B.C.E. the architecture of the Indus civilization began to decline. New buildings and repairs to existing structures lacked attention to quality and detail. Residents began to leave the cities and towns along the Indus and to relocate northeastward into the Punjab to towns such as Kalibangan, and southeastward to towns such as Lothal in Gujarat. Meanwhile, newcomers—squatters—seem to have moved into the old cities.

Again, a variety of arguments suggest the reasons for the decline in the cities and the geographical redistribution of their populations. Perhaps the river changed course or became erratic; perhaps the soil became too saline; perhaps the forests were cut down and the topsoil eroded.

An older opinion—that the Indus civilization was destroyed by the invasion of Aryan peoples from somewhere northwest of India—is now less widely

held. It rested on Harappan archaeological evidence and Aryan literature. Several sets of skeletal remains in Mohenjo-Daro indicate violent deaths, while Aryan religious texts suggest that the invaders burned and destroyed existing settlements. The Rigveda, one of the earliest and most important of these texts, tells of the destructive power of the god Indra:

With all-outstripping chariot-wheel, O Indra, thou far-famed, hast overthrown the twice ten kings of men With sixty thousand nine and ninety

followers ... Thou goest on from fight to fight intrepidly, destroying castle after castle

here with strength. (i, 53)
... in kindled fire he burnt up all their weapons.

And made him rich with kine and carts and horses. (ii, 15)

The Aryan god of fire, Agni, is still more fearsome:

Through fear of you the dark people went away, not giving battle, leaving behind their possessions, when, O Vaisvanara, burning brightly for Puru, and destroying the cities, you did shine. (7.5.3)

Newer archaeological evidence, however, suggests that the decline, de-urbanization, and dispersal of the Indus civilization seem to have preceded the Aryan invasion. Further evidence suggests that the Aryans may not have swept into the region in a single all-conquering expedition, but in a series of smaller waves of immigration. The arrival of the Aryans may have only completed the Harappan decay.

- Why does the formation of new cities such as Kalibangan and Lothal suggest the decline of the Indus Valley civilization?
- Why did scholars once believe that Aryan invasions destroyed the Indus Valley civilization? Why do they now question that belief?
- What is the range of alternative explanations that have been offered? Why are scholars uncertain about the accuracy of these explanations?

a new ecology based on rice cultivation and the use of iron. Here Harappan skills were useless. Third, a three-headed figure frequently appearing in Harappan seals resembles later representations of the Aryan god Shiva. Perhaps an earlier Harappan god may have been adopted and adapted by the Aryans.

Finally, the Aryan caste system, which ranked people at birth according to family occupation, color, and ritual purity, and prescribed the people with whom they may enter into social intercourse and marry, may reflect the need of the Aryans to regulate relationships between themselves and the Harappans. To claim and maintain their own supremacy, the Aryans may have elaborated the social structures of an early caste system and relegated the native inhabitants to permanent low status within it.

The Aryan groups grew increasingly skilled and powerful as they moved east. The first known archaeological evidence of their urban structures dates to about 700 B.C.E. and is found in the Ganges valley. We will read more about it when we analyze the first Indian empire in Chapter 8.

THE CITIES OF THE NILE AND THE INDUS WHAT DIFFERENCE DO THEY MAKE?

To what extent do the river valley civilizations of the Indus and the Nile confirm or alter our views of the significance of cities? They do show us that cities come in very different forms and networks. In Mesopotamia they had appeared as warring city-states. Along the Nile they were part of a single state that was first unified by about

3000 B.C.E., and they continued to be unified through most of the next 2500 years. By 2000 B.C.E. they formed the core of an imperial state with foreign conquests. In the Indus valley we do not know if the cities were independent city-states or part of a unified state; it is apparent, however, from their design and cultural products that they were part of a single cultural unit. In all three areas, then, the city created the state and gave concrete form to its value system.

We also learn of the significance of archaeological and textual study in unearthing and recovering all these early civilizations. To greater or lesser degrees, all had been lost to history for thousands of years before being exhumed by scholars in the nineteenth and twentieth centuries. In the task of reconstruction, written records have been critical to understanding the social structures and value systems of these cities. In both Mesopotamia and the Nile valley, excavations and written records enable us to see clearly the presence of cosmo-magical religious elements, alliances between rulers and priests, extensive temple complexes and, in Egypt, burial complexes as well, and, in both civilizations, extensive specialization of labor and social stratification. But before we take these characteristics as the normal ancestry of city life, we pause at the Indus valley excavations, for here we see no record of such intense occupation with the otherworldly or the afterlife. We see no record of such extensive specialization of labor nor of such extreme stratification—although the more recent excavations at Dholavira exhibit significant differences between the richest and poorest residential areas. We also see little evidence of the levels of artistic accomplishments of Mesopotamia and Egypt. And, of course, without texts, we have no clear record of religious, philosophical, legal, or administrative systems in the Indus valley.

The citadel of Mohenjo-Daro, c. 2300 B.C.E. and later. The citadel at Mohenjo-Daro, a massive, mud-filled embankment that rises 43 feet above the lower city, was discovered by archaeologist Daya Ram Sahni while investigating the second-century C.E. Buddhist stupa (burnal mound) that can be seen in the distance. The citadel's summit houses the remains of several impressive structures, of which the most prominent is the so-called Great Bath (foreground).



To further explore the global legacy of city and state formation, we now turn to four other regions of indigenous, early city and state formation in places far from those we have studied and far from each other: the Yellow River valley of China, Mesoamerica, South America, and the Niger River valley of West Africa. We are in for some surprises.

Review Questions

- Why is it difficult to determine which Egyptian settlements are cities? Why is Hierakonpolis sometimes called a city, although more often it is designated a very large settlement?
- In what ways did their belief in an afterlife influence the cities that the Egyptians built?
- What can we learn about cities from the autobiographical account by Si-Nuhe of his experience in exile and his return to the capital city of Lisht?
- What kinds of information are available in the written records of Egypt, and of Mesopotamia, that are unavailable for the Indus valley due to the scarcity of written materials and our inability to decipher them?
- In light of the discovery of the likely origins of the Indus valley civilization in the foothills to the west, and of its extensions as far north as Punjab and as far south as the Narmada river, is it appropriate to continue to call it "the Indus valley civilization?" Why or why not? If not, what other name might you give it?
- What is the evidence that scholars use to argue that the Indus valley civilization was more egalitarian, with less class differentiation, than the civilizations of the Nile valley and Mesopotamia?

Suggested Readings

PRINCIPAL SOURCES

Baines, John and Jaromir Malek. Atlas of Ancient Egypt (New York: Facts on File Publications, 1980). Another comprehensive and excellent introduction from these publishers, with well-chosen and copious maps, pictures, and charts.

 Fagan, Brian. People of the Earth: An Introduction to World Prehistory (Upper Saddle River, NJ: Prentice Hall, 10th ed., 2000). The best available textbook introduction to prehistory.

Foster, John L., trans. and ed. Ancient Egyptian Literature (Austin, TX: University of Texas Press, 2001). A fine anthology of varied forms of literature, culled from the translator/editors of many previous collections, plus a few new pieces.

Hawass, Z. Silent Images: Women in Pharaonic Egypt (New York: Harry N. Abrams, 2000). Kuhrt, Amélie, The Ancient Near East, c. 3000– 330 B.C., 2 vols (New York: Routledge, 1995).

Lesko, Barbara, "Women of Egypt and the Ancient Near East," in *Becoming Visible:* Women in European History, 2nd ed., ed. Renata Bridenthal, Claudia Koonz, and Susan Stuard (Boston, MA: Houghton Mifflin, 1998). Lesko, Barbara S., ed. Women's Earliest Records: From Ancient Egypt and Western Asia (Atlanta, GA: Scholar's Press, 1989).

Manley, Bill. The Penguin Historical Atlas of Ancient Egypt (New York: Penguin Books, 1996). Through maps and pictures, an excellent review of Egyptian history from predynastic times through Alexander's conquest. Special sections include coverage of foreign relations and warfare, urbanization, and women. Special emphasis on trade.

Nashat, Guity. "Women in the ancient Middle East," in *Restoring Women to History* (Bloomington, IN: Indiana University Press, 1999).

Past Worlds: The (London) Times Atlas of Archaeology (Maplewood, NJ: Hammond, Inc., 1988). The best available introduction to the archaeological exploration of the world, with attractive and useful maps, pictures, diagrams.

Possehl, Gregory L., ed. *Harappan Civilization: A Recent Perspective* (New Delhi: Oxford University Press and IBH Publishing, 2nd ed., 1993). An comprehensive update of the research.

Spodek, Howard and Doris Meth Srinivasan, eds. Urban Form and Meaning in South Asia: The