

Settlement history of Iraqi Kurdistan: an assessment halfway into the project

Rafał Koliński

Institute of Prehistory, Adam Mickiewicz University

Abstract: The objectives of the “Settlement history of Iraqi Kurdistan” project include the identification and recording of archaeological sites and other heritage monuments across an area of more than 3000 km² located on both banks of the Greater Zab river, north of Erbil. A full survey of the western bank was carried out over three field seasons, in 2013, 2014 and 2015 (leaving the Erbil/Haūler province to be studied in the next two seasons). To date, at least 147 archaeological sites dating from the early Neolithic Hassuna culture to late Ottoman times have been registered. Moreover, the project documented 39 architectural monuments, as well as the oldest rock reliefs in Mesopotamia dating from the mid 3rd millennium BC, located in the village of Günduk. Altogether 91 caves and rock shelters were visited in search of Paleolithic and Pre-Pottery Neolithic remains. The paper is an interim assessment of the results halfway into the project, showing the trends and illuminating gaps in the current knowledge.

Keywords: settlement history, North Mesopotamia, Iraq, Kurdistan, heritage, Paleolithic, Neolithic, Chalcolithic, Bronze Age, Iron Age

The “Settlement history of Iraqi Kurdistan” project has been identifying and documenting prehistoric and historic settlement along the plains at the foot of the mountains of Kurdistan on both sides of the Greater Zab river ever since 2012, working under two consecutive grants from the Polish National Science Centre (2012/07/B/HS3/01472 and 2014/13/B/HS3/04872). An essential part of the project is the Upper Greater Zab Archaeological Reconnaissance (UGZAR), which is tasked with data collection from both banks of the Greater Zab river north of Erbil, an area which has

so far escaped any intensive archaeological research (Braidwood and Howe 1960; Boehmer and von Gall 1973; Reade and Anderson 2013).

To date, the survey has covered approximately two-thirds of the study area, amounting to 3058 km². In 2012, which was a short season, fieldwork concentrated in the province of Erbil, on the left bank of the Greater Zab and along the northern bank of the substantial seasonal stream Bastora Çai. In the course of three further survey campaigns in 2013–2015, the team moved through the province of Dohuk, on the right bank of the Greater Zab,

completing by the end of 2015 the study of the entire area allotted to the project in this province. The collected dataset can thus be easily compared to the results of a similar survey conducted toward the west by a team from the University of Udine within the framework of the Land of Nineveh Archaeological Project (LoNAP) (Morandi Bonacossi 2012–2013; Morandi Bonacossi and Iamoni 2015; Gavagnin,

Iamoni, and Palermo 2016). In fact, the dividing line between the two projects was entirely artificial, being set on the 43° 40' meridian, thus splitting the fertile Navkūr Plain into two uneven parts, the smaller of which constituted the western part of the UGZAR project study area. It is thus both feasible and reasonable to consider the UGZAR results in the context of data recorded by Italian colleagues.

RESEARCH OBJECTIVES AND METHODS

The UGZAR project has followed other major survey projects active in the region in implementing fieldwork methodology provided by the informal Assyrian Landscapes Research Group. This is a platform for contact and cooperation for all the major survey projects now being carried out in North–Central Iraqi Kurdistan, namely the Eastern Ḥabur Archaeological Survey by Eberhard Karls Universität Tübingen around Zaxo (Pfälzner, Sconzo, and Puljiz 2015; Pfälzner and Sconzo 2016), and Erbil Plain Archaeological Survey by Harvard University around Erbil/Haūler (Ur et al. 2013). The methodology called for extensive use of satellite imagery, in addition to other sources, in the initial phase of the project. Both historical (CORONA and HEXAGON spy satellite programs of the late 1960s and early 1970s) and modern satellite imagery (GeoEye, QuickBird satellite imagery freely accessible on the internet, as well as LANDSAT, ASTER and others) were used in combination. Other sources used during this phase of the project included the results of earlier archaeological research in the surveyed areas, accounts by travelers and other Europeans visiting the area, as well as a wealth of information collected

by the Iraqi State Board of Antiquities and Heritage (formerly the Antiquities Service of Iraq) (Salman 1970; 1976)

A list of tentative identifications of archaeological sites and heritage monuments was then verified during the field seasons in Iraqi Kurdistan. It turned out during the fieldwork that, at least in the UGZAR working area, identifying sites from satellite imagery was much more difficult than expected. It worked on the alluvial plain constituting the western part of the project area, but not really in the highlands and mountains (Koliński 2015). Consequently, to a large extent, the sites successfully identified on satellite imagery proved to be known already from the *Atlas of Archaeological Sites in Iraq* (Salman 1976, henceforth *Atlas*).

Thus the UGZAR field team relied more on other methods of tracking archaeological sites, namely, interviews with the indigenous population and transects [Table 1]. The interviews were carried out mainly with the *mokhtars* (village heads) and occasionally with employees of regional offices of the Direction of Antiquities of Kurdistan originating from villages located in areas of particular interest. A limited number of

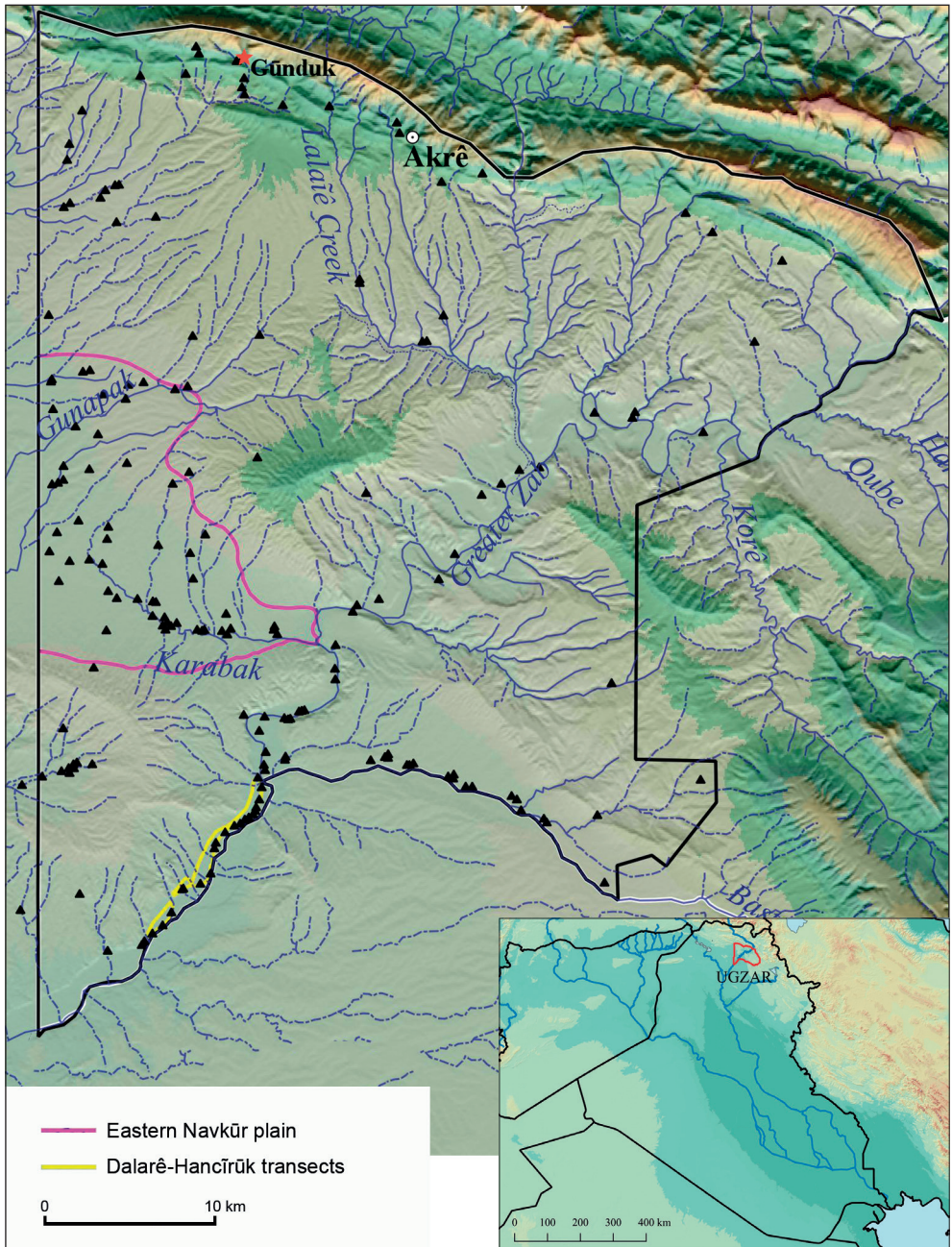


Fig. 1. Location of archaeological sites identified by the UGZAR project in the area surveyed in 2012–2015; inset, location of the UGZAR survey area (©UGZAR project/drawing J. Mardas)

transects was carried out in 2013 and 2014, taking on bigger proportions in 2015 to a considerable success.¹ The three seasons in Duhok province have identified 147 archaeological settlement sites [Fig. 1]. Most of the new identifications were made during the transects, especially the small and/or flat sites, which were likely to escape the attention of local residents. The interviews proved an almost equally efficient method of identifying new sites (interviewees usually also indicated sites known from the *Atlas*, which were not taken into account in Table 1), more so than interpretation of satellite imagery, which was of limited efficiency in specific landscapes, although the number of sites identified by this method is still higher than the number of sites indicated in the *Atlas*.²

Table 1. *Methods of archaeological site identification in Duhok province in the UGZAR area (sites listed in the Atlas are not included in the total of sites)*

Identification methods	Number of sites	Percentage share
<i>Atlas of Archaeological Sites in Iraq</i>	30	20.4%
Satellite imagery	34	23.1%
Interviews	40	27.2%
Transects	71	48.3%
Others	2	1.4%
Total	147	100%

The identified sites were documented with photographs, written descriptions and, in most cases, measurements necessary to plot a contour plan of the site. On smaller sites or sites with scarce sherd scatter, archaeological material was collected from the entire surface. On bigger sites or sites with more abundant finds, specific collection areas were marked, corresponding to the morphology of the sites. Material was collected selectively from these few points, covering only diagnostic sherds, like rims, bases, handles and decorated fragments. These were subsequently cleaned, inventoried and recorded at the base camp. Large finds, like baked bricks, and large stone implements (querns, mortars) were documented in the field.

During the three field seasons in Dohuk province, 7500 pottery sherds were collected and documented, of which 2811 (37.5%) were identified as to period using the Working Ceramic Typology (Ur 2013). These identifications served as a basis for determining site chronology and constituted the starting point for a reconstruction of the settlement history in the studied area.

At the end of each season, a list of documented sites including description, contour plan and dating was submitted to the Direction of Antiquities of Kurdistan; the same list was later published on the project's website, together with a map showing the distribution of the sites and a report on the concluded season (<http://archo.amu.edu.pl/ugzar/indexen.htm>).

¹ A mixed strategy, combining intensive transecting and extensive reconnaissance, implemented in 2016, covered with transects altogether 42 km², that is, nearly 10% of the area studied in the course of the season.

² The northern part of the study area, corresponding to the *qada* of Akre, is not covered by any of the maps in the *Atlas*.

SETTLEMENT HISTORY

The collected dataset has demonstrated the necessity of subdividing the surveyed UGZAR area into several morphological and environmental zones based on the geographical setting and in line with the differing trajectories of development (Koliński 2016: 163–166; forthcoming). Some areas, like the eastern, alluvial part of the Navkūr plain and the adjacent Karabak plain, show intensive settlement from the Neolithic down to late Ottoman(?) times [Fig. 2:A]. Other areas, like the bad-lands between Akrê and the Greater Zab valley, seem to have witnessed no settlement prior to the Neo-Assyrian period. It seems reasonable thus to present here an insight into settlement history only on the grounds of two of the most intensively studied areas, namely the eastern Navkūr/Karabak plain and the area on the western bank of the Greater Zab covered by the Dalarê–Hancîrûk transects. It certainly deserves note that the settlement pattern and the trajectories of development differ considerably for the Prehistoric period and the Bronze Age.

Neolithic settlement is nearly entirely absent from the area of the Dalarê–Hancîrûk transects. It is represented by a single Halaf–Ubaid period site (S170 = US139) [Fig. 2:B].³ Conversely, the Navkūr plain reveals a much richer settlement history, featuring slow growth in terms of both the number of sites and the aggregate site area with an apex in the Halaf

period, when as many as nine sites were occupied [Fig. 3]. After a decline during the Ubaid period, the late Chalcolithic featured a dynamic increase of sites in the Navkūr plain (up to 13.5 sites), despite a likeness of their description: all were small, typically less than 1 hectare in area. Similarly to earlier periods, the evidence for the late Chalcolithic period is hardly present in the Dalarê–Hancîrûk area, where only two sherds of this period were discovered [Fig. 4]; one of them represents a Beveled Rim bowl of possible South Mesopotamian origin.⁴ The first half of the 3rd millennium BC, belonging already to the Bronze Age, represented a settlement pattern very similar to the earlier one. Small sites dominated the plain in Navkūr, reaching 15 in number. The western bank of the Greater Zab seems to have been colonized in this period as it is then that settlement sites start to appear, albeit in limited number.

During the later part of the 3rd millennium BC a significant change occurred in the Navkūr plain. An urban settlement (S074 = US018), covering approximately 33 hectares in area, appeared for the first time in this area. Sites from this period in the UGZAR working area tend to be small settlements and no site of this size has been noted so far either in the western or in the central part of the Navkūr plain, although middle-sized settlements have been identified (D. Morandi Bonacossi,

³ The site numbers starting with an S refer to the field numbering, reflecting an increasing number of sites during successive seasons. The US numbers, to be used in the final publication of the project, reflect geographical site distribution.

⁴ The issue of so-called Southern Uruk pottery presence was addressed extensively by Dorota Ławecka in her paper ‘Newcomers and autochthons. Preliminary report on 2014–2015 survey activities in Kurdistan Autonomous Region, Iraq’ read at the first ‘Poles in the Near East’ conference organized in 2016 in Warsaw by the Polish Centre of Mediterranean Archaeology University of Warsaw.

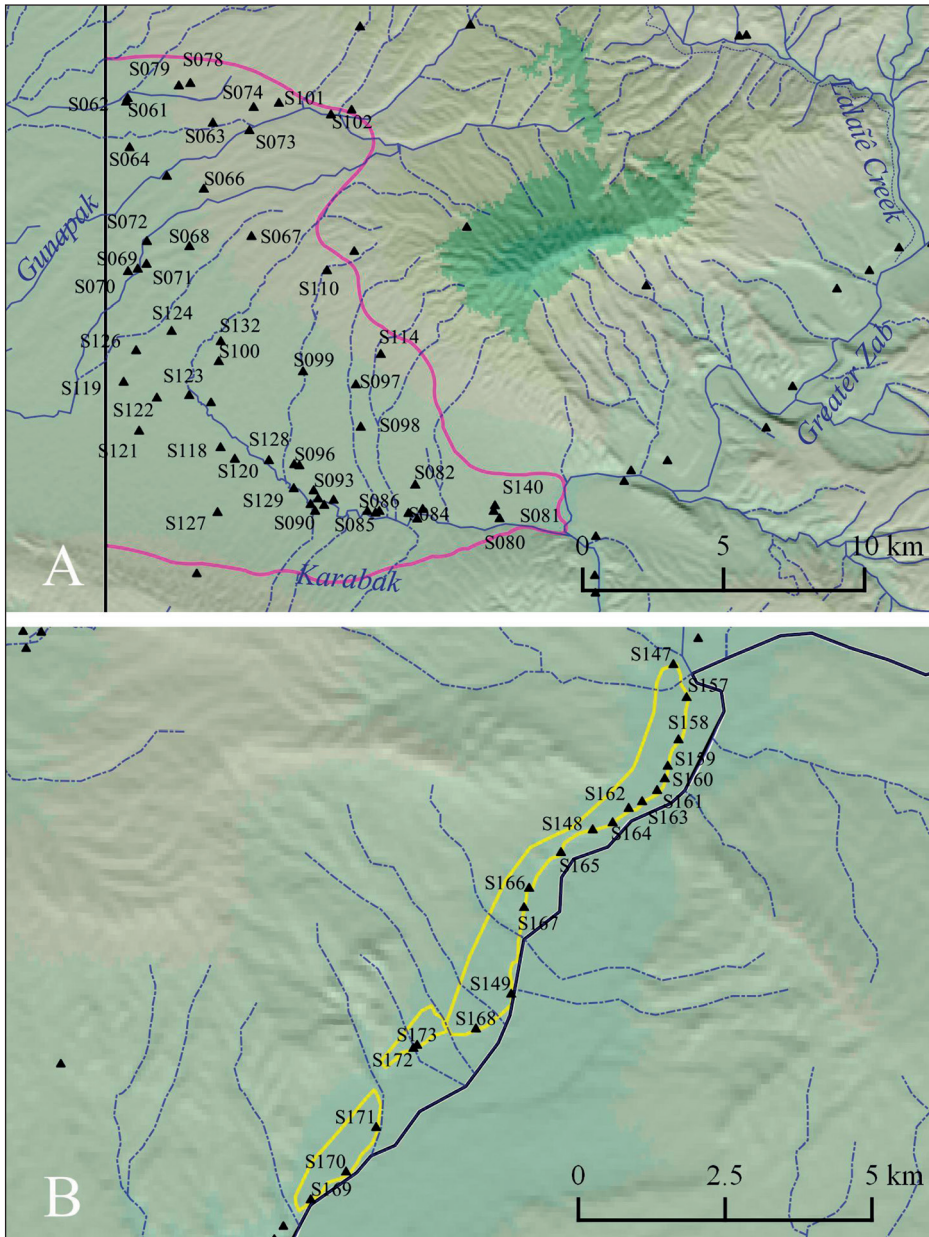


Fig. 2. Distribution of archaeological sites: in the Navkür/Karabak study area (A) and in the Dalarê-Hancîrûk transect area (B) (©UGZAR project/drawing J. Mardas)

personal communication). It seems very likely then that here was a power center of the later 3rd millennium BC (corresponding to the Akkadian and post-Akkadian periods), extending its authority probably to the entire Navkūr plain. Settlement density during the Middle

and Late Bronze Age increased, in terms of both the number of sites and the mean site area, but no comparable urban center to S074 = US018 from the close of the 3rd millennium BC has been attested. Instead, there are three sites of comparable area, topping 10 hectares, distributed

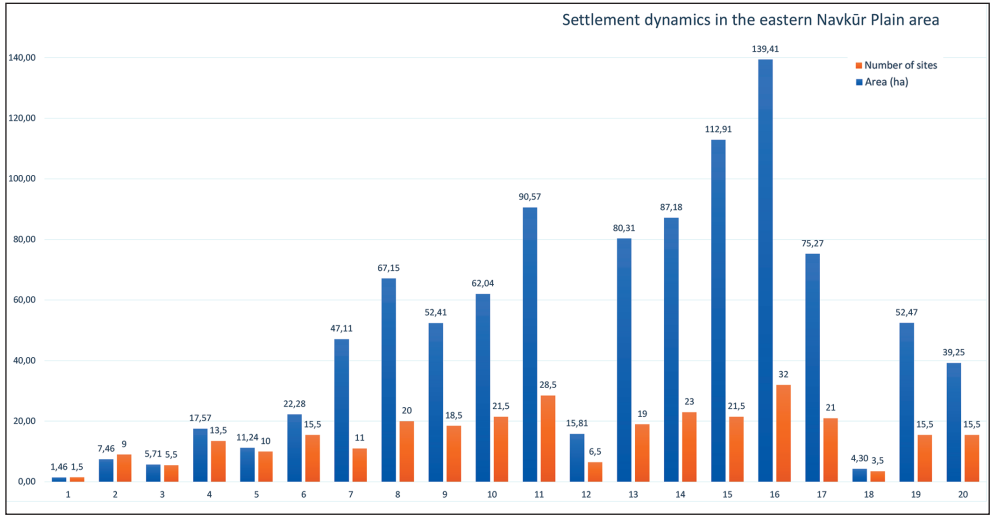


Fig. 3. Settlement dynamics in the Navkūr/Karabak study area (©UGZAR project/R. Koliński)

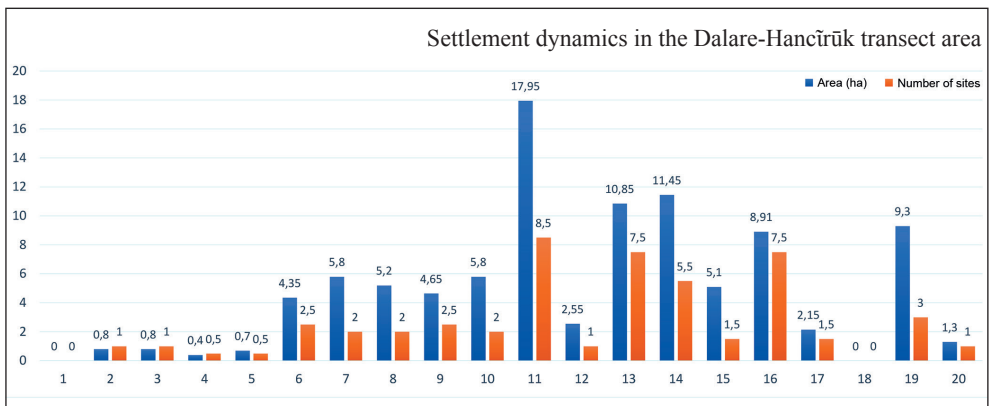


Fig. 4. Settlement dynamics in the Dalare-Hanciruk transect area (©UGZAR project/R. Koliński)

more or less evenly across the plain. A similar situation is observed in the remaining part of the Navkūr plain (D. Morandi Bonacossi, personal communication), suggesting that the main political center(s) of this period was or were located outside of the Navkūr plain. These changes did not, apparently, affect the Dalarê–Hancîrūk area, where the number of sites (2) and their size (about 5 ha altogether) remained stable throughout the 3rd and the 2nd millennium BC.

The area along the Zab witnessed a four-fold increase in Neo-Assyrian settlement. This is attested in the number of sites as well as the aggregate settled area. A similar change is clearly observable in the Navkūr plain and the neighboring survey areas, although it scores only about 50% owing to the quite high settlement density during the Bronze Age. The change could perhaps be attributed to the Assyrian imperial policy of agricultural development, which would have led to colonization of areas settled scarcely before, if at all (Morandi Bonacossi and Iamoni 2015: 25–29; Ur and Osborne 2016). The Neo-Assyrian period also marks the beginning of a new era, bringing in line finally the settlement development trajectories in the two regions here discussed. It may reflect the incorporation of the studied area into a supraregional imperial network starting with the Neo-Assyrian period.

The following so-called post-Assyrian period was characterized by a settlement collapse in both areas, a phenomenon typical of all of northeastern Mesopotamia at this time (Koliński 2017). Denser settlement was reestablished at the onset of the Hellenistic period and this rising tendency peaked in Sasanian and late Sasanian/early Islamic times, most probably due to

the presence of Christian communities fleeing Byzantium following the banning of the Nestorians in the 4th century AD. In the middle Islamic period, the number of settlements in both areas dropped by approximately 50% and the settlement density continues on this level until pre-modern times.

In terms of other heritage recorded by the survey, one should mention rock reliefs, caves and historical architectural sites.

ROCK RELIEFS

Four rock relief panels were recorded on the slopes of the mountain chains on the northern border of the UGZAR working area. Three of these, located in a rock shelter above the village of Günduk, date to the 3rd millennium BC and are currently the oldest known Mesopotamian rock reliefs. More



Fig. 5. *The Harîr relief in October 2014*
(©UGZAR project/photo D. Piasecki)

the pity that they were partly destroyed by treasure hunters either in 1994 or in 1996 (Reade and Anderson 2013: 82; Koliński 2016: 168). Explosives placed under one of the carvings destroyed one of the reliefs entirely (Panel 2), and seriously damaged the other (Panel 1). Only Panel 3, located deep inside the shelter, avoided damage. In 2013, the UGZAR team recovered two fragments of the destroyed Panel 2 on the slope below the rock shelter, allowing a critical reevaluation of published representations of the panel and excluding two of four as not being correct (Koliński 2016: 168–169).

The fourth and much younger panel is located in the eastern part of the area, above the Harîr township. The relief, showing a Parthian ruler (Grabowski 2011), was documented by Reiner Boehmer in 1970 (Boehmer and von Gall 1973). It has since deteriorated badly, most probably due to climatic conditions and the increased traffic on the Erbil–Roûanduz road located at the base of the hill where it is located [Fig. 5].

CAVES

Numerous caves are located in the UGZAR working area, especially in the limestone ranges of the Akrê, Prt and Harîr mountains. A few of them were visited by Robert John Braidwood during his pioneering research in the area (Braidwood and Howe 1960: 29, 59–60), and as much as 37 caves were listed in the Akrê area alone (Salman 1970). The near location of the Şanidar cave (Solecki 1963), just 35 km to the northeast of Akrê, prompted the UGZAR team to visit as many caves in

an effort to assess their potential for future research.

As many as 91 caves and rock shelters were visited during the 2013 season, but relatively little archaeological material was recovered due to continuous use of these places as animal shelters. In most cases finds were scattered on the slopes below cave openings and more often than not, pottery collected there represented very recent period(s), covering approximately the past two centuries at best. Flint or stone implements were also relatively rare, being registered in 19 documented cases. One should keep in mind, however, that most caves in Kurdistan, including the Şanidar cave, have witnessed extensive use in modern times and it was only after excavations began that the discoveries for which the Şanidar cave is famous were made (Solecki 1979). A coring project is recommended, if the cave deposits are to be fully evaluated in terms of their research potential. In any case, speleothems observed in about half of the documented caves offer opportunities for climatological studies.

ARCHITECTURE

Numerous architectural remains were documented, first of all in villages located in the valleys cutting into the southern slopes of the Şax-î Akrê mountain range. According to medieval sources, most of the villages located there were founded by Christian communities. Religious structures stand in most of these locations, either churches as in Şarman, Şuş, Xrdîs, Xerpe and Akrê or monasteries as in Günduk, Akrê and Narûa.⁵ A synagogue

⁵ Discussed in Xenia Kolińska's unpublished paper "L'architecture chrétienne dans la région d'Akrê. 50 ans après J.M. Fiey", read at the first "Poles in the Near East" conference in Warsaw in 2016.

documented in Şuş, as well as mosques in Akrê and in Bûsêl, attest to the presence of other religious communities in the area, a situation which is typical of northern Iraq even today. Other buildings, like castles for example, were also encountered in the region (in Şuş and Akrê). Moreover, the team documented

a group of industrial buildings, namely grist mills consisting of a stone drip tower and a mill-house at its base (Neely 2011), demonstrating that the tradition of horizontal water-wheel mills, known from Iran from the Sasanian period onward, had reached Iraqi Kurdistan as well.

HERITAGE MANAGEMENT

One of the aims of the project included documentation and monitoring of the damage sustained by archaeological sites in recent decades. Photographic and written assessment of such damage was made in the field. Generally speaking, illicit digging was found to be relatively rare at sites in the vicinity of Akrê in contrast to the heavily looted locations in southern Iraq. More dangerous and widespread was damage

resulting from human activities related to the rapid development of a settlement network, infrastructure and intensified agriculture (Mardas 2017, in this volume). It is clear that archaeological sites in the area need more protection than they have received until now, and that awareness-building activities in Kurdish society are a must in order for the country's rich cultural heritage to be preserved for the future.

SUMMARY

Four years of fieldwork carried out by the UGZAR project team in an area barely touched by earlier research revealed a rich and complex picture of ancient heritage in the studied area. The region appears to be a patchwork of sub-regions differing considerably in terms of settlement density and development trajectories. Some of the observed traits are typical of northeastern Mesopotamia as a whole, while others represent evidently local changes that still defy a full understanding. The acquired dataset provides the grounds for more comprehensive study of settlement history in the region.

The concurrent monitoring of the state of cultural heritage has also proved seminal in view of the rapid development of Iraqi Kurdistan in recent times which has

placed many archaeological remains and historical monuments in danger. Indeed, instances of unfortunate destruction have been witnessed by the project team even during its short time in the field.

The presented outline of results for part of the project area is an interim report and should be treated as provisional at best. Following two more field seasons, which will focus on the eastern bank of the Greater Zab river (Harîr township in 2016 and Şaqlaûa in 2017), the project will concentrate on producing the final publication of the survey results. Together with the results of the other major survey projects working in the region, it will provide a comprehensive and informative view of settlement history in the Iraqi Kurdistan area.

Assist. Prof. Rafał Koliński
Institute of Prehistory, Adam Mickiewicz University
61-614 Poznań, Poland, ul. Umultowska 89D
kolinski@amu.edu.pl

REFERENCES

- Boehmer, R.M. and von Gall, H. (1973). Das Felsrelief bei Batas-Herir. *Baghdader Mitteilungen*, 6, 65–77
- Braidwood, R.J. and Howe, B. (1960). *Prehistoric investigations in Iraqi Kurdistan* [=SAOC 31]. Chicago: University of Chicago Press
- Gavagnin, K., Iamoni, M., and Palermo, R. (2016). The Land of Nineveh Archaeological Project: The ceramic repertoire from the Early Pottery Neolithic to the Sasanian period. *BASOR*, 375, 119–169
- Grabowski, M. (2011). Abdissares of Adiabene and the Batas-Herir relief. *Światowit*, 9 (50) Fasc. A, 117–140
- Koliński, R. (2015). The use of satellite imagery in an archaeological survey in Iraqi Kurdistan. *Contributions in New World Archaeology*, 9, 113–122
- Koliński, R. (2016). Insights into the settlement history of Iraqi Kurdistan from the Upper Greater Zab Archaeological Reconnaissance Project. In K. Kopanias and J. MacGinnis (eds), *The archaeology of the Kurdistan region of Iraq and adjacent regions* (pp. 163–172). Oxford: Archaeopress
- Koliński, R. (2017). The Post-Assyrian period in the eastern Assyria. In R. Koliński, J. Prostko-Prostyński, and W. Tyborowski (eds), *“A man not to be forgotten”. Studies in ancient economy and society presented to Professor Stefan Zawadzki on the occasion of his 70th birthday* [=Alter Orient und Altes Testament 461] (pp. 93–113). Münster: Ugarit-Verlag
- Koliński, R. (forthcoming). An archaeological reconnaissance in the Greater Zab area of the Iraqi Kurdistan (UGZAR) 2012–2015. In B. Horejs et al. (eds), *Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East II*. Wiesbaden: Harrassowitz Verlag
- Mardas, J. (2017). Iraqi Kurdistan’s heritage in the face of regional development: state of preservation of archaeological sites and damage assessment — preliminary report. *PAM*, 26/1, 813–828
- Morandi Bonacossi, D. (2012–2013). Il paesaggio archeologico nel centro dell’impero assiro. Insediamento e uso del territorio nella ‘Terra di Ninive’. *Atti dell’Istituto Veneto di Scienze, Lettere ed Arti. Classe di Scienze Morali, Lettere ed Arti*, 171(3–4), 181–223
- Morandi Bonacossi, D. and Iamoni, M. (2015). Landscape and settlement in the Eastern Upper Iraqi Tigris and Navkur Plains: The Land of Nineveh Archaeological Project, seasons 2012–2013. *Iraq*, 77, 9–39
- Neely, J.A. (2011). Sasanian period drop-tower gristmills on the Deh Luran Plain, southwestern Iran. *Journal of Field Archaeology*, 36(3), 232–254
- Pfälzner, P. and Sconzo, P. (2016). The Eastern Habur Archaeological Survey in Iraqi Kurdistan. A preliminary report on the 2014 season. *Zeitschrift für Orient-Archäologie*, 9, 10–69

- Pfälzner, P. and Sconzo, P. with a contribution by I. Puljiz. (2015). First results of the Eastern Habur Archaeological Survey in the Dohuk region of Iraqi Kurdistan. The season of 2013. *Zeitschrift für Orient-Archäologie*, 8, 99–122
- Reade, J.E. and Anderson, J.R. (2013). Gunduk, Khanes, Gaugamela, Gali Zardak – notes on Navkur and nearby rock-cut sculptures in Kurdistan. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie*, 103(1), 69–123
- Salman, I. (1970). *Archaeological sites in Iraq*. Baghdad
- Salman, I. (1976). *Atlas of the archaeological sites in Iraq*. Baghdad
- Solecki, R.S. (1963). Prehistory in Shanidar Valley, northern Iraq. *Science*, 139(3551), 179–193
- Solecki, R.S. (1979). Contemporary Kurdish winter-time inhabitants of Shanidar cave, Iraq. *World Archaeology*, 10(3), 318–330
- Ur, J. (2013). *Working Ceramic Typology. 7th edition. Assyrian Landscapes Research Group 2012–2013*. Unpubl. manuscript
- Ur, J., de Jong, L., Giraud, J., Osborne, J.F., and MacGinnis, J. (2013). Ancient cities and landscapes in the Kurdistan region of Iraq: The Erbil Plain Archaeological Survey 2012 season. *Iraq*, 75, 89–117
- Ur, J. and Osborne, J. (2016). The rural landscape of the Assyrian heartland: recent results from Arbail and Kilizu provinces. In J. MacGinnis, D. Wicke, and T. Greenfield (eds), *The provincial archaeology of the Assyrian Empire* (pp. 163–175). Cambridge: McDonald Institute for Archaeological Research