EXCAVATIONS AT SUREZHA (ERBIL PLAIN, KURDISTAN REGION, IRAQ)

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Project Focus: The Origins of Towns and Social Complexity in Northern Mesopotamia in the Chalcolithic Period 5300-3500 BC

The Chalcolithic period, from 5300 to 3100 BC, is the time when the world's first urban civilization developed in Mesopotamia. These developments are best known through the Ubaid and Uruk periods and their associated material cultural styles in southern Mesopotamia, at sites such as Eridu, Ur, and Uruk/Warka. However, we still know very little about the development of towns and cities in northern Mesopotamia and especially in Iraqi Kurdistan, because, until recently, so few scientific excavations have been done in these regions. The last twenty years of excavations in north Syria and southeast Turkey have made it clear that these areas had distinctive local cultures which interacted closely with southern Mesopotamia in the Ubaid and Uruk periods but still retained their own material culture styles and traditions. Most notably, we can see that there was a period from 4500 to 3700 BC (after the Ubaid, and before the Middle Uruk period), when there was very limited interaction between southern and northern Mesopotamia.

The Surezha excavations investigate the key phases in the origins of towns and later cities in northern Mesopotamia during the Chalcolithic period. Surezha is an ideal site to define the Chalcolithic chronology and developmental sequence of the Erbil plain because the high mound at the site is largely prehistoric, with only limited later occupation from the Middle Assyrian period and the Iron Age.

In the 2013, 2014, and 2016 field seasons, our plan has been to define the chronology and cultural developments in northern Mesopotamia, especially on the fertile and strategically located Erbil plain during the Ubaid 3–4 (5300–4500? BC), Late Chalcolithic 1 or LC1 (4500?–4200 BC), Late Chalcolithic 2 or LC2 (4200–3850 BC), and Middle Uruk (= LC3–4 periods ca 3850–3400 BC) periods. The LC 1–5 sequence is used for northern or upper Mesopotamia in order to recognize the fact that cultural developments were not identical between the northern and southern parts of Mesopotamia (see table 1).

The Oriental Institute's third field season of excavations at Surezha was carried out from August 10 to September 8, 2016. The project was co-directed by Gil J.Stein and Abbas Alizadeh. Project staff consisted of Loghman Ahmadzadeh (Susa Archaeological Unit, Iran), John Alden (University of Michigan), Hosein Azizi (National Museum of Iran), Fred Eskra (Oriental Institute at the University of Chicago), Michael Fisher (Oriental Institute at the University of Chicago), Mehdi Omidfar (Susa Archaeological Unit, Iran), Max Price (Massachusetts Institute of Technology at MIT), Lucas Proctor (University of Connecticut), and Atefeh Razmjoo (University of Mazandaran). Field excavations were carried out by fifteen workers from the Erbil Museum and from the village of Surezha. Our government representatives from the Kurdistan Regional Government (KRG) Directorate of Antiquities for the Erbil Governate were Sabir

Dates	South Mesopotamia	North Mesopotamia			
3400-3100 BCE	Late Uruk	Late Chalcolithic 5 (LC-5)			
3700-3400 BCE	Middle Uruk	Late Chalcolithic 4 (LC-4)			
3850-3700 BCE	Middle Uruk (first cities in south)	Late Chalcolithic 3 (LC-3) (first cities in north)			
4200-3850 BCE	Early Uruk	Late Chalcolithic 2 (LC-2)			
4500-4200 BCE	Terminal Ubaid?	Late Chalcolithic 1 (LC-1) (begins ca. 4800 BCE in Kurdistan)			
5300-4500 BCE	Ubaid 3–4 (first towns in south)	Ubaid ("Northern Ubaid") (first towns in north)			
5800-5300 BCE	Ubaid 1–2 Chogha Mami Transitional Samarran	Halaf			

Table 1. Comparison of chronologies for southern Mesopotamia (the Ubaid and Uruk sequences) and northern Mesopotamia (the "Late Chalcolithic or "LC"1-5 sequence)

Hassan Huvsein, Rozhgar Raashid, and Amine Mahmoud, on-site and in the Erbil Museum. We express our deep appreciation to Mr. Mala Awat Abu Bakr Othman, Director General of Antiquities for the KRG, and to Mr. Nader Babakr, Director of Antiquities for the Erbil Governate. We especially thank Maghdid and Samira Maghdid, our host family in the village of Surezha. Financial support for the Surezha excavations came from the National Science Foundation (grant number 0917904), the Oriental Institute of the University of Chicago, and the generosity of private donors, notably Mr. Harvey Plotnick. We also thank the Oriental Institute of the University of Chicago for administrative support for this project.

Site Description

Surezha is a mounded settlement of 22 ha, located next to the modern village of Surezha, approximately 20 km south of the modern city of Erbil on the Makhmur road (fig. 1). Surezha was first recorded as Site 27 by Jason Ur and Harvard University's Erbil plain Archaeological Survey (EPAS) in 2012. The UTM coordinates of the site are: N. 399555.0694, E. 3984361.1196, and the top of the high mound is 356 m above sea level. The ancient site has three parts: a) the high mound, b) the terrace, and c) the lower town. The conical-shaped high mound measures approximately 188 m northwest-southeast and 150 m from southwest to northeast, with an area of approximately 2.8 ha (fig. 2). The high mound rises to a height of 16 m above the terrace. The base of the high mound is surrounded by a terrace on all sides. The terrace is about 2 m high and slopes gradually down over a distance of approximately 70 m to the lower town which extends out from the terrace in all directions. Part of the lower town lies underneath the modern village of Surezha to the north and east. The combination of surface collections and excavations in 2013 indicated that the Chalcolithic occupations of the Surezha high mound included the following sequence:

- LC4 (Late Middle Uruk) known from Uruk ceramics found out of context
- LC3
- LC2/3 transitional
- LC2
- LC1
- Ubaid
- Halaf known mainly from Halaf ceramics found out of context in later deposits

We had four main goals for the 2016 Field Season:

- 1. Extend and refine the stratigraphic sequence of the site through continuation of the deep sounding in Operation 1, and focused excavations of Operation 5 and Operation 8 inside Operation 1 as a way to explore key transitional phases from LC1 to Ubaid, from LC2 to LC3, and from LC3 to LC4.
- 2. Continue excavation of Operation 2 at the south base of the high mound to expose Ubaid and LC domestic architecture, while clarifying the transition from Ubaid to LC1.
- 3. Develop a rigorous archaeobotanical sampling program to collect data on changing agricultural systems in the Chalcolithic.
- 4. Refine our ceramic chronology and typology for the Ubaid and the local LC1-4 periods on the Erbil plain.



Figure 1. Map of the Chalcolithic Near East showing the location of Surezha



Figure 2. Topographic map of Surezha showing main 2016 excavation areas: Operations 1, 2, 5, and 8

Excavations

Excavations took place in four parts of the Surezha high mound - three areas in the step trench (Operation 1 deep sounding, Operation 5, and Operation 8), and one area at the south end of the mound (Operation 2).

Operation 1 Deep Sounding (Abbas Alizadeh)

Operation 1 is a step trench oriented northwest-southeast on the west slope of the Surezha high mound. When the trench reached the base of the high mound in 2013, excavations shifted to a deep sounding originating from the lowest "step" in the trench. Excavations of the deep sounding continued in 2016, with the goal of defining the LC1-to-Ubaid transition, and the hope of reaching the Halaf deposits underlying the Ubaid. We inferred the presence of Halaf deposits from the small but steady stream of painted Halaf sherds occurring out of context in the deep sounding. We excavated 4.5 m in the deep sounding in the 2016 field season (fig. 3). The deep sounding produced very few clear occupation floors or surfaces with preserved architecture. However, the ashy deposits contained enough charcoal, ceramics, chipped stone,



Figure 3. Operation 1 deep sounding stratigraphic profile

and bones, to make it clear that we were excavating cultural remains — most likely re-deposited trash or wash from actual architecture located somewhere outside the extent of our trench.

Except for two poorly preserved architectural loci 71 and 72, much of the deposit in the

deepest levels of the mound consisted of thick, clayey, and grayish green deposits that could not be separated into finer levels, indicating gradual deposition rather than an identifiable sequence of occupation surfaces. Nevertheless, in Loci 83 and 84 we found more than twenty roughly biconical clay sling bullets on what seemed to be a horizontal deposit (fig. 4), but we were unable to find a surface related to this cache either in the trench or in close examination of the stratigraphic sections.

We had hoped to reach sterile deposits in the Operation 1 deep sounding. While from the depth of about 336 m above sea level (ASL) sherds became rare and almost no bones or stone tools were found, we did not find any deposit completely devoid of sherds down to 333.4 m ASL when the season ended on September 4. Due to the small ceramic samples recovered from these deposits, we can only draw tentative conclusions about the earliest occupations at the site. Our best estimate is that locus 69 and the deposits above it date to the LC1, while underlying mudbrick walls 70, 71, 74, and the deposits below them date to the Ubaid, down to locus 90, the deepest stratum reached in the 2016 field season. If this is correct, then the 2016 excavations were able to identify the LC1-Ubaid transition in the Operation 1 deep



Figure 4. Operation 1 deep sounding Cache of unbaked clay ovoid sling bullets (SR 2827) dating to the Ubaid period. Similar caches have been found in Ubaid levels of Tepe Gawra (Iraq) and Tell Zeidan (Syria)

sounding. Although we did not reach any deposits with purely Halaf material, based on the out-of-context Halaf sherds discovered in locus 89 along with Ubaid painted ceramics, we are confident that these deposits are in fact present somewhere in the lower depths of the site.

Operation 2 (Michael Fisher)

Operation 2 is a 5×5 m trench at the southern base of the high mound. Excavations begun here in 2013 by Hamid Fahimi recovered well-preserved remains of two mudbrick houses oriented northeast-southwest, with a narrow alley between them. Associated ceramics, including the deep parallel comb incised ceramics and herringbone incised jars, suggested that these houses dated to the local expression of the LC1 period on the Erbil plain. Radiocarbon dates indicated that the LC1 period on the Erbil plain dated from approximately 4800–4200 BC. This was surprising, since it suggested that the Ubaid period may have ended on the Erbil plain earlier than in other regions such as north Syria, in what can be called a "sloping chronological horizon" for the Ubaid.



Figure 5. Operation 2 "West House" (upper left) and "East House" (bottom right) — Multi-room houses dating to the Ubaid period

The 2016 excavations conducted by Michael Fisher aimed to complete the exposure of the two mudbrick houses, while focusing on identifying the Ubaid-LC1 transition at the south part of the high mound. Although both structures were only partially exposed in the trench, they appear to have been constructed in similar fashion, and were largely contemporaneous in their use (fig. 5). The "East House" and "West House" are both multiple room houses with ca. 90 cm thick exterior walls 3–4 courses wide, subdivided into interior rooms with smaller, thinner walls. The two houses appear to have undergone at least one major rebuild, in which the exterior walls of the later construction phase were built on the same lines as the earlier exterior walls. During both the earlier and the later construction phases, the interior rooms underwent periodic modifications in size and layout (fig. 6).

The radiocarbon dates and ceramics associated with the East and West Houses show that they were continuously occupied in both the earlier Ubaid period (ca. 5300–4800 BC) and in the succeeding Late Chalcolithic 1 or LC1 period. Our evidence suggests that the transition from the Ubaid to the LC1 was gradual, with many stylistic continuities between the two periods. The floors of the East and West houses were generally clean; however, at least some recovered artifacts suggest that higher status individuals inhabited these structures. A small bin (locus

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Figure 7. Operation 2 West House bin 68 Ubaid ceramics associated with fragment of a black polished stone palette (at left). Polished stone palettes are a widely distributed Ubaid prestige good also found at Tepe Gawra and Tell Zeidan



Figure 8. Operation 2 East House floor locus 83 lot 88 fragment of a stone stamp seal (SR 1951) with incised decoration

68) in the West House contained typical Ubaid painted ceramics associated with a cache of sealing clays and a fragment of a polished black stone palette (SR 3180) (fig. 7). The Surezha palette is similar to contemporaneous examples known from Ubaid levels at Tepe Gawra and Tell Zeidan. In the East House, floor deposit locus 83 contained a fragmentary carved stone stamp seal with a possible sunburst motif (fig. 8).

Operation 5 (Max Price and Loghman Ahmadzadeh)

Operation 5 is located at the top of the conical mound of Surezha, and was briefly excavated in 2014 in order to extend the spatial and chronological coverage of the Operation 1 step trench to cover the uppermost occupational deposits on the high mound. After the suspension of the 2014 fieldwork at Surezha due to security conditions, excavations in Operation 5 resumed in 2016. Operation 5 was excavated in three steps (1, 3, and 4 — see topographic map, fig. 2). At the top, step 1 was a 2.65×2.00 m exposure. Step 3 was located downslope and 2.15 m northwest of step 1. Step 4, the lowest step on Operation 5, was a 3×2 m exposure located immediately to the northwest of step 3. Step 4 provided the stratigraphic link between Operation 5 and the 2013 step trench Operation 1.

The stratigraphy of step 1 consisted of mixed deposits containing both second millennium BC and Late Chalcolithic ceramics. These deposits were overlain and cut through extensively by later mixed deposits containing roofing fragments, domestic refuse, and spent ammunition found in the remains of huts, trenches, and refuse pits dating to the time when the mound was used as an anti-aircraft emplacement by the Iraqi army during the Iran-Iraq war of the 1980s.

Due to the extensive modern disturbances in step 1, we shifted our excavations downslope to step 3 (skipping over step 2). Excavation of step 3 sought to discover the abandonment layer spanning the transition between the second millennium Middle Assyrian occupation and the Late Chalcolithic occupations of the high mound. Unfortunately, we were unable to locate the deposits representing the hiatus in occupation of the Surezha high mound. However, step 3 did produce good evidence for the late Chalcolithic 3 (LC3) occupation of the site. The most important material derived from refuse deposit locus 19. This deposit contained large

amounts of ceramics, along with a basalt grinding stone and large stone pestle. Almost all the ceramics dated to the Late Chalcolithic LC3 period, with one intrusive bevel rim bowl sherd from the LC4 period. The LC3 diagnostic ceramics were handmade, chaff-tempered wares, most notably storage jars with internally carinated straight flaring rims and burnished gray ware bowls with rounded beaded rims. The unusually large ceramic deposit in locus 19 provided an extremely useful cross-section of the range of ceramics in the LC3 period — dating roughly 3850–3700 BC.

Like step 3 above it, the deposits in step 4 also dated to the LC3 period with key diagnostics such as gray ware bowls, internally flanged "dog-leg" rimmed jars, and bowls with internally thickened and beaded rims. Excavations in Operation 5 reached the same early LC3 levels as those in the adjacent Operation 8 to the northwest. Operation 5 locus 35 is a compact outdoor surface that forms the top of a brick collapse deposit, and it equates with Operation 8 locus 13. This is important, because these loci immediately overlie the LC2 deposits excavated by Abbas Alizadeh in his 2013 step trench Operation 1. In other words, both Operation 5 and Operation 8 reached the top of LC2 deposits at Surezha.

The most striking discovery in Operation 5 step 4 was an intrusive Middle Assyrian shaft tomb with a side chamber (locus 26) covered with a pitched mudbrick vault. The shaft of this tomb had been excavated in 2013 as part of the Operation 1 step trench, and a C14 sample from this shaft had been dated to the fourteenth century BC.

Inside the vaulted chamber, the body of a single adult was positioned on its left side, facing north with its left hand resting underneath its head. The skeleton was aligned east-west. A variety of grave goods were placed next to the skeleton (fig. 9). Near the head, the mourners placed a bowl (SR 2085) and a high-necked and band-painted jar (SR 2086). An unpainted jar (SR 2091) was placed by the feet of the deceased. The positioning of the bowls was reminiscent of a second Middle Assyrian burial recovered in 2016 in Operation 8 – which lay ca. 4 m to the northeast and parallel to the body in Operation 5 Locus 26 (see description below). Near the right hand were found the remains of an unbaked clay plate. Other graves goods included four large bone needles and four bone beads (SR 2094) along with animal bones (SR 2097), which derived from a single young caprine, probably a lamb, included as a food offering. As with the burial in Operation 8, articulated skeletal remains of a young caprine were also found within the jars. Unlike the burial in Operation 8, no metal pins were discovered in Operation 5 burial 26.



Figure 9. Operation 5 Middle Assyrian burial 26 (fourteenth century BC) grave goods

Operation 8 (Hosein Azizi)

Operation 8 is a 5.3×2.0 m section located in the middle section of the 2013 step trench Operation 1 (fig. 2). Operation 8 was designed to explore the transition between the LC3 and LC2 phases at Surezha in greater detail. Operation 8 was excavated from August 15–25, 2016. The majority of the excavated materials derived from secondary trash and tertiary wash



Figure 10. Operation 8 Middle Assyrian burial locus 7, photogrammetric image

deposits dating to this transitional phase. As noted above, excavations in both Operation 5 and Operation 8 reached the top of the LC2 phase.

A Middle Assyrian burial was cut down from an indeterminate surface into the LC2/3 transitional deposits such as locus 9 (fig. 10). The pit does not appear to have had a pitched mudbrick vault; in that way it differs from tomb locus 26 in Operation 5. The burial pit was roughly oval in shape, measuring $1.90 \times$ 0.87 m, and is oriented northwest-southeast. The flexed skeleton of an adult (sex undetermined) is lying on its left side, with the left hand in front of its face. The facial bones of the skull were not preserved. A range of burial goods were interred with the body (fig. 11). Next to the head, a bowl containing sheep



Figure 11. Operation 8 Middle Assyrian burial locus 7 – grave goods

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Figure 12a-b. Lucas Proctor consulting with Erbil metal-workers on design of the flotation machine (top) and the final assembly of the flotation machine (bottom)



Figure 13. Atefeh Razmjoo and Rajan Maghdid processing flotation samples to collect light and heavy fractions for analysis

bones — the remains of a food offering — was placed. Three additional ceramic vessels were placed in the grave — a large plain ware jar and two smaller, button based jars with painted horizontal bands. The grave goods included a bronze pin (or needle) with a loop (SR 2350), a second bronze pin (SR 2349), three long bone needles, and a stone bead necklace.

Archaeobotanical Analyses (Lucas Proctor)

Lucas Proctor (University of Connecticut) was responsible for the processing and analysis of the Surezha archaeobotanical samples were collected since the 2014 season. Lucas oversaw the fabrication of a "Siraf" type flotation machine in a metal-working factory in Erbil (fig. 12a–b). Eighty-five flotation samples were processed on-site, collecting both heavy and light fractions (fig. 13). These were exported to the US for analyses. These examinations are ongoing. Initial results from Lucas' analysis of eleven samples indicate that cereal grains and chaff represented the vast majority of carbonized botanical remains in the examined samples. From the examined samples, barley and emmer wheat both appear to have been heavily exploited at Tell Surezha. Barley was the more common of the two, having been identified in all but one sample. This emphasis on heat and drought tolerant cereals is consistent with Tell Surezha's location on the hot, semiarid Erbil plain. The Surezha data closely match the pattern of cereal remains recovered from other Ubaid/Chalcolithic sites in Northern Mesopotamia, especially

Tell Zeidan and Kenan Tepe. Flax seeds also common, probably as a source of fiber for textile (linen) production, and perhaps secondarily for oil.

Zooarchaeological Analyses (Max Price)

Analyses of the animal bone remains from Surezha were conducted by Max Price (Massachusetts Institute of Technology at MIT). The recovered faunal material (N = 1,956 fragments) builds upon the data recovered in 2013, giving us a total of 4,791 fragments from the 2013 and 2016 seasons for analysis. We now have samples of animal bones from the Ubaid, LC1, LC2, LC 2/3 transitional, and LC3 periods at the site.

Identified Taxa	Ubaid	LC 1	LC 2	LC 3
Sheep/Goat	62	57	22	89
Sheep	(3)	(4)	(2)	(9)
Goat	(1)	(18)	(8)	(2)
Pig	54	29	0	79
Cattle	19	7	0	22
Total	135	93	22	190

Table 2. Major identified taxa of domesticated animals from all contexts, broken down by phase.

Preliminary examination indicates that caprines (sheep and goats) are the most common taxa in all phases (table 2). This is consistent with the pattern seen at other Chalcolithic sites in Northern Mesopotamia. However, we were surprised to see the high number of pigs in the faunal record throughout the Ubaid-LC 3. In all phases except the LC 2, pigs make up 30-40% of the recovered domestic fauna.

Ceramic Analysis (John Alden)

Analyses of the ceramics was conducted by John Alden (University of Michigan). During the 2016 field season, John sorted and recorded 2,404 diagnostic sherds from Chalcolithic contexts in Operations 1, 2, 5, 6, 7, and 8 (fig. 14). Key categories were rims, bases, painted body sherd, incised body sherds, and other miscellaneous diagnostics (handles, lugs, spouts, etc.). Incised decorations such as horizontal deep-comb incision and shallow-incised herringbone and chevrons are proving to be especially useful stylistic elements to identify the local LC1 ceramic assemblage on the Erbil plain. In the 2016 season, John measured and drew 311 diagnostic ceramics. This analytical data set is essential for the development of the Surezha Chalcolithic material, John also recorded and drew the complete ceramics recovered from the two Middle Assyrian burials Operation 5 locus 26 and Operation 8 locus 7. Finally, we selected thirty-two samples of Chalcolithic ceramics for geochemical analyses of elemental composition to be conducted by Leah Minc (Oregon State University).

2016 Radiocarbon (C14) Dates and Chronology



Figure 14. Selected diagnostic ceramics of the LC1, Ubaid, and Halaf phases at Surezha. A-G: LC1 phase; H-M, P: Ubaid phase; N, O, Q: Halaf phase

In 2016 we continued our radiocarbon sampling program aimed at defining an absolute chronology for the Chalcolithic ceramic assemblages on the Erbil plain. We experimented with radiocarbon dating ten samples of archaeological bone. However, none of these samples contained enough bone collagen to allow for any kind of reliable dating. As a result, we will limit future sampling to seeds and charcoal. Fourteen samples of seeds and charcoal were processed by Accelerator Mass Spectrometry (AMS dating) by Beta analytic Laboratory in Florida (table 3).

When combined with the sixteen AMS C14 dates from the 2013 season (see *Annual Report* 2013–2014), we are well on our way toward developing a reliable absolute chronology for the Chalcolithic of the Erbil plain region of Iraqi Kurdistan. The 1016 dates were especially useful because they confirm our tentative conclusion from ceramic analysis that the houses excavated in Operation 2 did, in fact, date to the later Ubaid period ca. 5200–5000 BC (calibrated).

Beta #	SR #	2 Σ BC Cal. Max	2ΣBC Cal. Min	2 Σ BC Cal. Mean	Period/phase	Operation	Locus	Lot	Locus Description	Comments
	3002	3895	3695	3795	Late Bronze Age		26	33	A single adult inhumation with a	
									vaulted mubdrick tomb structure.	Unreliable - charcoal
										originates from LC deposit
										cut through by excavation
450547						5				of Assyrian burial
450538	2075	3785	3655	3720	LC 3	5	24	29	Ashy sediment mixed with clay.	
454033	2389	4325	4280	4303	early LC 3	8	11	12	Wash layer	Date is too early - wash
	3041	3940	3710	3825	LC 2-3		34	48	Accumulated deposit of mudbrick	
									detritus built up behind (south of)	
450539						5			wall 32.	
	2248	5215	5025	5120	Ubaid?	2	29b	25	West Building North Room - floor	
450543									level (latest floor in 2016)	
453157	2283	5215	5040	5127.5	Ubaid?	2	50	32	Alleyway	
453156	2605	5300	5080	5190	Ubaid?	2	53	35	East Building	
	2748	5215	5025	5120	Ubaid		66	58	East Building Room – sooty,	
									medium gray and grayish-brown	
									deposit occurring in sloping layers	
450546						2			up against Wall 58.	
454034	2987	5310	5210	5260	Ubaid	2	75	79	East Buidling on top of Floor 83	
450549	3168	5040	4850	4945	Ubaid	2	83	88	East Building – floor level (second	
	3199	5005	4845	4925	Ubaid		68	92	West Building North Room - small	
									rectilinear area bounded by thin,	
450547						2			short, crumbly day walls.	
	2899	5215	5040	5128	Ubaid		72	70	Alleyway – compacted mudbrick	
									and broken mudbrick collapse,	
									with an area of stones and flat-	
450548						2			lying sherds	
450545	2176	5050	4855	4953	Ubaid	1	76	14	Greenish gray deposit with chalk	
450550	2976	5200	4940	5070	Ubaid	2	76	76	Sounding level – earliest level	

Table 3. 2016 Radiocarbon Dates from Surezha

Conclusions

The 2016 field season at Surezha enabled us to recover important information that enables us to identify and date the local Chalcolithic cultures of the Erbil plain in the Kurdistan Region, east of the Tigris River in northeastern Iraq. In particular, we can now define, recognize and give absolute dates to the ceramic assemblages of the Halaf, Ubaid, LC1, LC2, and LC3 periods on the Erbil plain. These periods are important because they span the crucial time when social stratification, states, and urban societies first developed in Mesopotamia. The Surezha excavations are thus providing the first reliable basic information on the character and chronology of the local Chalcolithic cultures on the Erbil plain. With this solid baseline, we can start to understand the early development of towns and cities in this important, but so-far poorly known region of the Fertile Crescent.

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