## DEAR DIARY ORIGINS OF SETTLED LIFE

MARTIFACTS AND HUMAN REMAINS IN TURKEY

I magine a wheat field stretching to the horizon like a sea of golden grass. Now imagine a bump in the middle of the wheat field. Most of us would think "hill." But if you're an archaeologist you think "mound." And if you are an archaeologist digging in Turkey you think "höyük," because höyük means mound in Turkish. That's exactly what archaeologist James Mellaart thought one cold November

BULGARIA

Black Sea

GEORGIA

GREECE

Ankara

TURKEY

IRAN

\*Catalhöyük

SYRIA

IRAQ

Mediterranean

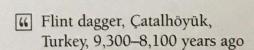
Sea

evening in 1958 when he sent a worker scrambling 65 feet up to the top of the mound.

The sun was setting, but even in the dim light they could make out chunks of mud-

angles and stone tools scattered everywhere. Mellaart scraped away dirt with his trowel and discovered white plaster coating the brick walls. "Right from the start I knew that not only was Çatal Hüyük old, but its occupation had lasted a long time," Mellaart told interviewers later.

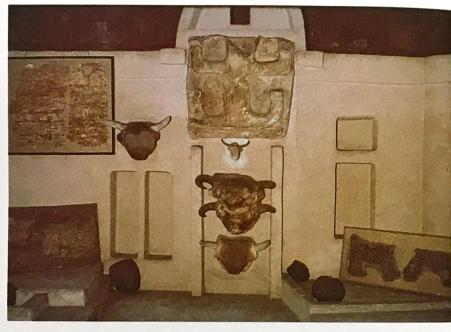
Mellaart may have known from the start that Çatalhöyük was important, but it was not until he began excavating that he realized he had discovered one of the largest towns on Earth 9,000 years ago—a town that housed as many as 10,000 people in its back-to-back dwellings. The town was packed together so tightly that there was no room for streets. The dwellings were crammed so snugly that doorways had to be cut into the roofs and people had to climb down ladders to enter their homes. Çatalhöyük was a very crowded place.



## NOT A GOOD CHOICE FOR SPELLING BEES

Çatalhöyük is spelled various ways. The current favored spelling seems to be Çatalhöyük, pronounced CHAH-tahl-HU-yook.

A museum exhibit in Ankara, Turkey, gives an idea of what a room at Çatalhōyūk may have looked like. Clay cattle heads adorn the walls, and benches are built into the floor.

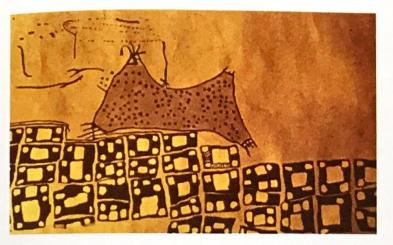


Houses, Çatalhöyük, Turkey, 9,300–8,100 years ago

When Mellaart dug a slice out of the town he found 12 levels of buildings, one on top of the other, spanning nearly 1,500 years. In one section he dug up 200 houses each

about the size of your classroom. The houses had built-in furniture—benches, sleeping platforms, and cupboards. The ovens and grain bins were built-in, too. All the surfaces were coated with white plaster. The walls had been painted again and again to refresh them after they had turned sooty from cooking fires. Some houses had been painted 100 times. And on the fresh white surface, artists drew murals.

Mellaart loved to make up stories that could have inspired the murals. One of his favorites was the story he designed to go



with a volcano drawing. He believed Çatalhöyük had been the center of trade for the translucent black glass made by volcanoes—obsidian—a material perfect for flaking into razor-sharp edges. The artist, he said, was paying tribute to the source of the town's wealth by painting the volcano where the town's people got the materials to make their tools and their polished black mirrors.

Some houses were more elaborately decorated than others. Some had bull's horns sticking out of the plaster. In others figures were sculpted right into the walls. Each generation added its personal touch until finally the house was torn down and another house built right over the ruins—adding another layer to the mound.

Mellaart has retired now, and Çatalhöyük is in the capable hands of archaeologist Ian Hodder. Where Mellaart scooped artifacts from the soil with his bare hands in the 1960s, Hodder sifts the dirt looking for the bits and pieces of the puzzle today. After the dirt is sifted, it is thrown into barrels of water. Slivers of obsidian sink to the bottom of the barrel, seeds float, and more pieces to the puzzle are separated from the soil. Once the scientists have passed the dirt through the sieves and the water barrels, they examine the mud that is left under a microscope. Hodder tries not to let anything escape his team. Sometimes diggers work for a month in one corner of one house. It is a different time for archaeology. As Mellaart said of the 1960s, "We dug a large

Mural, Çatalhöyük, Turkey, 9,300–8,100 years ago

This wall painting uncovered at Çatalhöyük, Turkey, dates to somewhere between 8,100 and 9,300 years ago. Some scientists think this painting shows the houses of Çatalhöyük and a nearby volcano in the background.



MEANWHILE ALL OVER THE WORLD...

Permanent settlements were springing up in the Near East, China, and the Americas. The oldest known village to date is a 10,500-year-old settlement outside present-day Jericho, in the Middle East. Thousands of years would pass, however, before the first undisputed cities would rise, such as the 5,500-year-old city of Uruk in Mesopotamia.



## MEANWHILE IN EURASIA...

When the Ice Age ended and ocean levels rose, the Mediterranean Sea over-flowed and burst through a land barrier that separated it from Lake Euxine 7,600 years ago. Saltwater poured into the freshwater lake. The salt killed millions of fish. The water destroyed farmland and villages,

We think of a dam bursting as a single "whoosh" event, but this flooding lasted many lifetimes. The water advanced at a steady pace—not so fast that villagers couldn't out run it, but fast enough that their homes were covered in a single day. The water kept coming for 100 years. When it was over, Lake Euxine had become the Black Sea.

hole and got out things." Hodder hopes his approach will provide a deeper picture of life at Çatalhöyük.

Hodder encourages his team to talk—talk in the trenches, talk in the dig house, and talk in their diaries. He hopes that all that talking will help solve the mystery of the origins of settled life. Here's what they were talking about in their diaries in the spring of 1999:

The first few days on site were spent...understanding... the layout of an individual house within its one space and relation to others.

Çatalhöyük was rebuilt at least 12 times over its 1,000-year heyday. Houses crumbled and populations swelled. As in any large town, construction was ongoing. Preserving the details of the walls can be a challenge for excavators. Mud brick dries out and quickly erodes when it is exposed to the air. To hold in the moisture, workers spread plastic sheets over the walls, then record the position of each brick. Modern archaeological methods place importance on the site as a whole. It's not just what you dig up, but where it was found in relation to everything else around it. Hodder's team continues in their diaries:

The skull of the skeleton was discovered with the cold steel of a mattock blade and was therefore recovered

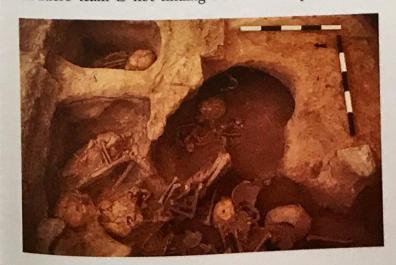
in a number of pieces...
cleaning of the skeleton...
revealed the burial to have
been of a very young baby....

The cold steel once again located another burial. As I write the skeleton is still being removed.

Under the plaster floors and built-in beds, excavators found skeletons—hundreds of them. There were infants and young children, adults and old people. The people of Çatalhöyük lived on top of their ancestors, generation after generation buried beneath the floors. Scientists believe one possible explanation for the home burials has to do with claims to ownership. The skeletons of your ancestors are proof that your family has lived there. Initially scientists thought that the bodies had been put out in the open before they were buried so that the vultures could pick the bones clean. Modern studies suggest that the bodies were buried intact. Smoke billowing from the open fires in the houses must have helped cover the stink of rotting flesh.

One reason it is exciting to find the bones of the people of Çatalhöyük is that scientists need to know what the residents did for a living. Their jobs define Çatalhöyük. Many scientists don't believe that Çatalhöyük was a city, or even a town. They call it an overgrown village. The difference between a city and a village isn't just about how many people live there or how close together their houses are built, but about what the residents do to support themselves. A "town" is born when some people can eat, not by growing their own food but by trading a skill for food with those who do farm. Townspeople can specialize—in art, in building, in weaving—and still feed their family.

What did the people who lived in Çatalhöyük do? Hodder's team is not finding evidence for specialization.



Several human burials are exposed under a house floor at Çatalhöyük. The black-and-white poles are scales to help the viewer understand how big things really are. Each block of color on a pole is 10 centimeters, or about 4 inches, long.

Homo sapiens sapiens skeleton, Çatalhöyük, Turkey, 9,300–8,100 years ago Bricks, Çatalhöyük, Turkey, 9,300–8,100 years ago



The houses are similar to one another, but it looks as if everyone built their own. There is no evidence that there were people supporting themselves as builders. The mud bricks are mixed in almost as many different ways as there are houses. If a professional builder did the mixing you would expect to see the mud brick.

always made the same way. There are many beautifully crafted objects from obsidian, but it looks as if the people of Çatalhöyük were crafting them in their houses. There is no evidence of people supporting themselves as artists. Instead of finding concentrations of flakes in a few workshops, the flakes are littered around nearly every hearth. Hodder says, "It is hard to imagine 10,000 people, minimally 2,000 fam-

ilies, were going out and doing their own thing, but that is what we see." So is Çatalhöyük one of the first cities? Hodder says, "Let's not try to categorize it, as a city or a village, but first try to find out how it works."

In the diaries of Hodder's team, we see what they see. Perhaps one day they will solve the mysteries of how

Çatalhöyük worked, what brought so many people together, and what kept them together. Somewhere in the bits of bones and slivers of stone and clumps of clay, they'll piece together the puzzle of the origins of settled life.

Obsidian, Çatalhöyük Turkey, 9,300–8,100 years ago