

## **ANCIENT LAGASH: A WORKSHOP ON CURRENT RESEARCH AND FUTURE TRAJECTORIES**

The ancient state of Lagash was one of the major political powers in the Sumerian world of the third millennium BCE. Presently located in southern Iraq, this state incorporated three main cities: Girsu (Tello), Lagash (Tell al-Hiba), and Nigin (Tell Surghul). Early excavations at Tello retrieved textual records and artifacts that remain crucial and inexhaustible sources for our understanding of the social, political, economic, and religious structure of a Sumerian state.

The recent resumption of various excavation, survey and publication projects dealing with the Lagash region necessitate a scientific dialogue. This workshop will bring together scholars from multiple disciplines who are actively engaged in the study of Lagash in order to facilitate collegiality and explore avenues for continuing research and fieldwork. Papers in this workshop will present and compare datasets and analytical results from ongoing projects. Through these presentations, the workshop aims to promote discussions on topics such as chronology, landscape, and urbanism and to facilitate the development of future research designs..

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**Abstracts:**

**SURVEYS**

**Cities of the Sealands: Form and Function in Marshland Agricultural Communities**

Jennifer R. POURNELLE / Carrie HRITZ

Over the past century, the settlement landscape of southern Mesopotamia has been reconstructed from archaeological excavation and settlement survey, analyses of accounting records, and translations of ancient texts. From the 3<sup>rd</sup> millennium B.C. onward, it is modelled as an enduring and relatively homogenous settlement system, comprising a central city, located at a nodal point along the river system and containing 80% of the alluvial population, connected to a sprawling hinterland of suburbs and small secondary sites with low population densities interspersed among long, linear, irrigated agricultural fields. Partly due to assumptions about the primacy of irrigated grain agriculture and livestock husbandry in the rise of complex societies, and partly due to inaccessibility, the lower delta of southern Iraq southeast of the Shatt al-Gharraf river has been omitted from these models.

Examining this area to the present shoreline of the Gulf, we demonstrate the density of uninvestigated archaeological sites; reconstruct settlement distributions; identify off-mound features that comprise a settlement's broader economic and cultural landscape; and indicate broad ecological boundaries. While this ecosystem as a whole is resilient, highly productive, and buffered from most extreme effects of climatic variation and upstream change, at the local scale, it is sensitive to both, resulting in dynamic ecological boundaries and resource availability. We show that, in contrast to the geographically extensive, demarcated land tenure systems linking mounded sites, river levees, and irrigable plains on the upper alluvium, the spatial organization of communities in the deltaic lowlands follows a very different logic. We identify six general settlement types, and suggest that these reflect continual cultural, physical, and economic negotiation and renegotiation of spatially and temporally diverse economic conditions that favored development of more loosely integrated, primarily self-sufficient communities.

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**Reconstruction and Dating of Palaeochannels and Marsh in Lagash Region**

Jaafar JOTHERI

Mesopotamia consists of one of the most dauntingly complex landscapes in the world because of the way it has been sequentially deposited by alluvial processes, overprinted by 9000 years of human occupation and deflated by millennia of aeolian activity. Despite this complexity, some elements of the landscape have been argued to have developed along fairly simple principles.

This paper reconstructs the ancient courses of channels in the Lagash region. The focus is on tracing palaeochannel courses, determining when these palaeochannels were active, and understanding the pattern of avulsions. The research was carried out using a combination of geological, geomorphological, remote sensing, historical and archaeological approaches. Fieldwork included "groundtruthing" of the remote sensing work, drilling boreholes (up to 7m in depth), sedimentary and geomorphologic documentation and sample collection for radiocarbon dating.

Three main different periods of channel and marsh have been found. The oldest channels and marsh are associated with the sites such as Adab, Jidr, Zabalam, Umma, Lagash and Nina and dated back from the fourth millennium BC. The second main channel and marsh are from Parthian to Islamic i.e.

the Dujaila palaeocanal that used to irrigate an area more than 100 km wide and more than 150 km long, transporting water from the western bank of the ancient Tigris, near the modern city of Kut, towards the south-west, passing the famous Islamic site of Wasit, before finally merging with the marshes. More than 500 human settlements were associated with this canal; most of these settlements were occupied from the Sasanian period to the Islamic period. The third main course is the modern Gharraf branch which is formed after the Mongol invasion.

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### **Organizing Canal Maintenance in Ancient Lagash: The case of the “Canal going to Nina”**

Stephanie ROST

The organization of irrigation is central to our understanding of early complex societies. Irrigation played a key role in the intensification of agriculture to produce the necessary surplus to sustain the very features of early statehood, such as urbanism, full time labor specialization, state institutions and status hierarchy. In most areas of the world, the study of ancient irrigation practices is based entirely on archaeological remains. However, it is frequently difficult to reconstruct the linkages between these material remains and the social organization of irrigation, particularly with respect to state administration and centralization, as different social realities can lead to similar material manifestations. There are few places in the world that have as extensive an archaeological and historical record on irrigation as Mesopotamia, making it possible to provide empirical evidence of the management of irrigation. The most comprehensive and oldest record on ancient irrigation management derives from the archives of the provincial capitals (mainly Umma and Lagash) of the Ur III state (2112–2004 B.C.). This paper will discuss four rare work assignment texts that provide detailed insights into the organization of the maintenance of the so-called “Canal going to Nina”. This canal once connected all the main cities of the Lagash province and was as the main water artery of tremendous economic importance. The information of its maintenance provides insights into the understanding of the socio-economic organization of this province.

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### **The Umma-Lagash Border Conflict: A View from Above**

Carrie HRITZ

This paper will present an empirical and synthetic approach to the Sumerian landscape. Traditionally reliant largely on textual records, this consideration will integrate geospatial technologies and datasets, excavated material and recent ground observations from the area around the site of Girsu to shed light on the border landscape between Umma and Lagash. This study will demonstrate, that when contextualized and correlated, these datasets can reveal a robust picture of real and perceived boundaries in the Sumerian landscape that contributed to fundamental transformations of social, political and economic organization.

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### **A New Survey for Umma-Lagash Region**

Abdulmir AL-HAMDANI

Although most of the Mesopotamian alluvial plain has been surveyed and documented, many areas remain without documentation. Among these areas are the area east of Umma (modern Chokha), and the plain between Girsu (modern Tello) and Lagash (modern Telūl al-Hibā) south east to Nina (modern

Zürghol). In 2003–2009, I was able to initiate a series of surveys in the region of Umma-Lagash in order to document the settlement and canal systems.

## **TELL SURGHUL/NIGIN**

### **Excavating the Ancient State of Lagash: The New Evidences from Tell Surghul/Nigin**

Davide NADALI / Andrea POLCARO

In 2015 the Italian Archaeological Expedition to Nigin started the exploration of Tell Surghul concentrating on two main areas (Area A and B) and operating a survey of the north-western sector of the city (Area C). The present communication presents the results of the operations carried out at Nigin focusing on the new evidences of the phases of occupation of the city from the 5<sup>th</sup> to the 4<sup>th</sup> millennium BC that in fact give additional information on the historical and archaeological development of the ancient region of Lagash. Actually, in the light of the recent discoveries at Tell Surghul, the paper also intends to point at the future trajectories of the archaeological exploration of the both city of Nigin and the other major urban centers of the region (Lagash and Girsu) and the neighboring landscape (existence of smaller settlements, morphology of the landscape, presence of water sources): the recovery of new archaeological explorations in the Ancient State of Lagash can in fact explain the phenomena of formation of urbanism and the management of landscape and environment.

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### **The Ubaid Period at Nigin: First Results from Area B Excavations and Their Significance in a Regional Perspective**

Agnese VACCA

The chronological scheme for the Ubaid period was first formulated by J. Oates, who proposed a four-folded division (Ubaid 1–4), based on the reanalysis of the long stratified sequence from Eridu. This chronology has been further refined, introducing two more phases, that is the Ubaid 0 or Oueili period and the Ubaid 5 or Terminal Ubaid. The first occupation of the southern alluvial plain dates back to the Ubaid 0, while it is during the Ubaid 3–4, that many elements of the southern material culture spread over a broad geographical area, extending far beyond Mesopotamia into Syria, southeast Anatolia and Iran. From the 1970s the intensification of field activities in the latter areas made the focus shift away from the Mesopotamian heartland, allowing to better define the Late Ubaid period (Ubaid 3–4 or 'Northern Ubaid' in Upper Mesopotamia) out of the southern alluvial plain and to elaborate different interpretative models on the so-called 'Ubaid phenomenon'. New researches in Southern Mesopotamia are crucial in order to bring the focus back on the Ubaid period in its core area; data from Nigin are all the more relevant, since they contribute to better define this period in the area of Lagash, barely touched by previous researches, which focused instead on the areas of Ur, Eridu, 'Oueili and Uruk.

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### **The Uruk Period in Southern Mesopotamia: New Data from the Area A Excavation at Tell Surghul/Nigin within a Regional Perspective**

Sara PIZZIMENTI

Surveys conducted in Southern Mesopotamia shown, during the 4th millennium BC, the beginning of a demographic increase, together with a reorganization of the territory following a hierarchical scheme. The first cities make their appearance, a new form of state characterized by the control of the

work, of the food production and of the religious power by the elites. The site of Uruk, with ca. 100ha of extension at the beginning of the 4th millennium BC, reached 250ha during the Late Uruk Period, while settlement of minor extension should gravitate around it.

Data on the Uruk Period mostly come from excavations and surveys conducted in Northern Mesopotamia, in the Middle Euphrates (e.g. Habuba Kebira and Jebel Haruda), in the Khabur (e.g. Tell Brak) and in the Malatya regions (e.g. Arslantepe). On the other hand, surveys and excavations focused on the Uruk period in Southern Mesopotamia were mainly conducted in the Uruk region. The new archaeological activities at Tell Surghul/Nigin, with the discovery of at least two Uruk phases in Area A, have given new data regarding the Uruk Period in Southern Mesopotamia, and more precisely in the Lagash region.

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**Searching for Nigin: Third Millennium BC Archaeological and Textual Data between Presence and Absence**

Melania ZINGARELLO

Recent fieldwork conducted by the Italian Archaeological Expedition at Tell Surghul, ancient Nigin, has revealed evidence of a Third Millennium BC phase mainly consisting of pottery sherds and inscribed bricks and cones scattered on the site surface. This paper examines the information at disposal, both positive and negative, and attempts to evaluate the position of Nigin in its regional setting during the Third Millennium, also on the basis of textual data.

**AL-HIBA/LAGASH**

**The Early Dynastic Built Environment at Tell al-Hiba, ancient Lagash**

Holly PITTMAN / Darren ASHBY

This paper presents the outlines of the Al-Hiba Publication Project. Following the death of Donald Hansen, Pittman began systematic work on preparing the final publication of his work. Her team has prepared an entirely digital data archive that serves as the basis of the analysis and publication. At the time of presenting, Area G, the Early Dynastic I area, will be completely analyzed and the results of that work will be summarized. Darren Ashby will present the results of his reanalysis of the architecture of Area B with reference to temple installations and function. With the completion of the analysis of each area, the data and analysis will be made available on line.

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**Combining Heritage Data and Digital Technologies: The Architectural Layout of Ancient Lagash**

Reed GOODMAN / Elizabeth STONE / Elizabeth CARTER

In 1984, a team led by E. Carter conducted one season of systematic surface survey at the southern Mesopotamian site of al-Hiba, the location of the ancient city of Lagash. Until now, these results have only received preliminary publication. As part of the ongoing Al-Hiba Publication Project, we are comparing the original records against an existent GIS, created from remotely sensed imagery. As a result, this paper considers the potential for multi-seasonal satellite data to reveal the intra-site organization of an Early Bronze Age city in the alluvial environment of southern Iraq.

### **The Material Culture of Al-Hiba: Glyptic and Ceramic Evidence**

Holly PITTMAN / Steve RENETTE

Six seasons of excavations in four different areas of Al-Hiba uncovered occupation spanning the third and early second millennium BCE. The excavations focused on horizontal exposure of building levels, resulting in a comprehensive ceramic corpus. While this dataset does not provide a continuous sequence, it does present coherent and well-dated assemblages for the ED I, ED IIIA, ED IIIB, and Isin-Larsa periods. This corpus is significant because it not only represents the material culture of Lagash, but it also greatly expands our knowledge of ceramic types of otherwise poorly understood archaeological periods. In this paper, we will the importance of the stratified glyptic corpus as well as the significance of the Al-Hiba ceramic corpus. Methodological issues and avenues for future research will be presented.

### **TELLOH/GIRSU**

#### **Tello/Girsu. New research on the religious megapolis of the Lagash city-state**

Sébastien REY / Camille LECOMPTE / Fatima Yassir HUSSEIN

Girsu (modern Tello) was considered to be the sanctuary of the patron-god Ningirsu and the sacred metropolis of the Lagash state. Extensively excavated between 1877 and 1933 by four French expeditions, and heavily plundered especially between 1909 and 1929, the site's topographical layout has considerably changed over the past 138 years, i.e., since the first exploration by Ernest de Sarzec in 1877. Today massive amounts of excavation spoil completely conceal, at least for the central mounds of the site, any significant landscape features of the archaic city. A new interdisciplinary research combing the re-examination of the archaeological evidence by means of remote sensing, enhanced by ground reconnaissance and new site explorations, and the reassessment of the textual sources, led to reconstruct the city's ancient landscape. This paper's primary aim is to present the first results of this research.

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#### **Archives and Households in ED IIIb/Presargonic Lagash**

Ingo SCHRAKAMP

Among the tens of thousands of clay tablets excavated during the late 19th and early 20th centuries in Tello/Girsu, ca. 1750 mostly administrative texts from the ED IIIb/Presargonic periods constitute the most important sources pertaining to ED IIIb/Presargonic socio-economic history. They include ca. 1600 tablets unearthed during illicit excavations in 1902 as well as many tablets from the French excavations, mostly from *Tell des tablettes*. On the basis of their colophons, they are usually attributed to the archive of the  $e_2\text{-mi}_2 / e_2^{\text{d}}\text{ba-u}_2$ , which still constitutes the largest and thus most important ED IIIb/Presargonic archive. But in fact, colophons indicate that a considerable number of tablets stems from institutions different from the  $e_2\text{-mi}_2 / e_2^{\text{d}}\text{ba-u}_2$ . Based on a correlation of colophons and findspots, the present paper discusses the evidence for different institutions and archives in ED IIIb/Presargonic Girsu.