of southern Uruk pottery into the ceramic assemblages of the Upper Habur.

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TELL QRAYA ON THE MIDDLE EUPHRATES

Tell Qraya appears to represent an alternative to the pattern of Uruk settlements, clustering around large cities. Located 50 miles south of Der ez Zor, nine miles south of the confluence of the Habur River, Tell Qraya is isolated from any other known Uruk Period sites. Tell Ramadi (7) near Tell Hariri, 60 miles away, is the closest known Uruk Period site. Even so, the artifactual material from Tell Qraya is so similar to that found on the southern alluvium it is apparent that, though physically isolated, Qraya is in no way culturally isolated. This unique situation along with the material found at the site make it a very interesting element in the period of the proposed Uruk expansion.

Situated on the west bank of the Euphrates River, Tell Qraya is approximately 2 ha in surface area and has 4 m of accumulated deposits. From the six seasons during which it was excavated, the most important material has come from a 10 m square, excavated nearly to virgin soil. This square contained forty different fire installations. Many of these were typical "bread ovens", but several were large ovens or kilns. The most elaborate ones have a sunken fire chamber with a permanent clay grill. In the three major building phases, each phase had one of these kilns along with other smaller or less elaborate constructions.

The small finds from this square include an inventory of ceramic wares and forms that are virtually identical to those found at contemporary sites, such as Susa, Habuba Kabira and Uruk/Warka. About two dozen seal impressions were found on door seals, jar stoppers, and clay bullae. Other finds include ladles, clay sickles, spindle whorls, and large concentrations of beveled rim bowls.

The artifactual evidence from Tell Qraya appears to say that Qraya was an Uruk Period site, which

(7) MARI 5.

was probably established as part of the larger network of long distance trade. Its particular functions had to include significant production of whatever was cooked or fired in the above-mentioned ovens and kilns. The questions is, how did Qraya serve that network ? Did it simply assist in the transportation of goods or did it participate in the production of goods for trade ? One suggestion, made by Giorgio Buccellati, is that Tell Qraya was being used to process and ship salt from nearby salt playas. Whether or not it was salt that was being processed and exported, Tell Qraya is likely to have supplied some needed resource to other sites of Uruk culture.

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RE-ANALYSIS OF FOURTH MILLENNIUM B.C. TEPE GAWRA

A re-analysis of strata XI to VIII of Tepe Gawra concluded that Gawra was probably the ceremonial and administrative center of a somewhat peripheral, isolated polity in the piedmont of Northern Iraq (8). Although it sat by one of few passes through the Jebel Maqlub into the Zagros Mountain front and was affected by the new economic opportunities of the Uruk Period, its focus seems to have been local.

That conclusion is based on a detailed collation and analysis of original field notes and registers in the Archives of The University Museum, which greatly expanded and corrected the database available in the original publications of Tepe Gawra (9). Key to the analysis was a wealth of provenience information for levels X to XII, XVI to XX in the form of small field "chits" and locus sheets, not used by Tobler.

The analysis first demonstrated that strata XI and XA were not separate architectural levels. The large buildings in the periphery of XI continued into XA (see fig. 3). The resulting plan differs from other recent attempts at architectural reconstruction (10). Other additions or changes in plan were necessary for each of the strata analyzed.

A pottery relative chronology, based on an expanded sample and better provenience information, proposed that level XI/XA was the equivalent in time to the Early Uruk, level X to the Middle Uruk, level IX to the Middle/Late Uruk. Notes also indicate that the terrace from level VI into levels VIII and IX, mentioned by Speiser (11), was more extensive than originally thought, disrupting all of squares 7J, 8J and 9J, and parts of squares 7K, 8K, and 9K of VIII.

(8) ROTHMAN, 1988.

(10) FOREST, 1983.

(11) SPEISER, 1935 : 19.

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<sup>(9)</sup> SPEISER, 1935; TOBLER, 1950.

## CONGRÉS, COLLOQUES, RECENSIONS

## OUT OF THE HEARTLAND : THE EVOLUTION OF COMPLEXITY IN PERIPHERAL MESOPOTAMIA DURING THE URUK PERIOD

On 7 November 1987, a group interested in the Uruk Period and Uruk phenomenon in the Middle East convened at The University Museum, University of Pennsylvania\*.

The purpose of the workshop was to discuss the evolution of complex societies and intraregional interactions in Greater Mesopotamia during the Uruk Period of the fourth millennium B.C. in the light of new research. The Uruk as a time period is important, because during it the earliest known experiments in state level organization were tried, and true urban centers evolved in a number of southern subregions of Mesopotamia. At the same time, a focus not on the so-called «heartland of cities», but on the adjoining «peripheral» areas, was chosen for two reasons. First, recent studies propose that the institutionalization of regional trade and perhaps economic colonization were key elements in the development of southern Uruk Period polities and in their supposed spread to northern Mesopotamia. This restructuring would account for the dispersal of shared cultural styles (at least as reflected in pottery) over a larger area than in any earlier time period (see fig. 1). Second, the bulk of new information on the fourth millennium B.C. is coming from northern and eastern Mesopotamian sites in Turkey, Syria, Iraq and Iran.

Two general questions were posed to the participants : what was happening economically, socially and politically in the sub-regions where current research is ongoing; and how does the changing internal organization of each peripheral sub-region reflect interactions among the various enclaves of Uruk culture, especially interaction with the apparently more developed South ?

\* The participants in this informal workshop included (in alphabetic order) Robert Adams (Smithsonian Institution), Guillermo Algaze (Oriental Institute Chicago), Virginia Badler (ROM, Toronto), Judith Berman (CUNY), James Blackman (Smithsonian Institution), Robert Dyson (University Museum, Pennsylvania), Richard Ellis (Bryn Mawr), Maria Ellis (University Museum, Pennsylvania), Mary Evins (Smithsonian Institution), Elizabeth Henrickson (ROM, Toronto), Lee Horne (University Museum, Pennsylvania), Gregory Johnson (Hunter-CUNY), Naomi Miller (MASCA, Philadelphia), Ilene Nicholas (Hobart and Smith), Vincent Pigott (MASCA), Gregory Possehl (University Museum, Pennsylvania), Susan Pollock (Binghamton), Stephen Reimer (UCLA), Mitchell Rothman (Pennsylvania), Glen Schwartz (Johns Hopkins), Caroline Steele (Binghamton), Mary Voigt (University Museum, Philadelphia), Patricia Wattenmaker (Michigan), Harvey Weiss (Yale), Henry Wright (Michigan), Melinda Zeder (Smithsonian Institution), and Richard Zettler (University Museum, Pennsvlvania).

What follows are summaries of each of the presented papers (written by their authors) and some of the general discussion during the day.

Because not enough time remained for a complete discussion of the issues raised and data presented, a second meeting is being contemplated for the near future. That meeting would focus on the interactions of the sub-regions and the evolutionary forces at work in the region as a whole. Ancillary issues such as the degree of variability over time in artifactual styles and organizational types, the nature and extent of regional transport and communication systems, and whether the Uruk cultural and political system collapsed will be open for discussion. Hope-fully, a more complete publication of data and ideas will emerge from that meeting.

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MESOPOTAMIAN EXPANSION IN THE SECOND HALF OF THE FOURTH MILLENNIUM B.C. : AN EARLY INSTANCE OF "MOMENTUM TOWARDS EMPIRE"

Societies in the southern Mesopotamian alluvium were expanding rapidly, both internally and externally. Internally, this expansion manifested itself in a variety of ways : 1) new forms of spatial distributions : the growth of cities and their dependencies; 2) new forms of socio-political organization : the explosive growth of social differentiation, the emergence of encumbered labor, and the crystallization of the state; 3) new forms of economic arrangements and of record keeping : state control of a significant portion of the means of production and of its surplus, craft and occupational specialization on an industrial scale, and the effective origins of writing; and finally, 4) new forms of symbolic representation needed to validate changes taking place in the realm of socio-political relationships. Externally, this expansion manifested itself in an actual migration of population, the establishment of specialized settlements at strategic locations, and in the formalization and maintenance of long-distance trade networks that were necessary to supply the requirements of increasingly urbanized and stratified societies. These various phenomena of internal and external expansion were interdependent and the processes leading to civilization in the alluvium may not be fully understood unless we treat them as such.