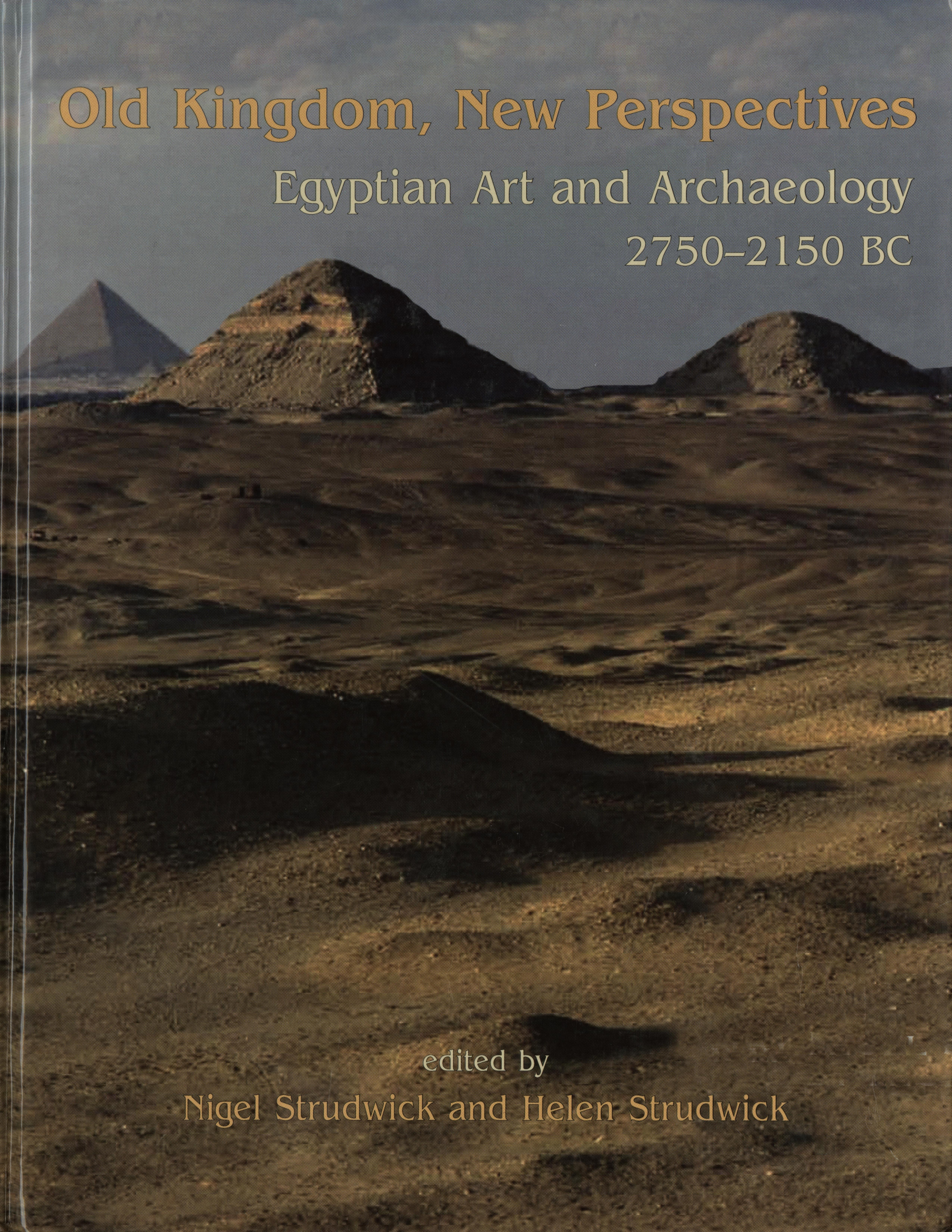
Old Kingdom, New Perspectives

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

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

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

7

A spatial metaphor for chronology in the secondary cemeteries at Giza

May Farouk

Although both of the two main excavators of Giza, Reisner[1] and Junker,[2] produced a different scenario for the development of the Giza cemetery, they both differentiated clearly between two main building phases: the original state-planned phase which included six nucleus cemeteries[3] and the later phase which included the smaller tombs built in the large spaces of unoccupied land left among and around the nucleus cemeteries. These later tombs were used either for members of the family of the owners of the larger mastabas or for their *ka*-priests. Clustering around the large older mastabas, these minor mastabas formed gradually what Reisner described as the secondary cemetery of Giza. A considerable number of those smaller tombs in the Eastern Cemetery and the Western Cemetery are uninscribed and are difficult to pinpoint precisely in time in the absence of artefacts or inscriptions. The present article is an attempt to use the options of Geographical Information System (GIS) software to produce a tentative global dating for such areas of tombs.[4]

In attempting to find a spatial metaphor for chronology which could be used to recognise different building areas in the secondary cemetery, it was assumed that areas of higher tomb density are of later relative date than those of lower density. In other words the building sequence in each cemetery can be traced in the direction of the decreasing distance between tombs. Higher density of tombs in one area is formed by two factors: the decreasing distance between tombs and their small sizes. Reisner assumed that mastabas of larger size are earlier because large mastabas could only have been made when large spaces were still clear between the independent mastabas. To test this hypothesis, the tombs of several small cemeteries were examined.

By applying a point density tool to the tombs of cemeteries G 1000 and G 1100 (Fig. 2), it became clear that the density of tombs increases in the study area from south to north and from west to east. The most occupied area is the north-east corner, suggesting that it is the latest area in the cemetery, and this agrees with the dating of Reisner for those tombs based on their types.[5] Thiesen polygons[6] were drawn around the main cores of this cemetery[7] (G 1221, G 1109, G 1020, G 1044, G 1024, G 1101 – Fig. 2). The largest number of tombs are those which are located in the north-east corner within the dominance area of G 1044. That later group of tombs has obviously lost the connection to the centre and was extended independently to the north-east. The same tendency of tombs to extend towards the

[1] For his dating of the Giza cemetery, see G.A. Reisner, *A History of the Giza Necropolis* I (Cambridge, Mass. 1942), 13–15, 73–84; Reisner, Chapter 15 of *Giza Cemetery Volume 2*, an unpublished manuscript kept in the Boston Museum of Fine Arts, passim.

[2] For his dating of the Giza cemetery, see H. Junker, *Gîza* I. *Die Mastabas der IV. Dynastie auf dem Westfriedhof* (Vienna and Leipzig 1929), 10–14.

[3] The main cores in the Eastern Cemetery, cemetery G 1200, G 2100, G 4000, Cemetery En Echelon and cemetery GIS.

[4] The present article is a part of a PhD thesis in which a geodatabase for the whole Giza cemetery was constructed with the means of ArcGis 9.3 software.

[5] G.A. Reisner, *Cemetery G 1000–1100*, unpublished manuscript kept in the Boston Museum of Fine Arts, 1–13.

[6] Thiesen polygons are polygons drawn around each point in a given space so that each polygon encloses only one point. This method attaches areas of space to the nearest centre in its vicinity. It deals with all centres equally, regardless of their size and hierarchy. For more information about Thiesen polygons see: C. Renfrew and P. Bahn, *Archaeology: Theories, Methods and Practice* (5th edition; London 2008), 159.

[7] Those which Reisner designates as early or on independent sites.

north-east can be noticed in cemeteries G 1400, G 1600 and G 3000 (Fig. 3). Here again the number of tombs increases towards the north-east corner.

The sequence of building suggested by the density maps for cemeteries G 1000, G 1100, G 1400, G 1600 and G 3000 is also supported when the visibility factor is taken into consideration. It was always the wish of tomb owners to locate their chapels on the eastern face of the mastaba to be visible to visitors and passers-by. Plate 3 demonstrates that the constant tendency to build towards the east caused older tombs in this cluster to have less share of visibility, if any. To acquire the best possible view on the plateau might have been also a competitive element which governed the expansion of the cemetery. When a viewshed[8] analysis was made for two tombs no more than 50 metres apart (Plate 5 and Plate 6) the range in view difference between both was very wide, demonstrating the significant change of visibility according to the location of the tomb.

The situation in cemeteries G 2000 and G 2200 was more complicated. Not only was their growth limited by their position between mastaba G 2000 and cemetery G 2100, but also an outcrop of bad rock happens to be located in the centre of its building area. According to their types, the earlier tombs are those situated in the eastern border of the cemetery. Later tombs extended from east to west as far as the eastern wall of G 2000, blocking access to its chapel. When the land in that direction was consumed, another building ground to the north was initiated, avoiding the area of bad rock in the middle. In this case too growth extended from east to west, using the land adjacent to G 2000 as the last alternative. The point density map of this cemetery (Fig. 4) reflects the same development scenario.

The growth of cemetery G 6000 was also limited by natural features (the Schiaparelli quarry) and by the existence of earlier cemeteries (the Steindorff cemetery). The area of higher density in G 6000 is at the north-west corner, where it meets with the adjacent Steindorff cemetery. The area where they meet in particular has a higher density of tombs than both cemeteries which might indicate their simultaneous growth in opposite directions (Fig. 1).

That these dense areas of tombs are of later date is better demonstrated by the Cemetery En Echelon (CEE). There, two secondary cemeteries developed; one to the east of the three original lines of the cemetery, and one to their north. The density map of the first cemetery indicates its growth towards the north until it was stopped by the existence of the *snḏm-ib* complex.[9] The north cemetery on the other hand grew towards the west extending beyond the earlier line of tombs G 2440-G 5280, and turning later to the south-west, which was the latest part of the cemetery. Distribution of the names of kings within the two cemeteries supports the same growth tendency. Names of kings of the fifth and sixth dynasties occur more often in the high density areas than in less occupied parts where the name of king Khufu is more in evidence (Plate 1).

The same principle can be applied to the central area of the western cemetery, on which little research has been done, to propose a general scenario concerning the development of the area. The line of tombs adjacent to the cemetery G 4000 (D 110–D 118) is certainly the earliest, not only because the area has a lower density of tombs, but also according to Junker, who estimated the dating to be between the end of the fourth dynasty and the beginning of the fifth.[10] The density map gives the impression that the cemetery developed from outside to inside, from west to east, the latest areas being thus those in the centre of the cemetery. Visibility also plays an important role here, this time as a motivator for the earlier builders to build their tombs as close as possible to the outer borders of the block, the inner tombs being much less visible (Plate 4).

Taking into account the lines of direction created by the density map, it is overwhelmingly evident that the Great Pyramid had little if any spatial weight during the later phase of the Western Cemetery development. Local considerations and topographical features on the other hand played a greater rule in the organisation of tombs.

Secondary tombs around the main cores of the nucleus cemetery indicate their chronological position in another manner. Those tombs which are built in a position to impede access to the older mastabas or to block the streets of the cemetery should in general be considered later than the secondary tombs which respected the layout of the cemetery. To recognise tombs of the first type, a selection by location was applied to all secondary tombs within 80 cm distance of the main cores, the minimum space to maintain traffic between two tombs. The outcome of selection demonstrates that the largest number of intrusive tombs was located around the main cores of G 4000. A point density map shows however that the most occupied area was around the cores of G 2100. This area of high density continues through the density map of the central area of the Western Cemetery (WCE, the area marked with a circle

[8] A viewshed is an area that is visible from a specific location based on elevation values of a Digital Elevation Model (DEM). For further reading about the viewshed analysis: Y.-H. Kim, S. Rana and S. Wise, 'Exploring multiple viewshed analysis using terrain features and optimization techniques', *Computers & Geosciences* 30 (2004), 1019–1032.

[9] Or by the mastabas which antedated the complex in the same location, as Reisner believed that G 2370 replaced older constructions (G 2371, G 2372, G 2373). See E. Brovarski, *The Senedjemib Complex, Part I* (Giza Mastabas 7; Boston 2001), 111–113.

[10] H. Junker, *Giza VI. Die Mastabas des Nfr (Nefer), Kdfjj (Kedfi), KAHjf (Kahjef) und die westlich anschiessenden Grabanlegen* (Vienna and Leipzig 1943), 4.

in Plate 2). It is difficult however to claim that either the secondary tombs cores around G 2100 or the central area in the Western Cemetery were an extension of the other, since tombs around the main cores are associated with a different context of family relations and funerary service.

Conclusion

Secondary cemeteries tended to have higher density as they grew, but this factor alone cannot be used to determine the chronological development of the necropolis. Local factors such as topographical features and the existence of larger earlier mastabas had also an influence on the final shape of the necropolis. Access to earlier structures was preserved as long as possible, and only blocked when building land in each cemetery became scarce. To answer the question whether the preservation of access was out of conventional morality or genealogical ties, more detailed research for each case would be required. Higher areas of density should in general be interpreted as later parts of the cemetery, and often as a meeting area between two simultaneously growing cemeteries.

Striving for the best visibility conditions influenced the expansion direction of secondary cemeteries and the urge to see and to be seen was no less fierce than the competition for an area of land.

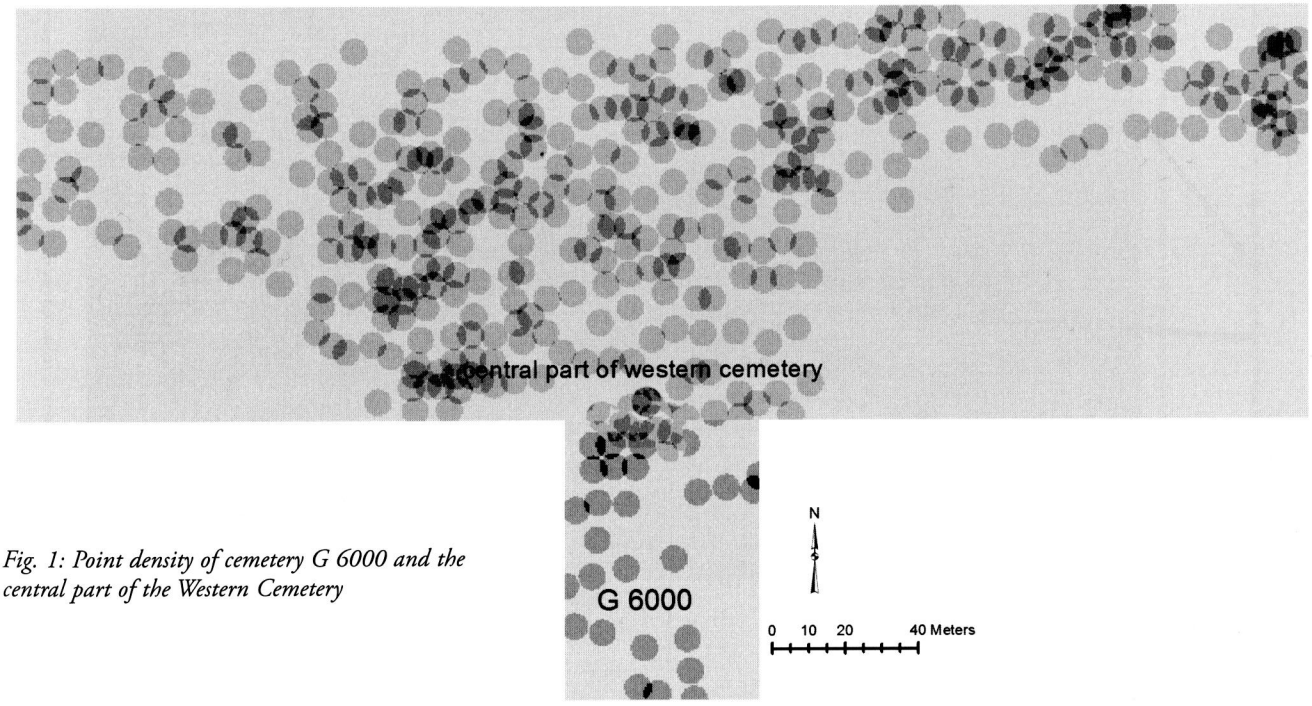


Fig. 1: Point density of cemetery G 6000 and the central part of the Western Cemetery

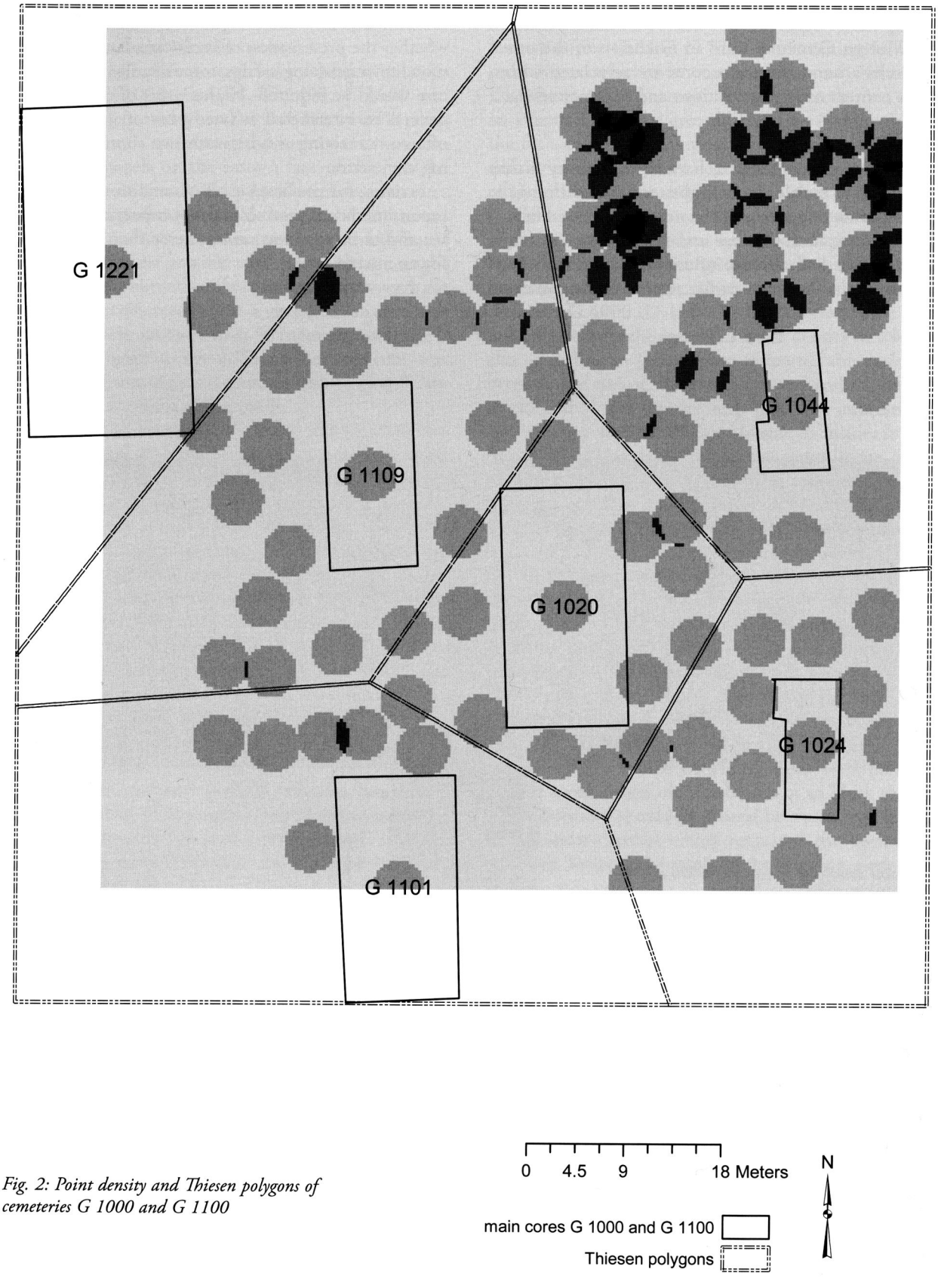


Fig. 2: Point density and Thiesen polygons of cemeteries G 1000 and G 1100

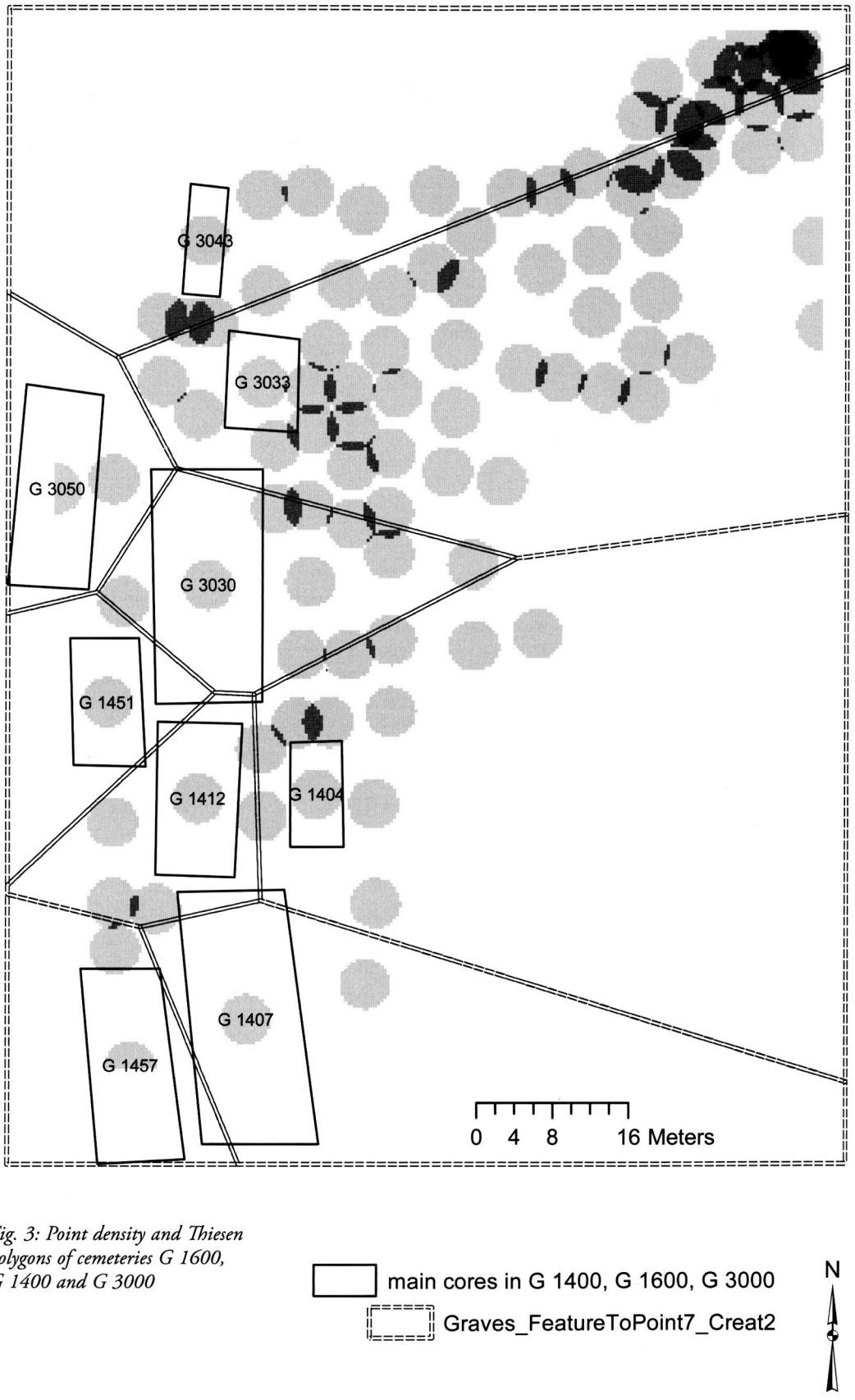


Fig. 3: Point density and Thiesen polygons of cemeteries G 1600, G 1400 and G 3000

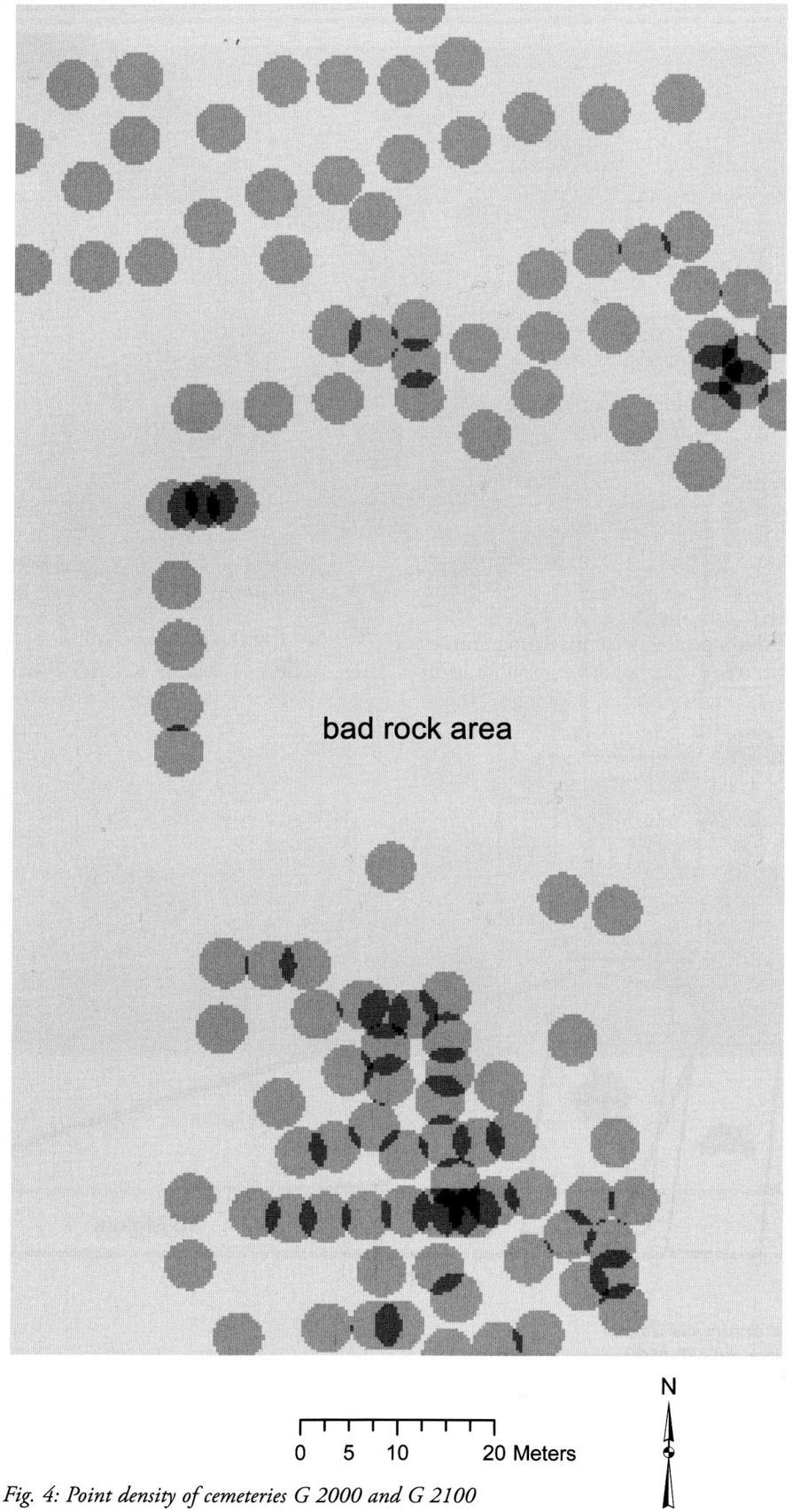


Fig. 4: Point density of cemeteries G 2000 and G 2100

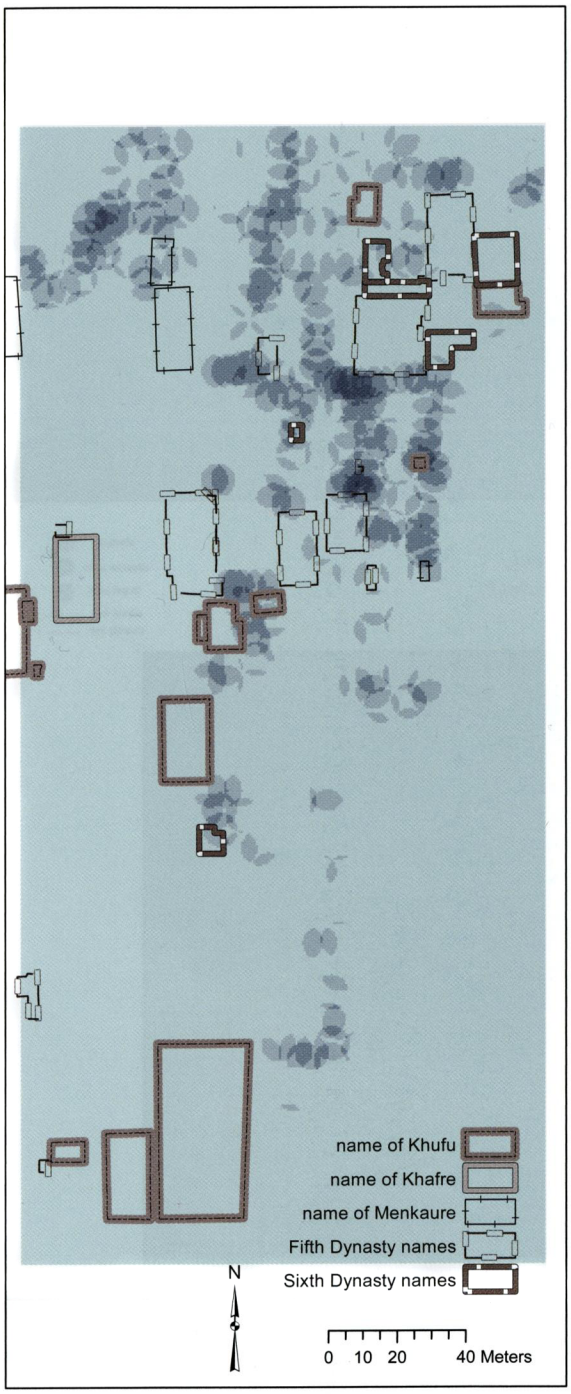


Plate 1: Point density of the Cemetery En Echelon with occurrence of names of kings (Farouk)

Plate 2: Point density of secondary intrusive tombs in the Western Cemetery (Farouk)

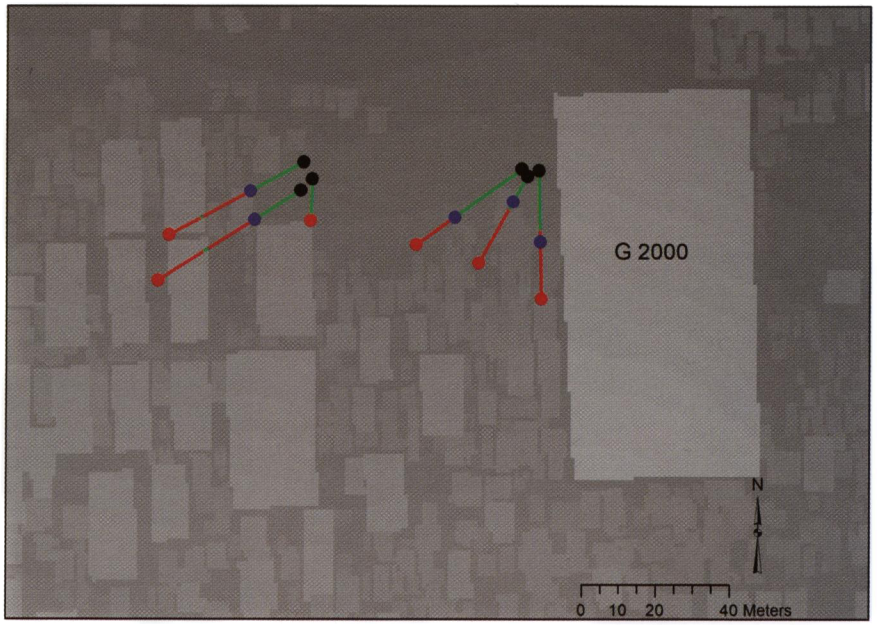
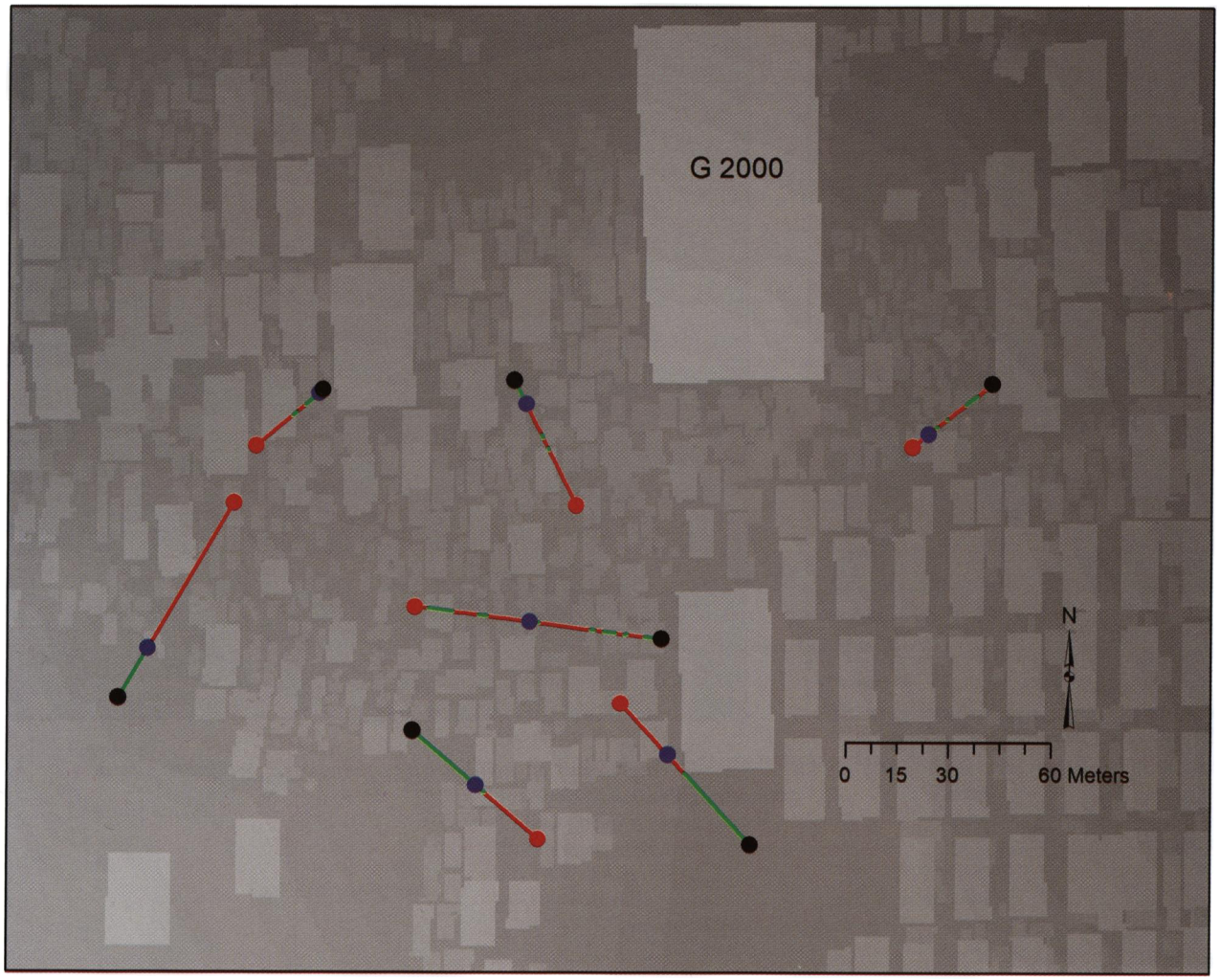


Plate 3: Line of sight of several observer points in cemeteries G 1100, G 1400, G 1600 (Farouk)
Plate 4: Line of sight of several observer points in the central area of the Western Cemetery (Farouk)



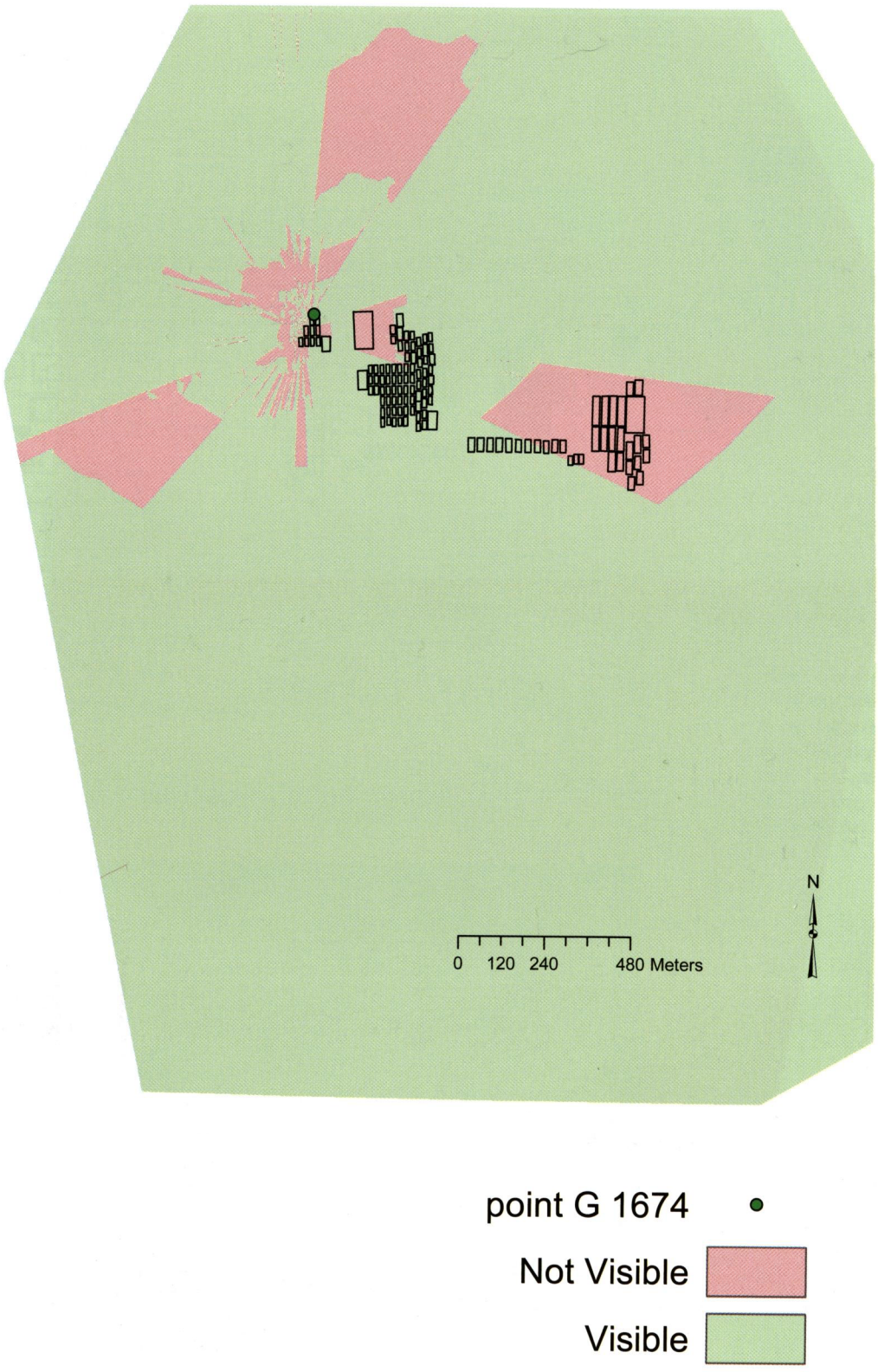


Plate 5: Viewshed analysis of G 1674 (Farouk)

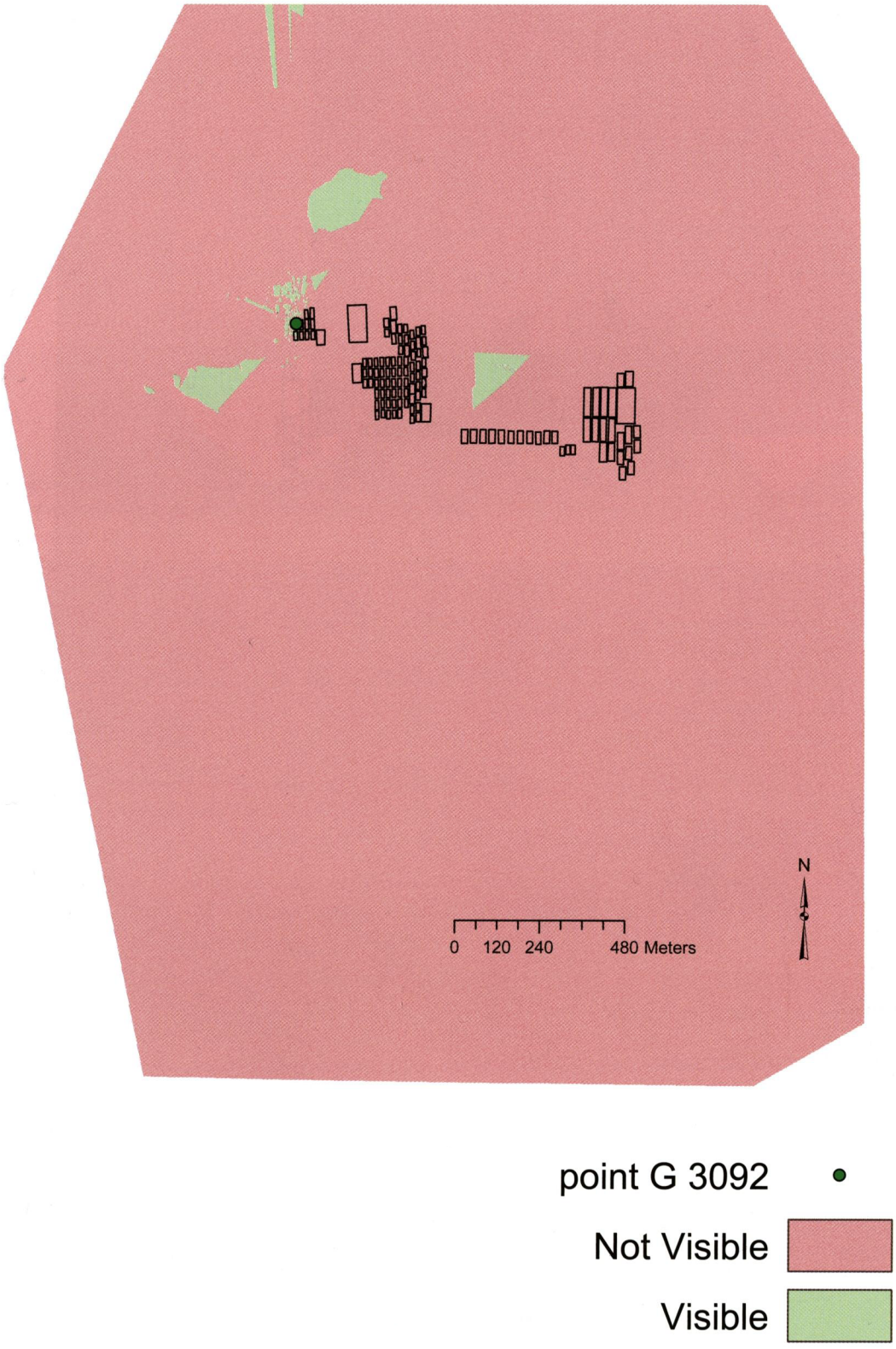


Plate 6: Viewshed analysis of G 3092 (Farouk)

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

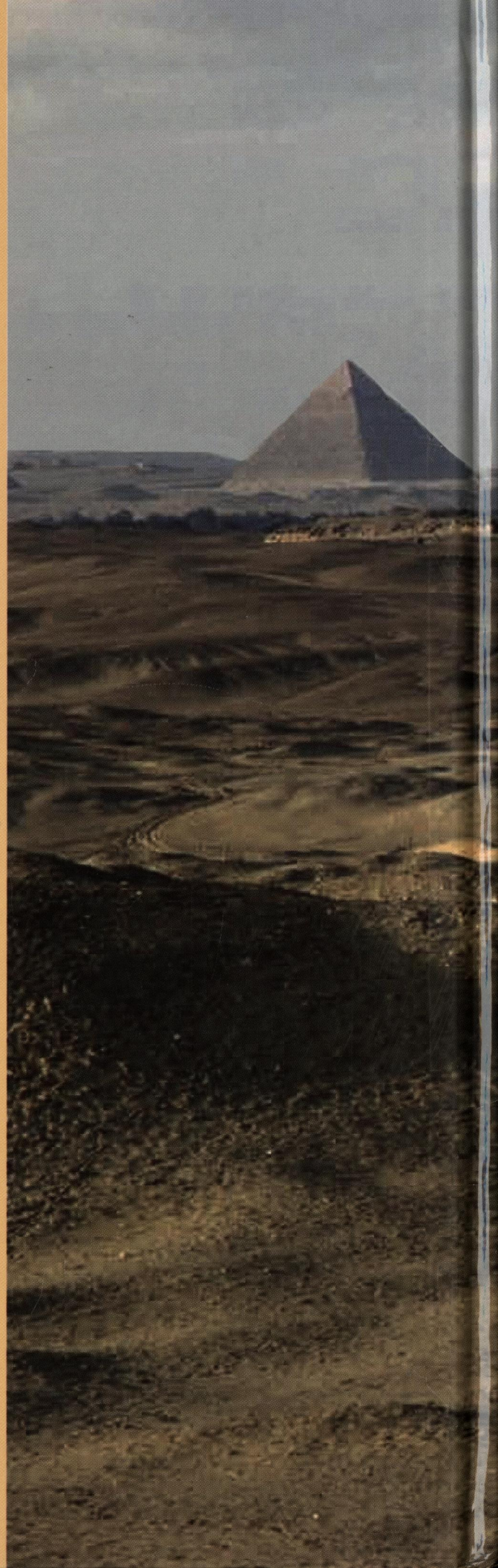
Dr. Alexandra Woods,
Department of Ancient History,
Faculty of Arts,
Macquarie University
Sydney
Australia
alex.woods@mq.edu.au

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 lesser-known 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*.



Oxbow Books
www.oxbowbooks.com

ISBN 978-1-84217-430-2
9 781842 174302