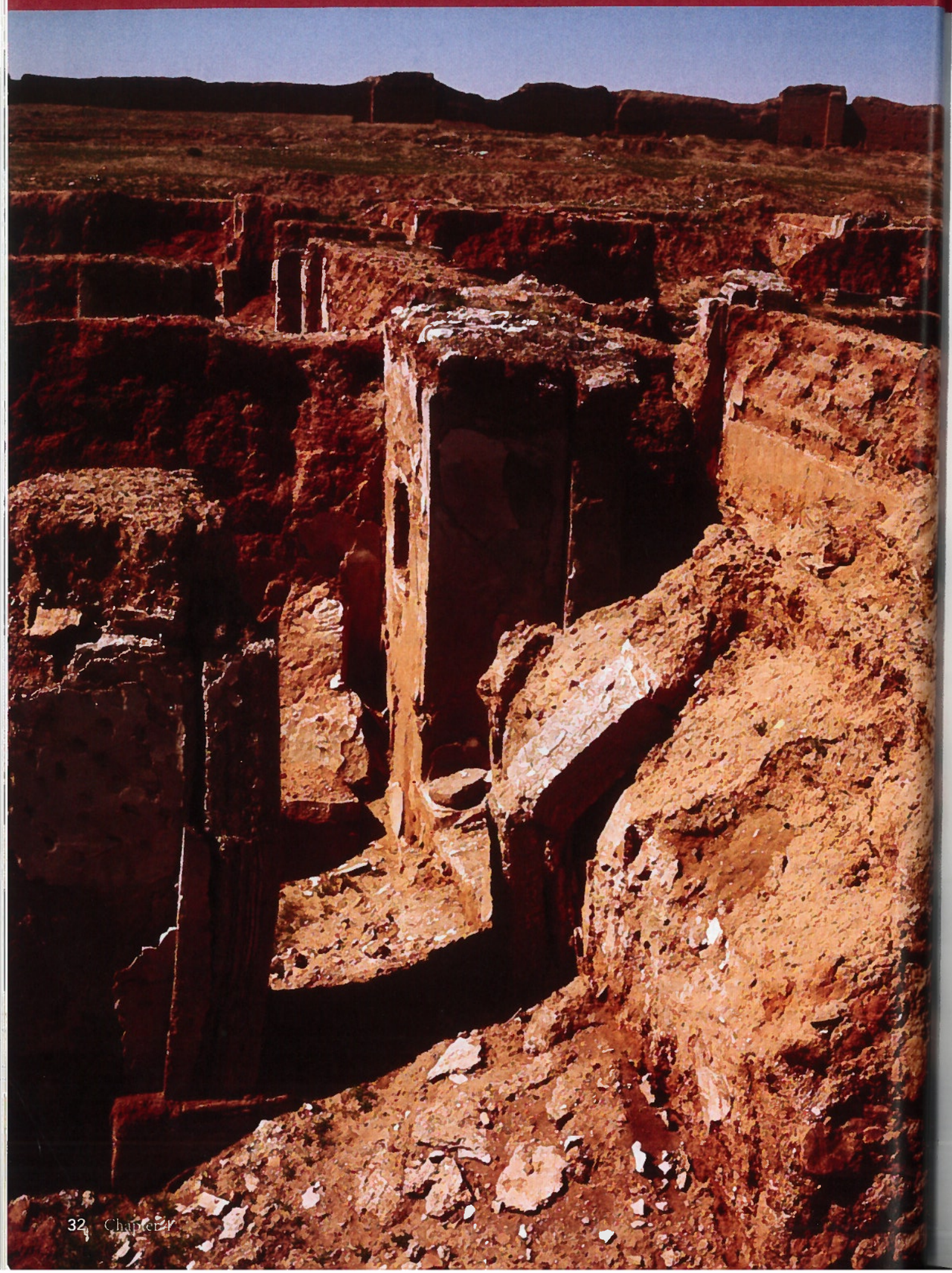


Chapter 4

The Rise of Sumerian City-States

How did geographic challenges lead to the rise of city-states in Mesopotamia?

4.1 Introduction

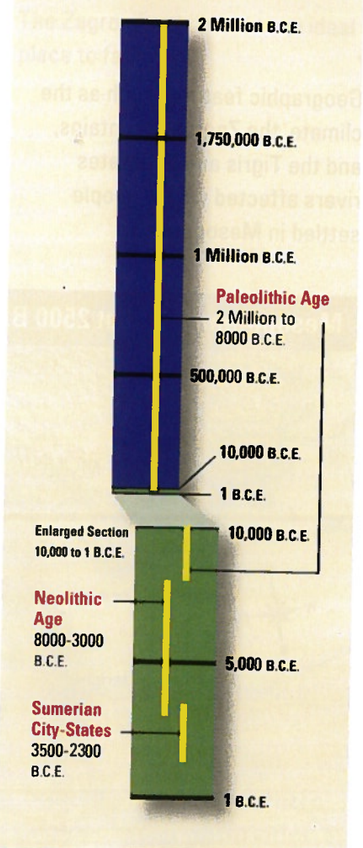
Early people who lived in the Fertile Crescent began farming and living in small villages. In this chapter, you'll see how small Neolithic villages grew into large, **complex** cities.

These villages were located in a land of rolling hills and low plains called Mesopotamia (meh-suh-puh-TAY-mee-uh). This land is in modern-day Iraq. *Mesopotamia* is a Greek word that means the "land between the rivers." The two main rivers of the Fertile Crescent are the Tigris (TIE-gruhs) River and the Euphrates (yuh-FRAY-teez) River. Cities first appeared in the southern part of this land.

The earliest cities in this area date back to about 3500 B.C.E. These first cities were like small, independent countries. They each had their own ruler, as well as their own farmland which provided food. Suppose that you were visiting one of these early cities. You would see a walled settlement surrounded by farmland used to supply food for the city. You would see strong city walls built of sunbaked bricks. Moats, or ditches filled with water, would surround these walls and help keep out enemies. During an attack, people living outside the city walls would flee inside for protection.

As you gazed at the city, you might wonder how it came to be built. Why didn't people in Mesopotamia go on living in small villages, as their ancestors had done for thousands of years? Why did large city-states grow in the "land between the rivers"? In this chapter, you'll find out.

From Caves to City-States



These ruins in the Syrian Desert reveal an ancient Sumerian walled city.

Mesopotamia in ancient times, the geographic area located between the Tigris and Euphrates rivers

Tigris River one of the two largest rivers in Southwest Asia that flow from the mountains in Turkey to the Persian Gulf

Euphrates River one of the two largest rivers in Southwest Asia that flow from mountains in Turkey to the Persian Gulf

Geographic features such as the climate, the Zagros Mountains, and the Tigris and Euphrates rivers affected where people settled in Mesopotamia.

4.2 Mesopotamia: A Difficult Environment

It was not easy to live in the part of the Fertile Crescent called **Mesopotamia**. The northern part was hilly and received rain. The southern part had low plains, or flat land. The sun beat down fiercely on the plains between the **Tigris River** and the **Euphrates River**. There was little rain. The Mesopotamians were farmers, and their farms needed water. The rivers brought water to the plains in flood season, but for most of the year the soil was hard and dry.

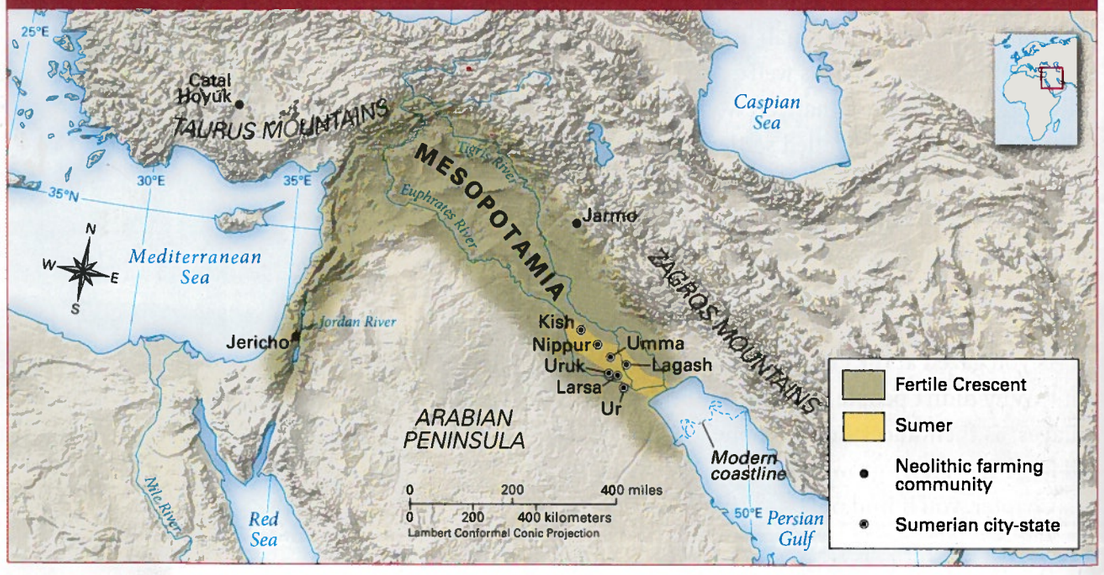
On the plains, building **materials** were difficult to find. There were plenty of reeds (weeds that grow near rivers). But there were few trees to provide wood. Even stones were scarce. And there were few natural barriers to keep out enemies.

Mesopotamians faced four major problems as they tried to survive in this environment:

- food shortages in the hills
- an uncontrolled water supply on the plains
- difficulties in building and **maintaining** systems that provided water across village boundaries
- attacks by neighboring communities

Over time, Mesopotamians found solutions to these four problems. Let's explore how their solutions led to the building of some of the first cities in the world.

Mesopotamia, About 2500 B.C.



The Zagros foothills were an ideal place to farm.

4.3 Food Shortages in the Hills

In Neolithic times, people in some areas of the world began farming. One of the areas that had good conditions for growing crops was the rolling foothills of the Zagros (ZAH-grihs) Mountains in northern Mesopotamia.

Mild weather and plentiful rains made the foothills a good place to farm. The wooded hills provided timber for building shelters. There were plenty of stones in the hills for toolmaking. Over several thousand years, these good conditions allowed the number of people in Mesopotamia to grow dramatically.

Then problems arose. Some historians believe that by 5000 B.C.E., farmers in the Zagros foothills did not have enough land to grow food for the increasing population. As a result, villages began to suffer from food shortages.

Below the foothills and to the south, the Euphrates and Tigris rivers ran through flat plains. The plains covered a large area of land, and few people lived there. During most of the year, the land was very hard and dry. And the plains lacked trees and stones for making shelters and tools.

Yet, the plains held promise, too. In the spring, both of the rivers flooded, bringing precious water to the land. Perhaps farms could be successful there.

Driven by the need to grow food, people moved out of the foothills and onto the plains. This region became known as **Sumer** (SOO-mer), and its people, the Sumerians.

Sumer an area in southern Mesopotamia, where cities first appeared

The Euphrates is the longest river in Southwest Asia.

4.4 An Uncontrolled Water Supply in the River Valley

The farmers who moved to Sumer faced many challenges. One of the biggest problems was the uncontrolled water supply.

During the spring, rain and melted snow from the mountains flowed into the Tigris and Euphrates rivers, causing them to flood across the plains. But no one could be sure exactly when the floods would come. If it happened after farmers planted their crops, the young plants would be washed away.

For much of the rest of the year, the sunbaked soil was dry and hard as stone. Hot, strong winds blew thick **layers** of dust across the ground.

Faced with such dramatic seasonal changes, farmers had to constantly struggle to raise crops. They had either too little or too much water. To grow food, they needed a way to control the water so they would have a reliable water supply all year round.

Therefore, Sumerian farmers began to create **irrigation** systems for their fields. They built **levees** along the sides of the river to prevent flooding. When the land was dry, the farmers poked holes in the levees. The water flowed through the holes and into the thirsty fields.

Over time, the Sumerians learned other ways to control the supply of water. They dug canals to shape the paths the water took. They also constructed dams along the river to block the water and force it to collect in pools they had built. These pools, or reservoirs, stored the water for later use.

irrigation a means of supplying land with water

levee a wall of earth built to prevent a river from flooding its banks

4.5 Building and Maintaining a Complex Irrigation System

Irrigation systems provided enough water for Sumerian farmers to grow plenty of food. But a new problem arose: how to maintain the irrigation system across village boundaries.

The irrigation system passed through a number of villages as it carried water from the river to the fields. The system needed constant care and repair. Canals became clogged with **silt,** so farmers had to clean them regularly. One clogged canal could disrupt the entire system.

Since villages were connected for miles around by these canals, farmers could no longer live apart, or in small groups. They had to work together for the common good.

Gradually, villages came to depend on one another to build and maintain this complex irrigation system. People who lived in different villages may have worked together to clear the silt from the canals to keep them open. Workers may have scooped water from one reservoir into another to ensure that water levels were balanced. As the Sumerians worked together, they began to create larger communities. Between 3500 and 3000 B.C.E., villages grew into towns. Some towns in Sumer became cities with populations as large as several thousand people.

silt fine particles of rock

The Euphrates River still irrigates fields in Iraq today.

A stele (STEE-lee) is an upright slab of stone inscribed with letters and pictures to depict important events. This part of the Stele of the Vultures, which was found in Iraq, shows an attacking army.

4.6 Attacks by Neighboring Communities

As Sumerian cities grew, they fought over the right to use more water. Sometimes, people in cities located upriver (closer to where the river begins) built new canals or blocked other cities' canals. In this way, they kept water from reaching the cities that were downriver (farther from where the river begins). **Disputes** over water became so intense that they often led to bloodshed.

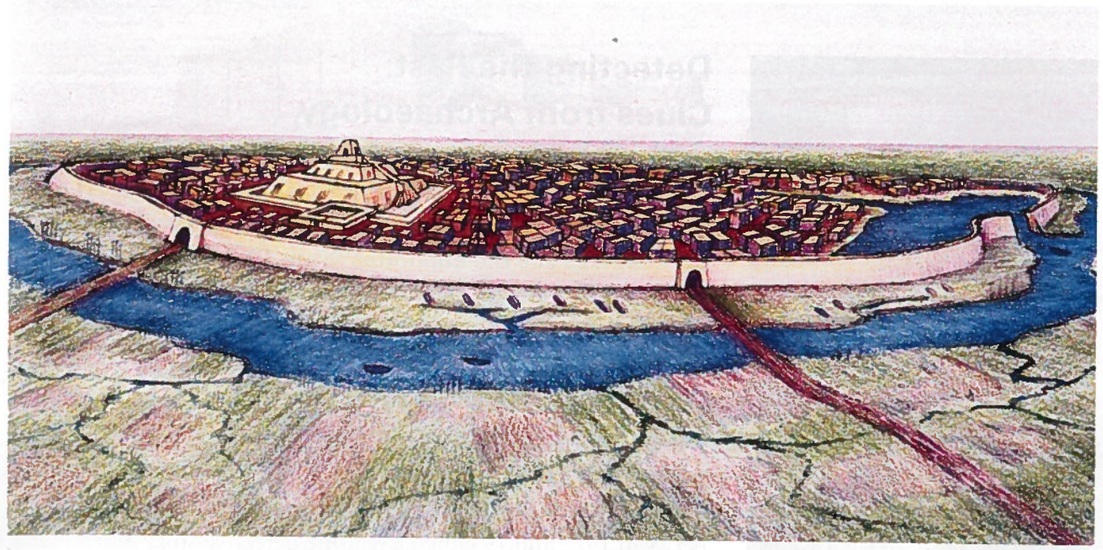
The Sumerians looked for ways to protect their cities from neighboring communities. The plains provided no natural barriers. There were no mountain ranges or rushing rivers to keep out enemies. The Sumerians began to build strong walls around their cities. They constructed the walls out of mud bricks that were baked in the sun until hard. The Sumerians also dug moats outside city walls to help prevent enemies from entering their cities. Most people lived in houses within the walled cities, but the farms lay outside. In case of attack, farmers fled the fields for safety inside the city walls.

The walled cities of Sumer were like independent countries. Historians call them **city-states**. By about 3000 B.C.E., most Sumerians lived in city-states.

city-state an early city that was like a small, independent country with its own laws and government

4.7 From Small Farming Villages to Large City-States

As you've seen, beginning around 3500 B.C.E., the Sumerians progressed from living in small farming villages to building large, walled cities. How and why did this happen? The answer lies not only in the problems the Sumerians faced, but also in their solutions. A basic challenge for any group of people is how to provide food for itself. Food shortages had forced settlers in Mesopotamia to move from the foothills down to the river valley. There, farmers faced the problem of having either too much water or too little.



A Sumerian city-state was like a tiny country. Its surrounding walls helped protect the city against enemies.

To control the water supply, Sumerians built a complex irrigation system. The system crossed village boundaries, so the Sumerians had to cooperate with one another. This led them to live in larger communities—the first cities.

These city-states were like independent countries. Often, they fought with one another. To defend themselves, the Sumerians built walls and dug moats around their cities. By 3000 B.C.E., the solutions to the challenges faced by the Sumerians had transformed Sumerian farming villages into walled city-states.

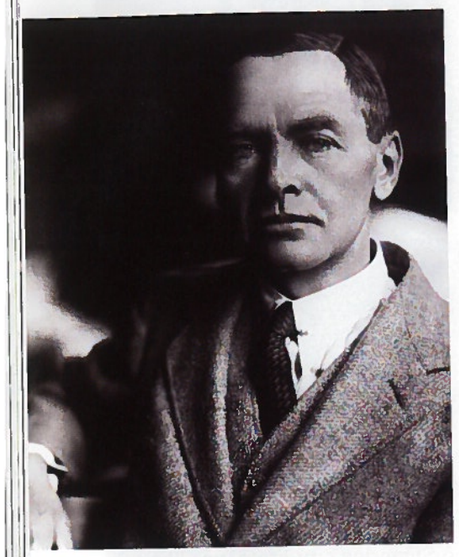
Chapter Summary

In this chapter, you have learned how geographic challenges led to the rise of city-states in Mesopotamia.

Food Shortages in the Hills A shortage of food forced people to move from the foothills of the Zagros Mountains to the plains between the Tigris and Euphrates rivers. This plains area became Sumer.

Controlling the Water Supply on the Plains Farmers in Sumer faced times of flooding and drought. They built irrigation systems to create a steady water supply. Maintaining these complex systems required cooperation among villages.

From Farming Villages to City-States As villages grew into towns and cities, some became large city-states with protective walls around them.



British archaeologist Leonard Woolley worked like a real-life detective to reveal the secrets of the ancient city of Ur.

Detecting the Past: Clues from Archaeology

Suppose that you are standing in the desert, southwest of the present-day city of Baghdad in Iraq. In the distance to the east, you see the Euphrates River. To the west are miles of desert. You then notice that scattered on the ground are small mounds of dirt. What could have made these mounds?

Leonard Woolley asked that same question in 1922 when he began excavating the ancient city of Ur in Mesopotamia. Woolley was a British archaeologist who had been trained to work much like a detective. His excavations and discoveries in Mesopotamia, between 1922 and 1934, tell a real-life detective story.

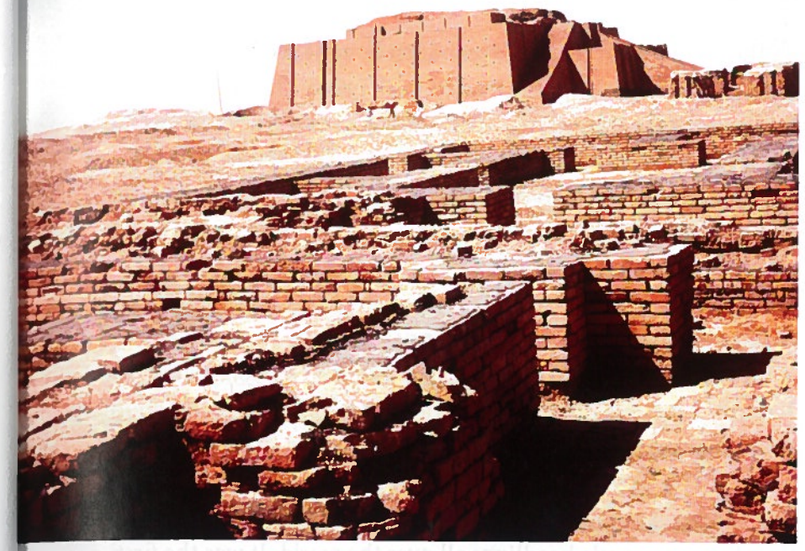
For an archaeologist working in the early 1900s, Woolley's approach was unusually careful and scientific. Many archaeologists of that time viewed research as an adventure, not as a science. They often dug up sites to search for treasure, more than to gain knowledge. They made little effort to preserve the sites or to prevent them from being damaged. These archaeologists often handed over artifacts to museums and private collectors in exchange for fame and money.

Woolley, on the other hand, wrote that his goal was "to get history, not to fill museum cases, . . . and [that] history could not be got unless both we and our men were duly trained." Therefore, he excavated using a basic plan. In this way, he preserved each clue that might help him understand life at Ur.

By the time he arrived at Ur, Woolley had already studied what others before him had found there. He knew where an ancient temple had once stood, who had built it, and when the construction had begun and ended. But, most important, Woolley knew that the city in which the temple had stood was called Ur, and its people, the Sumerians.

Woolley and His Team Begin

In general, archaeologists work in three stages. Woolley had just completed the first stage—Learn and Plan. He was now ready to begin the second stage—Dig and Discover. "The first thing that I did," he wrote in 1922, "was to dig trial trenches . . . [to] give us some idea of the layout of the city."



The ziggurat, or temple area, of Ur rises from the ruins of the ancient city. Woolley carried out excavations of Ur from 1922 to 1934.

Woolley dug deep trenches to discover how many generations of people had lived at Ur. He and his team examined each stratum, or layer of earth, from the top to the bottom of the trench.

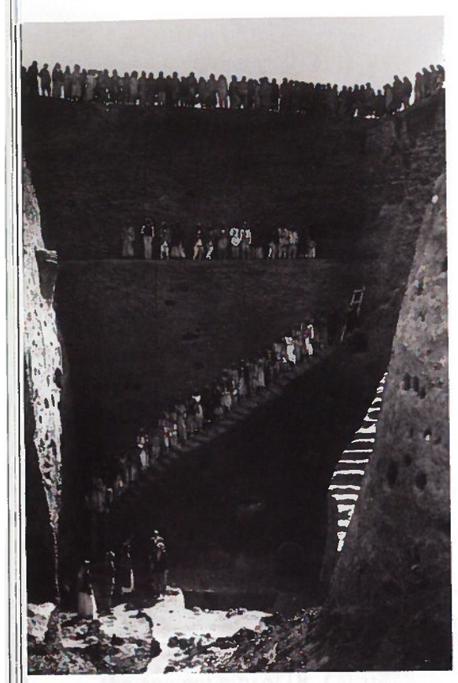
When Woolley went down into the first trench, he found mud-brick buildings at the shallowest, or most recent, layer. Slowly, he uncovered layer after layer, moving back in time. At one point, the remains of the brick buildings disappeared. Next, he found reed huts.

Excited by these early discoveries, the team continued to dig in and around Ur. Each object, no matter how small, was considered important. As the team uncovered each layer of a trench, workers sifted the dirt. Others kept records of where objects were found. These artifacts were labeled and packed carefully in boxes.

More Discoveries

During the first four seasons, team members reached the bottom of the ziggurat, or temple area. They also explored other places. Slowly, one discovery at a time, a picture of Sumerian farming life came together. The evidence showed that the Sumerians used stone hoes to raise grain. They used grinding stones to grind the grain into flour, which they used to make bread.

In addition to these discoveries, the team found plaster made with cow dung, which the Sumerians used to build their houses. Also found was a statue of a pig, indicating to the team that the Sumerians had other farm animals.



This is one of the deep pits Woolley and his team dug at Ur. Woolley is one of the figures at the very bottom. His staff is standing along the steps and around the edge at the top. Shown below is a gameboard discovered by Woolley and his team.

The team of workers uncovered fish bones and the sinkers that were used to drop fishing nets to the river bottom. They discovered a clay model of a boat, similar to one that Iraqis were still using in Woolley's time. This indicated that the Sumerians ate fish and made nets to catch them. Finally, the team found parts of a weaving loom, showing that the people of Ur knew how to make cloth.

Woolley's Most Famous Discovery

In their fifth season, Woolley and his team started to excavate their most famous discovery—a graveyard. They uncovered more than 1,850 burial sites. Most of the burials dated from about 2600 to 2500 B.C.E. The burial techniques were simple. Bodies were wrapped in reed mats or put in clay coffins in small pits. This discovery made headlines all over the world. It was the first time that so many artifacts, including jewelry and weapons, had been found in Mesopotamia.

But the biggest discovery was yet to come. Woolley and his team uncovered graves that contained great riches—the Royal Tombs of Ur. These tombs sometimes had more than one room and contained many bodies surrounded by valuable objects. What Woolley found here would lead him to ask intriguing questions and to find startling answers.

What did the tombs reveal? Woolley was able to identify the bodies buried in two of the graves. Near the bodies, writing was found on clay cylinder seals: "Mesdalamdug lugal," or king, and "Puabi nin," or queen. These burials had been grander. The bodies were discovered in rooms in deep holes. The chambers were built of stone and had domed ceilings. The remains of jewelry, musical instruments, chariots, games, tools and weapons, and cups and jugs led the archaeologists to reach an interesting conclusion: the Sumerians must have believed in an afterlife. These were objects the deceased would need in the afterlife.

The team also uncovered ramps that led down into the tombs. All along the ramp and around the tomb were many other bodies. Woolley wondered why all these bodies were there. They were lined up as if the people had all gone to sleep. There were broken cups by their sides. He reached a surprising conclusion. It was likely that these people had deliberately taken poison. They likely expected to go with their king or queen into the next life.

What Happened After the Expedition?

Back home, Woolley and the team would complete the final stage of their work—Preserve, Reconstruct, and Interpret. They had already packed and shipped artifacts back to museums. There, scientists would study, and preserve or reconstruct them, if necessary.

What exactly would expensive jewelry from 4,500 years ago look like? One such puzzle was Queen Puabi's headdress and jewelry. When the items were uncovered, they were lying on the ground in pieces. They were made of gold, with lapis lazuli and carnelian beads as decoration.

First, the team photographed the jewelry and recorded exactly where each piece had been found in relation to the others. Then, the workers put them in boxes. Back in the lab, archaeologists pieced together the headdress. Team members also reassembled the queen's necklaces and large hoop earrings.

Woolley's Legacy

The final step in an expedition is figuring out how to fit all the clues together. Woolley finished his work at Ur in 1934. For the rest of his life, he wrote about what he had discovered at the site and what he had learned.

Here are Woolley's major contributions toward our understanding of Sumerian life: The Sumerians were farmers and fishermen. They dug canals and irrigated their fields. They raised animals. They ground grain to make bread. They made cloth. They even took time to make statues of animals. They lived in plastered reed huts and, later, in mud-brick buildings.

In addition, Woolley discovered clues that told him that the Sumerians believed in an afterlife and were willing to die for their king or queen. They used a writing system, called cuneiform, to identify kings, conduct business, and describe Sumerian life. They also created works of art and music.

Leonard Woolley set the stage for careful and scientific theories about Mesopotamia that later archaeologists would further investigate and build on. In the 1960s and 1970s, the Iraqi government used Woolley's research to reconstruct the Ur ziggurat. Woolley would likely have appreciated that. He truly believed that present and future generations would better understand who they were by knowing who had come before.

Woolley's most important find was the grave of Queen Puabi. His team found the remains of her body. The top picture shows the gold headdress she was wearing, just as it was when discovered in her grave. The bottom picture shows the reconstructed headdress.