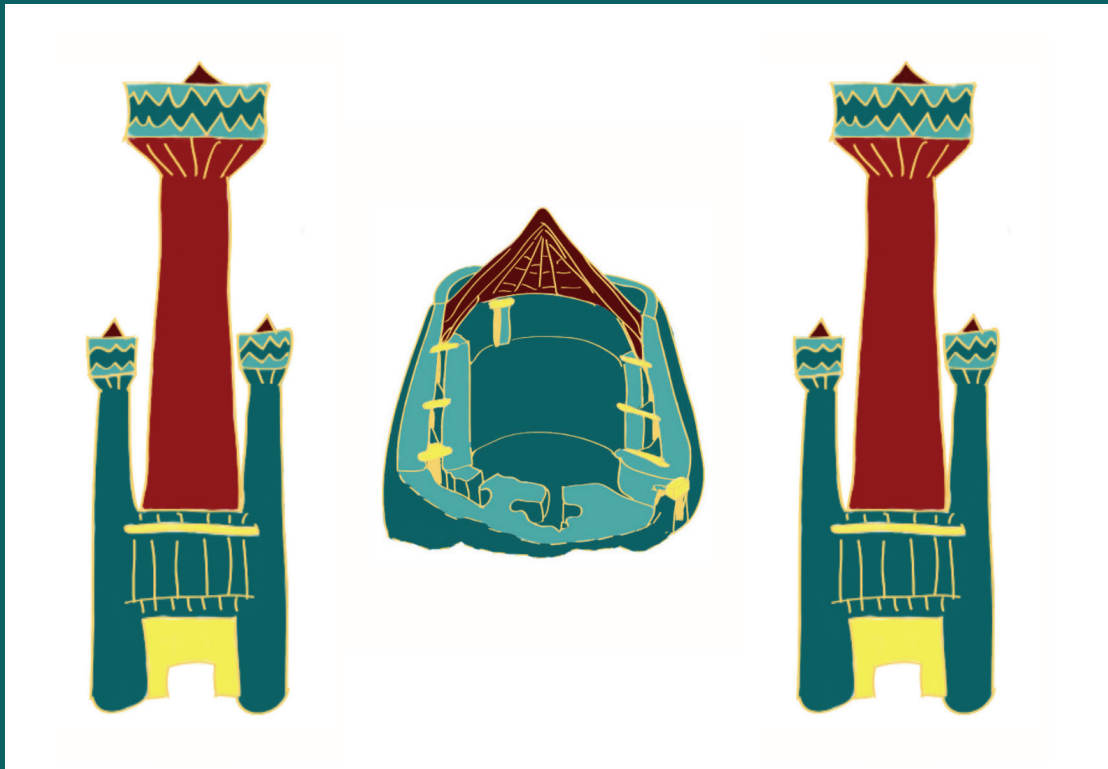




Gardening time

Monuments and landscape from
Sardinia, Scotland and Central Europe
in the very long Iron Age

Edited by Simon Stoddart, Ethan D. Aines
& Caroline Malone



Gardening time



McDONALD INSTITUTE CONVERSATIONS

Gardening time

Monuments and landscape from Sardinia, Scotland and Central Europe in the very long Iron Age

Edited by Simon Stoddart, Ethan D. Aines
& Caroline Malone

with contributions from

Ian Armit, John Barber, Lindsey Büster, Louisa Campbell, Giandaniele Castangia, Graeme Cavers, Anna Depalmas, Matthew Fitzjohn, Mary-Cate Garden, Andy Heald, Luca Lai, Robert Lenfert, Mary MacLeod Rivett, Hannah Malone, Phil Mason, Megan Meredith-Lobay, Mauro Perra, Ian Ralston, John Raven, David Redhouse, Tanja Romankiewicz, Niall Sharples, Alfonso Stiglitz, Dimitris Theodossopoulos, Carlo Tronchetti, Alessandro Usai, Alessandro Vanzetti, Peter Wells & Rebecca Younger

This book, and the conference upon which it was based, were funded by The ACE Foundation, The Fondazione Banco di Sardegna and the McDonald Institute. We are grateful to the British School at Rome and Magdalene College, Cambridge for their support.



The ACE Foundation
ARTS | CULTURE | PARTICIPATION

Published by:
McDonald Institute for Archaeological Research
University of Cambridge
Downing Street
Cambridge, UK
CB2 3ER
(0)(1223) 339327
eaj31@cam.ac.uk
www.mcdonald.cam.ac.uk



McDonald Institute for Archaeological Research, 2021

© 2021 McDonald Institute for Archaeological Research.
Gardening time is made available under a Creative Commons
Attribution-NonCommercial-NoDerivatives 4.0 (International)
Licence: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

ISBN: 978-1-913344-04-7

On the cover: *Cut out reconstruction of a broch flanked by two reconstructed Nuraghi, reconsidered by Lottie Stoddart.*

Cover design by Dora Kemp, Lottie Stoddart and Ben Plumridge.
Typesetting and layout by Ben Plumridge and Ethan D. Aines.

Edited for the Institute by Cyprian Broodbank (*Acting Series Editor*).

CONTENTS

| | |
|--|--------|
| Contributors | xi |
| Figures | xiii |
| Tables | xiv |
| Acknowledgements | xv |
| A tribute in honour of Giovanni Lilliu (1914–2012) | xvii |
| Tributes to Dr David Trump, FSA, UOM (1931–2016), and Dr Euan MacKie, FSA (1936–2020) | xxi |
| <i>Chapter 1</i> Introduction | 1 |
| SIMON STODDART, ETHAN D. AINES & CAROLINE MALONE | |
| Part I Built time | 5 |
| <i>Chapter 2</i> Memory in practice and the practice of memory in Caithness, northeast Scotland, and in Sardinia | 7 |
| JOHN BARBER, GRAEME CAVERS, ANDY HEALD & DIMITRIS THEODOSSOPOULOS | |
| Concepts and meanings: architecture and engineering | 8 |
| Dry stone building technologies | 8 |
| Canonicity and mutability: canonicity | 10 |
| Mutability | 10 |
| Scales of desired social change and of corresponding physical changes | 10 |
| The monuments: brochs | 11 |
| <i>Nuraghi</i> | 12 |
| Post-construction biographies of brochs | 14 |
| Post-construction biographies of <i>Nuraghi</i> | 14 |
| Conclusion | 14 |
| <i>Chapter 3</i> Monuments and memory in the Iron Age of Caithness | 17 |
| GRAEME CAVERS, ANDREW HEALD & JOHN BARBER | |
| The broch ‘icon’: a creation of archaeological historiography or the reality of Iron Age political geography? | 17 |
| Surveying the foundations in Caithness | 19 |
| Nybster: a study in Iron Age settlement development | 20 |
| The defences | 21 |
| Nybster: discussion | 21 |
| Thrumster broch | 22 |
| The Thrumster sequence | 23 |
| Thrumster: discussion | 24 |
| Whitegate: a warning | 24 |
| Discussion | 25 |
| Conclusion: brochs and the architecture of society | 25 |
| Monuments and memory: brochs as physical and conceptual raw material | 26 |
| <i>Chapter 4</i> Materializing memories: inheritance, performance and practice at Broxmouth hillfort, southeast Scotland | 27 |
| LINDSEY BÜSTER & IAN ARMIT | |
| Broxmouth hillfort | 27 |
| The Late Iron Age settlement | 29 |
| Household identity | 29 |
| Structured deposition | 30 |
| House 4: a brief biography | 32 |
| Discussion | 34 |
| Conclusion | 36 |

| | | |
|------------------|--|----|
| <i>Chapter 5</i> | Memories, monumentality and materiality in Iron Age Scotland | 37 |
| | LOUISA CAMPBELL | |
| | Social landscapes and memories | 37 |
| | Northern landscapes in the Roman Iron Age | 39 |
| | The lowland brochs | 39 |
| | Lowland broch depositional trends | 41 |
| | Wider settlement depositional trends | 43 |
| | Discussion | 43 |
| | Conclusion | 45 |
| <i>Chapter 6</i> | Rooted in water: the Scottish island-dwelling tradition | 47 |
| | ROBERT LENFERT | |
| | Presence in the landscape | 47 |
| | A 'wide-angle view' of islet use in Scotland | 48 |
| | Living on water – revisited | 49 |
| | Deconstructing defence | 49 |
| | Crannogs, prehistoric belief systems: ceramic and metalwork deposition | 50 |
| | Island dwellings and the concept of monumentality | 52 |
| | Island dwelling use and reuse in the archaeological record | 53 |
| | Loch Olabhat, North Uist, Western Isles | 53 |
| | Dun an Sticer, North Uist, Western Isles | 54 |
| | Eilean na Comhairle, Islay: a prehistoric crannog fit for a medieval king | 54 |
| | Buiston | 56 |
| | Ederline and Loch Awe | 56 |
| | Returning to (un)familiar places | 57 |
| <i>Chapter 7</i> | Remembering Nuraghi: memory and domestication of the past in nuragic Sardinia | 59 |
| | MAURO PERRA | |
| | The archaeological data | 59 |
| | Models of <i>Nuraghi</i> | 60 |
| | Other votives | 61 |
| | The votive context | 61 |
| | Conclusion | 64 |
| <i>Chapter 8</i> | Revisiting Glenelg a century after Alexander O Curle: reconstructing brochs in treeless landscapes | 65 |
| | TANJA ROMANKIEWICZ & IAN RALSTON | |
| | Curle's excavations | 65 |
| | The archaeological evidence for post holes within brochs reconsidered | 67 |
| | Timber sources in deforested landscapes – the environmental record | 70 |
| | Alternative reconstructions | 72 |
| | From timber sources to models of social organization | 73 |
| <i>Chapter 9</i> | Beyond the <i>Nuraghe</i> : perception and reuse in Punic and Roman Sardinia | 75 |
| | ALFONSO STIGLITZ | |
| | Examples of reuse of <i>Nuraghi</i> | 76 |
| | The archaeology of reuse | 79 |
| | Who reused the <i>Nuraghi</i> ? | 81 |
| | Conclusion | 82 |

| | | |
|-------------------|---|-----|
| <i>Chapter 10</i> | The <i>Nuraghe</i> 's life in the Iron Age | 83 |
| | CARLO TRONCHETTI | |
| | The changed use of <i>Nuraghi</i> in the Iron Age | 83 |
| | The <i>Nuraghe</i> as a symbol of memory | 84 |
| | Conclusion | 88 |
| <i>Chapter 11</i> | Monumentality and commemoration at a Late Neolithic henge site in Scotland | 89 |
| | REBECCA K. YOUNGER | |
| | Monuments, memory and archaeology | 89 |
| | Henge monuments in Scotland | 90 |
| | Commemoration | 91 |
| | Forteviot | 92 |
| | Heterotopias and imagined landscapes | 94 |
| | Conclusion | 95 |
| Part II | Landscape time | 97 |
| <i>Chapter 12</i> | Walking across the land of the Nuraghi: politics of memory and movement in central-western Sardinia during the Bronze Age | 99 |
| | GIANDANIELE CASTANGIA | |
| | Bronze Age evidence in the Sinis region | 99 |
| | GIS analysis | 101 |
| | Concluding remarks | 105 |
| <i>Chapter 13</i> | Memory as a social force: transformation, innovation and refoundation in protohistoric Sardinia | 107 |
| | ANNA DEPALMAS | |
| | The funerary context | 110 |
| | The religious and ceremonial context | 113 |
| | Iconographic information | 114 |
| | Conclusion | 117 |
| <i>Chapter 14</i> | Burial locations, memory and power in Bronze Age Sardinia | 119 |
| | LUCA LAI | |
| | ¹⁴ C-based evidence for the use of natural caves for burial | 121 |
| | Short outline of Bronze Age burial site types by phase | 124 |
| | Power, memory and burial locations | 125 |
| | Conclusion | 128 |
| <i>Chapter 15</i> | Memory and movement in the Bronze Age and Iron Age landscape of central and southeastern Slovenia | 131 |
| | PHILIP MASON | |
| | Memory and movement in the Late Bronze Age | 131 |
| | Memory and movement in the Early Iron Age landscape | 134 |
| | Conclusion | 136 |
| Part III | Multiple time | 139 |
| <i>Chapter 16</i> | The reuse of monuments in Atlantic Scotland: variation between practices in the Hebrides and Orkney | 141 |
| | NIALL SHARPLES | |
| | Twentieth-century encounters with monuments | 142 |
| | Landscape in the Western Isles | 145 |
| | Northern landscapes | 149 |
| | Conclusion | 150 |

| | | |
|-------------------|---|-----|
| <i>Chapter 17</i> | The nuragic adventure: monuments, settlements and landscapes | 151 |
| | ALESSANDRO USAI | |
| | Nuraghi and nuragic societies | 152 |
| | Nuraghi and landscapes: colonization, exploitation and the first nuragic crisis | 153 |
| | Nuragic settlements and landscapes: reorganization and consumption of resources | 155 |
| | Degeneration and dissolution of the nuragic civilization | 157 |
| | Conclusion | 158 |
| <i>Chapter 18</i> | Changing media in shaping memories: monuments, landscapes and ritual performance in Iron Age Europe | 159 |
| | PETER WELLS | |
| | Memory | 159 |
| | Memory, monuments and the performance of ritual | 159 |
| | Patterns of change – Early Iron Age burial: ritual performances for individuals and their monuments in the landscape (800–450 bc) | 160 |
| | Patterns of change – community rituals and new kinds of memory: Early and Middle La Tène (450–150 bc) | 162 |
| | Patterns of change – increasing engagement with the wider world: Late La Tène (150–25 bc) | 163 |
| | Interpretation | 164 |
| | Conclusion | 165 |
| <i>Chapter 19</i> | Cultivated and constructed memory at the nineteenth-century cemetery of Cagliari | 167 |
| | HANNAH MALONE | |
| | The Bonaria cemetery of Cagliari | 167 |
| | The collective memory | 168 |
| | A stratigraphy of memory | 169 |
| | The cemetery as expression of social change | 172 |
| | Conclusion | 173 |
| <i>Chapter 20</i> | <i>morentur in Domino libere et in pace</i> : cultural identity and the remembered past in the medieval Outer Hebrides | 175 |
| | JOHN RAVEN & MARY MACLEOD RIVETT | |
| | The background | 175 |
| | The archaeology | 177 |
| | Discussion | 180 |
| | Questions | 181 |
| | Conclusion | 183 |
| <i>Chapter 21</i> | Memory and material representation in the Lismore landscape | 185 |
| | SIMON STODDART, CAROLINE MALONE, DAVID REDHOUSE, MARY-CATE GARDEN, MATTHEW FITZJOHN & MEGAN MEREDITH-LOBAY | |
| | Cycles of time | 186 |
| | Interrogating the <i>third</i> cycle | 187 |
| | The fourth cycle | 188 |
| | The fifth cycle | 189 |
| | Conclusion | 189 |
| <i>Chapter 22</i> | Nuragic memories: a deep-seated pervasive attitude | 191 |
| | ALESSANDRO VANZETTI | |
| | Gardening time is not without counterpoints | 191 |
| | Sardinia seen by a non-Sardinian anthropologist | 192 |
| | Sardinian archaeology seen by a non-Sardinian archaeologist | 193 |
| | Memory of ancient places of Sardinia: major medieval break | 193 |
| | First millennium bc breaks | 194 |
| | Modern ‘museification’ and ‘memorification’ of the Sardinian heritage | 195 |
| | Conclusion | 198 |

| | | |
|-------------------|--|-----|
| <i>Chapter 23</i> | Endnote: gardening time in broader perspective | 201 |
| | ETHAN D. AINES & SIMON STODDART | |
| | Theoretical approaches to memory | 202 |
| | The impact of literacy? | 203 |
| | A hard-wired time depth to memory? | 203 |
| | The importance of context for memory | 203 |
| | Memory in archaeological studies | 205 |
| | The materiality of monuments | 206 |
| | The afterlife of monuments | 207 |
| | Conclusion: monuments for memory | 207 |
| References | | 209 |
| Index | | 239 |

CONTRIBUTORS

ETHAN AINES

Cambridge Zero, Centre for Science and Policy,
University of Cambridge, UK
Email: ea402@cam.ac.uk

IAN ARMIT

Department of Archaeology, University of York,
The King's Manor, York, YO1 7EP, UK
Email: ian.armit@york.ac.uk

JOHN BARBER

AOC Archaeology Group, Edgefield Road Industrial
Estate, Loanhead, Midlothian, EH20 9SY, UK
Email: John.Barber@aocarchaeology.com

LINDSEY BÜSTER

Department of Archaeology, University of York,
The King's Manor, York, YO1 7EP, UK
Email: lindsey.buster@york.ac.uk

LOUISA CAMPBELL

University of Glasgow, Molema Building, Lilybank
Gardens, Glasgow, G12 8QQ, UK
Email: Louisa.Campbell@glasgow.ac.uk

GIANDANIELE CASTANGIA

Independent Scholar
Email: gc2020@tiscali.it

GRAEME CAVERS

AOC Archaeology Group, Edgefield Road Industrial
Estate, Loanhead, Midlothian, EH20 9SY, UK
Email: Graeme.Cavers@aocarchaeology.com

ANNA DEPALMAS

Department of Humanities and Social Sciences
(DUMAS), University of Sassari, Piazza Conte di
Mariana 8, 07100 Sassari – Italy
Email: depalmas@uniss.it

MATTHEW FITZJOHN,

Department of Archaeology, Classics and
Egyptology, 12–14 Abercromby Square, University
of Liverpool, L69 7WZ, UK
Email: Mpf21@liverpool.ac.uk

MARY-CATHERINE GARDEN

The Anglican Diocese of Ottawa (St Martin's
Anglican Church), 2120 Prince Charles Rd, Ottawa,
K2A 3L3, Canada
Email: mcgarden@icloud.com

ANDY HEALD

AOC Archaeology Group, Edgefield Road
Industrial Estate, Loanhead, Midlothian, Scotland,
EH20 9SY, UK
Email: Andy.Heald@aocarchaeology.com

LUCA LAI

Department of Anthropology, University of North
Carolina at Charlotte, Barnard 225, 9201 University
City Boulevard, Charlotte, NC 28223-0001, USA
Email: llai1@uncc.edu

ROBERT LENFERT

Robert Lenfert Archaeology, 40A Allardice St,
Stonehaven, AB39 2BU, UK
Email: robert.lenfert@gmail.com

MARY MACLEOD RIVETT

Historic Environment Scotland, Longmore House,
Salisbury Place, Edinburgh, EH9 1SH, UK
Email: mary.macleod@hes.scot

CAROLINE MALONE

School of Natural and Built Environment, Queen's
University Belfast, Belfast, BT7 1NN, UK
Email: c.malone@qub.ac.uk

HANNAH MALONE

Faculty of Arts, University of Groningen, Oude Kijk
in 't Jatstraat 26, 9712 EK Groningen, Netherlands
Email: h.o.malone@rug.nl

PHIL MASON

Institute for the Protection of Cultural Heritage of
Slovenia, Ljubljana, Slovenia
Email: phil.mason@zvkd.si

MEGAN MEREDITH-LOBAY

University of British Columbia, Vancouver, BC,
V6T 1Z3, Canada.
Email: megan.lobay@ubc.ca

MAURO PERRA

Via Filippo Corridoni, 1 - 09045, Quartu S. Elena,
Cagliari
Email: perramarro@gmail.com

IAN RALSTON
School of History, Classics and Archaeology,
University of Edinburgh, Edinburgh, EH8 9JU, UK
Email: I.Ralston@ed.ac.uk

JOHN RAVEN
Historic Environment Scotland, Longmore House,
Salisbury Place, Edinburgh, EH9 1SH, UK
Email: john.raven@hes.scot

DAVID REDHOUSE
Department of Archaeology, University of
Cambridge, Downing Street, Cambridge, CB2 3DZ,
UK
Email: dir21@cam.ac.uk

TANJA ROMANKIEWICZ
School of History, Classics and Archaeology,
University of Edinburgh, William Robertson Wing,
Old Medical School, Teviot Place, Edinburgh,
EH8 9AG, UK
Email: T.Romankiewicz@ed.ac.uk

NIAL SHARPLES
School of History, Archaeology and Religion,
Cardiff University, John Percival Building, Colum
Drive, Cardiff, CF10 3EU, UK
Email: Sharples@cardiff.ac.uk

ALFONSO STIGLITZ
Independent Scholar
Email: alfonsostiglitz@libero.it

SIMON STODDART
Department of Archaeology, University of
Cambridge, Downing Street, Cambridge, CB2 3DZ,
UK
Email: ss16@cam.ac.uk

DIMITRIS THEODOSSOPOULOS
ESALA, Edinburgh College of Art, University of
Edinburgh, Minto House, 20 Chambers Street,
Edinburgh EH1 1JZ, UK
Email: d.theodossopoulos@ed.ac.uk

CARLO TRONCHETTI
Director emeritus of the National Archeological
Museum of Cagliari, via Paolo Veronese 4, Cagliari,
09121, Italy
Email: ctronchetti@hotmail.com

ALESSANDRO USAI
Soprintendenza Archeologia, Belle Arti e Paesaggio
per la città metropolitana di Cagliari e le province di
Oristano e Sud Sardegna, Piazza Indipendenza, 7,
I-09124 Cagliari, Italy
Email: alessandro.usai@tiscali.it

ALESSANDRO VANZETTI
Scienze dell'Antichità, Facoltà di Lettere e Filosofia,
V. Sciarra, Università di Roma, La Sapienza, Italy
Email: alessandro.vanzetti@uniroma1.it

PETER WELLS
Department of Anthropology, 395 HHH Center,
University of Minnesota, 301 19th Avenue South,
Minneapolis, MN 55108, USA
Email: wells001@umn.edu

REBECCA YOUNGER
School of Humanities, University of Glasgow,
G12 8QQ, UK
Email: Rebecca.Younger@glasgow.ac.uk

Figures

| | | |
|------|--|------|
| 0.1 | <i>David Trump.</i> | xxi |
| 0.2 | <i>Euan MacKie.</i> | xxii |
| 1.1 | <i>The two principal areas covered in the text and the location of the two other articles.</i> | 2 |
| 2.1 | <i>Dry stone building techniques.</i> | 9 |
| 2.2 | <i>Thrumster broch skeletal chronology.</i> | 11 |
| 2.3 | <i>Broch terminology.</i> | 13 |
| 3.1 | <i>Location of Caithness and distribution of broch sites.</i> | 18 |
| 3.2 | <i>Survey of Nybster broch ‘village’.</i> | 19 |
| 3.3 | <i>Aerial view of the broch at Nybster, Auckengill, Caithness.</i> | 20 |
| 3.4 | <i>General view of the cellular building, OB2, at Nybster, during excavation.</i> | 21 |
| 3.5 | <i>General view of the Nybster rampart during excavation.</i> | 22 |
| 3.6 | <i>View of the galleries at Thrumster broch, during excavation.</i> | 23 |
| 3.7 | <i>Excavation of human and animal remains in the Whitegate mural cells.</i> | 24 |
| 4.1 | <i>The Late Iron Age settlement (Phase 6) at Broxmouth.</i> | 28 |
| 4.2 | <i>House 2, showing the (Phase 1) burial adjacent to the northern entrance post hole.</i> | 30 |
| 4.3 | <i>House 4, through its five major structural stages.</i> | 31 |
| 4.4 | <i>Paired artefactual deposits.</i> | 33 |
| 4.5 | <i>The orthostat and slab.</i> | 34 |
| 5.1 | <i>Lowland brochs with Roman material culture.</i> | 41 |
| 5.2 | <i>Querns integrated into Broxmouth hillfort.</i> | 44 |
| 6.1 | <i>The submerged causeway leading to Dun Ban, Grimsay.</i> | 50 |
| 6.2 | <i>Largely intact prehistoric pottery from the lochbed surrounding Hebridean crannogs.</i> | 51 |
| 6.3 | <i>Examples of prominent ‘monumental’ islet architecture.</i> | 52 |
| 6.4 | <i>Dun an Sticer, North Uist.</i> | 55 |
| 7.1 | <i>Alghero, Nuraghe Palmavera.</i> | 60 |
| 7.2 | <i>Sorradile, Su Monte.</i> | 60 |
| 7.3 | <i>Villasor, hoard of Su Scusorgiu.</i> | 61 |
| 7.4 | <i>San Vero Milis, Serra Is Arais: Nuraghe model.</i> | 62 |
| 7.5 | <i>Mont’e Prama, Cabras: warrior.</i> | 63 |
| 8.1 | <i>Map of Scotland showing location of Glenelg.</i> | 66 |
| 8.2 | <i>Stratigraphy of the accumulated ‘mass in the interior’.</i> | 68 |
| 8.3 | <i>Profile of the interior of Dun Troddan.</i> | 69 |
| 8.4 | <i>Curle’s photograph from 1920 compared to the situation as extant in September 2012.</i> | 70 |
| 8.5 | <i>Reconstructions of Culswick, Shetland, and Ness broch, Caithness.</i> | 72 |
| 9.1 | <i>Archaeology of reuse: map of Sardinia.</i> | 76 |
| 9.2 | <i>S’Urachi, San Vero Milis.</i> | 78 |
| 9.3 | <i>S’Urachi, clay statue of Bes.</i> | 78 |
| 9.3 | <i>S’Urachi, clay statue of a black man.</i> | 79 |
| 10.1 | <i>Discovery sites of Nuraghe models.</i> | 84 |
| 10.2 | <i>Nuraghe models.</i> | 85 |
| 10.3 | <i>Nuraghe models.</i> | 86 |
| 10.4 | <i>Nuraghe models.</i> | 87 |
| 10.5 | <i>Reconstruction of the necropolis of Cabras, Mont’e Prama.</i> | 88 |
| 11.1 | <i>Transcription of cropmarks of prehistoric monument complex at Forteviot.</i> | 93 |
| 11.2 | <i>Plan of Forteviot Henge 1.</i> | 94 |
| 11.3 | <i>Schematic diagram showing henge monuments as temporal heterotopias.</i> | 95 |
| 12.1 | <i>Nuraghe Losa of Abbasanta.</i> | 100 |
| 12.2 | <i>Sinis landscape, Sardinia.</i> | 100 |
| 12.3 | <i>Nuragic sites in Sinis.</i> | 102 |
| 12.4 | <i>Cumulative viewshed analysis results.</i> | 103 |
| 12.5 | <i>Cost-path analysis results.</i> | 104 |
| 13.1 | <i>Single tower tholos Nuraghi.</i> | 108 |

| | | |
|------|---|-----|
| 13.2 | <i>Plan of Su Nuraxi di Barumini, and the Nuragic village huts of Serra Orrios-Dorgali.</i> | 109 |
| 13.3 | <i>Nuragic tombs.</i> | 111 |
| 13.4 | <i>Nuragic springs, wells and models.</i> | 112 |
| 13.5 | <i>Nuragic statuary and models.</i> | 115 |
| 14.1 | <i>Map of natural caves in Sardinia yielding MBA-EIA AMS dates.</i> | 122 |
| 14.2 | <i>Chart of calibrated range of dates for Sardinian MBA-EIA cave burial contexts.</i> | 123 |
| 15.1 | <i>Late Bronze Age and Early Iron Age settlements and cemeteries in central Slovenia.</i> | 132 |
| 15.2 | <i>The Late Bronze Age and Iron Age centre at Novo mesto.</i> | 133 |
| 15.3 | <i>The Iron Age centre at Vinji vrh.</i> | 134 |
| 15.4 | <i>The Late Bronze Age and Iron Age centre at Kučar near Podzemelj.</i> | 135 |
| 16.1 | <i>Chambered tomb and monumental roundhouse at Pierowall Quarry, Westray, Orkney.</i> | 142 |
| 16.2 | <i>Chambered tomb at Skelpick, Strathnaver, Sutherland.</i> | 143 |
| 16.3 | <i>Plan of the The Howe.</i> | 144 |
| 16.4 | <i>Chambered tomb and wheelhouse at Clettraval, North Uist.</i> | 145 |
| 16.5 | <i>Chambered tomb at Unival, North Uist.</i> | 146 |
| 16.6 | <i>Chambered tomb at Loch a'Bharp, South Uist.</i> | 147 |
| 16.7 | <i>A view of Loch Olibhat, North Uist.</i> | 147 |
| 16.8 | <i>The location of brochs and settlements on South Uist.</i> | 149 |
| 17.1 | <i>A simple Nuraghe: Zuras (Abbasanta).</i> | 152 |
| 17.2 | <i>A complex Nuraghe: Orolo (Bortigali).</i> | 153 |
| 17.3 | <i>An unfinished Nuraghe: Codina 'e s'Ispreddosu (Norbello).</i> | 154 |
| 17.4 | <i>A compact nuragic settlement with the Nuraghe in the middle: Pìdighi (Solarussa).</i> | 156 |
| 17.5 | <i>A nuragic settlement made up of isolated blocks with the Nuraghe on its edge: Bruncu Màduli (Gèsturi).</i> | 157 |
| 18.1 | <i>Map of principal sites mentioned in the text.</i> | 160 |
| 18.2 | <i>Schematic plan of the Hochdorf burial chamber.</i> | 161 |
| 18.3 | <i>Schematic sketches of sites of memory-generating performances.</i> | 163 |
| 19.1 | <i>Cagliari, Bonaria cemetery, monument to Antonietta Todde Pera.</i> | 167 |
| 19.2 | <i>Map of Cagliari marking the location of ancient tombs.</i> | 169 |
| 19.3 | <i>Cagliari, Bonaria cemetery, main chapel.</i> | 170 |
| 19.4 | <i>Cagliari, Bonaria cemetery, monument to Enrico Serpieri.</i> | 171 |
| 19.5 | <i>Cagliari, Bonaria cemetery, monument to Giuseppe Todde.</i> | 172 |
| 20.1 | <i>Location map.</i> | 176 |
| 20.2 | <i>'Borg' and 'bara' place names..</i> | 177 |
| 20.3 | <i>Dun Mhulan and Loch na Beirghe.</i> | 178 |
| 20.4 | <i>Dun Carlabhagh (Carloway).</i> | 179 |
| 20.5 | <i>Reconstruction of Dun an Sticer.</i> | 180 |
| 21.1 | <i>Lismore: viewsheds from Neolithic cairns.</i> | 185 |
| 21.2 | <i>Aerial view of Tirefuir (Tirefour) under excavation.</i> | 186 |
| 21.3 | <i>Lismore: views from brochs.</i> | 187 |
| 21.4 | <i>Lismore: location of medieval castles.</i> | 187 |
| 21.5 | <i>Lismore: modern identity and monuments.</i> | 189 |
| 22.1 | <i>Trends in number of visitors of the main archaeological museums and sites in Sardinia.</i> | 196 |
| 22.2 | <i>Demographic trend Sardinia compared to Sassari, Macomer and the Valle dei Nuraghi municipalities.</i> | 196 |
| 22.3 | <i>Average GDP per person of Sardinia and of selected Italian regions.</i> | 197 |
| 22.4 | <i>Sardinia: municipalities with the highest and lowest average income per person.</i> | 198 |

Tables

| | | |
|------|---|-----|
| 5.1 | <i>Southern brochs and souterrains – depositional contexts.</i> | 42 |
| 12.1 | <i>Cumulative viewshed analysis results.</i> | 101 |
| 12.2 | <i>Cost-path analysis results.</i> | 105 |
| 14.1 | <i>AMS dates from Sardinian MBA-EIA cave burial contexts.</i> | 120 |
| 14.2 | <i>Chronological table comparing Perra (1997) and Tykot (1994) schemes.</i> | 121 |

Acknowledgements

This volume is drawn from the conference *Gardening Time* held in Magdalene College on 21–23 September 2012. I am very grateful to the authors for their resilience! I am also grateful to Giandaniele Castangia for his initial advice, to Isabelle Vella Gregory for support during the conference itself, and to Ethan Aines for carrying the publication through to its penultimate stage, and to Olivia Shelton for copy editing, particularly of the bibliography.

We thank the Fondazione Banco di Sardegna, the McDonald Institute and the ACE Foundation (Stapleford, Cambridgeshire) for their important support in holding the conference. We thank the McDonald Institute for financing a major part of the publication.

We also thank the British School at Rome for allowing us to associate the conference and publication with the institution's name.

Simon Stoddart

A tribute in honour of Giovanni Lilliu (1914–2012)

Anna Depalmas

Remembering Giovanni Lilliu may seem an easy task. One might think that it is only necessary to list his rich scientific bibliography and to describe his great work over the course of nearly a century, as a university professor and archaeologist. However, a simple listing of his achievements would not transmit the true importance of his work. He not only illuminated the prehistoric archaeology of Sardinia, but also used it to establish the idea of a Sardinian epic which he connected to the modern world.

Prehistory was the choice of his field of study – rather than the predominant exaltation of the Roman era and classicism of the time –, and this had its origins in his study under Ugo Rellini at Rome. He graduated in 1938 and worked as Rellini's assistant until 1942, when he returned to Sardinia to take up the position of Professor of Historical Archaeology and Geography at the University of Cagliari. From 1942 to 1958, he taught various subjects – Paleoethnology, Geography and the History of Religion – and in the latter year became a Full Professor and was appointed to the Chair of Sardinian Antiquity at the University of Cagliari. From 1944 to 1955 he also worked for the Superintendency of Sardinian Antiquity.

He held many posts in his long academic career. He was for a long time, and on various occasions, dean of the Faculty of Letters, Director of the Institute of Archaeology and Arts, Director of the School of Specialization in Sardinian Studies and Editor of the Journal carrying the same name (*Studi Sardi*), and, in 1990, he was elected a fellow of the Academy of Lincei of Rome. In his later years, he remained a very active Professor Emeritus at Cagliari University.

In 1936, while he was still a student, he published his first work on Su Nuraxi di Barumini. This was his birthplace, and throughout his life he maintained a close and almost embodied connection with the village. This also led him to carry out his most important

archaeological work in the landscape of his birth. Indeed, between 1951 and 1956, he worked on excavating an artificial hill there, which was found to cover the nuragic complex of Su Nuraxi di Barumini. This was the first excavation conducted in Sardinia using a stratigraphic methodology to establish a time-line for the nuragic period, and it became a benchmark for later investigations and chronological research. His work at Barumini formed the basis for a series of fundamental papers on Sardinian proto-history, from *I nuraghi. Torri preistoriche di Sardegna* (The Nuraghi, prehistoric towers of Sardinia) in 1962 to *Civiltà nuragica* (Nuragic civilization) in 1982.

He was the first to study many of the themes that he investigated in depth during his long scientific career and many of these were only studied for the first time in the first half of the twentieth century. The chronology of proto-Sardinian civilization was one key field that he developed, modified and changed in the course of his long academic career. At the same time, Lilliu published a brief essay in which he attempted to identify certain constant factors in the history of Sardinian art, and this was developed in the catalogue for the exhibition of Sardinian bronzes in Venice in 1949. Following the theories of Ranuccio Bianchi Bandinelli on how to classify the art of the ancient world, Lilliu assessed the coexistence of the 'anti-naturalistic' art of the barbarian world and the 'naturalistic' art of the classical world within which he inserted Sardinia as a 'land of pure expression', and defined as anti-classical and barbaric. This line of thought became the nucleus of a theme which he studied from various angles and which helped him to define key concepts in his field of study.

At the beginning of the 1960s, he published his wide-ranging synthesis of Sardinia, *La civiltà dei Sardi dal Neolitico all'età dei nuraghi* (1963) (Sardinian Civilization from the Neolithic period to the nuragic

era). This work was later reprinted, expanded and revised in various editions until 1988. Apart from incorporating the results of later research, the later editions also allowed him to reassess some of his earlier observations with a critical eye, which was always one of his great strengths as a researcher and academic. The book proposed that a single unifying thread ran through Sardinian prehistory from the Neolithic period, even starting in the Palaeolithic period, until the Phoenician conquest. It established elements of the historiography of the island using data obtained from his work as an archaeologist. Many of the principal Sardinian monuments were described in an elegant style which alternated with detailed, creative and lyrical descriptions. The book was aimed at not only archaeologists and students, but also at a wider public, and indeed the book was dedicated to 'the shepherds of Barbagia'. Generations of archaeologists have studied the manual and found themselves cited in later editions, in agreement with Lilliu's global historiographical approach which aimed to unite past archaeological research with his experience of teaching Sardinian Antiquity in a university context. This book also gave birth to a national and popular history of prehistoric Sardinia, and expanded the work of archaeologists and their research from being only something studied in university lecture rooms and solely of interest to academics to its status as part of the common heritage of all Sardinians.

This social dimension, this impact, can be clearly seen from Giovanni Lilliu's popularity, which came from having shone a light on the national history of Sardinia and giving life to a Sardinian historiographical tradition, i.e. one with a strong sense of identity. His fame led to him being consulted, even in the later years of his life, on current events in Sardinia not necessarily related to culture or archaeology and being seen as a kind of prophet or even as the 'father of his country'. One of the many lessons that he taught us, and in which he himself was an expert, was the importance of intellectuals being able to discuss, communicate and talk about complex historical themes in a way which was both comprehensible and of interest to laymen.

He showed a total but clear love for his land by taking on civic responsibilities, which he fulfilled in a way which was never dull but rather vigilant and acute, despite his soft tone. As a cultured man, he worked for the Regional Council of Sardinia, drafting the Special Statute of Autonomy. He was also involved in politics, first as a member of the Christian Democrats and later as a supporter of initiatives which promoted the independence of Sardinia and of progressive positions which were

close to the Centre-Left. In practice, he was active in actions which were designed to give greater value to Sardinian identity and culture.

The ideological basis for these activities were elaborated by Giovanni Lilliu at the start of his intellectual life, and were made completely clear in the 1970s when he developed the concept of 'constant Sardinian resistance'. At the beginning of the first prehistoric phase, the Sardinians were characterized by their resistance to foreign invaders and any attempts at acculturation. This characteristic did not disappear in ancient times, but has been a constant theme of Sardinian history and ethnicity, and is still present today. In this sense, Sardinian culture is not a fossil, but rather displays an extraordinary historical continuity with the past. This is an analysis which never became an idealization of aspects of Sardinian society and behaviour, but rather provided a clear and realistic picture through also identifying its negative aspects and its limitations. Nuragic civilization in particular became a symbol of a polycentric society, always in conflict with itself, the land and foreign invaders.

However, it is certainly limiting to supply a rigid definition of what Lilliu meant by nuragic civilization, given that he saw it as a dialectical relationship between its various dimensions, and worked on a reconstruction of it that was complex and multifaceted. He proposed an interpretation of nuragic civilization that saw it not as local but Mediterranean. In this, he was greatly influenced by his direct experience of excavations in the village of Ses Paisses in Majorca, where he found ethnic roots which were common to all the large islands of the West Mediterranean, the Balearics and Corsica, although there were also differences connected to the independent developments drawing on their insularity.

The fact that he found writing easy as can be seen from his some 330 publications. The last of these was in 2010, and was a detailed description of the excavation of the Giant's Tomb of Bidistili in Fonni. It is worth saying that many of the present arguments about certain elements and problems of prehistoric and proto-historic Sardinia were originally raised by him.

I would like to end this brief and partial memorial to Giovanni Lilliu by mentioning his work as a university professor of prehistoric and proto-historic Sardinia (and not only those subjects – with great versatility he also taught Geography and Christian archaeology). What I will personally remember is his little figure in jacket and pullover (he seldom, if ever, wore a tie), typewritten sheets in hand, and always punctual. He never postponed a lesson and was never

absent. As an examiner he was always courteous and understanding. But you had to be very well prepared for his exams. The end of the course every year was the moment that we all waited for. Then there were the one or two day excursions that he led us on to various parts of Sardinia. We students would present

our explanations of the monuments and he would listen with great attention as if it were his first visit, and then sometimes add some of his own memories, making it ever more clear how he was the creator of our view of prehistoric Sardinia.

He really was the memory of Sardinian history.

Tributes to Dr David Trump, FSA, UOM (1931–2016), and Dr Euan MacKie, FSA (1936–2020)

Caroline Malone & Simon Stoddart

David Trump was best known for his important work on the islands of Malta (Malone 2020), but his contribution to the prehistory of Sardinia is also worthy of record in the context of this volume.

David Hilary Trump took his first class BA in Arch and Anth at Pembroke College, Cambridge in 1955, and was a scholar of both the British School at Jerusalem, where he dug with Kathleen Kenyon, and the British School at Rome, where he excavated the key site of La Starza.

After Malta, Trump held the post of Staff Tutor in Archaeology at the University's Board of Extra-Mural Studies until retirement in 1997, when he was succeeded by Caroline Malone. He not only contributed to the teaching of Mediterranean Prehistory in the Department of Archaeology, but also had a large following in the wider, continuing education community, engaging mature students in all aspects of Archaeology in the region and beyond. It was during this period that he made a major contribution to the archaeology of Sardinia, uncovering once again unsuspected phases of prehistory at Grotta Filiestru (Trump 1983) and completing the survey of Bonu Ighinu. At Grotta Filiestru, he characteristically invested all the resources he could muster into constructing an effective chronology (Switsur & Trump 1983) and some of the first faunal studies undertaken in Sardinia (Levine 1983). This work was, in its way, as equally pioneering as his work on the island of Malta. The Grotta Filiestru produced a new scientifically dated sequence of Sardinian prehistory, identifying the fifth-millennium BC Filiestru Neolithic phase for the first time. In earlier fieldwork he also excavated the cave site of Sa 'ucca de su Tintirriòlu (Loria & Trump 1978). His work around Bonu Ighinu (Trump 1990) is, however, closest to the



Figure 0.1. *David Trump.*

theme of this volume since, in typical energetic style, Trump also provided one of the earliest studies of a nuragic landscape, once again demonstrating a pioneering role, now followed by many others.

Euan MacKie was a central figure in the study of brochs, as is shown by the very high level of citation in this volume (Mackie 1965 ... 2008). In several ways the contribution of David Trump and Euan MacKie run in parallel, one journeying south, the other journeying north also from Cambridge beginnings, both Fellows of the Society of Antiquaries of London, engaged in seminal fieldwork, on a shoe string generally with volunteers, providing the first chronological foundations for monuments in the landscape and addressing synthesis of the results. Both were pioneers of their generation who retained their own intellectual independence in museums (both) and in continuing education (Trump), rather than a department of archaeology or a heritage organization.

MacKie graduated in Archaeology and Anthropology from St. John's Cambridge in 1959 and took his PhD from the University of Glasgow in 1973, becoming, after a brief period at the British Museum, Keeper and Deputy Director (1986) of the University Hunterian Museum. As a graduate he took part in an expedition to British Honduras, directing the excavation of the Maya site of Xunantunich, leading to an interest in Mesoamerican archaeology throughout his life.

His excavation of brochs such as Dun Mor Vaul on Tiree, published in 1975, Dun Ardtreck on Skye published in 2000 and Leckie in Stirlingshire published in 2008, were fundamental in uncovering the sequence, material culture and chronology of these monuments. He gathered information for his important three-volume compendium on brochs from his own excavations and the investigations of others, undertaking research well into retirement (1998), publishing the final volume in 2007. These volumes are landmarks of data on the subject, a resource which provides a platform for all broch studies. His achievements were also celebrated in his Festschrift, *In the Shadow of the Brochs* (2002), showing the respect shown to him by younger generations.

He ventured far and wide in his more interpretative work. Some of his interpretations of broch builders and their monuments are no longer widely held and the chronologies are currently being reconsidered, but his stimulating approach to ideas endures. He



Figure 0.2. Euan MacKie on Mousa broch in the Shetlands in 2000 at the Tall Stories conference.

was passionate about many other subjects including his seminal work in prehistoric metrology and archaeoastronomy. The volume *Science and Society in Prehistoric Britain* (1977) was a central work for Glyn Daniel's teaching in Cambridge, and he made the valid point that the sophistication of prehistory is not to be underestimated. His interest in ethnography, no doubt drawing on his Arch and Anth undergraduate career at Cambridge, gave him a great respect for other ways of thinking and for the architectural and political achievements of prehistoric Britain, most notably for the builders of the brochs themselves in the Iron Age.

Chapter 18

Changing media in shaping memories: monuments, landscapes and ritual performance in Iron Age Europe

Peter Wells

Mounds containing burials are an important aspect of prehistoric European cultural landscapes in central Europe. In some periods and regions, mound burial was common, in other contexts less so. During the Early Iron Age (800–450 BC) in the central regions of temperate Europe, mound burial became a standard part of funerary ritual. In the earlier part of the period, when cremation was common practice, mounds typically contained remains of one or two individuals. Later, when inhumation came to predominate, frequently more than 10 individuals were interred in a mound, and sometimes well over 100, as at the Magdalenenberg tumulus in the Black Forest region (Spindler 1976) and at Stična in Slovenia (Gabrovec 1966).

At the beginning of the Late Iron Age (Early La Tène Period), mound burial continued, but ordinarily without the very large mounds of the Late Hallstatt Period. From the early fourth century BC onwards, mound burial became rare in most parts of temperate Europe, and common practice was flat inhumation.

In regions east and south of the Main-Rhine confluence, the practice of burying the dead waned during the second century BC, and although a few small cemeteries are known, the large cemeteries that we would expect at the great *oppidum* settlements are missing. Evidence from a number of sites indicates that some kind of funerary rituals involving bones of the dead were performed in settlement contexts (see below), but the nature of these rituals is unclear.

Following the Roman conquests of Gaul and the lands east of the Rhine, the practice of sub-surface burial was resumed. Although some mounds are known from this period, more common practice for well outfitted burials was stone monuments placed above the ground that commemorated the buried individuals.

Constructing above-ground monuments, visible to living communities for generations, would seem to be very different from leaving graves unmarked on

the surface, or at least unmarked as far as any kind of permanent markers were concerned. In this chapter, I argue that the changes summarized above are connected to different ways of creating memories (Jones 2007), which in turn were linked to major cultural changes taking place during the final half millennium of prehistory.

Memory

For purposes here, memory is the recollection of objects, experiences, and social relationships, based on both what a person or group has seen and done and on the transformations that take place in people's minds as they recollect past events and experiences (Connerton 1989). Through our memories we fashion our identities, both as individuals and as members of communities. We need memories upon which to base our present and future thoughts and actions.

Memory, monuments and the performance of ritual

Funerary rituals are critical events in societies. They are highly charged emotionally, and when the deceased is a person of social or political importance, they are of political significance (Huntington & Metcalf 1979). These ceremonies remain strong in the memories of participants. (For examples from contexts for which textual accounts are available, see Kurtz & Boardman 1971 on ancient Greece and Owen-Crocker 2000 on *Beowulf*.) As Williams notes (2004, 94), the ways that rituals are performed, including the ways in which objects are manipulated, determine how the events are remembered.

Graves are the material manifestations of funerary ceremonies, and from them we can learn a great deal about the ceremonies. The discussion that follows



Figure 18.1. Map of principal sites mentioned in the text. Basemap source: Esri.

focuses on well outfitted burials. The same principles apply to less richly equipped graves.

The objects that were placed in Iron Age graves were selected to convey specific meanings (Hallam & Hockey 2001, 1). This aspect is apparent when we compare assemblages of objects in different graves of the same period and region. It is clear that specific rules were followed with regard to the inclusion of certain kinds of objects, though every grave was unique.

Although in most cases we cannot reconstruct in detail the process through which objects were placed into graves (but for some instances in which we can, see Wells 2012, 162–5), it is most likely that objects were displayed to those participating in the ceremony as they were being set into the grave, perhaps held aloft to the accompaniment of words spoken about how the object was important to the deceased individual and to the community. The objects are likely to have served as mnemonic devices to guide those performing the ceremony, in the sense of extended mind theory (Clark 2008; see Williams 2007, 145).

Cultural rules also guided the arrangement of grave goods – the ways in which they were arranged with respect to the remains of the deceased, to the walls of the grave, and to other objects. Arranged graves can be understood as ‘diagrams’ of their communities and their societies, in the sense that Bender and Marrinan (2010) argue that arrangements of objects and people

in representations are diagrams of how societies work and of how their memories are created. (For full details of this argument for graves as diagrams, see Wells 2012, Chapter 8.)

Patterns of change – Early Iron Age burial: ritual performances for individuals and their monuments in the landscape (800–450 bc)

The Early Iron Age grave at Hochdorf, near Ludwigsburg in southwest Germany, dating to about 525 bc, was richly outfitted with culturally important objects, was undisturbed, and was very well excavated (Biel 1985). In the context of the present discussion, I highlight four aspects of this grave with respect to the theme of memory.

Those who arranged the body of the man attached to it a whole series of visually evocative objects that would remain in the memories of all who attended the funerary ceremony. He was decorated from head to foot with gold – neck ring, two fibulae on his chest, wide ornate bracelet, gold belt plaque, dagger in a gold-covered sheath at his waist, and sheet gold ornaments on his shoes. Whatever members of his community recalled of him in life, they would surely remember how he looked in death, laid out with this elaborate display of gold on his body (for more detail on the visual aspects of this individual, see Wells 2008, 66–9).

The most striking theme conveyed by the burial assemblage at Hochdorf is the representation of the man's social role by the feasting equipment that literally framed the space inside the oak-built chamber (Fig. 18.2). The body was laid out on an ornate bronze couch, a type of furniture that played a central role in feasts (*symposia*) in the Greek and Etruscan worlds (Boardman 1990). At his feet was an enormous bronze cauldron manufactured in a Greek colonial workshop, along with a gold bowl. On the south wall of the chamber were hung nine drinking horns, all decorated with gold bands; along the east wall was a four-wheeled wagon with nine bronze dishes on it – apparently drink and food containers for the deceased man and eight of his followers. This arrangement of objects in the grave seems to have been designed specifically to emphasize his role as host and leader (Krausse 1996). The material representation of this role, through these visually striking objects – especially the cauldron, 80 cm high, 104 cm in diameter, and with a capacity of some 500 l – surely created a vivid memory in the minds of the participants and observers.

The third visually striking aspect of the burial chamber is the open space in the centre, measuring about 2.5 by 4 m – the affordance, to apply James J. Gibson's (1977, 1979) concept for visually empty spaces. Whether this space was left open during the ceremony, or occupied by people moving in and out

and performing with objects as they conducted the ritual, this open space was, as Gibson argues, visually critical to the message conveyed by the grave. It was a space of potential, bounded by highly evocative objects. And it would have been remembered as such by those present at the performance.

Finally, and perhaps most powerfully affective as regards memory, was the laying out of bedding on the couch and the subsequent wrapping of the body and later of the entire contents of the grave in brightly coloured textiles. Movement of objects makes them much more visible and attention-getting than stationary states of objects (Gregory 1998). When we watch someone manipulate objects – swinging an axe against a tree, lifting a chalice, or wrapping something in cloth – our brain responds to seeing those actions by taking part in them vicariously (Johnson 2007, 19–32). These responses would result in more vivid and lasting memories than simply seeing objects in a stationary tableau. Because of the unusually favourable conditions of preservation and the detailed analysis of organic remains by Udelgard Körber-Grohne (1985) and of textiles in particular by Joanna Banck (1996, Banck-Burgess 1999), we can say much about movement and sequential actions in the manipulation of these materials.

Körber-Grohne's analysis shows that in preparation of laying out the man's body, a layer of badger fur was set down on the couch. On top of that was placed a textile woven from hemp, on that stalks of grass set perpendicular to the weave of the hemp. Next were placed finely woven textile of badger hair, and on top, wool. The corpse was wrapped in a blue cloth decorated at the edges with red bands, then in a red textile, and finally another blue textile was placed over the lower part of the body. Other textiles decorated objects in the grave, and others were hung on the walls of the chamber. Many of the textiles were decorated with geometrical motifs woven into the fabrics.

Before the burial chamber was closed, every object was wrapped in textile (reconstruction drawing in Banck 1996, 40–1). If the wrapping was carried out in front of the participants in the ceremony, this action may have been the most powerful of all with regard to the creation of memories of the event – removing the objects from the visual world of the observers through a dramatic performance (Banck-Burgess 1999, 129).

These practices at Hochdorf are apparent in richly outfitted burials throughout the central regions of temperate Europe, though preservation of textiles is rarely as good. Other examples include chamber graves in northern Württemberg, notably Grafenbühl (Zürn 1970); and at Vix in eastern France (Rolley 2003), Grosseibstadt in northern Bavaria (Kossack 1970), and Hradenín in Bohemia (Filip 1966). In all of these

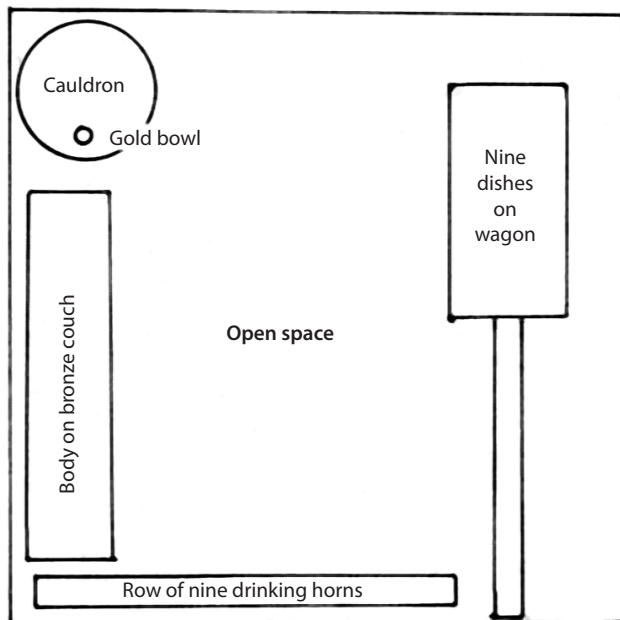


Figure 18.2. Schematic plan of the Hochdorf burial chamber, showing the framing of the central space by the objects referring to feasting, and the open space in the centre.

chamber tombs, the individual buried was decorated with special personal ornaments, often of gold, and in the chamber, feasting vessels played a major role in the funerary display. Open space was regularly a part of the overall display arrangement in this period.

Two elements of this set of practices are especially important, because they changed in the fifth century BC. One is the outfitting of the grave with feasting equipment for multiple participants, not just for the one deceased individual. The multiple sets of vessels, and extraordinarily large capacity of some, such as the Vix krater and the Hochdorf cauldron, represent the deceased's social role as host in the community. This individual-community link is all important, as will be seen below. The second is the open space in the burial chambers, unoccupied by grave goods – the affordances in Gibson's sense.

The richly outfitted burials of the sixth and early fifth centuries BC were the sites of the most elaborate rituals of which we have evidence during this period, in terms of expenditure of goods and labour, and presumably in numbers of participants. Both the focus on the individual person as community leader and the leaving of a substantial monument were closely connected to the hierarchical social structure of the time (for recent discussions of social structure, see the papers in Kienlin & Zimmermann 2012).

Patterns of change – community rituals and new kinds of memory: Early and Middle La Tène (450–150 BC)

The most familiar change in the archaeological material of the fifth century BC is the development of the Early La Tène style of ornament. But this was only one of a series of changes. At the end of the fifth century BC and the beginning of the fourth, burial mounds were still constructed over some graves, notably over the relatively richly outfitted burials of the Paris Basin, the Middle Rhineland, and Bohemia (summary articles in Moscati *et al.* 1991, 127–91). But the graves in those mounds were arranged differently from Hochdorf and the other chamber tombs of the preceding centuries.

Glauberg grave 1 will serve as an example, since it was well excavated recently and is typical in important ways (Frey & Herrmann 1997). Like Hochdorf, it contained the body of a man outfitted with gold and bronze ornaments and with weapons. Instead of feasting vessels for nine individuals, this grave contained a single ornate bronze jug. The gold, the ornate fibulae, the weapons, and the jug mark this man as elite for his time, but in contrast to Hochdorf, it is only the status of the man himself that is represented in the grave goods, not his role in his community.

Consistent with this perspective is the lack of open space in the grave chamber. As the plan (Frey & Herrmann 1997, 467, Fig. 7) shows, the body and the accouterments fill the grave space. There is no open space into which participants might move during the performance of the funerary ceremony. Other graves of this period – around 400 BC – show this same pattern, for example the relatively richly outfitted woman's grave at Reinheim (Keller 1965, 16, Fig. 4).

A large number of cemeteries dating to the fourth, third, and early second centuries BC are known all over temperate Europe (map in Müller 2009, 83, Fig. 79). The graves are generally small, just big enough to accommodate the bodies, typically laid out flat on their backs with legs extended (e.g. Hodson 1968; Waldhauser 1987). Women's graves typically include items of personal ornament (neck rings, bracelets, fibulae). Some but not all men's graves contain weapons (swords, spears, occasionally shields or helmets). Exceptionally richly outfitted graves are rare, though some differentiation in burial wealth is recognizable (Bujna 1982).

Instead of the most elaborate community rituals being carried out at the graveside, as at Hochdorf, Vix, and other Early Iron Age chamber and tumulus burials, community ceremonies were performed now at spacious, open enclosures, or 'sanctuaries', as they are often called in the literature (Poux 2006). In contrast to burial chambers like Hochdorf, these sites provided spacious enclosures where potentially hundreds of people could assemble to witness and participate in the performance of ceremonies that included the breaking and depositing of quantities of weapons. At Gournay-sur-Aronde the excavators estimate that the over 2000 weapons recovered represent the full accoutrements of some 500 warriors (Brunaux 2006). Open places where hundreds could assemble to participate in ceremonies are apparent at other kinds of sites as well, such as the water deposit sites at La Tène in Switzerland (Alt 2007) and at Hjortspring in Denmark (Kaul 1988) and at the 'fire offering sites' (*Brandopferplätze*) in Alpine and Alpine foothill regions, as at Forggensee in Bavaria (Zanier 1999) and Wartau in Switzerland (Pernet & Schmid-Sikimić 2007).

The performances at these sites – breaking swords and spearheads at Gournay, throwing weapons into the lake at La Tène, tossing tools and weapons on fires in the Alps – all took place in open spaces, with broad views of the countryside, with the possibility of being attended by large numbers of people (Fig. 18.3). Where small communities could attend the funerary ceremonies at Hochdorf and at the other Early Iron Age burials, all focused on a single individual and his or her role in the community, now much larger numbers of people could participate, and the focus was no longer

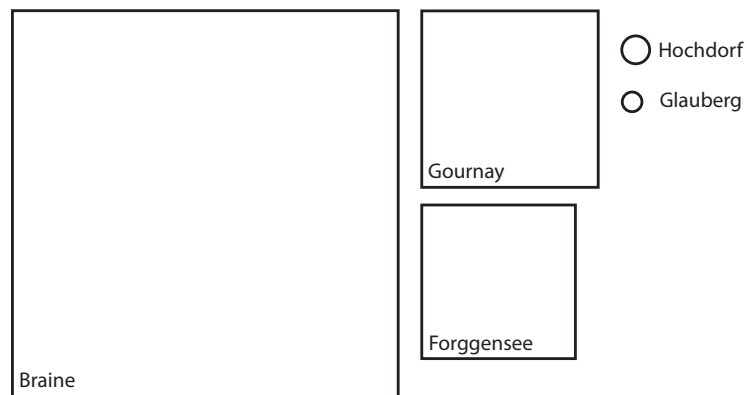


Figure 18.3. Schematic sketches of sites of memory-generating performances, all drawn at the same scale. Hochdorf and Glauberg are represented here by the entire burial mounds, though the performances were focused on the graves in them, which occupied much smaller spaces. The performance spaces of Gournay, Forggensee, and Braine are represented by squares showing the areas of the enclosure interiors where performances took place.

on the relation of an individual to a community but rather on the entire community itself. At these sites, there is no evidence for special attention devoted to any single individual. The result was the creation of memories of communities, not of specific persons.

Patterns of change – increasing engagement with the wider world: Late La Tène (150–25 BC)

Throughout much of the central regions of temperate Europe, the practice of burying the dead in the ground declined during the second century BC. We have no sizable cemeteries at the major *oppida* during this period, and only west of the Rhine and from the Moselle valley north do we find substantial cemeteries. Instead of subsurface burial, throughout much of temperate Europe, rituals surrounding the dead changed to a variety of practices involving manipulation of the bones of the deceased, frequently on settlement sites. At Manching, human bones from hundreds of individuals recovered on the settlement have been extensively studied (Lange 1983, Hahn 1992, 1999), and they have been recovered at other *oppida*, including Breisach-Hochstetten in southwest Germany, Basel-Gasfabrik in Switzerland, and at Knovice in Bohemia. Little is known about the rituals practised. Practices involving the manipulation of human skeletal parts, but not burial of the type represented earlier in the Iron Age, are evident at other sites as well, as for example Acy-Romance in France (Lambot 2006) and Leonding in Austria (Pertlwieser 2001).

The occurrence of human skeletal remains on big settlements suggests that whatever the rituals may have been, they were public affairs, not restricted to the celebration of specific individuals. The evidence at Manching suggests that no special treatment was accorded to deceased individuals, and the bones did not end up in any kind of special grave or ossuary.

Many open-air sites of the preceding period continued in use during these times and often on into

the Roman Period. At the Forggensee, depositional practice continued from the late prehistoric Iron Age into Roman times (Zanier 1999), and many of the sanctuary sites in France and other parts of Gaul, as at Empel in the Netherlands, continued in use throughout the period of the conquest and into provincial Roman times (Arcelin & Brunaux 2003, Roymans & Derks 1994). Of special importance for my argument below is the appearance of some rectangular enclosures considerably larger than earlier ones, defined by ditches with deposits of quantities of imported Roman amphorae in them in place of the damaged weapons that characterize the earlier sites such as Gournay. Braine in Aisne, France (Fig. 18.3, left), is among the best documented examples of these larger sanctuaries (Auxiette *et al.* 2000).

Two new media became major factors in forming and preserving memory during the second and final centuries BC – coins and writing. Both of these media are complex in their significance; here I highlight just one aspect. Although the idea of coinage was introduced into temperate Europe in the latter part of the fourth century BC, and local coinages developed throughout the third, not until the second did legends come into common use – names written in Greek and Latin letters (Allen & Nash 1980, 107). Allen and Nash observe that some 500 or 600 different names have been identified on coins of this period, indicating that writing in this form and medium had become widespread. Evidence for writing in other media, such as stamped on swords (Wyss 1956) and incised on pottery (Krämer 1982), is less common but nonetheless significant. Caesar's remark (Gallic Wars I, 29) that his troops found in the Helvetian camp 'records written out in Greek letters' supports the idea that writing was considerably more widespread in Late La Tène temperate Europe than the inscriptions on coins and other metal objects, and on pottery, would suggest. As Greg Woolf has noted (2009, 47), the practice of writing expanded greatly in the Roman world during the second century BC. With

all of the interaction evident in imported amphorae, pottery, bronze vessels, and coins from the Roman Mediterranean into temperate Europe, it is not difficult to imagine how writing was adopted, at least by those involved in the commerce.

As many researchers have argued (Goody 1986; Olson 2009), there are close and important connections between writing and memory. The presence of writing in a society changes the way people use material culture to preserve memory, whether each individual in the society is able to read or not. When subsurface burial of the dead was resumed as common practice in temperate Europe after the Roman conquests, many of the dead, at least among the elites, were commemorated with written burial monuments – gravestones with Latin inscriptions that spelled out the information which earlier had been conveyed by performances with objects placed in burials and by mounds erected in the landscape.

Interpretation

During the first centuries of the Iron Age, the greatest expenditure of resources and energy for ceremonial purposes was in the construction and arrangement of chamber burials under large earth mounds, as at Hochdorf. All indications are that the performance of the funerary ritual was a community event, and the arrangement of the selected objects in the chamber was intended to create powerful memories in the participants. The dominant theme of the funerary process was the individual in his or her role as an elite member of the community.

Early in the fifth century BC, this practice changed. The practice of erecting mounds declined, and small and spatially restricted graves replaced the spacious chambers of the previous century, and even the wealthiest burials (e.g. Waldalgesheim–Joachim 1995) contained only feasting equipment for one person, not for the groups represented by the sets in the earlier chamber burials. The focus of burial ritual was on the individual person, not on the person's role in the community. Much greater amounts of effort and material were expended in the construction of large open-air enclosures and in the display and deposition of quantities of material objects. These sites bear no signs of status display with respect to individuals, but rather emphasize community performances in large-scale deposition of swords, spears, shields, and other objects. The memories created in these events concerned communities, not individuals.

This profound shift from expenditure of effort and resources focused on individuals to expenditure focused on communities requires comment. Looking

beyond the confines of temperate Europe, we can see abundant evidence that long-distance contacts and interactions, not only with societies of the Mediterranean basin but beyond, were playing important roles in changing the worldview of people in temperate Europe. The stylistic elements of the new Early La Tène style were part of a Eurasia-wide sharing of design elements and motifs during the fifth and fourth centuries BC (discussion in Wells 2012, 201–9; 2019). Importation of exotic goods from beyond Europe also attests to the opening up of the continent to influences and products from other societies of the wider world, including ivory from Africa or Asia, silk from Asia, and ornate glass and metal vessels from north Africa and western Asia (Mac Sweeney & Wells 2018).

Another important indication of a widespread change in attitude toward the outside world is apparent in the treatment of imports from the societies of the Mediterranean region. The bronze vessels and Attic pottery that were imported from the Etruscan and Greek worlds during the seventh, sixth, and early fifth centuries BC were rarely altered by craftworkers in temperate Europe – they seem to have been valued as they were received and treated with special attention in their use in feasting rituals and funerary ceremonies. At the same time that the La Tène style of ornament developed, during the fifth century BC, we see indications of a change in attitude toward imports and presumably toward the societies from which they came. To cite just two examples – the Attic cups in the Kleinaspergle grave were transformed by a local goldsmith through the addition of La Tène-style ornaments of sheet gold to the ceramic bodies (Schaaff 1988); and the Etruscan bronze jug from Weiskirchen I was decorated locally with incised linear patterns, as were other imported vessels of this time (Megaw 1970, 63; drawing in Haffner 1966, 214). Whatever the specific reasons behind such alterations might have been, they show a change in attitude toward imports that had previously been unaltered after they arrived north of the Alps.

Textually attested service of 'Celtic' mercenaries in armies of potentates in the central and eastern Mediterranean regions during the fourth and third centuries BC (Szabó 1991) was another important aspect of this increasingly outward-looking activity on the part of Europeans. And the commercial activity between communities in temperate Europe and societies elsewhere, represented by the imports noted above, provided other contexts for interaction and development of new kinds of cultural self-awareness.

In this context of increasing interaction with the outside world, monuments and memorable experiences took on different aspects from those of earlier

times. The place of the individual in relation to the community became less critical, and the community as a whole, affirming its status and solidarity through performance of public ceremonies in open spaces, became more important. Memories created through large public ceremonies replaced memories generated by ceremonies performed with respect to individuals.

The introduction of coins and writing was part of the increasing involvement of communities of temperate Europe in the affairs – commercial, political and military – of the wider world of the greater Mediterranean basin (Dietler 2010). Quantities of Roman amphorae, pottery, bronze vessels, and coins attest to the growing scale of commerce between north and south. Exchange goods from the north remain elusive, but what have been interpreted as slave chains at Manching and elsewhere (Sievers 2003, 124) may point to a major aspect of the southward commerce, along with goods cited by Strabo (IV, 5, 2) and others.

The importance of a much more commercially orientated worldview during the final century BC is apparent in the character of the few unusually rich burials of this period (though they do not compare in wealth of gold and other luxury materials with Hochdorf, Vix, and Grafenbühl of the earlier period). For example, the grave at Clemency in Luxembourg included 10 Roman ceramic amphorae in the chamber (Metzler *et al.* 1991), that at Welwyn Garden City in southern Britain included 6 such amphorae (Stead 1967). This replacement of traditional local signs of special status, such as gold neck rings and fibulae, with signs of affiliation with the extensive commercial networks of the day is an indication of a substantial shift in the character of memories formed at ceremonial performances during the final half millennium BC. These individuals were not decked out with gold ornaments such as the Hochdorf man or the Vix woman were, suggesting that it was not so much the individual nor his or her role in the social system of the community that was being memorialized, but rather their position in commercial networks that were coming to dominate much of Late La Tène life. The display of amphorae in the sanctuaries at Braine and elsewhere, rather than the decorated weapons of Gournay and the other earlier sanctuaries, further emphasizes this aspect of ritual activity celebrated around the material signs of wider commerce rather than integration into local

communities. Memories of rituals at sanctuaries such as Braine and others at which imported commodities played such a major role (Poux 2006) were built around these new values that derived from the growing connections between communities in temperate Europe and societies in other parts of the world.

In temperate Europe, these widespread changes are further apparent in mass production of goods for the first time. Pottery made on the fast wheel came to dominate assemblages at both major settlements such as Manching and smaller settlements in the countryside. Iron tools and ornaments were manufactured in large series. And fibulae were mass produced. In all of these manufactures, detailed ornament and other individualizing features of objects that were so characteristic of earlier times largely disappear.

Conclusion

The character of monuments and of performances carried out at them can help us to understand how the kinds of memories created through ritual practices changed along with much else during the final half millennium of the prehistoric Iron Age. During the Early Iron Age, the construction of burial mounds and the performance of funerary rituals at them created memories about individuals and their roles in their communities. A couple of centuries later, as communities in temperate Europe became increasingly aware of, and interacted with, societies of the Mediterranean basin and beyond, the emphasis shifted to open public spaces, where much larger numbers of people could congregate to participate in performances with objects that emphasized the community, not any one individual's role. In the final two centuries of prehistory, as European communities became increasingly entangled in economic and political affairs of the larger world, writing began to replace objects as a medium for remembering, a point nicely illustrated by coins bearing legends. At the same time, both burials of some individuals (Clemency, Welwyn Garden City) and ever-larger public monuments constructed for ritual performance (Braine) emphasized the increasing role of the connections with other societies that created memories in this period, as communities of temperate Europe became ever more thoroughly involved in the affairs of the larger world.

Gardening time

Gardening may seem worlds away from *Nuraghi* and brochs, but tending a garden is a long process involving patience, accretion and memory. Scholars argue that memories are also cultured, developed and regained. The monuments in Scotland and Sardinia are testament to the importance of memory and its role in maintaining social relations.

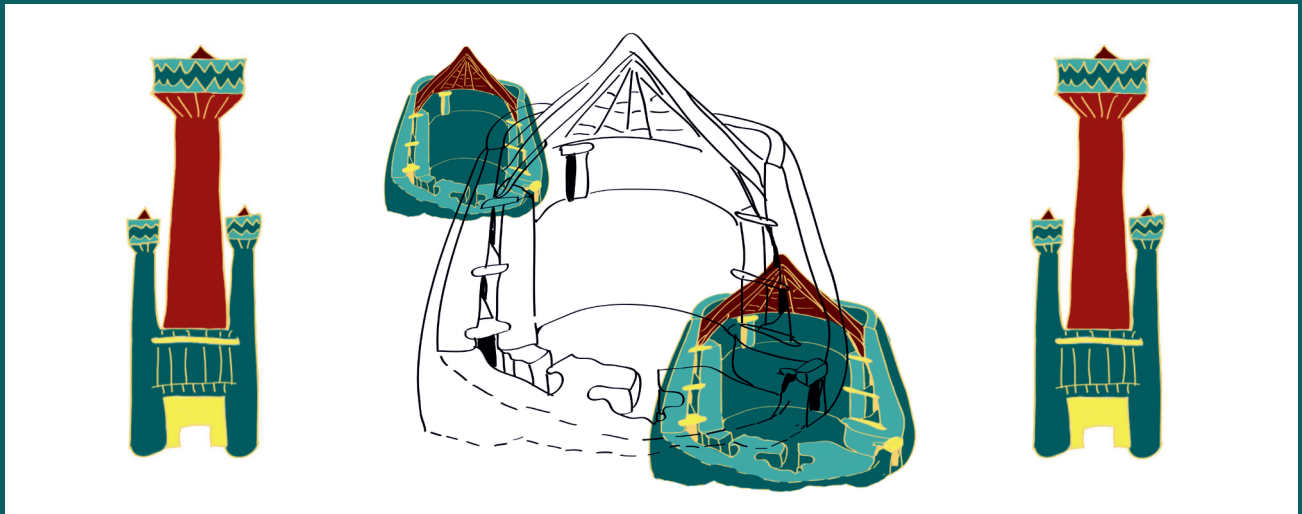
This collection of twenty-one papers addresses the theme of memory anchored to the enduring presence of monuments, mainly from Scotland and Sardinia, but also from Central Europe and the Balkans.

Editors:

Simon Stoddart is a Professor in the Department of Archaeology, University of Cambridge.

Ethan D. Aines is a Policy Assistant at Cambridge Zero, Centre for Science and Policy at the University of Cambridge.

Caroline Malone is Professor of Prehistory at Queen's University, Belfast.



*Published by the McDonald Institute for Archaeological Research,
University of Cambridge, Downing Street, Cambridge, CB2 3ER, UK.*

The McDonald Institute for Archaeological Research exists to further research by Cambridge archaeologists and their collaborators into all aspects of the human past, across time and space. It supports archaeological fieldwork, archaeological science, material culture studies, and archaeological theory in an interdisciplinary framework. The Institute is committed to supporting new perspectives and ground-breaking research in archaeology and publishes peer-reviewed books of the highest quality across a range of subjects in the form of fieldwork monographs and thematic edited volumes.

Cover design by Dora Kemp, Lottie Stoddart and Ben Plumridge.

ISBN: 978-1-913344-04-7

