

The Danish Archaeological Expedition to Iraq

Three years of pioneering archaeological research on the Rania Plain

Report to the Danish Institute in Damascus

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Front image. The Rania Plain from the top of Bab-w-Kur (Photo: Henrik Brahe, autumn 2015)

DAEI

The Danish Archaeological Expedition to Iraq is investigating early urbanism in the eastern margins of Upper Mesopotamia (an area encompassing parts of modern Iraq, Syria and Turkey). Urbanism – the origin of cities – is one of the greatest milestones in human history. Mesopotamia is home to the world's first urban societies, and their formation transformed human lifestyles and the landscape irrevocably.

The project also assists in monitoring and protecting archaeological heritage on the Rania plain in the Sulaymaniyah Province of Iraqi Kurdistan in northeastern Iraq (Fig. 1). With support from the Danish Institute in Damascus the project - a collaboration between the University of Copenhagen and the National Museum of Denmark - has recently completed its fourth season (October-November 2015) of archaeological research on the Rania plain with excavations at the twin sites of Bab-w-Kur and a survey of the surrounding region. The investigations have revealed fascinating evidence of early urban development in the Zagros foothills; a region which until very recently was remote and unexplored.



Figure 1. The Rania Plain from the top of Bab-w-Kur (Photo: Henrik Brahe, autumn 2013)

Pioneering archaeological investigations

The adjacent Peshdar and Rania plains represent an extensive settlement zone within the foothills of the Zagros Mountains of northeastern Iraq. Remains of past human activities are widely distributed across both plains, and include settlements and finds from early farming cultures and complex urban societies. Previous archaeological research on the Peshdar and Rania plains was limited and comprised of incomplete survey and salvage excavations by the Iraqi Directorate-General of Antiquities and by a Danish excavation project at the site of Shemshara; both of which were undertaken in the late 1950s prior to the construction of the Dokan dam and its reservoir, and the subsequent flooding of part of the plain.



Figure 2: Drone images of Bab surrounded by the Dokan Lake (Photo: Henrik Brahe).

Today hundreds of archaeological sites on the Peshdar and Rania plains are in danger of destruction either by the inundation of the dam's reservoir – Lake Dokan – or by expanding modern cities and towns. Archaeological investigations by the Danish Archaeological Expedition to Iraq have so far explored a section of the Rania Plain lying within the inundation zone of the lake. To achieve its goals the project undertakes intensive survey of the landscape to identify ancient settlements (with fieldwalking and the analysis of satellite imagery) combined with excavations and targeted soundings at selected sites. Excavations at Bab-w-Kur (Kurdish for 'father and son') and the associated cluster of smaller satellite sites that surround Bab-w-Kur have revealed an unusually complex occupational history dating to the Late Chalcolithic 2-5 period (4200-3100 BC), and the survey work has recorded a rich settlement history with a large number of sites dating to this period (Fig. 2). It is during this period in history that we start to see in the archaeological record the emergence of complex urbanism –with the rise of cities and significant societal and economic changes that led to fundamental transformations in human societies– across Mesopotamia.



Figure 3: The site of Kur on the shore of the lake (Photo: Henrik Brahe autumn 2013).

The 'palace of the lizard king'

The twin sites of Bab-w-Kur lie deep within the flood zone of Lake Dokan and are only accessible for about four months of the year. In 2012 fieldwork at the main mound of Bab revealed the remains of a well-planned walled settlement dating to the Late Chalcolithic 2-3 period (4200-3700 BC) at the base of the mound, and widespread pottery kilns and trash pits across its surface. In the following year, the project continued investigations at the neighbouring site of Kur (Fig. 3). Surface scraping and excavation exposed a large niched building dating to the Late Chalcolithic 3-4 period (3850-3400 BC) and evidence of systematic trash pitting following its abandonment.



Figure 4: Bab and the huge building complex (Photo: Henrik Brahe, autumn 2015).

Excavations at Bab in 2015 uncovered a huge building complex - possibly dating to the Late Chalcolithic 4-5 period (3700-3100 BC) - on the summit of the mound (Fig. 4-11). The building has a cruciform and symmetrical layout, and consists of a large central room with corridors and a series of flanking rooms. Two large rectangular hearths were found in the central room of this complex. These and the food preparation tools found in subsidiary rooms adjacent to the central room may point towards a formal use for this complex – perhaps as a palace or residence for a local ruler (Fig. 12). It is unusually large and well-laid out for the period, and potentially holds great significance for understanding the changes society was undergoing at this time. The name we have given to the building was inspired by the unusual motif of a lizard on a clay sealing found at the

site. Contemporary large multi-room and formal complexes are not well known from Upper Mesopotamia, but examples have been found at Habuba Kabira South in Syria, Arslantepe in Turkey and Tepe Gawra in Iraq. Interestingly, the groundplan for the famous “Eye Temple” at Tell Brak in Syria bears striking similarities to the layout of the building at Bab. Further excavation will shed light on the potential similarities between the large complex at Bab and the elite or public structures found elsewhere in Mesopotamia in this period.



Figure 5 and 6: Revealing the complex at Bab and the excavation of soundings into the rooms of the complex (Photos: Henrik Brahe, autumn 2015).



Figure 7 and 8: A visit by seven Kurdish TV stations to Bab in 2015 and team breakfast at Bab in autumn 2015 (Photos: Henrik Brahe, autumn 2015).

Survey and heritage management on the Rania Plain

Important archaeological remains belonging to the Late Chalcolithic period have also been recorded by the project’s survey work. In the autumn season of 2013 and spring season of 2015 in the region around Bab-w-Kur, the project recorded a large increase in the number of sites dating to the Late Chalcolithic period and unusual cases of sites clustering together into larger entities. We consider this patterning to represent evidence of small-scale urban sprawl across the Rania Plain – a phenomenon which is known in past Mesoamerica and present African urban societies but is still only just beginning to be identified and understood in Mesopotamian archaeology.

The Danish Archaeological Expedition to Iraq is also concerned with the assessment of damage to the archaeological heritage of the Rania and Peshdar Plains. Since the 1950s the archaeological heritage of the plains has suffered extensively from damage by the waters of Lake Dokan, the practices of agricultural intensification and modern urban expansion. These processes have recently started to rapidly gain pace. Today, many archaeological sites are at risk of damage or even complete destruction. As a result, the project has begun an initiative using UAV micro-helicopters, commonly referred to as drones, to monitor and record damage to the archaeological sites and landscape of the plain.



Figure 9-11: Collecting soil and flotation samples, sorting macro finds from flotation samples and recording the many surface finds from site (Photos: Henrik Brahe, autumn 2015).

Future work

A new phase of investigations on the Rania plain by the Danish Archaeological Expedition to Iraq will begin in 2016. Its aim is to explore and expand our understanding of the anatomy and temporal development of early urbanism at the margins of what was once Upper Mesopotamia. This research will include studies of the morphology of the urban landscape, the spatial and socio-economic organization of early urban societies, and it will establish a fine-resolution chronology through scientific sampling and dating methods for the urbanisation process visible in the region.

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About DAEI

The Danish Archaeological Expedition to Iraq (the former University of Copenhagen Archaeological Project in Iraq) is a collaborative project between the University of Copenhagen and the National Museum of Denmark. The project is directed by Tim Skuldbøl (University of Copenhagen, Denmark, Carlo Colantoni (University of Leicester, England) and Mette Marie Hald (National Museum of Denmark) and has a number of affiliated researchers from Denmark, USA and Europe who contribute to the study of archaeological remains. Further information: see www.facebook.com/babwkur and www.urbarch.tors.ku.dk



Figure 12: The 'palace of the lizard king' (Photo: Henrik Brahe, autumn 2015).

Team members in 2012-2015

Amanj Ameen (museum representative), Barzan Baiz (museum representative), Henrik Brahe, Carlo Colantoni, Marc Adam Fenchel, Anne Mette Harpelund, Ditte Kannegaard Kvist, Rasmus Birk Nielsen, Tim Skuldbøl, Guenever Bjerre Thaarup, Jill Weber and Alexandra Wood.

DAEI project presentations for 2013-2016

Public presentations

Skuldbøl, T.B.B., Colantoni, C. and Hald, M.M. 2016

Culture contact and early urban development in Upper Mesopotamia. New evidence from the Zagros foothills, northeastern Iraq. Paper to be presented at the 10th International Congress on the Archaeology of the Ancient Near East, Section: 6. Excavation Reports & Summaries, 25-29. April, 2016, Vienna, Austria.

Skuldbøl, T.B.B., Hald, M.M. and Colantoni, C. 2016

Why manage garbage? New light on the management of garbage in early urban societies. Poster to be presented at the 10th International Congress on the Archaeology of the Ancient Near East, 25-29. April, 2016, Vienna, Austria.

Colantoni, C. 2015

Three seasons of work by the University of Copenhagen Archaeological Project on the Rania Plain, Iraqi Kurdistan. An investigation of early urbanism on the hilly flanks of Mesopotamia. School of Archaeology, Oxford University Seminar series. May 2015.

Skuldbøl, T.B.B. and Colantoni, C. 2015

Low-density urbanism and urban sprawl in the Zagros foothills, northeastern Iraq. BANEAs - the British Association for Near Eastern Archaeology 2015, London. 7-9 January 2015.

Skuldbøl, T.B.B. 2014

Urban trajectories and dynamics of complexity in the Upper Mesopotamia: a view from the Zagros foothills. NINO 75-Jubilee Conference, Zagros. National Museum of Antiquities, Leiden, Holland, 1. December 2014.

Skuldbøl, T.B.B., Colantoni, C. and Hald, M.M. 2014

Early urbanism in the hilly flanks of Mesopotamia - The dynamics of settlement complexity and urban transformation on the Rania Plain in northeastern Iraq. ASOR - American Schools of Oriental Research 2014, San Diego, USA.

Skuldbøl, T.B.B. and Colantoni, C. 2014

Urbanism on the edge - Complex settlement patterns and urban transformations on the Rania Plain in northeastern Iraq. 9th International Congress on the Archaeology of the Ancient Near East (ICAANE 2014), Basel, Switzerland.

Skuldbøl, T.B.B. and Colantoni, C. 2014

First Results of the Rania Plain Survey - Salvage Operations in the Dokan Dam Inundation Zone. 9th International Congress on the Archaeology of the Ancient Near East (ICAANE 2014), for the workshop "Trajectories of complexity in Upper Mesopotamia: processes and dynamics of social complexity and their origin in the Halaf period". Basel, Switzerland.

Skuldbøl, T.B.B. 2014

First results of the University of Copenhagen Archaeological Project in Iraqi Kurdistan, Near Eastern Lecture Series - Archaeology and Assyriology, University of Copenhagen, 21. Marts 2014.

DAEI project publications for 2013-2016

Skuldbøl, T.B.B. and Colantoni, C. 2016a

First Results of the Rania Plain Survey. Salvage Operations in the Dokan Dam Inundation Zone. In *Proceedings of the 9th International Congress on the Archaeology of the Ancient Near East June 9-13, 2014, University of Basel. Volume 3: Reports*. Harrassowitz Verlag, p. 131-145.

Skuldbøl, T.B.B. and Colantoni, C. 2016b

Tracking early urbanism in the hilly flanks of Mesopotamia - three years of Danish archaeological investigations on the Rania Plain. In Kopanias, K. and MacGinnis J. Eds. *Archaeological Research in the Kurdistan Region of Iraq and the Adjacent Regions*. Oxford: Archaeopress, p. 411-415.

Skuldbøl, T.B.B., Hald, M.M. and Colantoni, C. 2016c

Why manage garbage? New light on the management of garbage in early urban societies. Poster presented at the 10th International Congress on the Archaeology of the Ancient Near East, 25-29. April, 2016, Vienna, Austria. Published on <http://urbarch.tors.ku.dk/publications/> Academia and Facebook.

Skuldbøl, T.B.B. and Colantoni, C. 2016d

Early urbanism on the margins of Upper Mesopotamia - Complex settlement patterns and urban transformations on the Rania Plain in northeastern Iraq. In *Trajectories of Complexity. Socio-economic Dynamics in Upper Mesopotamia in the Neolithic and Chalcolithic Periods*, Iamoni, M. ED. Studia Chaburensia Vol. 6, Harrassowitz verlag, p. 1-26.

Skuldbøl, T.B.B. 2015a

Rania Plain: University of Copenhagen Archaeological Project. In Kopanias, K., MacGinnis, J and Ur,

J. Eds. *Archaeological Projects in the Kurdistan Region in Iraq*. The Directorate of Antiquities of Kurdistan, 2015, p. 39.

Eidem, J. and Skuldbøl, T.B.B. 2015b

Rania Plain Survey. In Kopanias, K., MacGinnis, J and Ur, J. (eds.). *Archaeological Projects in the Kurdistan Region in Iraq*. The Directorate of Antiquities of Kurdistan, 2015, p. 40.

Skuldbøl, T.B.B. and Colantoni, C. 2014a

Damage assessment of Iraq's past: Archaeological Heritage Management on the Rania Plain, Iraqi Kurdistan. *Middle East – Topics & Arguments (META)* Vol. 3: 41-54.

Skuldbøl, T.B.B., Hald, M.M., Colantoni, C., Weber, J., Nielsen R.B., Thaarup, G.B. and Brahe, H. 2014b

Arkæologi i vandkanten – redningsundersøgelser langs Dokan-søen i det nordøstlige Irak. *National Museets Arbejdsmark 2014*, p. 144-157

Skuldbøl, T.B.B., Hald, MM., and Colantoni, C., 2013a

Danske arkæologer skal redde Iraks kulturarv. www.videnskab.dk (December 2013). Online periodical of the Danish Ministry of Research. <http://videnskab.dk/miljo-naturvidenskab/danske-arkaeologer-skal-redde-iraks-kulturarv>

Skuldbøl, T.B.B. 2013b

På kanten af Zagros bjergene. *Tidskriftet Sfinx*, nr. 2013-1: 20-23.

Further reading

- www.urbarch.tors.ku.dk
- www.facebook.com/babwkur
- www.videnskab.dk/miljo-naturvidenskab/danske-arkaeologer-skal-redde-iraks-kulturarv
- www.videnskab.dk/kultur-samfund/danske-arkaeologer-udgraver-tidligt-bysamfund-i-irak