The Oriental Institute’s 19th Season at Nippur was a remarkable one, resulting in the identification of a major temple and the excavation of an important tomb of the Akkadian period (c. 2300 B.C.). The current program of investigations at Nippur, in south central Iraq, is intended to elucidate the entire occupational history of the city, to gain insights into its internal organization, to understand the relationship of the sacred to the secular, and to place this most sacred of Mesopotamian cities in its geographical, ecological, historical, and cultural context. To carry out these aims, we have, since 1972, incorporated natural science studies and computer-aided recording and surveying into the traditional excavation and recording system. In the 11th Season, 1972, having taken over as director of the Nippur Expedition, I made a decision to turn away from the ziggurat area, which was the heart of religious life not only of the city but of early Mesopotamian civilization in general. I did so in order to try to discover more about the...
governmental, commercial, industrial, and residential aspects of the city. Directly across the now-dry bed of the ancient Euphrates that divides the ziggurat area from the much larger western mound of the site, was a very large pit. More than 100 by 150 meters in size, this pit was created by the pioneering expedition of The University of Pennsylvania, which worked there in the 1890s. It was especially inviting for us because all the occupational debris of the latest periods at the site had been removed. Here, in what we named Area WA, we had the chance of reaching ancient Babylonian and Sumerian material much more easily than in most other places on the site. Pennsylvania had reported finding a group of Kassite period administrative tablets (c. 1250 B.C.) in a tunnel in this area. It was also in this trench that the expedition found the archive of the Murashu family, powerful merchant-bankers of the Achaemenid period (c. 500 B.C.).

When we began working in WA, very little was known of the Kassite period in archaeological terms. Most of what we knew of the history of this dynasty had come from tablets found by Pennsylvania. If we could reach Kassite levels, we would be assured of significant results. We intended, however, to go below the Kassite remains and excavate as deeply as possible. Excavations at Nippur in the 1950s had provided two vital sequences of pottery, by which archaeologists at all Mesopotamian sites have continued to date their finds. We knew that there were problems with those sequences and intended to set up a new sequence to complement and correct the other two.

Within two weeks of opening WA in the 11th Season, we were aware that we were excavating not houses or a government building, but another temple. This was a small, three-room shrine datable to the Achaemenid period (c. 500 B.C.). It had been built against the wall of a much larger, older building, decorated with niches and buttresses, and thus identifiable as a temple. Although we could examine only a few meters of the outer wall of the larger building, from sherds and other artifacts found on the ground outside we could say that it had been built in the Neo-Babylonian period (c. 575 B.C.), and lasted into the Achaemenid period. We were prevented from clearing the larger building by a sand dune that covered it, rising to more than seven meters in height.

Having exposed and recorded the small Achaemenid shrine, we dug below it and were
Bronze figurine of a dog from the Gula Temple.

able to reveal the outer wall of the large niched-and-buttressed temple and could determine that there were at least two earlier buildings below it. We removed some of the sand dune and sank small pits in two rooms of the Neo-Babylonian version. These pits proved that there were Neo-Assyrian (c. 630 B.C.), Kassite (c. 1250 B.C.), Old Babylonian (c. 1800 B.C.), and Isin-Larsa (c. 2000) temples below.

In the 12th and 13th Seasons, 1973 and 1975, we spent weeks removing some of the sand dune above the temples in WA. This allowed us to expose about six rooms of the Neo-Babylonian temple and to dig down in these rooms to investigate the earlier versions below. We knew that we had found a major temple, with many objects left in place, but were unable to examine more than a fraction of it, even of its upper level, because of the sand.

We abandoned the effort in WA until this year, the 19th Season, when work became feasible once more. During the intervening years, we have been witnessing a tremendous ecological change in the Nippur area. The dune belt that stretched from Nippur toward the north, east, and south for dozens of miles has been shifting farther east and has been diminishing. New irrigation canals are being cut, allowing new cultivation to be started in the areas abandoned by the dunes. The new cultivation prevents the removal of topsoil by the wind, reducing the supply of material to make and replenish the dunes. And as the dunes are themselves reduced by wind, they are becoming smaller and the dune belt less dense. You can drive through the dune belt quite easily now, even with two-wheel drive vehicles, because the density is so reduced. The western edge of the dune belt that used to lie on Nippur is now more than a kilometer to the east of the site. I feel safe in predicting that there will be no desert in ten years, just cultivation as far as the eye can see. The desert may return, however, if the application of irrigation water is not carefully regulated. Over-irrigation can create a salt problem, and large areas of farmland can be turned back to dunes in a couple of decades. This process has been repeated many times in the past and can certainly happen again.

The 19th Season began on January 4 with the arrival of part of the expedition in Baghdad. The team moved down to Nippur on January 12 and preparation of the digging area began immediately. It was our intention, over the course of several years, to excavate the stack of temples in WA one by one, exposing the uppermost one entirely, recording it, then demolishing it and going below and repeating the process. We also hoped to expose some of the houses and other buildings that presumably lie around the temple. To reach the earliest temple will take years of work. If
we can excavate according to our plan, and if we are lucky enough to find inscribed documents (cuneiform texts and inscribed stone objects) along with the other artifacts, we should know more about the functioning of a Mesopotamian temple than has been possible before.

To prepare an area large enough to expose the entire temple and some of its surroundings, we needed to undertake a sizable preliminary clearance in WA. Although most of the sand has shifted from the mound, there was still one very large dune running across part of Area WA. There were also two large debris dumps left by Pennsylvania, and one small one left by us in the eleventh season, directly above where we wanted to work. I hired a front-end-loader and two trucks to move the dune and dumps. After ten days, we had moved parts of the dumps and a large part of the dune, but there was still a lot left. By then we had more than enough room to work for the season, even though we would not be able to expose the entire plan of even the topmost temple. It was clear that we could spend half the season just moving dunes and dumps, so I decided to stop the machines and get to work with small picks and trowels.

For the first time since 1975, we assembled the railroad and used it effectively to remove dirt. We had stopped using it because, in the mid-1970s, there was much development work in Iraq and we could hire only boys, who could not handle the hand-pushed cars safely. With the end of the Iran-Iraq War, we had plenty of men once again. With the railroad, we could remove the debris quickly as we began to re-expose the Neo-Babylonian temple.

After 17 years of lying under sand, the mudbrick walls of the Neo-Babylonian temple were only slightly eroded. We uncovered all that we had recorded in earlier seasons, looking forward to seeing the ends of rooms that we had left undug and new rooms adjacent to them. What we found, just twenty centimeters (about 8 inches) beyond our earlier clearance, was not more of the walls and rooms, but an abrupt cut, caused by the digging of foundations for a very large Parthian building (c. 100 A.D.) that had rested above the temple. The Parthian building, called "The Villa with a Court of Columns" by Pennsylvania, had foundations five meters deep.

Jewelry and a lapis seal from Burial 14, Skeleton 2.
In our previous work, the foundation seemed to go no deeper than a half meter above remnants of the Neo-Babylonian building. Now we see that toward the center of the Villa, the foundation was dug about another meter deeper, slicing away our Neo-Babylonian temple on the southwest. On the southeast, we could see that ancient erosion had destroyed this level of the building. Clearly, our Neo-Babylonian level was not to be examined in any more detail.

We decided to go to the next lower building, the temple of the Neo-Assyrian occupation of Nippur (7th Century B.C.). To do this, we had to remove a meter of intervening ancient debris. When the Neo-Babylonian builders decided to construct a new version of the temple, the 7th Century building was still standing. They took off the clay roof of the old building, removed the reed mats and wooden roof beams for reuse, then knocked down the mudbrick walls, leaving only stubs intact. The debris from the Neo-Assyrian roof and walls formed a meter-thick platform on which the Neo-Babylonian temple was constructed. The railroad was essential to remove this debris efficiently.

The Neo-Assyrian building was a renovation of a Kassite temple that had been built and abandoned in the 13th Century. We know from our previous work in WA and other parts of the site that between about 1225 B.C. and 800 B.C., much or all of Nippur was abandoned. Dunes covered the site. When the city was repopulated, new temples were built on the ruins of old ones. This can only mean that a kind of archaeology was already being practiced in ancient times. After hundreds of years, unbaked mudbrick buildings do not normally leave any traces. There are exceptions. I have walked through the rooms of mudbrick palaces in Afghanistan that were abandoned five hundred years ago. If there was no water near Nippur during most of the period of abandonment, the major buildings might still have been visible, at least as vague building plans. The 7th Century builders must have investigated the most prominent of the ruins, digging for things like stone door-sockets and foundation deposits that carried inscriptions indicating the deity to whom the temples were dedicated. In the case of the temple in WA, we have evidence that the stubs of walls of the 13th Century Kassite temple were used as the foundations for the 7th Century temple, following the same plan as in the earlier building. On the outside of the Kassite building, a new facade was built of mudbricks, almost doubling the thickness of the walls. Inside, however, the faces of the Kassite walls were cut back in order to lay in a baked-brick facade. This facade may have been merely at the base of the new walls, not all the way to the roof, to provide protection against rain and damp in the ground.
In the Kassite level we found the first hints of the identification of the deity who was worshipped in these rooms. Small baked-clay dog figurines had been sealed deliberately behind the mudplaster on some walls. There was also, in a bit of Old Babylonian (c. 1800 B.C.) debris we encountered, a bronze figurine of a dog. We found a very similar bronze dog in the same level during the 13th Season, along with a mold-made figurine of a dog lying on its side and suckling puppies. In debris on floors of the Kassite temple we found fragments of baked clay human figurines, one holding his throat, one with his hands on his chin and stomach, another with a hand on his head. The dogs began to make us think that we were dealing with a temple to Gula, the goddess of healing, whose symbol is a dog. The human figurines we interpret as showing distress, indicating where they were ailing. The final piece of proof came in the form of a fragmentary lapis lazuli disc, with an inscription "a-na 4Gu-la "to Gula."

Even without this inscription, the figurines would have been enough for an identification. In 1947, Sayyid Muhammad Ali Mustafa, working for the Department of Antiquities, excavated a site near Aqar Quf, the Kassite capital city west of Baghdad. Here he found hundreds of figurines very similar to ours, some with inscriptions mentioning Gula.

In future seasons, as we excavate this sequence of temples, we expect to find tablets related to the goddess' role in healing. We hope that we will be able to determine more clearly the relationship of this temple to the two kinds of medical practitioners in Mesopotamia. There was a herbal healer, the asu, who diagnosed illness, concocted remedies, instructed the patient on how to use them, and sometimes predicted the outcome. This person did not include ritual in his practice. The ashipu, in contrast, was a magician or exorcist, whose role it was to drive out demons which had made people ill. He did perform rituals and sometimes also used herbs. Dr. Robert D. Biggs has indicated that the magician seems to have dealt with mental illnesses.

It is not certain that sick people went to the Gula Temple, but the presence of the figurines argues that they did. Did they go after they saw the doctor, before, at the same time? We hope to find out. It is clear that Gula, who first appeared at about 2000 B.C., had a special role in medicine, as did earlier Sumerian goddesses such as Bau and Nintinugga. We expect that our sequence of temples at WA will have a number of levels earlier than 2000 B.C., and assume that they will be dedicated to one of the earlier goddesses of healing, giving over to Gula in the Ur III or Isin-Larsa period.

Thus far, we have been excavating in the more utilitarian parts of the WA temples, where food was prepared and metal objects fabricated. When we return for the next season, we once again will hire machines to complete the clearance of the sand and three other dumps that rest on the remainder of the temple. The area that we clear will be larger than the temple itself. We intend to excavate not only the temple in each level, but some of the houses around it. We have already gotten a glimpse of the houses awaiting us east of the temples. In 1972, we sank a deep pit in the southern end of
Area WF, Burial 14, Skeleton 2, a richly-equipped burial of the mid-Akkadian Period (ca. 2300 B.C.).

WA, hoping to gain insight into the occupations that awaited us far below. In this pit, called WA50c, we first exposed a stratum of garbage that we could date to the Seleucid period (c. 200 B.C.). Among the finds in the garbage were three cuneiform tablets with medical texts dealing with gynecological problems. Although later than the uppermost temple, these tablets seem to indicate a continued role in medicine for the WA area. Below the garbage layer was a sequence of house occupations. The lowest level we reached could be dated by inscriptions and pottery to the Akkadian Period (c. 2300 B.C.), and we thought that we were only a few centimeters from the Early Dynastic level below.

During the 18th Season, 1989, we excavated an even larger, deeper pit alongside WA50c. This operation, WF, was intended to investigate the Akkadian level more fully, in order to gain data on the transition from the Early Dynastic Period to the Akkadian, an important focus of research. We reached the Akkadian level and discovered that we had been nowhere near the Early Dynastic level in WA50c. The Akkadian level is a substantial one, consisting of occupation floors more than two and a half meters in total thickness. After digging a pit 10 meters deep, we had still not gotten into the Early Dynastic levels. The finds in the Akkadian level that season were extraordinarily important, including the world’s earliest datable man-made glass (two beads on a floor that could be dated by Akkadian tablets), and a very rich burial of an official who was identified on his two cylinder seals as “Lugal-DUR the scribe.”

This season, we continued work in WF by expanding the top of the pit from 7 meters square to 10 meters, which would allow us to excavate even deeper and prevent cave-ins. We were obliged to remove about two meters of sand that had blown into the pit during the year. During this season, we excavated only two meters lower in WF because we encountered a com-
plex, multi-occupant tomb that required a great deal of time and care to excavate. We did, however, reach Early Dynastic levels and have extremely good evidence that will allow the reconstruction of the transition from Early Dynastic to Akkadian.

Directly below the place where we had found the grave of Lugal-DUR last year, we became aware of a tomb that had been created by cutting a chamber out of accumulated debris. At one side of the tomb, there was a shaft going even deeper. Off this shaft were at least four small tunnel-like chambers, each with a skeleton and a few bowls, sealed with mudbricks. In the main chamber were three human skeletons. One had with it a "goddess-handled jar," that is, a jar with a handle in the form of a female wearing only a necklace and headband. A second skeleton had a table-like pottery item that we traditionally call a "fruit stand." The goddess-handled jar and the fruit stand are types that until recently were thought to have marked only the Early Dynastic Period. We suggested a few years ago that these and a few other pottery types continued into the Akkadian period. Now we can prove that they did, because the principal skeleton, a couple of feet away in the chamber, had a wealth of pottery and other objects that must be dated to the early part of the Akkadian period.

The principal skeleton had on its shoulder a copper pin and a lapis lazuli cylinder seal (of official style), on its forehead a gold fillet, and also was furnished with gold earrings and an elaborate necklace. The necklace included beads of lapis, gold, carnelian, and agate. The dominant features of the necklace were two large circular agate discs mounted in gold, with silver attachments. The agate discs were cut so that they appear to be eyes, with brown pupils surrounded by white. At the back of the neck we found a large V-shaped bead of banded agate (brown and white), with gold fittings on the ends. This was a counterweight, intended to balance the necklace and keep it in place. On the wrists of the skeleton were silver bracelets, one on each arm. In each armpit was a small copper bowl.

Next to the principal skeleton were copper vessels and another necklace of gold, lapis lazuli, and carnelian. Nearby was an extremely important find—the remains of a wooden box with a lid made of tiny pieces of bone inlay. Catherine Sease, the Field Museum conservator who joined us for the last month of the season, was able to reconstruct the pattern on the lid and suggest the position of two tab handles at the ends of the ovoid box. A floral decoration, still retaining some colored paste (red and yellow), could not be placed exactly, but it was probably central to the design on the box itself, not the lid. The wooden box was preserved only in minute fragments.

At the head and feet of the skeleton were several copper and pottery vessels. One pottery jar had fallen over and a white substance had run out onto and under objects and the skeleton. We think the substance is yoghurt. It is being analyzed at the Smithsonian Institution and we should know for certain fairly soon. Under the skeleton were the remains of a complete onager, a type of equid, and next to it were three sheep, two adults without their heads and a complete lamb.
Due to very poor preservation, we could not consolidate many of the human bones for study, but, since the burial lacked weapons, we think this skeleton was female. Ordinarily, the official-style cylinder seal would argue for its owner’s being a male, but the inscription on the stone had been erased in antiquity, probably causing a crack that mars the seal. I would suggest that this cylinder had been the official seal of the husband of this woman. At some point, the seal was going to be re-carved and it cracked. The woman then received it to wear as a piece of jewelry. As to her husband, I think we found him last season. Lugal-DUR, clearly a very important official of some kind with two extraordinary cylinder seals, was in effect the last person buried in the tomb. He was buried by cutting into the tomb after it was filled. We are assuming that the persons buried in the tomb were related, probably one family.

The richness of finds in the Akkadian level, both on the house floors and in the burials of WF and WA50c, allow us a glimpse of the exciting seasons that are to come as we excavate the Temple of Gula and the surrounding area. The Akkadian level draws our attention not only because of the sample of objects thus far recovered, but because the period is so little known through excavation. The excellence of the artwork of the Akkadian period is commonly recognized as the peak of Mesopotamian accomplishment. The Akkadian empire was marked by masterpieces of stone and copper statues, relief sculptures, cylinder seals, and even naturalistic baked-clay human figurines. But very little excavation has been done on sites and levels of this period. The reward in objects and information will justify the time, expense, and effort to reach the Akkadian occupation deep down in Area WA.

Our work this season was made more productive than usual by the cooperation of Dr. Moayyad Said Damirchi, the Director of Antiquities. We were once again lucky enough to have Sayyid Abbas Fadhil al-Obaydi as our representative, along with Sayyid Ahmad Hamud Abdullah. Sayyid Khalaf Bedawi was once again the key to effective work, as our foreman. Dr. James A. Armstrong and Beverly Armstrong joined us for the season. Jim oversaw the excavating of WA, while Beverly managed the house, assisted in registration of objects, and worked with accounts. John and Peggy Sanders were with us once again doing the computer-aided surveying, drafting, and recording. Augusta McMahon was responsible for Area
WF, while Joel Sweek and Jennifer Artz excavated Area WA. Dr. Miguel Civil was epigrapher. Margaret Schroeder was tablet conservator. Catherine Sease acted as conservator and David Reese was responsible for bones and shells. The photography was done by John Hudson. Two Friends of Nippur, Marnie Akins and Alice R. Hayes joined us for part of the season, giving valuable help in pot mending and cataloguing of human bones. A team of Smithsonian conservation researchers, consisting of Dr. Pamela Vandiver, Dr. Martha Goodway, Blythe McCarthy, and Amy Vandiver, continued their studies of glaze deterioration begun last season.

Once again, the generosity of Friends of Nippur made our season much more effective than it would have been otherwise. Their continued interest in our work is greatly appreciated. It is hoped that conditions will make it possible for more of them to visit us in future.

Inlaid bone box lid from Burial 14, Skeleton 2.