



Egypt

Our Study of Egypt

Our study of Egypt includes the following topics:

- Where the Egyptians Lived
- The Importance of the Nile River
- Government
- Social Organization
- What They Ate
- Farming
- What They Wore
- Housing
- The Development of Writing
- Education
- The Arts
- Medicine and Magic
- Trade
- Religious and Spiritual Beliefs
- The Legacy of the Egyptians

When most people think of ancient Egypt, they think of the **pyramids**. These immense monuments **still remain**, thousands of years after they were built. They suggest the **great power of the Egyptian pharaohs** [FAIR-ohs], the kings and queens who ruled Egypt. The pyramids also testify to the **sophisticated engineering skills** of those who built them.

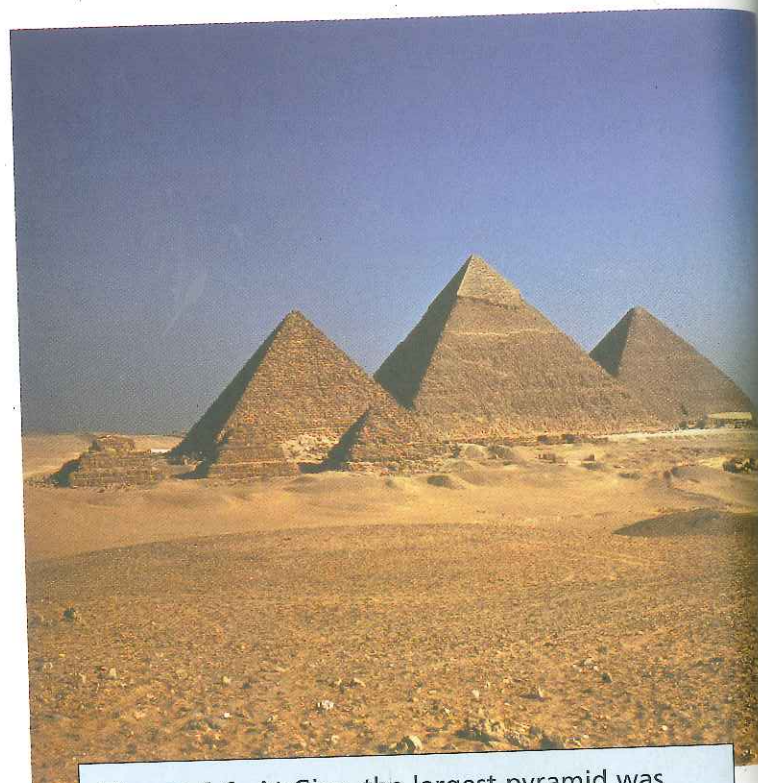


Figure 4.1 At Giza, the largest pyramid was built for the pharaoh Cheops, who was also known as Khufu; the second pyramid was built for Chephren, or Chephren, who was known as Khafre; and the third or smaller pyramid was built for Mycerinus, who was also known as Menkaure.

The ancient **Egyptians settled along the banks of the Nile River** in northern Africa. Their civilization lasted for almost 3000 years – from **about 3100 BCE to 332 BCE**. At its height, Egypt is thought to have had a **population of between nine and ten million people**.

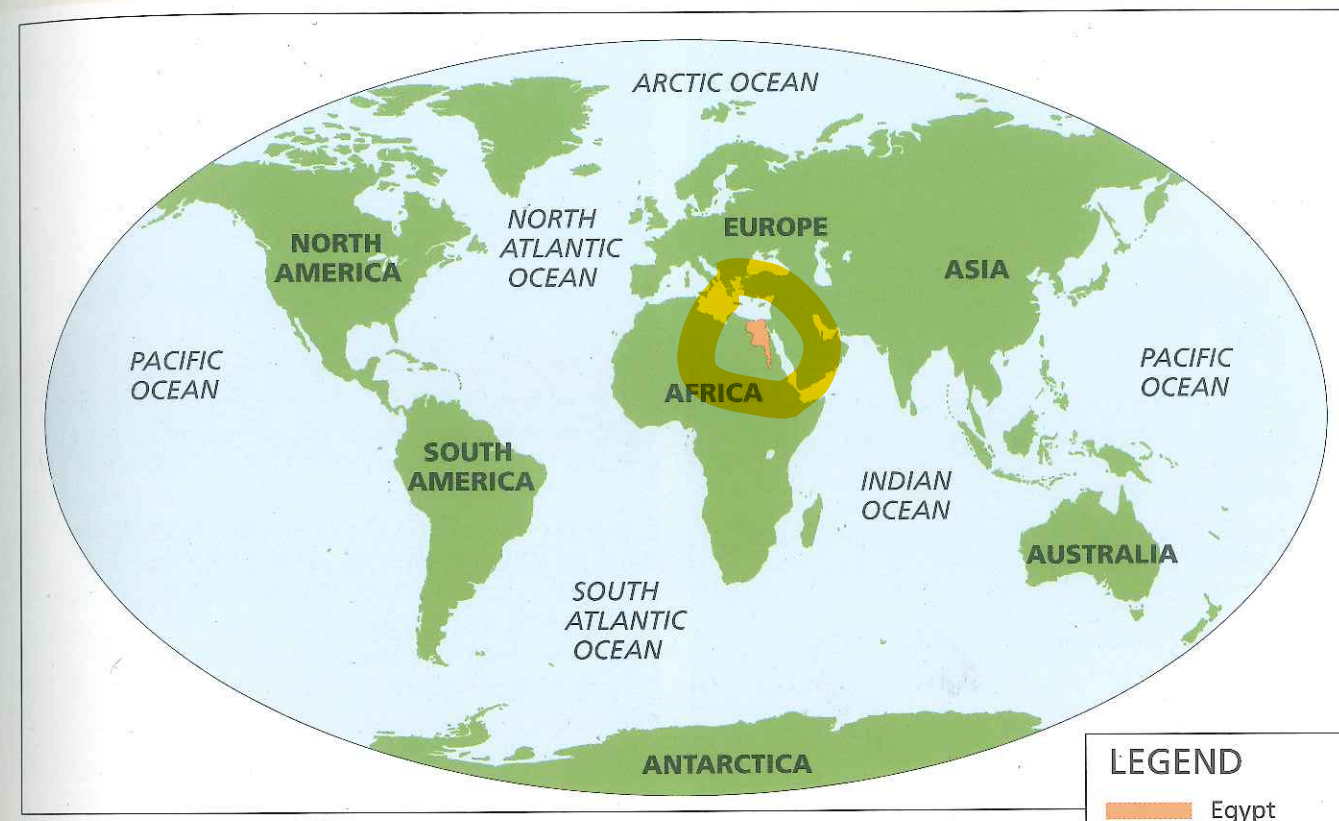


Figure 4.3 This map shows the kingdom of Egypt in about 1500 BCE.

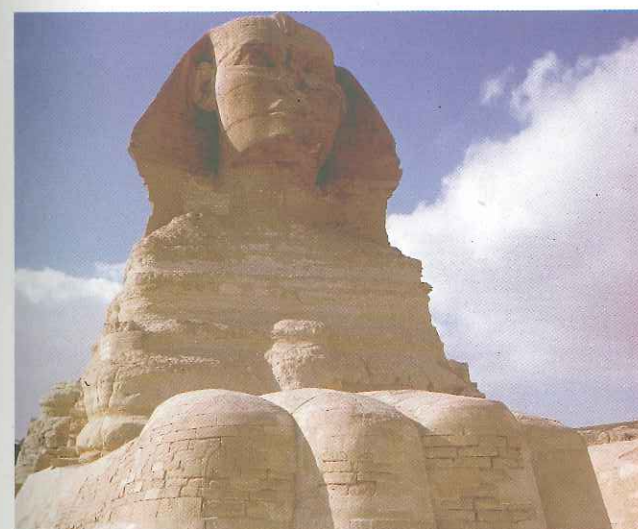


Figure 4.2 This limestone beast with the head of a man and the body of a lion is called the **Sphinx** [SFINGKKS]. It was built about 4500 years ago in Lower Egypt. The Sphinx is believed to represent the **sun god, Ra**. Its face is thought to be that of **Khafre** [KAF-ree], a pharaoh of the 4th Dynasty who ruled from 2558 BCE-2532 BCE. Khafre is credited with building the second largest of the three pyramids at Giza.

Questions to Think About

- ♦ How was life in the Nile Valley similar to and different from life elsewhere in very early times?
- ♦ How did Egyptians satisfy their non-material needs (e.g., entertainment, recreation, music, art, literature, religion)?
- ♦ What achievements of Egyptian society (e.g., inventions, religion, values, buildings) are considered important today?

Where the Egyptians Lived

The geography of ancient Egypt played a key role in the development of its society. Egypt's northern border is the Mediterranean Sea. This gave Egyptians access to the resources of the sea and to trading networks in the region. To the south, a series of cataracts – large, steep waterfalls – on the Nile River made travelling on the river extremely difficult. These cataracts provided protection from enemy attacks. To the west, the Libyan Desert, or Western Desert, acted as a barrier to outsiders. To the east, the Arabian Desert lay between the Nile Valley and the Red Sea, making it difficult for invaders to attack Egypt from that direction. Unlike many other peoples, such as the Babylonians, the Egyptians did not have to defend themselves constantly. They could focus more on internal matters that included governing the area fairly and ensuring peace within the country.

Two separate regions developed in the Nile Valley. The delta near the Mediterranean Sea, located in the north, was called *Lower Egypt*. This swampy and dangerous area was home to many wild animals including crocodiles and hippopotamuses. The land along the Nile River from Memphis to the First Cataract at Aswan was called *Upper Egypt*.

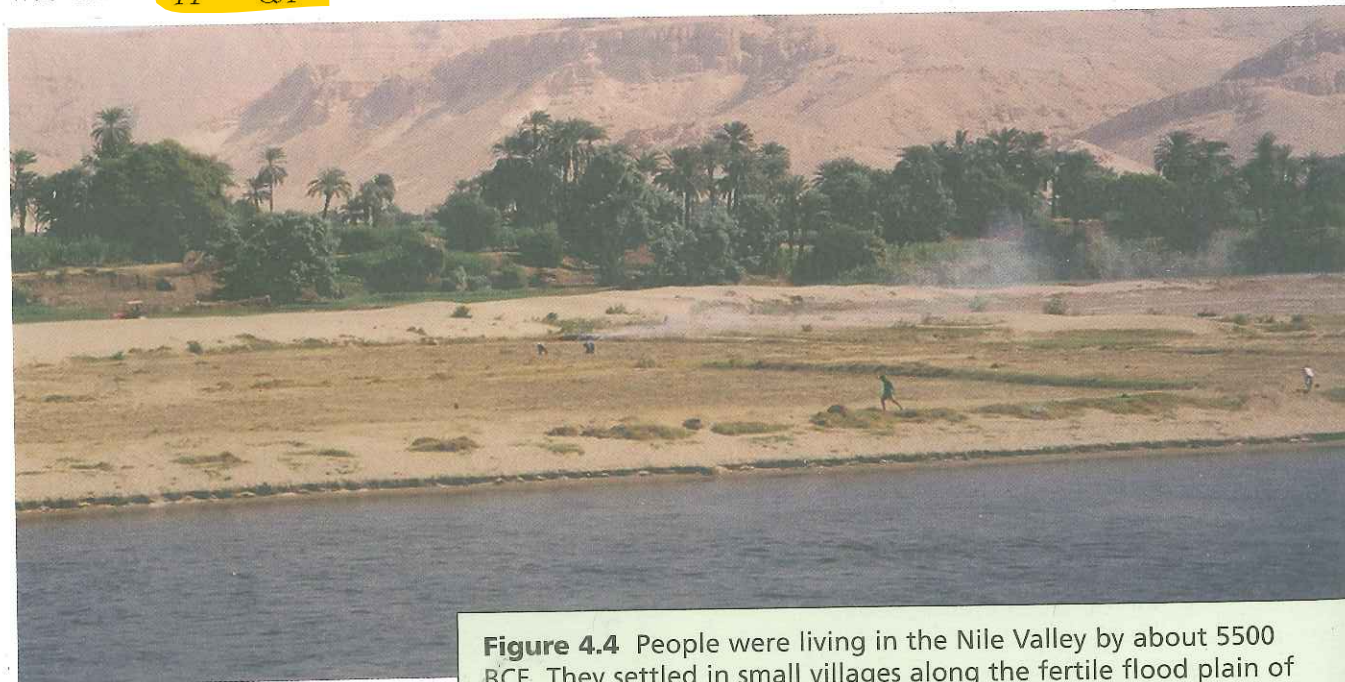


Figure 4.4 People were living in the Nile Valley by about 5500 BCE. They settled in small villages along the fertile flood plain of the Nile River. Memphis and a few other settlements on the delta grew into large cities.



Figure 4.5 Water level measurements were made with a nilometer [NEYE-low-me-ter]. A nilometer had ruled horizontal lines cut into rock surfaces along the river's banks to check on the inundation levels of the Nile River. Several nilometers were located along the Nile. At Elephantine (south Egypt), the Nile starts to rise one month before it does in Memphis (north Egypt). The nilometer at Elephantine acted as a warning for what the inundation would be in a particular year.

The Old Dam at Aswan was constructed and heightened three times between 1902-1933. The High Dam (Aswan Dam) was started in 1960 and finished in 1971. Lake Nasser was formed behind the dam and flooded much of what is called Nubia. The people of that region had to be relocated to other areas of Egypt, mostly around Aswan.

The Importance of the Nile River

In many ways, the story of ancient Egypt is the story of the Nile River. In Egypt, the Nile flows from south (Upper Egypt) to north (Lower Egypt) for about 1000 kilometres, connecting the entire country. Most of the river's valley is less than twenty kilometres wide. The valley is much wider at the river's mouth, where the Nile Delta, a large triangle of extremely fertile land, is located.

During ancient times, the Nile flooded its banks every year in late spring and deposited fine black silt on the land around it. The levels of flooding varied greatly from year to year. When the flood waters were too high, villages and fields were destroyed. If the flood waters were too low, crops failed and infestations of pests such as scorpions and rats occurred. When the flood waters receded, the farmers planted their crops. The farmland had to be re-surveyed each year, because the markers that allocated the size of each farmer's land were moved by the flood waters. The Egyptians were good at mathematics, especially geometry, and they developed surveying techniques that ensured measurements were accurate every year.

Government

In about 3100 BCE, Upper Egypt and Lower Egypt were united under Pharaoh Menes of Memphis. (In some writings, he is referred to as Narmer.) Menes founded the first dynasty. Under his rule, Egyptian society began to develop and advance. Historians have divided the history of unified Egypt into the Old Kingdom (2700 BCE to 2200 BCE), the Middle Kingdom (2050 BCE to 1800 BCE), and the New Kingdom (1550 BCE to 100 BCE). From

Egyptian Dynasties*

2700-2625	3rd Dynasty
2625-2500	4th Dynasty
2500-2350	5th Dynasty
2350-2170	6th Dynasty
2170-2130	7th-8th Dynasties
2130-1980	9th-10th (Herakleopolis) Dynasties
2081-1938	11th (Thebes) Dynasty
1938-1759	12th (Itj-Tawy) Dynasty
1759-1630	13th (Itj-Tawy) Dynasty
1675-1630	14th (Western Delta) Dynasty
1630-1523	15th (Avaris) ("Hyksos") Dynasty
1630-1523	16th Dynasty
1630-1539	17th (Thebes) Dynasty
1539-1292	18th (Thebes) Dynasty
1292-1190	19th (Thebes) Dynasty
1190-1075	20th (Thebes) Dynasty
1075-945	21st (Tanis) Dynasty
945-712	22nd (Bubastis) Dynasty
828-725	23rd Dynasty
724-712	24th (Sais) Dynasty
760-656	25th ("Nubian" or "Kushite") Dynasty
664-525	26th (Sais) Dynasty
525-405	27th Dynasty (Persian)
409-399	28th (Sais) Dynasty
399-380	29th (Mendes) Dynasty
381-343	30th (Sebennytos) Dynasty
343-332	31st (Persian) Dynasty

* All dates are BCE and approximate.

the formation of the Old Kingdom to the time Egypt was conquered by the Romans around 300 BCE, thirty-one dynasties ruled Egypt.

The rulers developed laws to control the behaviour of their people within the society. The Egyptian belief in justice, truth, and order made their culture more humane than many earlier cultures. For example, grain was stored in granaries to feed people in times of famine. Laws were adopted that protected the poor from being exploited by the rich. Most people, except slaves, were considered to be equal regardless of their wealth or social position.

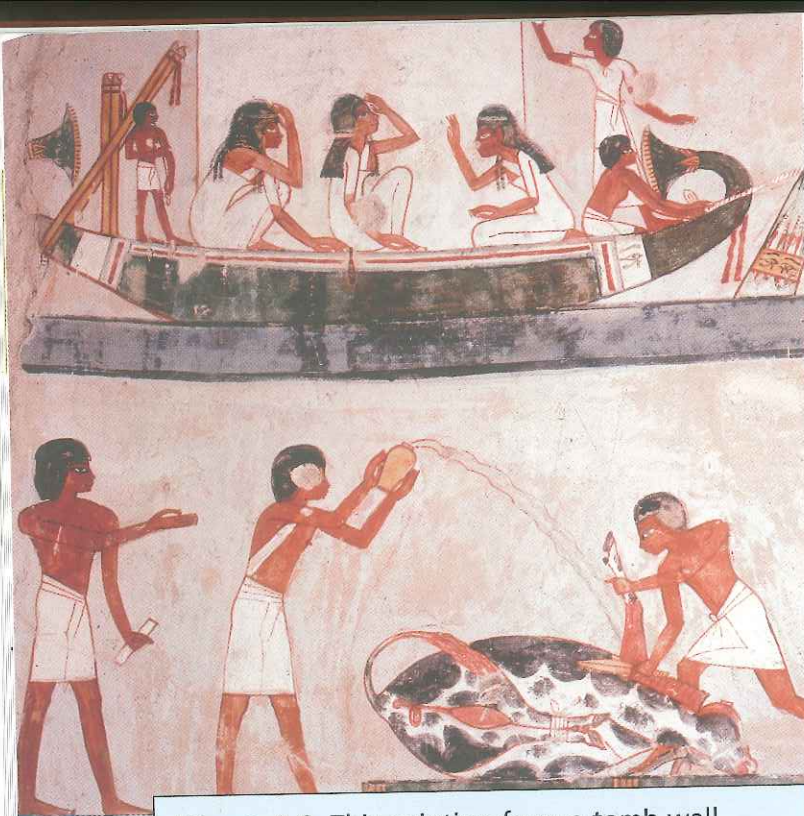


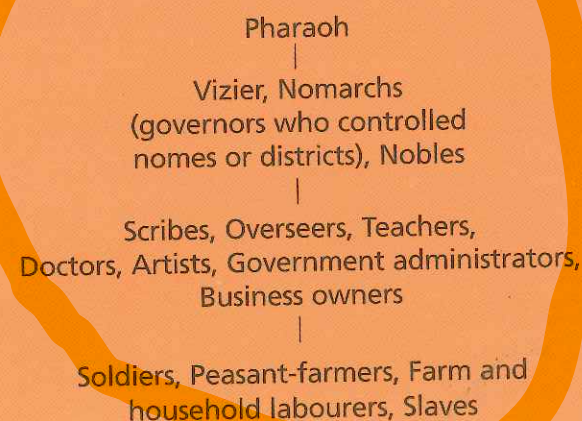
Figure 4.6 This painting from a tomb wall shows a family outing on the river.

Social Organization

Around 1550 BCE, Egyptians began using the term *pharaoh* to refer to their king. The pharaohs were considered to be descendants of the gods, and most ruled with absolute power. The ruling pharaoh owned the people, livestock, and land in Egypt. A pharaoh was the religious leader of the country as well as the government head. The power of the pharaoh was passed along through family lines so that the dynasty could continue.

Below the pharaoh, the Egyptian society was divided into classes.

Hierarchy of Egyptian Society



Officials were chosen to help the pharaoh administer the country. These officials were given land. The most important officials, the vizier [vi-ZAIR], enforced the laws and wishes of the ruler.

We know less about the daily lives of ordinary Egyptians than we do about the ordinary members of many other ancient societies. People in the upper classes often arranged for a scribe to write information about them on their tombs.

Wealthy men were involved in business or government, and they worked outside the home. Married women ran the home and tended to the needs of the children. When a family entertained, the wife was in charge of the preparations.

Family life was important. Many pictures depict children at play; boys with bows and arrows, wrestling, and playing ball; girls playing with dolls and board games, or throwing balls.

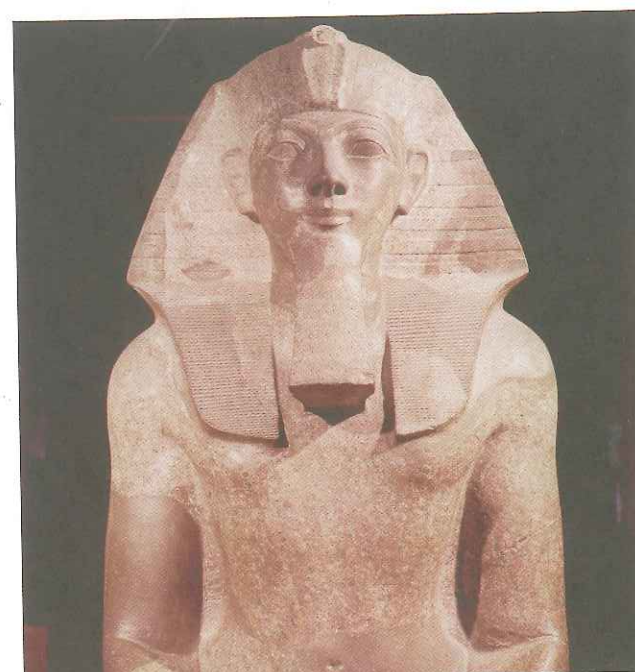


Figure 4.7 Egyptian society was run mostly by men. Although a number of queens had great power and influence, only a few became pharaohs. The most famous female pharaoh was Queen Hatshepsut [HAT-shep-suit]. She became a ruler around 1400 BCE during the 18th dynasty. Queen Hatshepsut often dressed as a man to conform to the traditional idea of kingship. Her reign was marked by few wars, extensive trade, and good diplomatic relations with her neighbours.

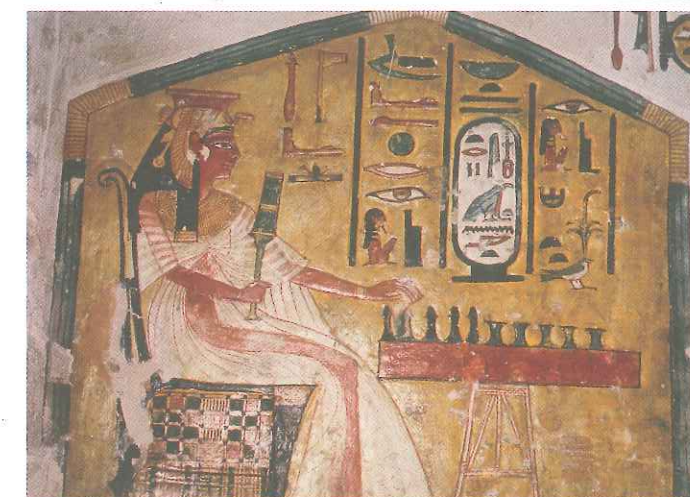
The poor did not leave records about their lives – they could not write, and they could not afford to hire scribes. Even if some left writings behind, most of the settlements where they lived are now covered by modern cities.

Life was not as pleasant for poor people. Men from the lower class spent long days alongside their wives working in the fields, serving the rich, or making clothing or food.

Both men and women were considered “citizens.” Both paid taxes, took part in the legal process, and helped priests with religious ceremonies.

Most women married at about age thirteen. By law, women had many of the same rights as men, such as the right to own property. Men, however, made the decisions for their families.

Figure 4.8 This woman is playing a game called *zenet* (also spelled *senet*). Zenet uses a chess-like board with 30 squares in 3 lines of 10 squares each. Although the rules of the game are not known, the game is played with two players.



An Unusual Day

In this story, Nefer celebrates with others as they welcome the new pharaoh to their town.

Nefer woke up just as Ra, the sun god, was starting his journey across the sky. She put on her linen tunic and sandals made from papyrus reeds and joined her family for breakfast. After a meal of bread and honey, goat cheese, and weak beer, Nefer helped her mother grind barley into flour. With the flour, they baked flatbread in the open firepit in the yard.

After the bread was baked, Nefer walked to the river to wash some clothing. She did not have to walk far to reach the water. The Inundation had peaked recently, and the river waters were still high. She kept a careful watch for crocodiles.

Later, her mother asked her to go to the market. Nefer was happy to leave her chores behind for a while. As she followed the path along the river into town, she watched herons and ducks in the reeds that grew there. Sometimes, her brother and his friends hunted the birds from a papyrus skiff.

Nefer was almost at the village when she saw a large crowd gathering beside the dock. Today, the new pharaoh was coming to visit her town. He was travelling throughout the kingdom, visiting all of his subjects. The crowd erupted into a huge cheer as a beautiful boat appeared around the bend in the river. Men were rowing in time to a drumbeat, and flags and pennants flew from the wooden mast. The hull of the boat was painted with pictures of the gods that protected the pharaoh.

The boat glided up to the dock, and some soldiers jumped ashore. A tall man wearing a red and white crown strode across the gangplank. He was followed by a beautiful, slender woman. She was wearing a white linen dress and a gold necklace. Nefer quickly realized the two visitors were the new king and queen. She joined the crowd as they bowed in respect.

Nefer followed the crowd as priests led the procession to the temple. Offerings of fruit and flowers were given to the gods. Afterwards, Nefer met some friends and they attended the feast held for the villagers. They ate roast goose, onions cooked with milk and cheese, stewed beef, and many kinds of breads and cakes, some shaped like pyramids and some shaped like crocodiles.

Following the meal, dancers and acrobats from the pharaoh’s household entertained the villagers. When darkness fell, the pharaoh and his wife returned to the royal boat. Nefer joined her family and they all walked home together. As they approached the house, Nefer’s favourite cat, Miw, ran up to her with a dead mouse in her mouth. Cats were very important to Egyptians. Nefer had heard that some people even had their cats mummified when they died.

Nefer’s father and brother lit a lamp and checked that the goats were safely penned for the night. Nefer and her mother brought in the washing that had been drying since morning. The night was warm, so they all moved their reed mats outside. As Nefer drifted off to sleep, she thought to herself: “What an exciting day. I can’t wait to see what will happen tomorrow!”

What They Ate

Wealthy Egyptians, like wealthy Sumerians in Mesopotamia, ate a wide variety of foods. Beef, mutton, poultry, and pork were eaten. The Nile Valley produced fruits and some vegetables including pomegranates, figs, watermelons, dates, sweet melons, grapes, and cucumbers. Honey was used as a sweetener.

Poorer Egyptians seldom ate meat, although some raised ducks, geese, chickens, or rabbits. Their meals usually consisted of bread, onions, and fish. Vegetables such as lentils, peas, and chickpeas were also eaten.

The Egyptians ate a great variety of breads, usually made from barley. These included hollow rolls filled with vegetables, flatbread cakes, round crusty breads, and heavy unleavened bread. A worker might eat as many as ten bread rolls and drink as much as two jugs of beer each day. Beer was made from barley, bread crumbs, water, and fermented dates. Egyptians often gathered at taverns to drink beer and wine, much as people do today.

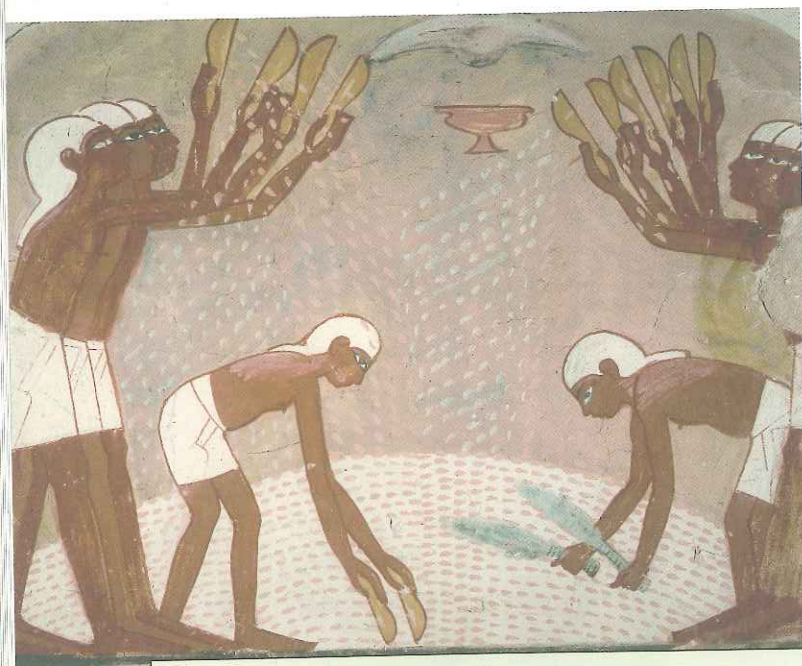


Figure 4.9 Farmer-peasants are winnowing harvested wheat.

Farming

Most Egyptians were farmers. They planted their crops after the Nile flood waters receded in October, and the ground was still wet and easy to work. They had to plant quickly, because the ground soon hardened in the sun.

All villagers were involved in the important task of planting. Workers used small hand hoes to break up the soil. They guided wooden ploughs that were pulled by oxen. Other workers walked behind those who were ploughing and sowed the seeds, which they carried in shoulder bags made from reeds. Sheep and cattle were then led over the planted seeds to push the seeds into the soil.

The crops were ready to harvest from mid-February to early June. At that time, scribes and officials decided how much to give to the pharaoh, the landowner, and the farmers, and how much to save as seed for the following year. The first pick of each crop was offered to the deities, such as Min, the god of fertility, as thanks for the harvest.

One important non-food crop was papyrus [puh-PIE-ruhs]. It grew in marshland and had many uses. Baskets, mats, boats, sandals, and paper were all made of papyrus.

Making Paper

The Egyptians made the world's first paper over 4000 years ago. They used papyrus plants that grew on the banks of the Nile River. The plant can grow up to a height of about 3.6 metres and has long, thin, triangular-shaped stems.

The papyrus plants were harvested and cut to the desired length. The stems were peeled, leaving only the white pith, and sliced into thin strips. These strips were soaked in water for many days. They were then placed side-by-side on flat stone plates in a lattice pattern. The strips were beaten and, because the juices form a strong glue, the strips bonded together into sheets. The strips were then placed between felt mats to absorb any water. Heavy stones were placed on top of the felt mats to squeeze out the excess water. Finally, the sheets were dried and scrubbed. They were then ready for the scribes to write on.

What They Wore

The most common clothing for women was an ankle-length sheath dress that attached at the shoulder. Women from the upper class wore dresses made from fine materials such as linen. Many also wore a beaded net dress over a close-fitting sheath dress. Some lower-class women wore more loosely fitted dresses that allowed them to work comfortably in the fields or at home.

Men wore wraparound skirts, called *shenti*, that resemble kilts. The fabric, length, fit, and decoration of each skirt depended on the man's rank and wealth. The skirts of the wealthy were usually pleated, but there were many different styles. Men seldom wore tops, and poor men and slaves wore only loincloths. As fashions changed, some men wore longer skirts over the shenti and sometimes wore short-sleeved tunics as well.

Linen was the most commonly worn fabric, probably because it is very cool. Linen is made from flax, a plant that grew easily in Egypt. Some cloth was dyed; most was not. Wool was not widely used for clothing, but some people wore it for outer garments. The skins of animals such as the gazelle and leopard were tanned and made into shoes and sandals.

Wealthy men and women wore makeup such as heavy black eyeliner called *kohl* to protect their eyes from the brightness of the sun. They also wore lipstick, and nail polish, and gold jewellery.

Housing

Most Egyptians lived in one-room houses made of mud bricks and reeds. The houses were covered with roofs made of large palm leaves. People often slept outside when it was hot.

The wealthy lived in large homes with many rooms. At the front of each home was a grand entrance. Inside were bathrooms, bedrooms, halls, a kitchen, and guest rooms. The floors

were covered in mats, and the walls often had wall hangings. Many homes made from mud brick were built around courtyards, which often contained swimming pools and gardens. These homes had flat roofs where people spent their evenings in hot weather and where they often slept at night.

Middle-class and upper-class Egyptians owned wooden furniture. Many pieces of such furniture have been found in the pyramids. The wealthy slept on beds, sat on chairs or stools, stored household items in baskets and boxes, and used lamps, kitchen utensils, and pottery. Lamps were usually pottery or stone bowls with a wick and filled with oil. Torches, made of pottery, were mounted on walls.

Kitchen utensils included storage jars, bowls, pots, pans, ladles, sieves, and whisks. Clay dishes were used, and the tableware was made of bronze, silver, and gold. Many people, especially the poor, ate with their fingers. Food was cooked in clay ovens and over open fires.

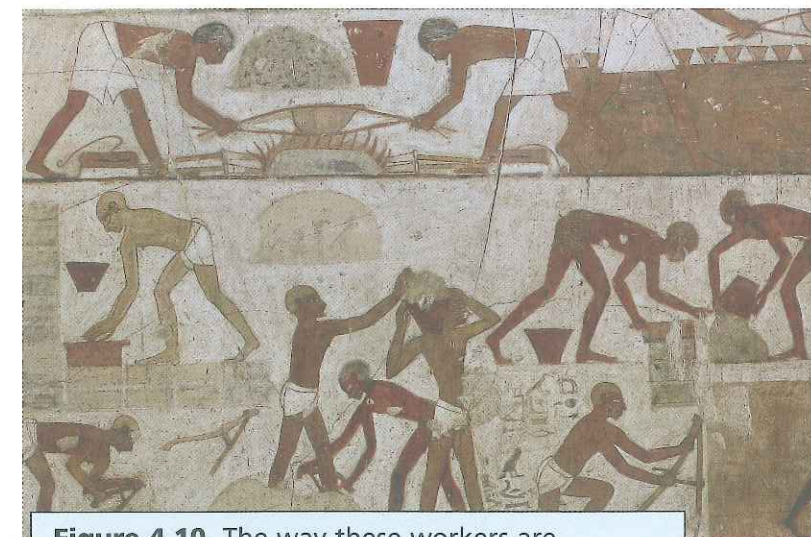


Figure 4.10 The way these workers are making mud bricks is still used in Egypt today. The mud is mixed with straw and shaped into bricks using wooden moulds. The bricks are then dried in the sun. These unfired bricks were used for homes, while stone was reserved for tombs and temples. Homes of both the wealthy and the poor were made of these mud bricks.

The Development of Writing

Hieroglyphics, the Egyptian form of pictorial writing, appeared about 3300 BCE. At first, the hieroglyphs represented actual objects. Later, during the Middle Kingdom around 2000 BCE, the glyphs represented sounds, which, like the cuneiform sounds of the Sumerians, could be combined to form words.

There may have been up to 6000 hieroglyphs in the early stages of this form of writing. Gradually, the system was simplified into an easier cursive form of writing called hieratic, with about 3000 glyphs for scribes to learn.

Hieroglyphics were developed to record what was produced, taxes that had been paid, supplies required for temples, and military information. Later, scribes used hieroglyphics for letter writing and recording stories. Hieroglyphs were placed on the inner walls of temples and tombs, on pottery and slabs of limestone, and on papyrus.

Hieroglyphics were last used by Egyptian priests in the 4th century CE. The priests kept the meaning of the writing a secret, and no one was able to read the hieroglyphs for another 1500 years. Then, French soldiers serving with Napoleon found a stone slab near the Egyptian delta town of Rashid, whose ancient name was Rosetta. The stone had text written in three languages: Egyptian hieroglyphics, Coptic (an Afroasian language), and ancient Greek. Since scholars could understand Greek, it was possible to decipher the hieroglyphics by using Greek as a guide to translation.

Education

The education of Egyptian children, both girls and boys, was based on religious beliefs. Schools were located in the temples, and the priests were the teachers. The students were mainly the sons and daughters of the wealthy.

Students started school at age five and continued until they were seventeen years old. Classes began at sunrise and continued until sunset. Teachers were very strict, and students who misbehaved were beaten.

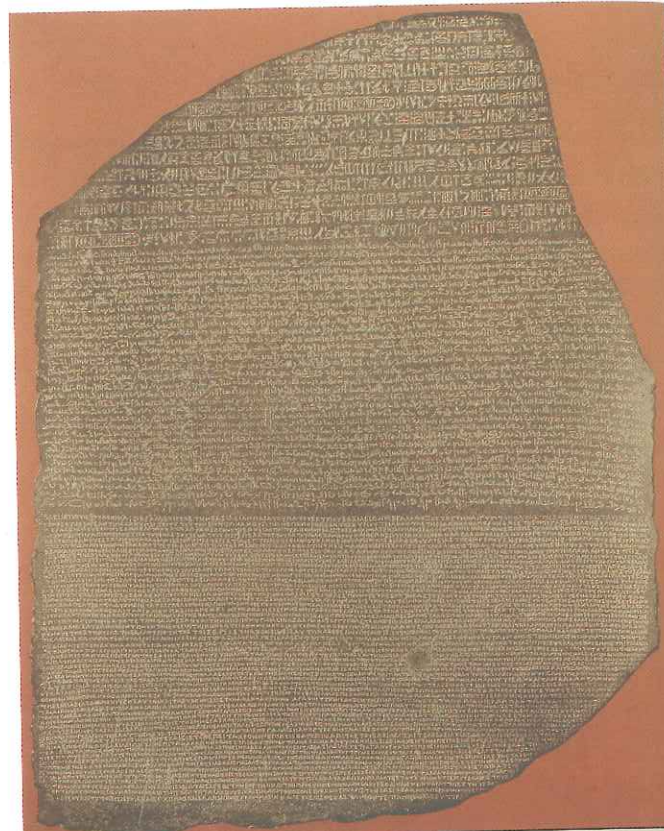


Figure 4.11 Jean-François Champollion (1790-1832), the man who deciphered the Rosetta Stone, never actually saw the stone. Although the stone had been found by French soldiers during the Napoleonic Wars (1798-1801), it was in the possession of the British. They had demanded the Rosetta Stone after defeating the French during the wars. Today, the Rosetta Stone is on display at the British Museum in London, England.

Boys were usually better educated than girls. Few women learned to read and write, so they did not become doctors, lawyers, engineers, or government workers.

The main function of the schools was to train scribes. Doctors, lawyers, engineers, and military leaders were all trained as scribes. They were responsible for recording everything from agricultural production to taxes and government records to historical events, such as victories in battle. Scribes held an honoured place in Egyptian society. Almost the only way that a poor person could move up in society was by becoming a scribe.

Most Egyptian children did not attend school. They learned the skills of their parents by being involved in their parents' work and by observation. Girls learned from their mothers, and boys learned from their fathers.

The Arts

Arts and crafts were very important in ancient Egypt. Artists and craftspeople created paintings, sculptures, weavings, and other forms of artistic expression. These illustrated the universe as they knew it.

Artists used mineral pigments to paint detailed scenes on the walls of the tombs of the pharaohs and nobles. After painting the walls, substances such as snake venom and egg whites were often mixed and painted over the colours to protect them from rain, wind, sand, and other elements. Paintbrushes were made of natural fibres, such as reeds or animal hair, and were of many different sizes.

Using Mineral Pigments to Create Colours

Blue: azurite, an ore of copper; a compound of silica, copper, and calcium

Red: iron oxide

Green: malachite

White: sandstone, calcium carbonate, calcium sulphate

Black: basalt, powdered charcoal

Yellow: yellow ochre

Dancing and music were important parts of daily life in ancient Egypt. Entertainment at official banquets and private celebrations was provided by troupes of professional singers, dancers, acrobats, and musicians. Ritual dances were performed as part of funerals and burial ceremonies. Castanets and rattles known as sistras were used to keep the rhythm.

Medicine and Magic

All societies develop a form of medicine, and there is evidence of Egyptian medical practices dating to about 4000 BCE. The best descriptions of their medical knowledge come from records of the time period from 2000 BCE to 1700 BCE. There is information on internal disease, skin disease, eye problems, diseases of the tongue, teeth, nose, and ears. There is also information on how to perform surgery. Records indicate that some doctors specialized in dentistry, internal medicine, and ophthalmology (treatment of the diseases of the eyes).

Magic played a role in medicine. Spells to keep snakes away as well as to cure or alleviate snakebites were common. Collections of charms and incantations for the protection of babies have been found as well as spells to protect against childhood diseases and dangers. People prayed to several deities, such as Isis and Hathor, to protect a mother and child during pregnancy. People also prayed to Selket, the scorpion goddess, to banish scorpions or cure the effects of their stings.

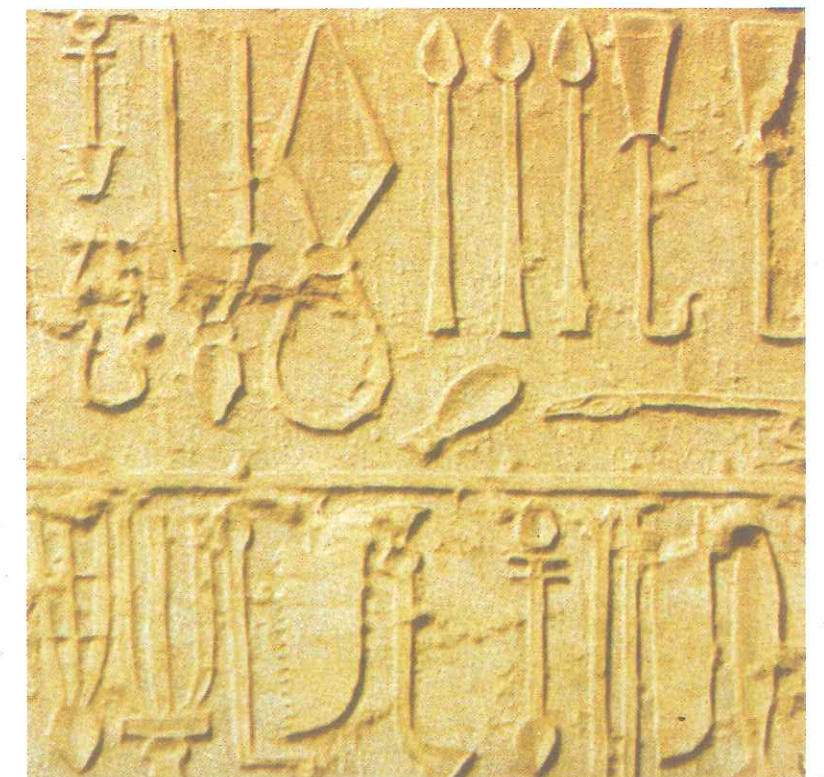


Figure 4.12 A town named Kom Ombo, near Aswan, was a famous medical centre. People of all classes came from all over Egypt to consult with doctors about their medical conditions and with midwives about giving birth.

Trade

The Nile River was always the most important travel route in Egypt. The Egyptians traded with their neighbours to the east (present-day Lebanon, Jordan, and Syria) to obtain goods that they could not produce themselves, such as wood. With their neighbours to the south, they exchanged jewellery and cloth for wild animals, leopard skins, giraffe tails, ostrich eggs, and plants for making perfume. With the peoples of western Africa and the island of Crete, they traded for bronze, items of gold, and ceramic pottery.

Myrrh was a much sought-after trade item. The Egyptians used myrrh, a fragrant, gummy substance with a bitter taste, in medicines, perfumes, and incense. The Egyptians imported animal skins, ivory, gold, and monkeys from the kingdom of Punt. The Egyptians thought that monkeys were sacred and kept them as pets. Monkeys are often shown in Egyptian art.

To improve trade efficiency, the Egyptians built ships and boats. Boats were also soon used for a variety of other purposes including fishing, travel, and warfare. The earliest watercrafts were rafts made from papyrus. The construction of rafts and other boats using papyrus or other reeds is still carried on in parts of Africa such as Lake Chad and in South America on Lake Titicaca.

Trade goods were transported along the Nile River on huge, flat-bottomed boats. Often the

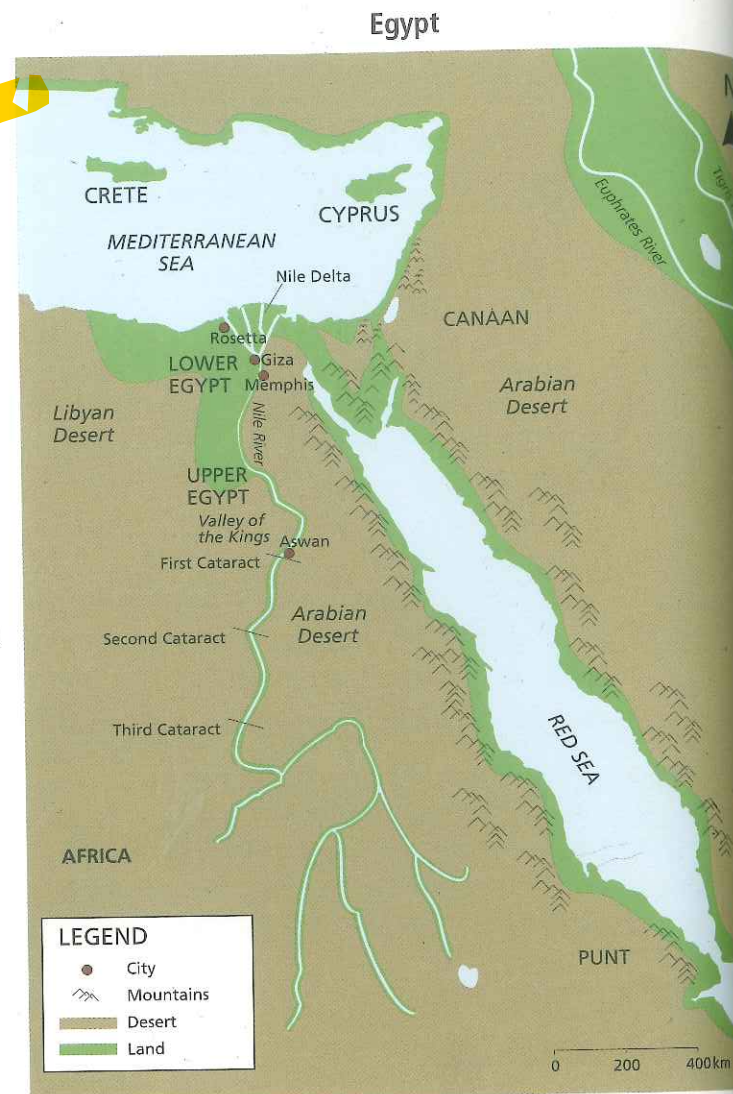
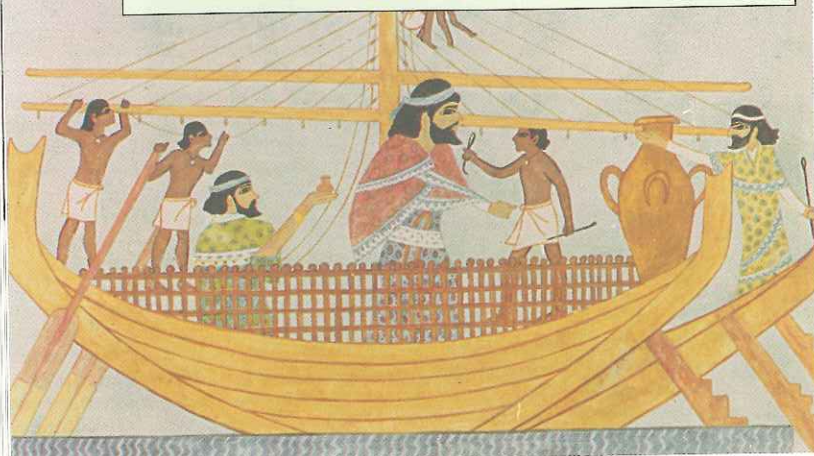


Figure 4.14 Egyptians settled along a narrow band of land on both sides of the Nile River.

Figure 4.13 This picture shows a Canaanite ship being unloaded in an Egyptian port about 1500 BCE. This type of ship was used for ocean travel.



larger boats were pulled by smaller boats, which were powered by crews of rowers. Egyptian sailboats used rowers when there was no wind.

Larger boats made of wood were built to move heavy loads, such as the large blocks of stone used to build the pyramids, temples, and other structures. Cedar, imported from Lebanon, was highly prized for boat building, as it was strong and straight and lasted a long time. Other large boats, over fifty metres in length, were built for trade and for war. These ships were slightly smaller than the boats that Christopher Columbus sailed across the Atlantic Ocean.

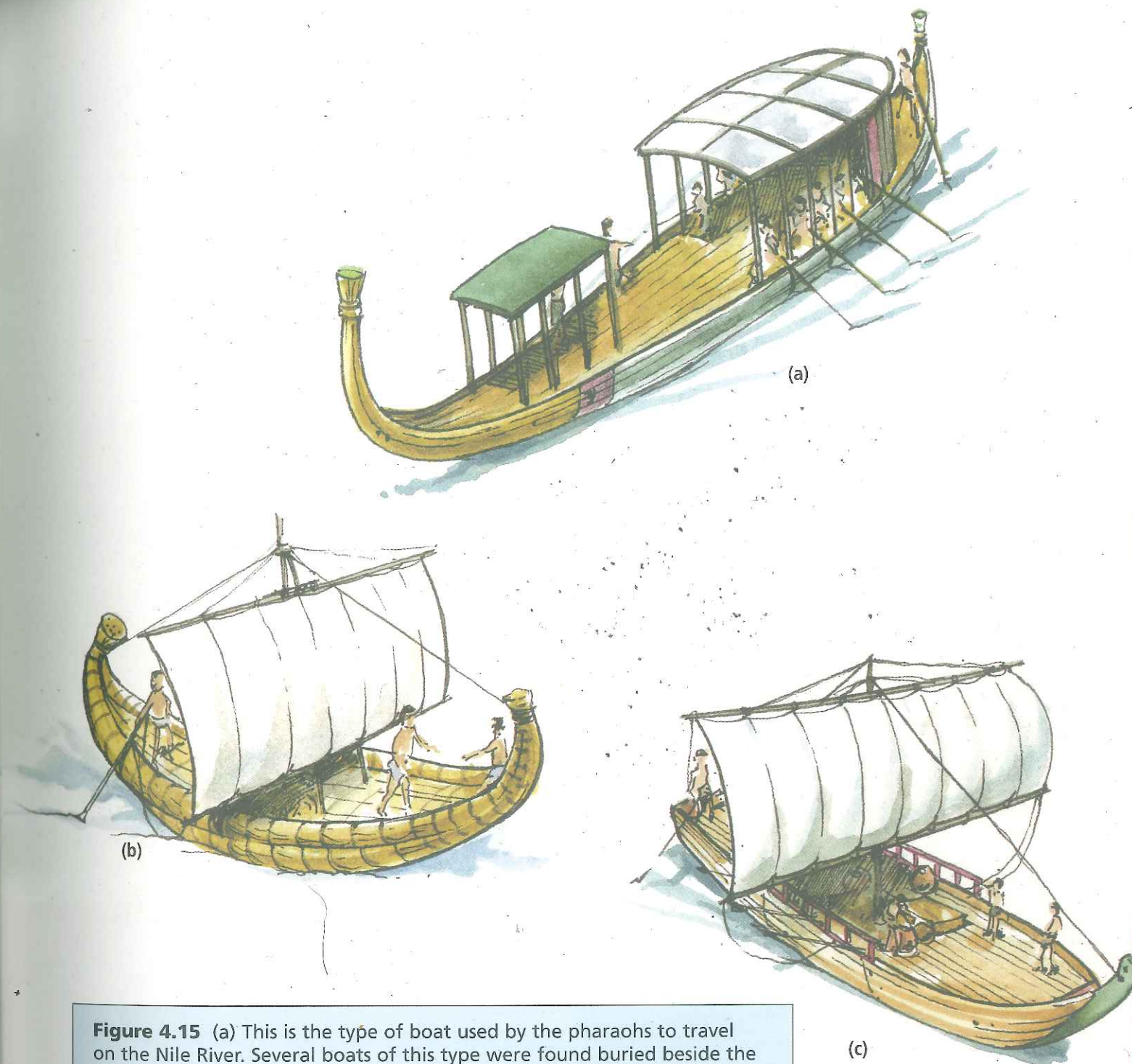


Figure 4.15 (a) This is the type of boat used by the pharaohs to travel on the Nile River. Several boats of this type were found buried beside the pyramid of Khufu in Giza. They were buried near the pharaoh so he would have a means of travelling in the afterlife. The boats are called solar boats when they have this connection to the afterlife, because they are similar to the ones used by Ra, the sun god, in his daily journey across the sky. (b) The most common type of watercraft used on the Nile was built by tying papyrus reeds into tight bundles. The papyrus reeds needed to be lashed together very tightly to be waterproof. The bundles were then tied together with the ends of the boat turning up. These craft could be propelled by a sail or were poled in shallow waters. Smaller boats used on the Nile for fishing and hunting were made of papyrus. (c) The Egyptians did not use nails to build their wooden ships. The planks of wood were tied together tightly with ropes. Tar-like substances were used to patch areas that might develop leaks. Bigger ships had large square sails, as well as oars for rowing.

Religious and Spiritual Beliefs

Like most ancient peoples, the Egyptians understood little about the natural world. They were in awe of events such as the annual flooding of the Nile River. As a result, the flooding became part of their religion.

The Egyptians had hundreds of deities. Some gods and goddesses were worshipped locally in the towns and villages, but the following four deities were important to all Egyptians:

- **Ra was the sun god.** Each day he sailed across the sky in a papyrus boat, bringing the sun with him.
- **Osiris was the god of the underworld.** The underworld was a cool, well-treed place where the souls of Egyptians went after they died. Osiris was one of the most important gods because of the importance of the afterlife to the Egyptians. Osiris was also the god who taught Egyptians how to farm. Osiris had been killed by his evil brother, Seth. Seth cut the body of Osiris into fourteen pieces and scattered them throughout the world.

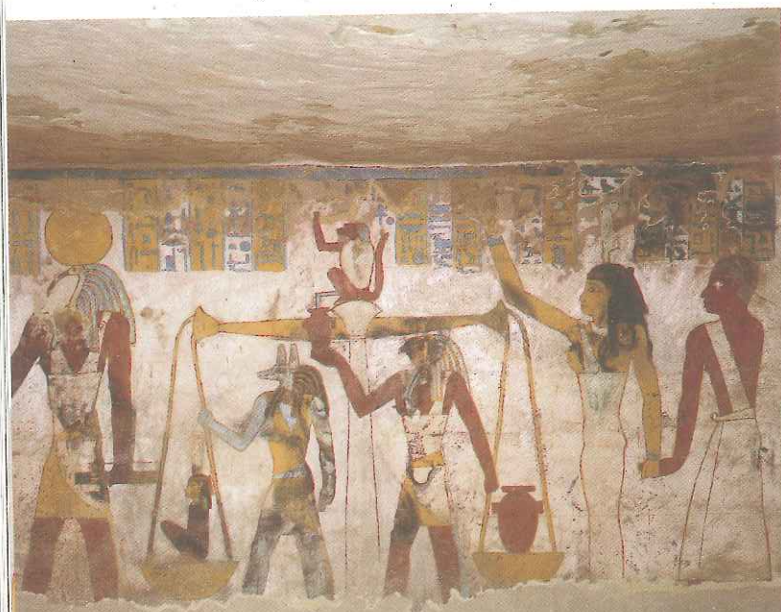


Figure 4.16 This painting shows judgment day. Anubis is weighing the dead person's heart against a feather, which represents truth. If the heart passes this test, the soul is allowed into the afterlife. If the person has not led a good life, the soul is devoured by monster-like creatures.

The ancient Egyptians hieroglyphics did not include vowels. When the names of the pharaohs, gods, and goddesses were translated into English, vowels were inserted to make the words more understandable. As a result, different authors/historians spell the words in a variety of ways. Some examples of these different spellings are:

Gods			
Bas	Bes		
Seth	Set		
Amun	Aman	Amen	Amon
Khnum	Khnum		
Aten	Aton		
Goddesses			
Hathor	Hathour		
Tefnut	Tefnout		
Nephthys	Nephtees		
Sekhmet	Sakhmet		
Pharaohs			
Akhenaten	Akhenaton		
Ramesse	Ramses	Ramesses	
Tutankhamun	Tutankhaman	Tutankhamen	Tutankhamon

- **Isis was the wife of Osiris.** She collected the fourteen pieces of Osiris's body from all over the earth and then brought him back to life. Isis was the protector of children.
- **Anubis was a god of the dead and the guardian of the tombs.** He was often represented in pictures as a jackal. The Egyptians believed that their souls were judged by Anubis when they died. Anubis means "He Who Counts the Hearts."

Because religion was so important, priests were very powerful members of society. Some controlled vast estates. In addition to their religious functions, priests were often scribes, doctors, scientists, engineers, and astronomers.

Egyptians and the Afterlife

All Egyptians were very concerned with death and with life after death. The bodies of kings and queens were preserved and buried in huge tombs and pyramids. The walls of the tombs were painted, and the tombs were filled with

pottery, sculptures, jewellery, furniture, clothing, and musical instruments that they believed would be needed in the next life. Chariots have been found in some tombs, as they were in Chinese tombs.

The poor were buried in shallow graves in the desert sand. Their bodies were not preserved, although they were usually wrapped in linen or covered with straw. The bacteria that decompose bodies need moisture to survive. In the desert, the hot, dry air caused the bodies to lose moisture quickly, creating "natural" mummies. The poor were buried with items such as pots or food, so they would have these with them in the afterlife.

Because of their concern for the afterlife, the Egyptians left more items connected with funerals than did any other ancient peoples. Archaeologists have been able to recover many of these items. As a result, we know a great deal about the death rituals and beliefs of the ancient Egyptians.



Figure 4.17 Egyptians preserved bodies for the afterlife, and priests developed embalming, or the preservation of corpses, to a fine art. The preserved body is called a mummy. The total process of preparing the mummy could take up to 70 days. The body was cleansed with oils and spices. Organs were removed and placed into containers called canopic jars. These jars were placed beside the sarcophagus in the tomb. The inside of the body was filled with sawdust and linen. A salt called natron was used to help the drying process. Finally, the body was wrapped in bandages that had been soaked in beeswax. The mummified body of the pharaoh Ramses II (seen here) is over 3000 years old.

Some Egyptian Deities

GODS

Amun (king of the gods)
Anubis (god of the dead)
Aten (a form of the sun god, Ra)
Bes (god of pregnant women, children, families)
Horus (god of the sky)
Khepri (god of creation)
Khnum (god of inundation)

Min (god of fertility)
Osiris (god of the underworld)
Ptah (god of craftsmen)
Ra (god of the sun)
Sobek (god of the Nile River)
Thoth (god of writing, knowledge)

GODDESSES

Bastet (protectress)
Hathor (goddess of love and joy)
Isis (goddess of magic spells)
Ma'at (goddess of truth, justice, harmony)
Nephthys (goddess of the dead)
Nut (goddess of the sky)
Sekhmet (goddess of war)
Wadjet (goddess of Lower Egypt)

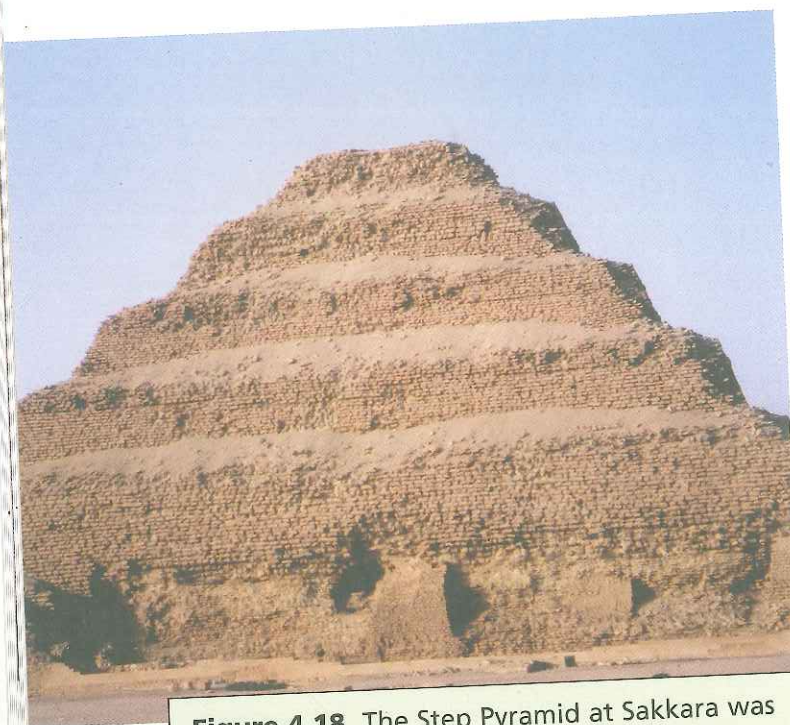


Figure 4.18 The Step Pyramid at Sakkara was built for the pharaoh, Djoser (also spelled Zoser) by the architect Imhotep [im-HO-tep]. The highly regarded architect was the first to design royal tombs in the pyramid shape from hewn stone.

The Pyramids: Wonder of the Ancient and Modern World

The pyramids are the burial places for the kings, queens, and other important people in ancient Egypt. To build the pyramids, the Egyptians needed an understanding of engineering, mathematics, science, and technology that would challenge even today's best designers and planners.

Most work on the pyramids was done during the flooding of the Nile when people could not farm. It is estimated that it took 100 000 workers

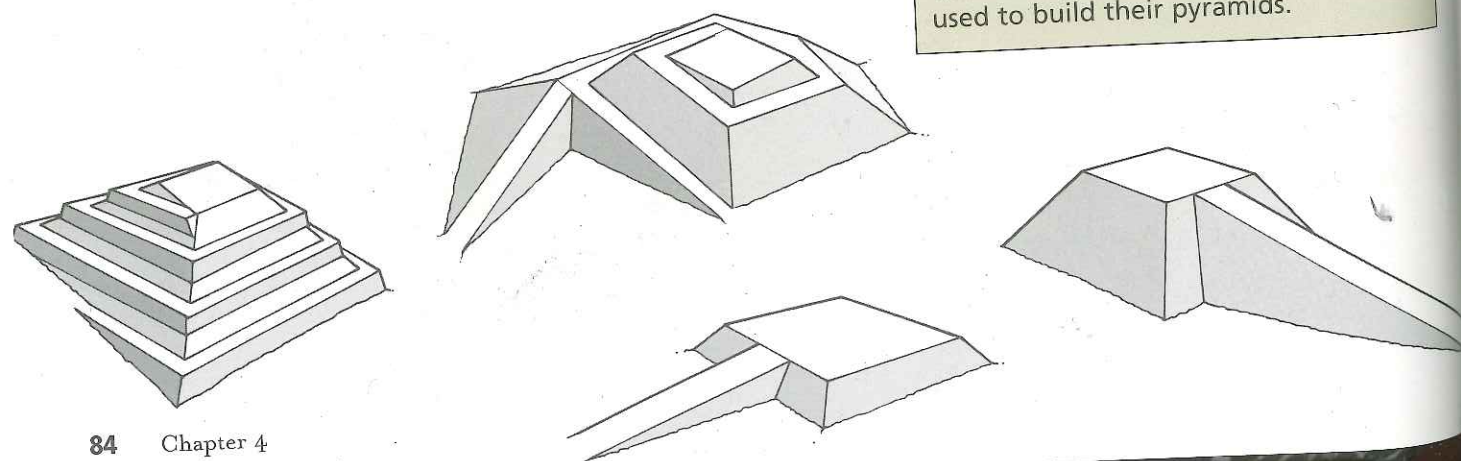
about twenty years to move the 2 million stone blocks used to construct a pyramid. The huge blocks were placed on flat-bottomed boats and moved on the high waters of the river to where the pyramid was being built.

The earliest stone pyramid (the Step Pyramid) was built at Sakkara (also spelled Saqqara). It was built in about 2700 BCE, south of the delta of the Nile River where stone was plentiful. About eighty pyramids were built in this area. The largest pyramid is the Great Pyramid at Giza (see page 70). The original structure was 152 metres high, and it was covered in gleaming white limestone blocks.

Technology improved as the artisans and architects designed more pyramids. To build the pyramids at Giza so high and perfectly vertical, builders began using tools such as the plumb line, mallets and chisels, and set squares. The plumb line, which is simply a weight attached to one end of a string, was used to check the vertical line of a block or wall. Wooden mallets and bronze or copper chisels were used to cut and size the blocks of stone. Chisels had to be sharpened often, because bronze and copper are soft metals. The set squares ensured that the angles and directions of the stone blocks were correct.

Pyramids were built over a period of about 1000 years, from the beginning of the Old Kingdom to halfway through the Middle Kingdom. Other famous structures in Egypt include The Sphinx and the temple of Amun, built at Karnak. As the power and wealth of the pharaohs declined, the construction of large monuments to the pharaohs declined.

Figure 4.19 This picture shows the different types of ramps the Egyptians used to build their pyramids.



Burying a Pharaoh

This story of the preparation for burial of a pharaoh is told by a young priest. With the Egyptians' concern for the afterlife, priests had an important role in the lives of all people.

Emeni readied himself for the burial of Tutankhamen [TOOT-ank-HA-men], the young pharaoh. Emeni was nineteen years old, the same age as the dead pharaoh. Although Tutankhamen had been pharaoh for almost nine years, he had not had time to accomplish a great deal because he was so young when he became king.

Emeni went down to the sacred pool to cleanse himself, then entered the temple sanctuary, a holy place open only to priests. Emeni placed an offering of food and a sacrificed goat in front of the statue of the god Amun. Emeni chanted a special prayer for the dead pharaoh.

Emeni's studies for the priesthood had taken several years. He had learned many chants, gestures, prayers, and sacred texts, as the Egyptians had hundreds of deities. His father was a priest, and Emeni had been ready for the challenge.

Priests had many responsibilities, including performing the ceremony before the soul of a dead person could pass into the afterlife. This was especially important on this day. Tutankhamen's soul must pass into the afterlife if other Egyptian souls were to follow.

Emeni was one of a select group of priests, priestesses, and family accompanying the body to its final resting place. Many preparations had been made for the burial. The walls of the pharaoh's tomb had been covered with artwork. Baskets of food, jugs of wine, clothes, dishes, jewellery, furniture, chariots, and weapons had all been provided so that Tutankhamen had everything he needed in the afterlife.

The location of the tomb was a secret so that tomb robbers would not find it. Not even a small pyramid marked the spot in the Valley of the Kings, the place where many pharaohs were buried.

Emeni had heard that the tomb was underground and contained four rooms. The antechamber was the first and largest room. Most of the items the pharaoh needed for the afterlife were stored there. A small annex containing such items as walking sticks, crooks, and games was connected to a treasury room. Very valuable items were stored here, such as a finely crafted alabaster ointment container in the shape of a boat. The shrines and the pharaoh's body were placed in the last room – the burial chamber.

Emeni joined the procession that was carrying Tutankhamen's body to the solar boat. When everyone was aboard the boat, the funeral party set sail for the burial site across the river.

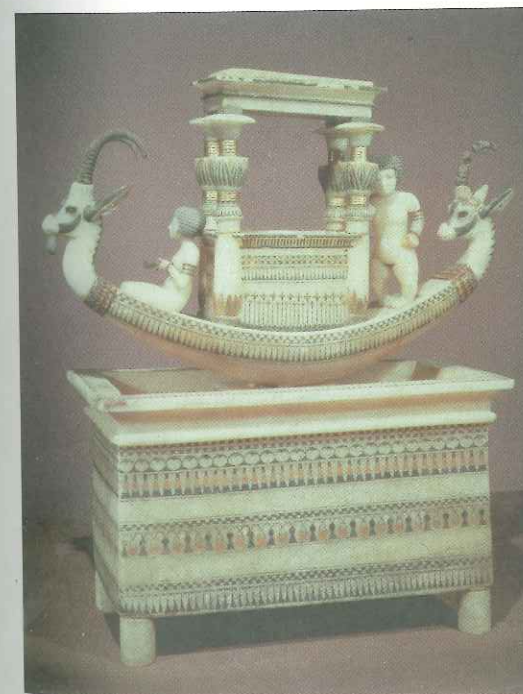


Figure 4.20 These are two of the items that had been placed in Tutankhamen's tomb. On the left is an ointment vase made of alabaster. The boat atop the chest is decorated with two Syrian ibex and a princess. The object on the right is an unguent box in the shape of a double royal cartouche.

Opening a 3300-Year-Old Tomb

After many years of excavation work in Egypt, British archaeologists Howard Carter and George Herbert discovered Tutankhamen's tomb in 1922. When they opened the tomb the following year, this is what Carter remembered: "At first I could see nothing. The hot air escaping from the chamber caused the candle flame to flicker. But presently, as my eyes grew accustomed to the light, details of the room within emerged slowly from the mist, strange figures of animals, statues, and gold – everywhere the glint of gold."

Tutankhamen is one of the most famous pharaohs because his tomb was discovered in good condition and with many ornate artifacts. This young pharaoh ruled from about the age

Figure 4.21 Howard Carter is shown here carefully cleaning a coffin. It took him about eight years to catalogue and restore the 5398 items in the tomb of Tutankhamen who lived in about 1330 BCE. The discovery of the pharaoh's tomb stirred the interest of many people around the world. Carter often found it difficult to work with so many visitors coming to the excavation site. The popularity and importance of the site also created some conflict between the Egyptian and British governments resulting in closing the tomb area for many years.

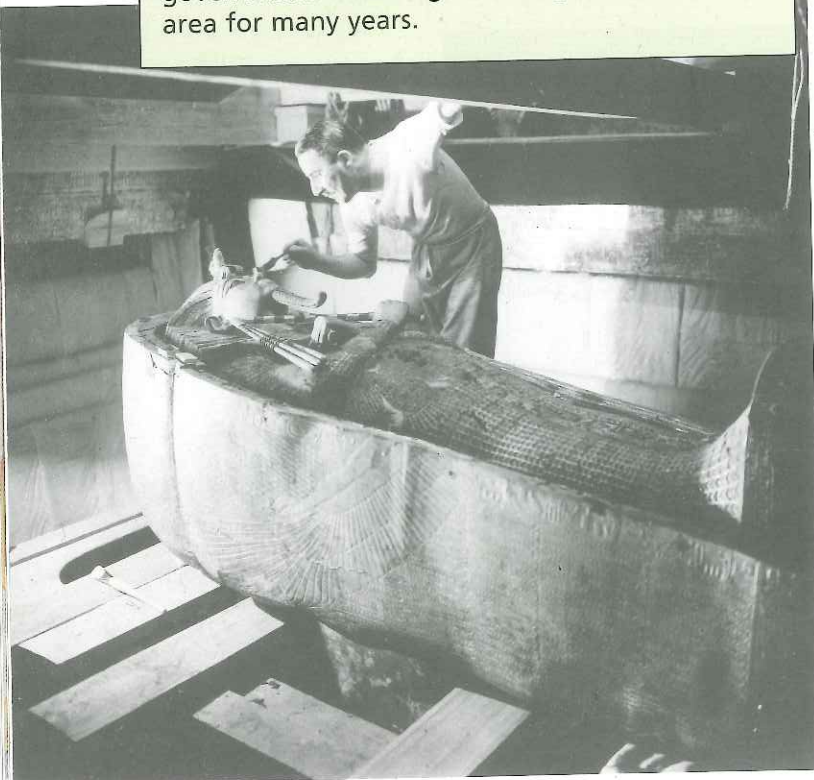


Figure 4.22 This photograph shows the antechamber of Tutankhamen's tomb. Grave robbers made it only this far, and they took only small items that were portable. This robbery took place about ten years after the pharaoh's death. The tomb then remained untouched until Howard Carter reopened it in 1923. Carter found hundreds of pieces of gold jewellery, weapons (swords, axes, spears, shields, daggers), clothing, religious items, and large statues like the ones pictured here.

of nine to age nineteen. His mummified body disintegrated when Howard Carter unwrapped it in 1923. The body had to be put back together by scientists so that archaeologists could study it further to learn more about the mummification process. In recent years, scientists have taken CT scans of Tutankhamen to continue research about his life.

Judaism

The Hebrews founded one of the world's major religions – Judaism. The followers of this religion are called Jews. Two other major religions, Christianity and Islam, have their origins in Judaism.

The main source of information about Judaism is the Old Testament of the Bible. The stories of the Old Testament were written over many centuries by different authors. They relate the history and ancient laws of the Hebrew people.

The Hebrews were nomadic, travelling with their animals from oasis to oasis at the edges of the Arabian Desert, east of the Nile Valley. During a drought in the mid-1800s BCE they moved to Egypt, where they thrived for a time. Eventually, they were enslaved by the Egyptians and forced to build pyramids, canals, and cities for the pharaohs.

According to the Bible, a man named Moses emerged as the leader of the Hebrews. Moses had been born in Egypt and raised by an Egyptian princess. Moses freed the Hebrews and led them out of Egypt. They settled in Canaan, an area between Egypt and Mesopotamia, between 1300 BCE and 1200 BCE. (Today it is part of modern Israel and the West Bank of Jordan.) There, they established a powerful kingdom.

Judaism is based on a belief in one just god. The concept of one god had been introduced to Egyptians for a brief period by Pharaoh Akhenaten. When the young pharaoh Tutankhamen came to power, however, he re-established the concept of many deities.

The Hebrews believed that they were a special people, chosen by their God to serve Him. In order to love their God, the Hebrews believed that they had to love their neighbours. These are further defined in the Talmud, which was written by rabbis during the time of the Roman Empire.

The Legacy of the Egyptians

The Egyptians were responsible for many inventions and advances in science and technology:

- the shaduf [shah-DOOF] to irrigate the fields beside the Nile River
- mummification of human bodies
- the invention of tools (levels, plumb lines, and set squares) and construction techniques such as ramps for building the pyramids
- powerful drugs such as castor oil, senna, opium, and mercury
- wooden boats
- papyrus for writing on and for the construction of boats
- sundials and water clocks to measure time
- mathematics applications, especially geometry, used in architecture and surveying techniques
- accurate twelve-month calendar of 365 days based on a knowledge of astronomy

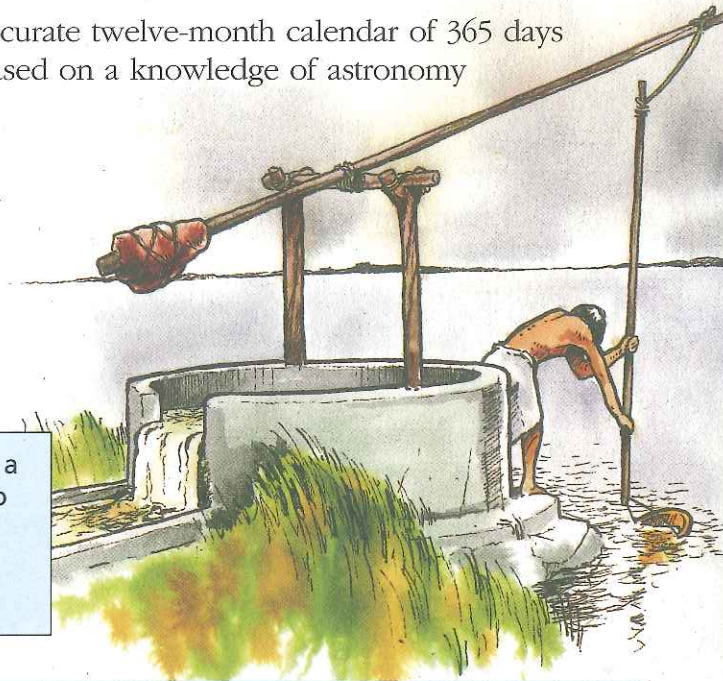


Figure 4.23 When using an Egyptian shaduf, a container is filled with water by dipping it into the river. Then, a counterweight raises the container to the appropriate level so that the water can be emptied into the ditch.

Summary

Egyptian society revolved around the yearly flooding of the Nile River. The river was important for irrigation, food (fish), transportation, and trade. As we shall see in the Indus Valley, China, Greece, Rome, Central America, and

South America, rivers and other waterways were useful

to the development of many societies.

Connecting and Reflecting

Reflect on the contributions and achievements of the Egyptians. Use the information you have learned in this chapter to describe how the ancient Egyptians have influenced your life today as a citizen of Canada and a citizen of the world.