
LANDSCAPES IN TRANSITION

Edited by Bill Finlayson and Graeme Warren

OXBOW BOOKS
Oxford and Oakville

Published jointly by
the Council for British Research in the Levant
and
Oxbow Books, Oxford, UK

© Council for British Research in the Levant, Oxbow Books and the authors, 2010

ISBN 978-1-84217-***-*

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

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

Cover image

Printed and bound in Great Britain by

Contents

| | |
|--|-----------|
| List of Figures and Tables | v |
| Acknowledgements | vii |
| List of Contributors | ix |
| 1 Landscapes in Transition: Introduction <i>Bill Finlayson and Graeme Warren</i> | 1 |
| Part One: Changing Landscapes: Process and Scale | 7 |
| 2 Different Ways of Being, Different Ways of Seeing ... Changing Worldviews in the Near East <i>Nigel Goring-Morris and Anna Belfer-Cohen</i> | 9 |
| 3 From Big Beat to Bebop: Settlement Between 6000 and 3000 BC in the Fenland Basin (UK) <i>Fraser Sturt</i> | 23 |
| 4 People and Their Places at the End of the Pleistocene: Evaluating Perspectives on Physical and Cultural Landscape Change <i>Lisa Maher</i> | 34 |
| 5 Subsistence at 4000–3700 cal BC: Landscapes of Change or Continuity? <i>Nicky Milner</i> | 46 |
| 6 A Geological Perspective on Climatic and Environmental Change in the Levant and Eastern Mediterranean from 25,000 to 5000 years BP <i>Stuart Robinson and Stuart Black, Bruce W. Sellwood, Claire M.C. Rambeau and Paul J. Valdes</i> | 55 |
| 7 The Case for Climatic Stress Forcing Choice in the Adoption of Agriculture in the British Isles <i>Richard Tipping</i> | 66 |
| 8 Changing Landscapes – Changing Societies? An Anthropological Perspective <i>Marion Benz</i> | 77 |
| Part Two: Moving Landscapes: Worldviews and Contact | 87 |
| 9 The Neolithization of Britain and Ireland: The ‘Big Picture’ <i>Alison Sheridan</i> | 89 |
| 10 Changing People, Changing Environments: How Hunter-Gatherers Became Communities that Changed the World <i>Trevor Watkins</i> | 106 |
| 11 Formalising the Sacred? The Late Mesolithic and Early Neolithic Monumental Landscapes of Britain and Ireland <i>Vicki Cummings</i> | 115 |

| | | |
|----|---|-----|
| 12 | ‘Islanding’ the Mesolithic–Neolithic Transition: Approaches to Landscapes of Contact and Transformation in Northwest Europe <i>Gordon Noble</i> | 125 |
| 13 | Reconsidering Early Holocene Cyprus within the Eastern Mediterranean Landscape <i>Carole McCartney, Sturt W. Manning, David Sewell and Sarah T. Stewart</i> | 133 |
| 14 | The Last of the Old: A Homogeneous Later Mesolithic Ireland? <i>Thomas Kador</i> | 147 |
| | Part Three: Landscapes of Settlement | 159 |
| 15 | Farmers, Gatherers or Horticulturalists? Reconstructing Landscapes of Practice in the Early Neolithic <i>Eleni Asouti and Andrew S. Fairbairn</i> | 161 |
| 16 | Modelling the Agricultural Impacts of the Earliest Large Villages at the Pre-Pottery Neolithic–Pottery Neolithic Transition <i>Dana Campbell</i> | 173 |
| 17 | Taskscapes and the Transition <i>Chantal Conneller</i> | 184 |
| 18 | From Mega Sites to Farmsteads: Community Size, Ideology and the Nature of Early Farming Landscapes in Western Asia and Europe <i>Amy Bogaard and Valasia Isaakidou</i> | 192 |
| 19 | The Temporality of Materials: Occupation Practices in Eastern England During the 5th and 4th Millennia BC <i>Duncan Garrow</i> | 208 |
| | Part Four: Conclusion | 219 |
| 20 | Time, Scale, Practice: Landscapes in Transition? <i>Bill Finlayson and Graeme Warren</i> | 221 |

List of Figures and Tables

List of Figures

- Fig. 1.1. View of the Wadi Faynan Eco-Lodge
Fig. 1.2. Workshop participants at the eco-lodge
Fig. 2.1. The phytogeographic regions of the Near East
Fig. 2.2. Changing site distribution densities in various areas of the Near East
Fig. 2.3. Reconstructed ranges of some early Epipalaeolithic groups in the southern Levant
Fig. 2.4. Uses of lime plaster
Fig. 2.5. Uses of slab pavements in ritual settings
Fig. 2.6. Anthropomorphic and zoomorphic arrangements
Fig. 2.7. Uses of monoliths in symbolic contexts
Fig. 2.8. Some secluded site settings
Fig. 2.9. Marked graves
Fig. 2.10. Distribution map of the archaic ‘villages’ of the PPNA in the Levant
Fig. 2.11. Distribution map of the extent of the PPNB *koine* in the Levant
Fig. 3.1. The fenland basin and major sites/areas mentioned in the text
Fig. 3.2. Isopachyte map of Holocene deposits within the fenland basin
Fig. 3.3. Mesolithic findspots in East Anglia
Fig. 3.4. Distribution of Neolithic scatters in East Anglia
Fig. 3.5. Key sites on the south-east fen edge
Fig. 3.6. Location of finds in Isleham against a modelled palaeoenvironment
Fig. 3.7. Location of finds in the Nar Valley
Fig. 4.1. Dichotomous treatment of the EP landscape
Fig. 4.2. A) reconstructed vegetation zones of the southern Levant; B) the boundaries of the Natufian ‘homeland’
Fig. 4.3. Grave IV, Homo 6
Fig. 4.4. The Early and Middle EP site of Kharaneh IV
Fig. 4.5. The flint- and bone-covered surface of Kharaneh IV
Fig. 6.1. Location map of the Eastern Mediterranean and Levant region
Fig. 6.2. Terrestrial and marine palaeoclimatic proxy data for the Levant and Eastern Mediterranean
Fig. 7.1. Changes from 5050 to 3050 BC in atmospheric and ocean circulation in Northwest Europe
Fig. 7.2. Changes from 5050 to 3050 BC in temperature in Northwest Europe
Fig. 7.3. Changes from 5050 to 3050 BC in precipitation in Northwest Europe
Fig. 8.1. Annual receipt of insolation of the last 10,000 years
Fig. 8.2. Model showing the thresholds passed when moving from a foraging lifestyle to resource production
Fig. 9.1. Proposed strands of Neolithisation
Fig. 9.2. 1. The closed chamber and simple passage tomb at Achnacreebeag, Argyll and Bute; 2. Breton-style closed chambers and simple passage tombs in Britain and Ireland
Fig. 9.3. The Breton-style pots from Achnacreebeag and *comparanda*
Fig. 9.4. The Carinated Bowl tradition ceramic repertoire
Fig. 9.5. The Early Neolithic timber ‘hall’ at Warren Field, Crathes, Aberdeenshire
Fig. 9.6. Broadsands passage tomb
Fig. 9.7. Sherds from two Early Neolithic carinated bowls from Broadsands passage tomb
Fig. 11.1. Chambered tombs in the Irish Sea zone
Fig. 11.2. Western Scottish Clyde cairns and mountains
Fig. 11.3. Northeast Irish court cairns and mountains
Fig. 11.4. North Welsh dolmens and mountains
Fig. 11.5. View of Arran
Fig. 11.6. Michael’s Grave, Bute, and Carreg Samson, Pembrokeshire
Fig. 13.1. Sea areas from which the mainland and islands are inter-visible
Fig. 13.2. Location of (modern) sea-turtle nesting sites and selected Mesolithic/Epipalaeolithic coastal sites
Fig. 13.3. Climate history and radiocarbon chronology
Fig. 13.4. The location of the EENC survey area
Fig. 13.5. Location of Asprokremnos in EENC survey landscape
Fig. 13.6. Sources of chert
Fig. 16.1. Settlement extent estimates for MPPNB and LPPNB ‘Ain Ghazal
Fig. 17.1. The location of the Vale of Pickering
Fig. 17.2. Archaeological sites around lake Flixton. Seamer C is site 7
Fig. 18.1. A hypothetical household distribution
Fig. 18.2. Specific sites/regions discussed in the text
Fig. 18.3. Reconstruction of PPNB Abu Hureyra and its landscape
Fig. 18.4. Mean site size versus mean architectural compartmentalisation of Late Natufian–LPPNB settlements
Fig. 18.5. Size of Thessalian sites during the Neolithic
Fig. 18.6. A) reconstructed settlement plan of Schwanfeld, Franconia; B) reconstructed view of Schwanfeld
Fig. 18.7. Plan of Langweiler 8, Aldenhovener Plateau, Rhineland
Fig. 18.8. Reconstructed landscape of the middle Merzbach valley, phase VII
Fig. 18.9. Vaihingen an der Enz
Fig. 19.1. Excavation of a 4th-millennium BC pit at Kilverstone, Norfolk
Fig. 19.2. Cereal impressions in pottery from Hurst Fen and Broome Heath

Fig. 19.3. Kilverstone Area E

Fig. 19.4. The temporality of occupation at Kilverstone

List of Tables

Table 2.1. Dates and duration of the Terminal Pleistocene–Early Holocene prehistoric units in the southern Levant

Table 4.1. The cultural landscape of the EP period with separate cultural trajectories for core and periphery zones (modified after Belfer-Cohen and Goring-Morris 2002)

Table 5.1. Dates on human bones

Table 5.2. Dates from Carding Mill Bay

Table 13.1. Preliminary sequence of early Holocene occupation in Cyprus

Table 13.2. The results of a pilot study of chert source exploitation

Table 14.1. Locations dated to the later Mesolithic period

Table 14.2. Average object size in comparable later Mesolithic assemblages

Table 14.3. Dates and sources for Irish later Mesolithic locations reviewed in the paper

Table 16.1. Estimated population levels for MPPNB, LPPNB and PPNC ‘Ain Ghazal

Table 16.2. Estimated areas of land suitable for the cultivation of barley, emmer wheat, field pea and lentil within a walk of 1.25 hours’ duration from ‘Ain Ghazal, under a precipitation regime where rainfall amounts are 50 mm higher than current levels; and percentage of the total amount of land within that same distance

Table 16.3. Areas and percentage of land available in each suitability class within a walk of 1.25 hours’ duration from ‘Ain Ghazal, to provide 50% of the inhabitants’ total caloric requirements in cultivated cereals and 30% in cultivated legumes

Table 18.1. Chronological table. Levant and Central Anatolia based on Cessford *et al.* (2005); Kuijt and Goring-Morris (2002); Özbaşaran and Buitenhuis (2002); Greek Neolithic based on Andreou *et al.* 1996, 260, table 1; Crete based on Tomkins (2008); for the LBK see Stäuble (1995), Strien and Gronenborn (2005)

Table 18.2. The distance to the furthest cultivation plots in settlements of differing size and for a range of population densities, assuming high area yields (1500 kg per ha) and a requirement of 250 kg per person per year (cereals). Distances are estimated from the centre of the site to the outer edge of cultivated land

Acknowledgements

The Landscapes in Transition conference was primarily funded by the Council for British Research in the Levant (CBRL) with further support from UCD Seed Funding (including all transport costs for the UCD participants). Many individual schemes supported particular speakers, and these are acknowledged where appropriate in text. During the conference we were the privileged guests of the Royal Society for the Conservation of Nature Wadi Faynan Ecolodge who helped to support the conference through the special rate they gave us. We are very grateful to their staff for looking after us so well. We also stayed at the Petra Inn and would like to thank Mohammad Tweisi for his help here.

CBRL staff in Amman were very helpful throughout,

especially Mrs Nadja Qaisi who organised accommodation and transport for the participants.

Prof Zeidan Kafafi of Yarmuk University gave a tour of his excavations at the famous site of 'Ain Ghazal in Amman. Dr Hans-Georg Gebel gave a guided tour of his excavations at Ba'ja, while Moritz Kinzel led us around the University of Copenhagen's excavations at the Shkarat Msaia. Our thanks to all.

We are very grateful to Prof Alasdair Whittle for refereeing the entire volume and for his useful comments. Finally we would like to thank all of the participants for not only giving stimulating papers, but for enthusiastically entering into the spirit of the meeting and actively debating the issues as we travelled through the Jordanian landscape.

List of Contributors

The editors

BILL FINLAYSON
CBRL,
PO Box 519, J
ubaiha 11941,
Amman, Jordan
b.finlayson@cbri.org.uk

GRAEME WARREN
School of Archaeology, UCD,
Newman Building,
Belfield,
Dublin 4, Ireland
graeme.warren@ucd.ie

The authors

ELENI ASOUTI
School of Archaeology, Classics and Egyptology,
University of Liverpool,
Hartley Building,
Brownlow Street,
Liverpool L69 3BX
E.Asouti@liverpool.ac.uk

ANNA BELFER-COHEN
Prehistoric Archaeology,
The Institute of Archaeology,
Hebrew University,
Jerusalem 91905, Israel
belferac@mscc.huji.ac.il

MARION BENZ
Department of Near Eastern Archaeology,
Albert-Ludwigs Universität,
79085 Freiburg, Germany
marion.benz@orient.uni-freiburg.de

STUART BLACK
School of Human & Environmental Sciences,
University of Reading,
Whiteknights,
PO Box 277,
Reading RG6 6AB
s.black@reading.ac.uk

AMY BOGAARD
School of Archaeology,
36 Beaumont Street,
Oxford OX1 2PG
amy.bogaard@arch.ox.ac.uk

DANA CAMPBELL
School of Archaeology, Classics and Egyptology,
University of Liverpool,
Brownlow Street,
Liverpool L69 3BX
danac@liverpool.ac.uk

CHANTAL CONNELLER
School of Arts, Histories and Cultures,
University of Manchester,
Oxford Road,
Manchester M13 9PL
Chantal.conneller@manchester.ac.uk

VICKI CUMMINGS
School of Forensic and Investigative Science,
University of Central Lancashire,
Preston PR1 2HE
VCummings1@uclan.ac.uk

ANDREW FAIRBAIRN
Room 703,
Michie Building,
University of Queensland,
Brisbane,
St Lucia QLD 4072,
Australia
a.fairbairn@uq.edu.au

DUNCAN GARROW
School of Archaeology, Classics and Egyptology,
University of Liverpool,
Hartley Building,
Brownlow Street,
Liverpool L69 3GS
Duncan.Garrow@liverpool.ac.uk

NIGEL GORING-MORRIS
Prehistoric Archaeology,
The Institute of Archaeology,
Hebrew University,
Jerusalem 91905, Israel
goring@mscc.huji.ac.il

VALASIA ISAAKIDOU

Department of Archaeology,
Northgate House,
Sheffield S1 4ET
valasia_isaakidou@yahoo.co.uk

THOMAS KADOR

UCD School of Archaeology,
Newman Building,
Belfield,
Dublin 4, Ireland
thomas.kador@ucd.ie

CAROLE MCCARTNEY

University of Cyprus,
Archaeological Research Unit,
12 Gladstonos,
Nicosia, Cyprus
carolemcc@cytanet.com.cy

LISA MAHER

Leverhulme Centre for Human Evolutionary Studies,
University of Cambridge,
Fitzwilliam Street,
Cambridge CB2 1QH
l.maher@human-evol.cam.ac.uk

STURT W. MANNING

Department of Classics
and
Wiener Laboratory for Aegean and Near Eastern
Dendrochronology,
Cornell University,
Ithaca, NY 14853-3201, USA
sm456@cornell.edu

NICKY MILNER

Department of Archaeology,
The Kings Manor,
University of York,
York YO1 7EP
nm507@york.ac.uk

GORDON NOBLE

Department of Archaeology,
University of Aberdeen,
St Mary's,
Elphinstone Road,
Aberdeen AB24 3UF
g.noble@abdn.ac.uk

Claire M. C. Rambeau

School of Human & Environmental Sciences,
University of Reading,
Whiteknights,
PO Box 277,
Reading RG6 6AB
cmc*rambeau*@reading.ac.uk

STUART ROBINSON

Royal Society University Research Fellow,
Department of Earth Sciences,
University College London,
Gower Street,
London WC1E 6BT
stuart.robinson@ucl.ac.uk

BRUCE W. SELLWOOD

Deceased, November 2007

DAVID SEWELL

13 North Avenue, Leicester
david@sewllberry.org.uk

ALISON SHERIDAN

Archaeology Department,
National Museums Scotland,
Chambers Street
Edinburgh EH1 1JF
a.sheridan@nms.ac.uk

SARAH T. STEWART

Trent University,
Archaeological Research Centre,
1600 West Bank Drive,
Peterborough ON K9J7B8, Canada
sallystewart@trentu.ca

FRASER STURT

Centre for Maritime Archaeology,
University of Southampton, SO17 1BF
F.Sturt@soton.ac.uk

RICHARD TIPPING

School of Biological and Environmental Sciences,
Stirling University,
Stirling UK FK9 4LA
r.tipping@stir.ac.uk

PAUL J. VALDES

School of Geographical Sciences,
University of Bristol,
University Road,
Bristol BS8 1SS
p.j.valdes@bristol.ac.uk

TREVOR WATKINS

School of History, Classics, and Archaeology,
Old High School,
Infirmary Street,
Edinburgh EH1 1LT
Trevor.Watkins@ed.ac.uk