

# Ordnance: War + Architecture & Space

**a**  
ASHGATE

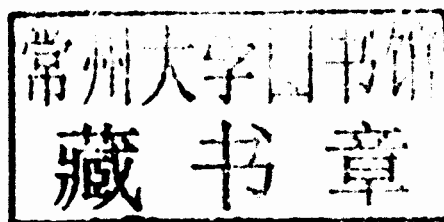


Edited by

Gary A. Boyd and Denis Linehan

# Ordnance: War + Architecture & Space

Edited by Gary A. Boyd and Denis Linehan  
*University College Cork, Ireland*



ASHGATE

© Gary A. Boyd and Denis Linehan 2013

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.

Gary A. Boyd and Denis Linehan have asserted their right under the Copyright, Designs and Patents Act, 1988, to be identified as the editors of this work.

Published by  
Ashgate Publishing Limited  
Wey Court East  
Union Road  
Farnham  
Surrey, GU9 7PT  
England

Ashgate Publishing Company  
110 Cherry Street  
Suite 3-1  
Burlington, VT 05401-3818  
USA

[www.ashgate.com](http://www.ashgate.com)

#### **British Library Cataloguing in Publication Data**

Ordnance : war + architecture & space.

1. Architecture and war. 2. War--Environmental aspects.
3. Military occupation--Environmental aspects.
4. Memorialization.

I. Boyd, Gary A. II. Linehan, Denis.

720.1'03-dc23

#### **Library of Congress Cataloging-in-Publication Data**

Ordnance : war + architecture & space / edited by Gary A. Boyd and Denis Linehan.  
pages cm

Includes bibliographical references and index.

ISBN 978-1-4094-3912-7 (hbk) 1. Architecture and war. 2. Space (Architecture)--Social aspects.

3. Space (Architecture)--Psychological aspects. I. Boyd, Gary A., editor of compilation. II. Linehan, Denis (Denis John) editor of compilation.

NA2543.W37O73 2013

720.1'08--dc23

2012027462

ISBN 9781409439127 (hbk)



Printed and bound in Great Britain by the  
MPG Books Group, UK.

# **ORDNANCE:**

**WAR + ARCHITECTURE & SPACE**



# List of Figures

## 1 To Gather in War and Peace: The City Squares of Savannah, Georgia

1.1 Portrait of James Edward Oglethorpe, ca. 1720. Artist unknown. *Source:* Courtesy of Oglethorpe University.

1.2 The first four wards of Savannah are laid out on a high bluff of the Savannah River. Peter Gordon, *A View of Savannah as It Stood the 20th of March 1734, 1734*. *Source:* Courtesy of the John Carter Brown Library, Brown University.

1.3 A conventionalized map of the ward-based historic centre of Savannah as it stood ca. 1920. Today almost all of the squares remain intact and in the public domain, with the exception of two of the westernmost spaces (Elbert and Liberty Squares), which were demolished in the 1930s. *Source:* Courtesy of the author.

1.4 Robert Barret's scheme for an ideal military camp from his 1598 volume *The Theorike and Practike of Modern Warres*, redrawn and rotated to reinforce its resonance with the Savannah plan. *Source:* Courtesy of the author.

1.5 Leonhard Christoph Sturm's vision of an ideal fortified town as influenced by George Rimpler. *Source:* Courtesy of the Special Collections Library at the University of Michigan.

1.6 Sir Robert Montgomery, the Margravate of Azilia, 1717. Note the central palace and town surrounded by a grid of country estates. Enclosed by the estates

are four hunting preserves, while between the estates and the outer perimeter are agricultural fields. *Source:* Courtesy of the John Carter Brown Library, Brown University.

1.7 1849 engraving of New Ebenezer based upon a survey taken in 1751–1771. In J.G.W. de Brahm's *History of the Province of Georgia: With Maps of Original Surveys*. *Source:* Courtesy of the John Carter Brown Library, Brown University.

1.8 A modern rendering, based on archaeological and historical evidence, of the fortified, frontline settlement of Frederica as it was designed and developed under Oglethorpe's leadership. *Source:* Courtesy of the USDI, National Park Service: Artist, L. Kenneth Townsend.

1.9 1849 engraving of Savannah based upon a survey taken in 1751–1771, revealing the dramatic increase in fortification required after the Royal takeover of Georgia. In J.G.W. de Brahm's *History of the Province of Georgia: With Maps of Original Surveys*. *Source:* Courtesy of the John Carter Brown Library, Brown University.

1.10 1898 photograph of Spanish-American War tent barracks on Telfair Square, Savannah. *Source:* Courtesy of the Georgia Archives, Vanishing Georgia Collection (ctm090).

1.11 Photograph of recently renovated Ellis Square taken in February of 2011. *Source:* Courtesy of the author.

## 2 The Political Aesthetics of Counter-Terrorism Design

- 2.1 The 'Infant School' gun foundry, Woolwich Arsenal, 1874. *Source: The London Illustrated News.*
- 2.2 The Home of Football – entrance to the North Bank stand of Arsenal's old Highbury Stadium, 2006. *Source: Courtesy of the authors.*
- 2.3 Location of Arsenal's Highbury and Emirates stadiums near Finsbury Park, North London. *Source: Courtesy of the authors.*
- 2.4 Encounters between football and faith communities in Finsbury Park, North London. *Source: Courtesy of the authors.*
- 2.5 Location and surroundings of the new Emirates Stadium in North London. *Source: Courtesy of the authors.*
- 2.6 Concrete letters barrier at the clock end bridge access to Arsenal's Emirates Stadium, London, 2006. *Source: Courtesy of the authors.*
- 2.7 Arsenal's iconic cannons in front of the fan shop 'The Armoury' at the new Emirates Stadium, London, 2006. *Source: Courtesy of the authors.*
- 2.8 Cordon of vehicle barriers surrounding the Staples Center, Los Angeles, 2009. *Source: Courtesy of the authors.*
- 2.9 Oversized planters with Chinese Cypress trees placed as vehicle bomb barriers in Canary Wharf, London, 2009. *Source: Courtesy of the authors.*
- 2.10 Burger van selling from a front yard on one of the last match days at Arsenal's old Highbury Stadium, 2006. *Source: Courtesy of the authors.*
- 2.11 Neighbourhood of Arsenal's old Highbury stadium on match days prior to the move to the Emirates Stadium. *Source: Courtesy of the authors.*

## 3 Protecting the Population: Bureaucracy, Affectivity and Governing the Liverpool Blitz

- 3.1 The effects of the Blitz on Liverpool.
- 3.2 The chart room of Liverpool's main control centre. *Source: With permission from Liverpool Records Office.*

3.3 Liverpool's civic leaders were often pictured as beacons of coordination. *Source: With permission from Liverpool Records Office.*

3.4 Liverpool's area of emergency coordination. *Source: With permission from Liverpool Records Office.*

3.5 The 'nerve centre' of Liverpool's chartroom, where clerks focussed intently on the 'disposition' of the personnel. *Source: With permission from Liverpool Records Office.*

3.6 Trainees learn to use stirrup pumps at the fire service training school. *Source: With permission from Liverpool Records Office.*

3.7 Fire-bomb fighting at the pier-head. *Source: With permission from Liverpool Records Office.*

## 4 Funky Bunkers: The Post-Military Landscape as a Readymade Space and a Cultural Playground

4.1 The fortress of Fårösund as a funky makeover. Rusted barbed wires and deserted defense obstacles still encircles the fortress as a part of the design scenery. *Source: Courtesy of author.*

4.2 Post-military relaxing in the bunker lounge. *Source: Courtesy of author.*

4.3 A former German sand silo turned in to a bunkerological 'field station' at Lista, Norway. *Source: Bunkerologi/Eva Brodtkorb, 2005.*

4.4 Bunkerological construction works. *Source: Bunkerologi/Eva Brodtkorb, 2005.*

4.5 Staging newness: Saab-event at Aerozeum staged by as systems GmbH. *Source: Courtesy of as systems GmbH, 2007.*

4.6 The bunker as a stage: The Chinese terracotta army exhibition at Museum of Far Eastern Antiquities in Stockholm. *Source: Karl Zetterström © The Museum of Far Eastern Antiquities.*

4.7 Dramatized Soviet repression combined with dinner: A Soviet Bunker as a cultural playground. Soviet Bunker 1984.

4.8 The 'first' readymade, a urinal. Marcel Duchamp: *Fountain*, 1917. Alfred Stieglitz in *Blindman* no 2/1917. © Succession Marcel Duchamp/BONO 2012.

4.9 Semiotic guerrilla warfare by Picasso: A bicycle handlebar added to a saddle becomes a head of bull (1942). Pablo Picasso: *Head of Bull*. Source: Béatrice Hatala, RMN/Musée National Picasso Paris/.  
© Succession Pablo Picasso/BONO 2012.

## 5 'Hiding the Assets': 'Self-concealing' Architecture and the British Landscape During the Second World War

5.1 'In peace-time, if factory shows up well from the air – so much the better. It makes free advertisement ... but in war, advertisement may be fatal': Aerial photograph illustrating the planned, organised landscape of modern Britain in the 1930s. Source: Camouflage Committee, 1942.

5.2 A sketch produced by Oliver Bernard, illustrating his idea for the inclusion of structural additions to the roof of a building in order to 'distort' its regular outline. Source: Bernard 1937.

5.3 The front cover of *Concealment of New Buildings*, produced by the Camouflage Directorate, 1942. Source: Camouflage Committee, 1942.

5.4 'The intersection of rivers, main roads, railways or canals, and well-defined loops in any of these are dangerous. You might welcome a site like this for its good rail and road services, but the enemy would welcome it more as an easy target'. Source: Camouflage Committee, 1942.

5.5 An illustration from *Concealment of New Buildings*, demonstrating 'good' and 'bad' locations for the siting of a new factory. Source: Camouflage Committee, 1942.

5.6 An illustration from *Concealment of New Buildings*, demonstrating 'bad' and 'good' layouts. Source: Camouflage Committee. 1942.

5.7 Illustrations showing the appearance of a semi-buried factory. Source: Camouflage Committee, 1942.

## 6 Home Base: Militarization of the American Home in the Second World War

6.1 With the massive mobilization required to enable the United States entry into Second World War, the entire population had to be drafted into the war effort. Source: *Good Housekeeping*.

6.2 Military rhetoric invaded every aspect of culture after the United States entered the war. Source: *Good Housekeeping*.

6.3 In addition to its role as the 'heart of the home' the modern American kitchen had to feed an army of home front and production workers, tasks which advertisers elevated through connection to similar tasks undertaken on the 'fighting front'. Source: *Good Housekeeping*.

6.4 Despite the need for women to contribute to the military effort and the production line, women's highest service was still understood to be in the home. Source: *Good Housekeeping*.

6.5 Magazine features and advertisements iterated to children (primarily girls and teens) the message of home-front help for mother as a patriotic duty. Source: *Good Housekeeping*.

6.6 Magazine features and advertisements iterated to children (primarily girls and teens) the message of home-front help for mother as a patriotic duty. Source: *Good Housekeeping*.

6.7 Prompted by the discovery that American men called up for military service were surprisingly underweight and undernourished, popular magazines developed a re-education campaign for women. Source: *Good Housekeeping*.

6.8 Since all civilian production was reduced and even eliminated during the war years, housewives were encouraged to take the necessary steps to preserve the appliances they had. Source: *Good Housekeeping*.

6.9 Magazines of the war period constantly stressed the virtues of thrift in service to the war effort. Source: *Good Housekeeping*.

## 7 The Art and Science of Invisible Landscapes: Camouflage for War and Peace

7.1 Fake trees for camouflage. Source: Breckenridge, 1942.

7.2 Method of planting to absorb cast shadows. Source: Breckenridge, 1942.

7.3 Suggested camouflage for a supply camp. Source: Major J. Gray, 83/38/1, Department of Documents at the Imperial War Museum.

7.4 Plan for the camouflage of Bradley Field, Connecticut, 1941. Note that the three landing strips are barely visible. *Source:* Hoover Institution Archives, Edward Farmer Papers, Box 1.

7.5 John Claudius Loudon, sketches illustrating the 'gardenesque [top] and picturesque [bottom] way of planting trees'. *Source:* Loudon, 1838.

7.6 The camouflage planting on the right was considered more effective. Note the irregular groups of trees mask the rectangular building near the left edge of the illustration. *Source:* Breckenridge, 1942.

7.7 Sylvia Crowe, example of the unobtrusive integration of a transformer station into the landscape pattern. *Source:* Crowe, 1958.

7.8 Sylvia Crowe, landscape plan for Trawsfynydd nuclear power station, Wales, 1959. *Source:* Landscape Institute. Sylvia Crowe Collection.

7.9 Sketches illustrating views from roads approaching and passing Trawsfynydd nuclear power station, Wales. *Source:* Landscape Institute. Sylvia Crowe Collection.

7.10 Susan Jellicoe, aerial perspectives showing model of Geoffrey Jellicoe's landscape design for Oldbury nuclear power station on the River Severn. *Source:* Landscape Institute. Susan Jellicoe Collection.

## 8 The Atlantikwall: From a Forgotten Military Space Towards Places of Collective Remembrance

8.1 Northern France, Calais, *Atlantikwall* – Coastal artillery with camouflage nets and soldiers on patrol, April–July 1943. *Source:* Courtesy of German Federal Archives Koblenz. Bild 1011-293-1471-21A.

8.2 France, *Atlantikwall*, Mouth of the Gironde – Soldiers leaning over a map during a meeting at an inner court of a bunker. *Source:* Courtesy of German Federal Archives Koblenz Bild 1011-263-1581-10.

8.3 France, Lorient – General Field Marshal Erwin Rommel by the *Atlantikwall* inspecting an OT work place. *Source:* Courtesy of German Federal Archives Koblenz. Bild 1011-719-209-07.

8.4 Operation Overlord, D-Day invasion aerial photograph showing Normandy beaches. *Source:*

Courtesy of United States National Archives at College Park, MD Aerial Photograph, 330/6/9/3-2 'Aerial Photograph of Normandy, June 1944'; Record Group 18, 8th Air Force.

8.5 Digging an antitank channel as part of the border condition of the *Sperrgebiet* in The Hague. *Source:* Photo taken by © Han Ketting, 18 March 1943.

8.6 The result of demolition works of entire urban quarters in The Hague. Shown here is the desolated street Goudsbloemlaan. *Source:* Photo taken by © Han Ketting, 20 February 1943.

8.7 France, Blanc Nez, *Atlantikwall* – Labourers building Coastal Battery 'Lindmann'. *Source:* Kuhn, Propaganda Kompagnie, Summer 1942. Courtesy of German Federal Archives, Koblenz. Bild 1011-359-2031-04.

8.8 Demolishing (antitank) obstacles from the German occupied beach of Scheveningen (The Hague). *Source:* Photo collection of Hydraulic Engineering Works of Delfland. Courtesy of Fotoverzameling Hoogheemraadschap van Delfland. Beeld a259\_5.

8.9 Former U-Boat bunker 'Hornisse' in Bremen Germany. The bunker was converted in 1980 into roof-top car park while simultaneously serving as the foundations for a boat-like office building. A small memorial plaque that was placed on the eastern elevation reads: 'The U-boat bunker "Hornisse" was erected in 1944/45. This memorial plaque was erected to commemorate the suffering and death of the detainees deployed from the satellite Concentration Camps Riespott, Schützenhof and Blumenthal'. *Source:* Photo taken by © Daniel Sokolis, 2005.

8.10 *Train Tracks* – Part of the Wall Series taken along the French coastline. *Source:* Artwork by © James Morris, Photographer, 2005.

## 9 Military Intelligence: The Board of Ordnance Maps and Plans of Scotland, 1689–c.1760

9.1 The military landscapes of eighteenth-century Scotland. *Source:* Drawn by author.

9.2 John Henry Bastide, *A prospect of that part of the land and sea adjacent to ye barrack to be built in Glen Elg*, 1720. *Source:* Reproduced by permission of the Trustees of the National Library of Scotland.



9.3 Theodore Dury, *A Plan of Sterling Castle, as here Color'd in Red lines, and the Black is a Design for better Fortifying the Entrance of the same; A profile of Elphinstons Tower and French Spur at Sterling Castle*, 1708. Source: Reproduced by permission of the Trustees of the National Library of Scotland.

9.4a–c Distribution of Scotland's fortification cartography in relation to phases of building activity: (a) 1689–1714, (b) 1715–1745, and (c) 1746–c.1760. Source: Drawn by author.

9.5 Lewis Petit, *Plan of Perth & adjacent places, with a projection of a Cittadel*, c.1716. Source: Reproduced by permission of the Trustees of the National Library of Scotland.

9.6 Joseph Avery, *An Exact Survey of the Several Lakes, Rivers, and Roads, between Fort William and Inverness, Extending from the East to the West Sea, latt. from 57° to 58°*, 1725. Source: © The British Library Board.

9.7 Clement Lemprière, *A Description of the Highlands of Scotland*, c.1731. Source: Reproduced by permission of the Trustees of the National Library of Scotland.

9.8 George Wade, *[Sketch and description of the proposed Roads from Callander and Loch Tay to Fort William and Appin including details of mileage and of inns]* c.1727–3. Source: Reproduced by permission of the Trustees of the National Library of Scotland.

9.9 [William Roy], *Part of the Reduction from the Great Map, shewing the Kings Road which is express'd by a Red Line & the Country Roads by a Brown Line*, c.1753. Source: © The British Library Board.

9.10 William Skinner, *A plan of Fort George, North Britain*, 1752. Source: Reproduced by permission of the Trustees of the National Library of Scotland.

## 10 Commanding the Rivers: Guarding the German Railway Network in Peace and War

10.1 Bridge over the river Elbe (built in 1847–51), Wittenberge – Remains of a casemate with embrasures for rifles and guns. Source: Photo, Volker Mende, 2009.

10.2 Bridge over the river Nogat (built in 1857), Malbork/Marienburg on the Polish border – The

*Blockhaus* at the right bank secures the forefront of the abutment. Source: Dr.-Ing. Hans-Rudolf Neumann, 2011.

10.3 Bridge over the river Rhine (built in 1862), Mainz – View of left abutment, the pair of towers is set on multi-storied gun casemates. Source: Photo, Volker Mende, 2010.

10.4 Bridge over the river Rhine (built in 1861), in Kehl – View from the left bank to the right bank in Baden. Note: On the right a *caponier* secures the turning bridge at the abutment. Source: Postcard, 1908. Private Collection.

10.5 Bridge over the river Oder (built in 1908), Stany/Aufhalt on the Polish border, guarded by two pairs of very old-fashioned brick blockhouses. Note: The left bank abutment blockhouses are preserved. The roofs are made by reinforced concrete. Both are connected by a basement infantry corridor, equipped with loopholes. Source: Photo, Volker Mende, 2011.

10.6 Bridge over the Moselle (left bank blockhouse built in 1904), Thionville/Diedenhofen on the French border. Note: The construction used reinforced concrete with dressed stone facade, covered by a roof armoured with concrete. Source: Karl-Heinz Lambert, 2006.

10.7 Bridge over the river Oder (blockhouse built in 1868, rebuilt in 1913), Wrocław/Breslau on the Polish border. Note: Remnants of the right-bank concrete blockhouse with anti-aircraft-platform. Source: Dr. Przemyslaw Dominas, 2010.

10.8 Bridge over the river Rhine (completed in 1919), Remagen. Note: The right-bank abutment was constructed using reinforced concrete with dressed stone facade, topped with anti-air-raid platforms. Source: Photo, Volker Mende, 2010.

10.9 The *Landsturmbataillon* No. 2 Rastatt Guard at the bridge over the river Rhine (built in 1895) Roppenheim in 1914, after outbreak of the First World War. Source: Gack Private Collection.

10.10 Bridge over the river Spree (built in 1866), Cottbus. Note: The standardised blockhouses on each side of the river were erected in 1868, right-bank *Blockhaus*. Source: Photo, Volker Mende, 2011.

## 11 *Forteresse Invisible: The Casemates of the Maginot Line in Alsace-Lorraine*

11.1 A rural casemate, of the type frequently found in technical pamphlets. This is an unambiguously military landscape: no sign of civilian life encroaches. *Sector Haguenau, Casemate 24 (Aschenbach Ouest)*. Source: Author.

11.2 The new football field of Hatten, next to a Maginot casemate. Its gun cupola has been disguised as a football. *Sector Haguenau, Casemate 31 (Hatten Sud)*. Source: Author.

11.3 This school yard accommodates the casemate by simply covering it with earth. The gun cupola can be seen to the right of the image, at the highest point of the mound. *Sector Bas-Rhin, Casemate 23 (Plobsheim 20/3)*. Source: Author.

11.4 A grave of architecture. *Sector Haguenau, Casemate 92 (Kilstelt 16/3)*. Source: Author.

11.5 Site plan, showing the casemate in its new suburban context. *Sector Haguenau, Casemate 27 (Oberroedern Sud)*. Source: Author.

11.6 A suburban casemate. The scalar similarity to its neighbours, and the ease with which the town is planned around it, is countered by its typological specificity. *Sector Haguenau, Casemate 27 (Oberroedern Sud)*. Source: Author.

11.7 A local museum reconstructs a 'typical' household preparing for the arrival of the Germans. *Sector Haguenau, Casemate 33 (Abri de Hatten)*. Source: Author.

11.8 A mannequin in the *Ouvrage Schoenenbourg* slowly accumulates mould. Source: Author.

11.9 The entrance to this *ouvrage* is closed, but a French flag is flown. *Sector Lauter, Petit Ouvrage de Rohrbach, Bloc 2 entrance*. Source: Author.

11.10 Plan drawing showing the underground elements of the *Ouvrage Schoenenbourg*. Source: Author.

## 12 *Defending the Irish Border: The Map of Watchful Architecture*

12.1 Overview of the Map. Source: Author.

12.2 Detail, Foyle basin. Source: Author.

12.3 Detail, South Armagh. Source: Author.

12.4 Detail, western tip of border. Source: Author.

12.5 Paul Gauci after Charles Bentley, (1806–1854), 'Pure-Piapa: A remarkable basaltic stone in Guiana', from *Twelve views in the interior of Guiana* by Robert H. Schomburgk, (1804–1865), London, Ackermann, 1841, hand-coloured lithograph. Source: Yale Centre for British Art, Paul Mellon Collection.

12.6 Saint Columb's Stone. Source: Author.

12.7 John Byrne. Border Postcard from *The Border Itself* exhibition, 2001. Photographic print with text. Source: Collection of the artist.

## 13 *British Soldiers' Graves in the Crimea and the Origins of Modern War Commemoration*

13.1 William Simpson's lithograph, 'Hospital and Cemetery at Scutari'. Source: George Brackenbury, *The Campaign in the Crimea*.

13.2 Roger Fenton's photograph, 'The cemetery Cathcart's Hill – the Picquet House, Victoria Redoubt and the Redoubt des Anglais in the distance'. Source: United States Library of Congress, LC-USZC4-9280.

13.3 Frontispiece to *The Memorials of Captain Hedley Vicars, Ninety-seventh Regiment*. Source: Catherine Marsh, *Memorials of Captain Hedley Vicars, Ninety-seventh Regiment*.

13.4 The Cathcart's Hill burial ground. Source: John Colborne and Frederic Brine's *The Last of the Brave*.

13.5 The Second Brigade, Light Division Cemetery. Source: John Colborne and Frederic Brine's *The Last of the Brave*.

13.6 Photograph of the Engineer's Cemetery from 1860 showing breaches in the stone boundary wall. The Consul-General sent several photographs to the Foreign Office with his written report on the cemeteries. Source: 'Inclosure in W. Grenville Murray's Despatch dated 29 October 1860', TNA:PRO CN 13–6.

13.7 A representation of the Cathcart's Hill burial ground as neat and well-ordered commemorative space following publication of the Adye-Gordon

Report. *Source*: 'The Graves in the Crimea as They Now Are' *The Graphic*, 19 August 1882.

## 14 Contested Spaces: Invisible Architectures

14.1 The Desert[ed] Hotel, Dunkirk. *Source*: Anam Hasan.

14.2 War is replaced by play at the Desert[ed] Hotel, Dunkirk. *Source*: Anam Hasan.

14.3 'Redirecting Light' across the border in No Man's Land, Berlin. *Source*: Lina Lahiri and Stephanie Bahr.

14.4 The Berlin Cube (construction by Oxford Brookes University). *Source*: Author.

14.5 Abandoned objects in the buffer zone of Nicosia. *Source*: Rasa Karuseviciene.

14.6 Pop up illuminated market and other landscapes subvert militaristic functions. *Source*: Ali Qureshi and Mohammed Ennayet.

14.7 The butcher's shop: The knife comes down on the exact line of the border. *Source*: Ali Qureshi and Mohammed Ennayet.

14.8 Meat and Two Veg: Gun trajectory drawings. *Source*: Ali Qureshi and Mohammed Ennayet.

14.9 In the Television Garden. *Source*: Rasa Karuseviciene.

14.10 Magic Tricks Decoys and Traps. *Source*: Rasa Karuseviciene.

14.11 The Apparatus of Disappearance, Nicosia. *Source*: Rasa Karuseviciene.

14.12 A Typology of Objects found in Contested Space or The Buffer Zone Cabinet. *Source*: Rasa Karuseviciene.

## 15 Sketches of War: The Graveyards of Historical Memory

15.1 Entrance plaque to the memorial village, Oradour-sur-Glane, France. *Source*: Author.

15.2 Gun shop in central Bucharest. *Source*: Author.

15.3 Commemorative bullet holes in Berlin. *Source*: Author.

15.4 Abandonedcroft on the Ardnamurchan peninsula, Scotland. *Source*: Author.

15.5 Type 4 Second World War bunker, Fife, Scotland. *Source*: Author.

15.6 Housing Estate, East Berlin. *Source*: Author.

15.7 Seventieth anniversary of Russian Revolution, Moscow. *Source*: Author.

15.8 Access corridor, Secret Bunker, Fife, Scotland. *Source*: Author.

15.9 The 'high street' in Oradour-sur-Glane, France. *Source*: Author.

15.10 Entrance to Breedonk Fort, Belgium. *Source*: Author.

15.11 Anti-War camp opposite the Houses of Parliament, London. *Source*: Author.

15.12 City Centre communication's tower, Bucharest. *Source*: Author.

# About the Editors

**Gary A. Boyd** lectures in architecture at University College Cork and the CCAE: Cork School of Architecture. His first book, *Dublin 1745–1922: Hospitals, Spectacle and Vice* (Four Courts 2006), examines connections between medical institutions and the city's urban and social development. Current research activities include systems and manufactured landscapes, and housing design and its histories.

**Denis Linehan** is a graduate of the University of Nottingham. He joined University College Cork in 2000, having previously worked as a geographer at Swansea and Lancaster universities. His research is concerned with the relationships between print and visual culture and urban life, particularly in the contexts of modernity and social change. His other publications include *Atlas of Cork City* (CUP 2005) and *Spacing Ireland* (MUP 2013).

# About the Contributors

**Carolyn Anderson** is a researcher and freelance editor. She completed her PhD on the Board of Ordnance military mapping of eighteenth-century Scotland in 2010; a collaborative project with the Institute of Geography at the University of Edinburgh and the National Library of Scotland Map Library. Prior to her studentship, she was Head of Cartography at Oxford University Press.

**Peter Adey** is Reader in Human Geography at Royal Holloway, University of London. He is interested in the relation between mobility, space and security and has published several books and research papers including *Mobility* (Routledge 2009) and *Aerial Life: Spaces, Mobilities, Affects* (Wiley-Blackwell 2010). Peter is the Director of a new MSc programme in Geopolitics & Security being launched by Royal Holloway in September 2012.

**Garrett Carr** is a writer and artist based in Belfast. To create maps, including The Map of Watchful Architecture, he walked the Irish border from end to end. He writes a blog on cartography at [www.newmapsofulster.net](http://www.newmapsofulster.net).

**Jonathan Charley** lives in Glasgow and is currently Director of Cultural Studies in the department of architecture at the University of Strathclyde. He studied architecture in London and Moscow and works in a variety of media on the political and social history of buildings and cities.

**Rebecca Lyn Cooper** is a Cota-Robles Fellow and a PhD candidate in the Critical Studies in Architectural Culture programme at the UCLA Department of Architecture + Urban Design. Her forthcoming dissertation, "Every Home a Fortress!": Militarization and Domesticity in Cold War America, examines points of connection between the post-war military-industrial economy and suburbanization during the period 1945 to 1962.

**Sonja Duempelmann** is Associate Professor of Landscape Architecture at Harvard University's Graduate School of Design. She is the author and editor of several essays and books on aspects of nineteenth and twentieth-century landscape architectural history, most recently of an edited volume, *The Cultural History of Gardens in the Age of Empire* (Berg Publishers, forthcoming 2012).



**Reenie Elliott** graduated from Architecture, University College Dublin in 1986. She has lived in New York, Paris and London, and worked in a range of architectural practices including Richard Meier, Jean Nouvel, and David Chipperfield. She started teaching architectural design part time in 1995. In 2004, she was appointed Academic Leader in Architecture at London Metropolitan University and runs the BA Architecture Degree Programme at the University of Greenwich.

Reenie Elliott is an architect and runs Invisible Architecture, a practice of mysterious proportions. Her current research interests are Contested Spaces, Berlin's Observation Towers, Histories of Architectural Technology, and the Collapse of Power and Vision in Architecture. She has worked in a range of architectural practices (including Richard Meier, Jean Nouvel and David Chipperfield), has taught architectural design since 1995 and has run architecture degree programmes at Oxford Brookes, London Metropolitan and Greenwich Universities.

**Lisa Haber-Thomson** is a PhD candidate in Urban Planning at Harvard University. Her research focuses on extra-territorial sites, and other spatial exceptions to political boundaries. She has a Masters in Architecture from the Harvard Graduate School of Design, and has worked as an architect and as a freelance animator.

**Andrew Keating** received his PhD in modern British history from the University of California, Berkeley in 2011. He is currently revising his dissertation on the politics and meanings of British war commemoration into a book titled *The Empire of the Dead*.

**Volker Mende** is a freelance building archaeologist and archaeological engineer, specialising in urban and industrial archaeology, fortifications and garden history. He has a Master of Arts in built heritage conservation from Brandenburg University of Technology, Cottbus and is currently a PhD candidate researching fortified railway bridges in Germany.

**Peter Mörtenböck** and **Helge Mooshammer's** joint research is concerned with new forms of urban sociality arising from processes of transnationalisation, transient and informal land use, and changing regimes of governance. They both teach architecture and visual culture at Vienna University of Technology and at Goldsmiths College, University of London.

**James Robinson** is a doctoral candidate at the Institute of Geography and Earth Sciences, Aberystwyth University. His research focuses on the spaces and practices of camouflage during the Second World War, with particular emphasis on the concealment of industrial installations within the British 'Home Front' landscape.

**Per Strömberg**, art historian and Associate Professor at Norwegian Business School, has recently finished a Postdoctoral project at the Centre of Experience Economy focusing on the reuse of buildings as a cultural innovation strategy in tourism, event and retailing. In 2007, he defended his PhD thesis on the spatial connection and symbiotic processes between business and aesthetics in today's tourism industry.

**Rose Tzalmóna** is engaged in exploring the relationship between contemporary architecture, memorial landscapes, war remnants and recovery. She is currently working on her dissertation where the central question addresses how the *Atlantikwall*, as a series of constructed buildings

and infrastructure situated in the public realm, can be historically (re)defined and strategically (re)presented in terms of military, political, cultural and collective notions of space.

**Nathaniel Walker's** Master's Thesis, entitled 'Savannah's Lost Squares', won the Outstanding Graduate Thesis Award and was subsequently published in the *Journal of the Society of Architectural Historians*. He entered Brown University's PhD programme in the autumn of 2008 to work with Professor Dietrich Neumann on eighteenth- and nineteenth-century utopian literature and its reciprocal relationships with the 'aesthetics of progress' in architecture and urban planning.

# Acknowledgements

For their immensely hard work, we would like to thank the book's contributors, who have not only produced a very fine series of engaging and original essays, rich in perspectives and critical in scope, but have also been singularly pleasant and amenable to collaborate with over the course of the book's development.

The institutions which have supported us in the production also deserve thanks, especially the Department of Geography, University College Cork and the CCAE: Cork School of Architecture (Cork Institute of Technology and University College Cork).

We would also like to thank Valerie Rose and Adam Guppy of Ashgate for making the task of producing the book an overwhelmingly positive experience.

Finally, we would like to thank our partners and families for all the support they have shown us throughout the process of editing *Ordnance: War + Architecture & Space*: Katharina and Emilia; and Anna, Elizabeth, James and Judith.

# Contents

<i>List of Figures</i>	vii
<i>About the Editors</i>	xv
<i>About the Contributors</i>	xvii

Introduction: A Place Called War	1
<i>Gary A. Boyd and Denis Linehan</i>	

## **PART I URBAN ORDERS: MILITARISED TERRAINS IN THE CITY**

1	To Gather in War and Peace: The City Squares of Savannah, Georgia	9
	<i>Nathaniel Robert Walker</i>	
2	The Political Aesthetics of Counter-Terrorism Design	33
	<i>Peter Mörtenböck and Helge Mooshammer</i>	
3	Protecting the Population: Bureaucracy, Affectivity and Governing the Liverpool Blitz	51
	<i>Peter Adey (with Barry Godfrey and Dave Cox)</i>	
4	Funky Bunkers: The Post-Military Landscape as a Readymade Space and a Cultural Playground	67
	<i>Per Strömberg</i>	

## **PART II THE INVISIBLE FRONT: DOMESTICITY AND DEFENCE**

5	'Hiding the Assets': 'Self-concealing' Architecture and the British Landscape During the Second World War	85
	<i>James Robinson</i>	