Old Kingdom, New Perspectives Egyptian Art and Archaeology 2750–2150 BC

edited by Nigel Strudwick and Helen Strudwick

OLD KINGDOM, NEW PERSPECTIVES Egyptian Art and Archaeology 2750–2150 BC

edited by Nigel Strudwick and Helen Strudwick

> OXBOW BOOKS Oxford and Oakville

Published by Oxbow Books, Oxford, UK

© Nigel and Helen Strudwick 2011 Cleo font by Cleo Huggins Typeset by Nigel Strudwick

ISBN 978-1-84217-430-2

This book is available direct from

Oxbow Books, Oxford, UK (Phone: 01865-241249; Fax: 01865-794449)

and

The David Brown Book Company PO Box 511, Oakville, CT 06779, USA (*Phone: 860-945-9329; Fax: 860-945-9468*)

or from our website

www.oxbowbooks.com

A CIP record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Old Kingdom Art and Archaeology Conference (2009 : Cambridge, England) Old Kingdom, new perspectives : Egyptian art and archaeology 2750-2150 BC / edited by Nigel Strudwick and Helen Strudwick.

p. cm.

Proceedings of the Old Kingdom Art and Archaeology Conference, held May 20-23, 2009 at the Fitzwilliam Museum in Cambridge.

Includes bibliographical references.

ISBN 978-1-84217-430-2

1. Egypt--Antiquities--Congresses. 2. Excavations (Archaeology)--Egypt--Congresses. 3. Egypt--Civilization--To 332 B.C.--Congresses. I. Strudwick, Nigel. II. Strudwick, Helen. III. Title.

DT60.O65 2009 932.012--dc23

2011034091

Cover: © Milan Zemina. Used by permission of Miroslav Verner

Printed in Great Britain by Short Run Press, Exeter

Contents

For	reword Timothy Potts	v
Int	Introduction Nigel Strudwick and Helen Strudwick	
1	Recent work in the tomb of Nebkauhor at Saqqara <i>Abdou el-Kerety</i>	1
2	A new Old Kingdom rock-cut tomb from Abusir and its Abusir-Saqqara context <i>Miroslav Bárta</i>	9
3	Mastaba core structure: new data from fourth dynasty elite tombs at Abu Rawash Michel Baud and Eric Guerrier	22
4	The art of Egyptian hieroglyphs as seen by the Akhmim painters <i>V.G. Callender</i>	33
5	Two cemeteries for one provincial capital? Deir el-Bersha and el-Sheikh Said in the fifteenth Upper Egyptian nome during the Old Kingdom <i>Marleen De Meyer</i>	42
6	Blocks from the Unas causeway recorded in Černý's notebooks at the Griffith Institute, Oxford <i>Andrés Diego Espinel</i>	50
7	A spatial metaphor for chronology in the secondary cemeteries at Giza <i>May Farouk</i>	71
8	The decorative programmes of the pyramid complexes of Khufu and Khafre at Giza <i>Laurel Flentye</i>	77
9	Reading the Menkaure Triads: Part II (Multi-directionality) <i>Florence Dunn Friedman</i>	93
10	The death of the Democratisation of the Afterlife Harold M. Hays	115
11	A new specific tomb type in Abusir? <i>Jaromír Krejčí</i>	131
12	An afterworld for Netjerykhet Kamil O. Kuraszkiewicz	139

13	Re-examining the Khentkaues Town Mark Lehner, Daniel Jones, Lisa Yeomans, Hanan Mahmoud and Kasia Olchowska	143
14	Searching for an undistorted template (digital epigraphy in action) <i>Jolana Malatkova</i>	192
15	The 'Reserve Heads': some remarks on their function and meaning <i>Massimiliano Nuzzolo</i>	200
16	The evidence of images: art and working techniques in the mastaba of Mereruka <i>Gabriele Pieke</i>	216
17	The concept of <i>hprr</i> in Old Kingdom religious texts Joanna Popielska-Grzybowska	229
18	Twisted Kilts: variations in aspective representation in Old Kingdom mastaba chapels <i>Ann Macy Roth</i>	234
19	And where are the viscera? Reassessing the function of Old Kingdom canopic recesses and pits <i>Teodozja I. Rzeuska</i>	244
20	Fixed rules or personal choice? On the composition and arrangement of daily life scenes in Old Kingdom elite tombs <i>Nico Staring</i>	256
21	Village, town and barracks: a fourth dynasty settlement at Heit el-Ghurab, Giza <i>Ana Tavares</i>	270
22	An Old Kingdom bakery at Sheikh Said South: preliminary report on the pottery corpus <i>Stefanie Vereecken</i>	278
23	Why was the Fifth Dynasty cemetery founded at Abusir? Miroslav Verner and Vladimír Brůna	286
24	The economic connection between the royal cult in the pyramid temples and the sun temples in Abusir <i>Hana Vymazalová</i>	295
25	The Ancient Egypt Research Associates settlement site at Giza: the Old Kingdom ceramic distribution <i>Anna Wodzińska</i>	304
26	zšš ws <u>d</u> scenes of the Old Kingdom revisited Alexandra Woods	314

Foreword

There can be no academic subject for which the general public has such an inexhaustible appetite as Egyptology, and no period more so than the age of the pyramids. But the popular writings in this area are notoriously variable. While there is no shortage of reliable and accessible surveys by leading scholars in the field, neither does one have to look far on book lists to find an abundance of 'pyramidology' and other nonsense which also finds a wide audience. It was therefore a very welcome opportunity that arose when Helen Strudwick proposed that the 2009 Old Kingdom Art and Archaeology conference be held at the Fitzwilliam Museum in Cambridge so as to coincide with our annual Glanville Lecture on Egyptology, thus bringing the fruits of recent excavation and research by leading scholars to a wide general audience. The resulting event, held on 20-23 May 2009, consisted of a three-day meeting of specialist researchers, followed by a day of talks by some of the foremost experts in the Old Kingdom, to which the public was also invited, all culminating that evening in the Glanville Lecture delivered by Dr Jaromir Malek on 'A city on the move: Egypt's capital in the Old Kingdom'. This volume publishes all but three of the twenty-seven papers presented at the conference, plus one additional offering.

The Fitzwilliam Museum is fortunate to have one of the most important collections of Egyptian antiquities in the UK and thus provides a very appropriate setting for the OKAA conference. The earliest Egyptian object to arrive-a very fine Third Intermediate Period coffin set-was given in 1822, only six years after the bequest of Viscount Fitzwilliam created the museum, and a quarter century before the building erected to house its collections first opened its doors. Since then the Museum's Egyptian collection has grown to nearly 17,000 objects, of which some one thousand are on display. The Egyptian galleries were refurbished in 2006 and remain the most popular in the museum.

Stephen Glanville, after whom the lecture is named, was Professor of Egyptology at Cambridge (1946–1956), as well as being Chairman of the Fitzwilliam's Syndicate and Honorary Keeper of Antiquities. Glanville saw it as essential that the Museum's Egyptian collections were actively used in teaching—as is still the case today—and that they continue to grow through acquisition. His commitment to engaging the public in the fascinating discoveries of professional Egyptologists has been continued by the Museum by the holding of a lecture bearing his name since 1977. We were delighted that Jaromir Malek accepted the invitation to give the 2009 lecture; and that so many distinguished scholars of Old Kingdom Egypt were able to attend the conference with which it was paired.

Special thanks are due to Helen Strudwick, at the time Senior Assistant Keeper, Antiquities, and Nigel Strudwick, the organisers of the conference, who have also edited the papers published here.

> Timothy Potts Director The Fitzwilliam Museum Cambridge

Introduction

This volume presents twenty-five of the twenty-seven papers presented at the 2009 Conference Old Kingdom Art and Archaeology, generously hosted by the Fitzwilliam Museum in Cambridge. The history of these Old Kingdom meetings was admirably summarised by Miroslav Bárta in his Foreword to the proceedings of the 2004 conference, held in Prague, and it would be superfluous to repeat it here. The contents of the present volume show the wide range of subjects which this research group now embraces, from the Pyramid Texts through site reports, from the analysis of statue orientation to attempts to study the spatial arrangement of Old Kingdom cemeteries. Some of the papers are substantially the same as those presented at the meeting, but the editors have encouraged authors, where they feel it is necessary, to expand upon their ideas and to take them beyond the limited range of material which can be presented in a twenty-minute talk. One further paper which could not be presented at the conference is also included.

We were delighted to welcome to Cambridge colleagues from all over the Egyptological world, and they fairly represent where the Old Kingdom is studied most. We are delighted to be able to include the paper from Abdou el-Kerety (better known to his friends and colleagues as Hatem); visa problems meant that he was regrettably unable to be present at the conference, despite our best efforts with the UK authorities, but his contribution was read and appreciated in his absence. The paper of Gabriele Pieke could not be presented at the conference but we are happy to be able to include it. The longest paper presented here is by Mark Lehner and his co-authors and is a report on progress of his excavations at Giza; this has turned into a substantial publication and analysis and it is a great pleasure to be able to include it in this volume.

The final day of the conference was open to the public, focusing more particularly on papers relating to the archaeology and monuments of the Memphite region. This, and indeed the conference as a whole, formed a precursor to the thirty-third Stephen Glanville Memorial Lecture. This annual event, hosted by the Fitzwilliam Museum, has been an important fixture in the Cambridge and UK Egyptological calendar since 1977. In 2009, the Lecture was given by Dr Jaromir Malek on the subject 'A city on the move: Egypt's capital in the Old Kingdom'.

The editors would like to thank many persons without whose help and assistance the 2009 Old Kingdom Art and Archaeology meeting could not have taken place. First and foremost, we are deeply indebted to Dr Timothy Potts and all the staff of the Fitzwilliam Museum for enabling the events to take place so successfully, and for ensuring the efficient operation of everything from computer projectors through to the teas and coffees which sustained us. We also thank our colleagues whose enlightening papers and discussion made the meeting the success it was, and we acknowledge their efforts in enabling the completion of the manuscript just over two years since the meeting.

We are delighted to acknowledge the help and assistance offered by Oxbow Books in taking this publication into their archaeological series. To our editor, Clare Litt, and the head of production, Val Lamb, go our profound thanks for their advice and support.

> Nigel Strudwick Helen Strudwick

The Ancient Egypt Research Associates settlement site at Giza: the Old Kingdom ceramic distribution

Anna Wodzińska

Introduction

Ancient Egypt Research Associates (AERA), directed by Mark Lehner, has been excavating a settlement since 1988 located on the southern edge of the Giza Plateau. Due to very intensive clearance we have at our disposal a large Old Kingdom site very precisely dated to the reign of Menkaure.¹

The site, called Heit el-Ghurab, can be clearly divided into smaller units, areas characterised by different plans and also diverse material cultures. The main components of the settlement are long rectangular galleries built in four regular rows, with adjacent industrial areas where bakeries were discovered. These probably functioned as barracks. Directly to the east, south and west of the galleries are, respectively, the Eastern Town, the Royal Administrative Building (RAB) and the Western Town (Plate 14). The towns are comprised of more or less square houses. The house plans reflect characteristic Egyptian 'snail-like' dwellings. The galleries were clearly planned, while the towns appear to have been built without a clear arrangement.²

Late fourth dynasty pottery

In the course of excavations several tons of pottery have been uncovered. Over 200 Old Kingdom pottery types were defined among them.³ The figures at the end of this paper (Fig. 11 to Fig. 14) show the AERA ceramic typology that includes:

Jars:

AB1: white washed storage jars (Fig. 11.1)⁴

AB2: red slipped, probably storage jars (Fig. 11.2);5

AB4: ovoid handmade beer jars (Fig. 11.3);6

AB7: large marl storage/transport jars (Fig. 11.4);⁷

Bowls:

CD6: red slipped carinated 'Meidum' bowls (Fig. 12.4);⁹

CD7: white washed carinated bowls (Fig. 12.5);¹⁰

¹ M. Lehner, 'The Pyramid Age Settlement of the Southern Mount at Giza', *JARCE* 39 (2002), 34; M. Lehner, 'Introduction', in M. Lehner and W. Wetterstrom (eds), *Project History, Survey, Ceramics, and the Main Street and Gallery III.4 Operations, Giza Reports. The Giza Plateau Mapping Project* I (Boston 2007), 46–47.

² For more information on the Heit el-Ghurab settlement see Lehner, *JARCE* 39 (2002), 27–74; Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I. See also the contribution of Ana Tavares in this volume.

CD1, CD2, CD3: red slipped serving dishes (Fig. 12.1-3);⁸

³ A. Wodzińska, 'Preliminary Ceramic Report', in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 275–315.

ibid, 295.

ibid, 295–296.

ibid, 296–297.

⁷ ibid, 297–298.

ibid, 298–299.

⁹ ibid, 299.

¹⁰ For further information on the white carinated bowls from Giza see A. Wodzińska, 'White Carinated Bowls (CD7) from Giza Plateau Mapping Project. Tentative Typology, Use and Origin', in M. Bárta, F. Coppens, and J. Krejčí (eds), *Abusir and Saqqara in the Year 2005, Proceedings of the International Symposium, Prague 27–30 June 2005* (Prague 2006), 405–429; Wodzińska in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 299–300; A. Wodzińska, 'White Carinated Bowls and Dating of the Giza Plateau Mapping Project Site', in M. Bárta and H. Vymazalová (eds), *Chronology and Archaeology in Ancient Egypt (the Third Millennium B.C.)* (Prague 2008), 111–123.

- CD20, CD21: hole-mouthed vessels probably cooking pots (Fig. 12.6–7);¹¹
- CD22: large basins known from tomb depictions as vessels used during bread making and beer brewing (Fig. 12.8);¹²
- CD25: large vats utilised during making dough for bread (Fig. 13.1);¹³
- CD32: bowls with internal ledges (Fig. 13.2);¹⁴

Stands:

E1: tall and E2 low stands (Fig. 13.3-4).¹⁵

Bread moulds:

- flat bread trays–F1A: round (Fig. 14.1) and F1C: oval (Fig. 14.2); ¹⁶
- also conical moulds, F2, known in three sizes: F2A: 12–14 cm in diameter; F2B (Fig. 14.3): 18–20 cm in diameter; F2C (Fig. 14.4): the largest is approximately 35 cm in diameter and 35 cm in height.¹⁷

Pottery distribution

I will focus on the distribution of pottery in five areas of the site that characterise the main types of occupation.

- 1. Gallery III.4
- 2. The Eastern Town House (ETH)
- 3. The Royal Administrative Building (RAB), an area located to the south of the galleries between Eastern and Western towns.
- 4 and 5. The Pottery Mound (PM), a discard area, and AA, a pedestal building within the Western Town.

Each of the selected areas show different patterns of ceramic distribution that reflect diverse activities such as bread making, perhaps beer brewing, cooking, storing/presenting of food, and finally consumption. I will attempt to answer the following questions. Why were white carinated bowls used by workmen? Where do red slipped vessels occur and for what were they used? Why are beer jars found in such large numbers in the Western Town? Is their presence connected to beer brewing or only beer consumption? Who might have drunk so much beer? And, who produced the massive amounts of bread, especially the very large loaves of bread?

In terms of relative frequencies the site can be characterised mostly by bread moulds (F), that form almost 50% of the entire ceramic material (see Fig. 1);¹⁸ followed by

¹⁷ ibid, 306–307.

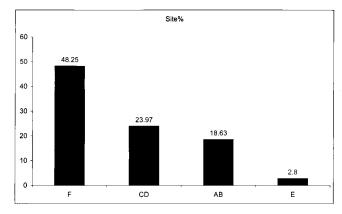


Fig. 1: Relative frequencies of main pottery classes from the Heit el-Ghurab settlement: AB: jars, CD: bowls, E: stands and F: bread moulds

bowls (CD-24%, mainly white and red carinated bowls); jars (AB-19%, commonly beer jars); and stands (E-3%).

Galleries and bakeries

Gallery III.4 is one of the long rectangular spaces with the entrance located at the main street to the north and small rooms to the south.¹⁹ The gallery can be generally described as place where many large conical bread moulds were found (see Fig. 2).²⁰ These bread moulds (see Fig. 14.4) are larger than the average moulds known from the late fourth Dynasty. The pots were used during baking of very large loaves of bread.

The presence of a large amount of bread moulds is also characteristic of bakeries discovered in 1991 (see Fig. 3).²¹ The bakeries are located in the vicinity of the galleries and were probably the place of bread baking for the galleries' inhabitants.²²

Both the bakeries and the galleries contained large vats (see Fig. 13.1), conical bread moulds (Fig. 14.3–4), flat bread trays (oval and rounded) (Fig. 14.1.–2), bowls with internal ledges (Fig. 13.2), and so on. Moreover white carinated bowls (CD7, Fig. 12.5) are found in large quantities in galleries and bakeries as well. Their shapes are very similar to red, so-called Maidum, carinated bowls (Fig. 12.4) but they seem to be unique to certain settlements connected

²² ibid, 43.

¹¹ Wodzińska, in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* 1, 300–301.

¹² ibid, 301.

¹³ ibid, 303–304.

¹⁴ ibid, 304–305.

¹⁵ ibid, 308–309.

¹⁶ ibid, 306.

¹⁸ All diagrams presented in the text do not include ceramic frag-

ments, usually very small, which cannot be classified as jars, bowls, stands or bread moulds.

¹⁹ A. Abd el-Aziz, 'Gallery III.4 Excavations', in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 193–234; M. Lehner, 'Introduction to Gallery III.4 Excavations', in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 185–192.

²⁰ A. Wodzińska, 'Ceramics from Gallery Set III.4', in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 229–237.

²¹ Lehner, in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 24–27.

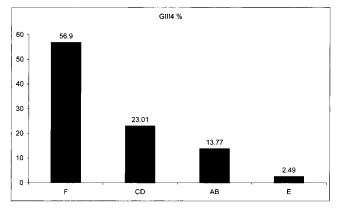


Fig. 2: Relative frequencies of main pottery classes from the Gallery III.4: AB: jars, CD: bowls, E: stands and F: bread moulds

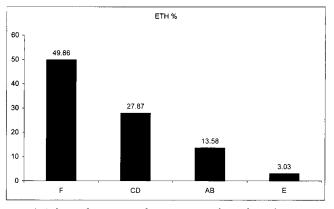


Fig. 4: Relative frequencies of main pottery classes from the Eastern Town House: AB: jars, CD: bowls, E: stands and F: bread moulds

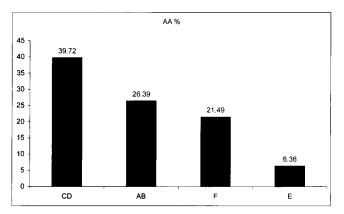


Fig. 6: Relative frequencies of main pottery classes from area AA: AB: jars, CD: bowls, E: stands and F: bread moulds

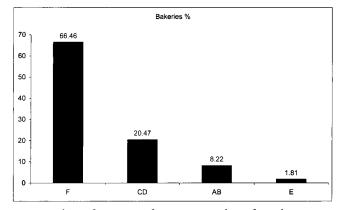


Fig. 3: Relative frequencies of main pottery classes from the Bakeries excavated in 1991: AB: jars, CD: bowls, E: stands and F: bread moulds

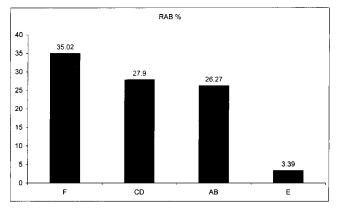


Fig. 5: Relative frequencies of main pottery classes from the Royal Administrative Building: AB: jars, CD: bowls, E: stands and F: bread moulds

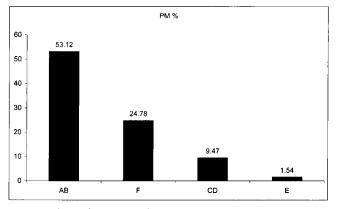


Fig. 7: Relative frequencies of main pottery classes from the Pottery Mound: AB: jars, CD: bowls, E: stands and F: bread moulds

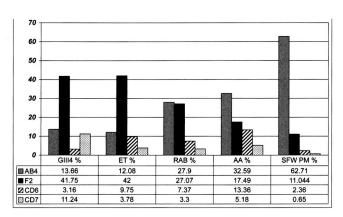


Fig. 8: Relative frequencies of AB4: beer jars, CD6: red carinated bowls, CD7: white carinated bowls, and F2: conical bread moulds in different areas of the Heit el-Ghurab settlement

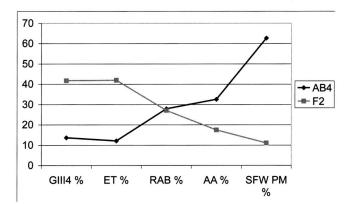


Fig. 9: Relative frequencies of AB4: beer jars and F2: conical bread moulds in different areas of the Heit el-Ghurab settlement

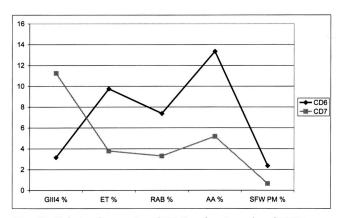


Fig. 10: Relative frequencies of CD6: red carinated and CD7: white carinated bowls in different areas of the Heit el-Ghurab settlement

to communities of workmen, that is Giza or Sheikh Said in Middle Egypt.²³

The Eastern Town House

The Eastern Town, located to the east of the galleries, consisted of more or less uniform square houses. One of them, the so-called Eastern Town House (ETH), has been fully excavated.²⁴

Pottery from the ETH was generally characterised by a large number of bread moulds (see Fig. 4), especially medium size conical moulds (F2B), coming from the early phases.²⁵ They indicate that bread production was performed in the industrial quarter of the house and outside in the open space of the courtyard and two rooms connected to it.

A significant number of bowls and jars suggest food preparation and storage. Food could have been prepared inside the house, especially in industrial rooms. The significant number of white carinated bowls (CD7) found in the courtyard perhaps indicates the consumption of food not inside the house but outside. Internal rooms could have been used as storage facilities as well. Furthermore, three large storage jars were placed in the ground of the house courtyard, which could have served as an additional storage facility.

It seems that the ETH was perhaps a self-sufficient unit where one family lived. The house is built in such a way that it appears to have contained industrial rooms associated with food preparation/storage, a domestic core where the family slept, and an open space where the food was partly produced and partly consumed by only one family.

The Royal Administrative Building

The so-called Royal Administrative Building (RAB), the largest excavated part of the site, is located to the south of the Eastern Town and south-east of the galleries. Extensive work in the area between 2002 and 2008 revealed twelve successive strata of construction, occupation, remodelling and abandonment within two main phases connected to two structures (Structural Complex 1 and 2) built one on top of another, in the western part of the area.²⁶ The later building, Structural Complex 1 was connected to the place

²³ Stefanie Vereecken, personal communication.

 ²⁴ D. Hounsell and E. Hancox, 'The Eastern Town House', Ancient Egypt Research Associates internal reports (Cairo 2004). Publication of the ETH excavations is currently in preparation by Freya Sadarangani.
²⁵ A more detailed report on the ceramics from the Eastern Town House is currently in preparation by the present author.

²⁶ Lehner, *JARCE* 39 (2002), 59–64; Lehner, in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 45; F. Sadarangani, 'Area BB Data Structure Report. Integrated BB Material-Covering 2002, 2004, 2005, 2006 and 2007 Excavations', *Ancient Egypt Research Associates internal reports* (Cairo 2007). Full publication of the area excavations is currently in preparation by Freya Sadarangani.

where large silos were constructed in the south-eastern corner of the entire complex. Between the so-called Western Rooms and silos a large courtyard was revealed.

Ceramics from the Royal Administrative Building are generally characterised by almost equal numbers of bread moulds, jars and bowls, with a slight predominance of bread moulds (see Fig. 5). The situation changes if we look at the pottery distribution in subsequent phases.

I will present only two phases here-5 and 7Gi-showing occupation of Structural Complex 1 connected to the construction and functioning of silos.²⁷

The occupation layers of the Royal Administrative Building do not contain many ceramic pots/fragments. Even if the floor deposits were very poor when the original room contents were removed at some point, some patterns can be observed.

Phase 5 represents the first occupation stage of Structural Complex 1. The most interesting structure within phase 5 was discovered in room 6 which seems to be an obvious kitchen installation. It took the form of a limestone bordered hearth with large spouted basin (CD22, see Fig. 12.8) placed near it, accompanied by two other pot emplacements, one of which contained a base of an AB1 storage jar, while the other was empty. One of the deposits appears to function as setting for a shallow bowl, perhaps used as a plate for preparation of food.

CD22 basins are known from numerous representations found in Old Kingdom tombs and they always appear in beer-brewing/bread-making contexts. In the context described here, the CD22 basin was not used as a vessel for pouring since it was placed in the ground. It still could have been utilised as a mixing vat for any food cooked in the nearby hearth.

Three pots, a medium sized bread mould (F2B) and two beer jars (AB4), were set in the ground in the southwestern corner of room 6 of phase 7Gi. A cut placed next to them may represent another pot emplacement, possibly containing a shallow serving plate (for example, CD1 or CD2: Fig. 12.1–2). The activity in room 6 of phase 7Gi appears to be different than in the previous occupation phases. A relatively larger quantity of bread moulds and beer jars found in the area of a hearth might indicate small-scale bread baking and beer brewing.

The Royal Administrative Building is very difficult to categorise. According to the pottery, it seems that some activities can be recognised as small-scale bread baking and beer brewing. Cooking is confirmed in room 6. Most of the beer jars probably came from the Western Town. Some of the bread moulds can be perhaps connected to bread making in the gallery complex. Various plates and bowls

²⁷ A more detailed report on ceramics from the Royal Administrative Building is currently under preparation by the author. probably reflect the consumption of food-food that was for the most part brought here from outside.

The area was clearly associated with silos, but the silos themselves did not contain any pottery fragments.

The Western Town

The Western Town is located in the south-eastern part of the site and it is represented by area AA and SFW PM (Pottery Mound). Area AA, located in the Western Town, is a peculiar place consisting of a large space filled with rectangular pedestals. Directly to the north, two ovens were discovered associated with a small bakery.²⁸ SFW PM, the so-called Pottery Mound, was clearly a discard area, probably for the Western Town.²⁹

Area AA generally contained many bowls-39.72%, mainly red slipped, used during the preparation and serving of food (see Fig. 6). The second most frequent pots of area AA are jars-especially beer jars-26.39%. Bread moulds (totalling 21.49%), medium size moulds (F2B) in particular, were also used there, although bread baking was not the major activity performed in the area.

The Pottery Mound (PM) consisted mostly of jars, especially beer jars (60% of the PM ceramic material) (see Fig. 7). Bread moulds were also present here (25.82%) and, similarly to area AA, they indicate a small-scale bread making in the Western Town.

Comparison between the selected areas

The comparison between the selected areas is based on four of the most characteristic types: AB4-beer jar; CD6-red carinated 'Maidum' bowl; CD7-white carinated bowl; and F2-conical bread mould. Fig. 8, Fig. 9 and Fig. 10 show a general comparison between these over the areas of Gallery III.4, ETH, RAB, AA and PM. Some interesting patterns can be observed.

Bread moulds are most common in the galleries and the Eastern Town House. Their number is gradually smaller towards the south. Beer jars are the most frequent in the Western Town, PM in particular. There are gradually fewer beer jars towards the north. White carinated bowls occur in great quantities in the galleries, and red carinated bowls are typical for area AA. They do not occur in large numbers in PM.

The white carinated bowls are very rare vessels, known only in two places in Egypt, Giza and Sheikh Said in Middle Egypt. At Giza they are especially connected to the gallery complex. Their production was massive and probably

²⁸ Lehner, in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 21–23; J. Taylor, 'AA', *Ancient Egypt Research Associates internal reports* (Cairo 2007).

²⁹ Y. Kawae and T. Björk, 'Soccer Field West. Pottery Mound', *Ancient Egypt Research Associates internal reports* (Cairo 2005); Lehner, in Lehner and Wetterstrom (eds), *The Giza Plateau Mapping Project* I, 45.

standardised. It has been suggested that they were a special product manufactured upon request.³⁰ They were neither cooking pots nor long-term storage containers. It seems that they were used on a daily basis as bowls for consumption of food by the galleries' inhabitants, namely workmen involved in construction activities at the Giza plateau.

Large loaves of bread were produced especially in the gallery complex. A series of bakeries made bread for the workmen housed in the galleries. Loaves were very large in order to produce more bread. The high number of bread moulds found in the galleries and bakeries show how much bread was needed. Bread appears to have been the main component of the workmen's diet.

Red slipped vessels, on the other hand, are more popular in towns outside the gallery complex. There are various bowls and plates, but especially significant appear to be red carinated bowls, the so-called Maidum bowls (CD6). These ceramic containers occur in greater quantity in the Western Town in particular. It seems that they represent not only different activities (cooking, short and long term storage) but also the higher status of people who used them. Those bowls were used by individuals, probably high officials, living in large houses.

Large numbers of beer jars found in the Western town indicate a great need for beer. Empty jars do not necessarily represent beer brewing in the Western Town. It seems beer was consumed there on a large scale but the exact place of beer production is not known. Is it area AA?

Similarly to the red carinated bowls, beer jars are a sign of the high status of people living in the Western Town. Beer jars are also known in other Heit el-Ghurab areas, but the Western Town is the place were they are especially common.

Conclusions

In conclusion we can say that ceramics from the AERA site are similar to the pottery known from other Old Kingdom sites in Egypt. The specific AERA settlement is characterised by a lack of pottery found *in situ*. However in spite of such difficulties it is possible to describe the occurrence and use of ceramic vessels across the site. Workmen housed in the galleries ate large amounts of bread baked in large conical moulds from the local bakeries. They also used white carinated bowls as serving containers. On the other hand, people living in the Eastern and Western towns – perhaps higher officials – used generally better table ware, especially many red slipped and well-polished bowls and plates. Their food must have tasted better with the perhaps locally brewed beer kept in the numerous beer jars.

Acknowledgments

I would like to thank Mark Lehner, the Ancient Egypt Research Associates (AERA) and the generous donors who support AERA's work for making my study possible.

I also would like to express my gratitude to Włodzimierz Godlewski and Kazimierz Lewartowski from the Institute of Archaeology, University of Warsaw, for understanding the value of ancient ceramics.

³⁰ A. Wodzińska, 'White Carinated Bowls (CD7) from Giza Plateau Mapping Project. Tentative Typology, Use and Origin', in M. Bárta, F. Coppens, and J. Krejčí (eds), *Abusir and Saqqara in the Year 2005, Proceedings of the International Symposium, Prague 27–30 June 2005* (Prague 2006), 420.

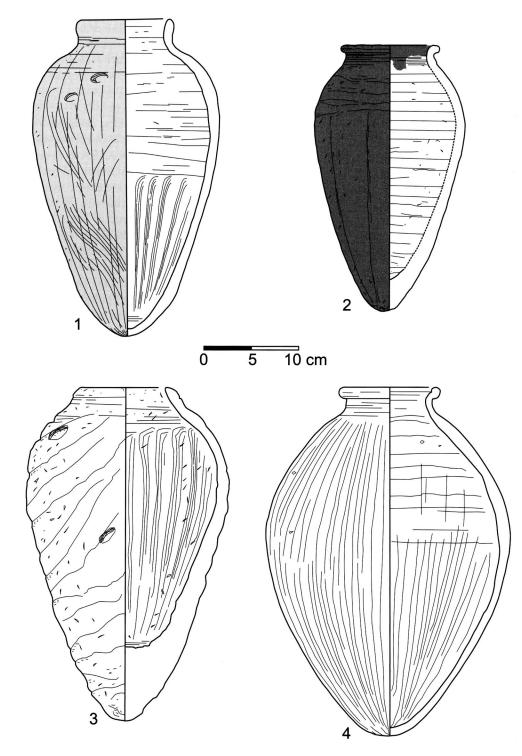


Fig. 11: The most common jars from the Heit el-Ghurab settlement; 1: AB1, 2: AB2, 3: AB4, 4: AB7. Light grey colour indicates white wash, dark grey: red slip

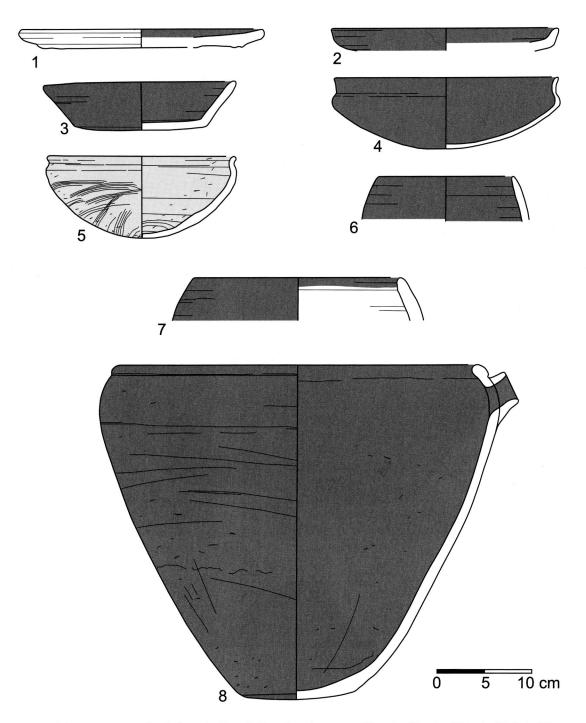


Fig. 12: The most common bowls from the Heit el-Ghurab settlement; 1: CD1, 2: CD2, 3: CD3, 4: CD6, 5: CD7, 6: CD20, 7: CD21, 9: CD22. Light grey colour indicates white wash, dark grey: red slip

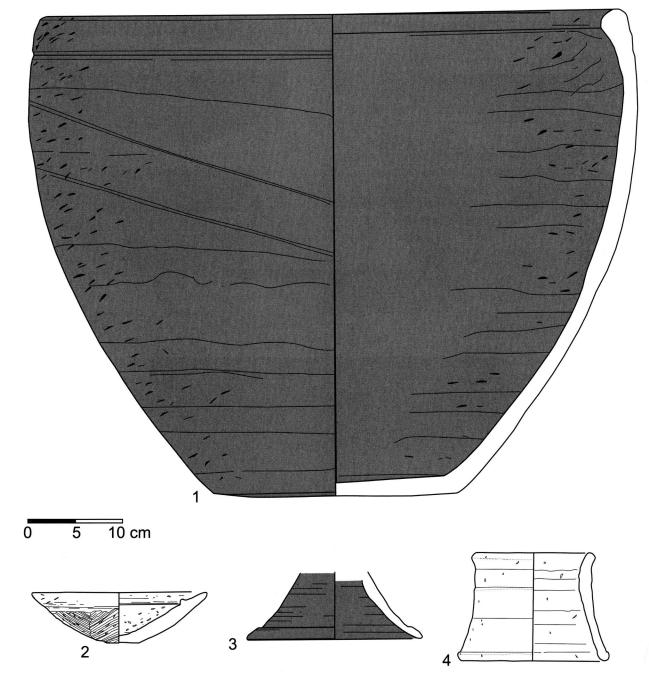


Fig. 13: The most common bowls and stands from the Heit el-Ghurab settlement; 1: CD25, 2–CD32, 3: E1,4: E2. Dark grey colour indicates red slip

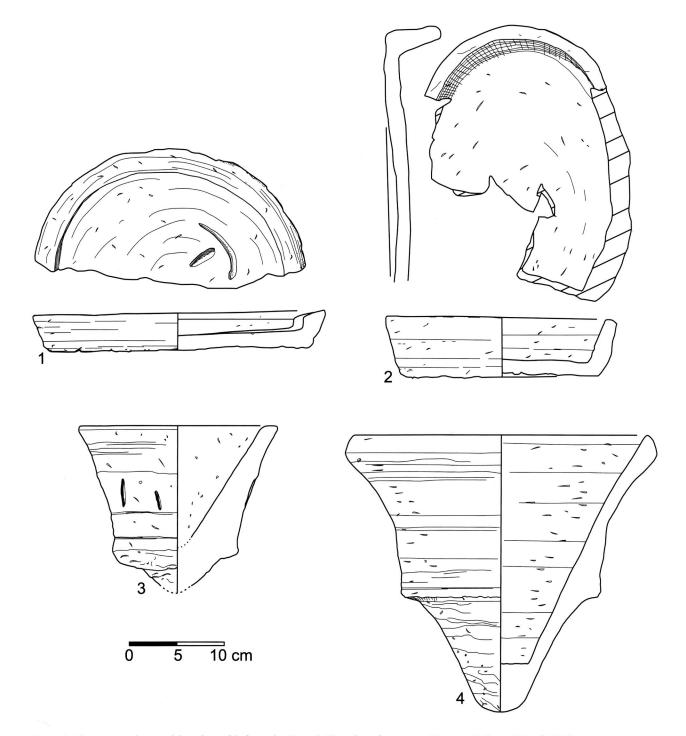


Fig. 14: Flat trays and conical bread moulds from the Heit el-Ghurab settlement; 1: F1A, 2: F1C, 3: F2B, 4: F2C

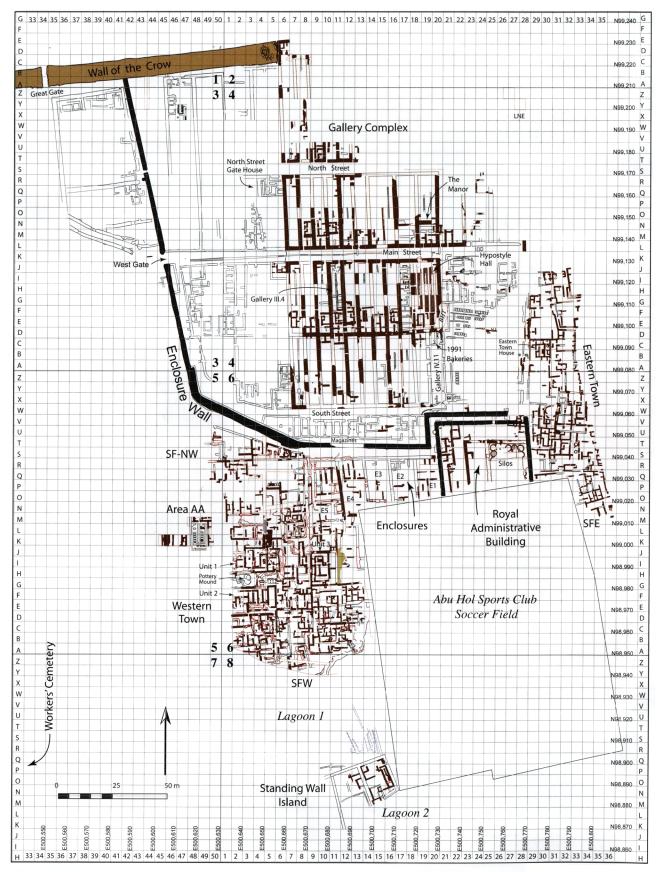


Plate 14: Plan of the Heit el Gurob settlement with areas mentioned in the text (Lehner, "Introduction", 14, Fig. 1.9) (Tavares/Wodińska)

Addresses of authors

Abdou el-Kerety

Supreme Council of Antiquities Saqqara Egypt

miroslav.barta@ff.cuni.cz

Miroslav Bárta

Czech Institute of Egyptology Faculty of Arts, Charles University nám. Jana Palacha 2 116 38 Prague 1 Czech Republic miroslav.barta@ff.cuni.cz

Michel Baud

Département des antiquités égyptiennes Musée du Louvre Porte des Arts 75058 Paris cedex 01 France michel.baud@louvre.fr

V. G. Callender

7 Beresford Road Thornleigh New South Wales, Australia 2120

vgcallender@yahoo.com.au

Marleen De Meyer

Katholieke Universiteit Leuven Faculteit Letteren, Oude Nabije Oosten Blijde-Inkomststraat 21-bus 3318 BE-3000 Leuven Belgium

Marleen.DeMeyer@arts.kuleuven.be

Andrés Diego Espinel

Centro de Ciencias Humanas y Sociales-CSIC C/ Albasanz 26-28 28037 Madrid Spain andres.diego@cchs.csic.es

May Farouk

Faculty of Tourism and Hotels Sadat city Egypt

mayfarouk21@yahoo.com

Laurel Flentye

Chicago USA

LaurieatGiza@gmail.com

Florence Friedman

Rhode Island USA ffriedman@verizon.net

H.M. Hays

Oude Culturen van de Mediterrane Wereld Universiteit Leiden postbus 9515 2300 RA Leiden The Netherlands H.M.Hays@hum.leidenuniv.nl

Jaromír Krejčí Czech Institute of Egyptology (see Bárta for full address) Jaromir.Krejci@ff.cuni.cz

Kamil O. Kuraszkiewicz Department of Egyptian and Nubian Archaeology Institute of Archaeology, University of Warsaw ul. Krakowskie Przedmieście 26/28 00-927 Warszawa Poland k.o.kuraszkiewicz@uw.edu.pl

Mark Lehner Ancient Egypt Research Associates, Inc. P.O. Box 382608 Cambridge, MA 02238-2608 USA

marklehner@aol.com Jana Malatkova Czech Institute of Egyptology (see Bárta for full address)

Jaromir.Krejci@ff.cuni.cz

Massimiliano Nuzzolo Massimiliano Nuzzolo University of Naples "L'Orientale" P.za S. Domenico Maggiore 12 80134 Napoli - Italy massimiliano.nuzzolo@libero.it

Gabriele Pieke Staatlichen Museen zu Berlin Germany

g.pieke@googlemail.com Joanna Popielska-Grzybowska

Institute of Anthropology and Archaeology The Pułtusk Academy of Humanijties 17, Daszyńskiego st. 06-100 Pułtusk

joannapopielskag@hotmail.com

Ann Macy Roth New York University New York USA

ann.macy.roth@nyu.edu

Teodozja I. Rzeuska Institute for Mediterranean and Oriental Cultures Polish Academy of Sciences Warsaw Poland teodozjarzeuska@wp.pl

Nico Staring Leiden University Zamenhofstraat 22 2312 NV Leiden The Netherlands n.t.b.staring@umail.leidenuniv.nl

Ana Tavares

Ancient Egypt Research Associates, Inc. (see Lehner for full address) tavares.ana.2008@gmail.com

Stefanie Verecken Katholieke Universiteit Leuven (see De Meyer for full address) Stefanie. Vereecken@arts.kuleuven.be

Miroslav Verner

Czech Institute of Egyptology (see Bárta for full address) Jaromir.Krejci@ff.cuni.cz

Hana Vymazalová Czech Institute of Egyptology (see Bárta for full address) Jaromir.Krejci@ff.cuni.cz

Anna Wodzińska Department of Egyptian and Nubian Archaeology (see Kuraszkiewicz for full address)

annawodzinska@uw.edu.pl

Dr. Alexandra Woods,

Department of Ancient History, Faculty of Arts, Macquarie University Svdnev Australia

alex.woods@mq.edu.au

Recent research on all aspects of the Old Kingdom in Egypt is presented in this volume, ranging through the Pyramid Texts, tomb architecture, ceramics, scene choice and layout, field reports, cemetery layout, tomb and temple statuary. The contributions also show how Egyptology is not stuck in its venerable traditions but that newer forms of technology are being used to great effect by Egyptologists. For example, two papers show how GIS technology can shed light on cemetery arrangement and how 3D scanners can be employed in the process of producing facsimile drawings of reliefs and inscriptions.

The authors cover a wide range of sites and monuments. A large part of the work presented deals with material from the great cemeteries of Saqqara and Giza of the Old Kingdom capital city of Memphis but all the smaller sites are discussed. The book also includes a paper on the architecture of mastabas from the lesserknown site of Abu Roasch. The provinces are by no means overlooked, with articles on material from Deir el-Bersha, el-Sheikh Said and Akhmim. Between them, the authors discuss material from the milieu of the king right down to that which concerned the tomb workmen and those who supplied their basic needs, such as bakers, brewers and potters.

Containing papers presented at a conference at the Fitzwilliam Museum, Cambridge in May 2009, this book continues a series of publications of the latest research presented at previous meetings in Paris, Berlin and Prague.

Helen Strudwick currently works at the Fitzwilliam Museum, Cambridge; Nigel Strudwick has worked at the British Museum and is presently teaching at the University of Memphis. They have carried out fieldwork together at Luxor since 1984 and are the authors of *Thebes in Egypt*.

