The Archaeology of the Kurdistan Region of Iraq and Adjacent Regions

Edited by

Konstantinos Kopanias and John MacGinnis

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Authors' details

Abdulmutalb, Dlshad
Directorate of Antiquities (Soran Province), Peshawa Street 13, 44008 Soran, Kurdistan, Iraq.
dlshad505@yahoo.com

Abdullah, Sangar Mohammed
High Commission for Erbil Citadel Revitalisation, The Citadel, Erbil, Kurdistan, Iraq.
sangarmuhammed@yahoo.com

Ali, Narmin Amin
1. Mission d'Archéologie Française à Bazyan, UMR 8167 Orient et Méditerranée, CNRS, Paris, France.
2. Department of Archaeology, Salahddin University, Erbil, Iraq.
narminaliamin@yahoo.fr

Al Yaqoobi, Dara
High Commission for Erbil Citadel Revitalisation, The Citadel, Erbil, Kurdistan, Iraq.
dalyaqubi@yahoo.com

Ar Rawi, Farouk
18 St. Edmunds Fields, Great Dunmow, Essex, CM6 2AL, England.
farouknha@yahoo.co.uk

Ašandulesei, Andrei
Alexandru Ioan Cuza University of Iași, Interdisciplinary Research Department – Field Science, Lascar Catargi Street 54, 700107 Iași, Romania.
andrei.asandulesei@yahoo.com

Barker, Graeme
St. John's College, Cambridge, CB2 1TP, UK.
gb314@cam.ac.uk

Beuger, Claudia
Institut für Altertumswissenschaften, Martin-Luther-Universität Halle-Wittenberg Philosophische Fakultät I, Seminar für Orientalische Archäologie und Kunstgeschichte, 06099 Halle (Saale), Germany.
claudia.beuger@orientarch.uni-halle.de

Biglari, Fereidoun
Paleolithic Department, National Museum of Iran, 30 Tir St., Emam Khomaini Avenue, Tehran, Iran.
fbiglari@gmail.com

Blaylock, Stuart
1 Colebrooke Lane, Cullompton, Devon, EX15 1EB, UK.
stuart.blaylock@btinternet.com

Boismier, William
Cemetery Lodge, 93 Brackley Road, Towcester NN12 6HJ, UK.
w.boismier123@btinternet.com

Cabral, Ricardo
Centro de Estudos em Arqueologia, Artes e Ciências do Património, Faculdade de Letras da Universidade de Coimbra, Largo da Porta Férrea, 3004-530 Coimbra, Portugal.
rdfcabral@uc.pt

Calini, Ilaria
Ecole Pratique des Hautes Etudes, Sorbonne University, 30 rue Montmartre, F-75001 Paris, France.
ilariacalini@hotmail.it

Casana, Jesse
1. Department of Anthropology, Dartmouth College, Hanover, NH 03755, USA.
Jesse.J.Casana@dartmouth.edu
2. Department of Archaeology, University of Arkansas, Fayetteville, AR 72701, USA.
jcasana@uark.edu

Cereti, Carlo Giovanni
Sapienza Università di Roma, Dipartimento di Scienze dell'Antichità, Piazzale Aldo Moro 5, 00185 Roma, Italy.
carlogiovanni.cereti@uniroma1.it

Colantoni, Carlo
School of Archaeology and Ancient History, University of Leicester, University Road, Leicester, LE1 7RH, UK.
carlo.colantoni@cantab.net

Colliva, Luca
Sapienza Università di Roma, Dipartimento di Scienze dell'Antichità, Piazzale Aldo Moro 5, 00185 Roma, Italy.
luca.colliva@gmail.com

Curtis, John
Iran Heritage Foundation, Asia House, 63 New Cavendish Street, London, W1G 7LP, UK.
john.curtis@iranheritage.org

Del Fabbro, Roswitha
Freie Universität Berlin, Institut für Altorientalistik, Hüttenweg 7, 14195 Berlin, Germany.
roswitha.del.fabbro@topoi.org

Deroche, Vincent
Mission d'Archéologie Française à Bazyan, UMR 8167 Orient et Méditerranée, CNRS, Paris, France.
vincent.deroche@college-de-france.fr

FALES, Mario
Dipartimento di Studi Umanistici e del Patrimonio Culturale, Università di Udine, Palazzo Caiselli, Vicolo Florio 2B, 33100 Udine, Italy.
frederick.fales@uniud.it

FARR, Lucy
McDonald Institute for Archaeological Research, University of Cambridge, Downing Street, Cambridge, CB2 3ER, UK.
lrf24@cam.ac.uk

FASSBINDER, Jörg
Department of Earth and Environmental Sciences, Geophysics, Ludwig-Maximilians-Universität München, Theresienstrasse 41, 80333 Munich, Germany.
joerg.fassbinder@blfd.bayern.de

GAVAGNIN, Katia
Università Ca' Foscari, Dipartimento di Studi Umanistici, Dorsoduro 3484/D, 30123, Venezia, Italy.
katia_gavagnin@hotmail.com

GLATZ, Claudia
School of Humanities, University of Glasgow, The Gregory Building, Lilybank Gardens, Glasgow G12 8QQ, UK.
claudia.glatz@glasgow.ac.uk

GREENFIELD, Tina
1. University of Manitoba, Department of Anthropology, St. Paul's College, Winnipeg, Manitoba, Canada.
2. McDonald Institute for Archaeological Research, Downing Street, Cambridge, CB2 3ER, UK.
Tina.Greenfield@umanitoba.ca; tlg26@cam.ac.uk

HADJIKOUMIS, Angelos
1. The Fitch Laboratory, The British School at Athens, Souedias 52, 10676 Athens, Greece.
2. 3 Sferou Street, Laiki Lefkothea, 3115 Lemesos, Cyprus.
angelos.hadjikoumis@gmail.com

HERR, Jean-Jacques
École Pratique des Hautes Études, Les Patios Saint-Jacques, 4-14 rue Ferrus, 75014 Paris, France.
herr.jeanjacques@gmail.com

HOZHABRI, Ali
Director of Archaeological Site of Ziviyeh and Karaftoo, Kurdistan, Iran.
Ali.hojabry2011@gmail.com

HUNT, Chris
School of Natural Sciences and Psychology, Liverpool John Moores University, Byrom Street, Liverpool L3 3LH, UK.
c.o.hunt@ljmu.ac.uk

HUSSEIN, Saber Hassan
Erbil Civilization Museum, Erbil, Kurdistan, Iraq.
jwtyara@yahoo.com

IAMONI, Marco
Dipartimento di Studi Umanistici e del Patrimonio Culturale, Università di Udine, Palazzo Caiselli, Vicolo Florio 2B, 33100 Udine, Italy.
marco.iamoni@uniud.it

ITOH, Shigeru
Paleo Labo Co. Ltd., Shimomae 1-13-22, Toda, Saitama 335-0016, Japan.
itoh@paleolabo.jp

JOHNSON, Jessie
Museum Conservation Institute, Smithsonian Institution, Museum Support Center, 4210 Silver Hill Road, Suitland, MD, USA.
johnsonjs@si.edu

KEPINSKI, Christine
C.N.R.S., Maison René Ginouvès ArScAn boite 17 Maison René-Ginouvès, 21 allée de l'Université, F- 92023 Nanterre Cedex, France.
christine.kepinski@mae.u-paris10.fr

KHORSHEED, Abdullah
Iraqi Institute for the Conservation of Antiquities and Heritage, Erbil, Iraq.
abdullahkhorsheed69@gmail.com

KOBAYASHI, Koichi
Paleo Labo Co. Ltd., Shimomae 1-13-22, Toda, Saitama 335-0016, Japan.
kobak@paleolabo.jp

KOIZUMI, Tatsundo
Institute for Cultural Studies of Ancient Iraq, Kokushikan University, Japan.
tatsundo.k@nifty.com

KOLIŃSKI, Rafał
Institute of Prehistory, Adam Mickiewicz University, Umultowska Str. 89D, 61-614 Poznań, Poland.
kolinski@amu.edu.pl

KOPANIAS, Konstantinos
Department of History and Archaeology, University of Athens, University Campus, 157 84 Athens, Greece.
kkopanias@arch.uoa.gr

KREPPNER, Janoscha
Historisches Seminar, Alte Geschichte, Geschwister-Scholl-Platz, 180539 München, Germany.
janoscha.kreppner@lrz.uni-muenchen.de

Kurapkat, Dietmar
Ostbayerische Technische Hochschule Regensburg, Prüfeninger Straße 58, 93049 Regensburg, Germany.
dietmar.kurapkat@oth-regensburg.de

Ławecka, Dorota
Institute of Archaeology, Department of Near Eastern Archaeology, University of Warsaw, Krakowskie Przedmieście 26/28, 00-927 Warszawa, Poland.
dorotalawecka@uw.edu.pl

Lione, Brian
University of Delaware Institute for Global Studies Programs, Iraqi Institute for the Conservation of Antiquities and Heritage Erbil, Iraq.
blione@udel.edu

MacGinnis, John
McDonald Institute for Archaeological Research, Downing Street, Cambridge, CB2 3ER, UK.
jm111@cam.ac.uk

Marf, Dlshad
Department of Archaeology, Salahaddin University, Erbil, Kurdistan, Iraq.
dlshadazamua@gmail.com

Marti, Lionel
CNRS, UMR 7192, Institut du Proche-Orient Ancien, Collège de France, 52 rue du Cardinal Lemoine, 75005 Paris, France.
lionel.marti@college-de-france.fr

Masetti-Rouault, Maria Grazia
Ecole Pratique des Hautes Etudes, Sorbonne University, 30 rue Montmartre, Paris, France.
masetti.rouault@wanadoo.fr

Matthews, Roger
Department of Archaeology, University of Reading, Whiteknights Box 226, Reading RG6 6AB, UK.
r.j.matthews@reading.ac.uk

Matthews, Wendy
Department of Archaeology, University of Reading, Whiteknights Box 226, Reading RG6 6AB, UK.
w.matthews@reading.ac.uk

Miglus, Peter
Institut für Ur- und Frühgeschichte und Vorderasiatische Archäologie, Marstallhof 4,D-69117, Germany.
peter.miglus@uni-heidelberg.de

Mollenhauer, Anne
TU Berlin FG Historische Bauforschung, Masterstudium Denkmalpflege, Strasse des 17. Juni 152, Sekr. A 58, Raum A 812, 10623 Berlin, Germany.
annemollenhauer@yahoo.com

Muhammed Haydar, Shwkr
Garmian Department of Antiquities, Kalar, Kurdistan Autonomous Region, Iraq.

Mühl, Simone
Institut für Vorderasiatische Archäologie, Ludwig-Maximilians-Universität München, Geschwister-Scholl-Platz 1, D-80539 München, Germany.
Simone.Muehl@vaa.fak12.uni-muenchen.de

Müller-Wiener, Martina
TU Berlin FG Historische Bauforschung, Masterstudium Denkmalpflege, Strasse des 17. Juni 152, Sekr. A 58, Raum A 812, 10623 Berlin, Germany.
muewie@uni-bonn.de

Nicolle, Christophe
CNRS, UMR 7192, Institut du Proche-Orient Ancien, Collège de France, 52 rue du Cardinal Lemoine, 75005 Paris, France.
christophe.nicolle@college-de-france.fr

Nieuwenhuyse, Olivier
Faculty of Archaeology, Leiden University.
postal address: Coornhertstraat 35, 2332AN, Leiden, The Netherlands.
onieuw@xs4all.nl

Novaček, Karel
Palacký University Olomouc, Faculty of Arts, Department of History, Na Hradě 5, 77200 Olomouc, Czech Republic.
karel.novacek@upol.cz

Odaka, Takahiro
University Museum, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo, 113-0033, Japan.
odaka@um.u-tokyo.ac.jp

Palermo, Rocco
Università di Napoli Federico II, Dipartimento di Studi Umanistici, Room 815, Via Nuova Marina 33, 80133 Naples, Italy.
roccoplrm@gmail.com

Pappi, Cinzia
Universität Innsbruck, Zentrum für Alte Kulture, Langer Weg 11, 6020 Innsbruck, Austria.
Cinzia.Pappi@uibk.ac.at

Peyronel, Luca
University IULM, Department of Classics, Humanistic and Geographical Studies, Via Carlo Bo 1, 20143 Milan, Italy.
luca.peyronel@iulm.it

Pfaelzner, Peter
Institut für die Kulturen des Alten Orients, Institute for Ancient Near Eastern Studies (IANES), Universität

Tübingen Schloss Hohentübingen, D-72070 Tübingen, Germany.
peter.pfaelzner@uni-tuebingen.de

PULHAN, Gül
1 Colebrooke Lane, Cullompton, Devon, EX15 1EB, UK.
gulpulhan@gmail.com

RADNER, Karen
Historisches Seminar – Abteilung Alte Geschichte, Ludwig-Maximilians-Universität München, Geschwister-Scholl-Platz 1, D – 80539 München, Germany.
karen.radner@lrz.uni-muenchen.de

RAHEEM, Kamal Rashid
Department of Antiquities, Sulaimaniya, Kurdistan, Iraq.
kamal_zewe@yahoo.com

RENETTE, Steve
University of Pennsylvania, Jaffe History of Art Building, 3405 Woodland Walk, Philadelphia, PA 19104, USA.
srenette@sas.upenn.edu

REYNOLDS, Tim
Department of History, Classics & Archaeology, Birkbeck College, University of London, Russell Square, London, WC1B 5DQ, UK.
te.reynolds@bbk.ac.uk

ROUAULT, Olivier
Lyon2 University, Maison de l'Orient et de la Méditerranée, 7 rue Raulin, Lyon F-69007, France.
olivier.rouault@wanadoo.fr

SCHWARTZ, Glenn
Department of Near Eastern Studies, The Johns Hopkins University, Baltimore, MD 21218, USA.
schwartz@jhu.edu

SCONZO, Paola
SFB 1070 'RessourcenKulturen', Tübingen University, Gartenstrasse 29, D-72074 Tübingen, Germany.
paola.sconzo@uni-tuebingen.de

ŞERIFOĞLU, Tevfik Emre
Bitlis Eren Üniversitesi, Fen Edebiyat Fakültesi, Arkeoloji Bölümü, Rahva Yerleşkesi, 13000 Bitlis, Turkey.
teserifoglu@beu.edu.tr

SHEPPERSON, Mary
67 Park Estate, Shavington, Crewe, Cheshire, CW2 5AW, UK.
m.shepperson@alumni.ucl.ac.uk

SHIDRANG, Sonia
PACEA-PPP-UMR CNRS 5199, Université de Bordeaux – Bât. B8, Allée Geoffroy Saint-Hilaire – CS 50023, 33615 PESSAC CEDEX, France.
sshidrang@gmail.com

SKULDBØL, Tim
Department of Cross-Cultural and Regional Studies, University of Copenhagen, Karen Blixensvej 4, Building 10, DK-2300 Copenhagen S, Denmark.
tbbs@hum.ku.dk

SQUITIERI, Andrea
Historisches Seminar – Abteilung Alte Geschichte, Ludwig-Maximilians-Universität München, Geschwister-Scholl-Platz 1, D – 80539 München, Germany.
a.squitieri@lmu.de

TENU, Aline
C.N.R.S., Maison René Ginouvès ArScAn boite 17 Maison René-Ginouvès, 21 allée de l'Université, F-92023 Nanterre Cedex, France.
aline.tenu@mae.cnrs.fr

TERRIBILI, Gianfilippo
Dipartimento di Scienze dell'Antichità, Sapienza – Università di Roma, Piazzale Aldo Moro 5, 00185 Roma, Italy.
gianfilippo.terribili@uniroma1.it

TILIA, Alessandro
Studio 3R Sas di Alessandro e Sven Stefano Tilia, Viale Marco Polo 80, 00154 Roma, Italy.
altilia@tiscali.it

TOMÉ, André
Centro de Estudos em Arqueologia, Artes e Ciências do Património, Faculdade de Letras da Universidade de Coimbra, Largo da Porta Férrea, 3004-530 Coimbra, Portugal.
andgtome@uc.pt

TSUNEKI, Akira
Faculty of Humanities and Social Sciences, University of Tsukuba, 1-1-1, Tennodai, Tsukuba, Ibaraki, 305-8571, Japan.
tsuneki.akira.gf@u.tsukuba.ac.jp

VACCA, Agnese
Sapienza University of Rome, Department of Antiquities, Ex Vetrerie Sciarra – Studio 121, Via dei Volsci, 122, 00185 Rome, Italy.
agnese.vacca@gmail.com

WATANABE, Chikako
Osaka Gakuin University, 2-36-1 Kishibe-minami, Suita-shi, Osaka 564-8511, Japan.
chikako@ogu.ac.jp

YONEDA, Minoru
Laboratory of Radiocarbon Dating, The University

Museum, University of Tokyo, Hongo 7-3-1, Bunkyo, Tokyo 113-0033, Japan.
myoneda@um.u-tokyo.ac.jp

ZENONI, Gioia
University IULM, Department of Classics, Humanistic and Geographical Studies, Via Carlo Bo 1, 20143 Milan, Italy.
gioia.zenoni@gmail.com

ZOUBOULAKIS, Kleanthis
University of Athens, Department of History and Archaeology, University Campus, GR-15784 Athens, Greece.
freantlis@windowslive.com

Preface

The present volume is the outcome of a conference held at the University of Athens, November 1st-3rd 2013, under the title 'Archaeological Research in the Kurdistan Region of Iraq and the Adjacent Areas'. The aim of the conference was to bring together scholars working in all the countries of the region, an aim in the event achieved resoundingly, with more than 100 scholars from across the world participating in the first forum of its kind to be held outside of the region itself. While the greater part of presentations related to research in the Kurdish Region of Iraq, other contributions dealt with analysis of material from sites in Syria, Turkey and Iran.

Kurdistan is home to some of the most important archaeological sites in the world, ranging from the Stone Age to the most recent past. These include cave shelters, mounds and low sites, canals and rock reliefs, castles and bridges, mosques and bazaars. For many years political and other factors held back the exploration of this heritage. The last decade, however, has seen a resurgence of archaeological activity in Kurdistan to the extent that is has become one of the most vibrant areas of near eastern archaeological research. More than forty international projects have commenced work in the region and others are in the pipeline. A major part has been played by regional survey projects which are for the first time systematically documenting the archaeological inventory in order to produce an exhaustive record of the region. The maps generated will in their turn be able to serve as the basis both for heritage management and for the study of settlement history. At the same the area has seen a flourishing of excavations investigating every phase of human occupation from the palaeolithic onwards. Together these endeavours are generating basic new data which is leading to a new understanding of the arrival of mankind, the development of agriculture, the emergence of cities, the evolution of complex societies and the forging of the great empires in this crucible of mankind. These field activities are complemented by epigraphic studies, numismatics and historical researches. There is a new focus on the conservation and preservation of both sites and finds, spearheaded by the Erbil based Iraqi Institute for the Conservation on Antiquities and Heritage.

We would like to express our deep thanks and appreciation to everyone who helped make this such a stimulating venture: to all who came to Athens to take part, to colleagues who while unable to attend nevertheless ensured that their work was represented, to everyone involved in researching and documenting this region's rich heritage, and last but not least, to Mr. Mala Awat, Head of the General Directorate of Antiquities of the Kurdistan Region of Iraq, and to all our colleagues from the Directorates and Universities of Kurdistan who have led the way and who have been so welcoming to the archaeologists and scholars from across the international community.

Dr. Konstantinos Kopanias
University of Athens

Dr. John MacGinnis
University of Cambridge

Archaeological investigations on the Citadel of Erbil: Background, Framework and Results

Dara Al Yaqoobi, Abdullah Khorsheed Khader, Sangar Mohammed, Saber Hassan Hussein, Mary Shepperson and John MacGinnis

The size, location and length of occupation of the citadel of Erbil mark it out as one of the most important sites in Mesopotamia with the potential to contribute fundamentally to the archaeological understanding of the area. Surface survey has already demonstrated that the mound has remains going back at least 6,000 years and the likelihood is that it will in fact be older than that, while recent work on the ancient cuneiform texts (MacGinnis 2014) has highlighted the exceptional status of the city in the history of Iraq and Kurdistan. In short, the citadel mound contains an unparalleled sequence of occupational layers accessible at no other site. There is no doubt of the calibre of the remains at Erbil. There is also no doubt that this could translate directly into a fundamental contribution to Mesopotamian archaeology. Scientific excavation of the citadel mound is certain to produce a sequence which will assume a central role in the archaeology of Iraq and Kurdistan.

Background

At this stage it is not known when an actual settlement was first founded in Erbil. In general terms the presence of mankind is documented in Kurdistan from the paleolithic, that is from around 70,000 years ago onwards. With respect to Erbil, attention is drawn more specifically to the evidence for a presence in the mesolithic period (ca. 13000-8500 BC) found near the foot of the citadel (Nováček *et al.* 2013, 2). The presence in the surrounding plains of sites with occupation of the Halaf period (5800-5300 BC) makes it highly likely that Erbil too will have been home to a Halaf settlement, though this remains to be actually demonstrated. Potsherds from the citadel mound do however show that there was a settlement at Erbil by the Ubaid period (5300-4500 BC) (Novácek *et al.* 2008, 276; Nováček *et al.* 2013, 2). The Uruk period (4500-3000 BC) is not yet directly attested on the citadel though mention should be made of the important Uruk remains found at the nearby mound of Qalinj Agha (al Soof 1966; 1969; al-Soof and es-Siwwani 1967; Hijara 1973). By the late Early Dynastic period, ca. 2300 BC, however the city was sufficiently important to be a destination for messengers from Ebla (MacGinnis 2014, 46). There is as yet no evidence as to whether Erbil was ever incorporated in the Akkadian empire but the city does feature as an objective of a military campaign of the Gutian king Erridu-Pizir. Thereafter the information from historical sources gradually increases. At the end of the third millennium Erbil was incorporated within the Ur III empire and surface survey has thrown up sherds which date to this period. In the early second millennium the city very likely regained its independence and was then caught up in the growth of Qabra and that city's downfall at the hands of Šamši-Adad and Daduša (MacGinnis 2013). There must then have followed a time when further periods of independence alternated with incorporation in the Mittanni and then Middle Assyrian states. The Neo-Assyrian period was certainly a high-water mark in the city's fortunes when it was famed for its temple of Ishtar and served as a terminal for military campaigns; in the reign of Sennacherib Erbil benefitted from a major canal project bringing water into the city from the mountains to the northeast. Following the fall of Nineveh in 612 BC it is not known for certain whether Erbil fell under the control of the Babylonians or the Medes, though the latter seems more likely (Curtis 2003, 166-7; Stronach 2012, 678). In the Achaemenid period Erbil will have been a thriving centre – direct evidence for this is surprising limited but the city does appear both in the Behistun inscription and in the Passport of Nehtihur. Alexander briefly stopped in Erbil before marching to Babylon but little else is know about the city's fortunes in the Hellenistic period. During the Parthian period Erbil was the capital of Adiabene, a client kingdom whose ruling family may have converted to Judaism, though this did not stop a large church being been built there in the mid second century. When the Sassanians came to power in 224 BC they replaced the local dynasty with a Persian governor and Erbil became the seat of a *marzban*; but the city continued as an important Christian centre and the cathedral was reconstructed between 450 and 498 AD. During the early Islamic period, Erbil appears to have been relatively unimportant, but its political and economic importance returned when it became the capital of an independent Kurdish emirate in the 12th century AD under the Kurdish Emir Zain al-Din Ali Kuchuk Begtegin. The appointment of Sultan Muzaffer Ed-Din Kokburi as ruler in 1190 ushered in a golden age, and the city developed a lower town, Al-Muzaffariyah. Erbil was the subject of repeated Mongol attacks but eventually fell under Mongol suzerainty by negotiation. In 1534 it was occupied by the Ottoman Sultan Suleyman the Magnificent and continued under Ottoman rule until 1918, albeit with some interruptions such as when the city was besieged and captured by the Persian ruler Nadir Shah in 1743.

Archaeological potential

With this long history of occupation there is no doubt that investigations of the citadel mound of Erbil have the potential to yield finds of major significance. For every period concerned there are major archaeological questions which excavation on the citadel mound would address. The lower town is important too. Important data on, inter alia, the lines of the fortification walls in both the Assyrian and medieval periods is preserved in both aerial photographic sequences from before and after the second World War and in satellite imagery from the cold war period (Nováček 2011, 12; Nováček *et al.* 2013, 24-30). Notwithstanding the extensive building which has taken place in the past decade, some archaeological remains still survive in the lower town. In this context, mention should be made of the excavation of a Neo-Assyrian baked brick vaulted tomb in the lower town 500 m northwest of the citadel carried out between 2008 and 2011 by the Directorate of Antiquities of Erbil in conjunction with the German Archaeological Institute (van Ess *et al*. 2012). Mention should also be made of the discovery at Bastura in 1946 of the head of the canal constructed by Sennacherib (Safar 1946; 1947).

Previous operations

This is the background against which the HCECR implemented a programme of archaeological investigations.[1] The first operations took place in 2006 with the work of a team from the University of West Bohemia directed by Karel Nováček. These included carrying out a ceramic surface collection from an area on the western side of the mound; conducting geophysical prospection utilising micro-gravimetry, shallow refraction seismology and multi-electrode direct resistivity; cleaning and recording profiles in two cuts at the foot of the mound; and excavation of a 4 x 4 m trench in a house in the eastern part of the citadel (Novaček 2007; Nováček *et al*. 2008). In 2008 four bore holes through the mound yielded cultural materials demonstrating that at the centre of the citadel occupational layers extend down 22 m from the surface. In 2011 and 2012 five exploratory trenches were laid out in order to verify the exact location of the foundations of the Grand Gate constructed in the mid nineteenth century, an objective in which they were successful.

Geophysical prospection

In addition to the work carried out by the Czech mission in 2006 mentioned above, geophysical prospection has been carried out from 2010 by two Italian Cooperation projects (MAECi-IsIAO and MAECI-Sapienza) directed by Carlo G. Cereti of Sapienza, University of Rome, with the support of the MAIKI, Italian Archaeological Mission in Iraqi Kurdistan, codirected by Luca Colliva and Maria Vittoria Fontana (Colliva *et al.* 2012; Cereti and Colliva, *forthcoming*). This started with trialing the use of ground penetrating radar, a technique which was found not to yield good results, perhaps due to the presence of ground water: it found traces of the surrounding fortification wall but failed to reach the deeper levels. In 2013 the application of electrical resistivity tomography and seismic refraction tomography successfully imaged north-south transects of (nearly) the whole mound as well as two partial east-west transects. In 2014 further work was carried out at the foot of the citadel. For a more detailed summary of the results of the geophysical work on the citadel see the accompanying document 'Geophysical prospection'.

Archaeological plan

It will be clear from the above that the citadel mound of Erbil is an archaeological site of international significance. Not only is it expected to contain remains from the full sequence of periods outlined but for every single period it is expected that discoveries could be made of fundamental importance. Exploration of the mound is an objective which is guaranteed to produce rich rewards. It will transform our understanding of the history and archaeology of the citadel. Recognising this potential, in 2011 the HCECR commissioned an archaeological assessment of the mound leading to the formulation of a plan for active investigations envisaging exploration of the mound through a combination of remote sensing and excavation.

Archaeological Excavation Team

In order to co-ordinate and implement this plan an Archaeological Excavation Team was appointed under the leadership of Dara al-Yaqoobi, Head of the HCECR, together with Dr. Abdullah Khorsheed Khader representing the Syndicate of Kurdish Archaeologists, Sabir Hassan Hussein representing the Department of Antiquities, and Sangar Mohammed Abdullah and Ibrahim Khalil Ibrahim of the HCECR. Dr. John MacGinnis was appointed as archaeological advisor and shortly after Dr. Mary Shepperson as on-site archaeologist.

Strategy for excavations

With respect to excavation, an evaluation of how an archaeological research programme can be carried out in the reality of the existing topography of the citadel mound resulted in the initial designation of areas for possible investigation (Fig. 1). These vary from small operations aimed at elucidating standing features to

[1] For a popular overview of the recent archaeological activity see Lawler 2014. Some excavation was in fact also carried out in the 1970s in the course of digging the foundations for the southern gate to the citadel constructed at that time; the Abbassid period ceramics recovered are now in the Erbil Museum.

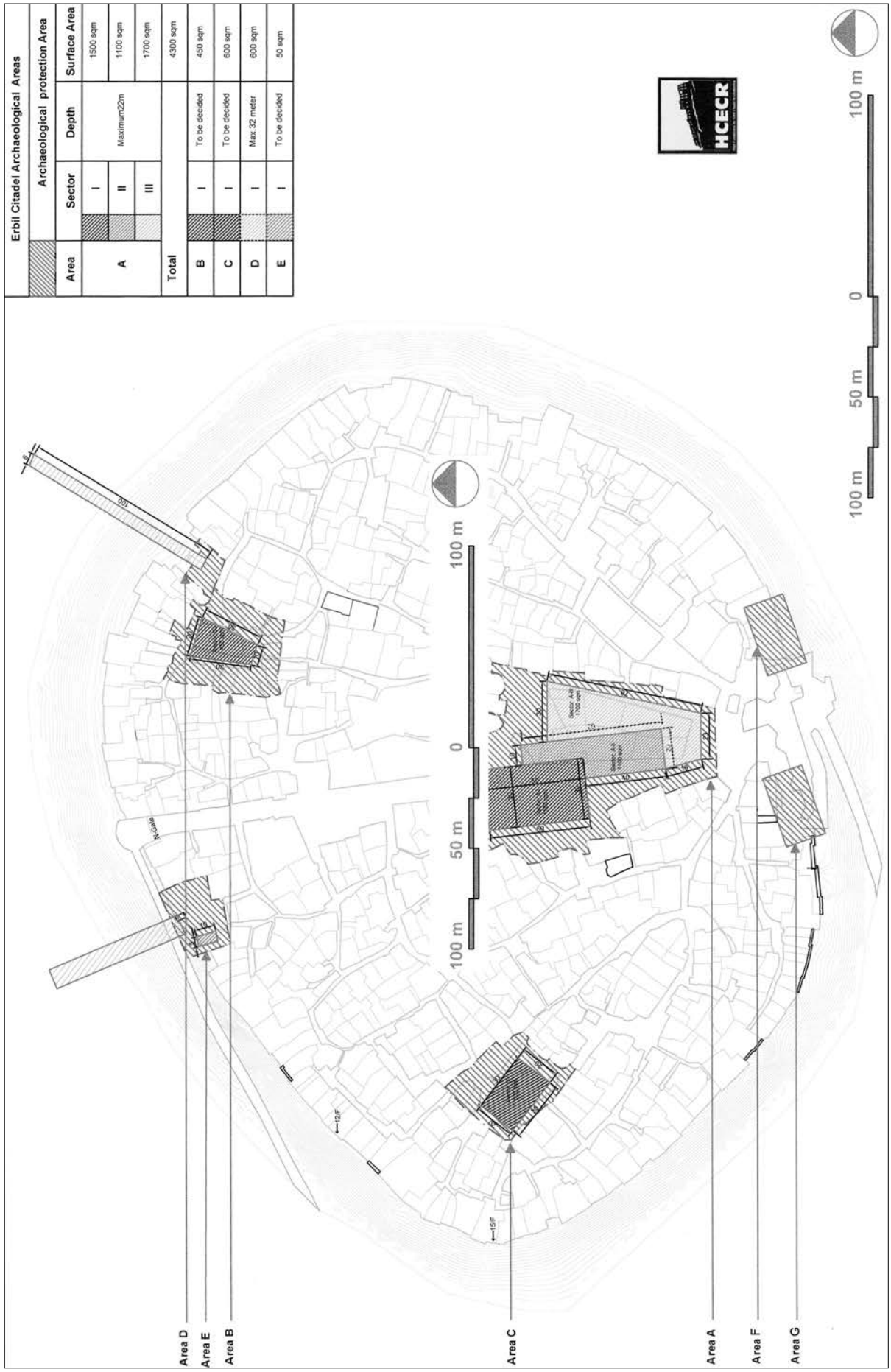

Figure 1. Erbil Citadel, areas demarcated for archaeological investigation.

proposed sites for major excavations. The programme of excavation has started with an area on the perimeter of the mound (Area E, see below). It is expected that as things develop further areas may also be proposed.

In more detail, the areas initially identified as possible sites of excavation are:

(1) Area A (Central Excavation)

The most important archaeological objective is to conduct a major large scale excavation in the centre of the mound. The excavation needs to be sited towards the centre of the mound as this is the area in which this complete sequence down to prehistoric origins can be expected. Furthermore, it is highly probable that an excavation in this area will come down on to some of the major buildings of earlier phases, particularly the medieval and Ottoman period mosques, the cathedral and early Christian church and the ancient Assyrian temple of Ishtar. In terms of the areas demarcated in the Master Plan, the place to carry out this excavation is Area A. Balancing the space available against considerations of time and resources, it is proposed to demarcate an area measuring 20 x 20 m and excavate this down to the natural, i.e. to the surface immediately predating human occupation. This is expected to be a stratigraphic sequence of the order of 22 m thick.

(2) Area B

Area B is located in the northeast of the city. The zone for archaeological investigation is formed by a trapezium overlying the area now covered by Block 36. It measures 20 m on the north side, 30 m on the east, 10 m on the south and 30 m on the west. Surrounding the zone for archaeological investigation is a demarcated perimeter zone (marked with stripes on the map), so demarcated in order that no construction takes place before the completion of any archaeological investigations. Prior to the completion of the citadel revitalisation Area B would be an amenable and suitable site for an archaeological investigation.

(3) Area C

Area C is a zone in the western lobe of the city measuring 20 m x 30 m. It would involve the demolition of the shacks that constitute Block 50. Surrounding Area C is a demarcated perimeter zone, so demarcated in order that no construction takes place before the completion of any archaeological investigations. Prior to the completion of the citadel revitalisation Area C would be an amenable and suitable site for an archaeological investigation.

(4) Area D (step trench)

Area D is a location on the perimeter of the mound east of the Amedi Gate where the presence of a vacant lot in the line of mansions ringing the citadel presents an opportunity for archaeological work to be conducted. It is the only location where a step trench from the top of the mound could be laid out. In light of the results of the work in Area E (see below), Area D would also be the ideal place to carry out further investigations into the history and sequence of fortification walls around the citadel.

(5) Area E (Investigation of fortifications)

Area E is another location on the perimeter of the mound, this time west of the Amedi Gate, where the presence of a vacant lot in the line of mansions ringing the citadel presented an opportunity for archaeological work to be conducted. It was judged the best location for investigating what remains might survive of the historical fortifications. Excavations in this area were carried out in 2013 and 2014 and the results are discussed further below.

(6) Grand Gate (Foundations)

Prior to the demolition of the old southern gate, limited excavations (five test trenches) were carried out in order to trace the foundations of the Grand Gate in order to facilitate the reconstruction of the gate.

(7) Grand Gate (Northwest)

The opportunity could be taken to carry out an archaeological excavation in a restricted area in front of the surviving architectural elevation west of the Grand Gate in order to expose earlier levels and determine how they relate to the still surviving modern and pre-modern architecture. Once the road here has been moved back to going through the reconstructed Grand Gate, there will be an area up to 27 m long and 12 m wide where such an excavation could be sited.

(8) Grand Gate (East)

There is also an area east of the Grand Gate where at an upper level a block of remains appears to preserve a section through the city wall. Here it would be possible to clean up the section and conduct limited excavation in order to define and present these remains.

(9) Additional operations

It is envisaged that in due course there may be other areas where it is considered necessary or desirable to carry out archaeological investigations.

Selection of area for initial excavation (Area E)

It was decided to commence the programme of major investigations with one of the smaller operations. The area chosen for the first major operation was Area E, a

location on the perimeter of the mound just west of the Ahmedi Gate. The area was open courtyard space and therefore amenable for investigation. The principal aim of working in Area E was to investigate whether remains of the historical fortifications were preserved. That a defensive wall once existed is known from a *firman* issued by Sultan Mahmoud I in 1745 ordering their repair. It is not known whether or not this order was carried out but in any case at some stage in the following decades the nature of the citadel perimeter changed fundamentally. The city wall was replaced with a line of substantial houses which grew to completely encircle the perimeter, giving the citadel the distinct appearance which it has to this day. The full evolution of such a development will have taken a substantial period of time and it not known exactly when this change started. It is possible that the city wall was leveled in accordance with the order of Mahmoud I but that a subsequent rebuilding never took place, and that it was the existence of this leveled area with solid foundations which led to the evolution of the Late Ottoman period/early modern configuration of houses around the perimeter.

Commencement of operations

The commencement of operations was marked by a formal ceremony on March 27th 2013 attended by His Excellency Nawzad Hadi, Governor of Erbil, together with representatives of the HCECR, archaeologists from across Kurdistan, members of the press and invited members of the public. This was held on site in the location of Area E. Proceedings began with a speech of H. E. the Governor, followed by speeches by Dara al Yakubi, Head of the HCECR, and by Dr. Abdullah Khorsheed and Dr. John MacGinnis. H. E. The Governor and the Head of the HCECR then formally started the excavation.

Summary of results

In the course of three seasons in 2013 and 2014 the area excavated in Area E consisted of a main trench measuring 20 x 15 m and an additional trench in the northwestern corner measuring 6 x 8 m. The primary aim of the excavation, locating the fortification wall, was achieved. A section of this wall was exposed and excavation was then conducted both to the north and south of it. In broad terms, the area may thus be considered in three sections – the area within the wall, the area outside, and the wall itself (Fig. 2).

Inside of the fortification wall

As regards the area on the inside of the wall, most of the features found are foundations and subfloor features of buildings that were demolished together with a fair number of pits. Most of these are very late, nineteenth or twentieth century AD. The deeper features visible in the soundings may be considerably older: ceramics going back as far as the Abbassid period have been recovered but the contexts from which they come were not well defined and it is possible these earlier ceramics were recycled in fill laid down at a later period. (The general presence on the Citadel of an occupation dating to the Abbassid period is of course not in doubt). The most interesting features are the two circular/conical brick structures. Although similar at first glance, they are in fact constructed differently. The one on the eastern side has its bricks faced on the outside, while the western one has its inside surface properly faced but not the outside, which suggests it is a sub-surface structure. The fill of this structure was excavated to a depth of nearly 3m without reaching any surface, at which point the work had to be suspended for reasons of safety. The fill was soft and very ashy all the way down with lots of animal bone and organics, as well as a large quantity of Ottoman period pottery including a number of distinctive poppy-head pipe bowls. At the moment the function of these circular structures is still not clear – defensive towers, cold storage, ovens or even ice houses have all been suggested.

Outside of the fortification wall

The area outside of the wall consisted chiefly of levelling fills, sloping deposits and a thick ash layer. The principal levelling fill, which was made up of alternating bands of red clay and grey dirt, was laid down in order to bring an area outside of the main wall up to the level of the ring of residences. It is as a result highly likely that it was created in order to form a platform for another mansion in this area. As a result, this fill must date to after 1745. For this method to work there must have been an outer retaining wall but signs of this have yet to be actually found. Underneath this levelling fill was a thick deposit made of dark olive-brown earth sloping up to the fortification wall: this deposit is interpreted as a rampart built up on the outer side of the wall. Underlying this was a layer of firstly broken mud brick material up to 1 m thick and below that a thick layer of ash. The ash layer, discussed further below, is provisionally interpreted as the remains of a destruction layer from an event preceding the construction of the main fortification wall. This ash was above another layer of compacted mudbrick rubble up to 40 cm thick which in turn overlay a wholly different earlier defensive wall.

The fortification wall

We turn now to the fortification wall itself (Fig. 2-3). The wall is built of a mixture of baked and unbaked mud bricks. It was in the end excavated to its full depth, resulting in an exposed standing section some 2.80 m high. The most notable feature is a cylindrical tower set in the wall with a diameter of 7.50 m. As this is solid brickwork it probably acted as a platform for defenders.

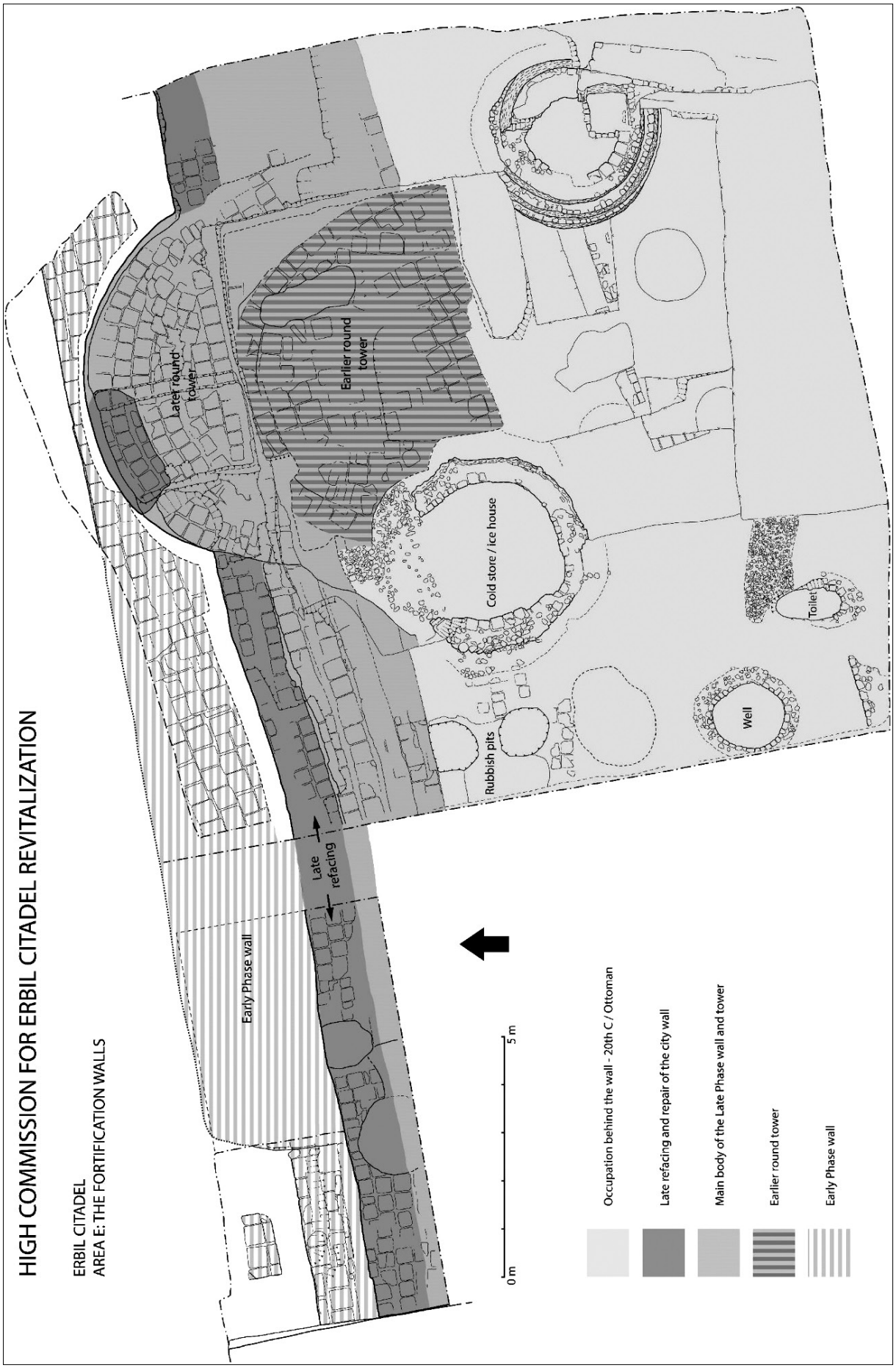

Figure 2. Area E, plan of the excavations.

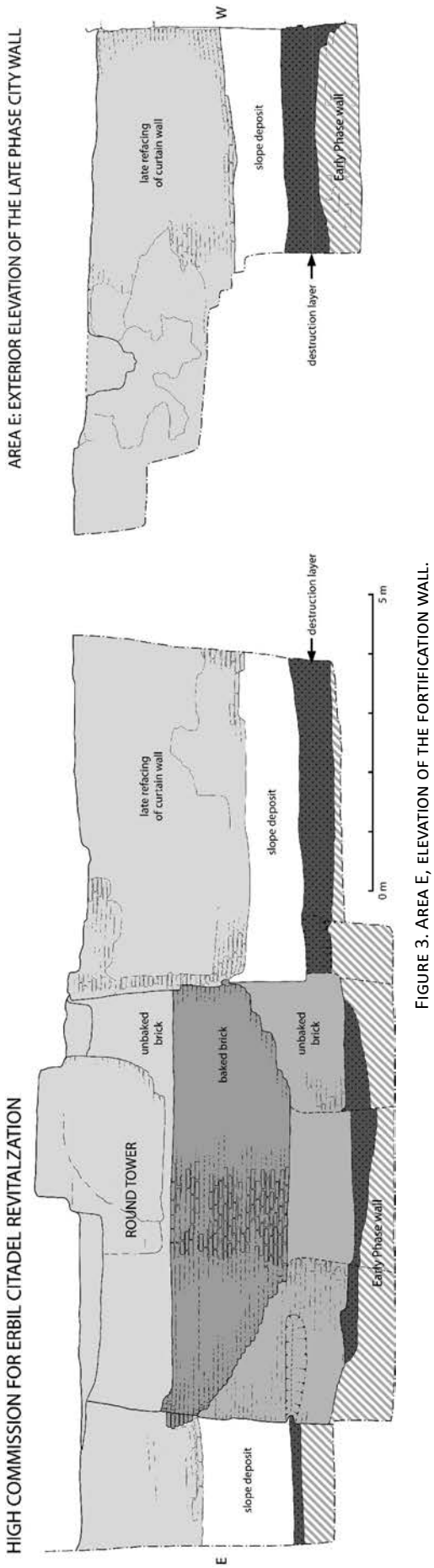

Figure 3. Area E, elevation of the fortification wall.

The tower had three main phases, an initial phase of unbaked brick, a baked brick rebuilding, and lastly a section of unbaked brick again. The wall itself is also not one single construction but rather something which was modified and added to on multiple occasions. The exposed outer elevation of the wall appears to be a late re-facing of the pre-existing wall structure three brick rows thick. This outer skin is not properly bonded to the wall behind and is made of slightly smaller bricks. The earlier wall behind is at least two bricks wide but traces of further brick rows continue back behind the wall face, where they are badly cut by later features, making it impossible to find the interior limits of the wall. As well as the outer re-facing of the wall, the tower was also repaired with a section of baked brick – this could be the remains of the repair work ordered by the Sultan in 1745.

There are also traces of curving brickwork behind the tower and careful cleaning of the uppermost surfaces revealed a very clear curving row of bricks forming the outer edge round a mass of dense brickwork. It seems virtually certain that this is the remains of an older tower – not as well preserved as the main one – and it seems very probable that deeper excavation in this location would reveal a corresponding curtain wall. Lastly, at the western end of the trench are the well preserved remains of a section of major walling built of baked brick which extends out beyond the wall face and clearly predates the main section of the fortification wall as visible now.

The fact that this wall has been rebuilt and repaired to this extent suggests it had a very long life in this form, probably stretching over several hundred years. In its earliest form this wall could be Medieval or even Early Islamic. The precise dating is a matter of ongoing research. Material culture recovered so far – ceramics and small finds – do not give much in the way of useful information as the contexts from which they come were too disturbed to be stratigraphically meaningful. There are however two other approaches which may prove more fruitful, (1) analysis of the dimensions of the bricks used and (2) analysis with scientific techniques such as OSL (Optically Stimulated Luminescence) dating; work on both of these approaches is currently in progress.

However the story does not stop here. Continuation of the excavation on the outside of the main wall below the level of its foundations revealed that it was built on top of a layer of ash up to 80 cm thick, and that this in turn overlay – at a depth of over five metres below the top of the tower – the remains of another massive wall. This is a completely separate, much earlier city wall underlying all the upper phases. In the section exposed to date no tower is visible, though there is an evident kink. The outer face of this wall was plastered with a thick layer of red mud plaster, which must have given a rather striking appearance to the city. Another interesting feature is that the later tower is built right up

to the edge of the earlier wall, deliberately using it as a foundation, suggesting that the earlier wall was still in evidence when the later wall was built. At the moment we have no direct indication of the age of this earlier fortification. A critical clue in this regard will be the results of C_{14} tests currently been carried out on samples of charcoal taken from the ashy layer separating the two walls. At this stage the most obvious interpretation is that this ash is a destruction layer associated with the end of the use of the earlier wall. It clearly demonstrates some violent event which occurred to Erbil, and it may be that it will in due course be possible to relate it to evidence from historical sources: possible candidates would include the destruction inflicted by the Mongols in 1258. Another piece of evidence for dating the earlier fortification is the size of the bricks used – 40 x 40 cm – dimensions consistent with, if not confined to, ancient Mesopotamian culture of the first and second millennia BC. In this context it should be noted that the history of the fortifications will have begun not just in the Assyrian period (900-600 BC) but in fact even earlier. We know, for example, that in the early second millennium, around 1800 BC, Erbil was besieged by a coalition of Shamshi-Adad of Assyria and Dadusha of Eshnunna (in the Hamrin). Shamshi-Adad explicitly refers to 'all the fortified cities of the land of Urbilum' – Erbil must certainly have been one of them. So we know the city was fortified at least from that period. In reality, it will not be surprising if we eventually discover that Erbil was a fortified city long before this, well back into the third millennium BC.

One last thing to consider about these massive fortification walls is the impact they might have had on the development of the citadel. The slopes of the mound are steep and our findings suggest that a possible reasons for this is that the underlying structure might be a continuous series of fortification walls, each one using its predecessor as a foundation. It would explain why the slopes seem relatively stable, even at the top edge where they support the current buildings. The fact that the settlement was restricted behind fortifications for most of its history would also explain why so much of its growth has been upward.

Future Operations

The initial plans for archaeological investigations were laid out above. As envisaged, the selection of areas actually to be investigated and the sequence and scheduling of excavations will be an on-going process. At the present moment, the results of the work in Area E suggest that there is further work that can be done in investigating the fortifications systems.

Fortification system

The excavations in Area E have uncovered remains of the fortification wall which must correspond to that last in use in the middle Ottoman period, falling out of use sometime between 1745 and 1800. In addition to this the excavations uncovered sections of two earlier walls, one inside of the Ottoman period wall and one clearly below it, with an intervening destruction level. It is therefore certain that not only does the Ottoman period wall comprise multiple phases, but that there are entirely separate earlier fortification walls. It is entirely possible that the full history of fortification walls at Erbil is (much) more extensive than the three walls discovered to date. Elucidating this sequence more fully would make a major contribution to our understanding of the history and development of the city. Due to the proximity to the access road leading up to the Amedi Gate, the extent to which further investigations of the fortification systems can be carried out in Area E is limited. There is however a second perimeter area, Area D, east of the Amedi Gate, where the existence of a vacant plot would allow an excavation to further investigate the fortification systems but without the problem of coming up against the access road. Conducting an excavation in this area is accordingly recommended as one aim of future operations.

Internal excavations

Area B and Area C are both areas where the demolition of modern shacks will clear a space where it would be possible to conduct archaeological investigation prior to redevelopment in accordance with the Master Plan.

Major central excavation

A major large scale excavation in the middle of the mound (Area A) remains a major objective. As outlined above, this has the potential to make a major contribution not just to the historic and prehistoric sequences of Erbil but to Mesopotamian archaeology as a whole.

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