CITY OF THE MOON

NEW EXCAVATIONS AT UR

BY WILLIAM B. HAFFORD
The ancient city of Ur was dedicated to the Sumerian moon god—today it resembles a lunar landscape. From 1922 to 1934 the Penn Museum and the British Museum jointly excavated portions of the site, but the massive mound containing 5,000 years of history has lain largely untouched for the last 80 years.
The mound of Tell el-Muqayyar juts above the desert plain of southern Iraq about 200 miles south of Baghdad. When you walk across it today, it seems as desolate and barren as the moon. Its surface is almost completely covered by a gray salt encrustation that crumples beneath your boots, causing a fine dust to rise. Pits, smoothed with age, pock the landscape like craters, and rubble punctuates the scene.

Then you notice that the rubble is not rock, but baked clay—squared bricks stick up from the salty gray. Everywhere there is evidence of past civilizations. This slowly eroding mound was a bustling city thousands of years ago. One of the first cities in human history, known simply as Ur. Millions of broken pottery pieces litter the mound. Heaps of them stretch for hundreds of yards, the remnants of intense archaeological excavation completed in the early 20th century. These monumental piles blend into the landscape that hides 5,000 years of occupation. Only the ziggurat (a massive stepped pyramid), re-faced with modern brick in the 1960s, stands out as a clear indication of ancient greatness.

Yet, new life is beginning to stir as interested locals visit the ziggurat and Iraqi school groups take guided tours to learn about their history. For the first time since archaeologist Leonard Woolley left in 1934, an international team has arrived to renew efforts to understand the important city abandoned more than 2,000 years ago. Under the direction of Drs. Elizabeth Stone and Paul Zimansky of the State University of New York (SUNY) Stony Brook, American, British, and Iraqi archaeologists began work here again in 2015.

The New Expedition to Ur
As a member of the new team of excavators, one of my key interests is in reinvestigating Woolley’s work. I studied his notes and publications as well as satellite and aerial photos of Ur for more than ten years but had never set foot on the site. I often wondered what Woolley might have missed and how accurate his notes were.

Archaeologists in Woolley’s day most often investigated temples, palaces, and wealthy burials where they were likely to find high-quality objects for display. Woolley certainly excavated such areas at Ur, the most famous being the Royal Cemetery that garnered public attention similar to that of the discovery of King Tut’s tomb, but he also uncovered large areas of more common domestic use. In his 9th season, he excavated the remains of more than 50 houses connected by narrow, winding streets. Today, it is still the largest expanse of contiguous Old Babylonian housing ever uncovered.

Woolley labeled this domestic area AH, an abbreviation that stood for “Abraham’s Housing” since the best preserved floors were of the period when the Biblical Patriarch was purported to have lived at Ur (ca. early
Unearthing Ur

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ABOVE: Baked clay bricks like this one are found throughout the excavation. It says that (Ur III) King Amar Sin built the temple to Enki.

RIGHT: A cylinder seal (Lot 366) was discovered in Trench 1 during the 2015 excavation. It depicts a combat scene with nude heroes fighting a lion.
2nd millennium BCE). Woolley assigned English street names, like Church Lane and Paternoster Row, to the winding alleyways, and for publication he numbered the houses by their placement on these streets. His field notes, however, used an earlier system of excavation numbers that I spent much time deciphering.

Domestic space in the ancient world greatly interests archaeologists today and the Stony Brook team set about particularly to examine the houses and daily life of the common people. We placed two trenches within Woolley’s area AH. In this way, we could test his records of the Old Babylonian and Isin/Larsa occupation (ca. 1900 BCE) and look below his lowest level into what should be the Ur III period (ca. 2100 BCE). We also placed two trenches outside, but close to, AH. Here we could recreate Woolley’s progress from the surface, analyzing the overlying Kassite (ca. 1400 BCE) and Neo-Babylonian (ca. 1000 BCE) occupation that excavation notes said were so eroded as to be largely uninterpretable.

We began Trench 1 in No. 1 Baker’s Square, a house at the western extent of the AH excavated zone. This house, along with its neighbor No. 1B Baker’s, had been excavated as Houses XIX and XVIII.

Reexamining No. 1 Baker’s Square
At least for part of its history, No. 1 Baker’s Square was occupied by a man named Gimil-Ningizzida and his wife Ningal-lamazi. Woolley found their names on cylinder seals in the main courtyard. Our team also found a cylinder seal there, but its inscription had been erased and covered over with engravings of a scorpion and a bird. Moreover, we found it in the fill that had washed into Woolley’s old excavation, so it may not have originally belonged to this house.

In all, we cleared nearly six feet of fill before we reached the floors that Woolley had investigated and published. The depth of the post-Woolley fill was surprising, but it had been 85 years since he worked in this spot. This was why the site now resembled a lunar landscape—erosion had done its slow work, beginning to wear down the huge piles Woolley had heaped up beyond

Revisiting Ur

LEFT: Archaeologist Leonard Woolley holding aloft the plaster cast of an excavated lyre in the late 1920s. PM image 140816. RIGHT: Woolley kept notes and drawings of his excavations on cards such as this. Here, he depicts a corbel-vaulted tomb in area AH similar to the one excavated in 2015.
his trenches and carrying much of their soil into the low spots. The process covered almost everything that had once been visible and left only stubs of walls above the surface.

The dirt wash had carried with it ancient pieces Woolley had missed so, in digging the fill, I found my opportunity to reinvestigate his work closely. Though he had missed a few small finds like the cylinder seal, he had mostly skipped over fragmentary pottery, preferring to collect only complete pots. Today we collect everything for analysis, meaning we proceed much more slowly than archaeologists of the 1930s. We count, weigh, and categorize all pottery fragments in order to understand the forms, styles, and techniques of different periods as well as their usage and waste patterns.

**Woolley’s Big Digs**

Woolley hired as many as 300 local workers to do the digging and yet had only two or three archaeological supervisors. He excavated extremely large and deep areas in short periods of time. In just one month, he opened more than 7,000 square yards in area AH. In our season, we opened less than 400. Conversely, photography was difficult and time-consuming in the 1920s and 1930s. Woolley took only 2,350 photos over 12 years; with modern digital photography we can take that many photos in a single day.

Under the circumstances of his excavation Woolley’s records are quite good. In most cases, he uncovered the Old Babylonian floor that was best preserved, documented it, and did not dig deeper. He did this to get a sense of the expanse of housing in a particular period. A large exposure of interconnected houses helps to analyze neighborhoods and daily activity, but houses were differentially modified, so a snapshot at any particular time is difficult to obtain. The best preserved floor might be from later or earlier in the Old Babylonian period, so the map Woolley created covers not a single moment in time, but variations on a period of some 200 years. Phasing of floors and wall refurbishment requires a careful analysis that was not possible at the speed Woolley’s team worked.

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**Burials beneath the Floors**

Mortality rates were high in the ancient world and the Old Babylonians buried
their dead beneath the floors of their houses, typically in or near the room that served as their private chapel. Woolley uncovered many such graves, but by no means did he find all. In No. 1 Baker’s, for example, the Stony Brook team uncovered at least eleven undiscovered burials and reinvestigated the remains of two that had been previously recorded.

Ur Excavations Volume VII mentions a vaulted tomb with an arched doorway in room 5 of No. 1 Baker’s Square but gives no further details. We completely uncovered this tomb, finding evidence of Woolley’s pit dug beneath the floor to reveal the arched doorway. He must have suspected that the tomb had been robbed in antiquity since it was filled with dirt rather than blocked off with bricks. He did not uncover more than about half of the doorway and never gave the tomb an official number.

We found that the tomb had indeed been looted in antiquity. Only partial remains of a skeleton lay on the brick-paved floor and a few scattered finds dotted the fill. We learned a great deal about the tomb construction, however. It had a vaulted roof and lay beneath the remains of the floor of the chapel room. Several of its bricks bore inscriptions from the Ur III period, showing they had been reused from earlier public buildings. A narrow bitumen-lined channel ran alongside the grave, perhaps for pouring liquid offerings, and we found many offering jars and bowls nearby.

**Woolley’s Burial Investigations**

Burials beneath house floors were common at Ur, especially in the Old Babylonian period. At first Woolley found it hard to believe that people would live so near the dead: he thought the dead were buried only in abandoned houses. As he found more and more graves, however, he came to accept that it had been standard practice.

In his notes, Woolley recorded 172 Isin/Larsa and Old Babylonian burials in area AH alone. He deemed only 94 of them complete enough to number and analyze in his main publication. His notes on the graves are, thus, particularly important because they provide more complete burial pattern analysis. We can understand the total number of graves in a house only by researching every occurrence, even those that had been looted or destroyed.

Woolley did not often record age and sex statistics—he was not a specialist who could tell this from the bones—but he typically recorded whether the remains
Numerous under-floor burials were excavated during the 2015 season.

Archaeologists and local Iraqi workmen excavate a domestic structure at Ur. Here we see the skeletal remains of an infant buried just beneath the floor of a house.

Present were those of an infant, child, or adult. Infant mortality was high and many of the graves beneath floors are those of the very young. In one house in area EM, Woolley discovered more than 30 infant burials, and the modern excavation of No. 1 Baker’s Square revealed nine under the floor of one room.

Woolley sent a few of the better preserved bones to the Royal College of Surgeons in London for analysis, but this amounted to samples of only about 30 skeletons from the entire expedition, during which time he had uncovered well over 2,000 graves. Techniques of forensic analysis have increased greatly in the past 80 years and we now hope to learn much more about the people who lived at Ur through study of the physical remains found in the modern excavations.

**Searching for Other Time Periods**

We had hoped to arrive at houses of the Ur III period beneath the Old Babylonian floors, but even though we did find some scattered artifacts of that time period, we did not find any walls that definitively dated to it. There were walls of unbaked brick beneath the baked brick walls, but these appear to have been from the Isin/Larsa period, slightly later than the Ur III period.

In other trenches, we again refined some of Woolley’s work and clarified his process. Our Trench 2 was situated in part of AH Niche Lane, an area where Woolley had found many indications of merchants. We, too, found balance pan weights and economic texts showing potential mercantile activity. We established Trench 3 outside of AH in an area Woolley had not excavated. Here we found an Old Babylonian house beneath badly eroded later structures, certainly a continuation of the overall domestic area.

Trench 4 was placed in Woolley’s Area NH. The abbreviation stood for Neo-Babylonian Housing because
Ancient Parental Protection

*Above:* Terracotta mother and child figurine excavated by Leonard Woolley, dated ca. 1000–500 BCE. Hundreds of this type of figurine have been found in houses. They were thought to protect women and children from harm. PM object 323-40-29.

Recent Finds from Ur

*Above:* Found during the 2015 excavation of Ur, a Humbaba mask (Ur Lot 1490) and a Neo-Babylonian model of a horse and rider (Ur Lot 1051). Humbaba masks, depicting demonic figures, were hung in homes to ward off evil.
the best-preserved outlines of late houses were located here. Woolley mapped the extent of seven late houses but dug down only about two feet to reveal their foundations. These houses were made entirely of unbaked brick and our attempts to use magnetometry to reveal more of the outlines without digging were only partially successful. Our trench in area NH, however, revealed a portion of the heavily denuded remains of the Neo-Babylonian and Persian occupation Woolley had seen. He felt these structures had been erected on a space intentionally cleared of other remains but did not excavate deeply enough to test that hypothesis. We dug down about ten feet, finding broken and jumbled trash material from Neo-Babylonian and Kassite times. A building made of reused bricks, dating to the later Old Babylonian or even Kassite period, lay covered by this trash, and beneath it we began to uncover solid baked brick walls at the end of our season.

It appears that, instead of being an abandoned or cleared space, area NH was lower ground in Old Babylonian times and that substantial houses do exist here, at a much lower elevation than those of area AH. They were then covered over by dumping, followed by expanded rebuilding on top of the dump in the Neo-Babylonian and Persian periods. Only further research and excavation can help to settle the question.

Excavation is set to continue at Ur over the next few years. Our plans include further investigation of domestic contexts, particularly Ur III if we can find them. We look forward to learning more about daily life at this ancient site that was first extensively excavated almost 100 years ago.

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Digitizing Ur: www.ur-online.org

The 1922 joint Penn Museum and British Museum mission to Ur was the first excavation authorized by the modern nation of Iraq. Woolley’s initial permit was signed by the Minister of Public Works before the Antiquities Department was officially created. Artifacts and excavation records, however, were distributed to several museums, making them difficult to access for study.

Artifacts from Woolley’s excavations were divided between Iraq and the excavating institutions. Fifty percent went to Baghdad, while the remaining half was split between London and Philadelphia. Letters and reports were sent to the various museums and field photographs were printed in multiples, but the original notes and photo negatives were stored exclusively in the British Museum. Combined, the records virtually reconstruct Woolley’s excavation and serve as a fascinating window onto the conduct of archaeology in the era of “big digs.”

With lead support from the Leon Levy Foundation, the two museums again joined forces from 2012–2015 to create an online open access resource uniting the information on the old excavations. The online resource uses metadata tags to associate photographs and documents with objects, people, locations, and publications. Researchers can, thus, gather related material across many categories for deeper analysis. We believe this digital resource will make research on and understanding of the ancient city quicker and easier than it has ever been.

Try your hand at researching the records, artifacts, and contexts. For example, browse www.ur-online.org by object type—to investigate dress and personal ornament, armor and weapons, weights and measures, or any other category of interest.