



## ABSTRACT SUBMISSION

# Crisis and Rebirth: Re-visiting the LC-EBA transition between the Zagros fringe and the Mesopotamian Alluvium

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## Abstract

The transition between the end of the Late Chalcolithic (LC) and the beginning of the Early Bronze Age (EB; ca.3400-2800 BCE) is recognised as a transformative period in Mesopotamia. The period features the collapse of the interregional Uruk Phenomenon, with the following EB featuring the reversal of many trajectories which characterised the preceding LC. Further changes include the reappearance of small-scale settlement, often characterised by highly decorative pottery traditions, and changing burial patterns.

The contingency of these changes with the passage from the 4th-3rd millennium meant that this was taken as a cultural, as well as a temporal, dividing line by modern archaeological research. Investigations tend to focus on one period or the other, with the transition between the LC and EB constituting a convenient stopping point for LC specialists and a starting point for those whose research focuses on the EB. Despite many substantial changes, vestiges of continuity between the LC and EB are present, such as distinct pottery types, the continuation of long-distance exchange and flow of semi-precious resources. Do the major changes then obscure other aspects of continuity that could be further investigated and interrogated, and to what extent does regional variation affect these processes, especially considering new data and recent archaeological fieldwork?

The aim of this workshop is to examine afresh the LC-EB transition throughout the Zagros and Mesopotamian Alluvium in the light of new archaeological research therein. Through careful consideration of 'transitions' as an archaeological, instead of a cultural-ontological concept, we seek to revisit the extent that the LC-EB transition represents a major breaking point in the regional archaeology, and to what extent (if any) do we note continuity of specific social, political, and cultural processes.

## Keywords

Uruk Phenomenon, Late Chalcolithic, Early Bronze Age, Mesopotamian alluvium and Zagros fringe, Transition

## Program

### Reassessing the "crisis". A non-linear evolution perspective applied to the decline of the Uruk phenomenon between Iraqi Kurdistan and southern Mesopotamia

Johnny Samuele Baldi (CNRS, UMR 5133, Archéorient, Lyon), Melania Zingarello (Oriental Institute of the Czech Academy of Sciences)

A vast archaeological literature describes the chrono-cultural change from the 4th to the 3rd millennium BCE with either chronologically vague terms (often mobilising the never well-defined concept of "transition") or culturally catastrophic ones, favouring the notion of "crisis". This picture uses a specific cultural trait or process – however prominent, such as the end of the Uruk phenomenon in northern Mesopotamia and western Iran – to portray the whole of this historical phase. Years ago, M.

Frangipane questioned the appropriateness of the very idea of a crisis in the southern Uruk world, subtly suggesting that an economic decline should perhaps rather be assumed to have affected northern Mesopotamian communities. Now, recent evidence seems to shift this perspective as well, showing that, while a cultural discontinuity is undeniable between the polities of the 4th millennium and the early cities of the first centuries of the 3rd millennium BCE, the end of the Uruk phenomenon in the North has left an extremely significant legacy in terms of social practices that one can recognise based on material culture. Thanks to recent data from excavated sites in the Zagros Piedmont (in the Chamchamal Plain and the Shahrizor Basin) and Southern Iraq (in the Dhi Qar Governorate), this paper aims to dismiss the concept of “crisis” of the Uruk system and propose a fresh reading of the political and cultural evolution between the 4th and 3rd millennium BCE.

### **Filling the gap: new data on the painted pottery from north-western Iran during the early third millennium BCE**

Vittoria Cardini (Sapienza Università di Roma)

The material culture from the LC to EBA transition shows that in the northern Iranian area there was a socio-cultural region (as revealed by the distribution of painted pottery) distinct from the ETC/Kura-Araxes which was located mainly along the southern part of the Urmia Lake, but also present in the region of present-day Iraqi Kurdistan, albeit to a smaller extent. The Zagros Mountains area has long been considered a geographical and cultural barrier, although in ancient times it was instead a place of interaction of people, ideas, and goods between Mesopotamia and the Iranian plateau. Data from archaeological excavations and surveys carried out by Iranian colleagues over the past 40 years have often remained little known to the international scientific community, and this has created a significant knowledge gap. Recently, the study of the dynamics of this “hinge” region has taken on a new role in the knowledge of ancient West Asian societies. Indeed, an understanding of the spatial and social dynamics between different cultures interacting in the same territory has been achieved by correlating spatial and material data to provide an integrated picture of an area, the Zagros foothills, where there are still many open questions. New data from excavations in both Iran and Kurdistan open new scenarios and allow us to investigate the connections between Mesopotamia and the Iranian plateau in a period which was key for the urbanization process of the highlands.

### **Does it all still stand in the Diyala region? Remarks on pottery, chronology, and stratigraphy in light of new excavations**

Francesco Del Bravo (Freie Universität, Berlin)

As is well known, the Diyala excavations carried out during the 1930s by the Institute for the Study of the Ancient World (i.e., the Oriental Institute) of the University of Chicago represent the bedrock upon which the “chronological edifice,” spanning the mid-4th and the entire 3rd millennium BC, was built. Ninety years later, new data are now available for the greater region spanning the Zagros Piedmont, and the upper Diyala area in particular. The aim of this presentation, then, is to focus on the major pottery sequences that cover the time-span bridging the 4th and 3rd millennium BC. Concurrently, considerations about architecture, landscape dynamics and burial customs will be taken into account to address issues of change, continuity, or crisis. Given Diyala’s geographical location, facing the Iranian highlands on the fringes of the southern alluvium, it has always been a preferential point of interaction and interplay among diverse cultures throughout its history. I believe it is now possible to reconsider old ideas that have persisted in academic discourse and, in many instances, hindered our understanding of the cultural processes and practices at play in the area. This is especially pertinent when scrutinizing the essential period of transition between the prehistoric and historic periods of Mesopotamia. Was there a reshaping of settlement dynamics? Or do major cultural continuities better fit the available data? Additionally, should the Diyala region still be considered merely a cultural backdrop to the southern alluvium, or did it contribute in unique ways to the flourishing of 3rd millennium BC Mesopotamia? These questions will be considered in light of new data and excavations carried out over the last 15 years, aiming to shake off some of the old “dust” of so-called certainties and to try to answer the main question: Does it all still stand in the Diyala region?

### **Road to Transition: The Development of the Late Chalcolithic Settlement at Gird-i Matrab (Iraqi Kurdistan)**

Marta Doglio (Brown University), Rocco Palermo (Bryn Mawr College)

This paper aims to present the development of the Late Chalcolithic settlement at Gird-i Matrab, with specific attention to the phenomena that characterized the final moments of the LC period and anticipated the Early Bronze Age. Situated in the Erbil Plain of Iraqi Kurdistan, Gird-i Matrab is a multi-period site offering insights into critically relevant periods in the history of this region. Specifically, the excavation of Operation B on the main mound has revealed a stratigraphic sequence featuring Late Chalcolithic structures and abundant in-situ ceramics and other artifacts. Although the main occupational phase, represented by a major development of the site, is dated at the LC 2 period, evidence of the final moments of the Late Chalcolithic (LC 5/Northern Uruk) points towards the inclusion of Matrab in a wider zone of interaction between large urban-like centers of Southern Mesopotamia and the dispersed rural landscape of its northern fringes. Indeed, the architectural remains and pottery repertoire highlight how the settlement was perfectly integrated into the regional cultural horizon of the Erbil Plain between the early 5th and late 4th millennia BCE, while also providing some puzzling questions. What led to the “crisis and rebirth” at the end of the Late Chalcolithic? What are the elements of continuity and what are those of rupture? Through the exploration of the unearthed evidence, this paper will discuss the path undertaken by the community inhabiting Gird-i Matrab through the LC phases, and their response - or lack thereof - to new social, economic, and cultural phenomena.

### **The Late Chalcolithic – Early Bronze Age Transition at Kani Shaie: Regionalised Trajectories and Social Transformations**

Michael Lewis (Universidade de Coimbra)

The Late Chalcolithic (LC, c.4500-3200 BCE) saw the increasing interconnectivity of much of Mesopotamia, culminating with the globalising network of the Uruk Phenomenon. Its collapse saw the reversal of many of the trajectories which characterised the previous millennia and a half, via the re-appearance of strongly regionalised trajectories, and, pertinent to this presentation, the re-emergence of highly decorative pottery traditions across Mesopotamia. The first half of the Early Bronze Age (EBA; c.3200-2600 BCE) then sits somewhat uncomfortably between the highly interconnected ‘World System’ or global network of the Uruk Phenomenon, and the second half of the EBA as an interluding period of cultural fragmentation and even societal collapse. Pottery production is the realisation of a set of social and technological choices. Thus, sudden changes to it – the likes of which are documented during this period at Kani Shaie – are socially and culturally significant. Within this presentation, I will present the stratigraphic and ceramic sequence of the LC-EB transition at Kani Shaie and explore aspects relating to the pottery manufacturing process across this period to investigate the effects of these societal transformations, and how the occupants at Kani Shaie adapted to them. The aim is to examine the social dimension of pottery production through presentation of results obtained via a multidisciplinary methodology integrating archaeology, material science, geology, and anthropological theory.

### **Evolution of Monumental Centres in Southern Mesopotamia at the Dawn of the Sumerian City-State**

Hugo Naccaro (Université Paris 1 Panthéon-Sorbonne, UMR 7041 ArScAn - VEPMO)

At the end of the 4th millennium BCE, the populations in southern Iraq underwent considerable socio-economic upheaval.

Southern Mesopotamian culture, in a phase of contraction, appeared to be in crisis, leading to the establishment of a new political model centred on divinity. Society was transformed, laying the foundations for the Sumerian city-state characterised by gods and kings.

During the Jemdet Nasr period (3200-2900 BCE), the monumental centres of major sites in southern Mesopotamia were completely transformed. The large tripartite buildings of the Uruk period disappeared, replaced by integrated complexes of a new type. During a period marked by many architectural innovations, construction techniques also changed. Data on the architecture of the Jemdet Nasr period, mainly excavated in the 1920s and 1930s and poorly understood, have been thoroughly revised by major publications from 1988 to 2020. This paper proposes a reassessment of the evolution of the monumental centres of the main sites of the alluvial plain during the Jemdet Nasr period in the light of new research and studies. Within a revised chronological framework, the stratigraphic and architectural data from key sites will be examined. This will lead to new hypotheses about the political organisation of the alluvial plain at the dawn of the Sumerian city-state.

### **The Transition from Late Chalcolithic to Early Bronze Age at Gird-i Begum**

Susan Pollock (Freie Universität Berlin)

The site of Gird-i Begum in the Shahrizor Plain was first occupied by the Halaf period and continued to be settled, with gaps, up to at least Sasanian times. According to presently available evidence, occupation may have been continuous from at least late Ubaid through Late Chalcolithic (LC) 3. Radiocarbon dates as well as ceramic evidence indicate that this was followed by a hiatus of approximately 500 years, which began well before the 5.2 ka event, and a reoccupation in the Early Bronze Age. In this paper, I examine (a) resource procurement and (b) practices of distribution of food/drink across the temporal gap from LC 3 to EBA. In the case of resources, to what extent did procurement strategies change in the EBA, following the long settlement gap and in the context of substantially different socioeconomic configurations in surrounding regions? I consider in particular the raw material sources used for chipped stone tools and the use of molluscs as a food source. I examine the second question in terms of practices associated with pottery vessels, with a primary focus on large-scale food/drink distributions. Were the well-known Mesopotamian practices in terms of distribution of food and drink carried over into the Shahrizor Plain, and if so, what forms did they take?

### **From Continuity to Change: A Typological Study of Jemdet Nasr Pottery and Socio-Economic Connections in Central Southern Mesopotamia**

Sara Quaggio (Università di Pisa)

During the Jemdet Nasr period (3100-2900 BC), the ceramic repertoire of central and southern Mesopotamia not only reflects regional stylistic developments but also plays a significant role in delineating socio-economic interactions within and beyond these regions. This presentation provides an in-depth re-analysis of Jemdet Nasr pottery from 22 sites, focusing on vessel shapes, contextual associations, and relevant morphological features.

Utilizing a statistical-typological approach, this study systematically identifies changes in ceramic association groups at both regional and supra-regional levels, forming significant clusters to track the evolution of specific vessel shapes. By identifying shared characteristics across different sites, the study reveals exchange relationships and underscores a common social identity manifested through material culture.

This integrated approach offers a comprehensive overview by reassessing Jemdet Nasr ceramics identified at major Mesopotamian sites. It presents a detailed picture of the ceramic repertoire during this transitional period between the Late Uruk and Early Dynastic I period, thereby enhancing our understanding of the intricate socio-economic connections within central and southern Mesopotamia.

### **Late 4th – Early 3rd Millennium BCE Transition from the Mesopotamian Alluvium: the Case of Tell Zurghul/Nigin**

Luca Volpi (Universidad Autónoma de Madrid), Davide Nadali (Sapienza Università di Roma)

Since 2015, MAIN (Missione Archeologica Italiana a Nigin) is carrying out intensive excavation campaigns at the site of Tell Zurghul/Nigin, 7 km SE of Tell al-Hiba/Lagash, in the Dhi Qar province of Iraq. The excavations in Areas D and E have revealed a long occupational sequence of the main mound (A) during the entire 3rd millennium BCE. Moreover, at the base of the mound (Area A), as well as in the lower town (Area F), at the base of the step trench in Area B, and in a small elevation east of Mound B (Area B2), the excavations have identified several building layers dated to the end of the 4th and the beginning of the 3rd millennium BCE. These recently excavated areas are providing a preliminary picture of the settlement organisation of the Tell at the passage between the 4th and the 3rd millennium BCE, furnishing new insights into the Late Chalcolithic (LC)-Early Bronze Age (EB; ca. 3400-2800 BCE) transition in southeastern Mesopotamia. The present paper will focus in particular on the urban layout of the city of Nigin in its formative stage, as well as on the morphological analysis of pottery materials from 4th and 3rd millennium BCE contexts, in order to contextualise the data within the Mesopotamian framework and to foster debate on the LC-EB transition in the area.

### **Synchronous Late Uruk and Naqada Collapse and the Changing Façades of State Power at 5.2 ka BP**

Harvey Weiss (Yale University)

The midlatitude westerlies' megadrought at ~5.2 ka BP, a ~200 year duration event across the eastern Mediterranean and West Asia, forced (1) abruptly reduced dry farming agro-production and collapse of the Northern Mesopotamian late Uruk colonies; (2) Euphrates flow reduction and the agglomeration of Southern Mesopotamian irrigation agriculture populations into nodal cities; (3) the collapse of urban parish agro-production authority into nascent palace polities.

The Indian Summer Monsoon, source of Nile flow and its annual cereal cultivation inundation, synchronously underwent the ~5.2 ka BP, ~200 year duration, megadrought that is recorded in paleoclimate proxy records across the Indian sub-continent, East Asia, and northeast Africa. This Indian Summer Monsoon megadrought forced (1) Nile flow cereal agriculture inundation area reduction; (2) Nile terminus delta settlement abandonments; (3) habitat tracking and population agglomeration to Upper Egypt settlement nodes; and (4) consequent regional agro-political state formation processes.

The causal linkage challenges remain megadrought and agro-production quantification and the changing state power façades' coincident, high-resolution, chronologies.

## **Type of paper**

Workshop