

## EXCAVATING TEPE GAWRA

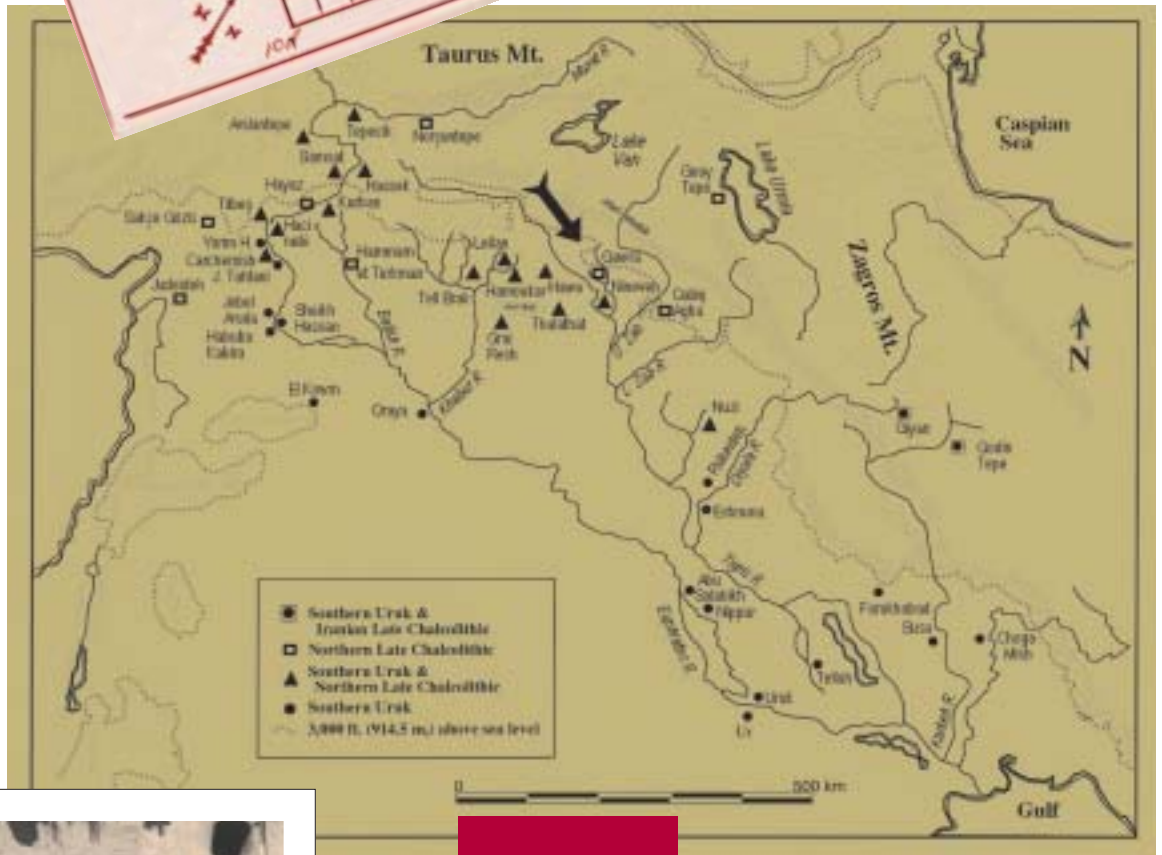
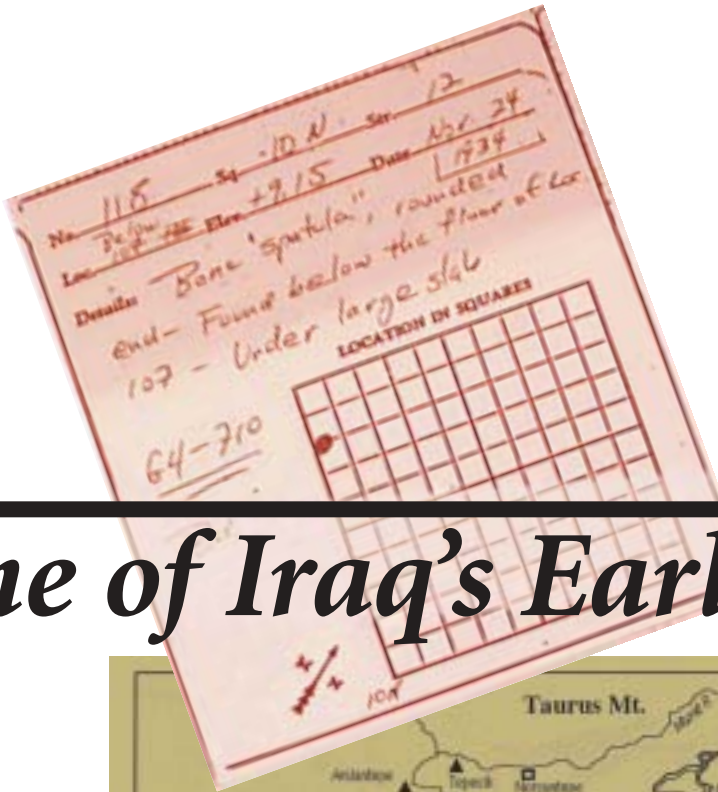
IN THE ARCHIVES OF THE

UNIVERSITY OF PENNSYLVANIA

MUSEUM

By Brian Peasnall and Mitchell S. Rothman

# One of Iraq's Earliest Towns



TOP: Field "chit"

MIDDLE: Greater Mesopotamia in the Late 5th and 4th millennium B.C.

BOTTOM: Gawra 1935 field crew.

From left, Cyrus Gordon, H.A. Schubart, Jr., E.B. Bache, Charles Bache, and E.B. Müller, an architect.



When does excavation not require the diggers to get dirty? Such a riddle may belie most people's image of archaeology. In their imaginations, archaeology is for adventurers, like the fictional Indiana Jones who traveled to exotic lands to retrieve ancient relics. With huge crews, they dig ancient mounds to bring back the most beautiful artifacts to fill their museums' cases. Here, however, we describe an unusually clean kind of excavation, one that takes materials from archaeology's past and uses it to answer the most modern and scientific kinds of research questions.

In the infancy of archaeology, excavators were often unaware of the intricacies of site stratigraphy. They were frequently negligent in recording where artifacts were found. As a result, museum storerooms and basements house thousands of largely ignored finds, and archives contain many unread fieldnotes. Despite the technical problems with these early excavations, they hold potential treasures, not in gold, but in information. Many of these sites were excavated in areas where we can no longer dig, and many represent large horizontal exposures of town plans, the cost of which few modern excavators can afford.

### TEPE GAWRA

Tepe Gawra in northern Iraq is one such site, which, despite the date of its excavation (1932–1938), has proven to be a gem in the rough. Aside from the richness of its artifacts, the quality of dig records “excavated” from the Archives of the University of Pennsylvania Museum proved to be a wonderful bonus. Those records served as the basis of a re-analysis of the site and provided a powerful research tool for asking new questions.

Tepe Gawra is located about 18 miles northeast of Mosul in the piedmont zone adjoining the Assyrian Plains in northeastern Iraq. It lies between the Tigris River and the first foothills of the Zagros Mountains, by the entrance to one of the few historically documented passes onto the Iranian plateau through the Jebel Maqlub. Gawra was certainly a transport link in trade for lapis lazuli and for other exotic goods from the Zagros highlands and from the Upper Tigris basin into Mesopotamia proper. Sites like it supplied the heartland of Sumerian and Babylonian cities with exotic goods in antiquity. They also served as centers of small societies at the edges of the hilly north.

Ephraim Avigdor Speiser, a young philologist originally from Eastern Europe, found the site during a survey on the Assyrian steppes and hills. After he finished his Ph.D. in 1924, a consortium of institutions, including the University of Pennsylvania, the American Schools of Oriental Research, and Dropsie College, sent him to Iraq to find ancient sites for excavation. In 1929 Speiser wrote, “I had practically completed my first season in Iraq before I came upon Tepe Gawra.” Gawra was intriguing to him because, as he wrote, “The mound in question is the oldest site in Northern Iraq that has yet been dug.”

The excavators of Gawra identified twenty-one stratified villages and towns, levels I to XX from top to bottom; the twenty-first and lowest level simply referred to as either Area A or the Northeast Base. These early settlements dated primarily from the sixth millennium to the early fourth millennium B.C., a

range of time almost unknown during the 1930s at other sites. The earliest level was never reached due to the start of the 1939 War in Europe.



TOP: Tepe Gawra



RIGHT: Ephraim Alvagor Speiser.

There are a number of chronological nomenclatures for these periods. Of special interest here is the so-called Uruk period dated from about 4200 to 3000 B.C. The definition of the Uruk period is based on southern Iraqi sites. Contemporaneous northern and eastern Mesopotamian sites were traditionally assigned to the Late Chalcolithic period. In an attempt to correlate the two chronologies scholars at an advanced seminar in Santa Fe developed a new system, dividing the period into five sub-periods from LC1 beginning at 4400 B.C. to LC5 ending at 3000 B.C. The results can be found in *Uruk Mesopotamia and its Neighbors*.

Of the twenty-one levels — a level is one stratum of generally contemporaneous buildings and open spaces — the first ten from the Akkadian to the late Early Uruk or late LC2 period were completely exposed. The rest varied from two-thirds to under a half of the strata.

### WHAT DO WE WISH TO KNOW?

When Speiser, in 1935, and a student of his, Arthur Tobler, in 1950, published two volumes on the excavation of the Tepe Gawra, they were primarily interested in culture history. Culture history was the dominant archaeological school or paradigm until the 1960s. Its focus was on constructing sequences of artifact styles, religious buildings, technologies, and other cultural

traits, and determining the spread of peoples and ideas largely through migration and diffusion. The processual school that dominates archaeology today looks at societies as a process of evolution from past cultures. In order to explain change or evolution, this school focuses on human behavior and on social, political, economic, and religious institutions.

As the culture historical school of archaeology faded, the Gawra volumes became classics of a past era, which were much less important than those of more recently excavated sites. However, Gawra has again become a focus of attention because of new questions raised about the origin of the earliest cities and states on the southern alluvial plains of Mesopotamia and resulting interactions between southern Mesopotamia and its northern and eastern neighbors. The founding of state societies meant rulers, bureaucrats, and complex economies with specialized production.

The two worlds, southern Uruk, and northern and eastern Late Chalcolithic, were quite distinct stylistically. They also appeared distinct culturally. The south, by the mid-fourth millennium, was organized as a set of cities with its dependent towns and villages near the main channels of the Tigris and Euphrates rivers. These are the city-states described in Robert McCormick Adams' *Heartland of Cities*. The north and east were typified by smaller, more spread-out settlements with less well-developed economic and political institutions.

Beginning in the mid-1980s, Guillermo Algaze, a student from the University of Chicago, noticed an interesting pattern in pottery style over the entire Greater Mesopotamian region. As the fourth millennium B.C. progressed, more and more pottery of distinctly southern origin appeared in a particular set of northern and eastern sites. By the Late Uruk period (LC5), the last century and a half of the fourth millennium, these pottery distributions appeared to form a dendritic pattern, with key sites in the Assyrian steppes and then many branching lines through more and more sites into the piedmont and hills. The first choke points on the system were towns such as Habuba Kabira and Jebel Aruda on the Euphrates, with entirely southern artifacts and presumably southern migrants.

Algaze put together this artifact style distribution based on the fact that the south lacked raw materials such as metals, precious and semi-precious stones, tool-making obsidian, and logs for large-scale construction of temples and palaces. The north and east had these raw materials or were on routes to obtain them. In his highly acclaimed work, *The Uruk World System*, he hypothesized that the rulers of the first states and first cities had organized a formal, international economic network to obtain desired goods from the periphery through a kind of economic colonial system. This system worked, Algaze theorized, because the south was so much more highly developed economically

and politically that it could dominate less developed northern and eastern societies.

Initially, scholars believed that Levels XII to VIII at Gawra spanned the entire Uruk or LC1–5 period. As a small center on the Tigris route between north and south, and as one of few northern sites with wide horizontal exposures of its town plans, Gawra would be a natural site to test Algaze's hypothesis. It would then be necessary to determine what Gawra's economic, social, and political institutions were during the periods contemporary with the southern Early, Middle, and Late Uruk periods.

### REANALYZING TEPE GAWRA AND FINDING ANSWERS

Because it was dug more than 50 years ago, initially under Speiser's direction, using techniques that no current archaeologist would sanction, our question became how well the data from Tepe Gawra could be trusted and utilized to assess its late fifth to fourth millennium B.C. levels. Since no one could excavate in the Kurdish area of northern Iraq, the only way to investigate the site was to go back into the archives and collections at the University of Pennsylvania Museum.

This effort proved more successful than any of us could have hoped. The key to re-excavating Gawra proved to be chits, initially discovered in a sarcophagus in the University of Pennsylvania Museum's subbasement by graduate student Sam Mild. These chits were small, preprinted forms with a 10 by 10 grid and spaces for recording object number, type, field number, final storage location, and other comments. Speiser was not a trained archaeologist, but a philologist. However, after the first two seasons, Speiser brought in Charles Bache to direct excavation at Tepe Gawra. Bache, a descendant of Benjamin Franklin whom the *Pennsylvania Gazette* describes as having two hobbies, tennis and archaeology, was well trained in the techniques of a developing American anthropological archaeology school. He understood stratigraphy and the imperative to make detailed notes of finds. Using chits, Bache's crew recorded the precise three-dimensional position of over 5,000 artifacts recovered in the third, fourth, fifth, and seventh seasons. They also often described the nature of the fill, so it was possible to determine the process by which artifacts found their way into a particular place. Field locus sheets and grave sheets left another set of invaluable data.

The chits proved very important because modern anthropological and historical archaeologists interpret the past through contexts. We cannot assume that people in the past conducted their lives as we do today. Which artifacts occur together in what kind of space, open or in a building, is the key to differentiating between, for example, a rich or poor person's house, a



church, factory, or government building. If you consider what differentiates an industrial city from an agricultural village, it is more than their respective sizes. An industrial city will have not only factories, but also houses, that differentiate workers from owners, products made, and items consumed. The sum of the activities or functions (for example, craft production, religious ritual, food preparation, sleeping areas, funerary practice, entertainment, government administration) gives us a clearer picture of what people did and how they organized their lives. In a theoretical sense, functions are a key to interpreting how ancient peoples constructed their institutions and saw their world.

For example, how would we know how a government worked in the prehistoric past? Without written records, which appeared at the end of the Uruk period, leaders used seals and sealings. These clay locks were placed on sacks, boxes, jars, and storeroom doors. They were stamped with a seal of authority

and were only to be opened by people authorized to do so. Those who controlled raw materials and foodstuffs had access to large work gangs, armies, craft producers, and the symbols of authority and status. By correlating the presence of

seals or sealings in the functional contexts, it was possible to determine what activities and goods leaders controlled.

To investigate these increasingly complex institutional arrangements, we first needed to place each level of the developing site in time and space. We had to reconstruct the activity areas and functions of the site for each period in succession. Again, Gawra offers us the possibility to do this as so much of each level was exposed.

However, Speiser, and even Bache, perceived the strata of the mound to be in a layer cake form. The problem with this view is that it ignores the fact that settlements do not spring up fully formed. Occasionally, structures are modified or new structures are built while others are in the process of decay. Although archaeological levels are treated as a single point in time, this synchrony is only relative to the other levels that make up the whole site.

Dating levels XII to VIII proved a problem. As we noted above, most researchers believed that the so-called expansion of southern (Uruk) cultures into their periphery happened at the very end of the Uruk period (see table 1). Gawra VIII was believed to be from that same period. Without absolute (C14)

**Table 1. Chronological Framework**

B.C.	SAR	TEPE GAWRA	SOUTHERN MESOPOTAMIA Old Terms
2000	Middle Bronze	IV-VI	Old Babylonian
3,000	Early Bronze	VII	Akkadian
	LC5		Early Dynastic
3,400	LC 4	hiatus	Late Uruk
3,600			Late Middle Uruk
3800	LC 3	VIII	Early Middle Uruk
	late	IX-X	
4000	LC 2	XI/XA	Early Uruk
4200	early	XIA/B	
4500	LC 1	XII	Ubaid transitional
	Ubaid	XIII- XVI	Ubaid
6700	Halaf	XVII-XX	Halaf



Tepe Gawra Level XIAB 5-1379

Clay sealing from Level XIAB.

dates, we are left with the older relative dates, which compare the style, mostly of pottery, with other sites on the assumption that similarity or identity of style means contemporaneity. Gawra has a small but distinct set of forms. Luckily, other contemporaneous sites with C14 dates do exist. A recent re-working of the Greater Mesopotamian region shows that Gawra VIII ended at about 3750 B.C., not 3100; that is, at the beginning and not the end of the period of contact and expansion. This was the LC3 or Middle Uruk period. That period of contact was not 150 years long, but closer to 600 years, leading to new interpretations of regional change and development, as those explored in *Uruk Mesopotamia and its Neighbors*.

First we reviewed the architect's field drawings, the chits, and archival photographs to redraw the town plans and place the graves. In this effort, we found many mistakes in Speiser's and Tobler's original publications (Bache died before he could prepare the second volume). We next put artifacts back into their



TOP: The White Room Building.

MIDDLE: Artifact distribution of the White Room Building, Level XII.

BOTTOM: Variation in pottery types from Tepe Gawra XII-VIII.



original contexts within buildings and open spaces. For example, one of the more important rooms in level XII is the so-called White Room building. Its size and position near the main entryway to the mound made it appear important. By putting artifacts back into context, we were able to determine that it was a domicile, but one of a very important person, perhaps a member of a chiefly lineage.

In this process, we often had to challenge the original excavators' *a priori* assumptions concerning the nature of various features. A good example comes from Tobler's discussion of the burials. He interpreted many of them as sacrificial in nature, solely on the basis of their proximity to structures thought to have had a religious function. Two interpretive problems were thereby created. Stratigraphic attribution of burials based on this assumption often overruled sound principles of superposition, and new analyses showed that many buildings had functions other than those Tobler assigned them.

As part of the larger attempt to reveal the evolutionary trends at Tepe Gawra from the fifth millennium to the very beginning of the Uruk Expansion (LC3), Brian Peasnell in his appendix to *Tepe Gawra* demonstrated how mortuary behavior helps archaeologists understand the past. Archaeologists tend to emphasize economics and politics, because the artifacts we recover are mostly relevant to those topics. From graves, however, we can get a glimpse of how the ancients viewed their communities and their concept of the divine. Cemeteries are really communities of the dead, where differences in wealth, religion, ethnicity, and the like are symbolized and preserved. For Gawra, based on architecture, town plans, and activity areas, we reconstructed a small center in the piedmont, serving farming villages and pastoral nomads. Contrary to Algaze's original hypothesis, economic specialization and political elaboration (complexity) were developing before intensified interaction with the south. This was not a backward periphery. However, the question remained, did the people at the time symbolize their changing social structure in graves that we archaeologists saw in economic and political artifacts?

People who were buried at Tepe Gawra were either placed in built tombs made of *libn* or mudbrick, in simple pits, vessels, pits with a small wall at their backs, mud plaster lined pits, or in cists (round holes lined with stone). The goods placed with them in their graves varied from a pot or necklace to rather rich collections of gold, exotic beads, obsidian cores, lapis lazuli seals, and the like. In fact, the graves represent the same sorts of evolution of differences in status, power, and privilege that the other analyses found. For example, through time the percentages of different kinds of internment varied until Level X. By that level, adults were either buried in simple pits or in mudbrick tombs, the latter with the richest grave goods.

This recitation can only begin to highlight what our "clean" excavation revealed. We did find reasons to challenge Algaze's theory of the underdevelopment of northern societies and the dominance of southern city-states but confirmed the importance of this long-distance trade as one of a number of factors in social and political development. We were able to draw a richer picture of cultural change than was possible with the original publications. *Tepe Gawra: the Evolution of a Small Prehistoric Center in Northern Iraq*, our final report, published by the University of Pennsylvania Museum, was able to answer questions undreamed of in Speiser's philosophy. Brian Peasnell is currently extending the archival analysis of Tepe Gawra back into the periods before the Uruk.



TOP: Libn tombs 111, 114, and 110.

RIGHT: Sample of grave goods from Tomb 110.



Our article should show, if nothing else, the incredible information lying in archives and collections. You do not even need to get too dirty or worry about visas or foreign diseases to recover it.



Brian Peasnall has spent the last 10 years investigating the emergence of settled village life in southeast Anatolia. Additionally, he has conducted extensive archival research on Tepe Gawra at the Museum. Peasnall is currently a research associate in the

Museum's Near East section where he is developing a digital catalog of the materials excavated from the site of Ur during the 1920s and 1930s by Sir Leonard Woolley.



TOP: Peasnall with one of the workmen during the 1997 excavation of Demirkoy, a small Neolithic-period village in southeastern Turkey.

BOTTOM: Rothman with a local mullah.

Mitchell Rothman is an associate professor of archaeology and anthropology at Widener University in Chester and a Consulting Scholar at the University of Pennsylvania Museum. He has been doing archaeology in the Middle East since a survey in Khuzistan, Iran, in 1974. In subsequent years, he has been on excavation crews at Tal-i Malyan in Iran, and Gordion in Turkey, and on survey teams in southeastern Turkey. Rothman has led a survey in highland eastern Turkey

and two salvage excavations at sites on the Euphrates River in Turkey near the Syrian border. His primary interest is in the origin of state-level society in Mesopotamia. Among his publications are *Chiefdoms and Early States in the Near East* (with Gil Stein), *Uruk Mesopotamia and Its Neighbors: Cross-cultural Interactions in the Era of State Formation*, and *Tepe Gawra: the Evolution of a Small Prehistoric Center in Northern Iraq*. The latter was recently published by the University of Pennsylvania Museum.



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