

11

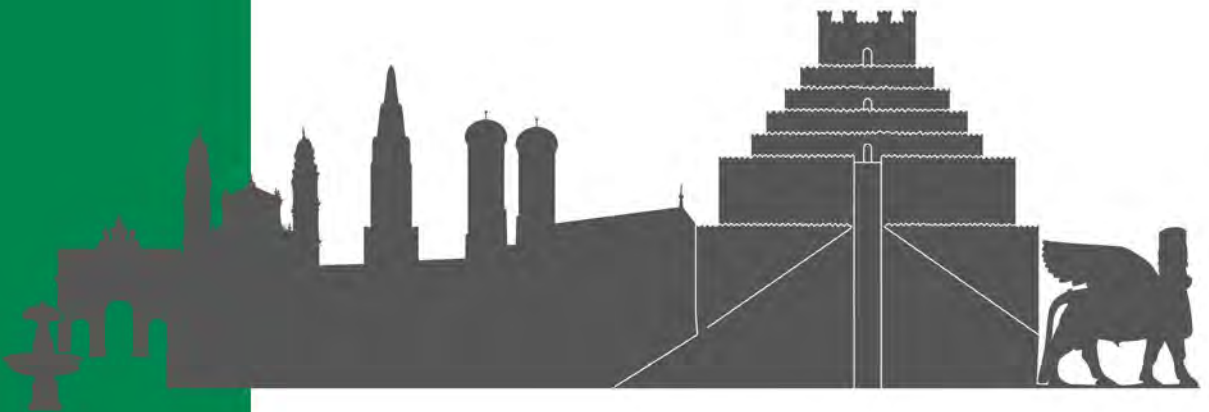
ICAANE

Proceedings of the 11th International Congress
of the Archaeology of the Ancient Near East

Volume 2

Field Reports

Islamic Archaeology



Harrassowitz Verlag

Proceedings of the 11th International Congress
on the Archaeology of the Ancient Near East

Volume 2

Proceedings
of the 11th International Congress
on the Archaeology
of the Ancient Near East

03–07 April 2018,
Munich

Edited by
Adelheid Otto, Michael Herles, Kai Kaniuth,
Lorenz Korn and Anja Heidenreich

2020

Harrassowitz Verlag · Wiesbaden

Proceedings of the 11th International
Congress on the Archaeology
of the Ancient Near East
Volume 2

Field Reports
edited by Adelheid Otto, Michael Herles and Kai Kaniuth

Islamic Archaeology
edited by Lorenz Korn and Anja Heidenreich

2020

Harrassowitz Verlag · Wiesbaden

Cover illustration: Manfred Lerchl.

Bibliografische Information der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen
Nationalbibliografie; detaillierte bibliografische Daten sind im Internet
über <http://dnb.dnb.de> abrufbar.

Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche
Nationalbibliografie; detailed bibliographic data are available in the internet
at <http://dnb.dnb.de>.

For further information about our publishing program consult our
website <http://www.harrassowitz-verlag.de>

© Otto Harrassowitz GmbH & Co. KG, Wiesbaden 2020

This work, including all of its parts, is protected by copyright.

Any use beyond the limits of copyright law without the permission
of the publisher is forbidden and subject to penalty. This applies
particularly to reproductions, translations, microfilms and storage
and processing in electronic systems.

Printed on permanent/durable paper.

Printing and binding: Hubert & Co., Göttingen

Printed in Germany

ISBN 978-3-447-11367-0



Participants of the 11th ICAANE in the main building of the LMU Munich.
For a higher resolution see: <https://www.vorderas-archaeologie.uni-muenchen.de/aktuelles/icaane11-in-muenchen/index.html>.

Contents of Vol. 2

<i>Adelheid Otto – Michael Herles – Kai Kaniuth</i> Foreword to Section 7 - Field Reports	1
Section 7 – Field Reports	
<i>Flavia Amato</i> Aradetis Orgora: Lithic Artefacts from a Site of the Southern Caucasus, Georgia	5
<i>Arsen Bobokhyan – Alessandra Gilibert – Pavol Hnila</i> The Place of “Dragon Stone” Sanctuaries in Context of Cultic Areas of Ancient Armenia	17
<i>Daniel Calderbank</i> Gulf Connections at Tell Khaiber. Interpreting Standardised Pottery Styles in the Sealand Period	31
<i>Antonietta Catanzariti – Terri Tanaka – Adam Maskevich</i> Ban Qala: A Late Chalcolithic Site in the Qara Dagh Valley of Iraqi Kurdistan	43
<i>Alessandra Cellerino – Enrico Foietta</i> The Sanctuary and Cemetery at Kal-e Chendar, Shami (Khuzestan, Iran)	55
<i>Franco D’Agostino – Licia Romano</i> Seven Excavation Campaigns at Abu Tbeirah	69
<i>Alexey Fribus – Sergey Grushin – Robert Sataev – Nadezhda Dubova</i> Excavations at Gonur Depe. A BMAC Bronze Age Site in Turkmenistan in 2014–2015: Necropolis and Residential Areas in the South-West	81
<i>Iulon Gagoshidze – Elena Rova</i> Early Bronze Age Graves at Doghlauri (Georgia): Results of the 2012–2015 Salvage Excavations	91
<i>Kathryn Grossman – Tate Paulette – Lisa Graham – Andrew McCarthy</i> 2017 Survey of Two Prehistoric Sites in Western Cyprus: Stroumpi-Pigi-Agios Andronikos and Makounta-Voules-Mersinoudia	105

VI

<i>Shuichi Hasegawa – Hidemasa Hashimoto – Hidetoshi Tsumoto – Takuzo Onozuka</i> The Excavations at Tel Rekhesh, Israel: The Results of 2013–2017 Seasons	115
<i>Virginia R. Herrmann – David Schloen</i> Zincirli Höyük, Ancient Sam'al: A Preliminary Report on the 2017 Excavation Season	129
<i>Jędrzej Hordecki</i> Why Did They Still Use the Tell? An Analysis of Changes in Post-Chalcolithic Settlement at Çatalhöyük, Turkey	141
<i>E. E. Intagliata – D. Naskidashvili – J. R. Snyder</i> Preliminary Report of the “Forgotten Borderlands” Project in Guria and Adjara (Georgia). Several Remarks on the Results of the Structural Survey at Tsikhisdziri	151
<i>Mehmet Işıklı – Oğuz Arası</i> A New Royal and Religious Space in Ayanis Citadel: The Hall With Podium	161
<i>Sari Jammo – Akira Tsuneki</i> The Outdoor Communal Neolithic Cemetery of Tell el-Kerkh, Northwest Syria	171
<i>Tatsundo Koizumi – Hitoshi Ojima – Hirokazu Yoshida – Ayami Yoshida</i> Experimental Analysis of Sun-Dried Bricks and Pottery from the Ubaid and Late Chalcolithic Periods	183
<i>Steffen Kraus</i> Prehistoric Mining and Metallurgy in Uzbekistan: An Introduction	197
<i>Meysam Labbaf-Khaniki – Kristen Hopper – Eberhard Sauer</i> Fortifications and the Defensive Landscapes of Kalat (North-Eastern Iran)	207
<i>Lanaro, Anna – Castellano, Lorenzo – Highcock, Nancy – Mantovan, Alessio – d’Alfonso, Lorenzo</i> South-Central Anatolia during the Iron Ages: a diachronic view from Kınık Höyük (Niğde)	215
<i>John MacGinnis</i> The 2016 and 2017 Seasons of Excavations at Qalatga Darband	229
<i>Florine Marchand</i> Kunara Lithic Industry: A Preliminary Report	243

<i>Maria Grazia Masetti-Rouault</i>	
Late Bronze and Iron Age Levels from Qasr Shemamok. A First Evaluation of the Impact of the Assyrian Presence in the Region East of Calah	253
<i>Andrew McCarthy – Lisa Graham</i>	
On the Origins of Urbanism in Western Cyprus: A View from the Palaipaphos Hinterland	265
<i>Davide Nadali – Andrea Polcaro</i>	
Italian Archaeological Expedition to Nigin, Southern Iraq: New Results from Recent Excavations	277
<i>Adelheid Otto – Berthold Einwag</i>	
The Survey at Fāra – Šuruppak 2016–2018	293
<i>Metoda Peršin</i>	
Building 2 at Tell Fadous-Kfarabida, Lebanon: An Architectural, Stratigraphic and Functional Study of an Early Bronze Age Building	307
<i>L. Peyronel – A. Vacca</i>	
The Italian Archaeological Project in the Erbil Plain (2013–2017)	317
<i>Agnieszka Pieńkowska</i>	
Iron Age Settlement in the Region of Qumayrah, Oman	331
<i>Philippe Quene</i>	
Eridu: Note on the Decoration of the Uruk ‘Temples’	341f
<i>Marie-Odile Rousset – Bernard Geyer – Nazir Awad – Shadi Shabo</i>	
The Defensive System of the Arid Margins of the Northern Levant during the Middle Bronze Age	349
<i>Eberhard W. Sauer – Jebrael Nokandeh – Hamid Omrani Rekavandi – Davit Naskidashvili – Mohammad-Reza Nemati – Mehdi Mousavinia</i>	
Interconnected Frontiers: Trans-Caspian Defensive Networks of the Sasanian Empire	363
<i>Marion Scheiblecker – Simone Mühl – Jörg W. E. Faßbinder</i>	
Magnetic Investigations in the Shahrizor Plain, Iraqi Kurdistan – The Tell Begum Cluster	373
<i>Melina Seabrook – Katheryn C. Twiss</i>	
Faunal Remains at Ur	385

VIII

- Tevfik Emre Şerifoğlu – Carlo Colantoni – Naoise Mac Sweeney*
The Final Two Seasons of the Lower Göksu Archaeological
Salvage Survey Project (2016–2017) 395
- Mahnaz Sharifi*
The First Season of Archaeological Excavation
at Cham Ruteh Tepe, Seymare, Central Zagros 409
- Alexander Tamm*
Gird-i Kazhaw. A Sasanian Hinterland Fortress
in the Sharizor (Iraqi-Kurdistan) 423
- Aline Tenu*
The 2016-2017 Excavation Seasons in Kunara (Iraqi Kurdistan) 435
- Régis Vallet*
Early Uruk Expansion in Iraqi Kurdistan:
New Data from Girdi Qala and Logardan 445
- Dirk Wicke*
Results of the First Two Seasons of Excavations at Gird-i Qalrah,
a Local Site in the Shahrizor-Plain (Iraqi-Kurdistan) 463

Section 8 – Islamic Archaeology

- Lorenz Korn and Anja Heidenreich*
ICAANE 2018 – Islamic Archaeology. Editors Foreword 481
- Cristina Tonghini – Valentina Vezzoli*
The Islamic Period Settlement in Iraqi Kurdistan:
Results from the Land of Ninive Archaeological Project 483
- Martin Gussone – Martina Müller-Wiener – Burkart Ullrich – Ibrahim Salman*
Settlements Below the Plane: Multidisciplinary Archaeological Survey
in al-Ḥīra (Iraq) 495
- Aila Santi*
Reinterpreting the *miṣr*: New Insights for a Revised Chronological
Attribution of the ‘Mosque-Dār al-Imāra Combination’ in Kufa 509
- Robert W. Smith*
The Abila Relief Fragment and the Creation of Hierotopy
in a Byzantine/Umayyad Era Pilgrimage Complex at Quwayliba, Jordan 521

<i>Ignacio Arce</i>		
	Khirbet el-Mafjar Revisited (II): Notes on the Plan and the Vaulting System of the 'Audience Hall'	533
<i>Hamidreza Pasha Zanous – Majid Montazer Zohouri</i>		
	Some Thoughts on the Iranian-Chinese Maritime Trade in Late Antiquity and during the Early Islamic Period	547
<i>Simone Struth</i>		
	Herzfeld's Theories Reconsidered: An Interdisciplinary Method for a New Reading of the Abbasid Stucco Panels from Samarra	559
<i>Serenella Mancini</i>		
	The Pottery <i>corpus</i> from Estakhr (Fars): Preliminary Results of a New Comprehensive Study	573
<i>Piotr Makowski</i>		
	Preliminary Remarks on the Pottery from the Last Phases of Occupation at Dharih, Southern Jordan (Late 10th–20th Centuries)	583
<i>Katie Campbell</i>		
	The City of Otrar, Kazakhstan: Using Archaeology to Better Understand the Impact of the Mongol Conquest of Central Asia	597
<i>Ana Marija Grbanovic</i>		
	Beyond the Stylistic Idiosyncrasies: Notes regarding the Identity and Mobility of Ilkhanid Stucco Craftsmen in Central Iran	607
<i>Nurşen Özkul Fındık – Deniz Yaşin</i>		
	Islamic Period Ceramics Unearthed in Dumpsites in the Adana/Tepebağ Höyük Excavations	621
<i>Ignacio Arce</i>		
	The Preliminary Phasing of Maqam al-Nabi Musa (Palestine)	635
<i>Bethany J. Walker – Yuval Gadot – Yelena Elgart-Sharon – Omer Ze'evi</i>		
	Agricultural Terracing and Rural Revival in Late Medieval Palestine	651
<i>Rami Alafandi – Asiah Abdul Rahim</i>		
	Aleppine Houses: Designs and Decorated Interiors during the Ottoman Era	663

Foreword to Section 7 - Field Reports

Adelheid Otto – Michael Herles – Kai Kaniuth

A short rejoinder is in order to the foreword contained in Vol. 1 of the 11th ICAANE-Proceedings. Among the presentations delivered in Munich, by far the largest number was registered for Section 7 – Field Reports. While the number of papers reporting on recent excavations was considerable, we deliberately opened the section to those reanalyzing older data or presenting it for the first time. During the conference, the section was divided between three parallel sessions, at times forcing unpleasant decisions on our audience.

Neither way of arranging the published papers being entirely satisfactory, we eventually opted for the same alphabetic order as in sections 1–6. The 39 papers are the most up-to-date summary of current field activities in Ancient Near Eastern Studies and convey a good impression of the topics and methods guiding this research.

The Survey at Fāra – Šuruppak 2016–2018

Adelheid Otto – Berthold Einwag¹

Abstract

The new survey at Fāra investigates the settlement structure of ancient Šuruppak, one of the major cities of third millennium Mesopotamia. Despite the massif destructions of most recent times, new insights into the functioning and use of most areas on the main mound and in the lower town, which had not been explored before, are still possible. Through combined methods of remote sensing, magnetometer prospection and an archaeological prospection of selected areas, various functional zones can be distinguished such as residential areas and various industrial zones. The most spectacular result is the discovery of the city wall and of a very large temple – essential urban structures which had not been found so far in earlier archaeological explorations.

Introduction

Heavy looting between 2003 and 2006 has done irreparable damage to the ancient mound of Fāra. Thousands of deep looters' pits have destroyed the upper meters of the main mound. But would it nevertheless be possible to gain more information about this important Early Dynastic city of Šuruppak, the settlement pattern and archaeology of which are so far but poorly understood? To evaluate this question a team of Ludwig-Maximilians-Universität Munich started a new survey project in and around Fāra in 2016.² The first two short campaigns, from 10th–21st October 2016 and from 12th–23rd January 2017, were organized within the regional QADIS survey project in the Diwaniyah province, directed by Nicolò Marchetti (University of Bologna) and Abbas al-Hussainy (University of Qadissiyah) (Marchetti *et al.* 2017).³ The survey at Fāra continued as part of the new Fāra Regional Survey project (FARSUP), directed by the authors, from February 22nd until March 14th, 2018. It included an

1 Ludwig-Maximilians-Universität, München.

2 Fāra is situated about 45 km southeast of Nippur and 50 km northnorthwest of Uruk in the province of al-Qadissiyah along the former Euphrates course. Today the area is completely deserted, and not even any village or single inhabited houses can be found nearby. Our base camp was in Afak, one hour's drive from the site.

3 We are grateful to the Vice Minister, the Director General of Antiquities Qais H. Rasheed, Chair of SBAH, for granting us the permission and support for this project. Further thanks go to Abbas al-Hussainy who contributed to the success of this season in many ways. Numerous SBAH staff members helped us in many respects in Diwaniyah and Afak, above all Jacob Abdulhassan Hassan and Haidar Laābi. Seven graduate students from al-Qadissiyah University helped us on the field and with the registration and drawing of finds and pottery. Members of the German team were the authors, Christoph Fink and Hardy Maaß; in 2018, Pierre Borsdorf, Friederike Einwag and Johannes Einwag joined the team, and Jörg Faßbinder, Marion Scheiblecker and Sandra Ostner conducted the magnetometer prospection. We are also grateful to the policemen, and to the two guardians of Fāra who took care of us. Our security concept was successful, also thanks to our close relations to the local tribe of the al-Budeir, the province gouverneur and the head of the police department.

intensive surface survey of Fāra and neighbouring sites as well as a magnetometer prospection (Fig. 1).⁴

The purpose of the new survey was twofold: on the one hand, we wanted to document the massive destruction and looting which had taken place after the Second Gulf war between 2003 and 2006 (Otto *et al.* 2018) and to raise the awareness of the local population in order to stop the illicit digging which has still not completely come to an end in the province. Second, we wanted to better understand the third millennium settlement structures, which are accessible immediately at the surface. Fāra offers the rare opportunity to understand the layout, structuring and organisation of a major Early Dynastic and Ur III city on a large surface. To this purpose, the team from Ludwig-Maximilians-Universität Munich investigated the site in 2016 and 2017 by means of systematic survey collections of selected areas and drone photography, in 2018 we carried out a representative surface survey and magnetometer prospection.

Earlier Archaeological Research at Fāra and Open Research Questions

With 180–250 ha Fāra is one of the largest sites in the area, but the main mound rises only to a height of 10 m above the present plain level, whereas the lower town is extremely shallow and in places even below the actual plain level (Fig. 2). The site was first investigated from June 1902 until March 1903 by the Deutsche Orient-Gesellschaft (DOG) under the direction of Walter Andrae (Andrae 1903; Heinrich and Andrae 1931).⁵ The German system of investigating the site by means of regularly laid-out trenches, one from SW to NE and over twenty trenches from W to E – a tremendous work under extremely difficult circumstances – was at that time the best method in order to reveal the settlement structures of such a large site. The trenches and their debris are still visible today on the site as linear depressions and adjacent ridges. Further excavations at the site were conducted by Erich Schmidt for the University of Pennsylvania during three months in 1931 (Schmidt 1931).⁶ Although field research was restricted to a few squares, the deep cut in area DE 38/39 revealed for the first time the stratigraphy of the site from the Jemdet Nasr to the Early Dynastic III period.⁷ More research at the site was carried out by Harriet Martin within the framework of her PhD research on Fāra, through a three day surface survey in May 1973 (Martin 1983; 1988). Martin put up several collection points, around which she collected pottery in an area of 2m. With this

4 The FARSUP Survey is devoted to the area between Fāra and Isin / Išān Bahriyāt. The funding for the project provided by the Faculty for Cultural Studies of the LMU, by the Münchener Universitäts-Gesellschaft, and through funds attached to the appointment of A. Otto as chair of Near Eastern Archaeology.

5 The preliminary results were reported by Robert Koldewey in MDOG 15 and 16 (1902 and 1903) and by Walter Andrae in MDOG 17 (1903). Other members of the team were Nöldeke and Baumgarten. The final results were published much later by Ernst Heinrich with an introduction by Walter Andrae (Heinrich and Andrae 1931), but a fair amount of information from these excavations has still not been published. The excavation house, erected as a protection in this remote area and aptly called al-Qasr, was built from reused Early Dynastic planoconvex baked bricks, which originated – as Andrae 1903: 34 tells us – from the silos; today it is still standing in parts.

6 Since Šuruppak was mentioned in the Sumerian King List as the seat of the last dynasty „before the flood“ and is said to have been the mythical home of the flood hero Utnapištim / Ziusudra, the search for an archaeological proof of the Deluge suggested itself, and was one of the reasons for the investigations of 1931.

7 The results were published by Harriet Martin in her seminal book on Fara in 1988 (Martin 1988: 20–26).

method, she was able to detect the settlement pattern of the city: in Jemdet Nasr and Early Dynastic I times it extended from the centre to the North-East, reached its largest expansion in Early Dynastic II–III, and shrank to an area in the West and South-West in Akkadian–Ur III times.⁸ In the early second millennium, the settlement shrank quickly (some remains on Mound E), was abandoned and never settled again, except for some scattered houses in the 18th century AD at the extreme eastern and northwestern edge. From Martin’s description it is not clear how the pottery of the 18th century AD looks like. It is a distinctive gritty, hand-made pottery of greyish, reddish or buff colour with incised geometric patterns and/or deep horizontal grooves (Fig. 3).

As is well known, dozens of so-called houses have been discovered in Andrae’s trenches, and about 15 of them were fully excavated. Among the most significant finds in these buildings are approximately 1000 cuneiform tablets and hundreds of sealings, which provide information on the social, economic and administrative processes in the city. Both find classes are so characteristic, that ED IIIa is still sometimes referred to as the “Fara Period”. The texts form one of the earliest Sumerian text corpora and are part of a centralized administration, which was headed by the ruler. The main goddess was Sud (⁴SU.KUR.RU), and a temple of her should have existed somewhere in Šuruppak (Krebernik 1998).⁹

However, the excavated remains of the site do not match too well with the city described by the Fāra texts: The archaeological results testify to an overall dense network of houses¹⁰ and several large silos were discovered in the northern part. But any buildings other than these, such as a temple or a palace, are missing. Neither a city wall nor any other fortification system have been detected – a strange fact, which has been attributed to the destructive power of the Euphrates.¹¹ These striking discrepancies between textual information and archaeological record demanded more research at the site.

Results of the First Three Seasons

A digital elevation model was produced with the help of a drone (Fig. 2). This model gives a clear image of the site: A pear-shaped main mound, measuring c. 1100 by 600 m, with a horizontal depression in the middle, is situated in the centre of the city. This main mound (F) was made up of a continuous sequence of third millennium layers (Martin 1988), as can be seen in many sections of the deeper looting pits. The main mound is surrounded by the rather shallow belt of a lower town. This belt is 300–600 m wide and raises in places to smaller mounds. Especially prominent are Mound B, east of the main mound, and Mound E in the South-West, beyond the large rivercourse. The lower town had barely been explored before: no trenches had been dug by the German or American missions and our only infor-

8 Martin considers it „a sizeable city of moderate importance in the Ur III period, despite again a complete absence of contemporary excavated architecture“ and calculated the settled area as about 50–85 ha (Martin 1983: 29). It was the capital of a province, at least nine *ensi* of Šuruppak are mentioned, and the Drehem harvest list notes 1200 men from Šuruppak which were recruited for harvesting work (Sallaberger 1999: 210; Krebernik 1998).

9 The majority of the texts are administrative or lexical, but also literary texts are attested here for the first time. For the administrative tablets see Steible and Yildiz 2015; Pomponio and Visicato 1994.

10 The so-called houses seem to have been used not only for living, but also for production exceeding subsistence needs (Starzmann 2007).

11 Andrae seems to be uncomfortable with attributing the large straight wall on mound E to the city wall. He wonders also if they had put forward the trenches in the East far enough (Andrae in Heinrich and Andrae 1931: 6–7) – a suspicion which was confirmed when we discovered the city wall, see below.

mation derives from Martin's three-days' surface survey with 20 selected collection points. Naturally, Martin's main concern in this brief survey was to establish the date and not so much the functions of the lower town's areas.

When we arrived in 2016, a systematic survey of the main mound was impossible. The upper 1–3 metres had been massively destroyed in most parts (as can be seen on Fig. 9). Apparently, the looters were especially interested in graves and in elevated, soft places, with a probably higher number of artefacts such as cylinder seals, tablets and others, and not so much in the flat areas of the lower town. Most areas of the lower town are much better preserved than the main mound, and investigations of these parts are still possible today. We therefore selected this portion of the site for a surface survey and geophysical prospection.

We divided the lower town into five areas, A, B, C, D and G. Within these areas we conducted exemplary systematic surveys of selected areas.¹² Our focus, however, was a complete survey of structures which were visible on the surface (walls, ovens, debris heaps, graves etc.) and the associated material (vessels, tools, slag, refuse etc.).

Work in the Lower Town

Area A: Large amounts of pottery slag, overfired ceramic vessels, clay sickles and plano-convex bricks, mixed with ashy material, cover most of Area A. This suggests pottery production on a large scale, especially in the northern part, close to the supposed ancient riverbed. Numerous overfired clay sickles had melted together in the oven and were clearly produced on the spot. Adams took these clay sickles as an indicator of an Early and Middle Uruk occupation (Adams 1981: 106 and 121), but we agree with Martin (1983: 26) that they continued to be in use in the Early Dynastic period and even later. The associated overfired pottery material speaks in favour of the production of these sickles at least into the ED III period. Another part of Area A seems to have been a stone working area: numerous cores (nuclei) of flint stone, flakes, implements and finished chipped stone tools, bits of semiprecious stone, finished stone beads and other objects were found. Countless toothed sickle blades with intensive sickle shine testify to their use in harvesting (Fig. 4). We wonder, whether the presence of so many used sickles and flint implements in this area is evidence of the storing of harvesting tools only, or also of threshing and grain processing.

Immediately north of this area, there is an elevated ridge, approximately 200 m long and 50 m wide, in the centre of which a significant concentration of (dozens of) mill stones and grinding stones from basalt was found (Fig. 5). On the same ridge, the remains of several ovens are visible on the surface. The bright red, heavily burnt material is without any associated slag. Therefore we suppose that these were bread ovens, and that possibly bread production took place there on a large scale. Since both these areas are situated close to the major concentration of the large grain silos along the northern edge of the main mound (see

12 Several transects through the Lower Town were systematically and completely collected; e.g. Area A1, a 10m wide and 370 m long strip, starts at the lower edge of the main mound and continues well beyond the modern track until the modern canal. The transect was divided into 10 × 10 m squares, which were later on expanded to 30 m width in some places. All the material on the surface, every sherd, stone and other object, was collected, washed, counted and photographed on the spot. Only diagnostic sherds and objects were taken to the expedition camp at Afak. This method helped to recognize the density of the ancient occupation, to distinguish various functions of the lower town, and gave an impression of the absolute number of finds which might be expected by a complete survey of the lower town. This method proved to be useful at Fara, where a complete systematic survey is impossible, because looting holes falsify the ancient distribution of surface finds.

Fig. 2), we conclude that a centre for grain storage, processing, and bread production was situated in the northern part of the city.

Mound B: This mound, situated east of the main mound, is the largest separate mound. It was investigated by three East–West trenches (II, IV, XI) in 1902/03, but its function was unclear, and no architectural structures have been reported. We conducted a systematic survey (Area B1) on a 60 m wide and 140 m long area, placed between trenches XI and IV. The aim was to reveal the nature of this seemingly separate settlement enlargement. Most of the material such as stone tools – especially ground stones –, saddle mills and grinders from basalt, points to the domestic use of that area. There are also traces of stone working in some places: concentrations of nuclei (flint cores), chipped stone tools from flint, semi-products and tiny chips, attesting to flint tool production on the spot (Fig. 6a. b). Many terracotta rings, which can be securely identified as net sinkers,¹³ point to the importance of fishing as subsistence strategy. Various door sockets are a further proof for houses. Numerous fragments of oval sarcophagi with a large, thickened rim, some of them smeared with bitumen, testify to the existence of graves in this area.

Although Mound B had been damaged considerably by looting holes, the results of the drone photography after rainfall in February 2018 were breath-taking: The ground-plans of dozens of houses, each consisting of several rooms, became visible for a short time (Fig. 7). Even streets, lanes and courtyards could be differentiated. They can be preliminarily dated to the ED IIIa period, since the cleaning of a deep looters' pit in one of the superficially visible houses has brought to light a floor with associated pottery approx. 0.80 m below the surface.

Magnetometer prospection was conducted by a team led by Jörg Faßbinder on a surface of 360 m × 80 m, adjacent to and partly overlapping with the area mentioned above (see Fig. 7).¹⁴ The magnetometry extended beyond the eastern border of the visible settlement remains. It ended in a completely flat area where no structure and hardly any sherds were visible, i.e. approximately 40 m beyond the easternmost trench of Andrae's team. The results of the magnetometry are complementary to the information derived from the drone photos. A few structures are only visible on the aerial photos, others only on the magnetometer images. The most important result of the geophysical prospection is an approx. 10 m wide, diagonal structure. It seems to be the Early Dynastic city wall, traces of which have not been found so far. Indeed, the erosion over millennia must have been so strong that not the slightest elevation is visible in this location. Andrae (in Heinrich and Andrae 1931: 7) reports that they ended their trenches when the artefacts became rarer and finally stopped, so they seem to have missed the massive city wall just by a few metres (the old trenches can be seen on Fig. 7).

Area C: The combined method of a systematic survey collection and a documentation of the visible surface structures was also applied to Area C south of the main mound. Part of

13 The remains of a fishing net with similar net sinkers have been found in the Temple Oval at Hafaji (Delougaz 1940: Figs. 54, 55).

14 Magnetometer measurement with a Caesium total field magnetometer Scintrex, SMG-4 special and Geometrics G-858 in duo-sensor configuration, total Earth's magnetic field at Fara 02/2018, 46.100 ± 40 Nanotesla, sensitivity ± 10 Picotesla, sampling density 25 × 50 cm; Gradiometer Foerster Ferex 4.032, sampling density 10 × 50 cm, all interpolated to 12.5 × 12.5 cm, dynamics in 256 grey scales, 40 m grid. We thank J. Faßbinder for this information.

this area of the lower town is covered with ceramic slag, overfired sherds and planoconvex bricks. They are often found associated with ground stone tools such as basalt grinding stones or pestles. Several heavily burnt spots with a concentration of this material mark the locality of ovens (Fig. 8). This area must have served as an industrial area for the production of pottery and baked planoconvex bricks. The overfired pottery includes Jemdet Nasr as well as ED I–III and Ur III pottery, which could indicate that this area used to be the potter's quarter for an entire millennium.

Areas E and C-West: Mound E and an elevated ridge at the southwestern edge of Mound C seem to have been the centre of the city during the Ur III period. A very large wall is visible on the surface of mound E. Andrae and Heinrich suggested that this wall used to be part of the city wall, but the remains are absolutely straight for a length of 80 m and end abruptly. Although a 200 m × 120 m area was surveyed by means of magnetometer prospection in 2018, the structure remains enigmatic. Another large wall, associated with Ur III pottery, is visible in Area C-West, on the other side of the large canal or rivercourse, which divides Area C from Mound E.

Work on the Main Mound (Area F)

The main mound of Fāra (Area F) is in a deplorable state. Thousands of massive and up to 4 m deep looting holes make work difficult if not impossible in most places. Superficially visible architectural structures and exceptional objects have been documented and georeferenced. Among them are several silos from baked planoconvex bricks, some of which can now be added to the 32 ones which had been reported earlier (Fig. 9).¹⁵ The diameter of the silos varies between approximately 2 m and 5 m, and they were built from plano-convex bricks in alternating herring-bone and horizontal layers. These silos can be found in most areas of the city, but they cluster at the northern edge of the main mound (see Fig. 2).

The main mound consists of a larger and higher southern, and a smaller northern part. They are separated by a depression, where Andrae excavated the so-called Haus III, a-b. This building differs from other houses by the size of its courtyard (approx. 17 m × 18 m) and Room 1 (20.4 m × 6.4 m), by the abundant use of baked bricks, and by the niched southern wall.¹⁶ Already Heinrich and later on Martin assumed that this building had a special function and could have been a temple.¹⁷ When we arrived in 2016, the soil in this depression was still so hard, that even looters had paid little attention to this area. Therefore, it was possible to conduct magnetometer prospection over an area of appr. 200 × 100 m. The results were most intriguing: the remains of a large courtyard and more than 18 rooms, excavated in 1902, seem to be just a small part of a single huge building which must have measured more than 160 × 100 m. The magnetometry revealed two walls, approximately 5 m wide with alternating niches, bordering the building to the east and west. We are also inclined to

15 Earlier research had registered 32 cylindrical silos, up to 10 m deep, which were used during the ED IIIa period for the storage of enormous amounts of grain (70.000–120.000 l each) (Heinrich and Andrae 1931: 6, 8–9, Taf. 3–4; Martin 1988: 42–47, 156, 159). This points to a centrally organized economic system, and fits well with the information from written documents which indicate that real estate was collectively owned by a (royal) family, clan, or temple.

16 Andrae published his sketch of the niched wall (Andrae 1903: 9–10; II, Abb. 5).

17 Heinrich/Andrae 1931: 12–13, Taf. 5; Martin 1988: 103–105.

interpret the building as a temple, although another function can not be excluded.¹⁸ We hope that future research can answer to this question.

A terracotta figurine, found on the surface in Area C, represents an enthroned mother goddess holding a child on her lap (Fig. 10).¹⁹ Two stumps were attached behind the seat at an angle of 90 degrees to make the moulded relief stand up. The goddess is wearing a flounced dress, her hair is entirely covered by a polos and a veil. She holds the baby with her left arm and with the other hand grasps its wrist, which is reaching for her right breast (this is an ingenious way of depicting the act of nursing where the divine mother is completely dressed). The figurine probably dates to the Ur III period. Similar enthroned mother figurines have been found e.g. at Ur.²⁰ It cannot be excluded that the Fāra figurine depicts the city goddess Sud (dSU.KUR.RU), which is equated with Ninlil (Krebern timer 1998: 240).

Summary

The Lower Town of Fāra offers interesting insights into yet uninvestigated aspects of Šuruppak during the 3rd millennium. Around the main mound, there seems to have been a kind of industrial zone with different agglomerations of handicrafts. In some areas the production of pottery and baked bricks, in others the production of flint and ground stone tools took place. Harvesting, grain processing and bread production was concentrated in the north near the largest concentration of the large grain silos. With the help of aerial photographs and magnetometer prospection it was possible to identify a large occupational zone with dozens of houses in Area B, and even a part of the city wall, the existence of which had so far been questioned.

The main mound is densely covered by hundreds of houses, silos and possibly also buildings with other, communal functions. The central depression of the main mound seems to have been the location of a very large building with a niched facade. Might this have been the main temple of the city goddess Sud? Further archaeological and geophysical investigations are required to answer this and many more questions concerning the settlement structure of this important city.

Bibliography

Adams, R. McC.

1981 *Heartland of Cities. Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates*, Chicago.

Andrae, W.

1903 Ausgrabungen in Fara und Abu Hatab. *MDOG* 17, 4–35.

Delougaz, P.

1940 *The Temple Oval at Khafajah. OIP* 53, Chicago.

Heinrich, E. and Andrae, W. (eds.)

1931 *Fara. Ergebnisse der Ausgrabungen der Deutschen Orient-Gesellschaft in Fara und Abu Hatab 1902/03*, Berlin.

18 It is not dissimilar in size and layout to the large Early Dynastic temple at Umm al-Aqarib (Oraibi Almamori 2014).

19 Terracotta figurine FA.18.O.130. Height: 6.2cm; Width: 3.8 cm; Length: 4.5 cm.

20 The figurine U.18966, UPM 35-1-108 (ur-online) is very similar, except for a slightly different style.

Krebernik, M.

1998 Die Texte aus Fāra und Tell Abū Šalābīḥ. In: J. Bauer, R. K. Englund and M. Krebernik (eds.), *Mesopotamien. Späturuk-Zeit und Frühdynastische Zeit*. OBO 160/1 (Freiburg–Göttingen), 235–427.

Marchetti, N., Einwag, B., Al-Hussainy, A., Luglio, G., Marchesi, G., Otto, A., Scazzosi, G., Leoni, E., Valeri, M. and Zaina, F.

2017 QADIS. The Iraqi-Italian 2016 Survey Season in the South-Eastern Region of Qadisiyah. *Sumer* 63, 63–92.

Martin, H. P.

1983 Settlement Patterns at Shuruppak. *Iraq* 45, 24–31.

1988 *Fara: A Reconstruction of the Ancient Mesopotamian City of Shuruppak*, Birmingham.

Oraibi Almamori, H.

2014 The Early Dynastic Monumental Buildings at Umm al-Aqarib. *Iraq* 76, 149–187.

Otto, A., Einwag, B., Al-Hussainy, A., Jawdat, J.A.H., Fink, C. and Maaß, H.

2018 Destruction and Looting of Archaeological Sites between Fāra / Šuruppak and Išān Bahrīyāt / Isin: Damage Assessment during the Fara Regional Survey Project FARSUP. *Sumer* 64, 35–48.

Pomponio, F. and Visicato, G.

1994 *Early Dynastic Administrative Tablets of Šuruppak*, Napoli.

Sallaberger, W.

1999 Ur III-Zeit. In: W. Sallaberger and A. Westenholz (eds.), *Mesopotamien. Akkade-Zeit und Ur III-Zeit. Annäherungen 3. Orbis Biblicus et Orientalis* 160/3 (Freiburg/Schweiz), 119–390.

Schmidt, E.

1931 Excavations at Fara, 1931. *University of Pennsylvania's Museum Journal* 2, 193–217.

Starzmann, M.T.

2007 *Archäologie des Raumes. Soziale Praxis und kulturelle Bedeutung am Beispiel der Wohnarchitektur von Fara*, WOO 5, Wien.

Steible, H. and Yildiz, F.

2015 *Wirtschaftstexte aus Fara II*. WVD0G 143, Wiesbaden.

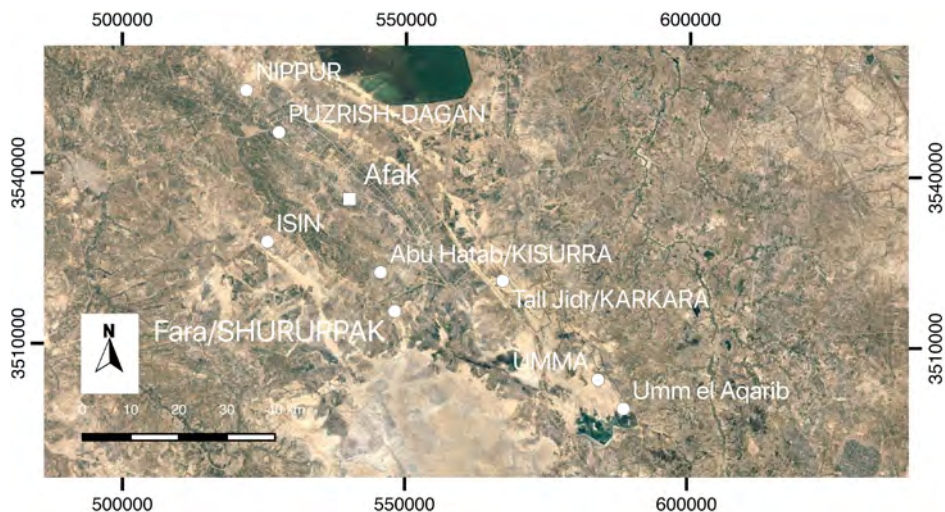


Fig. 1: Map of Southern Mesopotamia with situation of Fara

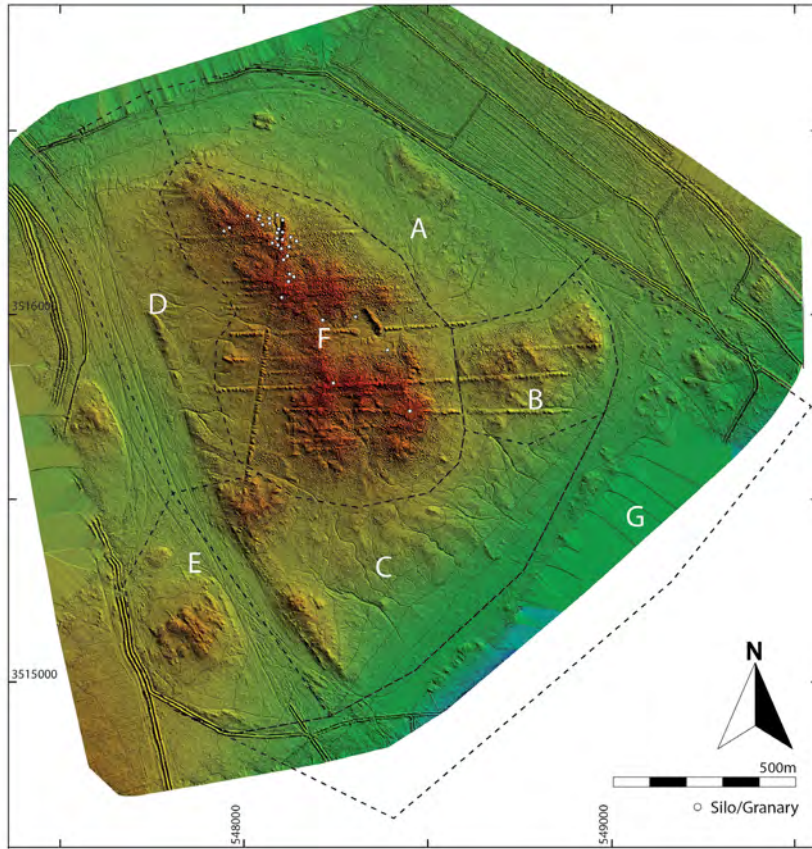


Fig. 2: Fāra Digital Elevation model with survey areas A-G (silos marked as white dots)



Fig. 3: Handmade pottery of the 18th century AD from Area G



Fig. 4: Toothed sickle blades from Area A



Fig. 5: Basalt mill and grinding stones from Area A-North



Fig. 6a: Area B surface with remains of a stone working area



Fig. 6b: Flint cores and chips from the same area

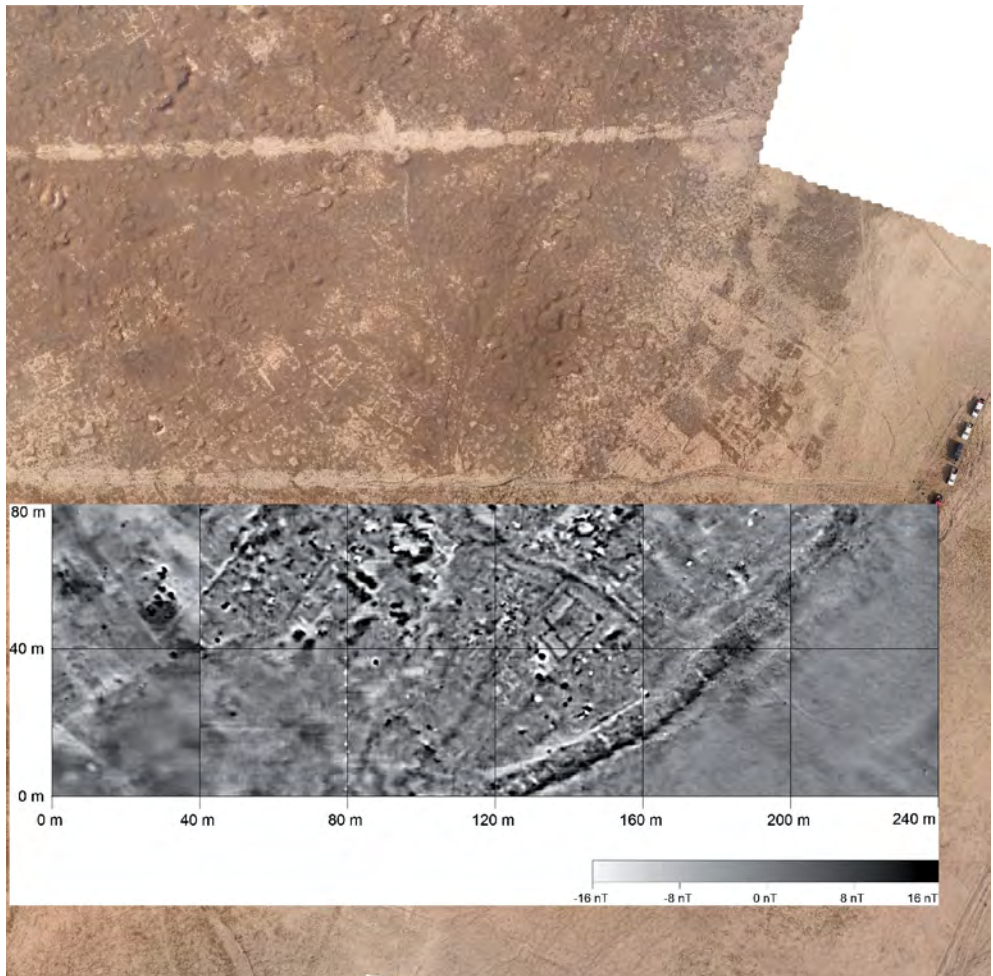


Fig. 7: Combined results of magnetometer prospection and drone photography: The city wall of Fara and Early Dynastic IIIa houses at the southern edge of Mound B (J. Faßbinder/B. Einwag)



Fig. 8: Pottery oven in Area C



Fig. 9. A silo from plano-convex bricks in the northern part of the main mound F



Fig. 10: Terracotta figurine of an enthroned mother goddess