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In Syria, a Prologue for Cities

By **JOHN NOBLE WILFORD**

Archaeologists have embarked on excavations in northern Syria expected to widen and deepen understanding of a prehistoric culture in Mesopotamia that set the stage for the rise of the world's first cities and states and the invention of writing.

In two seasons of preliminary surveying and digging at the site known as Tell Zeidan, American and Syrian investigators have already uncovered a tantalizing sampling of artifacts from what had been a robust pre-urban settlement on the upper Euphrates River. People occupied the site for two millennia, until 4000 B.C. — a little-known but fateful period of human cultural evolution.

Scholars of antiquity say that Zeidan should reveal insights into life in a time called the Ubaid period, 5500 to 4000 B.C. In those poorly studied centuries, irrigation agriculture became widespread, long-distance trade grew in influence socially and economically, powerful political leaders came to the fore and communities gradually divided into social classes of wealthy elites and poorer commoners.

Gil Stein, director of the [Oriental Institute of the University of Chicago](#), a leader of the excavations at Zeidan, said the site's northern location promised to enrich knowledge of the Ubaid culture's influence far from where the first urban centers eventually flourished in the lower Tigris and Euphrates Valley. The new explorations, he said, are planned to be the most comprehensive yet at a large Ubaid settlement, possibly yielding discoveries for decades.

"I figure I'm going to be working there till I retire," said Dr. Stein, who is 54.

There are several reasons for excitement over the Zeidan excavations. Warfare and ensuing unstable conditions have locked archaeologists out of Iraq and its prime sites of Mesopotamian antiquity. So they have redoubled research in the upper river valleys, across the border in Syria and southern Turkey. And Zeidan is readily accessible. Having never been built upon by subsequent cultures, it is free of any overburden of ruins to thwart excavators.

Above all, a driving ambition of archaeologists always is to dig beneath the known past for more than glimpses of the little known.

For almost two centuries, the glory went to expeditions unearthing the houses and temples,

granaries and workshops of earliest urban centers like Uruk, seat of the legendary Gilgamesh, and the later splendors of Ur and Nineveh. The challenge was to decipher the clay tablets of a literate civilization with beginnings in what is known as the Uruk period, 4000 to 3200 B.C.

Uruk remains overshadowed the traces of Ubaid cultures, the region's earliest known complex society. Only a handful of ruins — at Ubaid, Eridu and Oueili in southern Mesopotamia and Tepe Gawra, in the north near Mosul, Iraq — had produced at best a sketchy picture of these older cultures. A few Ubaid sites in northern Syria were either too small to be revealing or virtually inaccessible under other ruins.

A decade ago, Richard L. Zettler, a [University of Pennsylvania](#) archaeologist with extensive experience in Syria, said, “Our real focus now should not be on the Uruk period, but the Ubaid.”

Last week, Dr. Zettler, who is not associated with the Chicago team but has visited the site, said that Zeidan preserves artifacts over a long sequence of Ubaid culture at a junction of major trade routes. “We should see the transition as the Ubaid spread from the south up to farming regions in the north,” he said.

Guillermo Algaze, an anthropologist at the [University of California, San Diego](#), and an authority on early urbanism in the Middle East not involved in new research, said recently that Zeidan “has the potential to revolutionize current interpretations of how civilization in the Near East came about.”

Tell Zeidan is a two-hour drive southeast of Aleppo and three miles from the modern town of Raqqa. Muhammad Sarhan, a curator of the Raqqa Museum, is co-director, with Dr. Stein, of the excavations, formally known as the Joint Syrian-American Archaeological Research Project at Tell Zeidan.

The site consists of three large mounds on the east bank of the Balikh River, just north of its confluence with the Euphrates. The mounds, the tallest being 50 feet high, enclose ruins of a lower town. Buried remains and a scattering of ceramics on the surface extend over an area of 31 acres, which makes this probably larger than any other known Ubaid community.

It would seem that the mounds had long stood on the semi-arid landscape as an open invitation for archaeologists to stop and dig. A few stopped. The American archaeologist William F. Albright identified the place in 1926. The British archaeologist Sir Max Mallowan, husband of the mystery writer [Agatha Christie](#), was intrigued and made a brief survey in the 1930s. A Dutch team led by Maurits van Loon took an interest in 1983, finding that the site appeared to date to the Ubaid period. A German group asked the Syrians for permission to excavate but was turned down.

Finally, after initial visits to Zeidan, Dr. Stein said the Syrian government “encouraged me to submit an application” to dig. Why the change?

“I was incredibly thrilled, but can only speculate on what their reasons were,” Dr. Stein said in a recent interview, referring to the Syrian decision. “Perhaps they were waiting for the right team to come along. Our institute had worked in Syria for something like 80 years, and we were interested in a long-term commitment. We also pointed out that the site was endangered from agricultural development along its edges. Parts of the site had already been bulldozed for fields and a canal.”

In the summers of 2008 and 2009, Dr. Stein directed mapping of the Zeidan ruins and digging exploratory trenches. He said the initial findings confirmed this to be a “proto-urban community” in the Ubaid period, most likely the site of a prominent temple.

A description and interpretation of the discoveries so far was published in the Oriental Institute’s recent annual report, followed by an announcement this week by the [University of Chicago](#). The international excavation team, supported by the [National Science Foundation](#) in the United States, is to resume fieldwork in July.

Four distinct phases of occupation have been identified at Zeidan. A simpler culture known as the Halaf is found in the bottom sediments, well-preserved Ubaid material in the middle and two layers of late Copper Age remains on top. From the evidence so far, the transitions between periods seemed to have been peaceful.

Archaeologists have turned up remains of house floors with hearths, fragments of mudbrick house walls, painted Ubaid pottery and sections of larger walls, possibly part of fortifications or monumental public architecture. The ceramic styles and radiocarbon tests date the wall to about 5000 B.C.

One of the most telling finds was a stone seal depicting a deer, presumably used to stamp a mark on goods to identify ownership in a time before writing. About 2-by 2- 1/2 inches, the seal is unusually large and carved from a red stone not native to the area. In fact, archaeologists said, it was similar in design to a seal found 185 miles to the east, at Tepe Gawra, near Mosul.

To archaeologists, a seal is not just a seal. Dr. Zettler said it signifies that “somebody has the authority to restrict access to things — to close and seal jars, bags, doors — and so once you have these seals you must have had social stratification.”

The existence of elaborate seals with near-identical motifs at such widely distant sites, Dr. Stein said, “suggests that in this period, high-ranking elites were assuming leadership positions across a very broad region, and those dispersed elites shared a common set of symbols and perhaps even a common ideology of superior social status.”

Other artifacts attest to the culture’s shift from self-sufficient village life to specialized craft production dependent on trade and capable of acquiring luxury goods, the archaeologists reported. Such a transition is assumed to have required some administrative structure and produced a

wealthy class. The expedition will be searching for remains of temples and imposing public buildings as confirmation of these political and social changes.

In what appears to be the site's industrial area, archaeologists uncovered eight large kilns for firing pottery, one of the most ubiquitous Ubaid commodities over wide trading areas. They found blades made from the high-quality volcanic glass obsidian. An abundance of obsidian chips showed that the blades were produced at the site, and the material's color and chemical composition indicated that it came from mines in what is now Turkey.

"We found flint sickle blades everywhere," Dr. Stein said, noting that they had a glossy sheen "where they had been polished by the silica in the stems of wheat that they were used to harvest."

Zeidan also had a smelting industry for making copper tools, the most advanced technology of the fifth millennium B.C. The people presumably reached as far as 250 miles away to trade for the nearest copper ore, at sources around modern-day Diyarbakir, Turkey. Getting the ore home was no easy task. In a time before the wheel or domesticated donkeys, people had to bear the heavy burden on their backs.

A site like Tell Zeidan, Dr. Zettler said, is "telling us that the Uruk cities didn't come out of nowhere, they evolved from foundations laid in the Ubaid period."

Until recently, Dr. Algaze said, "accidents of data recovery" had led scholars to think the origin of cities and states in Mesopotamia was "a fairly abrupt occurrence in the fourth millennium that as concentrated in what is southern Iraq."

The southern cities may have been larger and more enduring, he said, but increasing exploration on the Mesopotamian periphery, especially the spread of trade and technology among interacting Ubaid cultures, suggests that "the seed of urban civilization" had been planted well before 4000 B.C.

