MAN-MADE FUTURE

Planning, education and design in mid-twentieth-century Britain



Edited by
Iain Boyd Whyte

Man-Made Future

In 1945, the planner G. D. H. Cole asked, 'Are we to plan? . . . What are we to plan? . . . Would it mean less real and tangible freedom for ordinary people, or . . . an enlargement of the kinds of freedom that most people want and value?'

An anthology of essays by distinguished scholars, *Man-Made Future* investigates these questions, examining urban planning in Britain after 1945 as a polemical, visual and educational phenomenon. While the post-war period and the 1950s are increasingly the focus of scholarly research, the emotional and aesthetic context to post-war planning has been relatively neglected. This book aims to illuminate this critical era in the development of modern town planning, and offers architectural, social and urban historians, students and researchers new insights into the development of the mid-twentieth-century city.

Following the victory in 1945, a powerful belief emerged that a new mood in British politics, combining scientific humanism and Modernist architecture, could build better towns for a healthier and happier population. The ideas that promoted this belief provide the subject for this book, which investigates the precarious authority of the planner, the conflict between professional expertise and public indifference, and the visual imagery that was employed to depict and illustrate this new and emergent world. *Man-Made Future* confronts many of these issues and explores fundamental decisions that have had a lasting influence on British cities to this day.

Iain Boyd Whyte is Professor of Architectural History at the University of Edinburgh, UK. He has been a Research Fellow of the Alexander von Humboldt-Stiftung, a Getty Scholar and, more recently, a Senior Program Officer at the Getty Foundation, Los Angeles. He is a fellow of the Royal Society of Edinburgh and has served as a Trustee of the National Galleries of Scotland.

Man-Made Future

Planning, education and design in mid-twentieth-century Britain

Edited by Iain Boyd Whyte

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2007
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
270 Madison Ave, New York, NY 10016

This edition published in the Taylor & Francis e-Library, 2006.

"To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk."

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2007 Iain Boyd Whyte, selection and editorial matter; individual chapters, the contributors

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
Man-made future: planning, education, and design in mid-20th century Britain/ [edited by] Iain Boyd Whyte.
p. cm.
Includes bibliographical references and index.
1. City planning – Great Britain – History – 20th century. 2. Postwar reconstruction – Great Britain – History – 20th century. 3. Architecture – Great Britain – 20th century. I. Whyte, Iain Boyd, 1947–
HT133.M255 2007
307.1'21609410904 – dc22 2006022927

ISBN 0-203-00395-0 Master e-book ISBN

ISBN10: 0–415–35788–8 (hbk)
ISBN10: 0–415–35789–6 (pbk)
ISBN10: 0–203–00395–0 (ebk)

ISBN13: 978–0–415–35788–3 (hbk)
ISBN13: 978–0–415–35789–0 (pbk)
ISBN13: 978–0–203–00395–4 (ebk)

Contents

List of illustration credits vii

Preface x
Iain Boyd Whyte

List of contributors xii

1 1947 and all that: why has the Act lasted so long? 1
Jules Lubbock

2 Otto Neurath and the sociology of happiness 16
Iain Boyd Whyte

3 Surveying and comprehensive planning: the 'co-ordination of knowledge' in the wartime plans of Patrick Abercrombie and Max Lock 38
Michiel Dehaene

4 Everywhere at any time: post-Second World War genealogies of the city of the future 59
Volker M. Welter

5 Perceptions in the conception of the Modernist urban environment: Canadian perspectives on the spatial theory of Jaqueline Tyrwhitt 78
Rhodri Windsor Liscombe

6 Selling the future city: images in UK post-war reconstruction plans 99
Peter J. Larkham

7 Paper dream city/modern monument: Donald Gibson and Coventry 121
Louise Campbell

8 Conceptions and perceptions of urban futures in early post-war Britain: some everyday experiences of the rebuilding of Coventry, 1944–62 145
Keith D. Lilley

9 'Into the world of Conscious Expression': Modernist revolutionaries at the Architectural Association, 1933–39 157
Elizabeth Darling

10	*PLAN*: a student journal of ambition and anxiety *Clive B. Fenton*	174
11	'Destroy all humans!' *Simon Richards*	191
12	The English university of the 1960s: built community, model universe *John McKean*	205
13	The tall barracks artistically reconsidered: Hyde Park Cavalry Barracks and the total environment of modern military life *Miles Glendinning*	223
Index		247

Illustration credits

The authors and publisher gratefully acknowledge the following for permission to reproduce material in this book. Every effort has been made to contact copyright holders for their permission. The publishers would be grateful to hear from any copyright holder who is not acknowledged here and will undertake to rectify any omissions in future editions of the book.

Front Cover
Estate of Abram Games

Chapter 2
Otto and Marie Neurath Isotype Collection, Department of Typography and Graphic Communication © The University of Reading: 2.1, 2.2, 2.4, 2.5, 2.6, 2.7
©DACS 2006: 2.3
APRR Collection, Special Collections, Edinburgh University Library: 2.8, 2.9
Penguin Books Ltd: 2.10

Chapter 3
Middlesbrough Council: 3.6

Chapter 4
Lund Humphries/Ashgate Publishing: 4.1, 4.4
Mumford Estate (Robert Wojtowicz): 4.3, 4.5
Reproduction © Art Institute of Chicago: 4.2, 4.6, 4.7

Chapter 5
Athens Center of Ekistics: 5.2, 5.3, 5.4, 5.6

Chapter 6
City of Westminster: 6.8

Chapter 7
Lady Gibson: 7.1
University of Edinburgh, Art and Architecture Library: 7.11

Chapter 8
Coventry Archives: 8.1, 8.2, 8.3, 8.4, 8.5, 8.6

Chapter 9
Special Collections, University of Edinburgh Library: 9.1, 9.2
© The Architectural Association: 9.3

Chapter 12
The Architects' Journal: 12.1, 12.2, 12.3

Other figure sources

Front Cover
Abram Games, cover design for *Target for Tomorrow*, no. 9, 1942–43.

Chapter 2
2.1 Museum of Society and Economy (Gesellschafts- und Wirtschaftsmuseum), Vienna, travelling exhibition, c. 1926 .
2.2 Otto Neurath, *Gesellschaft und Wirtschaft*, Leipzig, Bibliographisches Institut, 1930, plate 55.
2.4 Otto Neurath, *Gesellschaft und Wirtschaft*, Leipzig, Bibliographisches Institut, 1930, plate 60.
2.5 Bilston Housing Exhibition, November 1946.
2.6 Bilston Housing Exhibition, November 1946.
2.7 Bilston Housing Exhibition, November 1946.
2.10 *County of London Plan*, West Drayton, Penguin, 1945, p. 24.

Chapter 3
3.1 Patrick Abercrombie and J. H. Forshaw, *The County of London Plan*, London, Macmillan, 1943, p. 54.
3.2 Patrick Abercrombie and J. H. Forshaw, *The County of London Plan*, London, Macmillan, 1943, p. 26.
3.3 Patrick Abercrombie and J. H. Forshaw, *The County of London Plan*, London, Macmillan, 1943, p. 21.
3.4 Patrick Abercrombie and J. H. Forshaw, *The County of London Plan*, London, Macmillan, 1943, p. 27.
3.5 Patrick Abercrombie and J. H. Forshaw, *The County of London Plan*, London, Macmillan, 1943.
3.6 Max Lock, *The County Borough of Middlesborough: Survey and Plan*, Middlesbrough, The Middlesbrough Corporation, 1946, p. 175.

Chapter 4
4.1 Arthur Korn, *History Builds the Town*, London, Lund Humphries, 1953, plate 81.
4.2 Ludwig Hilberseimer, *The Nature of Cities*, Chicago, Paul Theobald, 1955, p. 252.

4.3 Lewis Mumford, *The Culture of Cities*, New York: Harcourt, Brace, & World, 1938, double spread before p. 454.
4.5 Lewis Mumford, *The Culture of Cities*,New York, Harcourt, Brace & World, 1938, double spread following p. 135.
4.6 Ludwig Hilberseimer, *The Nature of Cities*, Chicago, Paul Theobald, 1955, p. 190.
4.7 Ludwig Hilberseimer, *The Nature of Cities,* Chicago, Paul Theobald, 1955, p. 192.

Chapter 7

7.2 *Architect and Building News*, 21 March 1941.
7.3 *Architect and Building News*, 21 March 1941.
7.4 *The Future Coventry*, 1945
7.5 *Resurgam*, Town and Country Planning Association, c. 1945.

Chapter 8

8.5 *Architect and Building News*, 27 December, 1946.
8.7 *Architect and Building News*, 29 November, 1956.

Chapter 9

9.3 *Focus*, 1, 1938.

Chapter 10

10.8 Innes H. Pearse and Lucy H. Crocker*, The Peckham Experiment: A Study in the Living Structure of Society*, London, George Allen and Unwin, 1943, p. 52.

Chapter 12

12.1 *The Architects' Journal,* 20 September 1972, p. 674.
12.2 *The Architects' Journal*, 20 September 1972, p. 674.
12.3 *The Architects' Journal,* 20 September 1972, p. 650.
12.5 *Architectural Design*, October 1966.
12.6 *Architectural Design*, October 1966.

Preface

In September 2003 a conference on city planning was held at the University of Edinburgh. It was one component in a major project designed to catalogue and accession into the University Library an enormous collection of material on town and country planning and urban design. This collection includes 2,000 books, over 4,000 bound planning reports, bulletins, pamphlets and conference reports; long runs of planning and architectural journals; and 500 boxes of grey material comprising draft reports, correspondence and minutes of meetings. The historical and geographical sweep of the collection is very broad, with subheadings ranging from 'City Plans – Britain (Coventry)' to 'CIAM/MARS', 'Urban Development Poland, Russia', 'Transport Planning', 'Tennessee Valley Authority', 'Communism/Socialism', 'Social Aspects of 1950s Housing', 'Rotterdam Review 1957', 'Brasilia', 'Japan – Conference on New Towns', 'Ekistics, Delos Symposium 1965', 'Kilmarnock Plan' and 'Architectural Education'. This extraordinarily rich resource on city and regional planning had been collected during the long working life of the architect-planner Percy Johnson-Marshall, an ever-present figure in the British, European and global planning debates between the mid-1930s and the 1980s.

After training with Charles Reilly and Patrick Abercrombie at Liverpool University, Johnson-Marshall worked with Donald Gibson on the replanning of Coventry. War service in India and Burma followed, leading to a post as governmental advisor on planning and reconstruction to the Government of Burma. Returning to post-war Britain, Johnson-Marshall was employed in framing the 1947 Town and Country Planning Act before moving to the London County Council as Senior Planner responsible for London's Comprehensive Development Areas, such as the Barbican, the South Bank, Elephant and Castle, Tower Hill and the Stepney/Poplar area, which included the showpiece Lansbury Estate, exhibited as model housing during the Festival of Britain. In the 1950s his planning responsibilities extended across all of London's Comprehensive Development Areas and sixty square kilometres of the inner city. He moved to the University of Edinburgh in 1959, where he was appointed Professor of Urban Design and Regional Planning in 1964, and he set up a planning consultancy – Percy Johnson-Marshall and Associates – which produced everything from regional reports to detailed town centre plans for diverse locations ranging from Kilmarnock, Salford and Coleraine to São Paulo, Islamabad, and Halifax, Nova Scotia.

The symposium was planned to bring the existence of this treasure trove to the attention of the scholarly public. Rather than focusing on Johnson-Marshall himself, however, it was decided to address the broader areas in which he worked in order to contextualise the archive and to generate research based on the material it contained. Accordingly, the thirteen chapters in this volume cover such topics as planning theory as it evolved in Britain from the 1930s through to the 1960s, the New Town Act of 1947 and its consequences, architectural and planning education in the 1940s and 1950s, the architectural status of the suburbs, and the possibility of completely planned environments designed for specific social groups such as students and soldiers. The rebuilding of Coventry and the example of the city's chief architect, Donald Gibson, had a particular significance in the career of Percy Johnson-Marshall, and this is reflected in the essays that follow. The texts are also linked by broader and interlinked themes: the genealogy of the civic survey; the precarious and ill-defined authority of the planner; the relationship between professional expertise and public indifference; and the potency of visual data and imagery in bridging the divide between the planner and the layman.

A generous Resource Enhancement Grant from the Arts and Humanities Research Council made it possible to secure the Johnson-Marshall material and to plan the conference and this book, and further funding for the conference was gratefully received from the British Academy. As manager of the archival project and organiser of the initial conference, Dr Clive Fenton shouldered considerable burdens with great ease and charm. Thanks are also due to Deborah Whyte for her Herculean labours in bringing initial order to the material, and to Rowena Godfrey, whose patience and editing skills formed the disparate contributions into a coherent whole, while retaining the energy and excitement of new research delivered in the lecture hall.

In a book published in 1945, the economist G. D. H. Cole asked:

> Are we to plan? If so, what are we to plan, and what are the essential instruments for making our plans and for carrying them into effect? And, first and foremost, what is planning, and how much substance is there in the allegation that it is inconsistent with liberty. . .? . . . Would it mean less real and tangible freedom for ordinary people, or would it mean an enlargement of the kinds of freedom that most people want and value?[1]

These questions engaged the liberal intelligentsia in the first months of peace in 1945, and are the subject of this book.

Iain Boyd Whyte
Edinburgh, April 2006

Note

1 G. D. H. Cole, *Building and Planning*, London, Cassell, 1945, p. 38.

Contributors

Louise Campbell teaches the history of art and architecture at the University of Warwick, specializing in twentieth-century British architecture and public art in the post-war period. She is currently completing a study of artists' habitats in France and England in the early twentieth century. In 2004 she secured AHRC funding for a major project, *The Life and Work of Sir Basil Spence, 1907-76: Architecture, Tradition and Modernity*, on which she is working in collaboration with Miles Glendinning, Jane Thomas, Clive B. Fenton in Edinburgh and a small research team at Warwick.

Elizabeth Darling is an architectural historian and a Senior Lecturer in the Department of History and Art at Oxford Brookes University. She researches and publishes on gender, housing and modernism, and her book on the emergence of architectural modernism in Britain in the 1930s, *Re-forming Britain: Narratives of Modernity Before Reconstruction*, was published by Routledge, 2006. With Lesley Whitworth she is co-editor of *Women and the Making of Built Space in England, 1870–50*, published by Ashgate, 2006.

Michiel Dehaene is Assistant Professor in Urbanism at Eindhoven University of Technology, the Netherlands, and a postdoctoral researcher at the K.U.Leuven, Belgium. He completed his doctoral studies in 2002 with a dissertation on the role of civic and regional survey in the development of the town planning movement in Britain in the first half of the twentieth century.

Clive B. Fenton studied at the Departments of Architecture and History at the University of Edinburgh. He is currently Research Fellow for the AHRC-funded research project on the Sir Basil Spence Collection, based at the Royal Commission on the Ancient and Historical Monuments of Scotland, and lectures at the Edinburgh College of Art. He was previously manager of the AHRB-funded project: *Rebuilding the City: The Percy Johnson-Marshall Collection*. *The Man-Made Future* symposium, held in Edinburgh in September 2003, was one element of this project.

Miles Glendinning is Director of the Scottish Centre for Conservation Studies and Reader in Architecture at Edinburgh College of Art. As a specialist in modern architecture and urban history, he has authored or co-authored a number of books on the subject, including *Tower Block, Scottish Architecture* (World of Art) and *Clone City*, and is pursuing a range of research and publication projects on the work of Basil Spence and Robert Matthew. His chapter in this volume stems from an AHRC-funded project on Sir Basil Spence.

Peter J. Larkham is the Ginsburg Professor of Planning in the School of Property, Construction and Planning at UCE Birmingham. He is an urban geographer by background, although his research has always focused on aspects of urban form and the planning system. He has long-standing interests in conservation and urban design, and in recent years he has explored these in the context of the post-war reconstruction of British towns. He is a Council member of the International Planning History Society, an Associate Editor of *Urban Morphology* and *Planning Perspectives*.

Keith D. Lilley is an historical geographer and urban morphologist who is lecturer in human geography at Queen's University Belfast. He researches medieval and modern planning histories and has written on town planning in medieval Europe and also twentieth-century UK post-war reconstruction. He is currently looking at the influence that medieval monarchs had on processes of urban formation.

Jules Lubbock is Professor of Art History at the University of Essex and an historian of British architecture and town-planning. He was architecture critic of the *New Statesman* in the 1980s and a speechwriter for the Prince of Wales. His books are *The Tyranny of Taste: The Politics of Architecture and Design in Britain, 1550–1960* (Yale, 1995); *Architecture: Art or Profession, a History of Architectural Education in Britain* (co-authored with Mark Crinson, 1994) and *Storytelling in Christian Art from Giotto to Donatello* (Yale, 2006). Lubbock was director of the AHRB-funded project on 'Concepts of Self in the Theory and Practice of Architecture and Town-Planning since 1945' from 2001–2005. He is now writing a sequel to *The Tyranny of Taste*, dealing with the period since 1960.

John McKean has been architect, critic, teacher and historian; he has been Professor of Architecture at The University of Brighton since 1996. Widely published, his last book was *Giancarlo De Carlo: Layered Places* (Stuttgart and Paris, 2004); he is now embarking on completely rewriting Banister Fletcher's *A History of Architecture*.

Simon Richards is Lecturer in the Department of History of Art and Film at the University of Leicester. His research has been focused on the way that architecture and planning often contain ideas about human nature and the nature of self. His book *Le Corbusier and the Concept of Self* was published by Yale University Press in 2003, and he is currently preparing a follow-up provisionally entitled *Architecture Knows Best*.

Volker M. Welter is an architectural historian, currently Associate Professor at the Department of History of Art and Architecture, University of California, Santa Barbara. His research interests include history, theory, and historiography of architecture and urbanism since the nineteenth century. His latest book is *Biopolis: Patrick Geddes and the City of Life* (MIT Press, 2002). Currently he is writing a book on Ernst L. Freud, the architect son of Sigmund Freud.

Rhodri Windsor Liscombe is Head of Department of Art History, Visual Art and Theory at the University of British Columbia. His current research projects include a study of the intersections between Modern Movement design practice and late Imperial British policy, and an examination of the changing social and cultural role of architecture in reconstruction era Canada, with particular respect to the urban fabric. The design process and the association between aesthetic and technological design represent a further dimension of enquiry, the latter currently focused on the development and impact of the jet engine.

Iain Boyd Whyte is Professor of Architectural History at the University of Edinburgh. He has been a Fellow of the Alexander von Humboldt-Stiftung and a Getty Scholar. He was co-curator of the Council of Europe exhibition *Art and Power*, shown in London, Barcelona and Berlin in 1996/7, and is a former Trustee of the National Galleries of Scotland. His research and publications have focused on early Modernism in Germany, Austria and the Netherlands.

Chapter 1

1947 and all that

Why has the Act lasted so long?

Jules Lubbock

The Town and Country Planning Act of 1947, albeit in amended and re-enacted form, has ruled Britannia longer than the Queen and may well outlive her. Its basic principles have been succinctly summarised by Gordon Cherry:[1]

1 Land ownership does not confer the right to develop.
2 Development can only take place if planning permission is granted by a popularly elected Local Planning Authority or by the government minister responsible.
3 Local Planning Authorities are required to produce Development Plans, to which new developments are normally expected to conform.

Given that the fundamental legislative mechanism was the de facto, though not the *de jure*, nationalisation of the individual owner's right to develop land, it is surprising that the 1947 Act should have survived so many years of Conservative governments, including Margaret Thatcher's privatising administration. It has been described, incorrectly in fact, as the last surviving major nationalisation.

Why has this legislation survived so long? Why has it remained so resilient through ever-changing circumstances? Here is the story of the circumstances that led up to the passing of the Act and also of the opposition to land-use planning, a subject that is much neglected.

The 1930s background

During the 1930s, in all fields of life and at all scales there was a widespread enthusiasm for planning. This could take mildly comic forms – as in the concern to eradicate what was called 'congestion in the home'.[2] *Practical Planning with Books*, issued by the National Book Council in 1938, criticised the untidy libraries of prominent writers.[3] More significantly, in 1939 Marie Stopes's National Birth Control Council, which had been set up in 1930, renamed itself the Family Planning Association. In the view of many who wished to prevent further suburban sprawl there was a direct connection between family planning and land-use planning.[4] Propaganda for planning extended far beyond land-use and economic planning. Nonetheless, one must resist drawing the conclusion that the enormous volume of planning propaganda implies that it was popular with the general public, about whose attitudes we are largely ignorant. Among opinion formers, however, the consensus on physical planning seems to have been widespread and to have crossed party political boundaries.

The Report of the Transactions of the Conference of the British Association for the Advancement of Science, entitled *Science and World Order*, which was held in the famous horseshoe lecture theatre of the Royal Institution in London between 26 and 28 September 1941, provides a snapshot of this consensus.[5] This was a prestigious occasion with sessions chaired by the ambassadors of the US, the Soviet Union and China. The King and Winston Churchill sent messages of support; and contributors included J. D. Bernal, J. B. S. Haldane, William Holford, Sargant Florence, Ove Arup, Julian Huxley and H. G. Wells. Even Einstein sent a short paper, not however devoted to Town Planning. The proceedings were broadcast in thirty-nine languages and a summary was published as a Penguin Special.

The emphasis given to physical planning, architecture, building and the environment generally is extraordinary:[6] 40 per cent of the text devoted to specific topics, as distinct from the role of science in general, concentrated upon these subjects. In contrast, Health and Diet merited only 12 per cent and Biology 9 per cent. This is an index of the importance of physical planning within both the scientific and political establishments at this moment in history, following the end of the Blitz in the spring of 1941, when reconstruction became a priority for the coalition government.[7]

Since almost all the contributors spoke with one voice, appropriately enough in view of their common commitment to what they called 'standardised human needs', the following is a collective picture of the issues they raised.[8] First, there was general agreement that Town and Country Planning must not only employ science and technology, but that it was, itself, a science. Viscount Samuel claimed that 'a new social science has arisen, of town and country planning'[9] – though no one at the time or even later seemed to have much idea about how the new science was to be taught.[10] Holford stated that 'if planning is to be anything more than a design on paper, it must be the framework and the method by which the sciences relate to human needs'.[11] Each of the four major uses of land – agriculture, building and industry, transport, and recreation – should be served by

its related science. Oddly, housing is not a separate category. These sciences should play a vital role in the production of the survey, an essential preliminary to the development plan.

Several speakers referred to human needs, notably Herbert Morrison, the Home Secretary and former Labour leader of the London County Council, who claimed that in

> the last generation science has given us a new body of exact knowledge about human and social needs. We now know, as men in earlier years did not know, something about the basic requirements in food, housing and town planning, clothing, rest and education.[12]

A woman speaker extended this to household equipment, the 'tools of the housewife's trade', which needed to be improved alongside the more 'orderly planning' of housework in order to release women 'for their own happiness and for the service of society'.[13] But Morrison's commitment to the 'scientifically determined welfare standard',[14] as he called it, went even further: he saw it as the solution to the 'oldest problem confronting democratic statesmanship . . . the temptations of demagogy'. If science could ascertain the nature of standard human needs, then democratic politics, as constituted at that time, should be defunct. The role of the politician should become essentially managerial, implementing scientifically proven solutions as well as propagandising the facts. 'The politician with his ear to the ground must give way to the statesman with his eye on the future.'[15]

As well as being anti-parliamentarian, if not anti-democratic, the mood of *Science and World Order*, like other planning propaganda, was certainly anti-consumerist and opposed to free market capitalism. We see this in the remarks about labour-saving devices in the home, where no mention is made of the fact that most domestic equipment had developed through free market competition, particularly in the US,[16] and was being made available in Britain in unprecedented quantities as a direct result of the electrification accompanying the house building boom of the 1930s, itself largely accomplished by private enterprise.[17] Yet, Ove Arup was typical in calling for a shift in 'the centre of gravity . . . from private enterprise to public service'. He stated that 'the organisation of industry and communications, the planning of towns and agriculture . . . are all problems which . . . cannot possibly be left to private initiative', if human needs were to be satisfied.[18]

Suburbia, or 'sprawl', was a pet hatred of what David Matless has dubbed 'The Planning Front' organised by the Town and Country Planning Association (TCPA) among others.[19] The texts one can use to illustrate this condemnation of suburbia are legion and largely interchangeable. Thomas Sharp's Nietzschean jeremiad of 1937 is particularly vivid.

> Tradition has broken down. Taste is utterly debased. There is no enlightened guidance or correction from authority. The town, long since

> degraded, is now being annihilated by a flabby, shoddy, romantic nature-worship . . . that . . . is destroying . . . the object of its adoration, the countryside. Both are being destroyed. The one age-long certainty, the antithesis of town and country, is already breaking down. Two diametrically opposed, dramatically contrasting, inevitable types of beauty are being displaced by one drab revolting neutrality. Rural influences neutralize the town. Urban influences neutralize the country. In a few years all will be neutrality. The strong masculine virility of the town; the softer beauty, the richness, the fruitfulness of that mother of men, the countryside, will be debased into one sterile, hermaphroditic beastliness.[20]

Sharp called for 'authority' to reinstate clear-cut differences between town and countryside, and seems by implication to favour the re-establishment of gender differences and roles. There could be no middle way.

One can summarise the concerns driving the campaign for new town planning legislation as follows:[21]

1. The waste of agricultural land and the spoiling of precious countryside as a result of unregulated building and suburban sprawl.
2. The location of industry and overall planning to bring jobs to areas of high pre-war industrial unemployment.
3. The vulnerability of the large industrial metropolis to aerial bombardment.
4. Excessive economic individualism.
5. The absence of legislative powers to make centrally controlled plans, as opposed to local councils simply reacting to proposals from developers. A key factor here was the requirement for local authorities to compensate landowners for the loss of development value if permission to develop was refused.

The widely canvassed solutions included:

1. National control over the use of land on the model of the best practice of aristocratic landowners, as opposed to the self-interested individualism of the speculative house-builder.[22] 'Are we to become masters of . . . our land?' asked Lewis Silkin, the Minister of Town and Country Planning, in his speech introducing the debate on the second reading of the Bill in January 1947.[23]
2. Positive as opposed to permissive and reactive planning control, to be based upon scientific surveys and flexible development plans in place of fixed rules or by-laws.
3. Powers to purchase property compulsorily for the purpose of positive planning and reconstruction. Many welcomed the effects of the Blitz for performing preparatory demolition work.

4 Safeguarding both the beauty of the countryside for recreation and its use for agriculture in order to make Britain self-sufficient in food.
5 Centralised regulation of the location of industry.[24]
6 The construction of municipal flats rather than houses in order to prevent sprawl by maintaining high densities. This was, however, an unusually controversial political issue, as we shall see; at the 1941 conference Herbert Morrison refused to commit himself.[25]
7 The building of satellite towns 'budded from the parent'.
8 Scientific sociological research, which should play a major role in the preparation of the new development plans, necessitating the training of a 'new type of planner', to quote Silkin once more.[26]

In his peroration Silkin claimed that the 1947 Act would give Britain 'the great opportunity of leading the world once more in a better cause' than the Industrial Revolution. 'The world is looking eagerly to this country' to see such measures used to solve its urban problems.[27]

This was the ethos that 'the gentleman in Whitehall knows best'.[28] He knew better than markets and certainly better than the general public. Keynes regarded himself and his circle as platonic philosopher-rulers, as did Beveridge.[29] Herbert Morrison believed not only that scientifically standardised needs would replace much political debate, but also that Parliament must legislate for general discretionary powers to be given to government ministers. He disparaged the leisurely 'slow moving mechanisms of nineteenth-century formal democracy'.[30] If democracy did not 'grow up', speed up and delegate powers to Whitehall, the result, he seemed to threaten, would be Fascism. Mosley's word for the same syndrome was 'inertia'. So a major issue was the establishment of strong centralised leadership based upon objective scientific research, even if this involved the erosion of democracy as it existed and of parliamentary sovereignty. But though Morrison's views may sound Leninist today,[31] they were mild compared to those of Harold Laski, who in a 1932 *New Statesman* article raised the question of whether in the 'transition to Socialism, a Labour Government can risk the overthrow of its measures as a result of the next General Election'.[32] He need not have worried. Many of the young generation of Conservative MPs, such as the future Prime Minister Harold Macmillan in *The Middle Way* of 1938, were socialist in all but name, just as disenchanted with unrestricted free market competition as their contemporaries in the Labour Party. Macmillan called for a 'comprehensive system of national planning'. His book is a remarkable document.[33] Private enterprise and uncontrolled competition should only be permitted in new industries. Mature industries should be integrated into national monopolies under the Industrial Reorganisation Act, while essential industries and services should be nationalised or statutorily controlled. The wise and scientifically informed elite must provide strong leadership.

David Matless has drawn attention to the links between Macmillan's circle and Oswald Mosley and also between the Mosleyites and the Council for the Protection of Rural England, the CPRE, a central campaigning organisation of the

Planning Front.[34] Macmillan's secretary from 1934 onwards was Allan Young, a former member of Mosley's New Party, while the architect Clough Williams-Ellis, a leading member of the CPRE and author of *England and the Octopus*,[35] well to the left of the Labour Party himself, was a friend of Mosley's and used Mosleyite language: 'We need direction and leadership now as never before.'

By 1934 both Williams-Ellis and Allan Young had joined an anti-Fascist Federation, but the ethos of their circles remained committed to central planning both of the economy as a whole and of land use in particular. Several rural preservationists remained Mosleyites.[36]

This is a familiar story, but was this really the way things were? Putting aside for a moment the attitudes of the general public, was the establishment really so undivided on issues of planning? Such was the volume of propagandist planning literature that historians are inevitably dependent upon it for their historical reconstruction and this inevitably leads to bias.

Dissent within the establishment consensus

According to Cullingworth's official history of the genesis of the 1947 Act, there were some divisions among the civil servants on William Holford's research team who framed the Bill during the war. These arose particularly between Holford and his acolytes and Sir George Pepler, Raymond Unwin's successor as Chief Technical Officer for Building and Town Planning at the Ministry of Health and, after 1943, at the new Ministry of Town and Country Planning. Holford's group wanted power over decision-making to be vested completely in the Local Planning Authorities, which were to be endowed with considerable discretion based upon the development plans. In contrast, Pepler wanted less discretion, more precise by-laws and a great deal of local public involvement both in the formulation of the plans and through public inquiries. Although Holford largely got his way, public inquiries did become part of the machinery.[37]

In addition, within the wartime coalition there were powerful tensions over the central issue of Betterment Levy, a tax on the increase in the value of land resulting from the granting of planning consent. A related issue was that of compensation to landowners for the loss of development value when permission was refused or when their land was incorporated into a Green Belt. The Conservatives wanted both the levy and compensation to be based upon current land values; Labour wanted them to be based upon 1939 prices, which would have resulted in a higher levy and lower compensation. Michael Tichelar has recently shown that this dispute almost led to the downfall of the coalition between June and October 1944.[38] To heal the rift, the 1944 Town and Country Planning Act was restricted to measures enabling the designation of Comprehensive Development Areas in order to deal with bomb damage, while the proposals on betterment and compensation, which lay at the heart of the new system of development control, were sidelined into the 1944 White Paper, *The Control of Land Use*, which, quite deliberately, was not debated in Parliament.[39]

Even so, and although the differences of opinion on compensation and betterment continued into the debate on the 1947 Bill and beyond – indeed they

have continued to this very day – there was, nonetheless, a broad and firm consensus between the two major political parties on the new regime of Town and Country Planning. Development rights would be effectively, though not actually, nationalised. The right to develop one's property remained inherent in ownership, but could only be exercised after planning consent had been obtained. That original consensus must be one factor in the longevity of the legislation.

A glance at the Labour, Conservative and Liberal Party manifestoes for the 1945 General Election confirms one's sense that consensus extended to almost every area of policy. It was the Conservative Party, for example, that promised a 'Comprehensive Health Service . . . available to all citizens' in which 'no one will be denied the attention he requires because he cannot afford [it]'. On planning, the Conservatives promised legislation on compensation and betterment 'so as to secure . . . the best use of land in the public interest, including proper reservation of open space and the best location of industry'. Labour, while making a ritual gesture in favour of land nationalisation, also promised fair compensation and betterment taxation 'for the purpose of controlling land use and town and country planning'.[40]

One's sense of this consensus is fully borne out by the debate on the Second Reading of the 1947 Bill where the Tory spokesman dissented only on the issues of betterment and compensation and the discretionary powers entrusted to local authorities, which were, in his view, excessive.[41] These issues concerning the extent of discretion, the retention of some form of explicit by-law, public inquiries, betterment and compensation seem to have marked the limit of internal disagreement within the political parties, the civil service, the planning and architectural professions and the planning front generally.

Opposition to the consensus

How much opposition was there outside these groups to the new principles of planning? And what were the views of the general public? As mentioned above, there is a problem concerning the preponderance of evidence in the public domain.[42] Furthermore, those were early days for opinion polls or for in-depth research into social attitudes. Gallup was founded in 1935 in the US and Mass Observation in 1937 in Britain.[43] The 1939 Penguin Special, *Britain by Mass Observation*,[44] raised precisely this issue – official ignorance of people's attitudes – in the context of the Englishman's primary commitment to his home as his castle, a place where 'a man can live his own life', despite the increasing rights of encroachment by the gas man and the overcrowding inspector.[45] 'But today the leaders, politicians, are taking an increasing part in determining how people shall live. Most obviously, they are breaking up the pattern of living in streets' of individual houses and moving people into flats. 'Basic to this and the elaborate legislation which enforces it, is the assumption that ordinary people want better homes than those they live in.' The authors comment:

> There is no objective data or analytical material either to prove or disprove this, which is therefore simply a hypothesis on the part of the

> leaders, a characteristic attitude towards the working class, and a mix up of what ordinary people are supposed to want to have and what the leaders of 'public opinion' think they want to have.[46]

In a critique of the notion of standardised human needs the authors pointed out that

> we know . . . little about personal needs and individual ideals . . . Everywhere we turn in the British scene, we are faced with no data, or data utterly inadequate for any scientific or long-term judgements about our society and culture.[47]

They argued that if democracy were to 'function and survive', the gap between the general public and the elite, both political and intellectual, had to be bridged.[48]

In 1943 Mass Observation developed these insights in their famous survey into *People's Homes*, which demonstrated that the overwhelming majority in all classes wanted to live in a house or a bungalow with a garden.[49] Nonetheless, and with admirable objectivity, they pointed out that 'good and well-built flats near people's workplace are suitable for some and are appreciated', especially when it was a choice between a house and garden far from the workplace and a well-equipped flat nearby.

Their findings on attitudes to housing help to explain why Herbert Morrison had been so cagey in 1941 about the house versus flat issue. In 1944 Attlee had been informed that after the fear of unemployment, the public were most concerned about housing: 'The traditional English hatred of flats and tenements is still very strong. Everyone wants houses with gardens.'[50]

Mass Observation does not provide direct evidence of people's attitudes to town and country planning, a somewhat esoteric subject. Nonetheless, if 70 to 80 per cent of working-class people wanted houses or bungalows with gardens, suburbia would have to expand still further, and the planning lobby was determined to stop this.

Meanwhile, almost three million households had purchased new suburban homes in the 1920s and 30s, housing as much as a quarter of the total population of Britain, and representing a huge migration from the city centres.[51] In addition, a substantial proportion of the 1.3 million new local authority homes were cottages with gardens in the suburbs, which proved to be very popular.[52] What were the views of these people, objects of scorn to the likes of Thomas Sharp and poets such as W. H. Auden and even, in those days, John Betjeman?[53]

Nobody bothered to collect their opinions and attitudes. Mass Observation rightly focused its attention on the working class because they had less opportunity to express their preferences through the market. Moreover, this generation of middle-class purchasers is now dead. But from memoirs written by their children who grew up in the new suburbs, such as Paul Vaughan's *Something in Linoleum*,[54] we gain a vivid impression of the move from dirty, shabby, congested and noisy accommodation in the better part of Brixton to the 'sweetness and light' and proximity to countryside of a semi-detached on the Kingston by-pass in Malden.

The prime mover was Vaughan's mother, who wanted to get away from her in-laws. She also wanted a labour-saving home to provide herself with more leisure and a place upon which she could put her own stamp. Such evidence is endorsed by Alison Light in *Forever England* and by the late Raphael Samuel in his lecture 'Little Red Boxes', though both draw upon literary evidence rather than upon oral history or social survey.[55] Light defends the suburban dream as the means of emancipation for respectable working-class women against both their conservative and progressive detractors. The former accused such women of rising above their station, the latter maligned them for being more concerned with home improvement than with self-improvement.[56] Light also defends them against the general tendency of the period, already glimpsed in the quotation from Thomas Sharp, to regard the suburbs as the site 'of specifically female triviality'. Light defends 'the carpet and the three-piece suite, the hoover and the new gas-oven' as 'icons of hope and dignity, as well as of pride and envy'.

The views of the new middle and lower middle class as well as the better-off working-class suburbanites need far more impartial research along the lines pursued by Mark Clapson for the post-war working class.[57] As already noted, these suburbs were the product of free enterprise and also of the Town Planning Schemes under the Town Planning Acts from 1909 onwards – where such schemes were in force – which gave developers almost total freedom within specific rules on density and the observance of building regulations.[58] As a result of Britain being forced to leave the Gold Standard and allowing the pound to float downwards in 1931, mortgage rates fell progressively. They had been 6.5 per cent in 1924; by 1935 they were 4.5 per cent. Thus, a modest house in Petts Wood East, in Kent, costing £595, could be had for a £30 deposit and 14*s*. 8*d*. (73p) a week compared to council rents which could be as high as 21*s*. 11*d*. (£1.10) or even 27*s*. (£1.35).[59] House ownership, itself a novelty, was very affordable, perhaps even more so than today.[60] The related consumer boom in new domestic equipment played a large part in protecting the south of England from the worst effects of the Great Depression, which was so much more devastating in the US and Europe.[61]

In spite of this, it is hard to find many people at the policy-making level who spoke out publicly on behalf of the merits of this highly significant social and economic phenomenon. J. B. Priestley in his *English Journey* of 1934, published just two years after Sharp's *Town and Countryside*, rejoiced in the new suburbs as 'essentially democratic' and in a new England becoming a land without privilege, whose young people no longer 'play chorus in an opera in which their social superiors are the principals'.[62] Priestley, nonetheless, subscribed to the consensus on economic planning in order to relieve the depressed areas. Another advocate of suburbs was John Cadbury, who stated in a radio debate in 1935 that: 'I do not call it a waste of land to give a man his own house and garden where he can feel that it is his own to do with as he pleases.'[63]

Within the architectural and planning establishment, only *The Castles on the Ground* praised suburbia for what it was. This was published – just one month before the debate on the 1947 Bill – by J. M. Richards, the long-serving editor of the influential *Architectural Review*. But, as he admitted in his autobiography, 'the

book was scorned by my contemporaries as either an irrelevant eccentricity or a betrayal of the forward-looking ideals of the Modern Movement.'[64] Some say he was never forgiven.[65] Certainly, he never returned to the issue even though he claimed that the book was his only original publication. His objective had been to champion participation, aiming to depict

> the mature suburban environment, with its well-tended gardens and its variously embellished architecture, as being to some extent created from inside by the people who lived in it. I saw it therefore as a contrast to the regimented environment, designed from the outside, which was being more and more imposed, though with good intentions, by the new enthusiasm for planning.[66]

Like J. B. Priestley and Mass Observation, Richards stressed the importance to democracy of

> deciding – for a change – to pay some attention to what people themselves want . . . We may despise what they want. We may think they should be educated to want something different . . . but we can only progress democratically at a speed which does not outpace the slow growth of the public's understanding.[67]

This was a different conception of democracy from that of Herbert Morrison.

Last among the opponents of planning, in all its forms, was Friedrich von Hayek, then teaching at the London School of Economics. His argument first appeared in a 1938 article[68] and then in his famous pamphlet *The Road to Serfdom* of 1944, which was dedicated to 'Socialists of All Parties'.[69] He probably had Macmillan in mind when he asserted that there was no middle way between competition and central planning. This was the most powerful attack upon the planning ethos in general, though he only touched upon the CPRE and land-use planning to illustrate his thesis that 'from the saintly and single-minded idealist to the fanatic is but a step'.[70] Hayek was not, however, in favour of a free-for-all; he favoured planning in the form of the rule of law exemplified by the Highway Code, building regulations, weights and measures legislation and the Factory Acts. What he opposed was the 'central direction of all economic activity according to a single plan'. While he does not mention planning by-laws such as those favoured by Pepler, one imagines that he would also have approved of them. Such formal rules are not only consistent with the principle of liberal political economy but necessary to it, by permitting the individual to operate freely within a transparent and comprehensible framework of law.[71]

In contrast, central planning 'cannot tie itself down in advance to general and formal rules' and is, therefore, inevitably accompanied by 'arbitrariness of prerogative, or even of wide discretionary authority on the part of government'.[72] As David Hume, one of Hayek's heroes, had observed, discretion is but a short step from tyranny. With direct reference to the doctrine of scientifically determined

standardised needs, Hayek pointed out that it is inherent in planning that 'the community, or rather its representatives . . . must decide the relative importance of different needs', not the individual.[73]

Hayek seems to have had little immediate influence and departed for the US in 1950. One of his few English disciples, John Jewkes, author of *Ordeal by Planning* and Professor of Economics at Oxford in the 1960s, is said to have lectured to empty halls.[74] The only other significant spokesman for suburbia was David Low's cartoon character, Colonel Blimp. But those who questioned the new form of discretionary land-use planning – George Pepler, Mass Observation, the new suburbanites themselves, J. B. Priestley, Hayek, Colonel Blimp and, for a brief moment, J. M. Richards – were far too disparate to mount a serious challenge to the well organised planning front. Thus, in town and country planning, as in so many areas of policy at the time, cross-party consensus reigned except in so far as changes of government led to the abolition of Betterment Levy and its subsequent reimposition in a new form, and to swings in policy back and forth from positive planning to reactive policy.[75]

Why has the consensus held?

First, pre-war Conservatives had been as much involved in the campaign for controls on land use as Labour. Affluent homeowners objected to their encroachment by sprawl.[76] In addition, the post-war programmes of the Conservative and the Labour parties both developed out of the wartime coalition government, which was itself a great reforming administration in the social field. The post-war Conservatives were not supporters of free markets but of the middle way. Many landowners who had land ripe for development must have been mollified by the substantial sum of £300 million which, under the 1947 Act, they received in compensation – equivalent to perhaps £10 billion at current values. When, moreover, the Betterment Levy was repealed in 1953, they had little to complain about.[77] Even when reintroduced as the Development Land Tax in 1967, it was a tax that was easy to avoid. A further factor in helping to preserve the consensus may have been that the controlled dispersal of inner city populations to New Towns and overspill estates preserved old Labour constituencies, while the new Labour constituencies did not dilute the Tory rural strongholds.

Finally, the laws of unforeseen circumstances and unintended consequences played their part, as always. The 1940 Barlow Report had estimated that there would be no population growth in Britain until 1971 – the total population would remain stable at 46 million.[78] In such circumstances, a policy of urban containment, Green Belts and the end of suburban sprawl through the control of land use and the limited dispersal of population from the inner city, would have seemed unproblematic to the gentleman in Whitehall. But, in fact, the population reached 54 million by 1966 and the number of households almost doubled in the five years between 1961 and 1966.[79] At this point one might have expected a strong case to have been made for a return to the free market in land of the inter-war period. Indeed, such a case was made by Reyner Banham, Peter Hall, Paul Barker and Cedric Price in their famous article of 20 March 1969, 'Non-Plan: An Experiment in Freedom'.[80]

However, this was to be an experiment, not full freedom itself. There is a certain timidity in that subtitle. One reason for this, which the authors admit, was the growth of nimbyism. One effect of the restrictions on sprawl had been for the middle classes to leapfrog the Green Belt 'to smaller towns, cities and New Towns beyond'.[81] Such people had the strongest interest in opposing uncontrolled development in their own area. Moreover, their cause was assisted by the mechanism of the public inquiry which Pepler had successfully advocated. Electorally this was, as it remains, very powerful.[82] Furthermore, the very families who had moved to new suburbs, such as Petts Wood, in the 1930s became the nimbys of the 1960s and were highly effective in using the public inquiry to prevent any further development on green field sites around their desirable outer suburbs.[83] To this day these remain powerful forces, arguably restricting the supply of new houses and raising the price of them.[84] The 1947 Act will probably remain with us for many years yet.

Notes

1 Gordon E. Cherry, *Town Planning in Britain since 1900: The Rise and Fall of the Planning Ideal*, Oxford, Blackwell Publishers, 1996, p. 126.
2 Council for Art and Industry, *The Working Class Home: Its Furnishing and Equipment*, London, HMSO, 1937, pp. 28–30, quoted in Jules Lubbock, *The Tyranny of Taste*, New Haven, CT, Yale University Press, 1995, p. 315.
3 Joan Woollcombe, *Practical Planning with Books*, London, National Book Council, 1938, pp. 4–7.
4 Robert A. Peel (ed.), 'Marie Stopes, eugenics and the English birth control movement : proceedings of a conference organised by the Galton Institute, London, 1996', London, Galton Institute, 1997, pp. 50–68. On p. 67 Stopes is quoted as advocating the 'compulsory sterilisation of those whose uncontrolled breeding threaten the country'. And Patrick Geddes, *Cities in Evolution: An Introduction to the Town Planning Movement and to the Study of Civics*, London, Williams & Norgate, 1915.
5 The Report of the Transactions of 'Science and World Order', *The Advancement of Science*, II, no. 5 (January 1942), London; J. G. Crowther, O. J. R. Howarth and D. P. Riley, *Science and World Order*, Harmondsworth, Penguin Special, 1942.
6 This was not so in the Penguin Special summary, where barely three of the 138 pages are devoted to these subjects.
7 Nicholas Bullock, *Building the Post-War World: Modern Architecture and Reconstruction in Britain*, London, Routledge, 2002, pp. 10 ff.
8 *The Advancement of Science*, p. 3.
9 Ibid., p. 6.
10 Louis Silkin's speech introducing the 1947 Town and Country Planning Act in the House of Commons, *Parliamentary Debates*, 5th series, vol. 432, House of Commons, Session 1946–47, 29 January, p. 962.
11 *The Advancement of Science*, pp. 35–6.
12 Ibid., p. 31.
13 Ibid., p. 37. The speaker was Mrs Mary Agnes Hamilton (1882–1966), Labour MP for Blackburn from 1929 to 1931.
14 Ibid., p. 32.
15 Ibid., p. 32; and Le Corbusier, *The Radiant City*, New York, The Orion Press, 1967, pp. 76 ff., originally published as *La Ville Radieuse*, Paris, Architecture d'Aujourd'hui, 1933.
16 John Jewkes, *Ordeal by Planning*, London, Macmillan, 1948, note on p. 223.
17 Peter Waymark, *A History of Petts Wood*, Petts Wood, Petts Wood and District Residents Association, 2000.
18 *The Advancement of Science*, p. 57.
19 David Matless, *Landscape and Englishness*, London, Reaktion Books, 1998.
20 Thomas Sharp, *Town and Countryside: Some Aspects of Urban and Rural Development*, London, Oxford University Press, 1937, p. 11, quoted by Colin Ward in the Third Sharp Memorial Lecture,

University of Newcastle-upon-Tyne, 1985, and reprinted in Colin Ward, *Talking Houses*, London, Freedom Press, 1990, pp. 81–99. This prejudice still flourishes, not least in the novels about Harry Potter – Harry's ghastly relatives, the Dursleys, are arch-suburbanites who live at 4 Privet Drive.

21 See *When We Build Again: A Study Based on Research into Conditions of Living and Working in Birmingham*, a Bournville Village Trust Research Publication; with a foreword by Lord Balfour of Burleigh, London, G. Allen & Unwin, 1941, which is a paradigmatic pro-planning publication; and *Parliamentary Debates*, pp. 947–81.

22 *When We Build Again*, p. viii and pp. 103 ff.

23 *Parliamentary Debates*, p. 987.

24 Ibid., p. 964.

25 *The Advancement of Science*, p. 32.

26 *When We Build Again*, p. 101; *Parliamentary Debates*, p. 962.

27 *Parliamentary Debates*, p. 987.

28 'Housewives as a whole cannot be trusted to buy all the right things . . . in the case of nutrition and health, just as in the case of education, the gentleman in Whitehall really does know better what is good for people than the people know themselves.' Douglas Jay, *The Socialist Case*, London, Faber and Faber, 1937, p. 317. For the history of this observation see working papers of Manchester University History Department at www.art.man.ac/uk/HISTORY/research/workingpapers/wp_49pdf.

29 Robert Skidelsky, *John Maynard Keynes: Vol. 1, Hopes Betrayed, 1883–1920*, London, Macmillan, 1983, p. 142; and Lubbock, *The Tyranny of Taste*, pp. 322, 368.

30 *The Advancement of Science*, p. 33.

31 Neil Harding, 'The Marxist-Leninist Detour', in John Dunn (ed.), *Democracy, the Unfinished Journey, 508 B.C. to A.D. 1993*, Oxford, Oxford University Press, 1992, pp. 155–87, especially p. 172.

32 H. Laski, 'Labour and the Constitution', *New Statesman*, 10 September 1932, p. 277, quoted in F. von Hayek, *The Road to Serfdom*, London, G. Routledge and Sons Ltd, 1944, p. 47.

33 Harold Macmillan, *The Middle Way: A Study of the Problem of Economic and Social Progress in a Free and Democratic Society*, London, Macmillan, 1938, pp. 186–7, 201, 206.

34 Matless, *Landscape and Englishness*, pp. 26–32.

35 Clough Williams-Ellis, *England and the Octopus*, London, Geoffrey Bles, 1928.

36 Matless, *Landscape and Englishness*, pp. 120–4.

37 J. B. Cullingworth, *Environmental Planning 1939–69. Vol. 1, Reconstruction and Land Use Planning*, London, HMSO, 1975, pp. 4–5, 67, 83, 95–7; there is a summary in Lubbock, *The Tyranny of Taste*, pp. 346–8.

38 Michael Tichelar, 'The Conflict over Property Rights during the Second World War: The Labour Party's Abandonment of Land Nationalization', *Twentieth Century British History*, 14, no. 2 (June 2003), pp. 165–88.

39 *The Control of Land Use*, Presented to Parliament by the Ministry of Town and Country Planning and the Secretary of State for Scotland, June 1944, London, HMSO, Cmd. 6537.

40 See www.psr.keele.ac.uk/area/uk/man/con45.htm and www.psr.keele.ac.uk/area/uk/man/lab45.htm.

41 Andrew Cox takes a different view of the Tory position during the debate in *Adversary Politics and Land: The Conflict over Land and Property in Post-war Britain*, Cambridge, Cambridge University Press, 1984, p. 105.

42 A related problem arises over the abdication crisis of Edward VIII. Recent research indicates that far from the general public being opposed to the King's marriage to Mrs Simpson, a small majority of those who wrote to the Prime Minister and the King was in favour of the marriage. See Susan Williams, *The People's King: The True Story of the Abdication*, London, Allen Lane, 2003.

43 In the Mass Observation archive at the University of Sussex there is an unpublished report entitled 'Planning for What?' dated 17 October 1941, just three weeks after the Science and World Order Conference. It forms part of a group of papers on reconstruction which includes the report on the British Association for the Advancement of Science Conference cited in note 5 above.

44 Charles Madge and Tom Harrison, *Britain by Mass Observation*, Harmondsworth, Penguin, 1939. The book was largely devoted to a study of attitudes to the Munich Crisis of 1938.

45 Ibid., p. 217.

46 Ibid., p. 218.

47 Ibid., p. 225.

48 Ibid., pp. 228–9. It is interesting, in view of John Carey's thesis in *The Intellectuals and the Masses: Pride and Prejudice among the Literary Intelligentsia 1880–1939*, London, Faber, 1992, that Mass Observation criticised poets more than any other elite group for showing contempt for the general public.

49 *An Enquiry into People's Homes, a report prepared by Mass Observation for the Advertising Service Guild: the fourth of the 'Change' wartime surveys*, London, J. Murray, 1943, p. ix and pp. 220–6.

50 Tichelar, 'The Conflict over Property Rights', p. 170, quoting from the William Piercy papers in the British Library of Political and Economic Science. Despite this advice, the left-wing 1944 Labour Party Conference opted for flats rather than houses. On p. 186 Tichelar believes that the reason behind this was, in effect, gerrymandering: the party did not want dispersal to threaten the 'political cohesion of traditional Labour communities'. Herbert Morrison, as London County Council Leader, had aimed to 'build the Tories out of London', according to Michael Hebbert, *London: More by Fortune than Design*, Chichester and New York, John Wiley, 1998, p. 102. The 2002 MORI survey for the Commission for Architecture and the Built Environment (CABE), showed that today fewer people wish to live in flats and that the bungalow beats the village house into second place in the housing popularity stakes. The main figures are: bungalow 30 per cent, village house 29 per cent, Victorian terraced house 16 per cent, modern semi-detached house 14 per cent, 1930s semi-detached house 6 per cent. Flats score about 1 per cent. See the *Daily Telegraph*, 27 June 2002, p. 11. A still more recent survey by Halifax General Insurance showed that bungalow dwellers were the happiest of all house occupants – *Daily Telegraph*, 19 February 2005.

51 There are various estimates for the numbers of dwellings constructed in the inter-war period. The Barlow Report, *The Royal Commission on the Distribution of the Industrial Population*, London, HMSO, 1940, p. 67 puts the total for local authority housing in Great Britain at 1,325,371 and for private housing at 2,984,054 giving a total of 4,309,425, of which 69 per cent was private. On p. 22 Barlow puts the total population of Britain in 1937 at 46 million. Helen Meller, 'Housing and Town Planning, 1900–1939', in Chris Wrigley (ed.), *A Companion to Early Twentieth-Century Britain*, Oxford, Blackwell, 2003, p. 391, Table 24.1 (b) puts the total at 4,533,530 inter-war houses, of which 2,935,195 were private and 1,598,335 were public.

52 Antonia Rubinstein, Andy Andrews and Pam Schweitzer (eds), *Just like the Countryside: Memories of London Families who Settled the New Cottage Estates, 1919–1939*, London, Age Exchange, 1991.

53 W. H. Auden and Christopher Isherwood, *The Ascent of F6*, quoted in Paul Vaughan, *Something in Linoleum: A Thirties Education*, London, Sinclair-Stevenson, 1994, pp. 114–15. See, too, Betjeman's poem 'Slough' in *John Betjeman's Collected Poems*, London, John Murray, 1973, pp. 22–4. Carey, *The Intellectuals and the Masses*, p. 66, points out that at this period Betjeman favoured the old suburbs but considered the new ones monstrous; only much later did he become the fond chronicler of Metroland.

54 Vaughan, *Something in Linoleum*.

55 Alison Light, *Forever England: Femininity, Literature and Conservatism between the Wars*, London, Routledge, 1991. Raphael Samuel, 'Little Red Boxes', delivered to The Thursday Club, 11 June 1992, but sadly untranscribed.

56 Light, *Forever England*, pp. 218–19; Carey, *The Intellectuals and the Masses*, p. 52.

57 Mark Clapson, *Invincible Green Suburbs, Brave New Towns: Social Change and Urban Dispersal in Post-war England*, Manchester, Manchester University Press, 1998; Mark Clapson, *Suburban Century: Social Change and Urban Growth in England and the U.S.A.*, Oxford, Berg, 2003. See also Terry Farrell, *Place: a Story of Modelmaking, Menageries and Paper Round: Life and Work: Early Years to 1981*, London, Laurence King, 2004.

58 Lubbock, *The Tyranny of Taste*, pp. 338–45; Waymark, *A History of Petts Wood*, p. 43.

59 Waymark, *A History of Petts Wood*, pp. 57 and 81; *An Enquiry into People's Homes*, p. 177.

60 Hebbert, *London*, p. 56. See also note 84 below.

61 Dudley Baines, 'Recovery from the Depression in Great Britain, 1932–39', *Refresh*, Economic History Society, 11, Autumn (1990), pp. 1–8.

62 J. B. Priestley, *English Journey: Being a Rambling but Truthful Account of What One Man Saw and Heard and Felt and Thought During a Journey through England during the Autumn of the Year 1933*, London, W. Heinemann, in association with V. Gollancz, 1937, 1st edition 1934, p. 402, see also pp. 4–5, 401–6. See Colin Ward's Third Sharp Memorial Lecture, University of Newcastle-upon-Tyne.

63 BBC debate 'Suburbs or Satellites', *The Listener*, 27 February 1935, pp. 347–9. I owe this reference to Rex Walford in the typescript of *'As by Magic', the Growth of 'New London' north of the Thames, 1918–45, and the Response of the Church of England*, Cambridge, Thesis (Ph.D.), Anglia Polytechnic University, 2003.
64 J. M. Richards, *The Castles on the Ground*, London, Architectural Press, 1946; J. M. Richards, *Memoirs of an Unjust Fella*, London, Weidenfeld and Nicolson, 1980, p. 189.
65 Theo Crosby, verbal communication with the author in about 1989. Crosby was a leading member of the Independent Group.
66 Richards, *Memoirs of an Unjust Fella*, p. 188.
67 Richards, *The Castles on the Ground*, p. 15.
68 F. A. Hayek, 'Freedom and the Economic System', *The Contemporary Review*, CLIII, April (1938), pp. 434–42.
69 F. A. Hayek, *The Road to Serfdom*, London, G. Routledge and Sons Ltd, 1944, pp. 40–1.
70 Ibid., pp. 56 and 60.
71 Ibid., p. 61, where he quotes Kant: 'Man is free if he needs to obey no person but solely the laws.'
72 Ibid., pp. 54–5, quoting A. V. Dicey, *Introduction to the Study of the Law of the Constitution*, 8th edition, London, Macmillan, 1915, p. 198.
73 Hayek, *The Road to Serfdom*, p. 69.
74 I am indebted to Jeffrey Judelson for this evidence.
75 Cox, *Adversary Politics and Land*, pp. 81–5.
76 Rubinstein *et al.*, *Just like the Countryside*, p. 53 quotes a letter of 11 November 1927 in the *Hendon and Finchley Times* objecting to the effect of the London County Council Watling Estate, whose bungalows faced 'houses that sold a few years ago for over £2,000'. There is a need for studies of local opinion and campaigns.
77 Cox, *Adversary Politics and Land*, pp. 106–11.
78 Barlow, *The Royal Commission on the Distribution of the Industrial Population*, pp. 137–43. Subsequent official population studies in the late 1940s confirmed this.
79 Cox, *Adversary Politics and Land*, pp. 112–15.
80 Reyner Banham, Paul Barker, Cedric Price and Peter Hall, 'Non-Plan: An Experiment in Freedom', *New Society*, no. 338, 20 March 1969, pp. 435–43.
81 David H. Mackay and Andrew W. Cox, *The Politics of Urban Change*, London, Croom Helm, 1979, p. 39.
82 For the General Election of 5 May 2005, the Conservative Party manifesto supported the retention of Green Belts.
83 Waymark, *A History of Petts Wood*, pp. 100, 104–6.
84 See Kate Barker, *Review of Housing Supply: Interim Report*, London, HMSO, 2003, commissioned by the Chancellor of the Exchequer. Barker pointed to a doubling in the real price of houses over the previous 30 years (p. 5) because of weak supply and because of a weak response in the volume of house building to increases in price. House prices during the inter-war period were four times more responsive (p. 8). There is no actual shortage of building land. Among the key factors causing these constraints Barker singled out the political circumstances associated with the planning system and, in particular, 'those in need of housing are much less likely to have a strong voice in the political process compared to those already housed' (pp. 11–12).

Further reading

Nicholas Bullock, *Building the Post-War World: Modern Architecture and Reconstruction in Britain,* London, Routledge, 2002

Gordon E. Cherry, *Town Planning in Britain since 1900: the Rise and Fall of the Planning Ideal*, Oxford, Blackwell, 1996

Mark Clapson, *Invincible Green Suburbs, Brave New Towns: Social Change and Urban Dispersal in Postwar England,* Manchester, Manchester University Press, 1998

Jules Lubbock, *The Tyranny of Taste: The Politics of Architecture and Design in Britain, 1550–1960,* New Haven, CT, Yale University Press, 1995

David Matless, *Landscape and Englishness,* London, Reaktion, 1998

Chapter 2

Otto Neurath and the sociology of happiness

Iain Boyd Whyte

Otto Neurath was a fascinating man. He was a political economist, sceptical Marxist, intimate of the Vienna Circle, co-editor of the *Encyclopedia of Universal Knowledge* and inventor of the Isotype system of universal signs. Hounded from his native Vienna via the Hague to Oxford, he died on 22 December 1945. On the very last day of his life, this polymath bemoaned to his wife, Marie, the fact that no one would want to write his biography. Marie answered: 'Never mind, you have Bilston, isn't that better?'[1] Bilston is a suburb of Wolverhampton, an industrial town in England's Black Country, the wider conurbation of Birmingham. Looking at the broader picture of Neurath's life, it is hard to see how Bilston could compete with its other highpoints, but this modest housing development does bring together many of the larger motifs of Neurath's work and also acts as a symbolic hinge between the continental practice of urban development and post-war reconstruction in Britain. Most importantly, it offered the British planners a tangible example of the visual argumentation employed by Neurath to promote a better life for the broad mass of the people.

Although a committed socialist, Neurath was not a conventional Austro-Marxist. He was a passionate empiricist and positivist, utterly opposed to all forms of mysticism and transcendence, or anything non-empiricist such as mind, concept, essence, truth and falsity. From his earliest days he was a committed polemicist and educationalist, desperately keen to convey complicated social and economic relations to the broad and largely uneducated proletariat. This mission was grounded in his conviction that education was the essential precursor of any plans to transform the tangible aspects of daily life, for only an informed and

enlightened society would be able to modify in a meaningful way the conditions under which its members lived and worked. As a member of the Vienna Circle, which reached its full flowering in the 1930s under the leadership of Rudolf Carnap and Moritz Schlick, Neurath saw scientific rationality as holistic and as a force that could be applied to all areas of human activity: not only to science, but also to philosophy, politics, economics and art. In contrast to the theoretically based systems of Descartes or Kant, Neurath insisted on science as practical knowledge, as the practice of human agencies which cannot exist in abstraction from this context. For him there was no Aristotelian distinction between *theoria*, with its apodictic certainty, and *praxis*, with its engagement in the tangible task and the particular situation. His pragmatic goal was to establish the social sciences on a causal, predictive footing, akin to physics or astronomy. To achieve this ambition, he invented a visual language that could explicate social theory without recourse to subjective issues of interpretation. He looked to art and visuality to give plasticity and visible form to the socioeconomic order, to show that it is made of structures that can be moulded and changed. At various points in his life, both in his native Vienna and in Britain, all these passions were focused in his involvement with housing and urbanism.

The characteristics of Neuraths's life and work outlined above are:

socialism;
positivism;
education;
controlled rationality;
visual language;
predictive sociology;
unity of science;
housing.

This is an archetypical scenario of heroic Modernism as it was played out in architecture and urbanism from the 1890s through to the 1960s. All the main themes are encapsulated in the work of this one life. As Neurath himself argued in 1931:

> The theory of social structure is essential for any social engineer, which means anyone who participates as collaborator in the planned organization of all social formations. Prediction of the coming social structure and of the functioning of a given social structure is then at the centre of a planned way of life.[2]

Following the completion of his doctoral thesis at Berlin University on commerce and agriculture in antiquity, Neurath taught economics and history in Vienna before being drafted into the Austrian War Ministry in the First World War; there, he became head of the General War and Army Economics Section, and subsequently director of the Museum of the War Economy in Leipzig. He worked with Wolfgang Schumann, who was also editor of the rather conservative art and culture journal *Kunstwart*, and launched on his career as a visual educator

with exhibitions in the museum explaining the wartime economy. When peace came in 1918, Neurath had a dramatic engagement with the short-lived 'Soviet' uprising in Bavaria, which culminated in a spell in jail. He was released thanks to the intervention of the sociologist Max Weber and the Austro-Marxist politician Otto Bauer, who portrayed him to the judge as an economic technician rather than a dangerous revolutionary. There was, moreover, a good deal of truth in this testimony, as Neurath consistently argued that the dissemination of scientific, social and economic knowledge – and not physical revolt – was the essential precursor of the socialisation of society. The goal was to win minds, not to break heads.

Austro-Marxism was the intellectual context in which Otto Neurath continued his work after returning to Vienna in 1920. Its goal was a third way between dogmatic Bolshevism on one hand and Social Democratic revisionism on the other. According to Austro-Marxist theory as developed by the likes of Otto Bauer, Max Adler and Karl Renner, revolution in the Marxist sense was not possible in an advanced capitalist society, while the incremental reforms of the Social Democrats were too slow and wearisome, and promised only resignation and integration rather than a socialist remodelling of society. In the first instance, however, the political and cultural enlightenment of the masses through education was seen as the guarantor of the socialist hegemony that would supersede the capitalist system and lead to state socialisation.

Pursuing this aim, Neurath became secretary of the Research Institute for Social Economy (Forschungsinstitut für Gemeinwirtschaft) on his return to Vienna. In 1921 he established the Austrian Settlement and Allotment Garden Association (Österreichischer Verband für Siedlungs- und Kleingartenwesen), which was an umbrella organisation for housing cooperatives, societies and self-help groups in Austria – many of which had emerged from wartime squatting initiatives and build-it-yourself shanty estates in the outer suburbs. After defeat in 1918 and the decimation of the Austro-Hungarian Empire, living conditions were impossibly difficult in post-war Vienna. As the architect Grete Lihotzky noted in 1923:

> A majority of these allotment gardeners had constructed primitive, self-help enclosures and huts. Individuals bought bricks, wooden posts, planks, paste-board wherever they could; some covered their huts with tin from old condensed milk cans, or bought an old tramway car in order to live in it.[3]

Neurath's work with the Association brought him into contact with architects, and he engaged several eminent designers – Josef Frank, Josef Hoffmann, Greta Lihotzky and Adolf Loos – to work on projects for improved and, above all, rationalised social housing. He would have also known Frank as the brother of the physicist Philipp Frank, one of the core members of the Vienna Circle.

While the distant model was Ebenezer Howard's garden city, transmitted via the German Garden City Association (Deutsche Gartenstadtgesellschaft), Neurath's politics were much further to the left than Howard's revisionist liberalism,

which offered 'a peaceful path to real reform'.[4] Neurath favoured simple terraced houses with connecting gardens and a communal house in the middle to serve as a centre and meeting point. He envisaged the end of private kitchens and planned to fuse mini-kitchens and living rooms as a transitional phase. He also proposed, as did the Soviets in the mid-1920s, the communal raising of children, as well as youth care and communal cultural and educational facilities. Neurath's Association was administered by the city housing department, which employed Adolf Loos as head of Vienna's Settlement Bureau (Siedlungsamt) from May 1921 until June 1924. In this context Loos designed his 'House with one wall', while Greta Lihotzky drew up plans for very basic 'core houses' to be sited on allotment plots, few of which were actually built. Various exhibitions on model housing were also arranged, the most significant being the 'Fifth Viennese Allotment Garden, Settlement, and Housing Exhibition', staged in and around the Town Hall in September 1923. In addition to prototypes of the core houses and displays about fruit-growing, bee-keeping and ingenious uses for rabbit fur, the exhibition offered statistical information on the goals of the settlement movement to the 200,000 visitors that attended.

By 1923, however, the city council had decided that self-help cottage housing would not solve the housing shortage in Vienna, and it launched the mass programme of large-scale housing blocks, the *Gemeindebauten* of Red Vienna. Although Neurath's Settlement and Allotment Garden Association was commissioned to design one of the early superblock schemes – the Leopold-Winarsky-Hof/Otto-Haas-Hof in Vienna's 20th District – design on this scale could be entrusted only to professional architects, rather than to self-help builders, and this project involved the work of such luminaries as Adolf Loos, Peter Behrens, Josef Hoffmann, Josef Frank, Franz Schuster and Oskar Strnad. Responding to this situation, Neurath was very positive indeed about the particular contribution of architects to the social revolution. In an important article from this period entitled 'City Planning and the Proletariat', he wrote:

> In the field of architecture, the centralism characteristic of proletarian socialism reaches down to meet and join forces with the upward growth of grass-roots democracy and self-government. Co-operation between the architects and the working population as a whole must be pushed to the point where something of the aspirations, the dream, living in all our minds, finds expression in the new architecture. And while the architect's expert judgment must be deferred to, there is plenty of scope for the life of the ordinary individual to make its mark. The architects will come before the forum of working people full of hope that the projects they dream of realising will meet the aspirations of the working people. They will have to listen carefully to the message of social trends, if they are to remain in harmony with a developing society. One of our first artistic and organisational imperatives must be to explore and analyse these issues and to make more or less conscious use of the insights gained to guide us when we set out to design public space. It will no

> doubt take a whole generation for all design and construction activity to be embraced in a single comprehensive movement. The changing fortunes of proletarian power and proletarian organising ability will be unmistakably reflected in contemporary architecture. But even today architecture can be seen to have emerged as a significant strand within the proletarian cultural movement.[5]

In the same text Neurath argued for mixed development in which dense, multi-storey blocks would give way towards the edge of the city in favour of allotments and cottage housing.

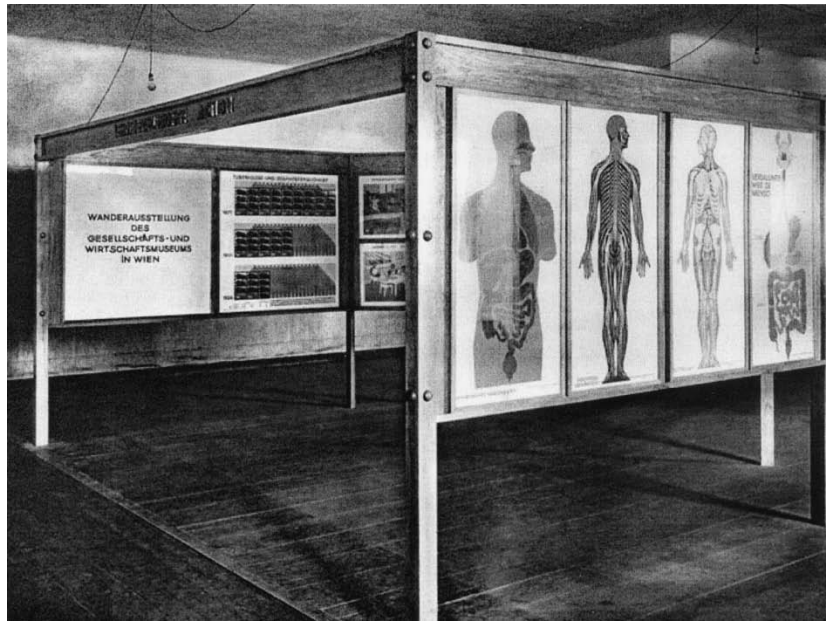
The city council's decisive move towards the superblock as the solution to Vienna's accommodation problems marked the end of Neurath's first housing initiative. As Nader Vossoughian has noted:

> Increasingly coming to grips with the realities of the housing shortage, the Settlement and Allotment Garden Association had for the most part to forego the aspirations of cooperative settlement development, opting instead for collectivized high-rises built by professional laborers. In doing so, it had to relinquish much of its original mission, which had been to educate and support the cooperative laborer in the context of allotment garden development.[6]

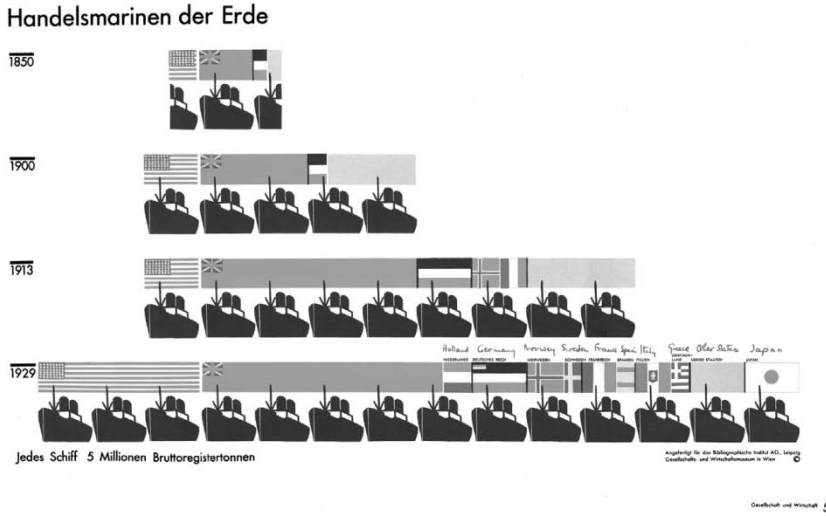
As a consequence of this, after 1924 Neurath redirected his boundless energies towards visual education and into transforming the housing museum that had been opened in 1923 into a broader enterprise. The launch-pad was the Viennese Hygiene Exhibition (*Die Große Hygieneausstellung in Wien*), held in May and June 1925.

This evolved into a permanent exhibition – the Museum of Society and Economy (Gesellschafts- und Wirtschaftsmuseum) – which was housed in the Town Hall in Vienna. The installation of the displays was designed by the architect Josef Frank and was structured around three themes: Labour and Organisation, Life and Culture, and Housing and Urban Development. Consistent with Neurath's anti-foundationalist position, all of these areas were inseparably linked and inter-connected. He saw the primary task of the museum as the development of methods to inform the public about the results of sociological and economic research. Since the socialist future would depend on educated citizens, a method was needed to convey basic social knowledge to the people. The prime vehicle developed by Neurath for this purpose was pictorial statistics, and one of the first exhibits in the new museum was a picture display with the unambiguous title 'Income and Mortality from Tuberculosis in Vienna in the year 1913'. From this beginning evolved the Vienna Method of Pictorial Statistics (*Wiener Methode der Bildstatistik*), which in 1935 was renamed the International System of Typographic Picture Education: Isotype.

To turn a pedagogic idea into a system, Neurath laid down a set of six basic rules. The result was a design method generating symbolic forms that are as



2.1
Museum of Society and Economy (Gesellschafts- und Wirtschaftsmuseum) Vienna, 1926 (installation by Josef Frank)



2.2
'Merchant Fleets of the World'

simple and abstract as possible, strictly two-dimensional, brightly coloured, with heavily delineated edges, and bold, simple captions that contrast sharply with a white background. The same type of object is always represented by the same symbol, so that a symbolic language is imprinted on the viewer's memory. Rows and linear arrangements of flat, non-perspectival symbols were considered easier to compare with one another than volumes or pie-charts. 'It is preferable', insisted Neurath, 'to memorise simplified quantitative pictures than to forget exact numbers.'[7] His ambition here was to democratise knowledge, drawing on the naturally inclusive form of the icon and on the heightened receptivity to visual images which blossomed in the early twentieth century through films, illustrated journals, advertising and window displays, neon signs in the cities, and so on. Neurath explained:

> Modern man is preeminently a visual being. The advertisement, the information poster, illustrated journals and magazines provide the great part of all education for the broader masses. Even those who read a lot derive ever-increasing stimulation from pictures and picture sequences. The exhausted person quickly comprehends something pictorial, which he would not be able to understand from text. Furthermore, visual didactics are means of opening up educational opportunities that would otherwise be out of reach to less educated adults – who tend to be more optically receptive – or to underprivileged youth . . . Words divide, pictures unite.[8]

In contrast to the private world of the book, visual languages are more suited to public discourse and discussion: the greater the number of people who understand the signs, the broader the discussion. In their simplicity, Neurath's pictograms gain a heightened truth, not because of any true similarity with the object depicted, but because of their profound deviation from this similarity. Their truth is thus symbolic and able to link the tangible with the non-tangible: Viennese children with economic indices, for example, or with the invisible tuberculosis bacillus. The close attention to the concerns of the intended audience – the urban proletariat – guaranteed a heightened receptivity, and confirms E. H. Gombrich's proposition that 'the greater the biological relevance an object has for us the more we will be attuned to its recognition – and the more tolerant will therefore be our standards of formal correspondence'.[9]

From its origins in Vienna, which focused on the debates around housing and hygiene, Neurath's system of symbolic signs took on a broader, autonomous existence. In collaboration with the German artist Gerd Arntz, Neurath published in 1930 his standard work *Gesellschaft und Wirtschaft: Bildstatistisches Elementarwerk*. His own work also took him well beyond the confines of Vienna: in the later 1920s he was involved with Paul Otlet's project for a Mundaneum – an intellectual and cultural meeting point for the world and a repository of all human knowledge;[10] and he travelled to Moscow in 1931 to train Soviet statisticians in visual representation. Moscow was also the location for a series of meetings that

2.3
Gerd Arntz, 'Above and Below, 1931'



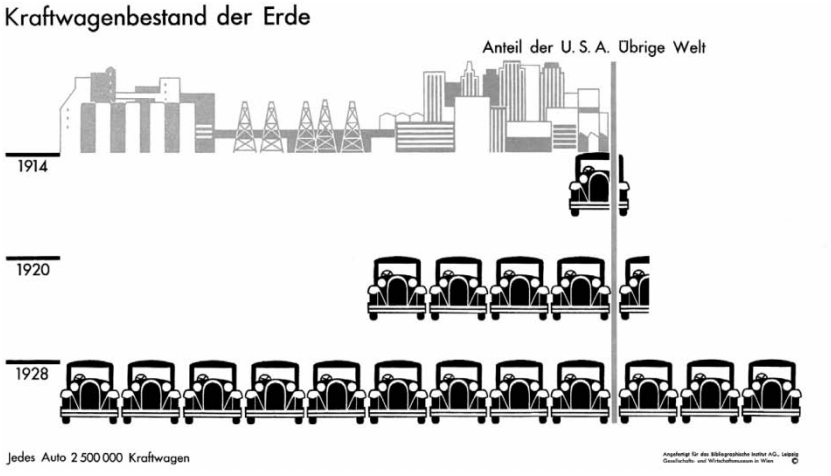
Neurath held with CIAM (Congrés internationaux de l'architecture moderne) delegates in 1932 to plan an exhibition; this was intended to run concurrently with the CIAM congress initially scheduled to be held in Moscow in the summer of 1933, but subsequently moved to Athens. The key issue in these discussions was the definition of, and agreement on, a set of visual symbols that would enable 'comparative city planning'. This notion was proposed by the Amsterdam-based planner, Cor van Eesteren, who had also made the initial contact between Neurath and CIAM. Led by Neurath's example, van Eesteren and his Dutch colleagues produced three maps of Amsterdam as examples of the method that the other CIAM participants should adopt in order to make it possible to compare their own cities with others. Van Eesteren's team also devised seventy-two symbols for use on the maps. As described by Vossoughian, these symbols were

> divided into roughly two groups, one devoted to the 'existing' city and the other to the 'projected' city. They notated a range of locations and functions: industrial areas, public services, central markets, harbours, sheds, and petroleum docks; slum dwellings, working, middle, and upper-class districts; woods, park areas, allotment gardens, swimming facilities, and yacht roods; gardens, zoos, cemeteries, and train tracks.[11]

This shared visual vocabulary based on standardised plans and symbols was very significant in that for the first time it created the basis for the comparison of cities around the globe. However, it also forced very diverse and complicated organisms into very tight and unbending matrices, which may well have hidden or distorted more than they revealed. Ultimately, the CIAM delegates were comparing maps and statistical diagrams rather than cities. This dry, desiccated, and ideologically driven approach found little lasting support among the architects in CIAM, who were generally more interested in physical and zonal planning within the city, rather than in statistical data; in a letter to László Moholy-Nagy, even van Eesteren spoke of 'Neurath's rather limited system'.[12]

The cooling relations between Neurath and CIAM were overshadowed by the worsening political situation in Vienna and the increased threat from the political right. Neurath decided to leave Vienna in 1934 and, significantly, he did not go to Moscow but to the Hague. From there he launched the International Union of Unified Science, working with such luminaries as Niels Bohr, John Dewey, Bertrand Russell, Rudolf Carnap and Charles W. Morris. In partnership with Morris, the eminent Chicago-based semiologist, Neurath founded the *International Encyclopedia of Modern Science*. This was an additive encyclopedia, in which all the elements of knowledge were presented as part of a greater picture – much like the Isotype image. In both models, the individual elements were intended to fit together to form the larger body of knowledge.

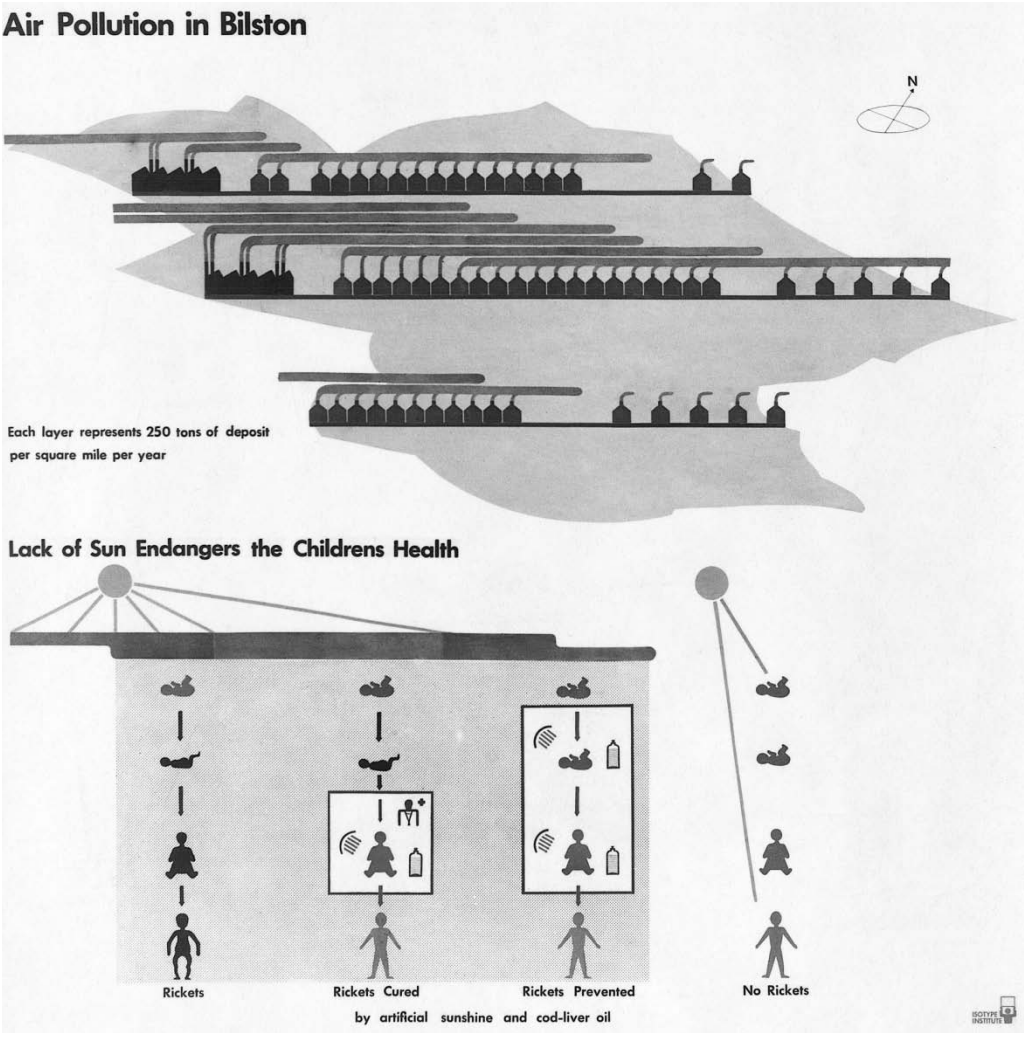
Just as the German army advanced into Holland in 1940, Neurath and his second wife, Marie Reidemeister, escaped by boat to England, where he was promptly interned as an enemy alien on the Isle of Man – together with the artist Kurt Schwitters, the painter Ludwig Meidner, thirty or so university professors and lecturers, and Peter Schidlof and Siegmund Nissel, who subsequently made up half of the Amadeus Quartet.[13] He was released in February 1941, and with the help of the philosopher Susan Stebbing and the economist G. D. H. Cole, he and Marie moved to Oxford, where they continued to work on visual statistics and



2.4
'Car Ownership in the World'

documentary films. At this time Cole himself was very prescient of the importance to any future socialist government of effective publicity at the local level. In his *Plan for a Democratic Britain*, published in 1939, Cole noted that:

> The Government will be powerless to further the cause of democracy unless a large section of the people clearly understands what it is trying to do, not merely in general terms but with an intelligent knowledge of its actual measures. Publicity, therefore, will be of the first importance; and with publicity will have to go the largest degree of decentralisation and local initiative that can be reconciled with effective central direction.[14]



2.5
Marie Neurath, 'Air Pollution in Bilston'

The local initiative that ultimately attracted Neurath's attention was the post-war project to rebuild Bilston.

In spite of the failure of his collaboration with the professional architects in CIAM, Neurath had never abandoned his faith in the Isotype system as a polemical tool in the housing debate. In the summer of 1937, through the intercession of his North American colleagues, he had published in the *Architectural Record* an article entitled 'Visual Representation of Architectural Problems'. But in contrast to his polemics of the Viennese period, which were grounded on the Austro-Marxist agenda, Neurath by the late 1930s was driven by a more generalist and more benign concern, namely 'human happiness'. As he argued in this article:

> If we wish to explain the general importance of a new architectural project or idea to specialists in various branches as well as to laymen, we must show how people live and act within buildings such as houses, schools, factories, hospitals, museums, libraries; how men walk along streets, go by car or other vehicles; how men use parks, beaches and other places of recreation. We must also show how buildings, streets, parks and other architectural elements are important for the entire life of a community. That is to say, it is not enough to represent location and motion of men, vehicles and other things – one must also give a picture of the factors which condition human happiness.[15]

So, in the Bilston context, Neurath saw himself a consulting sociologist of human happiness.

Bilston had grown up around iron. In 1767 an ironmaster named John Wilkinson had established his first blast furnace in Bilston for the manufacture of pig iron, and by 1775 output had doubled after the installation of a Boulton & Watts steam engine. By 1940, however, these pioneering ironworks and the town that had grown up around them were in a poor state. A civic survey of Bilston was carried out in 1944 and an exhibition of the results was held in Bilston Town Hall in September of that year. This revealed that of the 7,771 houses in the town no less than 2,655 were unfit for habitation, while a further 1,176 – although in a reasonable state of repair – had no proper provision for sanitation.[16] The poor housing conditions were further aggravated by heavy air pollution, with an estimate of 13,000 tonnes of silica, antimony and arsenic dust descending each year on each square kilometre and a half of the town. To address this appalling situation, the well-informed and ambitious city council sought out the expertise that would enable a radical solution to be found for Bilston's problems.

Otto Neurath was invited to Bilston in July 1945 to help to engage the local community in the ambitious programme of slum clearance and rehabilitation by elucidating and making visible the sociological dimensions of the problem. The physical planning was given over to Sir Charles Reilly, who was appointed after Neurath and proposed 'Neighbourhood Architecture'. This involved small housing estates grouped around communal greens, planned in a way that would allow people direct access to communal facilities such as nursery schools and social

clubs without having to cross busy streets. It was a very English idyll, completely in accord with the renewed interest in picturesque planning that dominated large British architecture in the immediate post-war years.[17] In Reilly's own words, published in 1947:

> We are a social race brought up in villages and round village greens, knowing our neighbours, and we inherited from the Greek Agora and the Roman Forum the market place for the exchange of ideas as well as goods. In the seventeenth, eighteenth and nineteenth centuries we developed the square, the crescent and the circus. The Bilston greens are usually oval in shape (but not strictly elliptical, to avoid the necessity of similar and symmetrical houses on either side) and radiate like the petals of a flower from the centre where is placed the Club house. Together they form a communal unit in the town which, like the buildings at King's College Cambridge, I propose should be named each after its architect.[18]

The best of Greece, Rome and Cambridge was to be combined in rebuilding a post-war paradise in the industrial heart of England.

The instruments of persuasion favoured by the Neuraths were an exhibition and a 'carefully worded pamphlet in which the emphasis was on the suggesting of ideas and the posing of questions rather than on dictatorial exposition'.[19] The thinking behind the exhibition can be seen in a lecture given in September 1945 by A. V. Williams, the Town Clerk of Bilston, in which he argued that the civic survey on the model established by Patrick Geddes also had a didactic function:

> The only effective education for the public in planning is through the actual process and products of planning. The lack of interest in civic design and planning in the past and incidentally the lack of interest in civic affairs and the politics of everyday life has surely arisen through the poverty of educational material.[20]

Williams insisted that the survey methods should involve a broad spread of specialists including historians, sociologists, architects and engineers. The data gathered in the survey would then be transformed into diagrams and maps for the purposes of an exhibition designed to inform and educate the public. 'From the public point of view,' said Williams:

> the exhibition is the culmination of the survey and with quite modest resources at their disposal, the local authority can arrange for the public an exhibition of their area which is well documented and illustrated. It is generally accepted that the visual presentation of facts is the best means of creating and fostering argument. And it is argument which the planners should require of their public in order to keep interest alive.[21]

Only three months after the Town Clerk had so vigorously endorsed the power of visual didactics, Otto Neurath died, making the Bilston exhibition his last, posthumous initiative. This was completed by his widow and opened in November 1946. Whereas its predecessor in 1944 had been held in the Art Gallery, this new, Neurath-designed show was held in a slum shop to make it more accessible to the broader public.

The night before the opening of the show, Dr Robert Abbott, the Chairman of the Bilston Health Committee, gave a talk on the BBC Midland Service, explaining the intentions to the local listeners. The goal, he said, was to educate the future residents about the social intentions that lay behind the planning of the new housing, and to prepare them – even before the houses were completed – for the management of their new lives.

> Our first step is the staging of an unusual exhibition in an unusual place. It will be opened tomorrow in a shop in one of the worst districts . . . If we want to see this exhibition, perhaps to approve, perhaps to criticise, go to the depths of the Black Country, to Oxford Street in Bilston where in a few minutes you will learn more about re-housing problems than a month of concentrated study could teach you.[22]

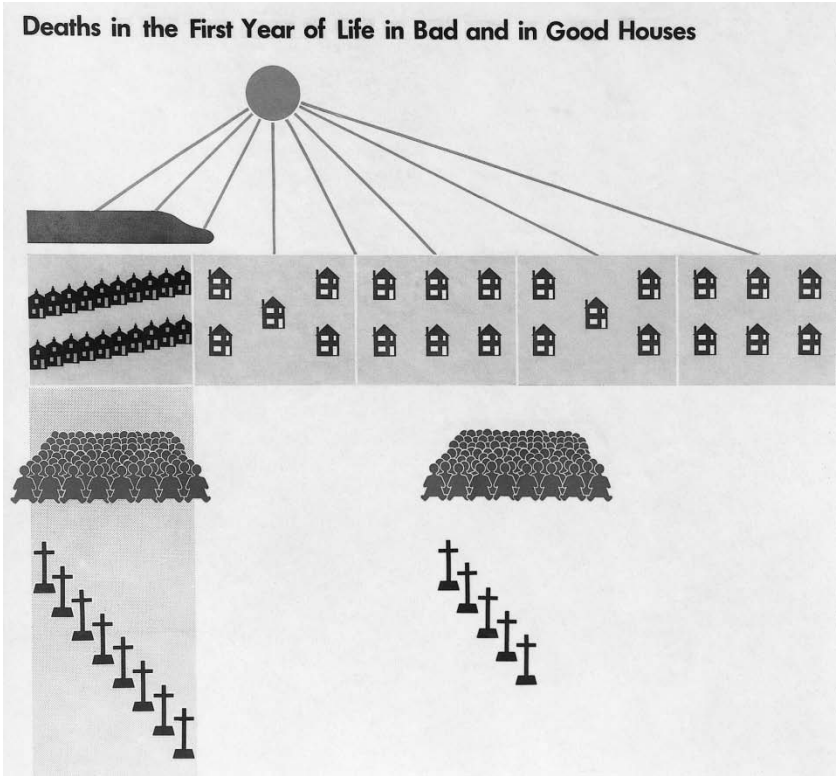
Twelve major questions were posed in the exhibition on brightly coloured charts over a metre square. In paraphase, they asked:

1. How can bad housing be replaced and good housing retained?
2. Where can space to build be obtained?
3. What should the mix of large and small houses be?
4. How does this depend on the existing supply of usable housing?
5. How should new districts be laid out?
6. Who should get the new houses first?
7. How can we get more sun into our lives?
8. Would zoning and smoke control help this?
9. How is infant mortality affected by sunshine and clean air?
10. How can we avoid the spread of infectious diseases?
11. What social spaces will enable people to live healthier and happier lives?
12. Why do we bother so much about spare time?[23]

The information that would help visitors to the exhibition to frame their answers to these questions and would put forward the council's own plans for the future was captured in Isotype images that vividly depicted the present condition and the future prospects.

One of the more contentious elements of the exhibition, however, was the contribution provided by Derek Wragge Morley, an entomologist and sociobiologist, of a 'formicarium', an ant colony, which was on display in a glass case. As the slim brochure to the exhibition asked, vis-à-vis the ants: 'What do we

2.6
Marie Neurath, 'Deaths in the First Year of Life in Bad and Good Houses'

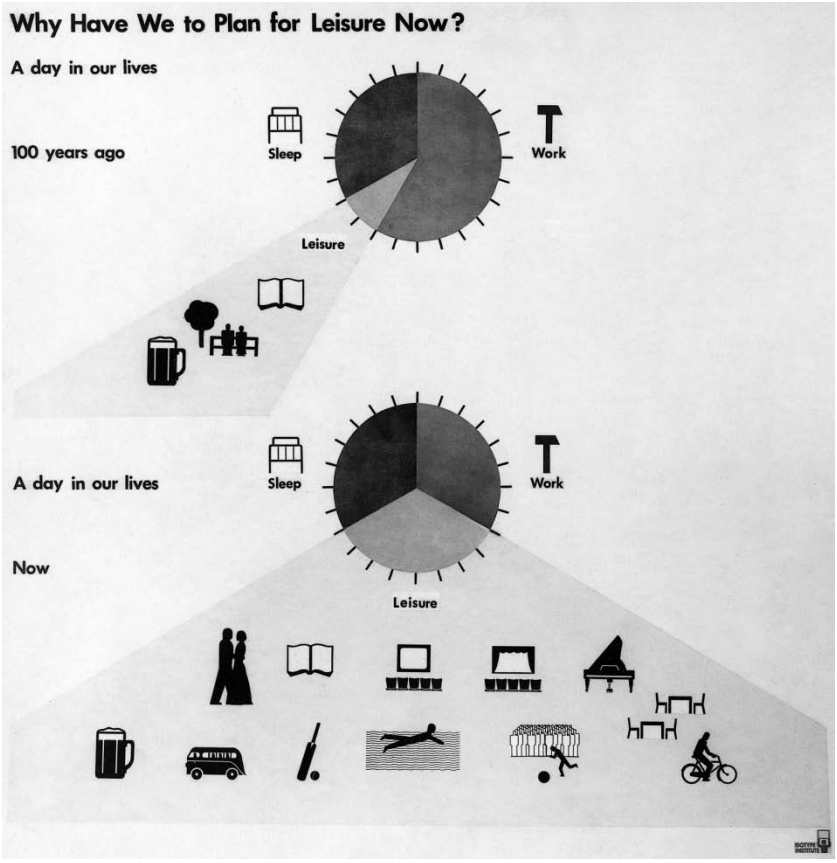


gain from making such a study?' The answer came that the study of ants could explain to people the progress from non-functional individuality to community:

> We learn that in the earliest ants the individuals behave very much like one another. They do things separately yet are more like living machines than those living in the larger later-developed communities. The later-developed ants can learn more complicated things. They differ greatly in their ability to learn also in the jobs they do and the way they do them. They have gained more of their primitive individuality, not lost it, yet there is greater co-operation (greater in many ways than in men) and a greater division of work.[24]

The success of this particular display was questionable: however enlightening the social habits of the ant might be for a scientist such as Morley, the paternalistic equation of the Bilston working man with the ant cannot have endeared the exhibition to its target audience.

At the time, the Bilston initiative was described as 'a sociological approach to town planning'. One of the vital points of contact between the physical planner and the sociologist was the untapped wealth of public opinion. As Morley explained:

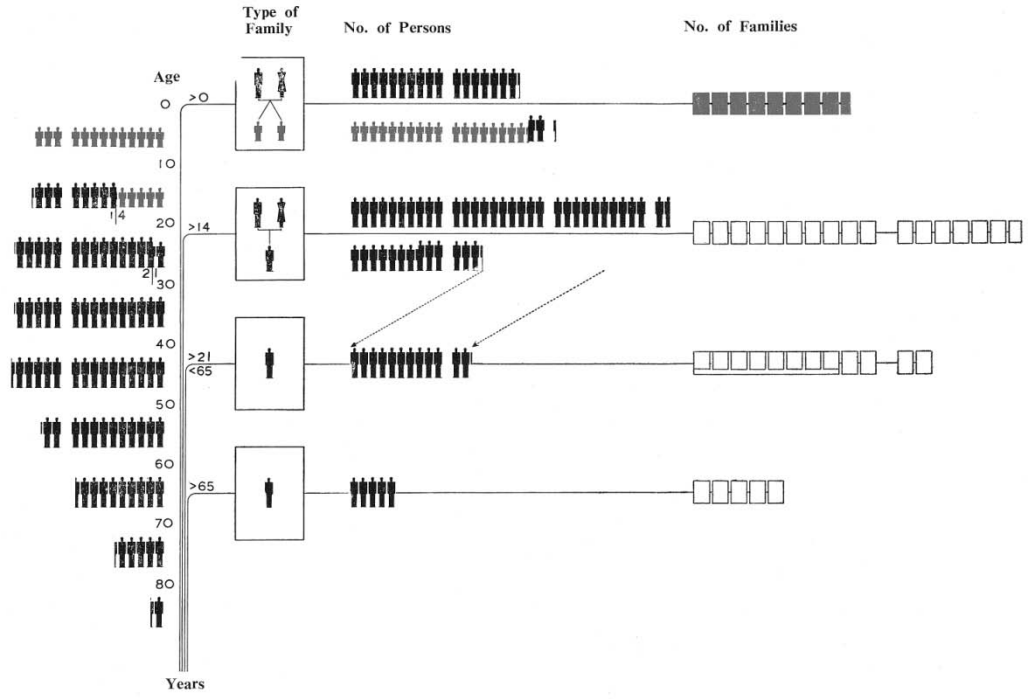


2.7
Marie Neurath, 'Why Have We to Plan for Leisure Now?'

> They [the people] should be stimulated by questions and answers, proposals and criticisms, to take an interest in their future welfare, to make full use of the advantages of the plans proposed and play their full part in their development and alteration, and in fact develop a new and active life.[25]

In its attempt to bridge the gap between the professional and the public, the Bilston team anticipated current theories of advocacy planning. Comparable to present-day advocacy or citizen-centred planning, the process at Bilston was seen neither as value-neutral nor as a linear process with a set format and predictable outcomes. As Sybilla Nikolow concludes from her excellent analysis of Marie Neurath's Bilston charts: 'Here planning is portrayed not as a centralized process from the top down but as a partially incomplete process.'[26]

Little came of the generous social experiment proposed by the Bilston Town Council. The exhibition was closed prematurely following pressure from opposition parties in the council, while funding was withdrawn by the central government after only 165 houses had been built.[27] G. D. H. Cole's plea for 'the



2.8
APRR, Broadsheet no. 3, 1942(?), 'Distribution of 100 Persons by Age Groups and by Families in 1950'

largest degree of decentralisation and local initiative that can be reconciled with effective central direction' was resolved in favour of the centre, and the Bilston experiment was doomed to be a fascinating exercise in popular democracy and decision-making, conducted primarily in graphic form.

Although Neurath had died even before the Bilston initiative met its own demise, his mission to present visual sociology to a broad public via the Isotype did have an influence on the polemics of post-war planning in his adopted country. This influence did not come simply through the Bilston model, but also through his books. The basic guide to his sign system, *International Picture Language: The First Rules of Isotype*, was published in London in 1936, and it was followed three years later by *Modern Man in the Making*, an account of the social and economic phenomenon of modernity explained in text and in Isotype image, which was published both in New York and in London.[28]

Among the beneficiaries of Neurath's work in Britain was the Association for Planning and Regional Reconstruction (APRR), which was based in London and directed after 1938 by Eric Anthony Ambrose Rowse.[29] Thanks to Rowse, the APRR had a strong Geddesian pedigree and a predisposition toward visual argumentation. In the 1940s, it published a series of broadsheets dedicated to planning, health and the national economy, which made some use of the Neurath

method. Broadsheet no. 3, for example, undated but probably from 1942, carries a figure entitled: 'Distribution of 100 Persons by Age Groups and by Families in 1950'. This is a demographic forecast of Britain in 1950, predicting the volume of new housing and the mix of housing types that would be needed. The report concluded that a minimum of 2,716,000 housing units would be needed by 1950 to satisfy the needs of a growing population and to compensate for the losses through slum clearance and 'bombardment effects'. Although the accompanying text is extraordinarily convoluted,[30] the visual presentation would make little sense without it, suggesting that the pure Isotype image, offered without any explanation, is not well suited to the explication of multi-layered information. Because of this, the Isotype was used by the APRR more as an illustrative narrative than as the prime bearer of the relevant information, as can be seen in the volume of *Maps for the National Plan: A Background to the Barlow Report, the Scott Report, the Beveridge Report*, published in 1945.[31] This volume of maps employs a mixture of graphic techniques, all superimposed on an outline map of Britain. Isotype figures, pie charts, bar charts, areas of hatching and occupational symbols are all employed on the maps, either singly or in combination. A more successful adoption of the Neurath model is to be found in E. J. Carter and Ernö Goldfinger's *The County of London Plan*, from 1945. In contrast to the APRR texts, which were aimed at professional planners, this was published by Penguin for a broad audience – precisely the public intended for the Isotype.[32]

According to Neurath, the purpose of the Isotype was

> to give all men a common starting-point of knowledge, to make one united science, forming a connection between the special sciences and putting together the work of different nations, to give simple and clear accounts of everything as a solid base for our thoughts and our acts, and to make us fully conscious of [the] conditions in which we are living.[33]

The claim, however, that the empirical-analytical sciences could provide *the* model for all legitimate knowledge is impossible to substantiate. Even within the realm of Unified Science, it was admitted that the diversity of modern existence could not be captured by one language. In an article on the theory of signs, published in the *Encyclopedia*, Charles W. Morris admitted that:

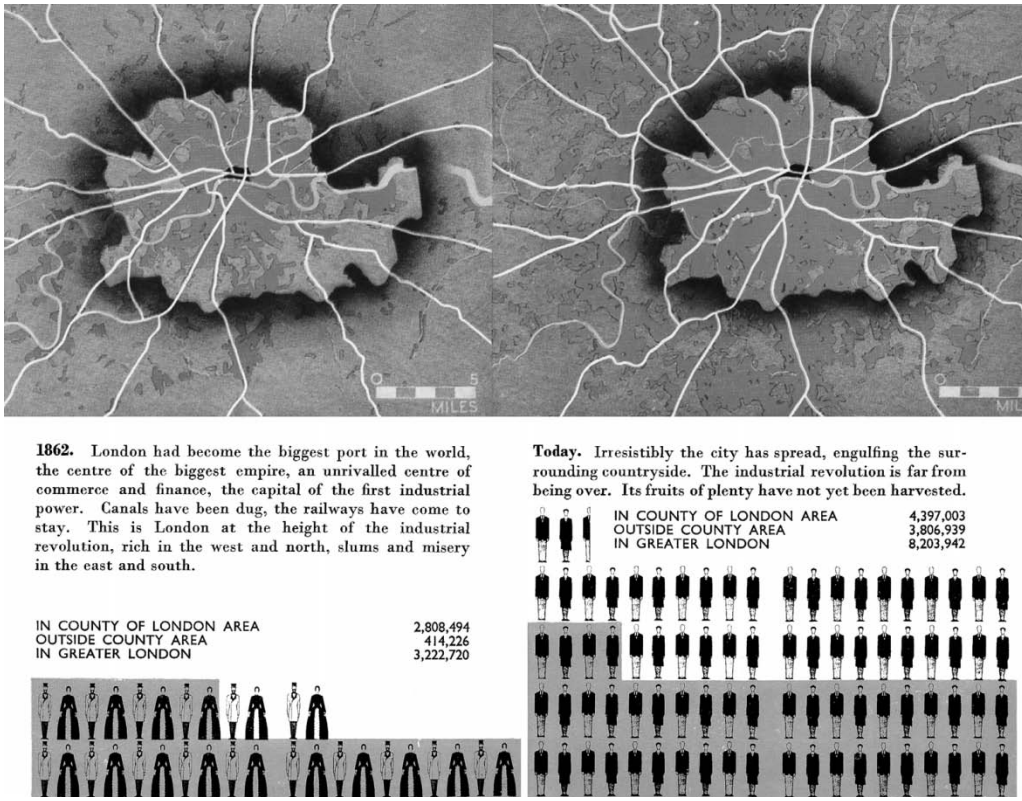
> The very devices which aid scientific clarity may weaken the potentialities for the aesthetic use of signs, and vice versa. Because of such considerations it is not surprising that men have developed certain special and restricted languages for the better accomplishment of certain purposes: mathematics and formal logic for the exhibition of syntactical structure, empirical science for more accurate description and prediction of natural processes, the fine and applied arts for the indication and control of what men have cherished.[34]

It could also be argued that city planning, as compared with the mere provision of housing, demands all the above languages and more to embrace the enormous

2.9
APRR, 'Low Paid Employment 1931' from *Maps for the National Plan*, 1942, p. 54



54



2.10
E. J. Carter and Ernö Goldfinger, ***County of London Plan***

complexity of the contemporary city and the many semantic layers on which it operates. Even Neurath himself, in another text in the *Encyclopedia*, argued that 'it is useful to avoid dogmatism and bumptiousness in scientism and empirical panlogism. One can love exactness and nevertheless consciously tolerate a certain amount of vagueness.'[35] Neurath opened the door here to the hermeneutical tradition of the humanities, which resisted what it saw as the false objectivism and certainty of the empirical-analytic agenda. As Jürgen Habermas notes in this context: 'The verification of lawlike hypotheses in the empirical-analytical sciences has its counterpart in the interpretation of texts. Thus the rules of hermeneutics determine the possible meaning of the validity of statements in the cultural sciences.'[36] Planning practice operates uneasily between these two realms, negotiating between the apparent certainties of the boffin and the explicit prejudices or 'texts' of the middle-class professional, who wishes to bring the aura of King's College Cambridge or of Siena's Piazza del Campo to mass housing. Post-war Britain – a world of chronic fatigue, extensive war damage, labour unrest and food rationing – had little resistance to either, yet found no alternative voice. Ultimately, however, it may not have mattered. As a chronicler of the recently built Stevenage New Town commented in 1953:

> It may be concluded, therefore, that there are no universally acceptable architectural or sociological principles for engineering the happiness and success of neighbourhood or community, but only different principles catering to the needs of different social groups and planners. Many new town planners try to understand and cater to the needs of industrial workers, but, as no full-time planner is himself an industrial worker, it is more than likely that mistakes will be made. Again, most key planners are salaried intellectuals whose outlook differs in certain respects from that of the commercial and white-collar middle classes for whom the new town will cater, so here, too, mistakes are likely. Fortunately, many planning decisions are unlikely to affect the happiness of the new town residents one way or the other, for the residents will probably be less concerned about them than are the planners and, being ordinary people and not abstractions, will be able to adjust satisfactorily to a variety of physical and social environments.[37]

In the last months of his life, Neurath would appear to have agreed with this very pragmatic conclusion. Loosening his grip on the scientific rationality of the Vienna Circle, and in response perhaps to the dogged resistance of all classes of British society to high theory, he confessed: 'One can hardly imagine that rigid principles will prevail; rather a gigantic "muddling through" may be the characteristic of a future world community in which orchestration will play a greater part than unification.'[38]

Notes

1 Marie Neurath, 'Preface', in Marie Neurath and Robert S. Cohen, *Otto Neurath: Empiricism and Sociology*, Dordrecht and Boston, MA, Riedel, 1973, p. xiii.
2 Otto Neurath, 'Empirische Soziologie: Der Wissenschaftliche Gehalt der Geschichte und Nationalökonomie', in *Schriften zur wissenschaftliche Weltauffassung*, vol. 5, Vienna, Julius Springer, 1931, p. 89.
3 Grete Lihotsky, 'Wiener Kleingarten- und Siedlerhütten-Aktion', *Schlesisches Heim*, 4, no. 3 (1923), p. 83. Original German from Nader Vossoughian, *Facts and Artifacts, Otto Neurath and the Social Science of Socialization*, unpublished Ph.D. dissertation, Columbia University, 2004, p. 126, translation Iain Boyd Whyte.
4 Ebenezer Howard's book on the garden city was first published in 1898 under the title *To-Morrow: A Peaceful Path to Real Reform*, London, Swan Sonnenschein, 1898. It was republished in 1902 as *Garden Cities of Tomorrow*, London, Swan Sonnenschein, 1902.
5 Otto Neurath, 'Städtebau und Proletariat', *Der Kampf: Sozialdemokratische Zeitschrift*, 17 (January–December 1924), pp. 238–40.
6 Vossoughian, *Facts and Artifacts*, p. 98.
7 Otto Neurath, 'Das Gesellschafts- und Wirtschaftsmuseum in Wien', *Minerva Zeitschrift*, 7, no. 9/10 (1931), pp. 153–6.
8 Otto Neurath, 'Bildstatistik nach Wiener Methode', in *Die Volksschule*, 27, no. 12 (1931); quoted from Neurath, *Gesammelte bildpädogogische Schriften*, Vienna, Hölder-Pichler-Tempsky, 1991, vol. 3, p. 189.
9 E. H. Gombrich, *Meditations on a Hobby Horse and Other Essays on the Theory of Art*, London, Phaidon, 1963, pp. 6–7.
10 In 1928 Otlet invited Le Corbusier and Jeanneret to design the World Museum, and they responded with a spiral-form ziggurat that would employ dioramas, graphic images and statistics, and a range

of natural and constructed products to tell the history of the world; see Giuliano Gresleri, 'The Mundaneum Plan', in Carlo Palazzolo and Riccardo Vio (eds), *In the Footsteps of Le Corbusier*, New York, Rizzoli, 1991, pp. 94–117.

11 Vossoughian, *Facts and Artifacts*, pp. 275–6.

12 Cornelis van Eesteren, letter to László Moholy-Nagy, 4 September 1933, quoted in Vossoughian, *Facts and Artifacts*, p. 282.

13 So dense was the academic population in the Isle of Man internment camps that the inmates started up the Popular University, with thirty different courses; 600 students attended daily. See Connery Chappell, *Island of Barbed Wire*, London, Robert Hale, 1984, pp. 113, 184.

14 G. D. H. Cole, *Plan for a Democratic Britain*, London, Labour Book Service, 1939, pp. 34–5.

15 Otto Neurath, 'Visual Representation of Architectural Problems', *Architectural Record*, (July 1937), p. 57.

16 F. Barnett, 'Housing and Overcrowding in Bilston', in W. L. Kay (ed.), *Bilston Civic Survey*, Bilston, 1944.

17 The most prominent advocate of the picturesque sensibility at this time was Hugh de Cronin Hastings, editor of *Architectural Review.* Under the pseudonym I. de Wolfe, he berated post-war Britain as a

> mid-twentieth-century world of barbed wire, electric cables on crazy fir standards through which as through a cage darkly, we are permitted to get an eyeful of lone villas, poultry farms, Radar stations, motor-car graveyards, Homes for Incurables – all clipt around with plantations of larch and fields of surprised looking wheat.
>
> I. de Wolfe, 'Townscape', *Architectural Review* (December 1949), p. 355

18 Sir Charles Reilly, 'A Town Planner's Solution', in Derek Wragge Morley, A. M. Williams and Sir Charles Reilly, 'Sociological Approach to Town Planning: The Bilston Experiment – A Problem in Social Housing', *Discovery: The Magazine of Scientific Progress*, vol. VIII, no. 8 (August 1947), p. 253.

19 Wragge Morley in ibid., p. 251.

20 A. V. Williams, 'Public Education in Planning', typescript of the lecture delivered to the Town and Country Planning Summer School, Bristol, September 1945, p. 5, Isotype Collection, University of Reading, Department of Typography and Graphic Communication, MS 1091, 3.2/93.

21 Ibid., pp. 12, 13.

22 Typescript of the talk by Dr Robert Abbott, BBC Midland Service, Thursday 7 November 1946, 6.20–6.50 p.m., Isotype Collection, University of Reading, Department of Typography and Graphic Communication, MS 1091, 3.2/96.

23 Questions paraphrased from Marie L. Neurath, 'An Isotype Exhibition on Housing', *RIBA Journal*, series 3, vol. 54, no. 13 (October 1947), pp. 601–3.

24 Anon, *Catalogue to Bilston Housing Exhibition*, November 1946, no pagination, Isotype Collection, University of Reading, Department of Typography and Graphic Communication, MS 1091, 3.2/93–6.

25 Wragge Morley *et al.*, 'Sociological Approach to Town Planning', p. 250.

26 Sybilla Nikolow, 'Planning, Democratization and Popularization with Isotype ca. 1945: A Study of Otto Neurath's Pictorial Statistics with the Example of Bilston, England', in Friedrich Stadler (ed.), *Induction and Deduction in the Sciences*, Vienna Circle Institute Yearbook no. 11, Dordrecht, Kluwer, 2004, p. 306.

27 Ibid., pp. 310–11.

28 Otto Neurath, *International Picture Language: The First Rules of Isotype*, London, Kegan Paul, Trench, Trubner, 1936. And Otto Neurath, *Modern Man in the Making: A Book for the Intelligent Citizen Who Wants to Understand the World He Lives In*, New York and London, Knopf, 1939.

29 Among its diverse activities, the APRR – at the behest of the War Office – ran a correspondence course on planning for members of the armed forces and prisoners of war. The course was offered by an affiliate body, the School of Planning and Research for Regional Development in London, under the directorship of Jaqueline Tyrwhitt. As the APRR reported in December 1945: 'Over 1000 students have enrolled, and, on demobilisation, those who have reached a certain standard will attend a three months course, after which successful students will be exempt from the final examination of the Town Planning Insitute', (APPR, *Key to Broadsheets*, London, Lund Humphries,

1940, reprint 1945, no pagination.) One of the successful graduates was the architect Johnson-Marshall, who had enrolled on the course, while serving in India in the British army. One of the books that he had sent out to him in India, care of Grindley's Bank in Calcutta, was a copy of Otto Neurath's *Modern Man in the Making*. After working on secondment from the army as an advisor on planning and reconstruction for the government of Burma in 1945–46, Johnson-Marshall returned to Britain in 1947 and promptly bought himself a copy of Neurath's book *International Picture Language*.

30 Association for Planning and Regional Reconstruction, *Broadsheet no. 3*, London, Lund Humphries, no date [1942], no pagination, University of Edinburgh Library Special Collections, APRR papers, Geddes Collection, Box 3. The text reads:

> In considering the diagram and tables showing the typical distribution of 100 persons by age-groups in 1950, and of the same 100 persons by households, note that there are 8.65 families (of average size 4.35 persons) containing children under 14. This group comprises 37.5 per cent. persons, whom it is believed, should be offered house and garden accommodation. Next there is the group of 16.75 families (average size 2.7 families) with no children under 14, but containing the newly-married couples. The latter would perhaps be best suited to a house and garden, though the remaining families could very well occupy flat dwellings. The group comprises 45.2 per cent in all. The next group of 12.3 persons living singly are all over 21, and are drawn from the children of the second group, as indicated by dotted arrows. The last group comprises 5 per cent. of the total, mostly women, many over 65, which would equal about half the number of persons over 65. This group is composed of widows, widowers, spinsters and bachelors, not naturally attached to the family.

31 APPR, *Maps for the National Plan*, London, Lund Humphries, 1945. The Barlow Report was published in January 1940 by the Royal Commission on the Distribution of the Industrial Population. It was followed by the Scott Report, produced in July 1942 by the Committee on Land Utilization in Rural Areas, and by the Beveridge Report, which was published in November 1942 by the Inter-Departmental Committee on Social Insurance and Allied Services.

32 Edward Julian Carter and Ernö Goldfinger, *The County of London Plan Explained*, West Drayton, Penguin, 1945.

33 Neurath, *International Picture Language*, p. 111.

34 Charles W. Morris, 'Foundations of the Theory of Science', *International Encyclopedia of Unified Science*, vol. 1, no. 2, Chicago, IL, University of Chicago Press, 1938, pp. 11–12.

35 Otto Neurath, 'Unified Science as Encyclopedic Integration', *International Encyclopedia of Unified Science*, vol. 1, no. 1, Chicago, IL, University of Chicago Press, 1938, p. 21.

36 Jürgen Habermas, *Knowledge and Human Interests*, Boston, MA, Beacon Press, 1971, p. 307.

37 Harold Orlans, *Stevenage: A Sociological Study of a New Town*, London, Routledge, 1953, p. 101; quoted in Paul Addison, *Now the War is Over: A Social History of Britain 1945–51*, London, Pimlico, 1985, p. 84.

38 Otto Neurath, 'Visual Education: Humanisation versus Popularisation', *c.*1945; quoted in Nikolow, 'Planning, Democratization and Popularization with Isotype ca. 1945', p. 315.

Further reading

Nancy Cartwright *et al., Otto Neurath: Philosophy between Science and Politics*, Cambridge, Cambridge University Press, 1996

Robert J. Leonard, '"Seeing is Believing": Otto Neurath, Graphic Art, and the Social Order', in: Neil de Marchi and Craufurd D. Goodwin (eds), *Economic Engagements with Art*, annual supplement to *History of Political Economy*, vol. 31, Durham, NC, Duke University Press, 1999, pp. 452–78

Otto Neurath, 'Visual Representation of Architectural Problems', *Architectural Record*, (July 1937), pp. 57–61

Otto Neurath, *Gesammelte bildpädogogische Schriften*, Vienna, Hölder-Pichler-Tempsky, 1991

Edward Rolfe Tufte, *Envisioning Information*, Cheshire, CT, Graphics Press, 1992

Chapter 3

Surveying and comprehensive planning

The 'co-ordination of knowledge'[1] in the wartime plans of Patrick Abercrombie and Max Lock

Michiel Dehaene

A scientific horizon for national planning

The 1930s saw the gradual forging of a consensus in the political centre around the idea of national planning and planning in general. Elements of a national planning policy had been around and had figured in the campaign for a regional approach to town and country planning in the period following the First World War. In the 1930s, however, a different political climate emerged that would lead, during the Second World War, to the creation of what Cherry and others have designated as 'the corporate state'.[2] For a short time in history there seemed to exist the concrete promise of a full and mutual integration of social and economical forms of planning on the one hand and of the tradition of the town and country planning movement on the other.[3]

In the 1930s and 1940s the survey was the flagship for a more rational approach to planning, and in part it camouflaged a lack of incisive analysis of the socioeconomic problems. In spite of the widely accepted nature of survey rhetoric, the renewed emphasis on the survey brought to the fore a number of unresolved conflicts that had been latent in the earlier campaign for surveying in town planning which had been led by Patrick Geddes and others around the turn of the century.

For Geddes, the survey had been the necessary means to guarantee greater rationality in planning. He argued that the systematic recording of data and their careful representation and interpretation would gradually lead to a more balanced, complete and holistic understanding of the environment, beyond the reductive approaches promoted by nineteenth-century political economists. However, in addition to the systematic agenda of comprehensive data gathering in Geddes's early articles[4] (when he campaigned with Paul Otlet for the creation of an all-encompassing index museum and for intellectual kinship in the tradition of the French *Encyclopedistes*), his efforts for the better 'co-ordination of knowledge' were always accompanied by a different movement which could be designated as a search for the personalization of that knowledge.[5] For Geddes the survey was never only about the expansion of knowledge but, rather, about an expanded awareness of the environment and about man's place within it.

As the cornerstone of the new science of civics, the survey was an ode to man's capacity for self-determination. The Civics Section of the Sociological Society, which was founded and led by Geddes, complemented the Eugenics Section led by Francis Galton. Eugenics explored the evolution of society in so far as it was determined by biological heredity, while civics studied society as a non-deterministic project of cultural evolution that provided concrete points of entry towards self-determination by means of cultural education and of the care for the material heritage. City and regional surveys were part of the broader civics project, and the aim was that they would bring about a generation of caring and informed citizens who would be prepared to take the conscious shaping of cities and regions into their own hands. Surveying provided a natural introduction to planning, enhancing environmental awareness and self-understanding, in order to bring about, ultimately, a more responsive and responsible community.

Within the Geddesian survey project there were two contradictory dimensions – the provision of an objectified background as well as the promotion of a subjective agency. These united in an exalted moment of heightened awareness in which accumulated knowledge and personal determination seemed to coincide. Geddes' convoluted prose testifies to a constant slither between objective observations and highly personal assessments which are interwoven in a dense narrative text. Within this, the survey process reveals itself as a sort of shuttling movement between facts and values, observation and qualification, travelling back and forth in a continuous process of assessment and reassessment, forming a continuous pattern in which provisional interim findings are queried again.[6]

The renewed campaign for surveying in the 1930s was accompanied by repeated references to the earlier work of Geddes. Eric Anthony Ambrose Rowse

and Jaqueline Tyrwhitt were instrumental in cultivating the image of Geddes as the father of a research-based urbanism. In 1949 Tyrwhitt re-edited *Cities in Evolution*, trying to make it more accessible for contemporary readers. She also published fragments of Geddes' Indian plans in a book which, for a long time, remained the only commonly available source on Geddes' work in India.[7] And, in his campaign for national surveying, Patrick Abercrombie repeatedly acknowledged the importance of the teachings of 'Professor Geddes, the tireless preacher of a crusade against inconsidered planning'.[8]

However, the campaign in the 1930s differed in a number of significant ways from the survey movement earlier in the century, because it was linked to a different understanding of planning – to the idea of a scientific and rational administration of society rather than collective (re)education.[9] Patrick Abercrombie was one of the first to argue that the Geddesian survey formula was impracticable because of its lack of well-defined goals. In an early paper,[10] he indicated that surveying should be preceded by an initial step in which the planning problem was clearly formulated.[11]

The inherent openness of Geddes' approach to planning, namely to initiate the planning process with as few a priori assumptions as possible, was traded for an approach in which the normative goals were determined beforehand.

> The first necessity is to decide what attitude the future town planner intends to adopt toward urban existence; he must have a theory or basis of City Planning at the back of his head, so that all pieces of work undertaken may serve as definite fragments in the pattern of mosaic which he aims to accomplish.[12]

In other words, surveying needed to be organized in such a way that it would support the coherence of the plan.

If in the 1930s surveying was once again presented by the town planning movement as a remedy for irrationality and ill-considered action, it was not citizen participation and collective education that were at stake. The inherent dynamics of Geddes' survey philosophy – the co-ordination of knowledge and collective self-realization – were renegotiated in view of a different role model, one in which the planner-prophet would gradually be replaced by the professional expert. For Geddes, the planner was a guide and an inspiration for the community in its self-development; but for Abercrombie, Unwin, Adams and Pepler the planner was the advisor to the public authorities who held the power to regulate the organization of society and the environment.

The epoch-making commissions – by Barlow, Scott and Uthwath[13] – created the practical opportunities for a whole class of would-be planners to transcend the semi-informal context in which they had been operating and to present themselves as expert professionals. Over a decade of lobbying culminated in the establishment of the first Ministry of Town and Country Planning in 1943, with W. S. Morrison as the minister.[14] The creation of the new ministry marked the culmination of a long campaign for national surveying. In addition to

the Plans Division and the Legislation Division, it included a large Research and Techniques Division.

This first attempt at inserting survey work more solidly into the executive branch of government very quickly showed up the need to clarify the link between surveying and planning and the related search for the proper 'co-ordination of knowledge'. The research officers were supposed to function as counterparts to the regional planning officers in the Plans Division. This separation of tasks indicated the general philosophy of survey-before-plan in the form of a drama between the different administrative sections of the ministry. The interaction between these divisions, as Cherry and Penny have explained, proved to be highly problematic and eventually brought to the fore a general weakness in the conception of the relationship between survey and planning work.[15]

The difficulties in co-operation between these two divisions were more than just friction. Although the surveys produced in the Field Research Division by the regional research officers were more targeted and based on better informed research than the studies that had been produced in the pre-war years, they were descriptive and topographical in character. They did not deliver the sort of data upon which planning decisions could be based in a straightforward manner: the type of analysis that a regional geographer working for the Research Division was able to deliver was potentially valuable, but it lacked precision and quantitative detail.[16]

> If he were not himself in a position to influence events, the utility of his contribution would depend upon the extent to which those who read his work were so placed, and could participate in the understanding which had informed its production.[17]

'Teamwork' and 'standards'

While planners and social scientists were asking for a survey-based planning approach, they were in fact well aware of the problems underlying the co-ordination and transfer of knowledge within the planning process. In the first volume of *Creative Demobilisation*, Gutkind included a long excerpt from a presentation by Ove Arup before the British Association which summarized very well the contemporary approaches towards the resolution of this problem:

> The problem is the same here as in other spheres of human activity – a wealth of new knowledge, new materials, new processes has so widened the field of possibilities that it cannot be adequately surveyed by a single mind . . . This produces the specialist or expert, and the usual problem arises, how to create the organisation, the 'composite mind' so to speak, which can achieve a well-balanced synthesis from the wealth of available detail.[18]

Two solutions present themselves:

> One is to have planning carried out by a team of experts whose combined knowledge covers a substantial part of the relevant technical

> information. Another is to have all the technical information which may have a bearing on the problem checked up, classified, standardized and made easily available.[19]

Arup pointed to two watchwords of the technocratic planning ideal – 'teamwork' and the need for 'standards'. In survey-related discussions in the 1930s and 1940s there are numerous repetitions of these ideas.[20] Arup presented the two approaches under the encompassing ideal of the 'composite mind'[21] which reflects a classical topos in urban planning and design – an approach to architecture as the collaborative synthesis between art and science through the personal co-operation of differently gifted individuals.

In design thinking from William Morris to Walter Gropius the idea of interdisciplinary co-operation had been offered as the means to achieve such a synthesis. Teamwork and the standardization of knowledge presented the technocratic version of the co-operative ideal in the applied arts. For Jaqueline Tyrwhitt this search for interdisciplinary co-operation was the natural outcome of a question first raised by Geddes. In her introduction to *Cities in Evolution*, she explained:

> [Geddes'] dual requirement of a God-like perspective of vision and comprehension with a clerk-like detailed accumulation of local material and humility of approach can scarcely be expected from any one individual planner. The combination can probably only be achieved by the gradual development of a 'composite mind' which can, under certain circumstances, result from the close co-operation of a small group of people working together over a considerable period.[22]

The idea of standards also belonged to a discussion on the transfer of knowledge between different spheres of thought, between different experts, and between thought and action. Teamwork presented a model in which that transference depended on the understanding between individuals without needing to make the basis of the understanding explicit; whereas standards presented the ideal of a universal, impersonal transfer of knowledge by means of referring to an objectified and mutually agreed upon conceptual frame.

The notion of teamwork and the reference to constructed standards involve the idea of a shared language. Teamwork invokes the internal, flexible language of a collaborative culture. Standards refer to the objectified and fixed language of a transparent and precisely defined terminology. To the extent that an increased division of labour within the planning administration was not counterbalanced by good interpersonal relationships and informal agreements, the circulation of research information became dependent upon the possibility of organizing and quantifying the research material into predetermined formats and categories that were shared by planners and researchers alike – in a language in which the words would mean the same for everyone.

However, standards did not only figure as a way of finding a common technical language, but also required the definition of a common target, a shared norm. Discussions about planning targets, open space quotas, minimal housing sizes and optimal densities were as old as town planning itself. But whereas these discussions had usually been framed in terms of universal human standards, the 1930s saw the emergence of survey research in order to define planning targets as a function of existing patterns or trends, or as a marketing feature.

As planning moved away from laissez-faire thinking and embraced the idea of demand-management, needs were increasingly seen as the standard to be extracted from a general pattern in consumer demands. To the extent that planning became more concerned with the question of the correct distribution of wealth, planning standards became an expression of the general idea of living standards.[23] Hence, the targets for planning could be set according to existing living standards and could then point towards gradually improving these living standards in a more equal distribution of the economic pie.[24]

The development of sample survey techniques facilitated the construction of an empirically verified picture of existing consumer demands. In the pre-war period several voluntary organizations were involved in surveying housing preferences. Mass Observation, for example, produced an ambitious survey, based upon interviews conducted in about 1,100 households selected from different strata of the population in different locations. The Mass Observation survey, which was published as *People's Homes*, provided a valuable source of evidence for the Dudley Commission when it was considering the housing standards and models to be adopted in the post-war reconstruction programme.[25]

The 1930s and 1940s saw the deployment of conceptual vehicles that created both a common descriptive language and the normative calibration of the field structured by that language. Both these aspects – objectified description and normative calibration – are functions of a technocratic division of labour defining different measures of an objectified planning practice. First, a codified language is constructed, and this provides a structured working terrain and a solid grip on the problem. The normative calibration of that structured terrain is defined in a separate operation, and respects a clean division between 'facts' and 'values', but at the same time leaves open the possibility of constructing objectifiable values, verifiable norms that begin to serve as clear targets for planning in a manner well suited to a cyclical conception of economic planning.

Mediation and intermediaries

The culmination of the comprehensive planning ideal in the 1930s and 1940s was dependent both upon the informal language of teamwork that was developed within an expert corporate elite and upon the standardized language of specialization, and each aspect reflected a different outlook on society.[26] The call for teamwork and the ideal of co-operation rang a nostalgic note, reminiscent of the nineteenth-century resistance to the modern division of labour. But the language of standards heralded the full embrace of the very same division and specialization

processes, and demanded rational means to regulate the administration of an already compartmentalized world.

The narrative structure of Geddes' surveys defined its unity of approach and was instrumental in 'imagining' a field of shared references, a common language to unite the different voices opening up a great civic dialogue. The town planner narrates into existence a sense of communal purpose, and this orientates the chatter of the aimless crowd, thus bringing about a process of social co-operation. The construction of an increasingly codified language gradually replaced the close interlacing of descriptive and normative enunciations characteristic of the personalized Geddesian survey approach, and supported a descriptive survey practice that was made subservient to a number of predefined normative planning concepts.

This evolution can be summarized as a shift from town planning as a 'mediating' practice towards a practice organized around a number of stable 'intermediaries' – a number of normative categories that enabled the co-ordinated development of the plan. Within the planning practice of the inter-war years, intermediary concepts such as 'community', 'region', 'town', 'country' and 'neighbourhood' were beginning to be recognized. Although these categories were to a large extent already at work in Geddes' survey narrative as a particularized ideolect, they ultimately became the concrete constructive categories of an 'organic plan' and the keywords of a mobilizing rhetoric. The voice of the planner/narrator recedes into the background and is exchanged for the voice of the expert planner, who finds in a mass of empirical data the contours of a set of concepts that have been posited a priori and which guarantee the unity of the narrative.

To illustrate this evolution, Patrick Abercrombie's *The County of London Plan*[27] and Max Lock's *The County Borough of Middlesbrough: Survey and Plan*[28] provide two eloquent expressions of the comprehensive planning ideal and include a pronounced position on the importance of surveying. Both plans mark the high point of a planning tradition in which the planner-intellectual takes centre stage. And both plans mark the transition from an architecture-based planning tradition to a more technocratic style of planning, by merging the expert's voice with the artist's vision of the architectural design.

Both of the plans hinged upon a limited number of carefully selected concepts that provided a matching structure for the presentation of the survey and plan in a single, neatly argued report. The neighbourhood concept is advanced as an intermediary notion, defining the common matrix from which the co-ordinated narrative of the survey and the plan emerges. These plans also shared a conceptual framework that placed great emphasis on community grouping and neighbourhood planning. The construction of the neighbourhood concept – the central unit of analysis and the primary building block of the plan – differs in the two plans, and illustrates the different forms of teamwork and the development of a professional language, respectively.

For Abercrombie, the making of the London plan marked a change from the way in which he had worked in his inter-war regional planning practice. He had been used to working very much by himself, with a few collaborators and a group

of local experts. The creation of the London plans was subject to a very different division of labour. For the first time in his career Abercrombie put together a professional team, and they worked on the plan for a period of more than two years, acting in close co-operation with the administration of the London County Council and the Reconstruction Group of the Ministry of Works. Nevertheless, while presenting the London plan as the product of teamwork, the presence of the team remained hidden behind the assertive voice of the planner-intellectual, who brought everything together with great authority. In the case of the Max Lock Group and the Middlesbrough survey and plan, the work of the team was all-important. The language of the plan was more neutral, and great effort was invested in the definition of concepts and in the construction of objectified standards of judgement.

Abercrombie's *The County of London Plan* (1943)

At the time when *The County of London Plan* was drafted, the concept of the neighbourhood unit was relatively new to England. Its application in *The County of London Plan* was instrumental in the introduction of the concept to post-war planning.[29] The neighbourhood unit has been understood in different ways, and is often used simply to refer to different arrangements of clustered housing that were developed in the first two decades of the century as an alternative to the perimeter block. One of the most influential studies of this kind was Raymond Unwin's *Nothing Gained by Overcrowding* (1912), which claimed that in contrast to nineteenth-century by-law housing neighbourhoods, clustered housing arrangements were not only more efficient in land consumption and infrastructure, but also reinforced the sense of community.[30] But in *The County of London Plan*, the terminology of the neighbourhood unit is more specific and combines technical studies on optimal groupings and layouts for residential estates with newer ideas on community planning which were being actively promoted by the Regional Planning Association of America.

The term 'neighbourhood unit' had been coined by Clarence Perry in the seventh volume of the *Regional Survey of New York and its Environs*.[31] For Perry the neighbourhood was, first of all, a natural grouping within the community structure of the region.[32] The neighbourhood represented the smallest unit within a hierarchical series of community identities – moving from the regional community down through the city, county or village community to the neighbourhood community. The calibration of this model with respect to size and to the required levels of public service, school and open spaces was based upon the analysis of existing neighbourhood patterns within the New York region. The neighbourhood unit was important for the ways in which it linked a convenient model of spatial analysis to an idea of social grouping in the light of an empirical methodology and of the identification of service standards.[33] When linked to the idea of the superblock as developed by Clarence Stein and Henry Wright, the neighbourhood unit became an important device in American inner-city redevelopment programmes.[34]

The planning team of *The County of London Plan* was familiar with the survey work of the New York regional plan.[35] In *The County of London Plan*, Abercrombie added to Perry's concept a number of received ideas on traffic

planning, on the distribution of services (such as schools and open spaces) and on the legibility of the urban fabric.

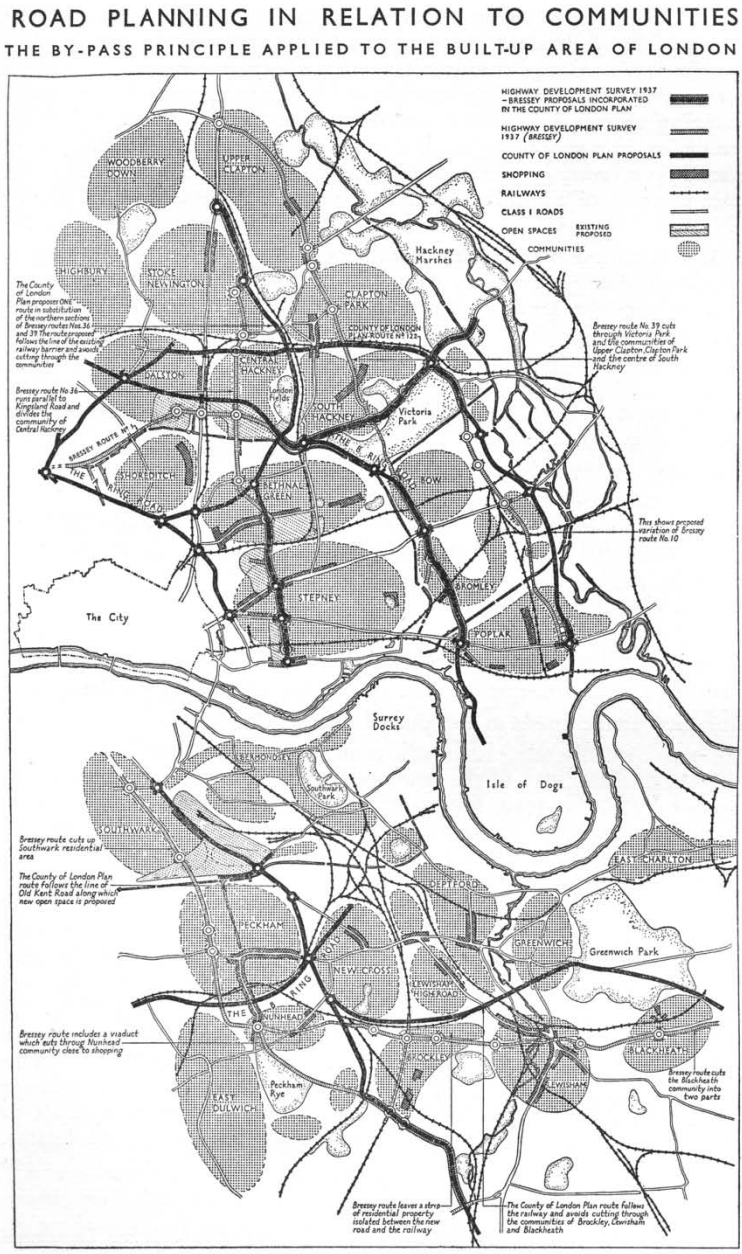
The principle of the adjustment of the neighbourhood units and the arterial roads proposed in *The County of London Plan* had been studied in detail in a book, *Town Planning and Road Traffic*,[36] written by the Scotland Yard Assistant Commissioner, Alker Tripp.[37] The plan adopted Tripp's terminology, 'precincts', to refer to the pockets contained within the system of arterial roads. Abercrombie was determined to ensure that any new roads would not have the same detrimental effect upon the community structure of the city as the railway lines had done in the past. Like Perry, Abercrombie believed that the careful planning of roads could, in fact, reinforce community identity.[38]

Abercrombie used elementary schools as the best way to determine the size of the neighbourhood units, aiming for walking distances of about half a kilometre.[39] At the same time, however, the units were to be configured in such a way that they would correspond to the existing community structure and reinforce the characteristic features of an area as well as the delineation of the boundaries in order not to 'endanger the sense of interdependence on the adjoining communities or on London as a whole'.[40]

Many sections of this existing community structure could 'be traced back to the original villages which existed when the capital was no larger than present-day Southampton; others have been determined by local geographical conditions or artificial barriers, such as railways, canals and industrial concentrations.'[41] The plan would reinforce the 'independent spirit' of these original villages which was 'still very much alive'.[42] This vision of an extended urban agglomeration composed of many village-like pockets provided an image that fitted London rather well. The projection of these community units on the map confirmed the cherished vision of London as 'the unique city' composed of many villages.[43] And this clear and familiar vision, which was skilfully represented in the memorable bubble diagram by Arthur Ling, gave particular appeal to the plan.

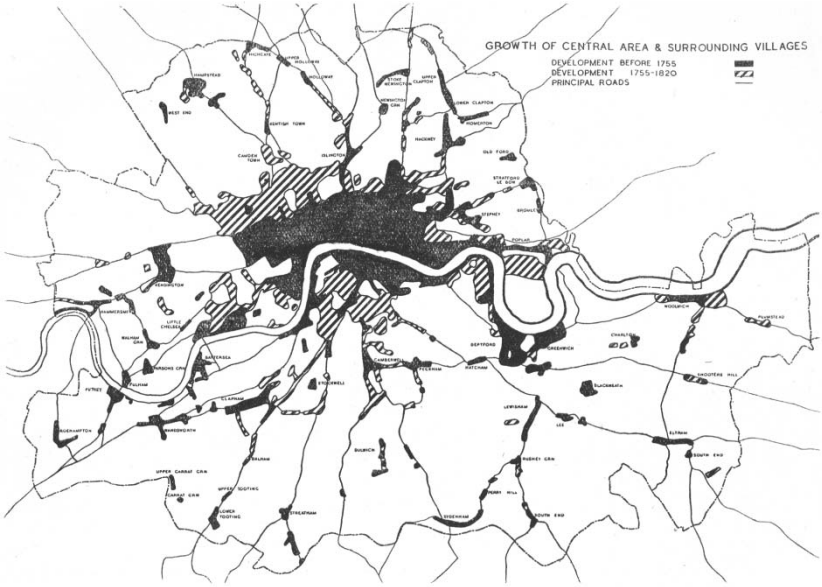
The neighbourhood unit – with its added associations of village life, precinct planning, school districts and local identity – provided a forceful concept which was deployed to clarify and explain the existing structure of London as well as to plan the future transformation of the city. The idea was extracted from analytical research about existing neighbourhoods. In *The County of London Plan*, the neighbourhood principle was explained by means of a diagrammatic analysis of the existing community of Eltham. The community survey included in the plan was presented as the 'recognition of the community structure', a structure that was presumed to be of a universal nature and more or less articulated.

In the best traditions of surveying, the plan was presented as the result of analysis. The analytical part of the report posited the very concepts it tried to trace empirically. In doing so, the survey aimed to define in descriptive language the concepts which, in the construction of the plan, gained normative stature, introducing a set of precise value judgements as if they were inscribed in the city itself. In other words, the analytical transfer from the survey to the plan hinged



3.1

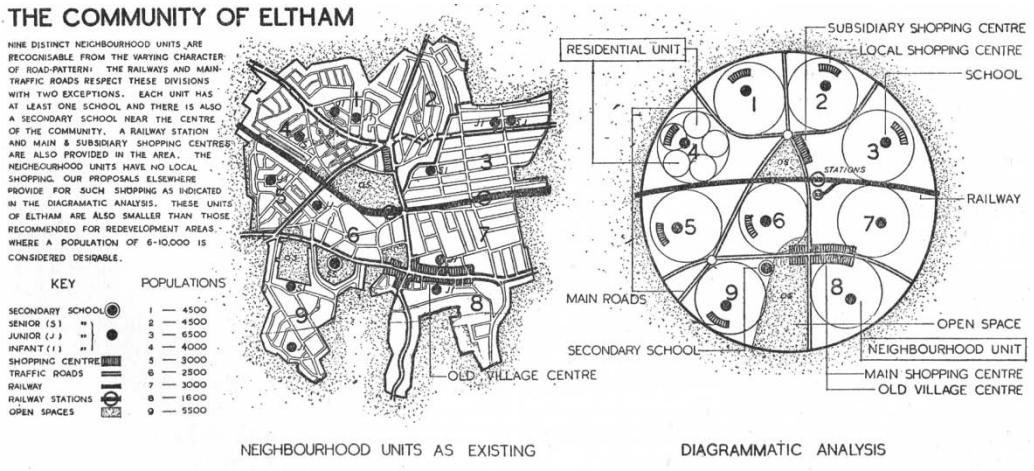
'Road Planning in Relation to Communities'. This figure is accompanied by the following text: 'The main traffic roads have been planned to follow the line of existing physical barriers between communities (railways, waterways, open spaces, belts of industry, etc.), rather than divide the existing residential areas and introduce yet another barrier in the form of a fast traffic road. It is realized that it will not always be possible to achieve this, but it is suggested that wherever a road can be devised to avoid communities and their shopping centres, it should be adopted rather than one that cuts up the communities in any way.'



3.2
'Growth of Central Area and Surrounding Villages'. The caption of this illustration reads: 'Showing the extent of London in 1755 and subsequent growth during the years 1755–1820, with the surrounding villages from which many of the present-day communities have developed.'



3.3
'London: Social and Functional Analysis', illustration by Arthur Ling



3.4
Exemplary analysis of the existing community of Eltham in South London according to the neighbourhood unit principle

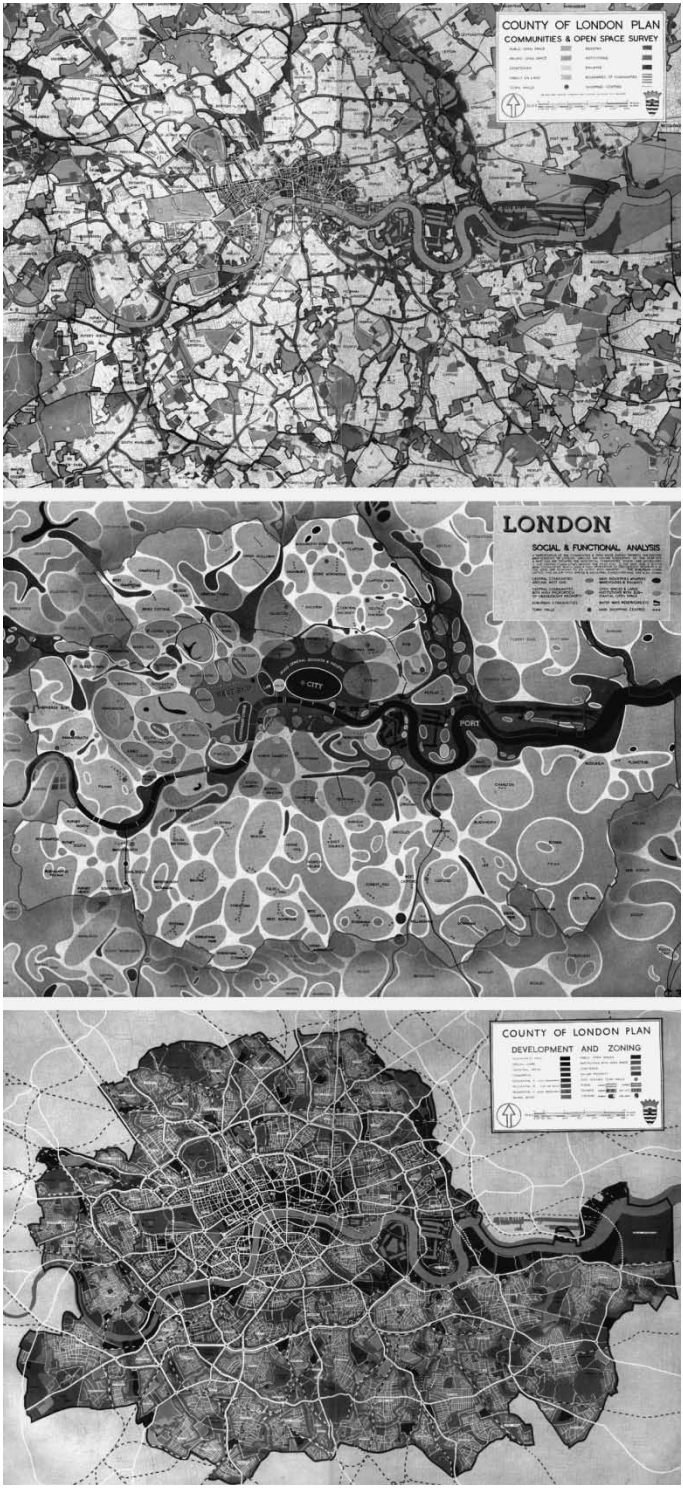
upon a set of intermediaries, which regulated the structure of the survey maps and of the plan maps.

These intermediaries seem to have been most clearly represented by means of diagrams. The diagrams define a relationship of analogy to the city while their normative direction seems to be the result of the radicalization and the almost cartoon-like representation of what is claimed to be 'already there'. They organize a sense of reciprocal similarity between the survey map and the planning map.

The intermediary concepts that are presented in diagrammatic form define the structure, which shows the passage of the city from its current state to its future shape as a process of self-development and natural growth. In this respect, the diagrams constitute an attempt to render the idea of organic structure in a set of schemes that begin to explain the relationship between the world's organization on a deep structural level and its actual appearance, and thereby suggest that the world responds to a natural plan. From that analysis the preferred development of the city could be presented as a movement towards a series of solutions that respond 'naturally' to the simple and profound structural insight indicated in the diagrams.

Max Lock's *The County Borough of Middlesbrough: Survey and Plan* (1946)

In the Middlesbrough plan an effort was made to separate the descriptive analysis and the evaluation, thus trying to objectify the evaluation process. The language of standards was crucial. The plan included lengthy passages in which a dividing line between standard and substandard housing was created, based on a meticulous description of the housing stock. The plan introduced an innovative multi-criteria grading system for the purpose of evaluating the quality of the various neighbourhood areas. Lock seemed concerned to convey the rationale behind the plan, and therefore presented it as a logically constructed argument. The report was published as the collective work of a team in which the contributions of the



3.5

Comparison of three coloured plates included in the County of London Plan: Open Space and Communities Survey, Communities Diagram, Zoning Plan. The diagram of London's community structure clarifies the relationship between survey and plan.

different team members were clearly stated. The connections between the sections depended on the construction of clear parameters. A standardized language defined the targets for the plan.

What makes Lock's plan particularly interesting is both his remarkable effort to involve the new social sciences and his genuine interest in sociological research which went well beyond the commonsensical positions expressed in Abercrombie's community mappings. Urban sociology was still a very young and insecure discipline, which was gradually outgrowing a legacy of Victorian social studies and social reform.[44] It sought to combine its ambition to become more scientific with a desire to stay relevant to matters of social planning and reform. In 1955 Ruth Glass wanted to distance herself from the 'sociological' legacy of the town and country planning pioneers of the inter-war years. She lamented the fact that sociological considerations in British planning had for so long almost exclusively followed the lead of Howard, Geddes, Branford and Unwin, rather than that of Booth and the Webbs.

> Despite its apparent practical bent, sociological or quasi-sociological thought on town planning in this country follows on from . . . that motley group of enthusiasts in semi-philosophical speculation and social reform who helped to establish the Sociological Society and the *Sociological Review* at the beginning of the century . . . Their benevolence was mixed up with equally traditional British eccentricity – often endearing and no doubt stimulating. Their thought processes were instinctive rather than systematic; their universe was so wide as to be no longer verifiable.[45]

Those who developed sociology and social surveys from the 1920s onwards, indeed, chose their models of statistical and quantitative research in the Booth-Rowntree tradition.[46] However, as Ruth Glass's own participation in the field betrays, the few sociologists who in the 1940s did engage in town and country planning were by and large reproducing the very same concepts that had been pioneered by the first generation of amateur planners, because in many ways they lacked a clear operative framework in their own field. For example, Glass could have successfully distanced herself from the holistic mysticism of Geddes and Branford, but ended up seeking confirmation for very similar ideas – albeit by different, empirically verified means.

In fact, Glass's contribution to the study of Middlesbrough relied heavily on the neighbourhood concept. She was concerned with the definition of the appropriate delimitation of the neighbourhood unit through the combination of territorial boundaries and sociological criteria, such as rateable value, building age, type of housing, density, number of habitable rooms per dwelling, school distribution, births and deaths, and occupations and wages. Although her analysis was not entirely uncritical,[47] the synthetic interpretation of the different data sets insisted upon the correlation of all the data in reference to the same territorial unit, and was, in the end, entirely dependent upon the very concept it was trying to trace empirically.[48]

Aware of the limitations inherent in the applied empirical methods, Glass indicated in the conclusion of her survey report that the extent to which different sociological and geographical data originating from different perspectives could be integrated into the planning process depended on the definition of a common perspective through close co-operation.

> The problems that the plan has to solve can, and should be, scientifically discovered and presented. But their final solution, which is rarely unequivocal, is at the discretion of an individual or a group. As it is essential that the survey results at least be entirely reliable, specialized techniques of investigation have to be used, and several fields of inquiry have to be covered. Different specialists should be consulted, but while their methods are necessarily varied, their approach to the problems of planning should be unified. Town-planners, architects, geographers and social scientists have yet to learn to synthesize their specific points of view, and they can learn it only through the experience of co-operative work.[49]

To the extent that there was a tentative participation of social scientists in planning, this interaction took place in areas where concepts could be identified that were both analytical as well as synthetic, both descriptive and normative, and which could provide the necessary lynchpin for co-ordinating analytical observations

3.6
Synthetic table presenting a comparison of Middlesbrough neighbourhoods based on five 'neighbourhood indices': concentration of social activities, geographical demarcation, social homogeneity, social rank, institutional equipment.

TABLE V COMPARISON OF NEIGHBOURHOOD INDICES

Neighbourhoods			*Indices of*					
Graded According to Index of Concentration of Social Activities			1	2	3	4	5	*Population*
Group	*Number*		*Concentration of Social Activities*	*Geographical Demarcation*	*Social Homogeneity*	*Social Rank*	*Institutional Equipment*	
VI	A1	St. Hilda's	6	1	1	1	6	5,399
	A16	Cargo Fleet	6	1	1	2	4	1,188
	A17, 18	Brambles Farm ..	6	1	1	3	2	5,098
	B8, 9	Marton Grove South	6	2	1	3	1	6,388
V	A14	North Ormesby ..	5	1	2	2	6	10,083
IV	A2	Newport	4	3	1	1	5	13,121
	A12i	Vulcan	4	3	1	1	4	4,821
	A7	Shopping Centre ..	4	3	3	2	5	5,632
	A5	Crescent Road ..	4	3	2	3	5	6,471
	A9	Waterloo Road ..	4	3	5	3	4	6,251
	A3	Heywood Street ..	4	3	3	3	2	3,780
	A15	Whitehouse Farm ..	4	1	5	5	1	1,035
	B1	Whinney Banks ..	4	2	1	3	3	7,069
	B10	Marton Grove North	4	2	2	4	5	3,959
	B11	Longlands	4	3	4	5	2	2,222
III	A6	Cleveland	3	4	2	2	2	5,723
	A8	Acklam	3	3	1	3	2	8,020
	A4	West Lane	3	2	1	4	1	1,026
	B5	Ayresome Park ..	3	3	6	4	3	5,142
	B6	Cumberland Road ..	3	3	6	5	4	2,535
II	B3	West Linthorpe ..	2	3	6	5	3	4,258
	B7	Emerson Avenue ..	2	3	1	5	1	1,376
I	A10, 11, 12	Civic Centre	1	3	4	2	6	8,010
	A13	Clairville Road ..	1	3	6	4	1	3,222
	B2	West Acklam ..	1	3	2	5	1	2,190
	B4	Mid Linthorpe ..	1	4	2	6	4	2,408

and qualitative assessments. By and large these common concepts belonged to a shared organic conception of the city and ended up confirming the latter.

The success of these concepts depended in part on the extent to which the concepts could be territorially articulated and readily mapped, with the map serving as a natural medium of transition from the survey to the plan. This goes a long way towards explaining the relatively successful entry of geographers into the planning process. The land fertility studies of Stamp and Willats, as well as the survey of industrial minerals (sand and gravel) by Wooldridge and others, set out clear criteria upon which planning decisions could be based.[50] The result of this was that, perhaps, disproportionate attention was paid to issues such as the agricultural value of land and the presence of mineral resources in the post-war period.[51] Both in sociological and in geographical analyses, much energy was spent on the definition of boundaries and the unit of analysis.[52] The dwelling, the neighbourhood unit, then, on a larger scale, the village, the town and the conurbation, provided the divisions necessary for analysis and administration. They also defined the elements to be configured within an urban, regional or national pattern. Central place theory, in which the planning profession started developing an interest during the war years, mainly helped to give a scientific aura to the problem of territorial distribution and anticipated the quantitative revolution and systems-approach of the 1960s.[53] During the 1940s and 1950s, before the emergence of computerized calculation techniques, the importance of these theories seems to have been constituted by the fact that they confirmed a type of analysis that had direct operative significance in decentralist planning schemes, rather than by their operative value or their quantitative character per se.

Conclusion

The latent desire within the comprehensive planning ideal to eliminate the authorial voice, thus encouraging a technocratic view of the discipline, brought the Geddesian survey legacy to a crisis point.

For Geddes, true understanding seemed to emerge from concretely experienced confrontation with the city. The ad hoc recording and collecting of significant observations was gradually integrated into a synoptic understanding of the city as a whole. Surveying brought about a new awareness that first emerged at the level of the discovery of new opportunities within the confines of experience, pregnant with the mobilizing impulses of a personal encounter. This moment of awakening was inserted into a collective evolutionary cycle which led the citizen and the city to ever-higher states of spiritual fulfilment and reciprocal adjustment. For Geddes, it was this evolutionary process narrated in the survey and the subject's truthful implication in it that had normative bearing. The survey was the reflection of a belief in providence, which was not entrusted to outside intervention or to the necessary unfolding of a divine plan but, rather, to the wholesome effects of human hope on the community as a whole.

But, after Geddes, planning sought to eliminate the implication of subjectivity in the survey process, in a drive towards rationality. Planning was no longer a matter of careful co-ordination of the objective and the subjective, the

collective and the individual, the universal and the particular; instead, it set about defining the unitary structure of society directly, and made the comprehensive planning ideal the prisoner of its own intellectual infrastructure, caught in the tautological circles of full correspondence, coinciding with the moment in which subjectivity would ultimately be effaced.

Within the entire survey tradition there is a tendency to bring surveying and planning closer together. In Geddes' work this was done literally through the construction of a mixed genre, which was both a survey and a plan: descriptive observations were immediately linked to practical suggestions for improvement, and the plan was concretely projected onto the city. However, in the comprehensive planning tradition the coming together of surveying and planning was achieved by inscribing both within a clearly defined shared framework which underscored the structural logic of the plan. Abercrombie's and Lock's survey maps defined the ingredients of the plan: the collection of maps constructed a multi-layered foundation for the plan. The normative dimension of the survey process was no longer the outcome of a tedious process in which the gradual qualification of a set of tentative observations began to produce a plausible set of working concepts but, rather, became a function of the very same concepts that regulated the normative content of the plan. In this way the survey was made into a neutral means of smuggling a set of normative presuppositions into the planning process.

Notes

1 P. Geddes, 'A Proposed Co-ordination of the Social Sciences', *The Sociological Review*, 16, no. 1 (1924), pp. 54–65.
2 G. E. Cherry, *Town Planning in Britain since 1900*, Oxford, Blackwell, 1996.
3 M. Hebbert, 'The Daring Experiment: Social Scientists and Land-use Planning in 1940s Britain', *Environment and Planning B: Planning and Design*, 10, no. 1 (1983), pp. 3–17.
4 P. Geddes, *The Classification of Statistics and its Results*, Edinburgh, A. and C. Black, 1881.
5 P. Geddes, 'Civic Education and City Development', *The Contemporary Review*, 87 (March 1905), pp. 413–26.
6 M. Dehaene, 'Survey and the Assimilation of a Modern Narrative in Urbanism', *Journal of Architecture*, no. 7 (2002), pp. 33–5.
7 J. Tyrwhitt (ed.), *Patrick Geddes in India*, London, Lund Humphries, 1947.
8 P. Abercrombie, 'Modern Town Planning in England', *Town Planning Review*, 1, no. 1 (1910), pp. 18–36, especially p. 26; 'Town Planning Literature', *Town Planning Institute Papers and Discussions*, no. 2 (1915–16), pp. 5–21, especially p. 10; 'Study before Town Planning', *Town Planning Review*, 4, no. 3 (1916), pp. 171–90, especially p. 184; 'The Basis of Reconstruction: The Need for a Regional Survey of National Resources', *Town Planning Review*, 7, nos. 3 and 4 (March 1918), pp. 203–6; 'The Civic Survey in General Education', *Garden Cities and Town Planning*, 11, no. 2 (February 1921), pp. 31–4; 'Regional Town Planning', in P. M. Heath (ed.), *A Record of the Town Planning Exhibition held in Town Hall, Manchester, Oct. 9th to 17th, 1922, Proceedings of the various Conferences held in connection with the Exhibition*, Manchester, Manchester and District Joint Town Planning Advisory Committee, 1922, p. 68; 'The Preliminary Survey of a Region', in International Federation for Town and Country Planning and Garden Cities, *International Town Planning Conference Amsterdam 1924, Part I: Papers*, Amsterdam, De Erven Van Munster, 1924, p. 38; *Planning in Town and Country, Difficulties and Possibilities. An Inaugural Lecture in the Department of Town Planning, School of Architecture, University College, London*, London and Liverpool, Hodder and Stoughton and University Press of Liverpool, 1937, p. 13; 'Geography, the Basis of Planning', *Geography*, no. 23 (1938), pp. 1–8, especially p. 1; 'Towns in the National Pattern',

in G. McAllister and E. Glen McAllister, *Homes, Towns and Countryside*, London, Batsford Ltd, 1945, p. 5; and 'Twenty Years After', *Journal of the Royal Institute of British Architects*, no. 59 (1952), pp. 156–60, especially p. 157.

9 The West Midland Group, founded through the initiative of Raymond Priestley and the Bournville Trust in 1935, provides a good illustration of the different constitution of the survey movement in the 1930s. The West Midland Group was a loose association of researchers interested in geographical, social and economical research in the West Midlands region. The initiative was a continuation of the research on housing and living in Birmingham published by the Bournville Village Trust; see Bournville Village Trust, *When We Build Again*, London, Allen and Unwin, 1941. The Group brought together civil servants, academics, businessmen and social workers with a common interest in regional survey and planning. On the one hand, the West Midland Group continued an old line of voluntary action and amateur research, as its attachment to the Bournville Trust shows. On the other hand, its organization, the professional level and academic pedigree of its members and the quality of its work reflected a different climate. The West Midland Group included a strong contingent from the University of Birmingham – Professor T. Bodkin, History of Fine Arts, Professor P. Sargant Florence, Faculty of Commerce, and Professor J. G. Smith, former Dean of the Faculty of Commerce. Dudley Stamp was also a member of the Group.

10 P. Abercrombie, 'Study before Town Planning'.

11 Thomas Adams had likewise criticized the open nature of Geddes' survey approach as its fundamental problem. 'Professor Geddes', he concluded in a retrospective assessment of the early years of the planning movement,

> has the credit of initiating regional and civic surveys on comprehensive lines, although perhaps covering a wider field of investigation than was necessary for town planning purposes. These surveys have had an educational value for students of history and sociology but do not contain a great deal of data for purposes of practical town planning.

See T. Adams, *Recent Advances in Town Planning*, London, J. and A. Churchill, 1932, p. 103.

12 P. Abercrombie, 'Study before Town Planning', p. 171.

13 The Barlow, Scott and Uthwath Commissions, so named after their respective chairmen, were created by the government in the late 1930s and early 1940s to investigate aspects of national planning and land use. The Barlow Commission was concerned with the location of industry, the Scott Commission reported on the issue of rural land use, and the Uthwath Commission looked at the technical issues of planning in relation to legal aspects of land tenure.

14 G. E. Cherry and L. Penny, *Holford, a Study in Architecture, Planning and Civic Design*, London and New York, Mansell, 1986; and Ministry of Town and Country Planning, *Town and Country Planning 1943–1951, progress report by the Ministry of Local Government and Planning on the Work of the Ministry of Town and Country Planning*, London, HMSO, 1951.

15 Cherry and Penny, *Holford, a Study in Architecture, Planning and Civic Design*, pp. 103–12.

16 G. H. J. Daysh, A. C. O'Dell, A. A. L. Caesar, *et al.*, *Studies in Regional Planning: Outline Surveys and Proposals for the Development of Certain Regions of England and Scotland*, London, George Philip and Sons, 1949.

17 Cherry and Penny, *Holford, a Study in Architecture, Planning and Civic Design*, pp. 111.

18 E. A. Gutkind, *Creative Mobilization. Vol. I. Principles of National Planning*, London, Kegan Paul, 1943.

19 E. A. Gutkind, *Creative Mobilization. Vol II. Case Studies in National Planning*, London, Kegan Paul, 1943.

20 Adams, *Recent Advances in Town Planning*; Architectural Association, *Town and Country Planning Summer School. University of Birmingham, Edgebaston. September 24th to 31st*, Birmingham, University of Birmingham, 1943; P. Abercrombie, 'Planning for Reconstruction, the Data Required', *Journal of the Town Planning Institute*, 29, no. 4 (1943), pp. 141–8; W. Holford, 'Towards a National Planning Survey', *Journal of the Town Planning Institute*, no. 4 (2002), pp. 148–60; M. Lock, *The County Borough of Middlesbrough: Survey and Plan*, Yorkshire, The Middlesbrough Corporation, 1946; R. Glass (ed.), *The Social Background of a Plan. A Study of Middlesbrough*, London, Routledge and Kegan Paul, 1948, pp. 1–8; Association for Planning and Regional Reconstruction, *Town and Country Planning Textbook*, London, The Architectural Press, 1950. (Although this last reference was published in 1950, it was based on texts that were prepared by members of the APRR for their extension classes for would-be planners who were serving in the army during the Second World War.)

21 The term 'composite mind' can also be found in the writings of E. A. A. Rowse. According to Mary Ashton, Rowse borrowed this term from Gropius. While Gropius indeed made use of the term 'composite mind', I have not been able to establish whether the common use of this term should be understood as a mutual reference to Gropius and the Bauhaus. See M. O. Ashton, '"Tomorrow Town": Patrick Geddes, Walter Gropius, and Le Corbusier', in V. Welter and J. Lawson (eds), *The City after Patrick Geddes*, Oxford and Bern, Peter Lang, 2000, p. 196.

22 J. Tyrwhitt, 'Introduction', in P. Geddes, *Cities in Evolution*, Outlook Tower Association and APRR (eds), London, Williams and Norgate, 1949, p. xi.

23 See Gutkind, *Creative Mobilization. Vol. I*, p. 48:

> The plan in itself cannot give the answer for all spheres of our social and economic life. It is a means to an end, nothing else. And this end – as has already been stated – is to prepare consciously the efficient co-ordination of all productive resources, human and material, for a higher social and economic standard of life through scientific research and creative imagination.

24 For example, Lock, *The County Borough of Middlesbrough*, p. 37:

> The difficult question of decay in buildings is as nothing compared with the serious inequality of standards, as between one part of the town and the other – between the amenities of the quarter of Middlesbrough families who live in the new suburbs on the periphery and that third of the population who inhabit the old central core.

25 N. Bullock, 'Plans for Post-war Housing in the UK: The Case for Mixed Development and the Flat', *Planning Perspectives*, 2, no. 3 (1986), pp. 71–98, especially pp. 76–8; Mass Observation, *People's Homes*, London, John Murray, 1943.

26 A textbook such as that of the APRR, prepared for their extension classes for people serving in the army, presented these two languages side by side. Although Jaqueline Tyrwhitt was trying to create a very systematic organization for the survey process, she still introduced the problem of surveying through the Gedessian mythology, repeating a *Cities in Evolution*-like narrative; see APRR (ed.), *Town and Country Planning Textbook*, London, The Architectural Press, 1950, pp. 90–146. However, Ruth Glass presented a far more pragmatic and technical basis for the construction of social surveys, discussing, for example, ways in which to construct questionnaires in a scientifically adequate manner; see APRR (ed.), *Town and Country Planning Textbook*, pp. 210–11.

27 P. Abercrombie and J. H. Forshaw, *The County of London Plan*, London, Macmillan and Co. Ltd, 1943.

28 Lock, *The County Borough of Middlesbrough*, p. 11.

29 Bullock, 'Plans for Post-war Housing in the UK'.

30 R. Unwin, 'Nothing Gained by Overcrowding. How the Garden City Type of Development may Benefit both the Owner and the Occupier', *Garden Cities and Town Planning*, New Series 2 (1912), no. 9–11, pp. 192–4, 219–22, 242–7.

31 C. Perry, *The Neighbourhood Unit, Neighbourhood and Community Planning, Regional Survey, Volume VII, Regional Plan of New York and its Environs*, New York, Regional Plan Association, 1929.

32 See Shelby M. Harrison, 'Introduction', in Perry, *The Neighbourhood Unit*, pp. 22–3:

> What is known as a neighborhood, and what is now commonly known as a region, have at least one characteristic in common – they possess a certain unity which is quite independent of political boundaries . . . neighborhood and local communities are natural constituents of large urban aggregations.

33 P. Sica, *Storia dell'urbanistica III. Il Novecento*, Rome, Laterza, 1985, p. 168.

34 C. Boyer, *Dreaming the Rational City*, Cambridge, MA, MIT Press, 1983, pp. 248–52.

35 See Abercrombie and Forshaw, *The County of London Plan*, p. v: 'Early on in our researches we were pleased and encouraged to receive from the New York Regional Plan Association their comprehensive Regional Survey.' Wesley Dougill, who headed Abercrombie's planning team, had particular experience in neighbourhood planning. Dougill had taken part in a study undertaken by the National Council of Social Service which in 1942 had surveyed American neighbourhood planning in the context of inner-city community planning; the results of this had been published as *The Size and Social Structure of a Town*; see Bullock, 'Plans for Post-war Housing in the UK', pp. 87–8.

36 Abercrombie wrote the foreword to *Town Planning and Road Traffic*: 'Mr. Tripp's most original contribution to planning in general is his development of the idea of the "Precinct". It was implicit in the by-pass; Mr. Tripp has given it a more positive and especially an urban significance.' See H. A. Tripp, *Town Planning and Road Traffic*, London, Edward Arnold, 1942, p. 8.

37 Abercrombie engaged Alker Tripp as an advisor on traffic matters for the Greater London Plan; see Abercrombie, *The Greater London Plan 1944*, London, HMSO, 1945, p. iv.

38 Abercrombie put great trust in the use of tunnels as a means to adapt the road system to the existing city structure without having to compromise the logical organization of the road infrastructure: see Abercrombie and Forshaw, *The County of London Plan*, p. 48.

39 Abercrombie and Forshaw, *The County of London Plan*, pp. 28–9:

> After very careful consideration, it has been decided that the elementary school should be the determining factor in the size and organization of the subsidiary or neighbourhood units of those communities in which large-scale reconstruction is proposed. The desirable scholar-capacity of the elementary school and the desirability of fixing a maximum walking distance from home to school, make the latter the one suitable building on which to base the size and arrangement of neighbourhood units.

40 Abercrombie and Forshaw, *The County of London Plan*, p. 28.

41 Ibid., p. 25.

42 Ibid., p. 26.

43 S. E. Rasmussen, *London the Unique City*, London, Jonathan Cape, 1937.

44 R. Glass, 'Urban Sociology in Great Britain: A Trend Report', *Current Sociology*, 4, no. 4 (1955), pp. 5–19.

45 Ibid., p. 12.

46 Ibid., p. 12:

> As their influence declined during the late twenties, sociology and town planning parted company. In sociology, Patrick Geddes, Victor Branford, and their partners from the planning field like Raymond Unwin, left hardly any traces. From the early thirties on, and throughout the decade, the *Sociological Review* was a learned journal: articles on social theory and on coherent specialized investigations took the place of the previous general pronouncements on urbanism.

47 Glass emphasized the necessary distinction between what she called 'territorial neighbourhoods', which were marked by a characteristic identity of the area, and 'integrated neighbourhoods', which depended on the integration of the community and their members' sense of belonging to them. She, moreover, pointed to the reactionary bias in the concept, which rated village and small town life more highly than urban social constellations: ibid., p. 18. She also insisted on the interaction between neighbourhoods, a point that was overlooked in many more dogmatic applications of the concept. See R. Glass (ed.), *The Social Background of a Plan. A Study of Middlesbrough*, London, Routledge and Kegan Paul, 1948, p. 190: 'Though distinct territorial groups exist, which might be called neighbourhoods, these are never self-contained . . . It appears therefore, that the interdependence of neighbourhoods should be emphasized in urban design, rather than the strict demarcation of each of them.'

48 Glass, *The Social Background of a Plan*, p. 192.

49 Ibid., pp. 192–3.

50 L. D. Stamp, 'The Planning of Land Use', in G. McAllister and E. Glen McAllister, *Homes, Towns and Countryside*, London, Batsford Ltd, 1945; E. C. Willats, 'Geographers and their Involvement in Planning', in R. W. Steel, *British Geography 1918–1945*, London and New York, Cambridge University Press, 1987, p. 110; S. W. Wooldrige and S. H. Beaver, 'The Working of Sand and Gravel in Britain: A Problem in Land Use', *Geographical Journal*, 115, no. 1 (1950), pp. 42–57.

51 Hebbert, 'The Daring Experiment'.

52 C. B. Fawcett, *A Residential Unit for Town and Country Planning*, London, University of London Press, 1944; R. E. Dickinson, *City Region and Regionalism. A Geographical Contribution to Human Ecology*, London, Kegan Paul, 1947, pp. 1–20.

53 Dickinson, *City Region and Regionalism*, pp. 52–62.

Further reading

M. Christine Boyer, *Dreaming the Rational City. The Myth of American Planning,* Cambridge, MA, MIT Press, 1983

Nicholas Bullock, *Building the Post-War World: Modern Architecture and Reconstruction in Britain,* London and New York, Routledge, 2002

Arturo Lanzani, *Immagini del territorio e idée di piano, 1943–1963,* Milano, Franco Angeli, 1996

David Matless, *Landscape and Englishness,* London, Reaktion Books, 1998

Volker Welter and James Lawson, *The City After Patrick Geddes,* Oxford and Bern, Peter Lang, 2000

Chapter 4

Everywhere at any time

Post-Second World War genealogies of the city of the future

Volker M. Welter

Contrary to the often-heard assumption that a tabula rasa was the perfect ground on which to erect the modern city of the future, some architects and planners in the mid-twentieth century began to argue that the latter was not an immaculate creation out of nothing. Instead, the city of the future was the product of an evolutionary process that had originated in the past. Just before and after the Second World War such architects and planners as Lewis Mumford (1895–1990), Arthur Korn (1891–1978) and Ludwig Hilberseimer (1885–1967) surveyed distant and past urban landscapes in order to appropriate as predecessors of the modern city a wide variety of urban designs from all regions, nations and historical periods. They assembled in books extremely disparate selections of classical Greek and Roman towns, medieval northern European urban settlements, Renaissance towns, colonial cities in the Americas, and even the occasional Asian temple city. Together, these cities constituted a genealogy of human urban settlements that usually culminated in the authors' own designs for the city of tomorrow.

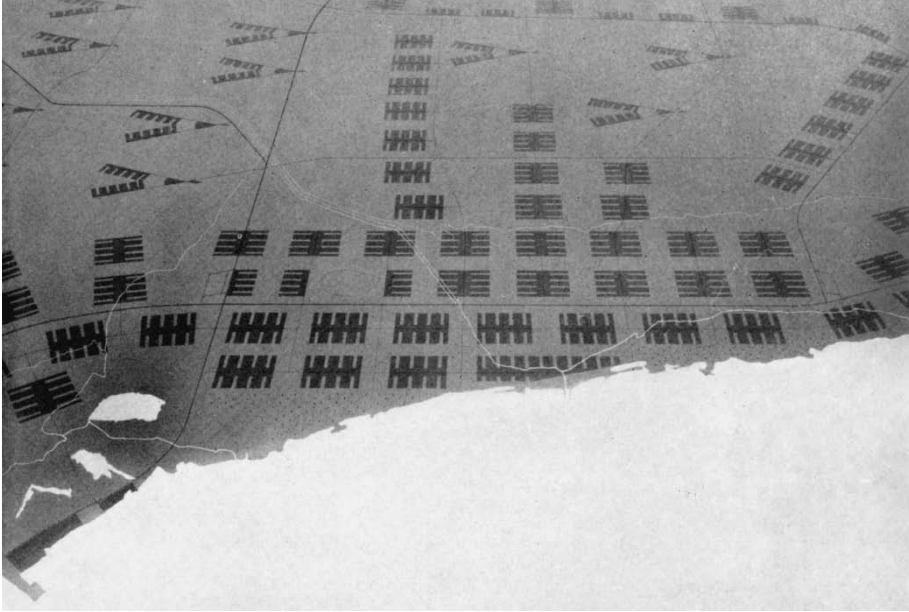
At first glance, their interest in the history of the city appears to have been a response to the destruction of many cities during the Second World War. But the reality turns out to be more complex. For example, in 1953 Arthur Korn presented

various modern city planning schemes in the final chapter of his book *History Builds the Town*. Among them was the London plan of 1942 in which the British MARS group (Modern Architecture Research Group) under Korn's leadership had proposed to reorganize the city into a herring-bone pattern of linear cities.[1] And in *The Nature of Cities* (1955), Ludwig Hilberseimer discussed extensively the division of the city of Chicago into a network of smaller regional sections – a scheme he had worked on since the 1940s.[2] These two distinct examples of modern city planning had little obvious respect for the cities of London and Chicago which had developed over time. So why were they included in chronological surveys of histories of city building? And why did the surveys end with these schemes, thus turning them into teleological goals? Korn and Hilberseimer argued for a connection between the historical city and its Modernist successor, and this generates an interesting paradox: why survey urban history in the first instance if subsequent planning proposals sweep aside all history in order to make space for radical city plans?

The focus of this chapter is a critical analysis of the interest in the history of the city which informs Lewis Mumford's *The Culture of Cities*[3] and the two books by Korn and Hilberseimer which have just been mentioned. Published between 1938 and 1955, all three contain more or less complete surveys of historical city development.[4] Moreover, all three culminate in city planning proposals whose uncompromisingly Modernist character raises the question of their connection with the preceding periods.



4.1
MARS Town Planning Committee, MARS plan for the reorganisation of London, 1942. The committee was composed of Arthur Korn (chairman), Maxwell Fry, Felix Samuely, Godfrey Samuel, William Tatton Brown, Arthur Ling and Christopher Tunnard.



4.2
Ludwig Hilberseimer, 'Re-planned Chicago, view from Lake Michigan', undated

Mumford, Korn and Hilberseimer were practising city planners and architects as well as historians of the city and of urban culture. They can also be considered as collectors of images of cities and, in this context, Walter Benjamin's thoughts on collecting and its consequences for the collected artefacts are helpful in understanding the mid-twentieth-century interest in the city of the past.[5] The three authors' aims were not really to appreciate historical cities, but rather to seize on them in order to advance the quest for a tabula rasa as the most appropriate space for the activities of the modern city planner and architect. At the same time, these teleological genealogies were a reply to the very real threat that modernity had posed to humankind's urban (and rural) survival because of the atomic bomb.

A brief overview of various arguments by Sigfried Giedion (1883–1968), Patrick Geddes (1854–1932) and the British town planner Jaqueline Tyrwhitt (1905–83) about the relevance of the history of the city to planning the city of the future will set Mumford, Korn and Hilberseimer's books in context.

Sigfried Giedion: history in the service of the future

In the opening pages of *Space, Time and Architecture*, Sigfried Giedion wrote: 'To plan we must know what has gone on in the past and feel what is coming in the future. This is not an invitation to prophecy but a demand for a universal outlook upon the world.'[6] In this book Giedion set out to formulate his ideas about the principles of Modernist architecture and city planning. Yet, as the subtitle 'The Growth of a New Tradition' indicates, he saw these principles as a continuation of history, and not as the latter's overthrow.

The first part of the book is entitled 'History a Part of Life' and it aimed to establish the lasting relevance of history to the Modernist architect and city planner. As quoted above, Giedion equated an awareness of history with a universal attitude towards the world, the 'reaction against a whole century spent in living from day to day'.[7] He criticised the nineteenth century for being a period during which 'people lost all sense of playing a part in history; they were either indifferent to the

period in which they lived or they hated it.'[8] By raising awareness both of the larger dimensions of time and of participation in history, Giedion argued that history could give meaning back to life. Furthermore, it would allow people to recognise, and to live actively in accordance with, the spirit of an epoch.[9]

According to Giedion, linking the study of history to contemporary goals had consequences both for the historian and for the town planner. In order to know what to look for in the past, he claimed that roots in the present were needed:

> The historian, the historian of architecture especially, must be in close contact with contemporary conceptions. Only when he is permeated by the spirit of his own time is he prepared to detect those tracts of the past which previous generations have overlooked.[10]

The town planner, likewise, needed to have roots in both the past and the present: only by acquiring a historian's universal outlook, for example in the form of a 'wide survey, a farsighted point of view', could the introduction of a new urban order be achieved.[11]

In spite of this plea to be aware of a city's history, Giedion nevertheless recommended a total physical transformation of existing cities. Identifying cities as an 'eternal phenomenon based on contact from man with man', Giedion concluded that they are 'native to every cultural life and every period'.[12] The physical adaptation of the present city to contemporary needs was to guarantee both the city's continued existence and its importance for the well-being of society and its citizens.

Whether this emphasis on history was merely a strategic move or a genuine call for greater historical awareness, the important point is that Giedion insisted that historical knowledge was essential for the Modernist city planner:

> The town planner . . . seeks to discover how the town came into being and how it has reached its present stage of growth. He wants to know as much as he can of the site . . . and of its relations to the surrounding region and the country as a whole.[13]

Patrick Geddes: exhibiting the history of the city

Geddes' interest in historic cities can be traced back to the 1890s, but it crystallised in a highly visible form after 1910. During that year, Geddes contributed his survey of the development of Edinburgh to a town planning exhibition in London that coincided with the first international conference on town planning.[14] The exhibition explored the historical and contemporary development of towns and cities worldwide. After the 1910 conference, the temporary exhibition was transformed into The Cities and Town Planning Exhibition, with Geddes as its director.[15] This new circulating exhibition aimed to explain the history of the city from antiquity to the present, with its contemporary garden city movement. In addition, Geddes usually added a survey of the town in which the exhibition was currently being held, thus juxtaposing the universal phenomenon of the city with the specific local example.

The exhibition opened with a section that explained the geographical conditions that allowed cities to emerge. It then followed a historical chronology that led from ancient and antique cities to medieval and Renaissance ones, and then onwards to a depiction of the contemporary industrial city with its pressing social and urban problems. The exhibition did not end with a specific plan or a general solution, except to recommend garden city principles. Instead, Geddes wanted to educate the visitors, whom he hoped would leave with ideas as to what they could apply to their own towns.

The exhibition consisted of engravings, maps and plans, as well as other two-dimensional and three-dimensional depictions of cities. These visual exhibits were to speak for themselves; textual explanations were extremely rare, for Geddes either guided visitors through the exhibition or referred them to a printed catalogue. But the exhibition was not simply a morphology of city forms. Though it did incorporate many visual insights into the emergence of urban forms (for example, images of market places, cathedrals and temples emphasised the importance of the heart or urban core of a city),[16] Geddes felt that it had an even more important aim – to shed light on such eternal structural facts as a city's dependence on its geographical region and the citizens' responsibilities for their environment: these were facts which, he believed, cut across geographical areas and historical periods.

Jaqueline Tyrwhitt: teaching the history of the city

Tyrwhitt was among the first to incorporate into the teaching of city planners the idea of the ongoing relevance of historical cities in the design of the city of the future.[17] From 1941 Tyrwhitt was the Acting Director of Studies of the School of Planning and Research for Regional Reconstruction. Originally this school had been associated with the Architectural Association in London, but by 1940 it was a division of the private planning consultancy, the Association of Planning and Regional Reconstruction (APRR). Under Tyrwhitt's directorship a correspondence course in town planning was one of the major activities of the school.[18] This course had been initiated by the Army Education Department of the War Office as part of its effort to train sufficient planners for the reconstruction of British cities after the war.[19] It consisted of three lecture series, and booklets with relevant readings were prepared for each lecture in each series.

After the war, much of the teaching material was brought together into *The Town and Country Planning Textbook*, to which Tyrwhitt contributed several essays. One of them was entitled 'Society and Environment. A Historical Review',[20] and in it she aimed to link the issues that British planners faced with an overview of the history of the city, explicitly citing Giedion's statement that the modern town planner needed to be interested in the history of the city.[21] Tyrwhitt's survey followed traditional accounts of the origins of Western civilisation in the ancient Near East and the gradual development both westwards and northwards through Greece and Rome towards southern and northern Europe. But, in order to make her overview relevant to planners in Britain, there were specific sections on 'Britain B.C.' and 'Roman Britain'. Interestingly, she included Renaissance cities in the

section on medieval cities. Two more sections on Britain – one on the 'English countryside in the eighteenth century' and one on 'British urban development' – brought the survey up to the nineteenth century. Like Geddes and Giedion before her, Tyrwhitt presented the nineteenth century as a grim period of failure in town planning. Her survey concluded with an overview of modern trends in city planning that touched on Ebenezer Howard's garden city, the theory of Patrick Geddes, CIAM's efforts in urban planning and Lewis Mumford's ideas on regional cities.

Overall, the chronological and geographical sequence made sense only when it focused on the relationships between, for example, Roman cities and Roman settlements in the British Isles and their continuing influence on the contemporary British city. The essay emphasised two conceptual points. The first was the question of housing, which Tyrwhitt made clear only in her conclusion to the essay: here, she brought together a number of expert statements on that issue. The second had already been stated in the opening paragraph: 'If, in a study of several primitive societies and their ways of living, we find much that they have in common, it is probable that these common factors are also important, though sometimes concealed, in more complicated societies.'[22] These common factors included food as a 'means of expressing social relations', possessions because of 'their social value', reverence for death and old age, 'regard for the close relationship of mother and child', and 'wrong-doing punished by general consent'.[23] Tyrwhitt's final paragraphs returned to these five points, after the intermediate sections had dealt with them individually in different historical and geographical urban settings.

Thus, Tyrwhitt's survey of the history of the city combined Giedion's claim that any historical inquiry should be driven by contemporary interests – housing in this case – with Geddes' aim of unearthing in the history of the city structural constancies that would determine social and individual life regardless of any historical period or geographical location.

Lewis Mumford's *The Culture of Cities*

Deeply inspired by Geddes' theory of the city, Mumford's book is one of the earliest examples of a history of the city that ends with a Modernist prediction of an urban future. In the preface Mumford explained that his goal was 'to establish, for the purpose of communal action, the basic principles upon which our human environment – buildings, neighbourhoods, cities, regions – may be renovated'. Furthermore, he wished 'to explore what the modern world may hold for mankind'.[24] Reflections on the importance of time dominated the introduction:

> Cities are a product of time . . . In the city, time becomes visible . . . Through the material fact of preservation, time challenges time, time clashes with time . . . By the diversity of its time-structures, the city in part escapes the tyranny of a single present, and the monotony of a future that consists in repeating only a single beat heard in the past.[25]

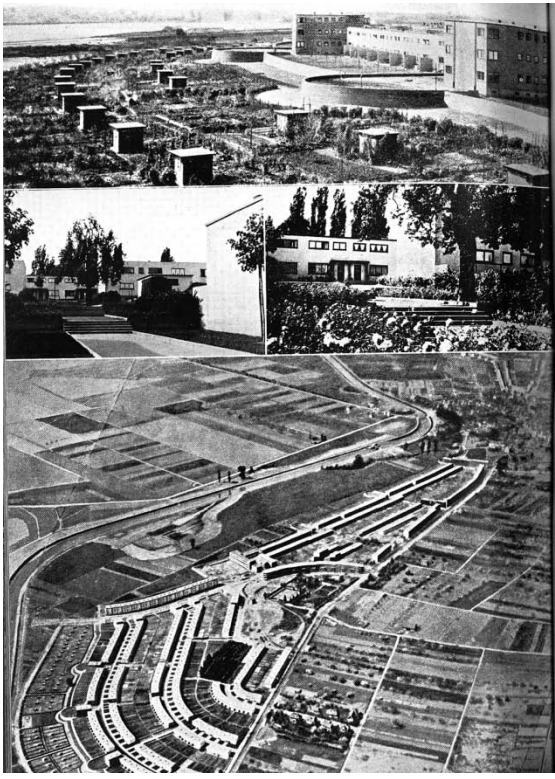
Based on the assumption that cities are shaped by a multitude of overlapping historical periods, Mumford provided a survey of the city in Western

civilisation. The chronology began in the first chapter with the Middle Ages in western Europe and continued in the second chapter with both Renaissance and Baroque architecture and planning. The third and fourth chapters were devoted to the rise and fall of the industrial town and the megalopolis, and included North American examples. The final three chapters presented an outline of the regional city of the future. Envisioning this city was presumably Mumford's ultimate goal in this book. However, considering Mumford's choice of urban designs – for example, Ernst May's Römerstadt in Frankfurt (1926 onwards) – any relationship between the city of the past and that of the future is not easy to detect.

Instead, the connection between the various historical periods was a conceptual one that centred around the relationship between the future and the past. Mumford identified the nineteenth century as a period of the almost total downfall of the city in Europe. Towards the end of that century an older way in which to encounter the world re-emerged:

> The orientation of thought toward the realities of organic life, something that in the eighteenth century went no further than the intuitions of the poet or the naturalist, had by the end of the nineteenth century become so pervasive that it entered even into the hitherto lifeless realm of mechanics.[26]

4.3
Ernst May, 'Frankfurt Römerstadt: Biotechnic Order', 1926



IX: CITY AND REGION

[32] FRANKFURT-RÖMERSTADT: BIOTECHNIC ORDER

One of the earliest applications, beginning 1926, of modern methods of planning and building communities: so far probably the best. Parallel rows of houses in long blocks unbroken by traffic streets: narrow roads bordered with verdure for local service: large open spaces, with ample lawns, flower beds, and dining terraces behind the houses. The curving unit in the middle of the air-view is a four story high apartment block and retail business center, equally accessible from both ends of the community: the utilization of low and high units in this scheme gave opportunities for strong rhythms and accents, as in the two apartment units that stand out by the curving ramparts in the top picture. The varying orientation of houses was determined, not by sunlight exposure alone, but by other equally important elements—the lay of the land and the grand view across the Nidda Valley, permanently zoned for agricultural uses. If this development does not show the rigorous economies and stereotyped formulae of some later German schemes, it shows the artists' freedom of design which will be more and more possible in future as our communities turn their economic production to social ends: to plan economically for the future means, not cramping the work to the niggardly possibilities of today, but anticipating the higher standard of living well within our collective grasp—with its call for space and beauty rather than mere economy. To plan on low levels, on the basis of standardized and universally accepted poverty, is to plan for defeat: high standards of space are the best safeguard against obsolescence. The low-lying land beneath the parapet (*top photograph*) shows the individual cultivation gardens with their trim, collectively built, tool sheds: part of the green belt that sets off this community on two sides. The urbanity of the street picture, full of color and subtle variation, is far more stimulating than the mediocre suburbanism of more conventional contemporary schemes.

Here is an urban nucleus that meets the need for concentration (social advantage), for openness (hygienic and biological advantage), and for collective order and beauty: an environment in which the varied needs of the individual and the common life are effectively reconciled. But Römerstadt is only a sample: the widespread building of such units requires equally positive changes in industry, in economic standards, in political organization, and in culture: changes for which the older political parties and programs have only confused, partial, and contradictory formulations. The building of new communities, on a scale commensurate with social need, awaits the wider foundation, in every department, of a biotechnic culture. These new forms are prophetic of a new civilization: a civilization now in the same embryonic state that capitalism and mechanism were in the seventeenth century. Our generation faces the alternative of courageously going forward toward this civilization—or of relapsing into barbarism, marked by the muddled timidities of a disintegrating capitalism, and that neurotic substitute for an integrated order, fascism. . . . Forward!

Together with the return to the organic went the dissolution of the boundaries between the mechanical physical world and the internal world of dreams and human aspirations.[27] Similarly, the dividing line between the past and the future changed for ever:

> Human beings and groups are the outcome of an historic complex, their inheritance, and they move toward a conditioned but uncertain destination, their future. The assimilation of the past and the making of the future are the two ever-present poles of existence in a human community.[28]

Accordingly, the present is confined to the eternal moment of transition from the future into the past – a small but crucial position: 'One of the most important attributes of a vital urban environment is one that has rarely been achieved in past civilizations: the capacity for renewal.'[29] To move the city towards the future while ensuring the assimilation of the past was the task of the present city. Accordingly, it did not exist outside any historical time but, just like an organism, between the poles of the past and the future: 'The autonomy of the organism, so characteristic of its growth, renewal, and repair, does not lead to isolation in either time or space. On the contrary, every living creature is part of the general web of life.'[30] Thus, Mumford's interest in historical cities turned out to be a necessary step towards the city of the future because both types together constitute the web of urban life.

Subsequently, Mumford distinguished between ossified urban cultures and living ones.[31] From here onwards the tone of his analysis of historical cities changed significantly. Permanence in urban structures would bring death,[32] and 'stone gives a false sense of continuity, and a deceptive assurance of life'.[33] In short, Mumford said that 'forms and patterns of past ages die slowly'.[34] His alternatives for the city of the future were, for example, 'de-materialization: a reduction of physical structures to their absolute functional minimum',[35] and the 'discovery of architectural constants that do not have to be renewed from generation to generation'.[36] Mumford continued:

> As we design our cities for permanent living . . . we shall discover . . . a whole series of biological and social constants that will vary little from generation to generation; or at all events, such variation as is necessary will take place within, not in opposition to, the permanent form.[37]

In spite of its account of earlier periods of Western urban history, ultimately *The Culture of Cities* concluded on an ahistorical note by outlining a city of the future that would arise out of the urban past only in order to end the latter for ever.

Arthur Korn's *History Builds the Town*

In spite of its title, Korn's book was not primarily about historical cities. Instead, the book had 'a practical purpose: to establish first principles for the planning of our contemporary town'. However, historical cities play a role in this process because

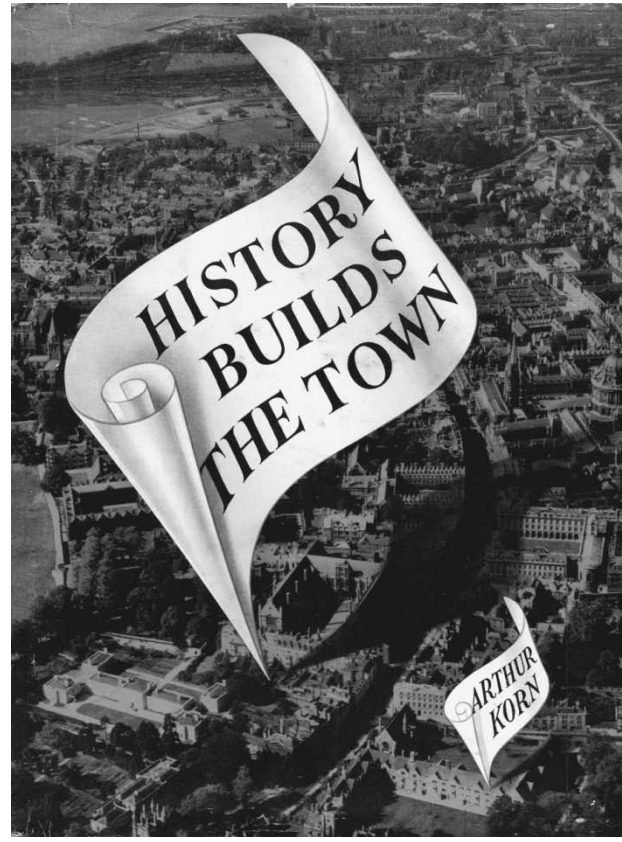
in order 'to master the problems of contemporary town planning, it is necessary to understand first what the town is'.[38] In the 1950s, Korn thought that the answer to that question could be found in the study of the history of town planning. This, however, had not always been his belief.

When asked about the basic ideas for the MARS plan for London, Korn sometimes recalled an episode from his time in Berlin during the 1920s:

> What basically is a town? Well, I thought, it's a big quarter where people live and where they work. So we did a scheme for Berlin – living on one side and work on the other; a line in the middle with all the equipment and the hinterland open so that both could expand or retract . . . this system I tried to apply to London and thus gradually created the MARS Plan.[39]

Clearly, early on in his career, Korn did not have much time for the fate of existing Berlin or historical London.

But in his book in 1953, Korn asked the same question again: 'What is a town?' This time his answer was more sophisticated: 'Each town has a personality



4.4
Edward Burrett, dust jacket for Arthur Korn, *History Builds the Town,* London, Lund Humphries, 1953, using an aerial image of Oxford with the Radcliffe Camera, Bodleian Library, centre right.

due to geographical or other natural influences; but as well as this personal "accidental" character each town is the result of the social and economic forces of a distinct historical period.'[40] Korn continued to outline a three-stage model for the analysis of cities:

> The most elementary way to study a town is to see it as an individual specimen. Everybody is aware of this method. The next stage is to classify it as a historical type; as for instance a medieval city, a renaissance [*sic*] town, or a great modern city. The last stage is to see it as a product of general laws which apply to towns of all types and periods.[41]

To study a town as an individual fact is barely worth mentioning – it is the way in which citizens usually encounter their urban environment. Perhaps this was a remark made to refute the Geddesian idea of the survey of a town through its citizens, even though Korn generally appreciated Geddesian theory.[42] To classify towns according to their origin in different periods could bring some order to the mass of historical examples, but it remains unsatisfactory for it does not point towards general principles. For example, Korn accused Max Weber's investigations of different cities in various civilisations of failing to identify the common denominator of all of them: 'In Weber's opinion such diversity of types indicates that there can be no common denominator; he is satisfied to list them without any attempt to find a common basis.' Even worse, Weber had concluded 'that one should speak only of particular towns or types but not of "the town" generally'.[43]

Finally, by linking the attempt to identify the common laws that governed all cities to the highest level of expert knowledge, Korn managed to balance the importance of the history of the city with the unchallenged authority of the modern planner. Only the latter has access to these supra-historical laws that cut across all towns and periods, and one such law is that 'the town has always been, and must be, the expression of the power-structure of society prevailing at the time'.[44] Moreover, 'the town is a social phenomenon . . . Nature and the activity of man are interdependent and form the basis of social progress; they must, therefore, be the point of departure for all further investigation.'[45] These rather vague statements formed the basis of *History Builds the Town*.

Korn's methodological approach was 'to put the towns of each age, including our own, into their proper historical setting and make intelligible their transformation from one type to another'.[46] Despite plenty of socialist rhetoric and many quotes from Marx's writings, the book's neatly divided chapters move rather conventionally through Western urban history. Cities in ancient societies formed the basis upon which Korn's historical narrative unfolds. The latter began with the medieval city, then moved to that of early capitalism, and ended with the modern city. Each chapter is divided into sections. For example, Chapter 5 on the modern city considered Britain and the US as examples of negative developments, and these two sections were followed by a positive account of recent city planning in the USSR. The book culminated in the final chapter 'Theory and Practice', which

presented visionary city schemes by Ebenezer Howard, Tony Garnier, Le Corbusier, Hilberseimer and N. A. Miliutin – the last best known perhaps for his linear city plan for Magnetogorsk from 1929 onwards. The chapter concluded with Korn's support for such vast regional development schemes as in the Tennessee Valley region in the US and in the Moscow region in the USSR.

Ultimately, Korn did not make a convincing argument as to why history as the alleged builder of towns matters in relation to the Modernist planning schemes described in the final chapter. Korn, himself, expressed some dissatisfaction with the book,[47] even though others judged it to have been popular.[48] But history, especially the idea of historical progress mattered to Korn himself. He had been forced to flee from Germany, first in 1935 to Yugoslavia and then in 1937 to Britain. Sometimes he was described as 'an inveterate, unrepentant Utopian' whose 'revolutionary optimism' convinced him that the 'power to change the world depends on the clarity of . . . inward vision'.[49] Considering the large-scale destruction of historical cities in the Second World War, the argument that history is, after all, a rationally progressing process might ultimately explain Korn's motivation for writing *History Builds the Town*.

Ludwig Hilberseimer's *The Nature of Cities*

The German-American architect and city planner Ludwig Hilberseimer stated that his book, *The Nature of Cities*, contained three differently oriented studies of the city.[50] The subtitle 'Origin, Growth, and Decline-Pattern and Form-Planning Problems' indicates the main themes and the overall conceptual order of Hilberseimer's analysis. The study begins with a historical retrospective, which is followed by a section on the relationship between urban patterns and the forces that generate them, and it ends with a detailed presentation of Hilberseimer's radical proposals for the city of the future. Focusing primarily on the US and on central Europe, Hilberseimer suggested splitting up cities into regional networks of discrete communities.

The historical account in the first chapter 'Origin, Growth, and Decline' starts with the Neolithic period, and is followed by the Bronze Age, and the emergence of the city in the area between the Tigris and the Euphrates. From there the narrative moves to Greece, to Rome, Constantinople and the Carolingian Empire of the early Middle Ages. Feudal Renaissance cities are considered and then the cities of territorial states, such as Berlin, Paris and London. The final pages present a gloomy account of the nineteenth-century industrial city.

The second chapter 'Pattern and Form' goes over much the same ground – though anything pre-Greece is excluded – but with a different focus. The interest now centres on two principal alternatives in city planning. First, there is the organic mode with a pattern of irregular streets, and second, the geometric grid that was traditionally adopted for many newly planned cities. Hilberseimer connected these basic concepts to other such factors as 'the location of the city in relation to its defense; the socio-political ideas and organization of the city's people; the creative expression in architecture of the spirit of those people'.[51] This conceptual approach provided him also with an order in which to discuss the material.

Hilberseimer wanted to prove that the geometric grid could become the basis for an organically – meaning functionally – ordered modern city.

The final chapter deals with the radical improvement of the contemporary city. By grafting this chapter on to the two preceding ones with their primarily historical subject matter, Hilberseimer's book clearly illustrates the difficulty of arguing for a close relationship between the city in history and an ahistorical vision for the city of the future. His proposal of dividing up cities such as Chicago into a network of low-rise communities is as radical as his previous idea of a *Highrise City* (1924), whereby he envisioned replacing Berlin with a series of high-rise urban superblocks. The main difference between the plans is not the question of low-rise versus high-rise, but the relationship of each scheme to the historical city. In the case of the Chicago plan, Hilberseimer deliberately sought such a connection, at least in the pages of his book, but in the case of the *Highrise City* any such relationship was vehemently rejected.

In 1927, Hilberseimer outlined in *Großstadtarchitektur* the reconstruction of the nineteenth-century city after its population had been transferred to new suburban settlements. The 'rebuilding has to be executed without consideration for sentimental historicisms because it is not our task to conserve the past, but to prepare the future'.[52] Not even the briefest look back into history was of any purpose: 'The big cities of the past are set apart from the modern metropolis due to completely different economic conditions . . . Accordingly, no comparison between them and the modern metropolis is possible, nor can fateful parallels between both be drawn.'[53] Hilberseimer's next book, *The New City* (1944), maintained that the modern city was essentially to be planned without any consideration for past cities: 'The present problem of city planning cannot be solved by the patterns of the past.'[54]

Only in the aftermath of the Second World War did Hilberseimer develop a more discriminating position. For example, he wrote in *The New Regional Pattern* (1949): 'We are no longer what we were in the past. Yet our past lives in the present as the present will live in the future',[55] thus expressing a newly found appreciation of both the progression of historical periods and their importance for the future. *The Nature of Cities* appears to be the logical conclusion of Hilberseimer's gradual rethinking of the importance of the historical city for the city of the future. The book contained much of the same material as *The New City*, including the images. The main difference was that the first chapter of *The Nature of Cities* was arranged chronologically, thus apparently affirming the importance Hilberseimer now placed on a historical sequence rather than a conceptual comparison of cities from various periods and civilisations.

However, two aspects of the book raised doubts about such a happy conclusion. First, Hilberseimer discussed the history of Western European urban civilisations almost without mentioning dates.[56] Unless his audience happened to be extremely well versed in the chronology of Western civilisations, the text was more likely to be read as a general illustration of historical civilisations and cities appearing and disappearing. Second, the author compressed the histories of individual cities, their civilisations and their particular economic circumstances into

just a few short paragraphs, and these paragraphs amounted to hardly more than a condensed narrative of the historical city over a long period of time with very little analysis of relevant economic and political forces. Differences between various cultures and historical periods were glossed over in favour of a contemplation of the timeless growth and decline of the city; Chapter 1, in particular, recalls Oswald Spengler's depiction of historical landscapes nurturing civilisations and cities that continuously blossom and wither away.[57] It is fitting that Hilberseimer settled upon *The Nature of Cities* as the title for his book. To be able to unearth eternal, quasi-natural laws of the city in order to apply them to his own designs would have let Hilberseimer's schemes for the city of the future blossom for all time.

The city planner: a historian of the city?

The three books just discussed share a number of characteristics. They are essentially about the city of the future, regardless of the different narratives which the titles suggest. Moreover, in all cases the contents are structured in a tripartite way. Epic overviews of historical endeavours to build cities are followed by descriptions of an urban crisis – socially and architecturally – during the nineteenth century, and the authors depict this crisis as lasting right through to their time of writing. The concluding sections turn to the city of the future as the redeemer both of the present city and of the ongoing urban crisis. This final twist makes it difficult to consider the books as straightforward surveys of the history of the city. The arguments for relationships between the historical city and planning schemes for the city of the future are often tenuous.

Nevertheless, the authors felt the need to compile comprehensive surveys of the city, both geographical and chronological ones. This put them at odds with Geddes' and Giedion's interest in history and the historical city. Geddes wished to expose universal structural similarities in human interaction with the environment, but balanced universal urban history with historical surveys of specific cities. Giedion even claimed that detailed historical studies of individual cities were always preferable to general historical overviews:

> *History is not a compilation of facts, but an insight into a moving process of life*. Moreover, such insight is obtained not by the exclusive use of the panoramic survey, the bird's-eye view, but by isolating and examining certain specific events intensively, penetrating and exploring them in the manner of the close-up.[58]

Thus with regard to these books, to consider Mumford, Korn and Hilberseimer primarily as historians of the city does not seem to penetrate to the core of their interest in the city in history. A more satisfactory motivation for their interest can be found if the three authors are understood as collectors of images of the city. The opening sentence of Mumford's *The Culture of Cities* confirms that the act of collecting was crucial both to the book and to the author: 'As far back as 1915, under the stimulus of Patrick Geddes, I began to collect the materials that have gone into this book.'[59]

The city planner as collector of cities

The three authors presented their genealogies of the city of the future in two formats: as textual accounts and as collections of images. Blocks of images often interrupted the written narrative. Mumford's and Korn's publications both contained such pictorial books within textual ones. Hilberseimer's book was more conventionally organised, with images distributed evenly throughout the entire book. In all three cases, the reader is required to study the text and the illustrations. In front of his eyes a pictorial panorama unfolds, which seizes on historical cities from past and distant urban landscapes as a prelude for the city of tomorrow. These books are collections of photographs, engravings, drawings, plans, perspectives and diagrams. Presumably the images were selected from even larger collections of comparable material that served as a pool of possible illustrations.

In his 1937 essay 'Eduard Fuchs, the collector and historian', Walter Benjamin presented two opposing approaches to history and historical artefacts. One is the history of culture, a historical materialism based both on collecting material artefacts and on a Marxist analysis of history as process. The other is cultural history, a historicist approach that usually constructs an epic, once-upon-a-time type of history from collected artefacts.

Benjamin stated two main objections to cultural history. First, when contemplating a historical artefact, cultural historians ignore the 'unnamed drudgery' of those contemporaries who created it. Benjamin emphasised that 'there is no document of culture which is not at the same time a document of barbarism'.[60] Second, he argued that this removal of contextual reality changes the character of the artefact. If the barbarism embodied in historical artefacts is ignored in favour of the equally encapsulated aspect of cultural achievement, a culture disintegrates into a pile of commodities, because with the removal of contextual reality the artefacts undergo a process of reification in so far as they become objects that can be possessed and collected. In short, the once-artefacts-now-objects have simultaneously been conserved with regard to their cultural aspect but destroyed with respect to the contextual reality in which they originated.

Like Benjamin's collector, when Mumford, Korn and Hilberseimer collected cities, they were motivated by unveiling the lasting cultural achievements of earlier examples of urban design, even at the price of removing the contextual reality from the city in history. To give just one example, it is worth considering Mumford's images of eighteenth-century British cities. Taking literally Mumford's statement that 'cities are emblems',[61] the blocks of images that are interspersed throughout *The Culture of Cities* can be looked at as a series of emblems. Under the heading (*inscriptio*) of 'Environment of the Olympians', Mumford presented images (*picturae*) of eighteenth-century Bath. An explanatory caption (*subscriptio*) linked *inscriptio* and *picturae* by providing a moral lesson: 'Here is standardization and uniformity, of the strictest sort, without the usual connotations of dreariness.'[62] Mumford did point out that the 'crowded servant's quarters under the roof remind one . . . of the class exploitation . . . that accompanied this regime'.[63] But this was just a passing reminder of the contextual reality of a closed-off historical period that

had no influence on the present or even the future. The only relevant point was the crescent as pure architectural and urban form, as an exemplary cultural object whose formal characteristics received admiration. And this object could be collected, if not in reality, then at least in the form of an image.

Neither Korn nor Hilberseimer made such a sophisticated appropriative use of images. Korn provided rather neutral captions to his images, whereas Hilberseimer focused on morphological similarities between, for example, Claude Nicholas Ledoux's plan for the city of Chaux (1804) with his own scheme for an industrial settlement.[64] The point of comparison was the merging of built form and natural environment along the perimeters of each town. These two images from Hilberseimer's book form the link between the first two chapters on the historical material and the third chapter on the city of the future, which opens with the following statement: 'The city of our day is unlike all cities of the past.'[65] This is puzzling, especially because the preceding 191 pages made the reader contemplate countless cities of the past. Comparable gaps between the historical account and the vision of the future are also encountered in the works of Mumford and Korn.

4.5
'Environment of the Olympians'

Again, the Benjaminian figure of the collector helps to explain this puzzling gap. Ultimately, Benjamin identified the collecting cultural historian as

III: TRANSITIONS [9] ENVIRONMENT OF THE OLYMPIANS

[TOP] Royal Crescent at Bath: one of the culminating points of eighteenth century upper class planning. Formal order and coherence of a palatial sort, achieved by the collective pooling of resources by the individual occupants, by the unified control of the land, and by a comprehensive design executed by a single mind that controls and orders all the elements: possible only when there is a consensus in society: a common point of view and common values. The relation of buildings and open spaces here shows a closer kinship to modern esthetic and social conceptions than does the more typical urban plan of Covent Garden, below. Here is standardization and uniformity, of the strictest sort, without the usual connotations of dreariness. (*Photograph: Aerofilms*)

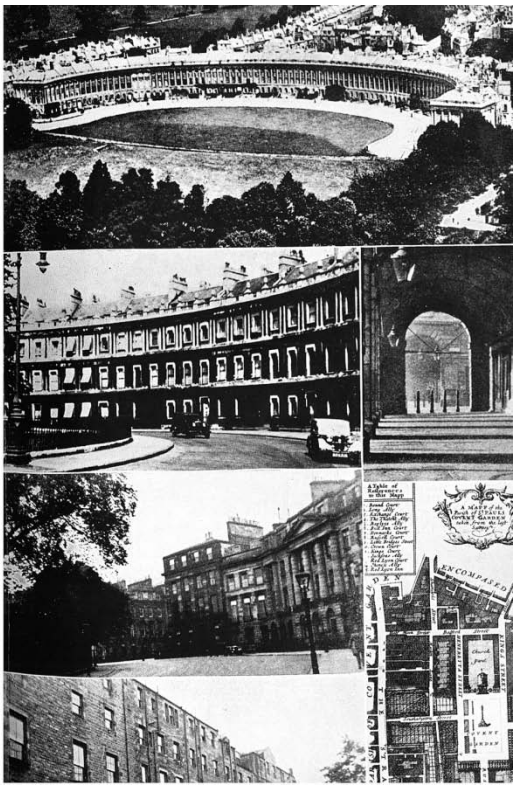
[FIRST LEFT] Street view of another circle at Bath: the architectural form is nearer the quiet eighteenth century English vernacular than to the somewhat more pretentious classic façades of the Royal Crescent. The crowded servants' quarters under the roof remind one, however, of the class exploitation and servility that accompanied this regime. (*Photograph: Carl Feiss*)

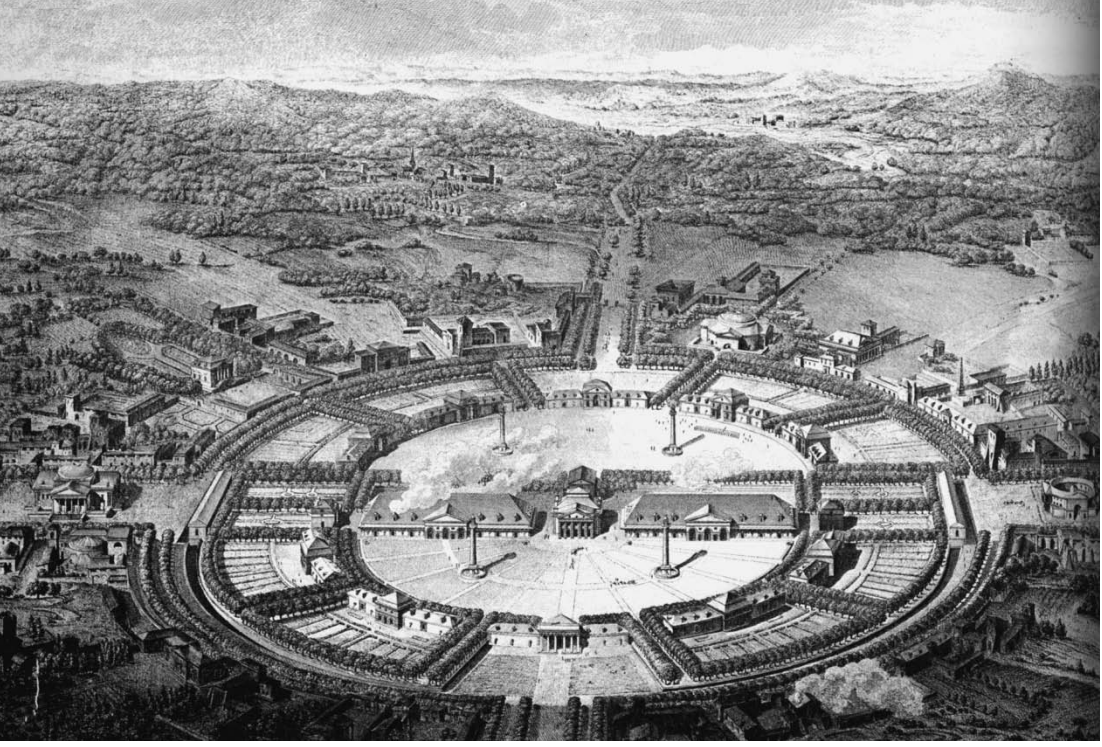
[SECOND LEFT] The class front in the new town of Edinburgh: like Karlsruhe, Nancy, and Bath one of the great examples of coherent upper class town planning made possible by unified ownership of large parcels of land and centralized, co-ordinated design and building: conditions which disappeared in the nineteenth century, only to be recovered in the publicly aided housing projects of today. Later exigencies broke the roof line and spoiled the esthetic effect of this example: the irregularity, so inevitable in medieval façades, is mere disorder in the baroque street picture.

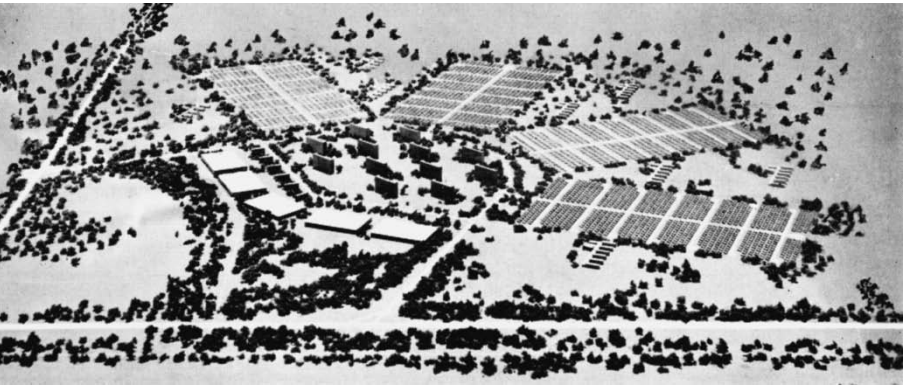
[BOTTOM LEFT] Rear of a handsome façade in Edinburgh: barracks architecture, facing a catwalk: typical indifference to rear views characteristic of scene painting. An architecture of fronts. Beautiful silks: costly perfumes: dirty bodies. Elegance and smallpox. Out of sight, out of mind. Modern functional planning distinguishes itself from this purely visual conception of the plan by dealing honestly and competently with every side, abolishing the gross distinction between front and rear, seen and obscene, and creating structures that are harmonious in every dimension: planning for the human organism as a whole.

[MIDDLE RIGHT] Arcade in Covent Garden: the Renascence theme in its purity. (*From London; the Unique City, by S. E. Rasmussen: New York, 1937. By permission of the Macmillan Company, Publishers.*)

[BOTTOM RIGHT] Plan of Covent Garden in the eighteenth century: except for the axial approach of Russell Street, the disposition and scale of this square is closer to late medieval Italian than to more absolutist concepts of baroque order. But note overcrowding of the surrounding blocks and courts: notably the airless buildings bounded by Maiden Lane and Half Moon Streets. Broad Court, lower right, is a typical late medieval form.







4.6
C. N. Ledoux, 'Plan of the City of Chaux', 1774–9

4.7
Ludwig Hilberseimer, 'Industrial Settlement', undated

an allegorist, the consequences of whose actions he described as follows: 'That which is touched by the allegorical intention is torn from the context of life's interconnections: it is simultaneously shattered and conserved.'[66] Thus, the puzzling gap or paradox turns out to be the ambivalence of the collector's action that oscillates continuously between preserving and destroying the object of his admiration.

Staying with the Benjaminian language, Mumford, Korn and Hilberseimer's endeavours conserve historical cities while shattering them at the same time. The authors preserve historical cities in their books. But, metaphorically speaking, they shatter them by reducing them to mere sequences of images of past urban designs which, furthermore, have found their match in the city of the future, the teleological endpoint of the genealogical surveys. Thus, the

books achieved what, in reality, had for a long time been out of reach – the creation of a tabula rasa, a clean slate on which to start all over again.

However, by the time these genealogies were compiled, this tabula rasa had become real. Mumford's book was written when the author foresaw a crisis in modern technological civilisation. Korn's book was published in the face of widespread destruction during the Second World War. And this same background informed Hilberseimer's book. In addition, Hilberseimer made numerous references to the threat that the atomic bomb posed both to the historical city and to the continued existence of humanity, and the way in which the city planner could respond to this. Thus, surveying humanity's efforts to build cities at such times of crisis might appear as an act of defiance that emphasised humanity's longstanding cultural and urban history. Even better, the genealogies stressed that whatever the future might hold, it is the modern city planner who guarantees that history continues, if not in real historical cities, then at least in their Modernist equivalents.

Notes

1 Arthur Korn, *History Builds the Town*, London, Lund Humphries, 1953, pp. 89–90, plates 81–2.
2 Ludwig Hilberseimer, *The Nature of Cities. Origin, Growth, and Decline. Pattern and Form. Planning Problems*, Chicago, IL, Paul Theobald, 1955, pp. 235–54; Ludwig Hilberseimer, *The New City. Principles of Planning*, Chicago, IL, Paul Theobald, 1944, pp. 140–9.
3 Lewis Mumford, *The Culture of Cities*, New York, Harcourt, Brace & World, 1938.
4 Other comparable genealogies from roughly the same period include Walter Segal, *Home and Environment* (1947), London, Leonard Hill, 1953, chapter 13, section 3, 'A Short Account of Layout Practices in the Past', pp. 178–91; Ralph Tubbs, *The Englishman Builds*, Harmondsworth, Penguin, 1945; Sigfried Giedion, 'Historical Background to the Core', in Congrès Internationaux d'Architecture Moderne, J. Tyrwhitt, J. L. Sert and E. N. Rogers (eds), *The Heart of the City: Towards the Humanisation of Urban Life*, London, Lund Humphries, 1951, pp. 17–25. An early predecessor is the *Transactions of the Town Planning Conference London, 10–15 October 1910*, London, RIBA, 1911, where 'Part 11 Papers and Discussions' presented a series of papers arranged in four sections – Cities of the Past (which was subdivided into a sequence of contributions which dealt with Hellenistic cities, Roman cities, Renaissance cities and Gothic towns), Cities of the Present, City Development and Extension, and Cities of the Future. Another early example is Bruno Taut, *Die Stadtkrone*, Jena, Diederichs, 1919, but there is no space in this chapter to investigate its possible influence on the works of Korn and Hilberseimer. A rather late example is Sibyl Moholy-Nagy, *Matrix of Man. An Illustrated History of Urban Environment*, New York, Praeger, 1968.
5 Walter Benjamin, 'Eduard Fuchs: Collector and Historian' (1937), in Andrew Arato and Eike Gebhardt (eds), *The Essential Frankfurt School Reader*, Oxford, Basil Blackwell, 1978, pp. 225–53.
6 Sigfried Giedion, *Space, Time and Architecture. The Growth of a New Tradition* (1941), Cambridge, MA, Harvard University Press, 1944, p. 7.
7 Ibid., p. 7.
8 Ibid., p. 9.
9 Ibid., p. 8.
10 Ibid., p. 5.
11 Ibid., p. 434.
12 Ibid., p. 547.
13 Ibid., pp. 540–1.
14 The Royal Institute of British Architects (RIBA) (ed.), *Town Planning Conference London, 10th to 15th October, 1910: Exhibition of Drawings & Models at the Royal Academy from the 10th to the 22nd October*, London, Clowes and Son, 1910.

15 Volker M. Welter, 'Stages of an Exhibition. The Cities and Town Planning Exhibition of Patrick Geddes', *Planning History*, 20, no. 1 (1998), pp. 25–35; Volker M. Welter, *Biopolis: Patrick Geddes and the City of Life*, Cambridge, MA, MIT Press, 2002, pp. 99–103, 124–31.
16 Volker M. Welter, 'From *Locus Genii* to Heart of the City: Embracing the Spirit of the City', in Iain Boyd Whyte (ed.), *Modernity and the Spirit of the City*, Routledge, 2003, pp. 35–56.
17 'Mary Jaqueline Tyrwhitt In Memoriam', *Ekistics. The Problems and Science of Human Settlements*, 52, no. 314/315 (1985).
18 Inés Zalduendo, 'Jaqueline Tyrwhitt's Correspondence Courses: Town Planning in the Trenches', paper read at the Fifty-Eighth Annual Meeting of the Society of Architectural Historians, Vancouver, British Columbia, 6–9 April 2005.
19 Jaqueline Tyrwhitt, 'Preface', in APRR, *Town and Country Planning Textbook*, London, Architectural Press, 1950, pp. xv–xvi.
20 Jaqueline Tyrwhitt, 'Society and Environment. A Historical Review', in APRR, *Town and Country Planning Textbook*, pp. 96–145.
21 Ibid., p. 145.
22 Ibid., p. 96.
23 Ibid., pp. 96–7.
24 Mumford, *The Culture of Cities*, p. v.
25 Ibid., p. 4.
26 Ibid., p. 300.
27 Ibid., p. 303.
28 Ibid., pp. 301–2.
29 Ibid., p. 433.
30 Ibid., p. 302.
31 Ibid., p. 433.
32 Ibid., p. 434.
33 Ibid., p. 435.
34 Ibid., p. 438.
35 Ibid., p. 441.
36 Ibid., p. 443.
37 Ibid., p. 445.
38 Korn, *History Builds the Town*, p. 1.
39 Arthur Korn, quoted in Edward Carter, 'Introduction', in Dennis Sharp (ed.), *Planning and Architecture. Essays Presented to Arthur Korn by the Architectural Association*, London, Barrie and Rockliff, 1967, pp. 13–14.
40 Korn, *History Builds the Town*, p. 3.
41 Ibid., p. 3.
42 Sharp, *Planning and Architecture*, pp. 9–10: 'Professor Tyrwhitt pointed out in a letter to me, Arthur Korn "would be happy to have the old hero's [Geddes'] voice presented in this volume".'
43 Korn, *History Builds the Town*, p. 2.
44 Ibid., p. 1.
45 Ibid., p. 3.
46 Ibid., p. xi.
47 Stephen Rosenberg, 'An Appreciation', *Architectural Association Quarterly*, 11, no. 3 (1979), p. 50.
48 Sharp, *Planning and Architecture*, p. 9.
49 Hugh Morris and Andrew Derbyshire, 'Arthur Korn: Man and Teacher', in Sharp, *Planning and Architecture*, pp. 125–6.
50 Hilberseimer, *The Nature of Cities*, p. 13.
51 Ibid., p. 116.
52 Ludwig Hilberseimer, *Großstadtarchitektur*, Stuttgart, J. Hoffmann, 1927, p. 1, my translation. The original reads: 'Diese Sanierung muß auch ohne Rücksicht auf sentimentale Historizismen durchgeführt werden. Denn unsere Aufgabe ist es nicht, die Vergangenheit zu konservieren, sondern der Zukunft Wege zu bereiten.'
53 Hilberseimer, *Großstadtarchitektur*, p. 1, my translation. The original reads: 'Die großen Städte der Vergangenheit unterscheiden sich von den modernen Großstädten vor allem durch ihre völlig andersartigen ökonomischen Voraussetzungen . . . Sie können daher weder mit der modernen

Großstadt verglichen werden, noch in irgendeine schicksalshafte Parallele zu dieser gesetzt werden.'

54 Hilberseimer, *The New City*, p. 17.
55 Ludwig Hilberseimer, *The New Regional Pattern. Industries and Gardens, Workshops and Farms*, Chicago, IL, Paul Theobald, 1949, p. 58.
56 Among the very few exceptions is a reference to the year 1377, when the Pope moved from Rome to Avignon: see Hilberseimer, *The Nature of Cities*, p. 73.
57 Oswald Spengler, *Der Untergang des Abendlandes. Umrisse einer Morphologie der Weltgeschichte* (1920), Munich, dvt, 1972, especially chapter 2 'Das Problem der Weltgeschichte', section 1 'Physiognomik and Systematik', pp. 125–51.
58 Giedion, *Space, Time and Architecture*, p. v (italics in original).
59 Mumford, *The Culture of Cities*, p. v.
60 Benjamin, 'Eduard Fuchs', p. 233.
61 Mumford, *The Culture of Cities*, p. 3.
62 Ibid., p. 136.
63 Ibid., p. 136.
64 Ibid., pp. 190, 192.
65 Hilberseimer, *The Nature of Cities*, p. 192.
66 Walter Benjamin, 'Central Park', *New German Critique*, 34 (1985), p. 41.

Further reading

Association for Planning and Regional Reconstruction (ed.), *Town and Country Planning Textbook*, London, Architectural Press, 1950

Walter Benjamin, 'Eduard Fuchs: Collector and Historian' [1937], in Andrew Arato and Eike Gebhardt (eds) *The Essential Frankfurt School Reader*, Oxford, Basil Blackwell, 1978, pp. 225–53

Walter Benjamin, 'Central Park' [1938–39], trans. Lloyd Spencer with the help of Mark Harrington, *New German Critique*, 34, winter issue (1985), pp. 32–58

Dennis Sharp (ed.), *Planning and Architecture. Essays presented to Arthur Korn by the Architectural Association*, London, Barrie & Rockliff, 1967

Chapter 5

Perceptions in the conception of the Modernist urban environment

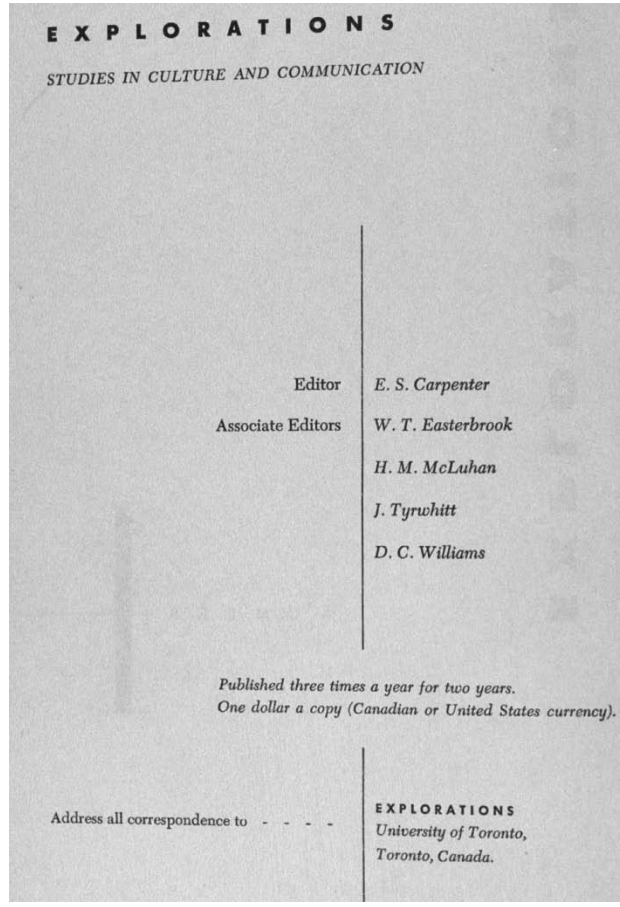
Canadian perspectives on the spatial theory of Jaqueline Tyrwhitt

Rhodri Windsor Liscombe

In investigating the influence Jaqueline Tyrwhitt (1905–83) exerted upon the formulation and transmission of Modern Movement town planning during the post-war decades, the significance of her Canadian connections becomes increasingly apparent.[1] These connections range from the professional to the anecdotal and thereby illustrate a still insufficiently studied aspect of the moment of trans-continental Modernist hegemony from the 1940s through to the 1960s.

After relinquishing her post as Director of Research at the Association for Planning and Regional Reconstruction (APRR) at the Architectural Association in London, and following a stint at the New School of Social Research in New York, Tyrwhitt partnered the Canadian Wells Coates in preparing the Town Planning Exhibition at the 1951 Festival of Britain in London.[2] Between 1951 and 1955 she

was Visiting Assistant Professor of City and Regional Planning in the Department of Architecture at the University of Toronto. There she collaborated with Marshal McLuhan, Thomas Eastbrook and Edmund Carpenter both to edit the journal *Explorations* (1953–59) and to undertake a major research project funded by the Ford Foundation on the 'Perception of the Environment'.[3] That research, which was completed in 1955, contributed to McLuhan's formulation of a theory of culture and, more specifically, of the role of media in the reconfiguration of the socioeconomic and individual ideo-psychological fabric. Furthermore, it engaged with issues that persist in a current debate about the existence of either a more complex Modernist condition or a distinct Postmodern condition.[4] In 1962 Tyrwhitt published a laudatory review of the adopted Torontonian Jane Jacobs's critique of conventionalized Modernist urbanism, *The Life and Death of Great American Cities*.[5] In 1976, having retired from full-time teaching at the Harvard School of Graduate Design (in 1969), but active as editor of *Ekistics* in collaboration with C. A. Doxiadis, she was a delegate to Habitat 1976, the United Nations Conference on Human Settlements at Vancouver.[6]


EXPLORATIONS

STUDIES IN CULTURE AND COMMUNICATION

Editor — E. S. Carpenter

Associate Editors — W. T. Easterbrook; H. M. McLuhan; J. Tyrwhitt; D. C. Williams

Published three times a year for two years.
One dollar a copy (Canadian or United States currency).

Address all correspondence to - - - -

EXPLORATIONS
University of Toronto,
Toronto, Canada.

5.1
Title page of the first issue of the journal *Explorations,* published in 1953 by the University of Toronto, with Jaqueline Tyrwhitt listed as an Associate Editor.

In a larger perspective Tyrwhitt's Canadian alliances were extremely varied. She worked with a range of influential individuals such as H. Peter Oberlander, who organized the Habitat 1976 conference. In addition she gained direct experience of the tension between periphery and centre within both modernity and Modernism. This experience reinforced her early upbringing and spatial perspective: she had been born in another of the British imperial dominions, South Africa, but was educated in Britain (in horticulture), in company with several Canadian Modernists, notable among whom was John Bland, a graduate of the Architectural Association who headed the McGill School of Architecture from 1939.[7] She became a central figure in the imagined and enacted community of Modernism, serving as Acting Secretary of CIAM (1951–64), which in her words comprised 'a gathering of friends from different countries who were devoted to the ideals of "modern architecture"'.[8] Besides teaching internationally, she was a consultant for the United Nations and organized the Delos conferences of the Ekistic foundation.

Her last book, *Human Identity in the Urban Environment* (1972), co-edited with Gwendolyn Bell, included essays by the multivalent universe of contemporary urbanists or urban sociologists from C. H. Waddington, Margaret Mead and Kenzo Tange to Christopher Alexander and Sigfried Giedion. The diversity of spatial understanding in both the geographical and theoretical senses which the contributors shared with Tyrwhitt is clearly shown in the essays by Alexander and Giedion. The essays were respectively entitled 'A City is Not a Tree' and 'Man in Equipose'. Alexander exposed the limitations of diagrammatic analysis in civic reconstruction, as exemplified by Tyrwhitt's associate, Ruth Glass, in her contribution to Max Lock's celebrated Redevelopment Plan for Middlesbrough (1947). Giedion acknowledged the limitations of the technical and political systems which in Modernist thought were supposed to be capable of effecting social improvement. In each instance gender played an oppositional role: the female expert endorsing nugatory expertise and the male defining the human condition.[9]

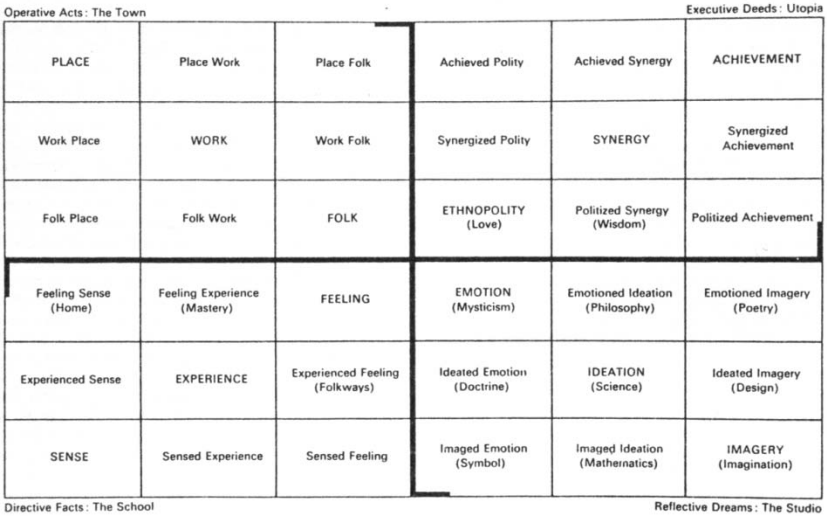
There is even a Canadian resonance to the conundrum of universality and gender neutrality in both Tyrwhitt's thinking and the wider ideation of Modernism. On 23 December 1960 McLuhan wrote to Tyrwhitt in reference to the typescript which their mutual friend, Serge Chermayeff, had sent to him. It was a draft of his book, *Community and Privacy: Toward a New Architecture of Humanism*, which he compiled with Alexander and published in 1963.[10] When writing about issues raised by Chermayeff, McLuhan identified as fundamental the loss of what he called the '*sensus communis*' (shared cultural sense) in the contemporary electronic age. He explained that because of this loss, 'we have discovered that we live in a global village, and the job is to create a global *city*, as center for the village margins. With electronics any marginal area can become center, and marginal experiences can be had at any center', thereby creating conditions for a new 'space-time'.[11]

Before considering the presumptions about spatial, social and sexual correspondence held by Tyrwhitt and other promoters of the Modern Movement, some background information is helpful. The networks established by leading Modernists through their design work, teaching, conference attendance and

friendships represent the intellectual infrastructure of what might be defined as the expansive phase of the movement. Modernism at that time benefited by being both a radicalizing force in the late imperial world and a conventionalizing agent in the creation of the new economic, political and cultural orders usually known as globalization.[12] The social aspect of this infrastructure also illuminates the inconsistencies within the supposedly homogeneous theory of triumphalist Modernism.[13] The inversions attaching to trans-geographical and trans-cultural design strategies and solutions were further complicated by the associations of Modernists with contrary socio-political forces. This is exemplified by Le Corbusier's courting of Vichy commissions and the cold war reconfiguration of the Modern as technologized consumerism centred in the traditional sites of modernity: middle-income suburbs and commercial town centres.[14] Studying the infrastructure additionally reveals the reflexivity active in Modernist thinking and practice despite the simultaneous pedagogical conventionalization inadvertently fostered by scholar-practitioners such as Tyrwhitt and the expanded academic training of architects and town planners during the period from 1941 to 1965.

In Tyrwhitt's case this folding-over process acted retrospectively as well as prospectively. Her two earliest substantial publications, *Planning and the Countryside* (1946) and *Patrick Geddes in India* (1947), inserted a blend of late Romantic and early sociological ideas into the textual mix of the Modernist agenda.[15] That agenda was akin to the later Canadian multicultural mosaic in its gathering together of a diverse collection of polemics. Moreover, this collection was chiefly reactive in nature, seeking to correct conditions rather than to introduce new solutions.[16] However, Tyrwhitt also contributed to the forward projection of concepts that had been developed in the late 1930s and early 1940s in her teaching and writing and through translating Giedion's seminal *Space, Time and Architecture* (1941).[17] The core bibliography which she developed for the APRR anticipated the pedagogical mental space built into post-Second World War university-based architectural training. This lexical architecture – the emergent historiography of Modernism – persisted for almost two decades, as Jean Gottman stated in a lecture given in 1976 at the University of British Columbia in Vancouver shortly before the opening of the Habitat conference: 'If you look at Western Europe, the teaching of planners, geographers, architects, urban sociologists and the rest is still based on the idealistic work of people who produced their best work before 1940 – Raymond Unwin, Le Corbusier and others.'[18]

Two years after the Habitat conference, Tyrwhitt discussed the study of urban and regional planning with Milos Pesovic, and this led to their book *Dialogues with Delians* (1978). The title referred to the conferences of experts on urban society and planning, which were held on Delos every year from 1963 to 1983. Tyrwhitt here endorsed ancient classical and idealist neoclassical ideas as much as Modernist thought. The American philosopher A. N. Whitehead's book *Adventure of Ideas* (1933) had been on her 1951 course reading list. 'Order and hierarchy', she asserted in 1978, were 'the wise restraints which make men free' and the 'basis of civilisation itself'.[19] So she endorsed the orderly analytic and strategy encapsulated in the Ekistic planning grid. She considered that this more complex



5.2
Patrick Geddes' town planning diagram as reproduced in the Tyrwhitt commemorative volume of *Ekistics*, 30, 1985.

version of earlier Gedessian, CIAM and Corbusian systems of urban diagnostic could 'encompass the developed and the underdeveloped [society], the individual and the mass, the natural and the man-made, the spontaneous and the planned'.[20] And she recalled a telling remark made by Giedion at the first Delos conference in 1963: regardless of the complexity of the urban problem, Giedion stressed the need for 'a leading thought that can be expressed in simple terms'.[21] Thus, while she successively modified her thinking and teaching, Tyrwhitt remained convinced that properly devised criteria could encompass the *particular* while yet being applicable to the *general* in terms of both time and space. A ludic expression of this ideology appears on the pack of 'Happy Families' playing cards sold at the 1951 Festival of Britain.

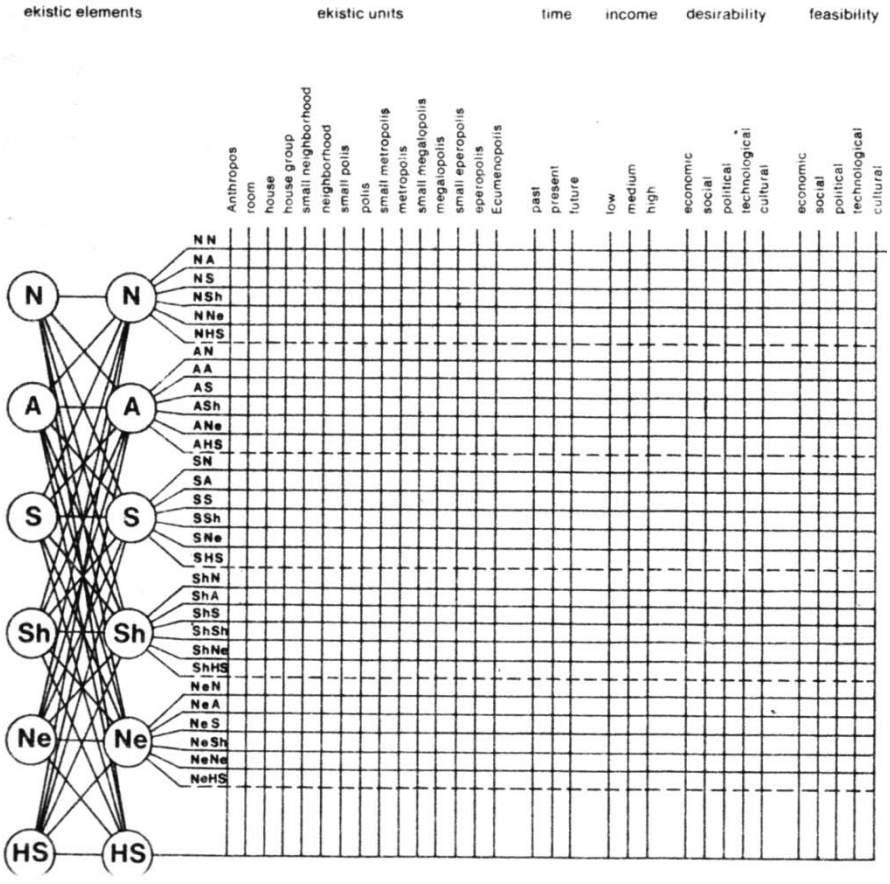
This conviction came from her background and her experience. Her architect father belonged to the generation of late Victorian agents of British and European imperialism who espoused the value of influential transoceanic systems and standards. Their actions transmitted material and cultural values that were presumed to be superior and therefore to be beneficial to the recipients. The effect is defined by Paul Ricoeur in *History and Truth*, where universalization appears to enable the 'advancement of mankind' but in fact results in the 'subtle destruction of historical and potential culture'.[22] This later colonial construct of the Enlightenment idea of progress concentrated on systems efficiency, especially in the social and environmental realms.[23] It was augmented by the legacy of the First World War – the acknowledgement of profound societal deficiency and the reification of technological and instrumental knowledge. These all infiltrated the liberal-humanist education of the privileged classes – in Tyrwhitt's case, at St Paul's Girls School in London. Her generation included a remarkable number of influential women who carried 'officer class' status and political emancipation into the presumption of equality in both gender and professional terms.[24] But the nature of that equality was idealistic, even aristocratic, rather than egalitarian, and this is signified by the

5.3
CIAM town planning grid as reproduced in the Tyrwhitt commemorative volume of *Ekistics*.

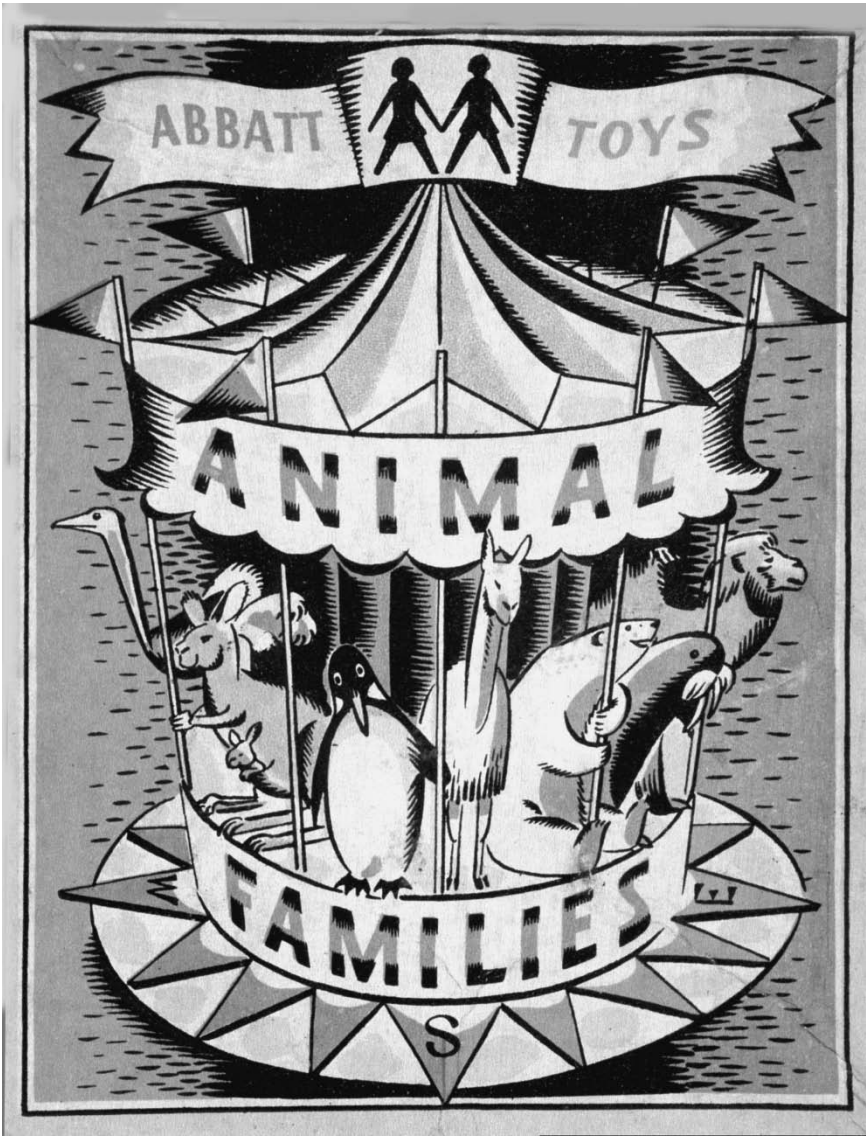
	10 Environment Physical, Historic and Demographic Data	11 Land Use Rural and Urban, Existing and Projected	12 Building Volume 3-Dimensional City Structure	13 Community Facilities	14 Ethics and Aesthetics	15 Economic and Social Aspects
Living						
Working						
Recreation						
Transportation						
Miscellaneous						

	16 Legislation	17 Finance	18 Stages of Realization	19 Miscellaneous	20 Rational Reaction Client, Public, and Authorities	21 Emotional Reaction Client, Public, and Authorities
Living						
Working						
Recreation						
Transportation						
Miscellaneous						

5.4
Ekistics anthropo-cosmos urban planning model as reproduced in the Tyrwhitt commemora-tive volume of *Ekistics*.



appointment from 1893 until 1936 of the Marchioness of Aberdeen as the President of the International Council of Women (which had been founded in 1888). Moreover, it depended on the assumption of traditional authority and on imperial geopolitics in the establishment of international agencies. Another British example from this first wave of feminism was Margery Perham, who both resisted and mobilized the societal constraints of her gender by becoming a leading advocate for gradual colonial devolution through her work as advisor to the Colonial Office.[25] This kind of paradox applied also to Tyrwhitt and other establishment women. Le Corbusier acknowledged the role of women in the simplification of design ethos but did not



5.5a and b
Box cover and card from the Happy Families games manufactured by Abbott Toys for sale at the 1951 Festival of Britain.

promote gender parity in the design profession. Women architects remained in the minority even though CIAM was initially financed by Hélène Mandrot. Yet, the list of British women Modernist architects is impressive, and included Elizabeth Denby, Jane Drew, Jessica Albery and Alison Smithson.[26] Similarly, the impact of women on international town planning during what was termed the Reconstruction era in the British sphere depended on remarkable individuals such as Catherine Bauer and Tyrwhitt herself.[27]

There was also the universalist ideology underpinning Modernism. Tyrwhitt's generation was haunted by the vicious legacy of political nationalism,



which had been particularly exaggerated in First World War propaganda. Furthermore, in the inter-war years, social classification and ethno-racial discrimination became intensified. Arguments from the particular seemed suspect, whereas arguments from the abstract appeared desirable and even practical. This was exemplified in many forms of discourse and policy in the period of Tyrwhitt's education and early career. On the brink of the First World War the English artist and critic Clive Bell had articulated a core strand in Modern Movement aesthetics through the concept of Significant Form – the evocative delineation of essential meaning through design – in his 1913 book entitled *Art*. His idea of the capacity of expressive form to exceed cultural boundaries was given a more practical purpose by Otto Neurath in a lecture on universal graphic language presented at the 1933 meeting of CIAM. The Congrès itself constituted one among several schemes for international systems, being a cultural equivalent of the linguistic Esperanto or the political League of Nations.[28] The British wing of CIAM, the Modern Architecture Research Group (MARS) devoted one room in its January 1938 exhibition in London to 'The Universality of Modern Architecture'. In the catalogue the group stated:

> The modern architect's aim is not to create a 'style' but to pursue a realistic unity of form and purpose, a concept whose implications are eligible not only for this or for that type of building, this or that climate, but for all building problems wheresoever.[29]

Such thought appears in the transformative, socio-cultural potency Le Corbusier ascribed to aerial technology in his book *Aircraft* (1935). Le Corbusier argued that the view from the air could expose deficient patterns and details in human settlements. Therefore, it could enable comprehensive understanding, and through an associated compression of time and space, enable the liberation of the social collective and individual subject.[30] Interestingly, Tyrwhitt inserted a module on air transportation in the curriculum she first developed for the APRR. The module readings included a book by Waldemar Kaempffert entitled *The Airplane and Tomorrow's World* (1945), while her lecture themes included 'Aviation and the New World Order' and 'The Obstacle of Nationalism'.[31] The currency of universalism also showed up in the renewed interest in the pan-cultural theology of Martin Buber and in the popular philosophical anthology, *The Perennial Philosophy*, published in 1946 by the British intellectual Aldous Huxley.[32]

Post-war reconstruction, accelerating colonial devolution and cold war mobilization variously acted to reinforce the framework of the universalist precept. That precept encompassed commonality of function and value together with the human 'common interests' and social 'forms of solidarity' reasserted by Hans-George Gadamer and Hannah Arendt.[33] Speaking on 'The Method of Training' at the Town and Country Planning Association meeting held at St Andrews University in September 1944, Tyrwhitt described planning as the coherent expression of the underlying patterns of community life: 'It keeps the different aspects of these in scale and is an integrating process linking up new social ideas and new scientific

developments with history, environment and habits of the people' – ideas and developments that were, however, to be 'creative and organic' and 'not in any sense something imposed and distorting'.[34] The paternalism was clearly shown in the notes Peter Oberlander kept of the 1947 CIAM conference at Bridgewater in England, which had largely been organized by Tyrwhitt. The set headed 'Notes on the Control of Architectural Expression' reads:

> Controls for the common good . . . [or] . . . more constructive ways of self-expression and self-assertion must be found and fostered to replace the superficial symbols of individuality (which is not an individualism in the creative or philosophical sense of personality; but a perverted ambition of being different from one's neighbours).[35]

In the 1951 version of her lecture, 'The Modern City', Tyrwhitt demonstrated the sophistication structured into such a proposition:

> The point of departure for all town planning should be the cell represented by a single dwelling, taken together with similar cells to form a neighbourhood unit of efficacious size. Every town-planning program must be based on accurate researches made by specialists. It must foresee the different stages of urban development in time and space. It must coordinate the natural, sociological, economic and cultural factors that exist in each case.[36]

The urban problem was initially regarded in the immediate post-Second World War years as one of containment in both spatial and social senses. Only in the late 1960s did Tyrwhitt's friend Otto Koenigsberger propose a flexible 'Action-Plan' model, which endeavoured to manage rather than constrain urban growth.[37] But the enormity of the global housing problem after the war, which was compounded by rapid population growth, reinforced her belief in systematic solutions. Such thinking predominated in the initiatives and reports that she carried out for the United Nations.

Her consultative work for the UN began with directing its inaugural seminar on housing and community planning held in New Delhi in 1954: this also involved organizing an exhibition of standardized low-cost village housing. The range of houses actually sought a combination of international techniques and local materials. Her regional Modernist approach anticipated Claude Parent's precept of critical modernity through a recognition of historical tradition,[38] and she probably chose it because of the unfortunate failure of the technologically faulty prefabricated housing started in Delhi by Koenigsberger in 1950.[39] The exhibition displayed seventy types of house, to accommodate regional variations across the subcontinent, but each was designed to general programmatic requisites with regard to space, structure and sociology. In this respect it recalled Lesson 1, 'The Approach', of the 1945 APRR town planning correspondence course summarized as 'Unity, diversity, uniformity'.[40]

At New Delhi in 1954 such an approach was eagerly received. The President of the Institute of Town Planners of India, Shri Fayasuddin, welcomed the historical, cultural and geographical space-time erasure central to Reconstruction Modernism:

> The purpose which has prompted us to assemble here is not one which is exclusive to any single country or any single nation. It is an international purpose and is common both to the highly developed or advanced countries and also to the so-called under-developed countries. The problem of housing or the problem of finding a suitable shelter and an environment considered desirable from a sociological, economical and human aspect is as important to man as the problem of finding food and clothing. And as far as low income groups are concerned, the problem of housing becomes a primary concern of every state claiming or aspiring to civilised status.[41]

Fayasuddin and Tyrwhitt looked beyond the divisive appropriation of ethnicity and nationalism in the resurgent competitive capitalist-commercial practices within the process of decolonization. The resolution of multiple disparity embedded in Modernist theory, the ultimately pragmatic legitimacy of utopian planning, never lost its appeal for Tyrwhitt. 'In her eyes,' mused Max Lock in the 1985 commemorative issue of *Ekistics*, 'Earth's changing elements were seen as a force working towards unity – man, nature and his environment.'[42]

However, Tyrwhitt was neither unreflexive nor dogmatic. The curricula of her courses evolved from a broad discussion of strategy and objectives to case



5.6
Photograph of Jaqueline Tyrwhitt with Prime Minister Nehru taken during the 1954 United Nations Housing Conference in New Delhi, reproduced from commemorative volume of *Ekistics*, 30,1985, p. 431, in which it is captioned 'Showing Nehru India'.

studies and problem-based learning. Her curricula modelled the architect-planner on the surgeon or the engineer and on the consultative team leader or coordinator. Her teaching at Harvard coincided with the Americanization of Modernism, which consequently changed from a Fabian socialist enterprise to a technocratically consumerist process, with the reification and then the demise of positivist views of progress.[43]

In her career Tyrwhitt also represented the radical potential of Modernism to sustain anarchic, or at least self-disruptive, activity amidst a broad consensus-driven reformist campaign. The inherence of a deconstructive position within the constructivist fabric of mainline Modernism surfaced in Tyrwhitt's association with McLuhan.[44] (Indeed, the extent of her influence on the theorization of acoustic space and a supra-modern frame for the enactment of social and individual cultural identity merits further investigation.) Before emigrating to Canada – in itself a significant step in her personal and professional life – Tyrwhitt had practised a version of McLuhan's bi-hemispherical thinking. For example, the reading list of her final 1951 diploma course at the APRR included writings by Herbert Spencer and Dale Carnegie, while she sought to integrate the individual idea into the universal. This is also shown in the description of her first planning course at Harvard, which was 'designed to make students see man as the measure of the human habitat, whether individual or community, and to introduce independent tools for forming man's physical environment'.[45] Planning was not an end-game, but a constant process of reconsideration.

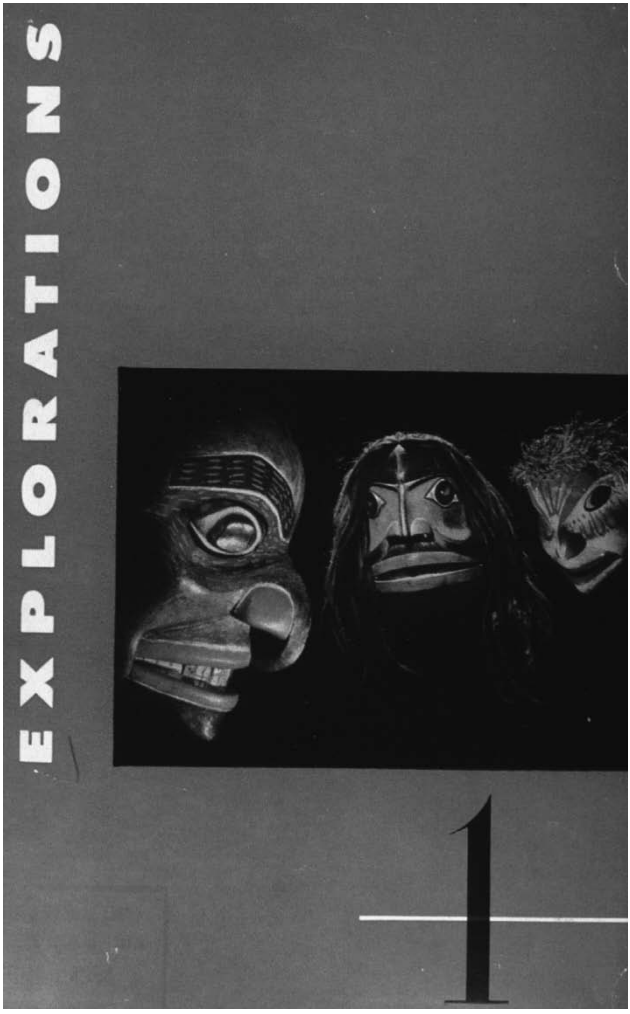
This corresponds with the editorial mandate of *Explorations*, a journal subtitled *Studies in Culture and Communication*, which was inaugurated in 1953. It was not intended to be 'a permanent reference journal that embalms truth for posterity', but 'a publication that explores and searches and questions'. The mandate was consequently defined in dynamic rather than static disciplinary terms:

> We envisage a sense that will cut across the humanities and social sciences by treating them as a continuum – we believe anthropology and communications are approaches, not bodies of data, and that within each of the four winds of the humanities, the biological sciences intermingle to form a science of man.

The editor, Edmund Carpenter, then Assistant Professor of Sociology at the University of Toronto, selected a series of First Nations masks from the Canadian north-west coast for the cover, and so he invoked the Modernist approach to indigenous art as an expression of material and symbolic meaning through abstract form.[46] The content of *Explorations* also demonstrated the variety of strands of thought and practice within the Modern Movement, even when it was most commercially and culturally conventional. In the first issue (1953), McLuhan's article 'Culture without Literacy' appeared alongside Northrop Frye's review of the *Oxford Dictionary of Nursery Rhymes*, David Bidney's 'Six Copernican Resolutions', David Riesman's 'Viblen's System of Social Sciences', Milford Spiro's 'A Typology of Functional Analysis', Ralph Goodman's 'Freud and the Hucksters' and Gregory

Kepes's 'Art and Sciences', while the third issue in 1954 contained an article by Harold Innis, pioneer of the spatio-cultural interpretation of new technology, and author of the celebrated book *An Empire of Communications*.

Tyrwhitt contributed to the second issue (1954), in which the contents ranged from Lord Raglan's article on social classes to Donald Theall's piece on the relation of Cartesian space-time to the novel form and its destabilization by James Joyce. Tyrwhitt's article was entitled 'Ideal Cities and the City Ideal'. It addressed a core issue in the genealogy, theory and historiography of Modernism. In immediate reference to the fundamental question of authority and agency, Tyrwhitt began, 'To write a Utopia, to live in an imaginary world, implies a dissatisfaction with one's immediate environment.' Utopian thinking was, to her, an essentially critical procedure, which defined 'evils and difficulties' in the current social and urban fabric.[47]



5.7
Cover of the first issue of the journal *Explorations,* published 1953 by the University of Toronto, illustrated with a still photograph of the Canadian Northwest Coast First Nations masks from the film *The Loon's Necklace* (Crawley Films).

5.8
Cover of the second issue of the journal *Explorations*, published April 1954 by the University of Toronto, composed in the manner of a newspaper page.



FEENICHT'S PLAYHOUSE

NEW MEDIA CHANGING TEMPORA
SPATIAL ORIENTATION OF SE

OTESTS USE HIS NAME

e Adams, former State ent employee, recently d as a poor security risk, tified before the Senate ing Committee that he is d has never been a mem- Communist Party. He ame had been placed on ad of a Communist front without his permission editor did not remove ad protested repeatedly.

LER TELLS OF GE BELIEFS

. White, missionary tive tribes of Canada, Kiwanis Club some beliefs held by these ple.

the native constantly sacred name will fall of an enemy who will vously. Rev. White seem strange, even but it's something s do. For to possess or his image is to his self, and when u have him at your

e these," said Mr. ce native peoples is upon the name. ghtened or beset ey change their ublicly, in a tra- , or secretly -- take on another ey begin afresh, slate clean with greis about the future ahead; orn. Again this strikes us as s nothing more ved expression and I dare say lief that dis- from this ex- n beneficial." t despite the rsonal pro- "he" occur that is, they e speaker, ken to, and neverthe- uages, Es- do not dis- mine. He r with the would in- e we are al feature as Mead mine to elopment ty. Ob- ation is 7)

McCarthy's photomontage of Communist Browder and Democrat Tydings kills Senator Tydings politically

SORCERY AMONG SAVAGES

Rhodesia: Recent reports warn that the natives of the Zambesi believe they can kill or injure an enemy by obtaining his likeness and introducing it into an unpleasant situation. Or, if they possess his name, they can render powerless the mightiest by naming him. In fact, if they obtain any part of the victim external to his body, so he is at their mercy, to be manipulated and destroyed at will.

The Colonial Office has promised to investigate these reports and to punish offenders.

Anthropologists interviewed in London pointed out that sorcery is a form of black magic, not to be confused with witchcraft. Witchcraft, they said, is a psychic art. Practitioners perform no rites, utter no spells, possess no medicines. They can injure others in virtue of some inherent quality that has no eternal symptoms. At times

(continued on page 2)

WAIT TILL FINNEGAN WAKES

Dublin: Why for thad they, it is Hiberio - Miletiana and Angloe-Noreman, donated him, birth of an option that was breeder to sweatoslaves, as mysterbolder, forced in their waste, and as for Ibdullin what of Himana, that their tolvtubular high fidelity daildialler as modern as tomorrow afternoon and in appearance up to the minute (hearing that anybody in that ruad duchy cf Wollinston schemed too halve the wrong type of date) equipped with supershielded umbrella antennas for distance, getting and connected by the magnetic links of a Bellini - Tosti coupling system with a vitaltone speaker, allirish earths and ohmes. This harmonic condenser enginium (the Mole) they caused to be worked caps ble of capturing skybuddies, harbour craft emittances, key clickings, vaticum cleaners, due to woman formed mobile or man made static and bowling the whowle hamshack and wobble down in an eliminium sounds pound so so to serve him up a meglegoturny mar goroumd, eclectically filtered for

T. S. ELIOT FLIES HOME

On leaving New York today Mr. Eliot said: "Only people who have lots of time ought to fly. Your body is in the plane, but all the rest of you is not, and that is why it is so exhausting. You need at least seventy-two hours after you come down to meet yourself and get put together again."

HISTORIC TIME COMES TO END

All the Chinese bandits having chopped off all the foreign ears, we have time to consider not only the subject ATROCITY, but the subject BANDITS, and the subject MISSIONARIES, and the subject FOREIGNERS, and the subject CHINESE. All the politicians who are going to be elected have been elected; and all the artificial excitement in events which no one really regards as either very important or very interesting has been exhausted. All historical events have happened

TIME - SI DUALITY C

Today scientists anno Western notions of time a once believed to be intu universal, are, in fact, Recognition of this fact ste two sources: (1) a growin ness that other cultures share these particular meta concepts, and (2) realizat these concepts are rapidly c in our own society.

Since the Renaissance the physics underlying our langua thinking has imposed upon t verse two grand cosmic f said to be utterly separate a connected aspects of reality. are (1) static, three-dimens infinite space, and (2) kinetic, dimensional, uniformly and petually flowing time, which turn, the subject of a three- division: past, present, and fu

But for modern man, lin thought, chronological order, torical sequence, causal relati ships, and all that these imply, no longer of vital importance. Ti standing alone, has ceased to b primary value; only as an ingredi of a larger whole is it now impo ant. The novel, the autobiograph the essay are no longer structur by sequential time, while emphas upon causality and succeeding im pressions, is being replaced b emphasis upon the single gestal standing alone. The "past" and th "future" have become part of the "now", and time and space are one.

Scholars are divided in their enthusiasm over these changes. Some argue that the end of the time-space duality, inseparably connected with science since the Renaissance, means the end of science. They view with alarm the new role of space, and fear for the printed page and the analytical argument. One large foundation has thrown its full weight behind traditional time studies. Other scientists are not so sure, and wonder if perhaps science will not only survive but flourish in this new climate.

Attempts to explain this revolutionary trend must be sought not in changes in the techniques of production of commodities, but in changes in the techniques of packaging and distributing ideas and feelings, which for man at least is as important as the food-quest itself. The power for change is not in the content of the messages, but in the form of the media themselves. Just as in the industrial revolutions, human relations and personality patterns were changed more by the means of production than by the commodities produced, so will these new

Tyrwhitt's second article appeared in the fourth issue (February 1955), together with such essays as Frye's 'The Language of Poetry', J. L. Borges's 'Mutations', Walter Ong's 'Space in Renaissance Symbolism', D. C. Williams's 'Acoustic Space', Carpenter's 'Eskimo Poetry: Word Magic', and McLuhan's 'Space, Time and Poetry'. Tyrwhitt's theme was the essential mobility of all spatial experience, whether of form in space, or of space in formation. Her article was entitled 'The Moving Eye', and it drew upon her stay in India, where she had been organizing the UN Planning Conference and where she had visited the sixteenth-century city of Fatephur Sikri.[48] She argued that it was conceived around a panoramic field of vision, through a regulating scale of proportions derived from an abstract schema based on concepts of ultimate order. She discussed the mobile delineation of the Chinese scroll as well as Doxiades's explanation of the Acropolis layout as a sequence of discrete fields of vision and Le Corbusier's recently formulated Modular. She talked about both the possibility and actuality of a Modernism divorced from the central concerns and practices of modernity. In her assessment, Modernism enacted deconstructive strategies. Modernist art had broken

> away from the tyranny of the static viewpoint – the conception of a static object and a static universe – to rediscover the importance of vision in motion. This close relationship of the discoveries of artists and scientists [including Werner Heisenberg, founder of quantum theory physics, whom McLuhan also often cited] is not fortuitous; they are fundamentally one and the same.

In addition, Tyrwhitt briefly examined Japanese prints, and film and television. However, she omitted the fuller analysis of the transformative intersection of science and technology with culture, which surely must have occurred in her discussions with both McLuhan and Giedion. Western vision – the collective gaze of late capitalist transoceanic culture – was changing, but only 'outside the realm of conscious rationalisation, because we have not yet learnt to organise [it] intellectually'. She concluded by noting the monotony underlying the magnificence of Versailles, in contrast to the exhilaration of the visual chaos of most contemporary city centres, and by anticipating the post-modern, post-metropolis validation of the random, the existential, the experiential, the ethnic, the disruptive and the destabilized – which was articulated variously by Robert Venturi, Christopher Alexander, Benjamin Constant, Hélène Cixous and Edward Soja.[49] Here she was wrestling with the main Modernist dilemma: the satisfying of the instinctive desire for individual identity in the rehabilitation of the totality. 'Here is our contemporary urban planning problem', she averred:

> How to find the key to an intellectual system that will help us to organise buildings, colour and movement in space, without relying entirely upon either introspective intuition (I feel it to be right that way) or upon the obsolete and static single viewpoint based on the limited optical science of the Renaissance.

In her last contribution to *Explorations*, in issue 5 which was published in June 1955, Tyrwhitt further detached the Modernist from Cartesian space, in a way that paralleled and probably informed McLuhan's re-spatialization of Western vision. The article was written with another of the journal's associate editors, D. C. Williams, and was published with sketch illustrations by L. Rampen as 'The City Unseen'.[50] They reviewed the results of a survey conducted in December 1954 at Ryerson College. The survey was probably a component of the Ford Foundation's project on 'The Perception of the Environment'. The students, 833 in all, had been asked to define their awareness of a series of composite and distinct urban and architectural factors, from streetscapes to advertising displays and the aesthetic attributes of buildings. Ninety per cent of the respondents were men educated in Ontario, which was a factor taken as normative by Tyrwhitt and Williams. Their major conclusions were the perceptual superficiality of the average person, a person's preoccupation with either the familiar or the new, and the significance of prior expectation and moral prejudice, which they called 'mental sightseeing'. But their terse analysis anticipated later twentieth-century theorization of space and place, from Henri Lefebvre's formulation of the social construction/production of space to Michel de Certeau's recovery of the narratives of everyday place-making and Marc Augé's diagnosis of supermodern non-places, filled with rhetoric and imagery of experience but bereft of organic society.[51] And their chief finding was the poor performance of most students in the operation of the Aristotelian trichotom of sensation, perception and ideation. They determined that few students operated cognitively above the utilitarian register of daily function in the urban spatial environment.



5.9
Sketch of a street in downtown Toronto drawn by L. Rampen to illustrate Tyrwhitt's article 'The City Unseen', printed in the fifth issue of *Explorations*, published June 1955.

Tyrwhitt's recognition both of the profound shifts in the perceptual frame and of the weak perception of most people evidently reinforced her faith in pedagogy and universality. In modifying her earlier teaching on town planning, she incorporated McLuhan's idea of the 'interface and the interval'.[52] Moreover, she endorsed those such as Christopher Alexander who castigated formulaic, end-solution planning. Thus, she honoured the radical reflexivity intended in Modernism design theory and strategy. She, therefore, also belonged among those who resisted the increasing emasculation of Modernist idealism and radicalism in much post-Second World War practice. In a final Canadian allusion, her approach might be likened to Glenn Gould's inventively harmonious deconstruction of J. S. Bach's fugues: a superseding of past forms by means of an inventive rethinking of their motivating logic.[53] Reflecting on the practice of planning and post-war urbanism after her retirement, Tyrwhitt affirmed the legitimacy of a comprehensive solution through analysis and decision. The Ekistic grid could, she declared, truly 'encompass the developed and the underdeveloped, the individual and mankind, the material and the man-made, the spontaneous and the planned'.[54]

Notes

1 The research for this article was funded through a grant from the University of British Columbia Humanities and Social Sciences Fund and under a John Simon Guggenheim Fellowship.

2 Tyrwhitt's career is recounted in 'Mary Jaqueline Tyrwhitt in Memoriam', a special issue of *Ekistics*, no. 52 (September/October and November/December 1985). Typically, her contribution to the organization of the Town Planning Exhibition was not fully acknowledged in the official and professional publications as represented by H. McG. Dunett, *Guide to the Exhibition of Architecture Town-Planning and Building Research*, London, HMSO, 1951, nor in the articles by A. Chitty and G. Stephenson published respectively in the May and August 1951 issues of the *Journal of the Royal Institute of British Architects*. See also, E. Harwood and A. Powers (eds), *Festival of Britain*, London, Twentieth Century Society, Special issue, 5, 2001.

3 The $43,000 Ford Foundation grant is noted in a letter which McLuhan wrote to Elsie McLuhan in November 1952, quoted in M. Molinaro, C. McLuhan and W. Toye (eds), *Letters of Marshal McLuhan*, Toronto, Oxford University Press, 1987, p. 236. In this letter, McLuhan wrote, 'We have in the project an architect-town planner, an economist, an anthropologist and a psychologist. No holds barred.'

4 This debate is reviewed in a case study of a recent Vancouver public commission in R. Windsor Liscombe, 'Conditions of Modernity: Si[gh]tings from Vancouver', *Journal of the Society for the Study of Architecture in Canada*, 25, no. 1 (2001), pp. 3–17.

5 The review was titled 'In praise of exuberant diversity' and appeared in *Ekistics*, no. 7 (1962).

6 Tyrwhitt did not make a formal presentation at the conference, but the persistence of comprehensive and reformist thinking, now allied with a greater sense of local variation and participatory process, is evident in the lectures delivered at the University of British Columbia in preparation for the United Nations Conference on Human Settlements; see H. P. Oberlander (ed.), *Improving Human Settlements: Up with People*, Vancouver, University of British Columbia Press, 1976. These include Richard Llewellyn-Davies's paper 'Thought and Action in Architecture and Planning' likening Bauhaus to atomic scientific process: 'any substance, however complex . . . could be analysed down to a number of limited, self-contained basis particles connected together by lines of force' (p. 139).

7 John Bland studied at the Architectural Association and returned to Montreal to head the McGill School of Architecture in 1939; see R. Windsor Liscombe, 'John Bland and the Modernizing of West Coast Design', *ARQ la Revue d'architecture*, 96 (1997), pp. 11–14.

8 Quoted in *Ekistics*, no. 52, p. 487, which contains an interview between Tyrwhitt and Milos Perovic.
9 G. Bell and J. Tyrwhitt, *Human Identity in the Urban Environment*, Harmondsworth, Penguin, 1972, pp. 401–28 and 224–6 respectively. Giedion was not untypical in continuing to define humankind as a male property.
10 Chermayeff's career was examined in A. Powers, *Serge Chermayeff: designer, architect, teacher*, London, RIBA Publications, 2001.
11 Molinaro, McLuhan and Toye, *Letters of Marshal McLuhan*, pp. 277–8, based on the extensive correspondence in the McLuhan Archive and the National Archives of Canada, MG31 D156. (Original emphasis.) The correspondence between Tyrwhitt and McLuhan formed the subject of a paper presented at the 2005 Society of Architectural Historians conference by R. Windsor Liscombe, 'A Correspondence of Space'.
12 F. Jameson and M. Miyoshi, *Cultures of Globalization*, Durham, NC, Duke University Press, 1998.
13 Examined in R. Windsor Liscombe, 'Usual Culture: The Jet', *Topia*, 25 (2004), pp. 83–99.
14 The transformations and anxieties within post-Second World War transatlantic Modernist design culture are explored in S. Goldhagen and R. Legault, *Anxious Modernism: Experimentation in Postwar Architectural Culture*, Cambridge, MA, MIT Press, 2000. A regional analysis of popular and professional attitudes to gender in Modern Movement design appears in R. Windsor Liscombe 'The Fe-Male Spaces of Modernism: A Western Canadian Perspective', *Prospects*, 26 (2001), pp. 667–700.
15 *Ekistics* no. 52 included the grids compiled by both Le Corbusier and Patrick Geddes. For Geddes, see V. Welter, *Biopolis: Patrick Geddes and the City of Life*, Cambridge, MA, MIT Press, 2002.
16 The range of ideological source and design polemic partially coalesced in Modern Movement thought and practice: see R. Banham, *Theory and Design in the First Machine Age*, London, Architectural Press, 1960.
17 In a letter to McLuhan dated Athens 16 April 1968, Tyrwhitt wrote, 'he [Giedion] was the reason we ever got to know one another'. McLuhan Archive, National Archives of Canada, MG51 D156, vol. 39, file 59.
18 Oberlander, *Improving Human Settlements*, p. 14.
19 *Ekistics*, no. 52, p. 446. See Tyrwhitt Archive, University of Edinburgh, Box 37, for Tyrwhitt's 1951 course reading list.
20 *Ekistics*, no. 52, p. 453.
21 Ibid., p. 470.
22 P. Ricoeur, translated by C. A. Kelbley, *History and Truth*, Evanston, IL, Northwestern University Press, 1965, pp. 276–7. Interestingly, the British Government's *Papers on Colonial Affairs No. 1. General Aspects of the Housing Problem in the Colonial Empire*, December 1943, stated: 'urgent need of improving housing schemes can be laid down . . . But there are certain particular points which are likely to require attention by many colonial governments or which may commonly be worth considering.' (Public Record Office, E.I. B59 77/12.) The underlying sense of comprehensive change through the introduction of standard values and properties is more explicit in a speech delivered in about 1945 by the post-war Colonial Secretary Arthur Creech Jones:

> Everything in our power must be done to eliminate race discrimination and colour prejudice. The various communities in our territories should co-operate for the common good of those territories. The old feeling of racial superiority should be completely eliminated in the work of administration, in the work of legislation and in the great economic tasks.
>
> (Creech Jones Papers, Bodleian/Rhodes House Library, Mss. Brit. Empire S332, Box 47, file 4)

Attitudes to reform shifted again by 1956 when A. C. Sutherland, British colonial planning official in West Africa, lectured on the 'Education of Town Planners' at a conference at King's College, University of Durham,

> Do we know what is best for man or what he really wants even in our own society let alone some different culture? Have we not all been guilty of looking for those "inert" ideas which reduce planning almost to the level of a jig-saw puzzle?'
>
> (British Empire and Commonwealth Museum, Bristol, J. B. Heigham Papers 2000/166/649)

23 See, for example, H. Fischar-Tine and M. Mann (eds), *Colonialism as Civilizing Mission: Cultural Ideology in British India*, London, Anthem Press, 2004; D. K. Fieldhouse, *Colonialism 1870–1945*, London, Weidenfeld and Nicolson, 1981; and A. D. King, *Urbanism, Colonialism and the World Economy: Cultural and Spatial Foundations of the World Urban System*, London, Routledge, 1991.

24 There is an extensive literature on the topic of the women's movement in the early twentieth century, notably L. J. Rupp, *World of Women: The Making of an International Women's Movement*, Princeton, NJ, Princeton University Press, 1997, especially pp. 13–18 and 159–79; B. Melman, *Borderlines: Gender and Identities in War and Peace*, New York, Routledge, 1998; and J. V. Matthews, *The Rise of the New Woman*, Chicago, IL, Ivan R. Dee, 2003.

25 Perham's indirect impact on the involvement of Modern Movement design in British colonial reform is examined in R. Windsor Liscombe, 'Modernism in Late Imperial British West Africa. The Work of Maxwell Fry and Jane Drew, 1946–56', *Journal of the Society of Architectural Historians*, 65, no. 2 (June 2006), pp. 186–215.

26 Alison Smithson with her husband Peter wrote on the multi-national/cultural condition increasingly confronting the Modern Movement in 'The Future of Architecture in Cultures in Change', *Architectural Design*, no. 30 (April 1960), pp. 149–50. Max Lock, developer of the Regional Survey and Civic Diagnosis, described Albery, Glass and Tyrwhitt as 'female . . . [with] scimitar minds . . . all focused on the problem', in *Ekistics*, no. 85, p. 420.

27 H. P. Oberlander and E. Newburn, *Houser. The Life and Work of Catherine Bauer*, Vancouver, University of British Columbia Press, 1999.

28 Neurath's lecture is discussed by J-L. Cohen in 'International Rhetoric, Local Responses', in H.-J. Henkel and H. Heyman, *Back from Utopia. The Challenge of the Modern Movement*, Rotterdam, 010 Publishers, 2001, pp. 84–5. Neurath, a member of the Vienna Circle, initiated and edited with Rudolf Carnap and Charles Morris the *International Encyclopedia of Science*, Chicago, IL, University of Chicago Press, from 1938, with an Advisory Committee including Niels Bohr, John Dewey, Bertrand Russell and Waldermar Kaempffert. On p. 24 its purpose was explained as the integration of the scientific disciplines 'so as to unify them, so to dovetail them together, that advances in one will bring about advances in the others'. Neurath contributed a paper on the 'Foundations of the Social Sciences', in the *International Encyclopedia of Unified Science*, Chicago, IL, University of Chicago, 1944, vol. 2, castigating 'premature drawing of boundary lines among the sciences'.

29 MARS, *Modern Architecture*, London, no. 20 (1938), with the additional sentence: 'Modern architecture is universal, infinitely adaptable.'

30 Le Corbusier, *Aircraft*, London, Architectural Press, 1935. On p. 11, for example, he avers, 'The airplane is an indictment. It indicts the city. It indicts those who control the city', and on p. 13, 'when the eye sees clearly, the mind makes a clear decision'. The proto-universal perspective of the aerial view was associated by Le Corbusier with a sentence from a comment he had made at the 4th International Conference on Art in Venice: 'Art was "universal" until artists were invented and "Academies" established.'

31 Kaempffert's book *The Airplane and Tomorrow's World* was published by the New York Public Affairs Committee as *Public Affairs Pamphlets*, no. 78.

32 Buber's publications included *Between Man and Man*, translated by R. G. Smith, London, Routledge and Kegan Paul, 1954. See also A. Huxley, *The Perennial Philosophy*, London, Chatto & Windus, 1946.

33 P. Hansen, *Hannah Arendt. Politics, History and Citizenship*, Stanford, CA, Stanford University Press, 1993, pp. 8–9.

34 APRR Archive, University of Edinburgh, Box 37. The Percy Johnson Marshall Papers – also at the University of Edinburgh (Crate 146, SR31) – contain among the material on the Service Arts and Technical Organization (SATO), which Marshall helped to establish, this retrospective summary of the SATO objective by George Barnstay, 'service personnel [were] determined to end with the old order and build a better world'.

35 Johnson Marshall Papers, University of Edinburgh, Crate 127, SR10.

36 APRR Archive, University of Edinburgh, Box 37.

37 Koenigsberger formally proposed this approach; see R. Windsor Liscombe, 'In-Dependence: Otto Koenigsberger and Modernist Urban Resettlement in India', *Planning Perspectives*, 21, no. 2 (April 2006), pp. 157–78.

38 Parent defined his theory in *The Function of the Oblique: The Architecture of Claude Parent and Paul Virilio 1963–1969*, edited and translated by P. Johnston, London, AA Publications, *c.*1996.

39 Windsor Liscombe, 'In-Dependence'.

40 APRR Archive, University of Edinburgh, Box 37.

41 Tyrwhitt Papers, Royal Institute of British Architects Library, Acc. M98. M 150 TyJ/29 [Box 29, File 12]. The proceedings were published in New Delhi in 1957 as *Proceedings of the South East Asia Regional Conference*. About this time Tyrwhitt had communicated with Maxwell Fry regarding low-cost housing in Chandigarh for which Fry, and even more so his partner Jane Drew, were largely responsible:

> I am certain that even in the low income group there are those who are capable of appreciating plastic intervention without having it explained to them . . . In all acts we must look for truth and dignity and I believe in our modern world these two qualities can be better expressed by the spirit and by intervention than by gold.
>
> (Fry Papers, RIBA, Acc. 264 Box 1, folder 1)

Later in 1986 Drew commented of her generation's pre- and post-war attitude to design: 'It is quite true that architects all thought that they could plan the world and politics were really irrelevant to the planning of the world.'

42 *Ekistics*, no. 52, p. 420.

43 This complex process of intuitive and intrinsic changes has, as yet, been only partially analysed, including by A. Colquohoun, *Modern Architecture*, New York, Oxford University Press, 2002; D. Ghirardo, *Architecture After Modernism*, New York, Thames and Hudson, 1996; and from a more theoretical perspective by H. Heynen, *Architecture and Modernity*, Cambridge, MA, MIT Press, 1999. See also R. Windsor Liscombe, *The New Spirit: Modern Architecture in Vancouver 1938–1963*, Montreal, Canadian Centre for Architecture, 1997.

44 This interpretation of the understanding of Modernist theory espoused by Tyrwhitt and McLuhan differs somewhat from that in R. Cavell, *McLuhan in Space. A Cultural Geography*, Toronto, University of Toronto Press, 2002. Some discussion of their personal and intellectual collaboration appears on pp. 21, 71 and 87, this last quoting McLuhan's letter of 11 May 1964 to Tyrwhitt just prior to publication of his book, *Understanding Media*, and the assertion of a return to primal undiscriminated auditory space, 'Visual space alone of all the space discriminated by our various senses is continuous, uniform and connected. Any technology that extends the visual power imposes these visual properties upon all other spaces.' In that book McLuhan indicated compounding awareness of the limitations of the Modernist optimism he shared with Tyrwhitt about accommodating individual preference through universalized solution: 'It is more difficult to provide uniqueness and diversity than it is to impose the uniform patterns of mass education; but it is such uniqueness and diversity that can be fostered under electric conditions as never before' (p. 316, quoted in Cavell, *McLuhan in Space*, on p. 90). For the disruptive and hybrid nature of the Modern Movement, see H. Muschamp, 'Service Not Included', in Edward Rothstein, Herbert Muschamp and Martin Marty, *Visions of Utopia*, New York, New York Public Library, 2003, pp. 29–48, noting here its adherents sought to 'capture the interplay between perception and reality in the immediate, heightened forms with which it is actually experienced in urban life' (p. 39).

45 Tyrwhitt Papers, RIBA, TyJ/20/1, dated March 1957.

46 *Explorations*, Toronto, University of Toronto Press, no. 1 (December 1953), preface. Some information on this group of scholars appears in Cavell, *McLuhan in Space*, especially pp. 54–5. With regard to the representation of aboriginal art, *Explorations*, no. 6 (July 1956), pp. 38–57 contained Giedion's 'Space Conceptions in Prehistoric Art', extracted from his then forthcoming book, *The Eternal Present. A Contribution on Constancy and Change*, New York, Bollingen Foundation, 1962. By linking primeval spatial conception to the non-objective depiction of Modernist artists (especially Kandinsky and Klee), Giedion stated, 'It is not chaos; it approaches more nearly to the order of the stars that move about in endless space universal in their relations and unconfined by any vertical' (p. 55). A related theme, of the kinship between the messaging capability of abstraction and children's art, had been examined by Jean Piaget in 'Time-space Concepts of the Child', printed in *Explorations*, no. 5 (June 1955), pp. 118–30.

47 *Explorations*, no. 2 (April 1954), pp. 38–50, especially p. 38.

48 *Explorations*, no. 4 (February 1955), pp. 115–19.

49 These changes in interpretation in architectural culture are examined by H. Klotz, *The History of Post Modern Architecture*, Cambridge, MA, MIT Press, 1988; and – with excerpts from the major contributors to new theories of spatial and formal production – in N. Leach, *Re-thinking Architecture. A Reader in Cultural History*, London, Routledge, 1997.

50 *Explorations*, no. 5, pp. 88–102.

51 See H. Lefebvre, translated by D. Nicholson-Smith, *The Production of Space*, Oxford, Blackwell, 1991; M. de Certeau, translated by S. Rendall, *The Practice of Everyday Life*, Berkeley, CA, University of California Press, 1984; and M Augé, translated by J. Glover, *Non-places: Introduction to Anthropology of Supermodernity*, (1992), London, Verso, 1995. On p. 71, Augé endorses Jean Starobinski's definition of the essence of Modernity as 'the superseding but also charming of the past by the present, which provides a useful distinguishing inflexion on the Modern Movement's rejection of historical exemplar if not its legacy of analytic and process'. An intriguing perspective on chiefly Canadian urban space embracing the Modern and Postmodern conditions appears in G. Livesey, *Passages. Explorations of the Contemporary City*, Calgary, University of Calgary Press, 2004.

52 Quote from a letter that McLuhan wrote to Tyrwhitt on 18 November 1968 – see Molinaro, McLuhan and Toye, *Letters of Marshal McLuhan*, p. 358.

53 O. Friedrich, *Glenn Gould: A Life and Variation*, Toronto, Lestar and Orpen Dennys, 1989; and K. Bazzana, *Wondrous Strange: The Life and Art of Glenn Gould*, New York, Oxford University Press, 2004.

54 *Ekistics*, no. 52, p. 453.

Further reading

Gwendolyn Bell and Jaqueline Tyrwhitt, *Human Identity in the Urban Environment*, Harmondsworth, Penguin, 1972

Richard Cavell, *McLuhan in Space: A Cultural Geography*, Toronto, University of Toronto Press, 2002

Sigfried Giedion, *Space, Time and Architecture*, Cambridge, MA, Harvard University Press, 1944

Peter Hall, *Cities in Civilization*, London, Phoenix, 1999

José Luis Sert with Jaqueline Tyrwhitt, *Can our Cities Survive?*, Cambridge, MA, Harvard University Press, 1942

Chapter 6

Selling the future city

Images in UK post-war reconstruction plans

Peter J. Larkham

During and immediately after the Second World War there was a substantial boom in the production of town-wide redevelopment plans across the UK. This was, of course, initiated by the severe air-raid damage that had been inflicted on cities such as London, Coventry and Plymouth in 1940–41. Such damaged cities had no option but to replan, and quickly, even at a stage in the war when victory was by no means assured, and they were encouraged to do so by political exhortations, such as the well-known urge by Lord Reith for Plymouth to 'plan boldly and comprehensively'.[1] Yet the number of towns that had suffered severe damage was relatively low, and the nature and extent of the damage were, in fact, quite limited compared with what later occurred in mainland Europe and Japan.

However, far more plans were produced than the number of seriously damaged towns would suggest. About 230 are known so far.[2] These cover many scarcely damaged and undamaged towns such as Warwick and Worcester. Such towns were simply following the trend of replanning, at a time when political, professional and, indeed, public rhetoric was all about 'reconstruction' and 'rebuilding'. Admittedly the word 'reconstruction' was used, particularly by the government, to mean many things, including economic, social, political and industrial restructuring, as well as the restoration of the physical fabric of the damaged towns.

There was a striking growth in the production of these plans. The earliest were produced for the high-profile damaged towns, but there was a clear peak in plan publication from 1944 to 1946 and a sharp decline thereafter. Some plans were produced in the late 1940s, but they were almost entirely based on the new, more

technical and much less visual 'development plan' framework introduced by the 1947 Town and Country Planning Act.

Who produced these plans? Much of the critical attention has focused on the 'great plans' of the 'great planners',[3] but local authority staff were equally prolific. Professor Sir Patrick Abercrombie, probably the country's most famous and experienced planner at the time, is justly renowned for his plans for London, Plymouth, Edinburgh and other places, including the small undamaged town of Warwick. Thomas Sharp made his reputation through his series of reconstruction plans, for Durham, Exeter, Oxford and many more. He was expensive to engage, since he did not hold an academic post.[4] Yet the local officers, in particular borough surveyors and engineers such as Herbert Manzoni of Birmingham and J. Nelson Meredith of Bristol, remain virtually unknown, usually because they worked only in their own towns and because their plans were rarely published in such high-profile, widely reviewed forms as were those of many of the consultants.

Motives for undertaking this expensive replanning varied. There was certainly an element of resource-seeking involved. When discussions about the new planning mechanisms were taking place in the early 1940s, Herbert Manzoni, the influential city architect-surveyor of Birmingham, was invited to participate. He quickly realised that the proposals for compulsory purchase powers and funding would leave Birmingham out. Although the city had been heavily bombed in terms of the tonnage dropped, there had been no large expanses of total destruction. Manzoni lobbied – successfully – for these powers to be extended to slum clearance areas too,[5] and so the new 1944 Town and Country Planning Act was widely known as the 'Blitz and Blight Act'. Moreover, there was also an element of civic boosterism or place-promotion in some of the plans.[6] It was inevitable that there would be changes in the traditional urban economic and social hierarchy after the war. Some towns were taking the opportunity to replan (whether they had been bombed or not) in order to reposition themselves in the emerging new hierarchy, and to promote the 'brave new' rebuilt town, with its advantages of location and communication, often using striking images to do so. For example, the dust-jacket of the plan for Leamington Spa has a bold arrow pointing to the town, emphasising above all its central position in the country.[7] It is these images and, to a lesser extent, the overall graphic presentation of the plans that influenced their effectiveness at communicating 'the future city' to the public.

About 90 of the plans were formally published, either by publishers such as the Architectural Press or by the towns themselves. The remainder exist only as unpublished reports, sometimes just as typescripts, which are often stamped 'Confidential'. The rest of this chapter focuses principally on the illustrations contained within, and on the general reception of, the published reports.

Plans needed to provide 'a series of drawings which convince the onlooker of the inevitability of [the] planning', as Tilden wrote of Sharp's 1946 plan for Exeter.[8] At Warwick, Abercrombie's assistant Derrick Childs 'explained the advantages which would accrue from the preparation of a set of perspective drawings'.[9] And perhaps some of the expert illustrators were used because, as was said of Cyril Farey, they 'had the gift of adding quality to a moderate design'.[10]



6.1
Reconstruction imagery as a place of promotion: front cover of James and Pierce's plan for Leamington Spa (1947), drawn by D. Macintyre. The arrow and coastline were printed in a striking pale blue.

These images included black and white photographs of the congested pre-war cities and of wartime destruction; a range of cartographic representations, building elevations, photographs of three-dimensional models, and – perhaps most strikingly – perspective drawings. Many published plans were noteworthy for their Modernist graphic style and for their use of colour printing, particularly during this time of austerity and rationing. Thomas Sharp was the most prolific plan author, and those of his plans that were published by the Architectural Press are particularly good examples. Indeed, in 1951 the *Architects' Journal* columnist 'Astragal' wrote of the published plans that

> their special excellence was the emphasis they put on the visual, three-dimensional aspect of planning . . . The era of independently-commissioned city plans must be said to be over. But it must not be forgotten what a stimulating influence these had. The most influential were all by Thomas Sharp.[11]

Who drew the illustrations?

It is not always possible to attribute the perspectives used in the plan documents to any particular person. It is a source of confusion that some commentators seem to have equated the illustrator with the designer. In addition, in the field of town planning, drawing is a relatively little-studied skill, whereas in architecture, at least until the middle of the twentieth century, drawing was rigorously taught[12] and the renderings and perspectives were exhibited and critically appraised as works of art.[13] At the Royal Academy summer exhibitions there were regular architectural exhibits, indeed usually an 'Architecture Room'. Because of their influence, it is helpful to discuss several of these architectural and other artists.

Professor Stanley Adshead (1868–1946), an influential planning academic and author of three reconstruction plans, was himself an excellent architectural perspectivist. At a Royal Academy exhibition at the turn of the century, it is recorded that 20 or more of his drawings were shown and he was 'one of the most notable perspective artists of his generation'.[14] Further, in the 1900 architectural competition for the Old Bailey Law Courts, he had prepared drawings for five of the six competitors.[15] His daughter said that

> one of the outstanding characteristics of her father's career was that he always did all his own perspectives, illustrated his own reports, drew or superintended his plans himself, and continued to paint landscapes in watercolour to the end of his life and was interested in all painting.[16]

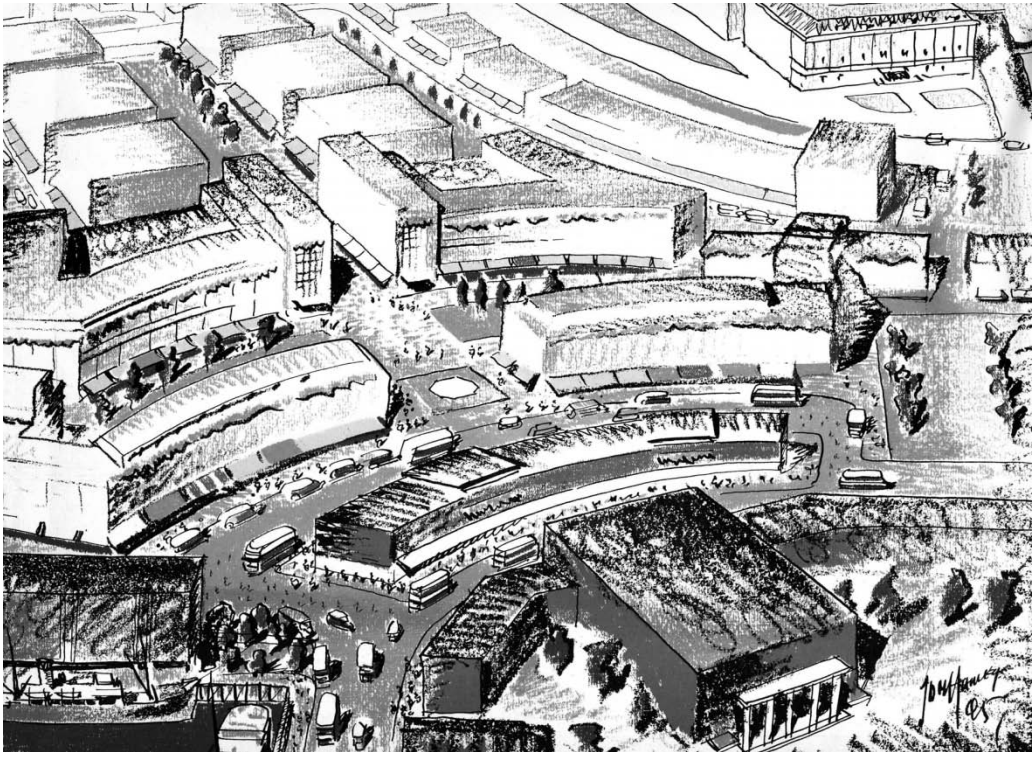
Yet, by the time of the reconstruction plans, Adshead was in his seventies and he seems not to have been actively drawing a great deal, perhaps due to ill health. Committee minutes of the Joseph Rowntree Village Trust show that he took a back seat in the York plan; and, indeed, there appear to be some errors in the perspective and composition of the drawings by Patrick Hall in the York volume which was finally published two years after Adshead's death.[17] Even so, in an enthusiastic review of Adshead's 1945 plan for Teignmouth, Clough Williams-Ellis wrote that the 'report contains several coloured perspectives in the author's characteristic luminous manner that will, I hope, persuade the citizens of Teignmouth that what their consultant prescribes is, in truth, just what they need. Adshead is good for you!'[18]

An artist used by several planners, particularly by Abercrombie for Plymouth and London, was J. D. M. Harvey (1895–1978). Born in Newfoundland, he had trained as an architect at the Bartlett School before the First World War. He had been in considerable demand by architects in the inter-war period. In the 1940s he was a Studio Instructor at the School of Planning, University College, London, where he also taught some of the junior staff employed with him on the Lutyens and Abercrombie plan for Hull.[19] His perspectives were also exhibited at the Royal Academy, including one for an hotel on Marylebone Road which 'makes the elevations look more crisp and imposing than they really are'.[20] However, Harvey's illustrations for the 1944 draft London plan are rather more vague than this; for example, the unusual low-level aerial view of the northern part of the ring route

shows the road highlighted in yellow, the facing buildings in white, and the London roofscape in an indeterminate grey wash: the overall impression of these views is one of overcast and gloom.[21] Yet, Harvey was noted for using new media (such as carbon pencils) 'to great effect'.[22] This is shown in some of his sketches for Hull which – because of the media used – seem hasty and incomplete.[23] The 1944 London views and perspectives have a noticeable affinity to his unfinished rough study, a 'perfect example of brevity', which was illustrated in Myerscough-Walker's classic work on perspective drawing.[24] After 1944, Harvey ceased practising as an architect and became solely a perspective artist and illustrator.[25]

Thomas Sharp's most influential plans were all illustrated with perspectives produced by A. C. Webb.[26] He, too, had been in considerable demand by architects in the inter-war period.[27] He also illustrated the Royal Academy's rather Utopian report on replanning London.[28] The architect Sir Giles Gilbert Scott had particular respect for the realism of Webb's work, and used him for projects as diverse as Battersea Power Station and Liverpool Cathedral.[29] In Sharp's Durham study, Webb is credited for his 'exquisite perspectives',[30] although the drawings were gentle and rather fuzzy, a product of style and media. He was, perhaps, less effective in these perspectives than in his view of the incomplete Battersea Power Station, where smoke legitimately fogged the detail. The aerial perspectives were drawn from aerial photographs, on which Sharp indicated 'the parts needing

6.2
'Bird's eye view of New Osborne Street shopping centre', from Lutyens and Abercrombie's plan for Hull (1945), drawn by J. D. H. Harvey. The original was printed in colour on a large-format page.



reproduction and at what size'.[31] In 1946, after the Durham volume and in preparation for the Oxford study, Raymond Philp of the Architectural Press wrote to Sharp: 'I like Webb's drawings very well and feel sure that they are going to make good [printing] blocks. His changed technique and finer definition give the engravers a much better chance.'[32] The illustrations in the Oxford volume[33] show the development in Webb's style after the Durham volume, which had been produced four years earlier. Interestingly, in contrast to these favourable views of Webb from Sharp and his publisher, Sharp's biographer, clearly referring to Webb's work, wrote:

> unfortunately the sketches which appeared in Sharp's plans failed to convey his ideas on townscape and his proposals for enriching the quality of urban surroundings . . . Exeter in particular was a disaster; the new buildings were insipid boxes which had no townscape qualities.[34]

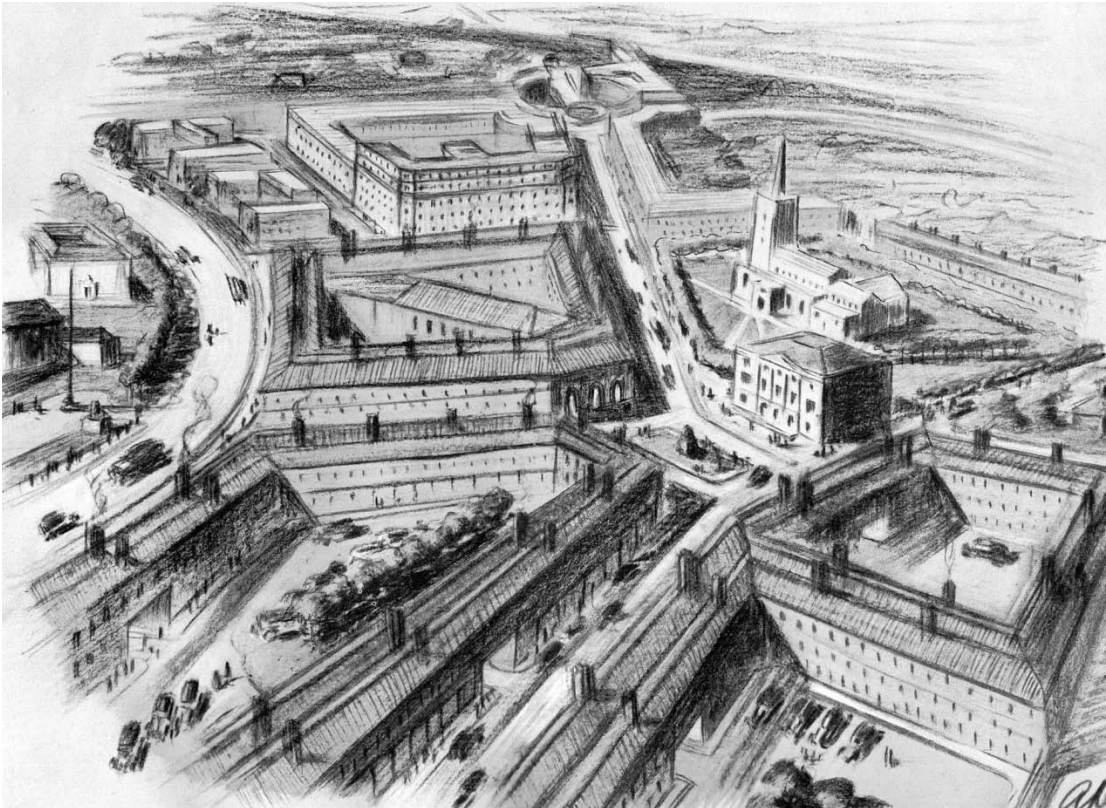
Also of interest with reference to Sharp's Oxford plan is a surviving letter from Sharp to S. R. Badmin of Henley on Thames. This notes that Badmin's fee was £20 per drawing, on condition that the original drawings were returned to Badmin, and that the copyright was shared between Badmin and Sharp.[35] Quite apart from being ground level rather than aerial, Badmin's style was very different from Webb's: of particular note are the sharper lines and bolder use of colour.[36] Although Badmin was credited by name in the Oxford volume, no explicit mention of copyright was made.



6.3
'The redeveloped city from the south-west', from Sharp's plan for Oxford (1948), drawn by A. C. Webb. The original was printed in pale colour.

Occasionally the illustrations were prepared by the planners themselves. This perhaps occurred more frequently when junior consultants were used, or during wartime when even experienced consultants could not maintain well-staffed offices. For the Worcester plan the architect-planner Anthony Minoprio initialled the colour perspectives.[37] Despite Minoprio's Beaux Arts architectural training,[38] the images were visibly less adept than those of the professional architectural perspectivists, but nevertheless they were visually striking. Not surprisingly, there are great similarities to Minoprio's own illustrations for his Chelmsford plan[39] – although the Chelmsford illustrations seem rather less polished and the perspective less true. Likewise, illustrations by C. H. James and Rowland Pierce (authors of plans for Norwich and Leamington Spa) are competent but uninspiring, although James and Pierce also exhibited their work at the Royal Academy.[40] It is unusual in that most of the partnership's illustrations were signed by Pierce, although James was an Associate of the Royal Academy for much of the period and became a Royal Academician in 1946. The architect-artist Peter Shepheard[41] contributed very competent colour perspectives to both the *Greater London Plan*[42] and Reilly's Birkenhead plan.[43] Even senior authors were not immune from contributing their own sketches, some of which were of poor quality.[44]

Finally, one series of illustrations provides some of the most striking images in artistic terms and most influential in planning terms. These are by Gordon Cullen (1914–94), who at this time was Assistant Editor (Art) of the *Architectural Review* and by 1952 was an exhibitor at the Royal Academy. They can be seen



6.4
'The High Street and Tindal Square', from Minoprio's plan for Chelmsford, drawn by Minoprio himself. The original was printed in colour.

principally in the published version of the City of London plan by Holden and Holford.[45] Using a very different style from the artistic renditions or architecturally accurate views of others, Cullen in this publication produced geometrically accurate perspective line drawings in ink, with a pale colour wash. The depiction of people was important: these were lived-in townscapes. He used the same style again in the *Architectural Review*'s editorial plan proposals for Westminster.[46] Although elsewhere and later he also used a cruder crayon style,[47] in many cases his fine lines imitated the techniques of etching and engraving. Indeed, 'Cullen's fresh and seemingly simple illustrations . . . depend on such cooperation with the printer that he uses photo-engraving almost as an artist's medium in its own right'.[48] Cullen was also a keen and early user of dry transfer tone to provide shading effects. This type of drawing and Cullen's own analytical approach to 'townscape' became very important in the illustration of British planning and architectural publications from the 1950s to the 1980s.[49] Cullen's post at the *Architectural Review* meant that his style and his interest in typography had wide circulation. So one might question whether this style was, in effect, a house style of the Architectural Press, which published the *Architectural Review*: the sketches of churches as war memorials by Barbara Jones are similar, though without the rigidly ruled lines,[50] and Gosling notes of D. Dewar Mills, a collaborator of Cullen's, that 'because their graphic styles were so similar, it is difficult to distinguish each artist's contribution'.[51] Cullen was also 'much copied'.[52]

Format and layout

In a number of the published plans, the use of sharply contrasting type sizes and faces – especially bold sans-serif – is novel for the period. Cullen is credited with the introduction of the use of Clarendon Bold in the *Architectural Review* issue of October 1947; this 'became a fashionable typeface in many architectural practices at that time'.[53] Before Cullen's appointment, the journal 'did not present a decisive development in graphic design and layout, confining itself to the safe Times and Italic typography'.[54] Yet the mix of typefaces in Architectural Press publications does, in fact, predate Cullen: Sharp's Durham volume had the main text in Imprint Old Face and the titles and captions in Gill Sans.[55] A review of this volume stated that 'the typography and general presentation are admirable and worthy of much better binding'.[56] In Sharp's Oxford volume, the text was in Gill Sans and Modern, with the headings and titles in a mixture of Sans Serif Condensed, Gill Sans and Clarendon.[57] This was a period of great interest in typography and page design, with the journal *Typographica* being launched in 1949 by Herbert Spencer.[58]

The narrow margins and illustrations bleeding out to the edges of the pages were equally unusual. The Sharp plans for Exeter and Oxford are good examples.[59] Full-colour fold-out illustrations, both maps and perspectives, were almost unheard of, and they set precedents for later reconstruction plans such as the large-format plan for Edinburgh by Abercrombie and Plumstead, which is a masterpiece of printing and binding, having 26 fold-out colour maps and plans.[60] Such formats gained more attention than the rather staid traditional formats of some of the local authority publications.[61] Sharp was assisted by his close working



6.5

'A possible treatment of the proposed approach to St Paul's from the river', from Holden and Holford's plan for the City of London (1951), drawn by Gordon Cullen. The original was printed in colour.

relationship with Raymond Philp at the Architectural Press and H. de Cronin Hastings, editor of the *Architectural Review* and co-owner of the Architectural Press, the journal's publisher. However, a comment about his Chichester plan[62] suggested that

> some of the author's recent reports have displayed the tricks of modern printing: prominent captions, bold projections of type, blocks of pictures removed from their context. The Chichester report returns to dignified book production with well and plainly designed pages of type and simply proportioned title page and chapter headings.[63]

The techniques of architectural drawing were important and were taught within many schools of architecture. Liverpool, for example, relied heavily on the Beaux Arts approach in the inter-war years; and many of the reconstruction planners and plan-writers were trained there.[64] Issues of drawing reproduction were widely reviewed in the professional press.[65] Bird makes two statements well worth considering in view of the quality of reproduction in some of the reconstruction plans, particularly those not published by the specialist architectural publishers. The first is:

> What may well have been a brilliant drawing in a large-scale original too often looks insipid when reproduced at report, book or periodical scale, or may even be illegible. When this happens it is useless to blame the process engraver.[66]

The second refers to colour printing:

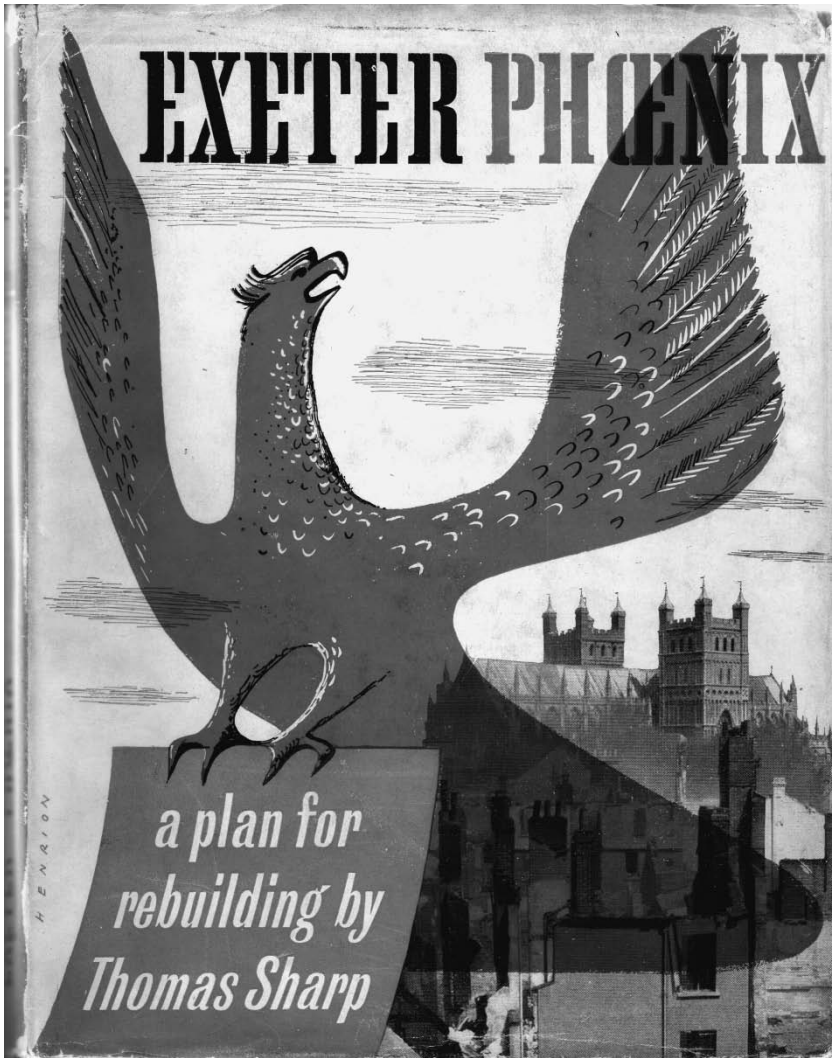
> Most town planning reports published to-day include examples of colour printing. A few are good; the majority are mediocre; some are just bad. It is very clear that in most cases the town planner has prepared his coloured drawings before consulting the blockmaker. Possibly his drawing has been prepared for a committee; it is subsequently handed to a blockmaker who can then do no more than make the best of a bad job.[67]

In fact, very few of the original coloured drawings – many of which were works of art in their own right – appear to have survived.[68] It is highly unlikely that any of the printing blocks, etched or engraved copper on wood, have survived. The importance of the block-making process to the success of the printed product is well made by Philp's comment on Webb's changed technique (quoted above). It is possible that these technical concerns may explain some of the rather odd reproductions found in some of the plans.

The restrictions on paper availability affected virtually all the published plans. Rationing also extended to coloured inks. Earlier plans had to be published in strict conformity to wartime standards, so in 1944 Wolverhampton had to seek

a special licence for the coated art paper for its brochure.[69] Even after the war, the Architectural Press wrote to Sharp in 1946: 'We have just heard from the Paper Control people at last and they, the brutes, have scaled down our application to enough paper for a first impression of about 8000 copies only.'[70]

Much thought was given to the presentation of front covers and, in some cases, dust-jackets. The cover of Sharp's first plan, for Durham, consisted of a traditional title and sketch superimposed upon an Ordnance Survey plan on a thin card cover.[71] By contrast, that of the radical and informal third-party plan for Oxford by the architect Lawrence Dale,[72] which was published by Faber, is virtually a piece of modern art, with abstract monochrome silhouettes and a minimum of bold red sans-serif lettering. Some covers alluded to the nature and extent of change:



6.6
The dust-jacket for Sharp's plan for Exeter (1946), drawn by F. H. K. Henrion. The phoenix was printed in a striking red/orange.

Dobson Chapman, a senior consultant and Town Planning Institute President in 1943–44, produced a pamphlet on Macclesfield in his own time and without a formal commission; its cover contains one of the most startling juxtapositions of old and radical new, 'Today' and 'Tomorrow'.[73]

Other covers were more symbolic. The dust-jacket for Sharp's 1946 plan for the badly damaged Exeter showed a phoenix, with its associations of death and rebirth-resurrection; it was designed by F. H. K. Henrion, a commercial artist who had worked principally for the Ministry of Information during the war.[74] (The phoenix symbolism was much used with respect to other cities, particularly those destroyed by fire in the nineteenth century.)[75] The phoenix was mirrored, in rather more abstract form, by the dove silhouette on the reprint of newspaper articles on the reconstruction of Birmingham.[76] And there is symbolism in the message of 'Englishness' contained within the colour dust-jacket for Jeremiah's 1949 plan for Sudbury and District.[77] This image

> pictured the rural life of the future. Tree, leaf, blossom and fruit weave the country life into a natural coherence, forming the spine of the book. Farming and crafts are shown revitalised. Nuclear families bloom . . . The hunt still hunts, but English sport also flourishes on the modern playing field. Cricket and modernism cohabit within a frame of trunks and branches.[78]

The imagery itself

The artists' impressions of new developments which accompany the texts in the town plans are often impressive in their size and use of colour; but the imagery used is also revealing. As in all renditions, the views are sanitised and idealised, largely because the plans were part of marketing exercises both by the consultant-artist and by the town itself. The soft images bear only passing resemblance to the hard realities of space. Indeed, some were deliberately 'soft', using familiar images: sketches in Holden and Holford's London plan[79] 'showed a shape of building that was not so different as to frighten people'.[80] The Worcester plan depicts new buildings whose scale and position is radical and modern, but which are actually clad in the familiar red brick typical of the town.[81] Some examples, including the views of a civic and cultural centre in Sharp's Durham plan[82] and, more famously, the plans by Max Lock and Associates,[83] use high-level, line-drawn perspectives to illustrate their point blocks and podia, and linear blocks on *pilotis*, reminiscent of the International Style. A very few also began to use the axonometric view then being adopted by Modernist architects, but these renditions were not easily comprehended by the general public and were uncommon.[84]

The everyday features that are illustrated are also an important, but perhaps easily overlooked, part of the image and the message. For example, some plans show familiar vehicles and clothing styles. In Minoprio's view of St Swithin's Avenue in Worcester,[85] the familiarity of the car design in the foreground (clearly a Rolls Royce) and the women's clothing must have been deliberate. In the unpublished views of the future Swansea and in Adshead's sketch

of Southampton,[86] the cars are clearly of the late 1930s (although the perspective is poor).

Tellingly, some plans (such as Cadbury's 1952 polemic on the Birmingham of 2002)[87] fill their new streets with sleek, streamlined, futuristic vehicles that have a very different visual impact in the street scene from that of the antiquated pre-war vehicles. They reflect the trends in car design towards streamlining which began in the US and Czechoslovakia in the 1930s but which were not popularised in Britain until the late 1940s. This is, plainly, the city of the future.

Contemporary drawing texts noted that such incidental features should not draw the viewer's attention away from the building or the street scene, which was the main focus of attention. In contrast to fine art painters, the perspectivist's

> technique differs from theirs, inasmuch as he must make it clear that he is primarily illustrating the designs of buildings, and consequently trees and other objects of landscape and human beings themselves must be portrayed in a different convention from that adopted by the painters.[88]

However, few of the images – whether familiar colour perspectives or less familiar axonometrics – give a clear, unambiguous view of the development proposals. They do not present the images in the way in which the eye would perceive them, or even in which the camera would photograph them – and people are generally used to interpreting the distortions of camera lenses, even those required to photograph buildings and urban areas. Horizontal attenuation leads to streets being rendered as improbably wide, when compared to the scale of the vehicles depicted using them, as in J. D. M. Harvey's sketch of the proposed approach to St Paul's.[89] The same is true of squares and other public spaces. Likewise, vertical attenuation suggests that the buildings lining these streets are often improbably tall, given that the number of storeys is indicated and people and vehicles are often included to give scale. Perspective is often distorted, with the

6.7
The familiarity of everyday objects in the new urban landscape: eye-level perspective from Adshead and Cook's plan for Southampton (1942), almost certainly drawn by Adshead.

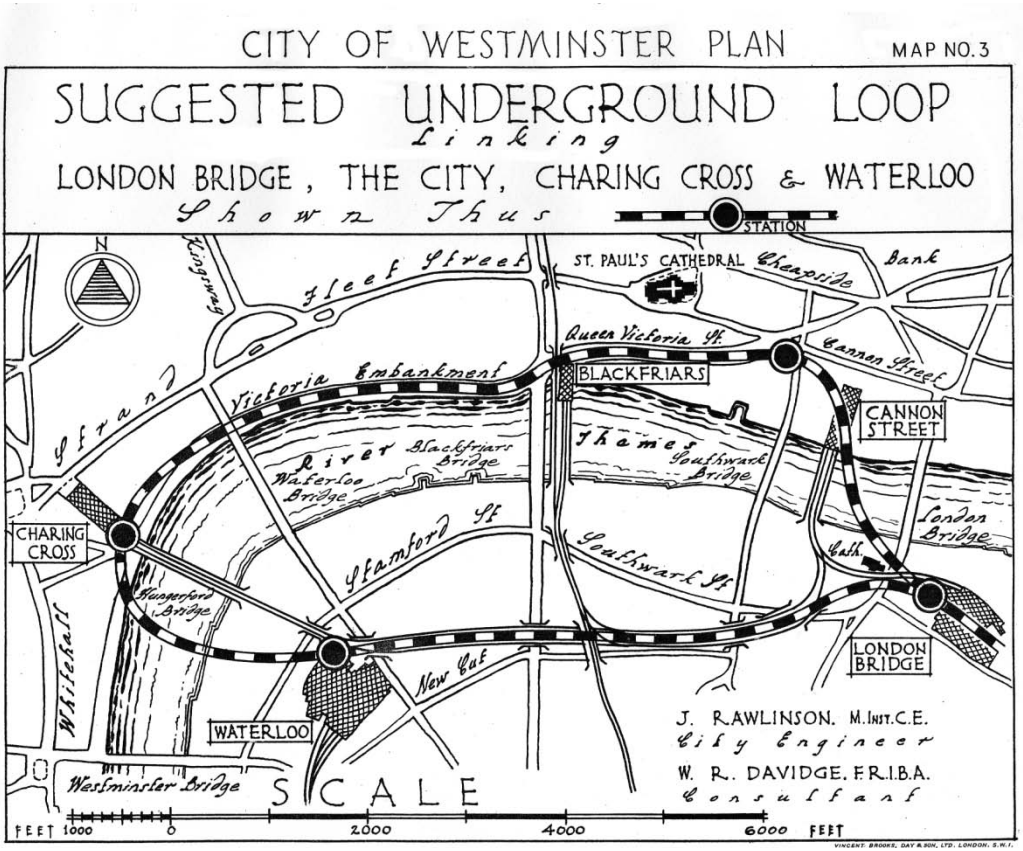


new developments exaggerated in the foreground and the existing urban surroundings minimised in the background. Unusual perspectives and viewpoints are attempted, again to highlight the new proposals. A view of the Plymouth theatre precinct is described as being 'viewed from roof level', but it would seem to be the roof of the church spire.[90] Similarly, there are relatively few eye-level street perspectives,[91] although some give even lower – perhaps ground-level – views, which further exaggerate the proposal.

In addition to the major, usually coloured, perspectives, there are many examples of simple sketches in the plans, some of which were drawn by local artists. In many cases they seem simply to fill otherwise empty spaces, for example at the foot of a page or at the end of a chapter,[92] and they do not always refer to the text. In many cases they just represent historic structures or areas (not all of which would have survived the replanning). Although some of them are well-drawn and appealing, that is not so in all cases.

A further type of image to consider is no less striking, but is arguably more abstract and less comprehensible to the lay reader – the schematic diagram. The new Underground loop proposed for Westminster provides a good example.[93] Here, the layout and lettering, including the outsize scale bar, obscure much of the

6.8
Schematic diagram: stylised Underground loop proposed in Rawlinson and Davidge's plan for Westminster (1946), probably by a member of the City Engineer and Surveyor's staff.



message, even though the new loop is printed in bold. Schematic maps, particularly those representing plan principles and land-use subdivisions, are more common. The complex structure of Abercrombie's new Plymouth was shown in an often-reprinted 'functional diagram' in this way,[94] while Newcastle's plan uses a very similar diagram, even in the representation of the town centre by an oval.[95] The traffic flow diagram in Dale's unofficial Oxford plan, apparently drawn by Dale himself, is virtually a piece of abstract modern art[96] and its meaning is very difficult to discern.

Reviews and reactions

Some of the reconstruction plans were widely reviewed, both for professional and for lay readerships. The former were catered for by journals such as the *Architectural Review*, *Architects' Journal*, *The Builder* and the *Journal of the Town Planning Institute*. *Town Planning Review*, primarily an academic journal, took some years to return to regular publishing after the war. The lay readership was catered for by newspaper reviews, *The Listener*, *Picture Post*, *Country Life* and similar magazines. But, overall, few of the plans were reviewed. Not surprisingly, those by the well-known consultants were reviewed most widely.

Few contemporary reviews included detailed comments about the contribution of the artist. An exception was the substantial review in 1951 by Angus McIntosh of the plan for Aberdeen by W. Dobson Chapman and Partners,[97] in which he noted that:

> In depicting all these proposals a series of beautiful line drawings by H. N. Mason, A.R.I.B.A., makes a useful contribution and reflects the care with which the consultants' staff has shouldered its architectural responsibilities, for besides their broad solution of various problems of civic design, these drawings contain useful architectural ideas of a much more detailed kind . . . New buildings of chaste contemporary design fit themselves into the townscape so that adjacent existing buildings, less chaste, fit more truly into the same scene.[98]

Most reviews commented in much more general terms – if they commented on the illustrations at all: on the Lutyens and Abercrombie plan for Hull,[99] a reviewer simply noted that 'it is most attractively produced and in addition to the maps in colour, contains very fine drawings and numerous photographs'.[100] The Worcester plan was merely 'well illustrated and attractively produced'.[101]

Sharp's plans were reviewed more widely than most, perhaps because so many were professionally published by the Architectural Press: Exeter was 'lavishly illustrated';[102] 'the illustrations are generous in number and excellent in quality, maps and diagrams clear and intelligible'[103] and, despite what has been mentioned above, it contained 'excellent plans and quite beautiful perspectives of the city'.[104] Oxford had 'excellent colour perspectives'[105] and 'the illustrations are of outstanding quality and must contribute greatly to [the report's] appeal to the general public'.[106] Of Chichester, however, it was said that 'the perspectives scarcely do justice to the proposals'.[107]

It is interesting that a comment on one of Lock's plans, post-dating the 1947 Act's new formula for 'development plans', welcomed the absence of illustration: 'Perhaps there is too little seduction about the report. There are none of those highly coloured charts and perspectives and no "visuals" of projected centres and this is very salutary and refreshing. There is no nonsense.'[108] This was in direct contrast to the fulsome praise of some reviewers.

Maps – whether in colour or black and white – were more of a problem than perspectives and elevations. Of Max Lock's report on Bedford:[109] the maps 'appear to be rather too complicated for lay-people to understand and perhaps a little insufficient for the use of technicians. Simpler and clearer maps are called for in a book of this kind.'[110] The binding of some fold-out maps caused one reviewer to comment acidly: 'In reviewing the book it became necessary to remove all the large maps from their binding before their contents could be appreciated to the full, and the book seemed immediately improved by this act.'[111]

Some commentators were also critical of the unadventurous architecture being depicted. For example, in an article in *The Observer* Osbert Lancaster castigated the Royal Academy's view (drawn by Professor A. E. Richardson) of a rebuilt South Bank as 'several reproductions of Stockholm Town Hall'.[112] Stansfield's criticisms of the blandness of some of Webb's illustrations for Thomas Sharp have already been quoted. However, many of the plans made it quite clear that the buildings depicted in perspectives and elevations were there simply to represent future structures: they were not actually *designed* by the plan author or illustrator – indeed, the final design could well have been the subject of a later design competition. The Norwich plan, for example, states that 'the new buildings shown are intended to indicate height and size only and are therefore made as non-committal in design as possible'.[113] Perhaps this approach misled Stansfield when she was so critical of Webb's bland perspectives?

The public's views

The published plans were clearly attempts to promote public interest – and often participation – in the form, function and design of the new towns that were emerging from the wartime bombing; and most of the plans envisaged a period of two to five decades for their full implementation. Yet it is clear that in many cases members of the public had concerns that were very different from what was included in the plans, and expected a far shorter timescale.

Public reaction seems to have focused on two aspects of the plans. First, people reacted to the drawings. The colour perspectives, in particular, (as well as the numerous three-dimensional models prepared for the public exhibitions) apparently represented a readily understandable means of communicating the planners' ideas to a lay readership. Yet critical reactions focus on the shock at the nature and the scale of the changes: there is sometimes a feeling that those reacting in this way had not absorbed the detail of the accompanying text. Second, people were concerned by the selection of the issues covered by these illustrations. These often, although by no means always, concentrated upon town centres.

Yet the public's major concern – mirrored, indeed, by the government – was for the repair of the bomb-damaged and neglected housing and for the clearance of the slums.

There is one further element of public reaction to consider: the apathy that was made evident in the low attendance figures at many of the public exhibitions and in the few written comments received by the town councils. For example, in Worcester the local newspapers covered the launch of the plan in October 1946. But despite the large-scale changes proposed and the striking imagery used to show them, public reaction was very muted: there was little or no protest by local residents recorded in the local media. Probably the most outspoken protest came from a resident of Kettering, Northamptonshire, who responded to the plan for Worcester and concluded that: 'The idea is nothing short of a scandal and I hope people will be loud in their complaints.'[114] But they were not. In Wolverhampton, the 1944–45 plan and its exhibition were met with some outrage, but mostly with apathy.[115] Less than two and a half thousand people visited the exhibition in its first ten days, the small number of entries for the essay competitions was disappointing, and one-third of the brochures supplied to W. H. Smith were returned unsold. The civic centre, for which detailed proposals had been exhibited, attracted adverse comment: 'Is it right to use the best position in the town for municipal buildings? I think that the officials and members of the council are too fond of glorifying themselves' and 'the scheme suffers from one very serious drawback – it has been prepared by municipal servants, with municipal amenities well to the fore'. Housing was identified by several respondents as having far higher priority than a civic centre. Overall, 'the proposals are so staggering that they leave the average person bewildered'.[116] In Walsall, the exhibition of the 1943 plan in a local shop resulted in very limited press coverage and virtually no public comment; and the plan disappeared without trace soon afterwards.[117]

Yet the plans were not without impact. Two academics have stated that the single most significant factor in their entering the professions of planning and architecture, in practical and subsequently in academic involvement, was the impression made by the colour images of the new redesigned town centres in these plans.[118]

Conclusions

Architectural perspectives have been seen as works of art in their own right, and several of the perspectivists discussed here had work exhibited in the Royal Academy summer shows. Sadly, few of the original drawings and coloured artworks appear to have survived. But the planning perspectives appear to differ from purely architectural depictions. Although similar devices are used to shape the viewers' perceptions, such as street widening, the removal of buildings and unusual viewpoints, planning views often give the appearance of being less finished, less works of art, than contemporary architectural renderings. Both haste and austerity restrictions on materials may have influenced this.

In addition, the images as texts are layered: the concept behind them was that of the eminent consultant (or unknown borough surveyor!); but then most

of the images were drawn up by the perspectivist, or – drawing upon architectural drawing office practices – it could well have been that a very junior member of staff would have set out the skeleton of the perspective, with the named artist adding the colour and the finishing touches. After that, the contemporary and current consumers of the images would add their own interpretations. It is thus difficult to discern whether there was a 'truth' behind the images and, if so, whose conception is being examined.

In the same way that the unrealised plans for post-fire London can be seen as a textbook of planning concepts of the seventeenth century, these post-war plans are important in the development of planning thought and practice. They chart the fall of traditional planning, with the rise of new planning mechanisms (principally the 1947 Act) giving increasing devolution of power to the *local* state and with the ascendancy of Modernism in planning and design. Ironically, the rising power of the local planning authorities was at the expense of the planning consultants who were preparing these visions. In a few cases, such as for the Coventry plan, the Modernist influence is overtly acknowledged: there, as Percy Johnson-Marshall later wrote,[119] it was Le Corbusier's *City of Tomorrow*. Some of those working in junior capacities on these plans later became influential in planning practice and education, as did Johnson-Marshall himself. For others, such as Sharp who became President of the Town Planning Institute in 1946, the reconstruction plans came at the pinnacle of their professional careers. For yet others, including Adshead and Lutyens, the plans were minor contributions at the end of their lives.

The production and consumption of images within the reconstruction plans, and their communication of large-scale, sometimes radical, planning and urban design ideas to the wider public need further research. More information is required about contemporary professional education, about the individuals concerned with creating the images, about the reactions to the images, and, indeed, about the survival of the original images themselves. It is difficult to obtain first-hand and reliable evidence about how the plans and their images were perceived at the time; further evidence from reviews, letters to newspapers and so on can be obtained, but have their shortcomings. And some significant aspects have not even been touched upon here, including the photographs and the large-scale, three-dimensional models. In addition, the change in emphasis and comprehensibility from the wartime 'outline reconstruction plans' to the post-1947 Act 'development plans' requires further investigation.

Finally, the post-war discourse of professionals, as well as academics and the public, in the process of urban design was deeply influenced by the number, scale and power of the images or representations of space in the plans. Yet the great majority of these plans were never implemented in their original form and, in some cases, what implementation there was took decades to achieve. Were these 'paper cities' therefore a waste of effort and resources? At the very least, their success or failure in selling 'the future city' must be assessed in greater detail; and their imagery clearly played a large part in that sales effort.

Notes

1 Quoted in the authors' note in J. P. Watson and P. Abercrombie, *A Plan for Plymouth*, Plymouth, Underhill, 1943, p. vii, although Reith also said much the same to other towns.
2 P. J. Larkham and K. D. Lilley, *Planning the 'City of Tomorrow': British Reconstruction Planning, 1939–1952: An Annotated Bibliography*, Pickering, Inch's Books, 2001, as amended by continuing research.
3 See, for example, P. N. Jones, '". . . A Fairer and Nobler City" – Lutyens and Abercrombie's Plan for the City of Hull 1945', *Planning Perspectives*, 13, no. 3 (1998), pp. 301–16.
4 P. J. Larkham, 'The Costs of Reconstruction Planning', *Planning History*, 27, nos. 1–2 (2005), pp. 20–6.
5 This information comes from A. R. Sutcliffe, 'Interview with Sir Herbert Manzoni, September 25th 1967', incomplete typescript bound in 'Transcripts of Interviews with Prominent Birmingham People 1967–9', Birmingham Central Reference Library, Local Studies Collection, LF71.
6 P. J. Larkham and K. D. Lilley, 'Plans, Planners and City Images: Place Promotion and Civic Boosterism in British Reconstruction Planning', *Urban History*, 30, no. 2 (2003), pp. 183–205.
7 C. H. James and S. R. Pierce, *Royal Leamington Spa: A Plan for Development*, Royal Leamington Spa, Development Committee, 1947.
8 P. Tilden's review in *The Builder*, 4 January 1946, pp. 3–4, of T. Sharp, *Exeter Phoenix*, London, Architectural Press, 1946, in advance of its publication.
9 Minutes, Warwick Public Health and Housing Committee, 18 April 1946, County Record Office, Warwick.
10 G. Dawbarn, 'Obituary of Cyril Farey', *Journal of the Royal Institute of British Architects*, January 1955, p. 130.
11 'Astragal', comment on the award of CBE to Thomas Sharp, *Architects' Journal*, 14 June 1951, p. 751. Of course, 'Astragal' and the *Architects' Journal* may have been biased: this was a comment on Sharp's CBE award, and he was appointed as Specialist Editor in Planning of the journal shortly thereafter.
12 C. Farey and A. T. Edwards, *Architectural Drawing: Perspective and Rendering*, 2nd edn, London, Batsford, 1949.
13 G. Stamp, *The Great Perspectivists*, London, Trefoil, 1982.
14 S. C. Ramsey, 'Stanley Davenport Adshead (1868–1946)', in L. G. Wickham Legg and E. T. Williams (eds), *Dictionary of National Biography 1941–1950*, Oxford, Oxford University Press, 1959, p. 4.
15 Stamp, *The Great Perspectivists*, p. 16.
16 Quoted in *Journal of the Royal Institute of British Architects*, 1946, p. 309.
17 S. D. Adshead, C. J. Minter and C. W. C. Needham, *York: A Plan for Progress and Preservation*, no publisher given, presumably York City Council, 1948.
18 C. Williams-Ellis's review in *Building*, February 1946, p. 56 of S. D. Adshead, *Report to the Urban District Council on Improvement and Development after the War*, Teignmouth, Teignmouth Urban District Council, 1945.
19 E. Lutyens and P. Abercrombie, *A Plan for the City and County of Kingston-upon-Hull*, London, A. Brown and Sons, 1945.
20 Stamp, *The Great Perspectivists*, p. 125.
21 Improvement and Town Planning Committee, *Report on the Preliminary Draft Plan for Post-War Reconstruction in the City of London*, London, Batsford, 1944.
22 Stamp, *The Great Perspectivists*, pp. 125, 130.
23 See, for example, Lutyens and Abercrombie, *A Plan for the City and County of Kingston-upon-Hull*, plate XXII.
24 R. Myerscough-Walker, *The Perspectivist*, London, Pitman, 1958, pp. 174–5.
25 Stamp, *The Great Perspectivists*, p. 131.
26 Webb is an elusive character. The signature on his perspectives bears a strong resemblance to that of the illustrator of the cover of *Fortune* magazine for October 1932, who was born in 1888 in Tennessee and mostly lived and worked in New York. (See Spiveys, 'Cover by A.C. Webb', www.spiveysbooks.com/%20PRINTS/FORTUNE/1932/OCT32.htm.) Yet the American Webb lived and worked in France in the inter-war period, so his presence and work in Britain from the late 1930s and particularly during the war would not have been impossible.

27 Stamp, *The Great Perspectivists*, p. 20.
28 Royal Academy Planning Committee, *London Replanned: The Royal Academy Planning Committee's Interim Report*, London, Country Life, 1942.
29 Stamp, *The Great Perspectivists*, p. 132.
30 T. Sharp, *Cathedral City*, London, Architectural Press, 1944, p. 3.
31 See letter from Sharp to Webb, 19 February 1946, in the Sharp papers held at the University of Newcastle upon Tyne.
32 Letter dated 31 July 1946, in Sharp papers.
33 T. Sharp, *Oxford Replanned*, London, Architectural Press, 1948.
34 K. Stansfield, 'Thomas Sharp 1901–1978', in G. E. Cherry (ed.), *Pioneers in British Town Planning*, London, Architectural Press, 1981, p. 156.
35 Letter dated 4 April 1946, in Sharp papers.
36 See Sharp, *Oxford Replanned*, pp. 108–10.
37 A. Minoprio and H. Spencely, *Worcester Plan: An Outline Development Plan for Worcester*, Worcester, Worcester City Council, 1946.
38 He obtained a B.Arch. in 1925 and an MA in 1928 from Liverpool University's School of Architecture.
39 A. Minoprio, *Chelmsford Planning Survey 1945*, Chelmsford, Chelmsford Area Planning Group, 1945.
40 'Architecture at the Royal Academy', *Architect and Building News*, 5 May 1944, pp. 94–6.
41 Shepheard was born in Birkenhead and was Abercrombie's godson. He was educated at Reilly's School of Architecture at Liverpool and – at Pevsner's urging – illustrated books on birds. See D. Rowntree, 'Obituary of Sir Peter Shepheard', *The Guardian*, 15 April 2002, p. 20.
42 P. Abercrombie, *Greater London Plan*, London, HMSO, 1944.
43 C. Reilly and N. J. Aslan, *Outline Plan for the County Borough of Birkenhead*, Birkenhead, County Borough of Birkenhead Council, 1947.
44 See the crayon sketch by Derek Plumstead, Planning Officer of Edinburgh, in P. Abercrombie and D. Plumstead, *A Civic Survey and Plan for the City and Royal Burgh of Edinburgh*, Edinburgh, Oliver and Boyd, 1949, Plate XIX.
45 C. H. Holden and W. G. Holford, *The City of London: A Record of Destruction and Survival* (1947), London, Architectural Press, 1951.
46 'Westminster Regained', *Architectural Review*, 102, no. 611 (November 1947), pp. 159–70.
47 See examples reprinted in D. Gosling, *Gordon Cullen: Visions of Design*, London, Academy Editions, 1996.
48 L. Wright, *Perspective in Perspective*, London, Routledge and Kegan Paul, 1983, p. 235.
49 See M. Bandini, 'Some Architectural Approaches to Urban Form', in J. W. R. Whitehand and P. J. Larkham (eds), *Urban Landscapes: International Perspectives*, London, Routledge, 1992; Gosling, *Gordon Cullen*.
50 See, for example, the front cover of Architectural Press, *Bombed Churches as War Memorials*, London, Architectural Press, 1945.
51 Gosling, *Gordon Cullen*, p. 53, note 34.
52 D. Buckman (ed.), *Dictionary of Artists in Britain Since 1945*, Bristol, Art Dictionaries, 1998, p. 316.
53 Gosling, *Gordon Cullen*, p. 51, note 3.
54 Ibid., p. 23.
55 Sharp, *Cathedral City*, p. 4.
56 Review by 'W. B. E.' in the *Proceedings of the Institute of Municipal and County Engineers*, no. 71 (February 1945), p. 226, of Sharp, *Cathedral City*.
57 Sharp, *Oxford Replanned*, p. 10. Incidentally, the dust-jacket of this book was a semi-abstract design by Cullen.
58 Typography, in the broad sense, was also an architectural consideration. See B. Warde, 'Typography and architecture', *Journal of the Royal Institute of British Architects*, July 1947, pp. 471–3.
59 Sharp, *Exeter Phoenix*; Sharp, *Oxford Replanned*.
60 Abercrombie and Plumstead, *A Civic Survey and Plan for the City and Royal Burgh of Edinburgh*.
61 See, for example, the small-format, traditionally laid-out plan for Newcastle in P. Parr, *Plan – Newcastle upon Tyne 1945*, Report of the Town Planning Sub-Committee, Newcastle upon Tyne, Newcastle City Council, 1945.

62 T. Sharp, *Georgian City: A Plan for the Preservation and Improvement of Chichester*, Brighton, Southern Publishing, 1949.
63 A. Schofield's review in *Journal of the Town Planning Institute*, June 1949, p. 184, of Sharp, *Georgian City*.
64 J. Sharples, A. Powers and M. Shippobottom, *Charles Reilly and the Liverpool School of Architecture 1904–1933*, Liverpool, Liverpool University Press, 1996; C. Crouch, *Design Culture in Liverpool, 1880–1914*, Liverpool, Liverpool University Press, 2002.
65 See E. L. Bird, 'Drawing for Reproduction: Advice to Architectural Draughtsmen', *Journal of the Royal Institute of British Architects*, September 1946, pp. 481–8.
66 Ibid., p. 481.
67 Ibid., p. 488.
68 An archive of Cullen's work is held by the architect David Price; the University of Newcastle has a perspective from Sharp's Durham plan; the Royal Academy retains some of the illustrations from its two reports on London; and the RIBA Drawings Collection, now at the Victoria and Albert Museum, has some relevant material. More may yet remain in private hands, but those local authorities consulted have retained little if anything other than the plans themselves.
69 Minutes of the Reconstruction Committee, Wolverhampton, 8 November 1944, Wolverhampton Archives and Local Studies.
70 Letter from Philp to Sharp, 24 September 1946, in Sharp papers.
71 Sharp, *Cathedral City*.
72 T. L. Dale, *Towards a Plan for Oxford City*, London, Faber, 1944.
73 W. Dobson Chapman, *Towards a New Macclesfield: A Suggestion for a New Town Centre*, Macclesfield, Macclesfield Borough Council, 1944.
74 Sharp, *Exeter Phoenix*; A. Games, 'Obituary of F. H. K. Henrion', *Journal of the Royal Society of Arts*, 138, no. 5411 (1990), pp. 738–9.
75 J. Gilliland, 'It's About Time: Exploring the Fourth Dimension in the Morphology of Disasters', *Urban Morphology*, 7, no. 2 (2003), pp. 110–12.
76 F. Price, *The New Birmingham*, Birmingham, Public Works Committee, Birmingham City Council, and *Birmingham Mail*, undated, *c.*1957.
77 K. Jeremiah, *A Full Life in the Country: The Sudbury and District Survey and Plan*, London, Batsford, 1949. The image was drawn by R. Tilbrook.
78 D. Matless, *Landscape and Englishness*, London, Reaktion, 1998, pp. 216–17.
79 Holden and Holford, *The City of London*.
80 J. Lubbock, *The Tyranny of Taste: The Politics of Architecture and Design in Britain, 1550–1960*, London, Thames and Hudson, 1995, p. 357.
81 P. J. Larkham, 'Remaking Cities: Images, Control, and Postwar Replanning in the United Kingdom', *Environment and Planning B: Planning and Design*, 24 (1997), pp. 741–59; Minoprio and Spencely, *Worcester Plan*, p. 58.
82 Sharp, *Cathedral City*, pp. 56–7. These were drawn by 'MS', presumably Sharp's assistant, Moira Shield, B.Arch., ARIBA, AMTPI.
83 M. Lock *et al.* (Max Lock Group), *Bedford by the River*, London, Murray, 1952.
84 The novelty of this form of illustration is demonstrated by the letter from the architect B. M. Miller accompanying axonometrics of his reconstruction-period estate at Bilston to the consultant in charge, his former professor Sir Charles Reilly, in which he had to explain how to read the drawings (manuscript letter, 1946, in Reilly correspondence file D204/7, Liverpool University Archives).
85 Minoprio and Spencely, *Worcester Plan*, p. 58.
86 Unpublished watercolour illustrations associated with J. B. Bennett's 1944 plans for Swansea in the West Glamorgan Archive Service, Swansea; S. D. Adshead and H. Cook, *The Replanning of Southampton*, Southampton, Southampton County Borough Council, 1942, following p. 12.
87 P. S. Cadbury, *Birmingham – Fifty Years On*, Birmingham, Bournville Village Trust, 1952.
88 Farey and Edwards, *Architectural Drawing*, p. 4.
89 Improvement and Town Planning Committee, *Report on the Preliminary Draft Plan for Post-War Reconstruction in the City of London*, Plate 4a.
90 Watson and Abercrombie, *A Plan for Plymouth*, p. 70.
91 For an example, see the black and white sketch by Webb in Sharp, *Exeter Phoenix*, p. 91.
92 Examples are in P. Abercrombie and R. Nickson, *Warwick: Its Preservation and Redevelopment*, London, Architectural Press, 1949; and in J. S. Allen and R. H. Mattocks, *Industry and Prudence, a Plan for Accrington*, Accrington, Accrington Borough Council, 1950.

93 J. Rawlinson and W. R. Davidge, *City of Westminster Plan*, Westminster, City of Westminster Council, 1946, p. 25.
94 Watson and Abercrombie, *A Plan for Plymouth*, p. 71.
95 Parr, *Plan – Newcastle upon Tyne*, p. 52.
96 Dale, *Towards a Plan for Oxford City*, p. 55.
97 W. Dobson Chapman and Partners, *The City and Royal Borough of Aberdeen: Survey and Plan*, Aberdeen, Corporation of the City of Aberdeen, 1949.
98 A. McIntosh, review in *Town Planning Review*, no. 22, pp. 167–70, of Chapman and Partners, *The City and Royal Borough of Aberdeen: Survey and Plan*. See p. 169.
99 Lutyens and Abercrombie, *A Plan for the City and County of Kingston-upon-Hull*.
100 Anonymous review in *Estates Gazette*, 23 November 1946, p. 503, of Lutyens and Abercrombie, *A Plan for the City and County of Kingston-upon-Hull*.
101 'P. C. L.'s' review in *Journal of the Town Planning Institute*, March–April 1948, p. 96, of Minoprio and Spencely, *Worcester Plan*.
102 Anonymous review in *Estates Gazette*, 6 April 1946, p. 329, of Sharp, *Exeter Phoenix*.
103 'H. G. A.'s' review in *Town Planning Review*, 19 (1947), p. 183, of Sharp, *Exeter Phoenix*.
104 Tilden's review in *The Builder*, 4 January 1946, p. 4, of Sharp, *Exeter Phoenix*.
105 W. E. van Heyningen's review in *Town Planning Review*, 20 (1949), p. 90, of Sharp, *Oxford Replanned*.
106 J. W. R. Adams and E. W. Berridge's review in *Journal of the Town Planning Institute*, May–June 1948, p. 129, of Sharp, *Oxford Replanned*.
107 R. E. M. McCaughan's review in *Town Planning Review*, 20 (1949), p. 181, of Sharp, *Georgian City*.
108 F. Atkinson's review in *Architect and Building News*, 27 January 1950, p. 104, of M. Lock *et al.* (Max Lock Planning Group), *Outline Plan for the Portsmouth District 1949–63*, (no place of publication given), Hampshire County Council, 1949.
109 Lock *et al.*, *Bedford by the River*.
110 C. Holliday's review in *Town Planning Review*, 24 (1953), p. 248, of Lock *et al.*, *Bedford by the River*.
111 Review in *Architect and Building News*, 26 July 1946, p. 58, of G. Payne, *Gloucestershire: A Physical, Social and Economic Survey and Plan*, Gloucester, Gloucestershire County Council, 1946.
112 Quoted in F. Barker and R. Hyde, *London as it Might Have Been*, London, Murray, 1995, p. 185.
113 C. H. James, S. R. Pierce and H. C. Rowley, *City of Norwich Plan*, Norwich, City of Norwich Corporation, 1945, p. 51.
114 R. Cooper, Letter to the Editor, *Berrow's Worcester Journal*, 11 November 1946, p. 4.
115 P. J. Larkham, 'Rebuilding the Industrial Town: Wartime Wolverhampton', *Urban History*, 29, no. 3 (2002), pp. 388–409.
116 Residents' letters published in the Wolverhampton *Express and Star*, quoted in Larkham, 'Rebuilding the Industrial Town'.
117 P. J. Larkham, 'Walsall: The Origin, Promotion and Disappearance of a Wartime "Reconstruction" Plan', *Planning History*, 25, no. 2 (2003), pp. 5–11.
118 In informal conversations with the author.
119 P. Johnson-Marshall, *Rebuilding Cities*, Edinburgh, Edinburgh University Press, 1966, p. 293.

Further reading

J. B. Cullingworth, *Reconstruction and Land Use Planning 1939–1947*, London, HMSO, 1975
J. Hasegawa, *Replanning the Blitzed City Centre*, Buckingham, Open University Press, 1992
J. Hasegawa, 'The Rise and Fall of Radical Reconstruction in 1940s Britain', *Twentieth Century British History*, vol. 10, no. 2 (1999) pp. 137–61
Peter J. Larkham and Keith D. Lilley, *Planning the 'City of Tomorrow': British Reconstruction Planning, 1939–1952, an Annotated Bibliography*, Pickering, Peter Inch, 2001
J. Stevenson, 'Planner's Moon: The Second World War and the Planning Movement', in Harold L. Smith (ed.), *War and Social Change: British Society in the Second World War*, Manchester, Manchester University Press, 1986

Chapter 7

Paper dream city/ modern monument

Donald Gibson and Coventry

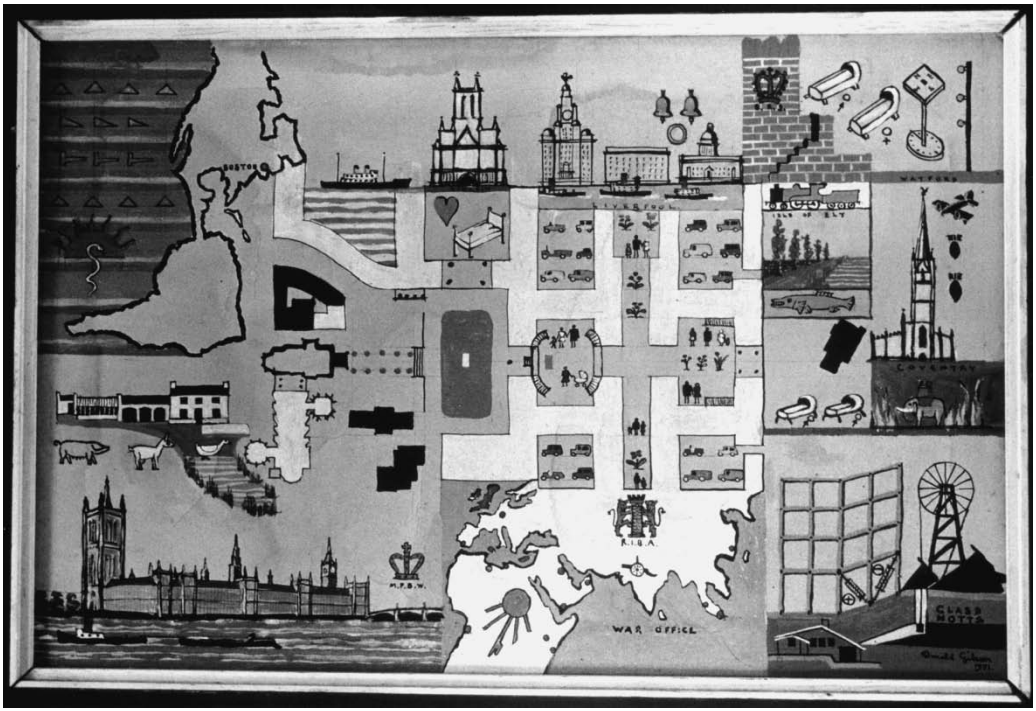
Louise Campbell

In 1953, as the first building in Coventry's new pedestrian precinct neared completion, Donald Gibson told a journalist that he saw his job as City Architect to be 'to mould together the team responsible for planning and design, to tactfully control its creative energies, and to guide its brainchildren through the uneasy adolescence of the committee room to the maturity of concrete'.[1] This statement eloquently conveyed the idea of a new type of architect-planner, someone with an 'unheroic conception of the official architect's position', who was more concerned to assemble a team competent to plan and design than to win for himself personal accolades.[2] In 1938, the President of the RIBA famously – and controversially – compared the work of the architect in public employment to the quality of the chocolate bars obtained from vending machines: predictable, mediocre in quality and often rather stale.[3] Donald Gibson (1908–91) was instrumental in configuring the image of the official architect in different terms, as someone engaged in a work of central importance and significance. Gibson's enthusiasm for applying techniques of pre-fabrication and industrialised building to the construction of houses and schools, and his advocacy of combining the functions of the planner with that of the architect, made him a key figure in post-war reconstruction. Coventry, where Gibson was appointed City Architect in 1938, became a paradigm for urban reconstruction under his aegis, and Gibson himself a shining exemplar of the public-sector architect: technically astute, non-hierarchical in his office organisation, with a strong sense of public service.

By contrast, recent writers have taken a rather different view of Gibson's achievements at Coventry. They have characterised Gibson as a ruthless creator of a Modernist city, someone who in his pursuit of a rationally ordered urban environment happily sanctioned the obliteration of familiar landmarks, and they suggest that the new Coventry that he devised was received by many of its citizens with indifference or hostility.[4] How then should he be assessed? Although Gibson's career as a whole has yet to be scrutinised, studies of Coventry's reconstruction in terms of local and national politics, together with the architect's personal papers, provide a useful starting-point for an analysis that balances professional concerns, personal conviction and political context.[5] Gibson emerges as a complex and interesting figure, whose determination to reshape architecture in terms of new technologies was accompanied by a profoundly humane view of post-war civic life. Coventry, dominated by politicians whose brand of socialism stressed the creed of civic improvement, served as a crucial catalyst for the development of Gibson's ideas.[6] An adroit politician-architect, he was a pragmatist who was prepared to modify his ideas in the light of experience, events and local opinion, someone whose concept of the city beautiful ultimately owes more to Patrick Abercrombie and Lewis Mumford than to the precepts of the Congrès Internationaux d'Architecture Moderne.

Three aspects of Coventry's early redevelopment will be examined in order to support this view of Gibson as an idiosyncratic blend of the technocrat and the idealist: the cautious, highly circumspect use that Gibson made of graphic techniques to convey ideas about the future shape of the city; his attitude to commerce and his attempts to control it in relation to his concept of civic decorum; and, finally, his adoption of some unexpectedly traditional techniques and images to convey his personal belief in the value of a well-ordered environment and his conviction that a city whose rapid growth, increasing prosperity and extremely youthful population necessitated the creation of a new species of civic iconography.

The broad contours of Gibson's career were conveyed with characteristic precision and clarity in a delightful autobiographical pictogram which he painted in his retirement in 1971. It starts in the top left corner with his departure for the US in 1931 – for a year 'out' from his studies at Manchester University. It then features a brief period in private practice in Lincoln after qualifying as an architect in 1932; his three years at Liverpool University; marriage to Winmary McGowan, who had been a fellow student at Manchester, and the birth of their four children; his work at the Building Research Station in about 1935 as scientific officer researching technical failures in buildings; his appointment as Deputy County Architect to the Isle of Ely in 1937, where he investigated day-lighting and the design of classrooms in his spare time; his time in Coventry from 1938 as first City Architect; his move to Nottingham in 1955 as County Architect; his move to the War Office as Director-General of Works in 1958; his appointment to the Ministry of Public Building and Works in 1962 as Director-General of Research and Development and then in 1967 as Controller General; and his election as President of the RIBA from 1964 to 1965.[7] The painting, like Gibson's career, is dominated by the distinctive plan of the pedestrian precinct at Coventry.



7.1
Donald Gibson, Autobiographical painting, 1971, private collection

Representing Coventry: medium and message

Working in Liverpool University's School of Architecture was evidently a formative experience for Gibson. The buildings of Liverpool's spectacular waterfront form the horizon of Gibson's autobiographical picture. 'I was . . . appointed lecturer at the University of Liverpool . . . nominally instructor in charge of the first year students. However, after my arrival I was invited to accept the lectures on construction to the fourth year students', he later recalled.[8] It was at Liverpool, between 1933 and 1935, that Gibson attended the course of lectures on town planning given by Patrick Abercrombie and obtained a certificate in the subject.[9] Liverpool School of Architecture was just at that time re-inventing itself as a cradle of Modernist design. Under Charles Reilly, the School had adopted the Beaux Arts approach to design and planning popular in American schools of architecture; it had also witnessed a vogue for Swedish Modernism, which manifested itself in such things as fountains and street furniture, decorative sculpture and well-crafted public buildings. After Reilly's retirement in 1933, a different, more socially conscious and technically informed Modernism began to appear, which supplanted the Beaux Arts influence while not entirely displacing the Swedish model.[10] Both Percy Johnson-Marshall (1915–93) and his brother Stirrat (1912–81) were students at Liverpool during this period of transition. Percy was to place great importance on the stimulus of those 'stirring times', and to the visits made by Erich Mendelsohn and Walter Gropius to the school. He recollected:

> This changed our direction of thought and design – how to come to terms with technology? . . . We were also becoming strongly influenced by social issues, and wished to take part in the 'scope of total architecture'. We both decided to go into some form of public service . . . and this conditioned us for most of our lives.[11]

Gibson, born in 1908 and their senior by only a few years, was considered by them as a sort of older brother. When Gibson arrived at the Isle of Ely, Stirrat was already working there as chief architectural assistant; and Percy was one of the first architects whom Gibson recruited to his new department at Coventry in 1938. Small though it was, the age gap between Gibson and the Johnson-Marshall brothers was to be significant. For Gibson, the excitement of Gropius's visit to Liverpool in 1934 lay less in his architectural and urban vision than in his concept of an entirely new kind of architectural education. Speaking to the Royal Society of Arts in 1940 about approaches to reconstruction, Gibson called for the creation of a Bauhaus-inspired institution:

> a combination of technical school, architectural school and town planning department, in which students would learn to handle and work on materials in the early years and would be sifted out in accordance with their talents and ability, the most gifted eventually becoming planners of the future environment.[12]

And although Modernist town planning concepts informed Gibson's initial plans for Coventry in 1939–40, they were to be consistently countered by the enduring influence of Patrick Abercrombie, whose example encouraged the development of a more moderate, regionalist Modernism.

At Liverpool School of Architecture under Charles Reilly, the architectural perspective had emerged as an art form in its own right. A former student (and subsequently the Head of the School) Robert Gardner-Medwin, recalled both the showmanship and the arduous discipline that was involved in producing elaborate renderings of buildings and cities, complete with cast shadows, highlights and reflections.[13] Liverpool students, carefully drilled in producing presentation drawings, scored some notable successes with their draughtsmanship, frequently winning the Rome scholarship in architecture.[14] But Gibson, who had charge of the new materials gallery at Liverpool, may have been critical of the emphasis that the School continued to place on such drawing skills and this is suggested by the very sparing use he made of architectural perspectives for conveying the appearance of Coventry's new city centre. This contrasts sharply with many of his architect contemporaries who produced or commissioned striking images of the new cityscapes as part of what Larkham calls 'a process of civic boosterism'.[15]

Gibson's appointment as City Architect at Coventry in late 1938 brought with it the responsibility for a programme of new civic buildings. Coventry's

population, boosted by its flourishing car and machine-tool industries, had shot from 128,157 in 1921 to 220,000.[16] About 10,000 people a year were pouring into the city to work in Coventry's armaments factories, then gearing up for war production, and there was a desperate need for new housing and for recreational facilities. From 1937 the City Council was controlled by the Labour Party which favoured a more interventionist approach.[17] The Council felt that the city lacked the cultural, social and educational buildings appropriate to a thriving industrial city. It had no theatre, central library, art gallery or public swimming pool; it needed new civic offices and law courts, and a new building for the school of art. Gibson approached the task in a highly rational way. Instead of working on designs for each of these buildings in isolation, using sites as and when they became available, he decided to work on a broader canvas. He persuaded his employers to let him recruit a team of assistants, initially in order to alleviate immediate housing needs. A staff of twenty-eight people, including seventeen architects and two quantity surveyors, were working in the Coventry department by the summer of 1939.[18] While designing the new housing, Gibson and his team also worked out a scheme for a new civic area as an entirety. A model was made to convey their ideas for this area, and to demonstrate to the City Council the essentially three-dimensional nature of planning and the optimum relationship between buildings, streets and greenery.

A conflict rapidly developed between Gibson's idea of reordering the historic centre as a park – a tranquil, well-planted space in a chronically traffic-choked city centre – and the rather different proposals that had been worked out in the late 1930s by the City Engineer, Ernest Ford, who was nominally responsible for town planning in Coventry. This conflict served as the catalyst for a much wider debate about land use and town planning conducted in the press and by the local amenity societies.[19] Controversy focused on the contrast between Gibson's design for a long, low range of civic buildings and the medieval buildings that they were designed to enfold and on the proposed removal of the buildings clustered around the cathedral, the parish church and the guildhall. Factories, workshop buildings and slum dwellings were to be demolished, together with the Georgian houses of the cathedral close, leaving the principal historic buildings as isolated fragments in a landscaped park. Although the City Engineer proposed to create a quiet civic 'square' in the historic centre, his proposals were far more conservative than Gibson's, retaining many elements of the old street layout, together with the tightly packed mix of shops, industry and residential buildings that characterised Coventry's post-medieval development.

An exhibition called 'Coventry of Tomorrow' was organised in May 1940 in the guildhall, St Mary's Hall, by the recently formed local branch of the Association of Architects, Surveyors and Technical Assistants (consisting largely of members of Gibson's office). Johnson-Marshall was branch secretary and organiser. As he frankly admitted, the exhibition was a propaganda exercise, designed to raise public awareness of the need for a coordinated approach to planning and to raise support for conducting a wide-ranging civic survey of Coventry.[20] Johnson-Marshall privately described the situation in Coventry as he saw it:

> some fine buildings which very few people care about, streets designed for a fraction of the traffic which now clogs them, most of the shop-fronts rebuilt in the worst 'modernistic' manner, acres of drab suburbs, few open spaces in the centre of the city . . . high land values in the centre preventing proper redevelopment, and a general lack of any cultural facilities.[21]

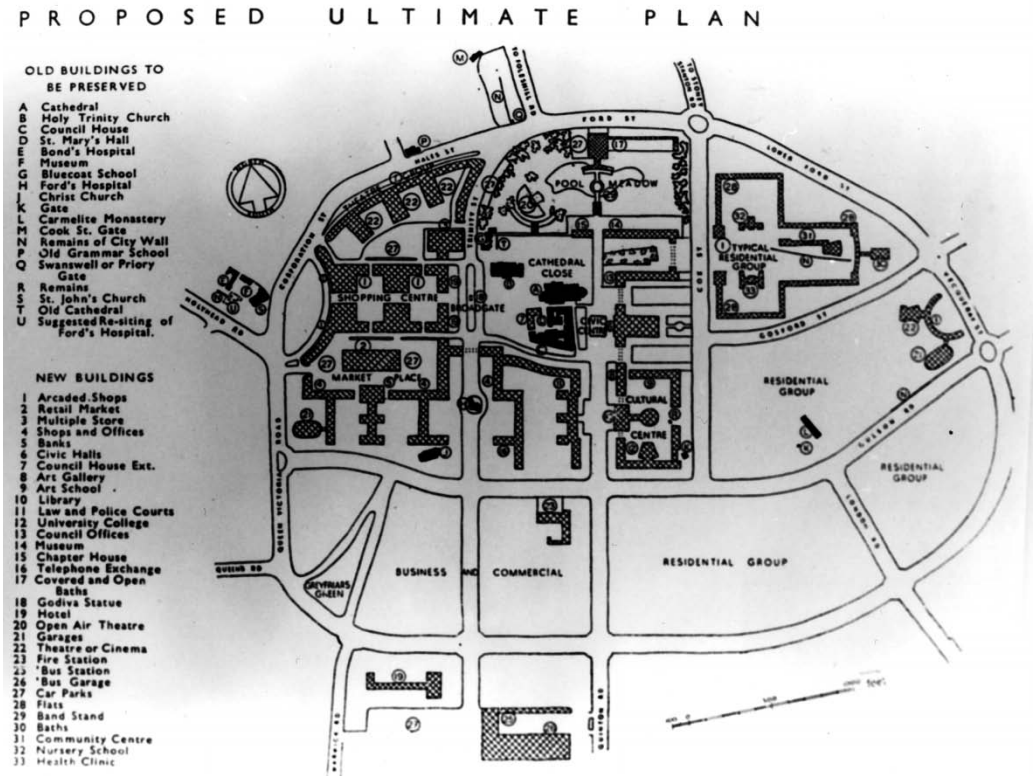
The concept of the exhibition derived from the classic method established by Abercrombie (and by Patrick Geddes before him) of survey, analysis and plan. Coventry's existing provision for health, housing, education, transport and industry were charted by means of statistics and by photographs mounted on panels. Under the slogan 'The Idea/To Avoid Chaos we must PLAN our city for all our needs' were arranged models of modern town planning schemes borrowed from the Architectural Association, from F. R. S. Yorke and Marcel Breuer, and the MARS Group. Architects including Maxwell Fry and Leslie Martin lent models of recently designed school buildings, and a photographic exhibition of Small Houses was sent by the RIBA. The centrepiece of the exhibition was the model of the proposed civic centre made by the members of Coventry City Architect's Department.[22]

The response of the public as recorded in the visitors' book was predominantly positive, although one citizen commented acidly: 'A Coventry rebuilt as suggested is what the people need – for health and happiness – but as Hitler started smashing up "improved" Belgium and Holland this a.m. – let's deal with him first!!!' Another enquired wistfully: 'Is it possible so to modify the plan of the civic centre that you retain the lovely old Tudor houses which still remain?'[23]

Six months later, in the aftermath of the air raid on 14 November 1940 in which much of the central area of the city was destroyed by incendiary bombs during a single night, Gibson was able to draw upon the work that he and his colleagues had already done and to exploit the demand for bold replanning which their exhibition had helped to orchestrate. The City Council's position in demanding help from central government was greatly strengthened by having already in post someone capable of planning for comprehensive rebuilding, and the City Architect assumed a position of considerable power. After a lecture given by Gibson in London in 1941, John Summerson suggested that the prerequisites for accomplishing any major change to the fabric of existing cities were plan, publicity and legislation. He pointed out that in Coventry the first and second of these were already in place, and the third was soon to follow.[24] Rapidly, Gibson and his team extended their pre-Blitz plans to include the commercial centre of the city, and the choked shopping streets were reconfigured in order to create a largely pedestrianised shopping area. Vehicular traffic was to be routed away from the city centre by means of an inner ring road to create what Gibson was later to describe as 'quiet precincts where the movement of people is slow, and close and intimate'.[25] This notion of a precinct as an oasis seems to be related to one of Abercrombie's ideas for the Bloomsbury area of London, for which he proposed a traffic-free academic precinct based on the model of the Inns of Court.[26] However,

in 1941 Gibson described his idea for central Coventry in rather different terms, writing of a 'pedestrian gardenway', constructed along a gentle slope, 'with water gardens spilling from one level to another and the shops all round them'.[27]

The final victory of Gibson's proposals for replanning Coventry over the plans drawn up by Ford came in 1941. 'Unsatisfactory architectural effect', 'Bad streets to remain', 'Badly shaped sites', 'Civic buildings blocked by shops', 'Bad traffic junctions' and 'Industry remained in centre' are among the disapproving comments with which Gibson annotated a copy of Ford's plan.[28] The City Council, no doubt swayed by Gibson's eloquent criticism of his rival's approach, voted by an overwhelming majority to implement the City Architect's more adventurous ideas.[29] In March 1941, Gibson's designs and plans were published in articles in the architectural press. The contrast between the devastation of the present and the orderly reconstruction of the future which had dominated the literature of wartime planning here took second place to the vigorous criticism of the laissez-faire pre-war attitudes to development. These were identified as the single most undesirable legacy of the past, one which – in the aftermath of the Blitz – could be effaced by dint of a rational and controlled approach to planning. It is noticeable that the seductive imagery of the architectural perspectivist was kept tightly under control. In the *Architect and Building News*, which illustrated two different architectural treatments of Broadgate, the new square proposed



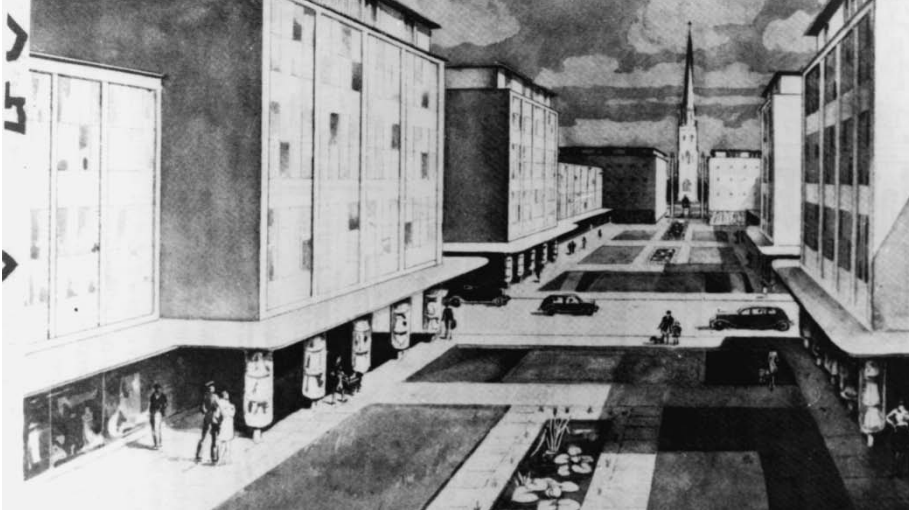
7.2
Donald Gibson and City Architects' Department: Plan for Coventry

for the centre of the city, it was argued that: 'It is the *plan* that is of primary importance, the details can follow later.'[30] The fundamental principles of the new scheme were illustrated by means of rough, schematic sketches and included creating areas of open space to allow an interestingly varied skyline and to free up the view of the historic buildings. The creation of new amenities such as cultural buildings, and a rational grouping of functions, with the city organised into zones designated for different types of building such as housing, industry, commerce, culture and education, were to compensate for the partial eradication of the ancient fabric of the city. 'These things will be welcome legacies of the war . . . [They] must be part of our war aims', claimed the writer.[31] The price to pay – the loss of buildings such as an ancient almshouse which stood in the way of a planned new road and which Gibson proposed should be dismantled and re-sited elsewhere – was claimed to be well worthwhile.[32]

It was suggested that, under the umbrella of a rationally determined approach to planning and grouping, a 'reasonable stylistic diversity in design . . . will



7.3
Two views of the new Broadgate, Coventry



7.4
Artist's impression of proposed shopping precinct, Coventry

certainly occur'.[33] Significantly, no unitary vision of a contemporary city emerged. The deliberate variety that was conferred upon the buildings proposed for the new city extended to the techniques used to represent them. In an article in the *Architects' Journal*, a hard linear style of drawing was used to show proposed new housing in the outlying area of Canley, while more traditional perspective drawings were employed to represent the buildings around the cathedral, the new civic centre and marketplace, thus conveying the different character of various quarters of the city.[34]

Gibson was dismayed to find the *Architect and Building News* article reprinted in the form of a pamphlet entitled *PLAN for the New Coventry*, with a dramatic new photomontage cover. 'The plans were printed by the Ministry of Information (without my knowledge) . . . It was sent out to the allied world to encourage a belief in our survival, as part of Britain's Propaganda', he later recalled.[35] The episode may have helped to demonstrate the uncomfortable parallels between the techniques and rhetorical devices of political propaganda, the discourses of planning and reconstruction, and the persuasive methods of modern advertising. For this reason, perhaps, Gibson consistently preferred to use plans, models and diagrams rather than sketches to convey ideas and information; they appeared to provide a more scientific and neutral medium than pictorial perspectives, and their meaning was less easy to distort or manipulate.[36]

Nevertheless, conventional presentation techniques were employed for more traditional occasions and contexts. A display of images was hastily put together when King George VI and Queen Elizabeth visited Coventry in February 1942, to show how the city was recovering from the Blitz. Interestingly, neither diagrams, nor the photographic records of what had been accomplished in the way of new housing and temporary shops, nor sketch drawings seem to have been considered adequate for this audience. A photograph of the scene in St Mary's Hall shows a number of highly finished perspective drawings of the new buildings proposed for the centre.[37] It is possible that this method of presentation, which was customarily used to represent prestigious kinds of architecture, was deemed more suitable for this occasion. It had the further advantage of making the city's plan seem less alarming than it might otherwise have appeared.

These traditional pictorial techniques contrasted with those that were employed in May 1945 at a more extended, ambitious and public exhibition entitled 'Coventry of the Future' held in the Drill Hall. This was dominated by the novel display techniques that had featured in the exhibition organised by Johnson-Marshall five years previously. Screens with maps, diagrams and photographs arguing the case for planning came from the Ministry of Town and Country Planning, and lectures, visits, slide and film shows were organised, featuring *A City Reborn*, the Ministry of Information's film about Coventry.[38] Much of the exhibition was taken up with models, and centred upon a large one showing the City Architect's plan of the central area, paid for by the proprietor of the main local newspaper. As in 1940, the emphasis was upon securing the attention and support of Coventry's citizens. The difference was that whereas the earlier exhibition was part of a larger campaign by professional architects to disseminate modern concepts of planning and design, the 'Coventry of the Future' exhibition of 1945 was part of a strategic bid by the City Council to build up a secure base of supporters. Public debates and essay competitions were organised in order to elicit active participation and debate, and to generate a consensus about the new plans in advance of the public enquiry. Publicity techniques verged on the coercive, and the distinction between publicity and propaganda was sometimes hard to draw. A memorandum from the City Council about publicity for the exhibition proposed drawing citizens' attention to it by making announcements on factory loudspeakers in the lunch-hour, using leaflets, hoardings, street banners and loud-speaker vans, placing notices on electricity and gas bills, making announcements in church, and organising visits for particular interest groups and for groups of local schoolchildren.[39]

'Civic Decadence' and civic renaissance

Laissez-faire commercial development was clearly anathema to Gibson. His painting of 1939, displayed at the 'Coventry of the Future' exhibition under the slogan 'The Choice' (see Figure 8.3) and later given the title 'Civic Decadence', indicates his impatience with a city that had allowed the shopkeeper to dominate the central area, and failed to impose any kind of architectural control over their shop-fronts or advertisements.[40] The charm of Broadgate as a classic marketplace, a point at which ancient roads converged, was not something that Gibson was prepared to acknowledge. His painting and his description of this junction reveals his distaste for the jumble of materials and architectural styles, the vulgarity of Victorian developments and the insensitive scale of inter-war commercial premises. In 1941 Gibson listed 'varying heights, hideous lettering, extravagant squiggles, narrow pavements' among 'the things to be avoided' in the future.[41] His ideas for Coventry's city centre were shaped by the wish to offset the visual chaos of the commercial centre with a set of dignified civic and cultural buildings. His attitude was hardened by the intransigence of the local shopkeepers, and particularly by that of the owners of a large department store, whose opposition to pedestrianisation remained the greatest single obstacle to reconfiguring the city's central junction: until 1955 they insisted that a major road be cut across the shopping precinct – something which, if executed, would have forced pedestrians to navigate it via an

underpass.[42] Gibson's dismissive attitude to advertising and shop-fronts was formed during the inter-war period by the campaigns of bodies such as the Design and Industries Association and the Council for the Preservation of Rural England, which had succeeded in curbing the worst excesses of advertising hoardings in town and country.[43] Gibson's first-hand experience of the exuberance of North American cities in 1931 perhaps helped to confirm his perception of commerce.

We know that Lewis Mumford's *The Culture of Cities*, published in the US in 1938 and appearing in England the same year, became a sort of bible in Gibson's office.[44] Together with a robust indictment of modern capitalism, the book contains a condemnation of the unplanned city of commerce. 'Makeshift piled upon makeshift', Mumford wrote in his chapter on 'The Insensate Industrial Town'. Some of Mumford's harshest words were directed towards the nineteenth-century city as the emblem of opportunism and profiteering: 'the Devil reserved for himself the privilege of building the cities.'[45] Mumford's indictment seemed peculiarly relevant to the situation in which Gibson and his team found themselves during the 1940s. In an article for the municipal magazine which was embellished with a vignette of a sack of money, Gibson had suggested in 1940 that the nationalisation of land – and government aid for public building projects – could provide the mechanism for effective replanning.[46] The 1944 Town and Country Planning Act, which allowed local councils to purchase land compulsorily in war-damaged areas provided that they produced a plan for redevelopment and that they held wide-ranging public consultations, enabled Coventry to implement its plan, although the pace was painfully slow. It was against this background of consultation, of persuasion, of trying to create a consensus, and of putting pressure on government agencies for more generous allocations of money, materials and labour, that Gibson exhibited his ideas to Coventry's citizens and refined his vision of the future city.

The sort of city that Gibson envisaged was one that contained opportunities for the cultivation of mind, body and spirit. To offset the frantic tempo of modern city life, he suggested creating tranquil zones of well-spaced buildings. The rebuilt city would be laced with precincts and parks. The commercial heart of the city would be dignified by an orderly pedestrianised shopping area, made pleasant with flowers, fountains and sculptures. The long ranges of buildings forming this shopping 'precinct' would be realigned to run east–west, replacing the old north–south axis of Broadgate, and would frame distant views of the historic centre on the other side of the central square. Around the medieval St Mary's Hall and the neo-Tudor town hall designed by Garrett and Simister in 1912–20, a new civic hall, an art gallery and university buildings would be grouped in a parkland setting, balancing the activities of the commercial zone with the more measured rhythms of civic and academic life. Areas of housing, conceived as well-equipped neighbourhood units and each provided with a school, a health clinic and shops along the model of the MARS plan for London, would lie beyond.

In a lecture of 1940, Gibson had articulated a Corbusian functionalism as regards gearing the design and construction of housing to the needs of the user and the technological means available.[47] Le Corbusier's vision of the contemporary city was later acknowledged by Johnson-Marshall to have been a significant

influence on Gibson's team. However, he admitted that in central Coventry, where space was not at a premium, there was no compelling argument for building high: vertical accents would be provided by the spires of Coventry's three great medieval churches, and not by the towers of a business quarter, as in Le Corbusier's *Plan Voisin*.[48] This pragmatic approach to modern town planning is shown in the anonymous watercolour perspective of Coventry illustrated in *Resurgam*, a booklet published by the Town and Country Planning Association towards the end of the war.[49] Coventry was represented as the epitome of an indigenous regionalist Modernism, in which the contours of the local geography, of the changeable English weather and of church spires provided a picturesque softening of the image of the Modernist city.

By means of this visual balancing of commercial, religious and public buildings, it was hoped to reinstate some measure of civic decorum. The opportunity was also taken to rethink some of the city's new buildings in terms of function as well as of form. For example, the museum and art gallery was envisaged by Gibson as a venue for artists' studios as well as for displaying collections of historic art.[50] For him, the cathedral, gutted in the air-raid of 1940, represented an opportunity simultaneously to rethink the historic centre and to articulate in modern form the close links that had once existed between the religious buildings and the civic life and occupations of the city. Both Gibson and the wartime Bishop of Coventry, Neville Gorton, had actually favoured sweeping away the shell of the gutted cathedral in a symbolic gesture of renewal. 'You cannot have a ruin to represent the Church in your city', Gorton declared to a Coventry audience, and he warned them against the 'false sentimental affection' attached to the ruins, which he feared might compromise his dynamic vision of the future of the city.[51] Accordingly, it was felt necessary to preserve only the surviving cathedral tower, which Gibson imagined as a fragment in the park-like historic zone, and the space that had once been occupied by the ruins was envisaged as a site of an imaginatively conceived building appropriate to the needs of the modern city with its population of machine-tool makers, engineers and technicians. The new

7.5
Perspective of the new Coventry



cathedral building that was to replace the ruins was imagined as nurturing new creative traditions – a centre for music and drama and 'a school of wood-carving and stone-carving and mural painting' as well as a place for worship.[52] In other words, the cathedral, like the museum, was conceived in entirely new terms, as fundamentally anti-monumental and as representing a vital counter-balance to the materialism and commercialism of the prosperous post-war city.

Gibson was instrumental in ensuring that the project to build a new cathedral was not hemmed in by stylistic constraints, for he – like the Bishop – regarded it as crucial that the cathedral should project a modern identity in order to appeal to a young population.[53] When it eventually materialised, the new cathedral building, designed by Basil Spence, functioned in very much more conventional ways than Gibson or the Bishop had imagined; and its design, rather than expunging the ruins of its medieval predecessor, embraced them in spectacular fashion. Despite this change, Gibson remained a staunch supporter of the project to build a new cathedral (as opposed to restoring the old one) as emblematic of the modernity of this city and of its capacity constantly to renew itself. Architecture and public art were envisaged as providing its vital aesthetic and spiritual nourishment.

Interestingly, both Gibson and Spence were concerned with the revival of civic heraldry in the 1950s. As part of the restoration of the Cappers' Room in the ruins of the old cathedral, Spence's assistant David Rock designed an elaborate panelled ceiling using emblems derived from the themes and characters of the Coventry medieval mystery plays. Although the ceiling was eventually designed to a much simpler format, the original drawing suggests a concern to adorn the meeting place of one of the city's ancient guilds in order both to celebrate their medieval origins and to provide rich opportunities for the exercise of craft skills.[54] After the restoration of the wooden ceiling of St Mary's Hall, damaged during the Blitz, Gibson was the prime mover in the painting and gilding of the carved figures supporting the roof beams, which was done at his insistence and at his own expense, greatly to the annoyance of the City Engineer and the archivist.[55] These projects provide an interesting counterpart to the public art programme that Gibson orchestrated elsewhere in the city.

City, ritual and symbol

In *The Culture of Cities*, Lewis Mumford provided a chilling description of the experience of the modern city-dweller, bombarded with newsprint and images of all kinds, their senses dulled and their responses blunted by a torrent of information, advertising and news. In what he called 'The Paper Dream City', citizens had come to rely increasingly on reported events rather than their own experience of events; they had lost contact with the materiality and immediacy of their surroundings, both natural and man-made. The surrogate quality of their daily experience also affected both their relationships with others and their imaginative life, for they took refuge from their environment in a fantasy world of bad Hollywood films. Strangers to one another and indifferent to the significance of their environment, they lived urban life as though in a dream.[56]

Mumford's analysis may well have helped to shape Gibson's belief that it was necessary to invent a new civic ritual and a set of images and symbols by means of which the inhabitants of a rebuilt city could begin to ground themselves in their place and their time. Ritual and imagery were devised in the lengthy and frustrating interregnum between the passing of the legislation that enabled Coventry's development plan to be implemented and the beginning of construction. Gibson has left detailed accounts of the commissioning of the ambitious programme of public art which he regarded as vital to the creation of a city of character.[57] These comprised a 'levelling stone' and a ceremonial standard topped by the city's arms to stand at the head of the shopping precinct, carved inscriptions, a clock on the theme of Lady Godiva's ride, a mosaic of the seventeenth-century Coventry Martyrs, sculpted figure groups on Broadgate House and a pair of spectacular carved panels beside the water feature in the precinct. The levelling stone was a butterfly-shaped piece of slate intended to serve as a marker for the centre of the redevelopment area and as a benchmark for surveying and establishing levels. The stone itself was carved by Trevor Tennant, a sculptor who had come to know Gibson while working in the war-time camouflage unit in Leamington Spa. At the centre is a phoenix rising from the flames, holding in its beak a plan for the new precinct; there were three cups for the legs of a theodolite and a bronze plate marking the height above sea-level. The elaborate ceremony that was devised for the dedication of this stone, set on the axis of the new shopping precinct, was staged to mark the first anniversary of VE Day in 1946 and also to inaugurate the reconstruction period. Gibson's account reveals another motive: the ceremony was designed to 'spike the guns of the opposition', forcing the hand of the City Council to expedite the start of building.[58] A copper casket containing contemporary records and plans for the city was sealed and placed in a cavity, the stone was bedded in place, tamped with a gavel, and ceremonially proved level.[59] The chief parts in this little civic drama were taken by the Lord Mayor and the City Councillors and Aldermen, while the Bishop of Coventry and the daughter of the actress Ellen Terry, who had been born in a house very near the site, were invited to participate at the eleventh hour. Gibson and his rival, the engineer Ernest Ford, played supporting roles. Gibson, posing for a carefully staged photograph with a theodolite and plumbline, now assumed with panache the mantle of architect-planner, for Ford retired just at this time, and the two jobs were combined.[60]

In 1948 the foundation stone of Broadgate House was laid. This was the head building of the Upper Precinct, and a single column was put into place, using scarce materials which a member of the architect's department was obliged to acquire on the black market.[61] A stone placed on the north face of the column was carved with an inscription recording the role of Princess Elizabeth in the ceremony, while on the south side the young Coventry letter-carver and sculptor John Skelton carved emblems of the city's weaving industries – a pair of scissors, a teazle, a cap and a loom.[62] At the base of the same column, Gibson asked Skelton to carve the symbol of the Egyptian pharaoh Akhenaten, who had became something of a cult figure when archaeological excavations had resumed at Tel-al-Amarna in the inter-war period.[63] During the 1920s, Tel-al-Amarna came to be viewed in terms of a lost



7.6
Trevor Tennant, Levelling Stone, Upper Precinct, Coventry, 1946, City Development Directorate



7.7
Donald Gibson with theodolyte at the Levelling Stone, 1946, City Development Directorate

utopia, an ideal city dedicated to the worship of the Sun. It was described and depicted in terms of a prototype of the garden city, with extensive housing quarters and broad, well-planted avenues.[64] The pharaonic preoccupation with city building came to seem especially important after the Second World War, although the focus now shifted from the interest of Tel-al-Amarna's citizens in nature and in hygienic housing to other aspects of the city, notably its regular plan and zoning. In a contribution to the CIAM congress in 1952, Sigfried Giedion described Akhenaten – who had abandoned the capital of Thebes and the old gods to found his new city – as a 'revolutionary' planner and the inventor of the grid system.[65] Gibson, too, was fascinated by this youthful figure, variously said to be the first town planner, the first individualist, the first monotheist and the first pacifist. Significantly, one of the books from which Gibson derived his information described the two large enclosures with their luxuriant shrubs and artificial lakes fringed by colonnades as 'the "Precinct of Aton", a sort of sacred pleasure-garden' within the city.[66] This image may have been as important as Abercrombie's concept of an academic precinct in Bloomsbury for the genesis of Coventry's precinct. Gibson was also intrigued by the figure of Tut Joseph, the sculptor who worked for Akhenaten, and who incised upon the buildings of the city a device showing the Sun with projecting rays, the longest holding the symbol of eternity.[67] Broadgate House's emblem, which in scale and position resembled a traditional mason's mark, was that found on the boundary steles in Akhenaten's city. Gibson told a journalist in 1948 that his intention was

> to signify a belief in the more spiritual values of human advance, and of civic design . . . [The] sign on the Broadgate column was used on many of the important buildings [of Tel-al-Amarna] and its meaning of a relationship between heaven and earth, shown by the solar disc and the outstretched arms with the hand leading down to earth holding a symbol of eternity, makes a worthy target, and is intended as an act of dedication of all those concerned in City building, in the service of the City's people.

The existence of a personal mythology featuring both the legendary figure of the town planner and the Sun's rays is intriguing.[68] Sunlight – which was of such central importance in discourses on health and science and in determining the optimum layout of modern buildings such as schools – was here invested with a different, profoundly symbolic and spiritual significance.[69]

Upon the face of another column of the building John Skelton incised the initials of all of the architects in the department, thus registering the fact that this represented the achievement not of an individual but of a team. The contributions of Fred Pooley, Wilf Burns, Brian Bunch, Jim Brown and others are commemorated in this way. On the columns of the Co-Op Building in Corporation Street, Skelton carved symbols representing cooperative industrial, transport, wheelwright, painting and coal services; the spirit of reconstruction; and co-operative nurseries, flowers, seeds and farms.[70] Other sculptural commissions went to Trevor Tennant, who carved four figural groups representing the people of

7.8
John Skelton, carved emblems of Coventry's weaving industries, Broadgate House, Coventry, 1948



Coventry.[71] These were positioned above the bridge spanning the road that was intended to bisect the precinct. Tennant's carved wooden figures of Godiva and Peeping Tom for a clock on Broadgate House was a more light-hearted design, a *jeu d'esprit* whose earthy Anglo-Saxon humour subtly lampooned the pompous bronze sculpture of Lady Godiva by William Reid Dick, which had been commissioned by a local businessman without Gibson's involvement and placed in the central island in Broadgate, laid out as a formal garden separating the pedestrian precinct from the 'historic zone' to the east.

Walter Ritchie, a young sculptor who had trained at Coventry School of Art and had been briefly apprenticed to Eric Gill, was asked to design a water feature incorporating sculpture for the precinct. He produced two carved panels to flank a pool under the footbridge spanning the Upper Precinct, taking as their theme the conflict between material and spiritual values. They represented the difficult subjects of man's struggle to control the world outside himself and man's struggle



7.9
John Skelton, detail of base of column of Broadgate House with emblem of Akhenaton, 1948

to control the world inside himself.[72] Gibson's decision to commission Ritchie rather than the older and more experienced Tennant suggests his concern to nurture a revival of art in Coventry. Significantly, the majority of the works of art that he commissioned for the precinct were pieces of architectural sculpture, carried out in traditional media.[73] Though Gibson was fundamentally anti-monumentalist, these are nevertheless remarkably monumental pieces, and provide the landmarks that he thought necessary to transform people's perception of a city from monotonous to interesting and memorable.[74]

Mumford had some harsh things to say about monuments and the kinds of art associated with them.[75] He believed that the monumental tradition had become so utterly contaminated by totalitarianism during the 1930s that it had lost much of its civic significance and that, therefore, it was almost inconceivable to continue along the same lines. He felt that mural painting and architectural sculpture had also had their day, and suggested that it might actually be preferable to separate architecture firmly from the other arts. The sculptures made by Ossip Zadkine and Naum Gabo for the Lijnbaan, the new pedestrian precinct of Rotterdam, were conceived in terms of a dynamic counterpoint to the buildings around them. The character of the work produced for Coventry was different, both because of Coventry's longstanding artisan tradition and because of the architectural character of the Upper Precinct, which Mumford on a visit in 1962 astutely described as the modern equivalent of a medieval Midland market-square.[76] These pieces of carving were a way of conferring a sense of place and local identity upon the newly



7.10
Walter Ritchie at work on 'Man's struggle to control the world inside himself', c.1956.



7.11
The Upper Precinct, Coventry, c.1959, showing Ritchie's relief 'Man's struggle to control the world outside himself' in situ under the footbridge.

reconfigured spaces of Coventry, with the deliberate intention of giving the inhabitants of 'The Paper Dream City' a permanent and enduring series of emblems, a stimulus for debate, a reminder of the past and a source of visual pleasure. Inscriptions in stone, ceremonial acts, and images carved by local artists were to compensate not solely for what had been damaged and lost, but also for the negative aspects of the ephemeral modern city, for the surrogate nature of the contemporary city experience and the vicarious sensations it provided. Blue Hornton stone, green Westmorland slate, creamy Doulton and Portland stone, red Warwickshire brick, mosaics, carved wood, bright paintwork and gold leaf would confront city dwellers with colour, tactility and materiality. It was, perhaps, an attempt to create for the mid-twentieth-century citizen an environment that embodied some of the historical and material significance that the Renaissance city held for its inhabitants. Of course, there is a paradox here, for Gibson, with his interest in new materials and technologies, certainly did not believe in building for eternity. Nevertheless, there is a strong sense that the architect believed that future generations might be able to understand the values and aspirations of mid-twentieth-century urban civilisation from the forms and fabric of the new city centre.

How the inhabitants of Coventry understood and responded to their new environment and the works of art commissioned for it has been the subject of a research project undertaken by Hubbard, Faire and Lilley.[77] They concluded that the commissions may actually have helped to divide and provoke some of the citizens rather than to unify them, but the small scale of the survey which they conducted places their conclusions in some doubt. More seriously, they failed to acknowledge the underlying reasons why Gibson might have felt that it was necessary to embark upon this project of civic improvement. The fact that Coventry had an extraordinarily high proportion of incomers, both from other parts of the country and from overseas, who had been attracted to the city by well-paid jobs in the engineering and construction industries, helps to explain the importance that the architect attached to devising a new civic iconography. Moreover, it is significant that in 1958 there remained sufficient levels of public awareness and interest in the project for the Mayor to suggest that the citizens of Coventry should consider commissioning a modern-day version of Turner's painting *Dido Building Carthage*, in order to commemorate the wholescale transformation of their environment during the previous decade.[78]

Notes

1 'Gibson of Coventry', *Building*, April 1953, p. 139.
2 Ibid.
3 H. S. Goodhart-Rendel, quoted in B. Kaye, *The Development of the Architectural Profession in Britain: A Sociological Study*, London, Allen and Unwin, 1960.
4 See R. Gill, 'From the Black Prince to the Silver Prince: Relocating Medieval Coventry', *Twentieth Century Architecture*, no. 7 (2004), pp. 58–86; and P. Hubbard, L. Faire and K. Lilley, 'Memorials to Modernity? Public Art in the "City of the Future"', *Landscape Research*, 28, no. 2 (2003), pp. 147–69.
5 N. N. Tiratsoo, *Reconstruction, Affluence and Labour Politics: Coventry 1945–60*, London, Routledge, 1990; J. Hasegawa, *Replanning the Blitzed City Centre: A Comparative Study of Bristol,*

Coventry and Southampton, 1941–1950, Buckingham, Open University Press, 1992; and Gibson papers (private collection, eventually to RIBA/V&A drawings and manuscript collection). Sarah Walford (née Shaw) is currently preparing a comparative study of the careers of Donald Gibson and Basil Spence for her Ph.D. Thesis at the University of Warwick.

6 See S. Shaw, *Experiment and Innovation in Coventry, 1938–1955*, MA Dissertation, Keele University, 1993, p. 8. This contains an excellent analysis of Gibson and his approach to housing.

7 Details from biography file, British Architectural Library; 'Donald Gibson', *Architects' Journal*, 20 January 1955, p. 77; obituary, *The Times*, 26 December 1991; and obituary, *The Guardian*, 7 January 1992.

8 D. Gibson, 'Memoir of Stirrat Johnson-Marshall', Gibson papers.

9 Details of Gibson's early career come from a *curriculum vitae* dating from the mid-1930s, and from his 'Memoir of Stirrat Johnson-Marshall'. Gibson gives various slightly different dates for his time at Liverpool, but since Abercrombie left Liverpool in 1935, Gibson must by then have completed his town planning course.

10 For a discussion, see J. Sharples, A. Powers and M. Shippobottom, *Charles Reilly and the Liverpool School of Architecture 1904–1933: Catalogue of an Exhibition at the Walker Art Gallery, Liverpool, 25 October 1996–2 February 1997*, Liverpool, Liverpool University Press, 1996.

11 P. Johnson-Marshall, in his memoir of his brother Stirrat, Gibson papers.

12 D. Gibson, 'Problems of Building Reconstruction', *Journal of the Royal Society of Arts*, 89 (27 December 1940), p. 78.

13 R. Gardner-Medwin, 'Fifty Years of Liverpool Architecture: A Personal Appraisal', in *Fifty Years of Liverpool Architecture*, Liverpool, Liverpool School of Architecture exhibition catalogue, 10–15 July 1978, p. 1.

14 Harold Chalton Bradshaw was the first Rome Scholar in 1913. William Holford was the Rome Scholar in 1930, and R. P. S. Hubbard in 1932. See Sharples, Powers and Shippobottom, *Charles Reilly and the Liverpool School of Architecture 1904–1933*.

15 See P. Larkham, 'Remaking Cities: Images, Control and Post-war Replanning in the UK', *Environment and Planning B: Planning and Design*, 24 (1997), p. 742.

16 Figures from M. S. Garrett, 'Background Notes of the Redevelopment of the Central Area of the City of Coventry, 1924–1958', p. 12, Percy Johnson-Marshall archive, University of Edinburgh Library CCC/B/1. Johnson-Marshall's archive is an excellent source of material about the genesis of the replanned Coventry.

17 Tiratsoo, *Reconstruction, Affluence and Labour Politics*, pp. 6–8.

18 R. D. Manning, 'Coventry. A New Official Architectural Department', *Keystone*, July 1939, pp. 23–4.

19 Hasegawa, *Replanning the Blitzed City Centre*, pp. 24–6; 'Coventry Civic Centre', *Coventry Standard*, 18 February 1939; and 'A "City Beautiful"', *Midland Daily Telegraph*, 8 March 1939.

20 See the Minutes of AASTA meeting of 18 January 1940, Percy Johnson-Marshall archive, ABT/E.

21 Letter of 3 May 1940 to Morris, briefing him about what to say in his speech at the opening of the exhibition, Percy Johnson-Marshall archive, ABT/E.

22 A catalogue and correspondence regarding loans are in the Percy Johnson-Marshall archive, ABT/E, and photographs of the exhibition at CCC/A/1/2.

23 Visitors' book, Percy Johnson-Marshall archive, ABT/E. According to *Keystone*, November 1940, p. 11, the exhibition was seen by 5,000 visitors.

24 'The Architectural Association: Coventry City Architect on Post-war Reconstruction', *Builder*, 31 January 1941, p. 134.

25 D. Gibson, 'The Third Dimension in Town Planning', *Report of Proceedings at the Town and Country Planning Summer School*, London, 1947, p. 103.

26 See J. H. Forshaw and P. Abercrombie, *County of London Plan*, London, Macmillan, 1943, pp. 50–2, for the idea of the precinct as applied to the Bloomsbury area.

27 D. Gibson, 'How We Want to Rebuild Coventry', *London Calling*, text of a broadcast in the BBC Pacific Service, BBC Archive Album, 1941, p. 9, held in the City Record Office, Coventry.

28 Undated plan, Gibson papers.

29 Interestingly, Ford had proposed separating pedestrian and vehicular traffic in 1939. Gibson's vision was not without its critics. A local paper pointed out that his plan involved not only eradicating the existing street pattern but that he was also prepared to sacrifice ancient landmarks for the sake of progress. See the *Midland Daily Telegraph*, 27 February 1941.

30 'Coventry: A Plan for the City Centre', *Architect and Building News*, 21 March 1941, p. 193. A BBC publication also illustrated the modern and traditional designs for Broadgate, and quoted Gibson on the subject of the new buildings in the city centre: 'We don't want them all to be the same: we want some individuality.' – see D. E. Gibson, 'How We Want to Rebuild Coventry', p. 9.

31 'Coventry: A Plan for the City Centre', p. 190. Johnson-Marshall made the accompanying sketches, which resemble Liverpool sketch-designs.

32 When the proposed new road between the station and the centre did not materialise, the almshouse – Ford's hospital – was reprieved and restored *in situ*. However, the strategy for demolishing and then reconstructing old buildings on new sites was to remain a characteristic feature of Coventry's idiosyncratic approach to conservation. See Gill, 'From the Black Prince to the Silver Prince', pp. 62–5.

33 [D. E. E. Gibson], 'Coventry 2: Post-War: A Plan for Re-development', *Architects' Journal*, 24 April 1941, p. 281.

34 For the Canley housing see 'Coventry 1: Wartime', *Architects' Journal*, 24 April 1941, pp. 273–4; and for the central area see 'Coventry 2: Post-War', pp. 280–1.

35 The pamphlet in the City Record Office, Coventry, 'Plan for the New Coventry' is a reprint of the article. Several pages from this pamphlet, annotated by Gibson, are among his papers.

36 P. Johnson-Marshall, *Rebuilding Cities*, Edinburgh, Edinburgh University Press, 1966, p. 306, complained that the

> rather rough sketches I drew on a wall in the office to illustrate some of the principles of the scheme to visitors . . . were used by the Ministry of Information in a pamphlet . . . Planners sometimes need to beware of the unexpected uses to which casual sketch studies may be put.

37 Gibson papers.

38 See *'Coventry of the Future': Guide to the exhibition in the Drill Hall, Coventry*, Coventry, Corporation of Coventry, 1945, in the City Record Office, Coventry.

39 See the photograph album and file on the exhibition in Coventry City Record Office CCA/TC/27/1/6/1, which contains a circular from the Council headed 'Exhibition Publicity'.

40 See the photograph album of the exhibition, City Record Office CCA/TC/2/22. The painting was later given by Gibson to the Herbert Art Gallery in Coventry.

41 'Coventry: A Plan for the City Centre', p. 192.

42 The Owen and Owen store. For a concise overview of Coventry's redevelopment, see 'Coventry Rebuilds', *Architectural Design*, December 1958, pp. 473–503; and W. G. Bryant, 'The Reconstruction of Coventry', in Hanford Wentworth Eldredge (ed.), *Taming Megalopolis*, Garden City, NY, Anchor Books, 1967, pp. 770–3.

43 See D. Matless, *Landscape and Englishness*, London, Reaktion Books, 1998, Chapter 1.

44 P. Johnson-Marshall, *Rebuilding Cities*, p. 295, states that Gardner-Medwin sent a copy from London.

45 L. Mumford, *The Culture of Cities*, London, Secker and Warburg, [1938] 1940, p. 148.

46 D. Gibson 'Post-War Civil Development', *Camera Principis*, August 1940, p. 2.

47 D. Gibson, 'Problems of Building Reconstruction', 1940, pp. 71–2. He was later to advocate building flats as a way of making a more efficient use of land.

48 P. Johnson-Marshall, 'Coventry: Test-case of Planning', *The Listener*, London, BBC, 17 April 1958, p. 654.

49 *Resurgam*, Town and Country Planning Association, *c.*1945, p. 64.

50 D. Gibson, 'Reminiscences', 1972, Coventry City Record Office 623/1/3.

51 See L. Campbell, *Coventry Cathedral: Art and Architecture in Post-war Britain*, Oxford, Clarendon Press, 1996, p. 43.

52 Of the cathedral scheme, whose architect was at that time intended to be Sir Giles Gilbert Scott, a journalist wrote: 'the building will be more than a public monument – a strong and united headquarters for everything that is alive and Christian in the heart of England'. It was also to comprise a Christian Service Centre and to house 'a school of wood-carving and stone-carving and mural painting where artists can praise God by making things of beauty for any church'. See C. Wills, 'Tomorrow Comes to Coventry', *News Chronicle*, 10 June 1946. There is an obvious reference to

the function of the medieval parish church as the focus for displaying the skills of local guild members; Coventry was famous during the Middle Ages for its stained glass.

53 Coventry's exceptionally young population also comprised a high proportion of people who had recently arrived in the city. See K. Richardson, *Twentieth-Century Coventry*, Coventry, Richard Clay, 1972.

54 Drawing of Cappers' Room ceiling, Spence archive, Royal Commission on the Ancient and Historical Monuments of Scotland, SBS 154/6.

55 Gibson papers.

56 Mumford, *The Culture of Cities*, pp. 255–9.

57 'In designing the new Coventry, I always hoped that it would be an interesting City for those who lived there, but also for visitors . . . In other cities which I enjoyed on visits, it was the beautiful buildings, and fountains and sculptures, and general atmosphere which divided the nice from the ordinary. So I tried to make Coventry a nice place, from the very start.' 'Broadgate Bridge clock tower and Lady Godiva's hourly ride', Gibson papers.

58 'The Story of the "Levelling Stone" in the Precinct at Coventry, as told by Sir Donald Gibson who was the first city architect, and later also the Town Planner for Coventry Corporation', 8 September 1977, Gibson papers.

59 The file on the levelling stone in the City Record Office lists the contents of the casket and gives details of the ceremony. The stone was repositioned in 1956, and the phoenix and the inscriptions were re-carved by Tennant in 1970. CCB/1/6/13.

60 I am grateful to Ray Bullen of the City Development Directorate, Coventry, for kindly locating photographs of the ceremony and its regalia.

61 According to Brian Bunch in his contribution to the memorial tribute to Donald Gibson held at the RIBA on 2 April 1992.

62 Jim Brown of the Architect's department carved the inscription recording the visit of Princess Elizabeth. John Skelton carved spring flowers and the initials of her parents to record their visit in 1951. It was planned to represent further industries on other columns of Broadgate House, but these were never carried out. See the Public Art files, Herbert Art Gallery, Coventry.

63 I am most grateful to Rob Gill for providing me with references to the cult of Akhenaten.

64 See D. Montserrat, *Akhenaten: History, Fantasy and Ancient Egypt*, London, Routledge, 2000, for a succinct and entertaining account of the myth of Akhenaten and its changing significance in the twentieth century.

65 S. Giedion, 'Historical Background to the Core', in J. Tyrwhitt, J. L. Sert and E. N. Rogers (eds), *The Heart of the City: Towards the Humanisation of Urban Life*, London, 8th Congress of CIAM, 1952, p. 19; and S. Giedion, *Architecture, You and Me: The Diary of a Development*, Cambridge, MA, Harvard University Press, 1958, p. 132.

66 A. Weigall, *The Life and Times of Akhnaton, Pharaoh of Egypt*, London, Thornton Butterworth, 1922, p. 181. See 'Broadgate Symbol has Big Significance', *Coventry Evening Telegraph*, 27 July 1948, in which Gibson cites Weigall's book. Both Akhenaton and Akhenaten are used as transliterations of this name.

67 In 1977 Gibson wrote:

> I am not a deeply religious person, but like most people I often wonder about the universe, and its creation, and order . . . Frank Moyle . . . the Rector of our Church . . . sometimes talked about the Prophets . . . the one who most appealed to me was the Town Planner Amen Hotep III of Egypt – Akhnaton . . . He was not only a good Town Planner, but also appointed Tut Joseph as his chief sculptor, to decorate the buildings in his new city . . . this is why, at the bottom of the corner column of Broadgate House, you will see the sign of Amen Hotep III as my personal recognition of the background of my own beliefs.
>
> ('Broadgate Bridge Clock Tower and Lady Godiva's hourly ride', Gibson papers)

68 See 'Broadgate Symbol has Big Significance'. The emblem of the Sun with the longest ray terminating in a hand also features in Gibson's autobiographical pictogram, together with a heliodon.

69 Gibson worked at Ely measuring sunlight levels in relation to the design of school classroom. In 'The Third Dimension in Town-planning', p. 105, he discussed the importance of considering overshadowing when planning tall buildings, and recommended the use of a heliodon to measure light levels, as he apparently did in the Coventry department. See A. Saint, *Towards a Social*

Architecture: The Role of School Building in Post-War England, London and New Haven, CT, Yale University Press, 1987 for a discussion of studies on the subject by Gibson and by the school building teams at Hertfordshire and Nottingham.

70 Information from Public Art files, Herbert Art Gallery, Coventry.

71 These were *Planning and working*; *The family*; *Creative maturity*; *Youth and vitality*. Information from Public Art files, Herbert Art Gallery, Coventry.

72 The commission began in March 1954 with a request for a design for a water cascade. The design for the first panel was approved in November. The design for the second panel was approved in 1955 and the completed panels were installed in the Precinct in 1959. They were removed in the 1990s when the bridge was demolished and were placed on the exterior of the Herbert Art Gallery. (Public Art files, Herbert Art Gallery). Gibson later observed: 'They are very interesting carvings, but I think we asked too much of him at the time.' See 'Broadgate House – the Stone Carvings on the South of the Bridge', Gibson papers.

73 Dick Hosking, who taught at Coventry School of Art, designed the mosaic of the Coventry Martyrs in Broadgate House, which was executed *in situ* by the Swiss mosaicist Antonietti.

74 Gibson, 'The Third Dimension in Town Planning', pp. 99, 103.

75 Mumford, *The Culture of Cities*, pp. 433–41.

76 Mumford, 'Lady Godiva's Town', *New Yorker*, 10 March 1962.

77 See Hubbard, Faire and Lilley, 'Memorials to Modernity?', pp. 147–69; and P. Hubbard, L. Faire and K. Lilley, 'Contesting the Modern City: Reconstruction and Everyday Life in Post-war Coventry', *Planning Perspectives*, 18, no. 4 (2003), pp. 377–97.

78 Mayoress Pearl Hyde, speech reported in *Birmingham Gazette*, 7 March 1958.

Further reading

W. G. Bryant, 'The Reconstruction of Coventry', in Hanford Wentworth Elredge (ed.), *Taming Megalopolis*, Garden City, NY, Anchor Books, vol. 2, 1967, pp. 764–83.

Louise Campbell, *Coventry Cathedral: Art and Architecture in Post-War Britain*, Oxford, Clarendon Press, 1996

Percy Johnson-Marshall, *Rebuilding Cities*, Edinburgh, Edinburgh University Press, 1962

Lewis Mumford, *The Culture of Cities*, New York, Harcourt Brace, 1938

Nick Tiratsoo, *Reconstruction, Affluence and Labour Politics*: *Coventry 1945–60*, London, Routledge, 1990

Chapter 8

Conceptions and perceptions of urban futures in early post-war Britain

Some everyday experiences of the rebuilding of Coventry, 1944–62

Keith D. Lilley

This chapter deals with the experiences Coventry people had in the 1940s and 1950s – of seeing their city razed to the ground in the Blitz; of looking at the proposals for reconstruction put forward by Donald Gibson and his colleagues; and of being in a city during the process of its rebuilding. It stems from a general interest in the early post-war reconstruction plans of British cities, as well as from a specific concern that all too often this period of urban change is recounted from the point of view of the planners rather than from that of the people whose cities were changing all around them as a consequence of the planners' ideas of the future. It is, therefore, intended as a kind of corrective to the many planning histories that have been written of the post-war rebuilding of British cities, and is based upon some recent research on Coventry conducted by my colleagues at Loughborough

University, Drs Phil Hubbard and Lucy Faire, and me – as part of a project funded by the Leverhulme Trust on the everyday experience of living in a city while it was being rebuilt after the war.[1]

The case of Coventry

Nowadays the ideas and ideals of the likes of Gibson have been brought into disrepute, with the so-called failure of Modernism and Modernist planning. Today the people of Coventry who lived there through the 1940s and 1950s are senior citizens who face many challenges and fears in their everyday routines in the city. Many of them now see Gibson's dream shopping precinct as a place to be avoided, especially at night, and they reflect with nostalgia on the pre-war city they knew from their childhood or early adolescence in the 1930s.

With the aim of 'remembering Coventry's post-war reconstruction', oral histories were used by the project team to see how the city was experienced by those who were there during its rebuilding during the late 1940s and in the 1950s. Asking people to think back in time to how they *then* felt about Coventry is a tough task, for memory is invariably selective and remembering is always done with the benefit of hindsight. About fifty individuals were interviewed in 2001, the majority of whom still reside in Coventry and are now in their sixties, seventies and eighties; the eldest interviewee we spoke to was born in 1913. Not all had been born in Coventry, but all had lived there during the 1940s and 1950s and so had seen the new city rise from the ashes of the old.

Finding willing interviewees was a challenge. Interest was stimulated locally through the *Coventry Evening Telegraph*, local radio broadcasts and a small exhibition held in the city library. Those interviewed provided detailed accounts of



8.1
The pre-war Coventry; aerial view of central area

their lives in Coventry in the 1940s and 1950s, providing a rich archive of memories which already are all the more precious as some of those interviewed have since passed away. Of course, a sample of fifty people is tiny for a city with a population of 300,000, so it cannot be claimed that the interviewees are representative of Coventry's population in the 1940s. However, while it might be thought that a call for interviewees to come forward would have attracted mainly more confident middle-class professionals, this was not in fact the case. The areas where the interviewees lived during the 1940s and 1950s included a spread of locations across the city, working class as well as more affluent ones. This is important, but the main focus was on what they told in answer to the following questions: How did they perceive what was going on around them at the time? What were their reactions to the destruction of the townscape in the Blitz? What was it like living in a city being rebuilt? Did they care about the Coventry of the future? Did they feel involved in what was going on? Were they impressed with what they saw at the exhibition held in October 1945 by the local council to publicise the plans for reconstruction, or with what they read in the local newspaper? Were they excited as they saw new buildings going up on empty bomb-sites, and as the new precinct at the heart of Gibson's rebuilt Coventry took shape?

There are also contemporary accounts of how Coventry people felt at the time. These are mainly in letters written to local newspapers, especially the *Coventry Evening Telegraph*, which was, in fact, a supporter of the council's proposals and even ran a competition to stimulate local interest in the proposals, with prizes of up to fifty guineas. Of course these letters are no less problematic than oral history interviews as sources for understanding local reactions to the council's plans for the city. Letters sent to the newspaper were no doubt vetted by the editorial team, and of those letters that were printed there is no indication of the age or social background of the senders, or even of their gender in some instances. But the letters are at least contemporary and so provide a useful ancillary source for our oral history interviews.

The Blitz – November 1940

Percy Johnson-Marshall was one of a young and energetic team of trained architect-planners working under Donald Gibson in Coventry when the city suffered the devastating bombing on 14 November 1940. He recounted his experience of this attack in his book, *Rebuilding Cities*, and described how he tried to get to work on the following day:

> In the morning, I walked up over piles of smouldering rubble to Broadgate. It was an unforgettable and indescribable sight . . . a shredded bus here, a car balanced crazily on the roof of a ruined building there, and the cathedral, the library, and nearly everything one could see still burning and smouldering in great masses of devastation.[2]

He was not alone. There were those who likewise woke up on 15 November and when stumbling around the city found little that they recognised.

Incendiaries caused most of the bomb damage, and these had particularly affected the city centre, including most famously of all the medieval church of St Michael, Coventry's 'old cathedral'. The destruction of the city centre caused not only physical loss, but also personally-felt pain. Catherine, who was just 15 in 1940, recalled: 'On the night of the November blitz it was like the end of the world because I went down town with a friend next morning and I thought we'd all have to move away for ever.' So many familiar streets and landmarks were wiped out in one night that when people did go into the centre they were unable to orient themselves. One female interviewee who was born in Coventry in 1919 said:

> After the blitz, the first time I went into Coventry, you did not know where you were at all. The only thing that you could eventually get an idea from was the fact that the council house clock was still there . . . I remember my husband's boss coming home on leave and coming into the town and just standing and not knowing where he was at all.

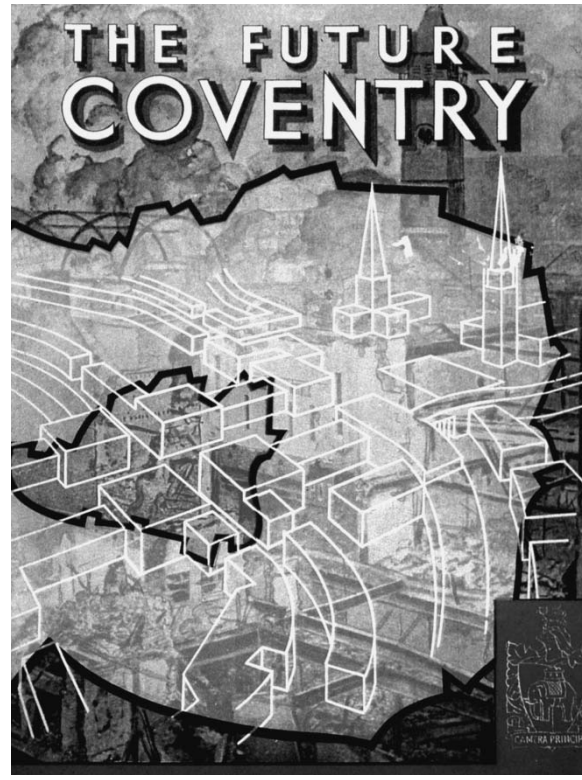
While the planners of the time may have seen the Blitz as an opportunity to enable them to build anew, local people viewed it far less positively. Their sense of loss and pain continued for years after. Just before he died in 1995, my own grandfather, who had been a firewatcher in Coventry during the war, told me with tears in his eyes how there were mass graves in the city centre where people had been left buried under piles of rubble. Such was the traumatic effect of the Blitz on the people of Coventry.

Wartime plans for post-war Coventry – 1940–45

While Gibson and his team had already drawn up plans and proposals for the new Coventry before the Blitz and had publicised them in an exhibition in May 1940, it was really only in early 1941 that a comprehensive plan for redevelopment was set out. A version of this was published at the time in the professional architectural press and also as a short pamphlet entitled *The New Coventry*. These paper plans for the future city underwent changes through the war, as political lines were drawn and redrawn both within and outside the council about how best to rebuild the city. In early 1945, Gibson and the City Engineer, Ernest Ford, were asked by the city council to set up an exhibition to publicise the plans and to create a short publication about them. This was the 'Coventry of the Future' exhibition held in October 1945, a time when many other local authorities in Britain were staging their own particular planning exhibitions.

From the attendance figures alone, the Coventry exhibition would appear to have been a great success, for about 50,000 people went to it – a sixth of the city's entire population. But all is not as it seems, as is evident both from the letters sent to the *Coventry Evening Telegraph* at the time and also from the results of our interviews. Two things emerged. The first was how few letters were sent to (or perhaps published by) the newspaper on the exhibition and its proposals – only fourteen appeared during the time of the exhibition. The second was how few of our interviewees actually recalled having visited the 1945 exhibition (in spite of

8.2
Front cover of *The Future Coventry,* published on the occasion of the Coventry of the Future exhibition, October 1945.

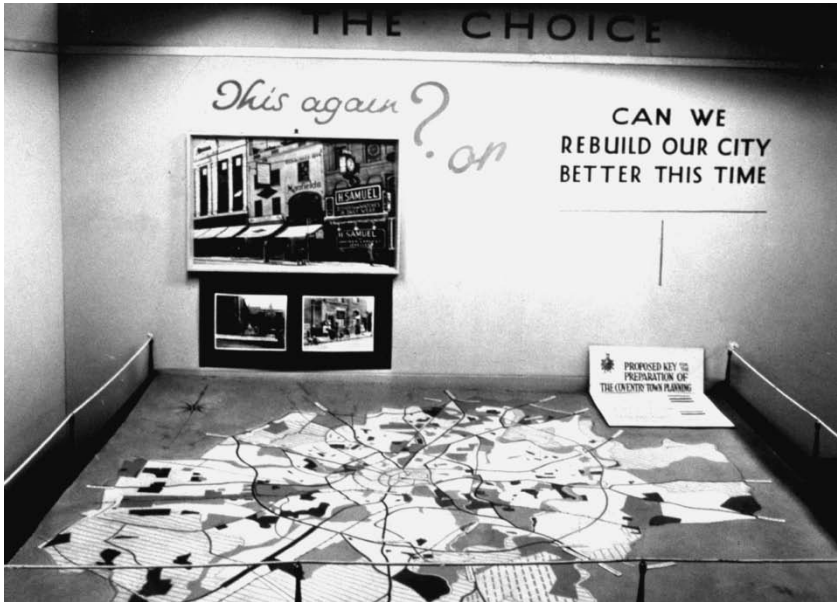


the fact that school groups were bussed in from all across the city), or remembered seeing the planning proposals either in published form in the local newspaper or in subsequent exhibitions of the exhibited models of the proposed city centre, for example in a kiosk specially set up for this very purpose in the centre of the precinct in the late 1940s. Such a lack of reaction seems curious when so many Coventrians were meant to have attended the exhibition. Did this indicate a general apathy among visitors and non-visitors alike? From the council's point of view there was certainly a fervent drive to ensure that the exhibition attracted attention and interest, but there are indications that although people attended the exhibition, it did not excite much sustained interest. For example, the competition held jointly between the council and the *Coventry Evening Telegraph* to coincide with the exhibition evidently met with a poor response, as the deadline had to be extended. Some idea of why this lack of sustained interest occurred is suggested by interviewees who told us that they were far too busy with family life: Muriel, who was about 25 in 1945, told us: 'You know, these [exhibitions] and you hear about them and all that, but well your life is going and you get married and have children and all that. You don't go to things like that.' So what was deemed to be of great importance in the minds of the city's planners – planning the Coventry of the future – was, perhaps, not a feeling shared by those who were being planned for. Other things were more pressing.

For those who went to the exhibition or remember having seen it, reactions were mixed, to say the least. Some newspaper letters reveal a highly enthusiastic response to the urban futures on display; others were less impressed. Certainly there seems to have been no mass consensus in favour of what the council planners were proposing for Coventry. From the interviews, it seems that those of the younger generation were positive about what they saw, likening the planners' future visions of the new city to futuristic images they had seen in comics of the time. 'We thought that this was fascinating', said Basil, who was 17 in 1945: 'We were all into space ships you know . . . Buck Rogers and so forth.' Trevor, who was about 7 in 1945, was likewise propelled into the future when he saw the proposals as a schoolchild; he thought, 'This is Flash Gordon territory, this is wow!' For others, the various models and images meant rather less. One of the interesting issues that emerged from the interviews was how difficult some people found it to visualise what the new city was going to look like from the models they saw, both at the 1945 and later exhibition, even though Gibson and Ford had gone to a lot of expense and trouble to have models built or borrowed to put on display. Dorrie, who was born in 1922, told us that she had seen models displayed showing the proposals:

> It was a proper model really. You were sort of looking down, you know, like an aerial view. But they were all buildings, it wasn't a picture it was models, you know. We went and had a look at that. You couldn't sort of visualize it really.

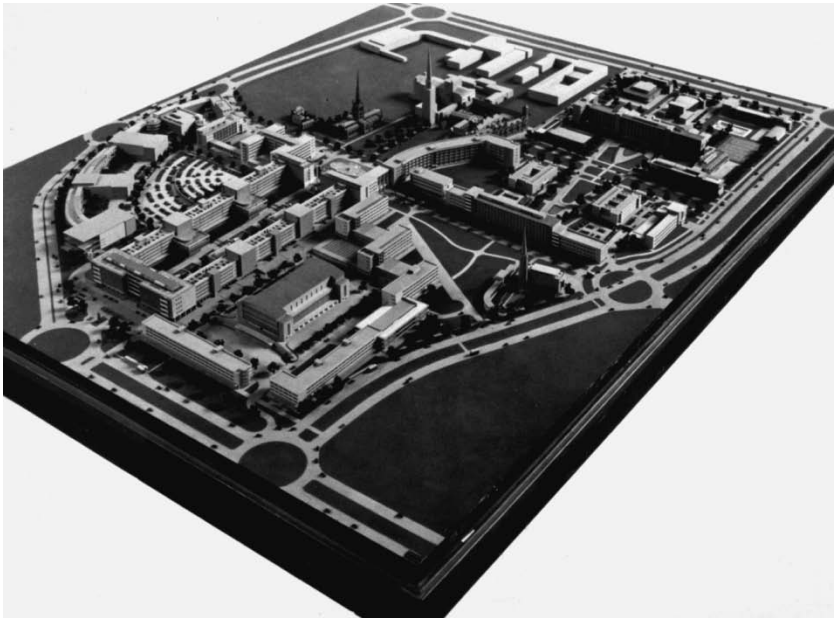
For the architect or planner, who was used to using such models to visualise future development, it might have come as a surprise to them that people just could not



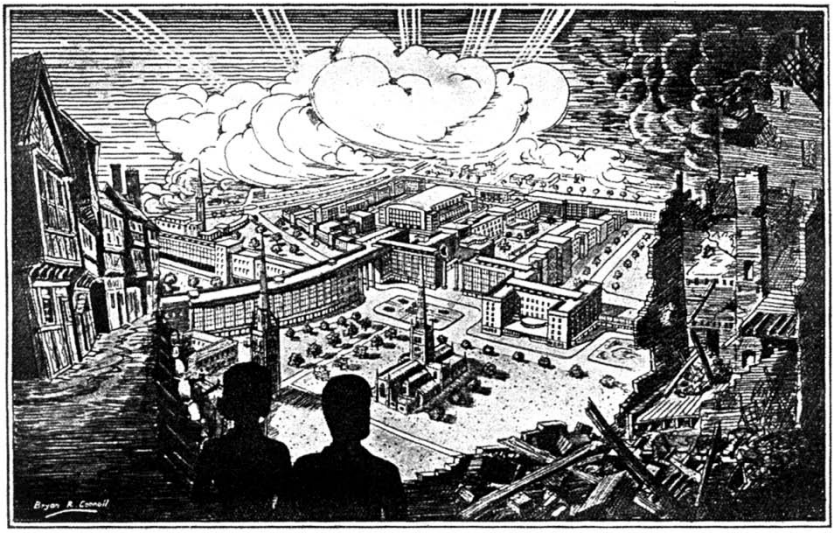
8.3
'The Choice . . .', a display in the Coventry of the Future exhibition, October 1945.

make sense of what they were seeing, even if they liked the look of it, as Basil did when he saw a model which he thought 'looked great . . . with the ring-road around the top . . . and the buildings underneath it and inside it . . . we thought this was quite something'.

The age of the interviewees, their family commitments, and their ability or otherwise to make sense of architects' models were all important factors in how local people felt in 1945 about the Coventry of the future. A further factor that appears to have been important in this respect was where a person came from. For example, Noreen, who was from Norfolk originally, said that her Coventry-born husband went to the exhibitions, but she herself did not. So what our oral history accounts record are small but telling snapshots of everyday life in the Coventry of the 1940s and glimpses of how people's lives interacted or not with the ideas and activities of the city's planners and architects who were so busily engaged in conceiving plans for rebuilding at this time. It is as if the two groups were inhabiting different worlds and looking differently towards the future, with local people concerned about where they were going to live, how an invalid husband was going to be cared for, how their children were going to be educated, and so forth; while members of Gibson's team were concerned about their professional futures, wanting to make their plans for Coventry stand out and be recognised in the architectural world. Certainly Gibson was a great publicist: he got the new plans for Coventry circulated early, in April 1941, and had them published in the architectural press of the time, well before other local authorities and planning consultants did the same in other towns and cities. The 1945 exhibition and plans were, in more ways than one, a key turning-point in Coventry's post-war future.



8.4
Model for rebuilding Coventry (1942), displayed in Coventry of the Future exhibition, October 1945.



8.5
'An artist's impression of the new Coventry rising from the ashes of the old', a Christmas card sent by the City Engineer (E. Ford) in 1946. It was drawn by Bryan Connell, one of the city's planning officers.

Rebuilding Coventry – 1945–62

For the first five years or so after the war, nothing much happened with the rebuilding of central Coventry. A foundation stone for the new precinct was laid in 1948 by the then Princess Elizabeth; the 'Levelling Stone', with a buried casket containing a copy of the plans for the new Coventry, was symbolically unveiled (see Figure 7.6); and the new Broadgate traffic island was laid out and planted with flowers. Otherwise, the city remained pretty much as it was until the early 1950s, when things began to move on with the construction of the new pedestrian precinct and with the shops along it, including such major retail stores as Marks & Spencer and Woolworth. Gibson left his post as City Architect in 1955 and was replaced by Arthur Ling. Gibson had laid the foundations and marked out the general outlines that the new city centre was to take, but during the later 1950s it was Ling's influence that was seen in the rebuilding of Coventry: he filled in the details, and as the decade progressed these became more and more radical in style, as his buildings became bolder in their Modernism. The post-war rebuilding of Coventry was, therefore, a piecemeal affair.

A special issue of *Architectural Design* was published in December 1958 'devoted to the reconstruction of Coventry'. In it William Holford offered some timely reflection on what was happening in the city: 'The central characteristic of the Coventry scene is expectation', he mused.

> This is perhaps as near as we can get, in an uncertain age, to faith in the future. Behind the first stage of rebuilding there is another stage developing, and visible prospects of further stages beyond that. Always in view is that stimulating sign MEN AT WORK.[3]

For the city's inhabitants these new developments meant that they had to adjust their daily and weekly routines. Some recalled the noise and the dust, the hoardings

and building sites that characterised Coventry's city centre in the early 1950s. Gradually the old course of Smithford Street was replaced by Smithford Way, part of Gibson's shopping precinct scheme. This effectively blocked the east–west passage through the city centre by car and bus, for the precinct was for pedestrians only, not even for cyclists. Feelings towards these changes varied. Celia, who was born in 1938, said, 'I remembered watching the redevelopment of Smithford Street because that was a street again that just disappeared completely and I couldn't understand it. You know, why was it disappearing? All the shops on Smithford Street disappeared too.' For Celia, as a child of about 12 watching the changes taking place, it was perhaps all a bit bewildering, but to others it was quite absorbing. Barbara, aged 16 in 1950, put it like this:

> Well, the first memory was that I can remember standing in Broadgate waiting for a bus to go to Bedworth and there was all this activity going on of building and I got totally engrossed in it. And then – I must have been looking at it for ages – and the next minute a very excitable Mother came running up to me. She'd got on the bus and I hadn't and she was half-way down Corporation Street or Bishop Street and I was still standing there engrossed in all this building that was going on!

For others who were older at this time the feelings were more of sadness than surprise or excitement. Lyn, about the same age as Celia and Barbara, recalled how her father reacted to the old buildings coming down: 'I remember him telling me how upset he was about the buildings where Ager's shoe shop and things is. Something was pulled down to put them up and he found that quite upsetting.' Similarly, Celia recalled how her parents were upset about 'their old Coventry disappearing'.

Age, then, seems to have been a factor in what people felt about the changes going on around them in the late 1940s and in the 1950s as the new city centre was taking shape. For the young the city centre began to look new and exciting. Their mental map of the city was not disrupted by the newly erected buildings and street layouts in the way that it was for their parents and the older inhabitants, whose template of the city was still a pre-war one, fixed in their minds but no longer making any sense. Reactions to the new shopping precinct area, once it was completed by the late 1950s, also seemed to differ between age groups, but it is worth noting that there is no clear-cut split between the pre- and post-war generations. Lyn said: 'You got this lovely new centre that was bright and attractive and full of fun really . . . we liked it.' The new buildings looked modern, and seemed a definite improvement on the many prefabricated buildings that had been put up following the Blitz which made the place look 'drab'. 'It was so modern and so nice for its time', recalled Jean, who was in her twenties at the time the precinct was being finished.

> It was pleasant, it was always pleasant to go in the precinct and do your shopping. You know, there was [*sic*] places where you could sit, there

> was the trees, there was the flowers, there was the shops and like I say there was no traffic. It was great. And it was very modern.

So, for some, the city planners' vision of an ordered and modern Coventry had become a reality they not only approved of but were proud of too, even if they felt they had had no part in its making. However, others were far more critical of the finished scheme and bemoaned the 'concrete city centre' that they thought 'bland . . . so plain and ordinary' – and this is a quote from Celia, who was about the same age as Lyn and Jean. It was the 'modern' buildings that they disliked. 'Everything was all very square', said Gerald, who had been born in 1936. Some people at this time (those with access to a car) avoided shopping in Coventry city centre altogether, preferring to go instead to Rugby, Leicester or Leamington, while one respondent who lived on the edge of the city said that they found it best just to go into town, get what they wanted, and then get out as quickly as they could. Of course, this was not what Gibson and Ling had intended for the new Coventry.

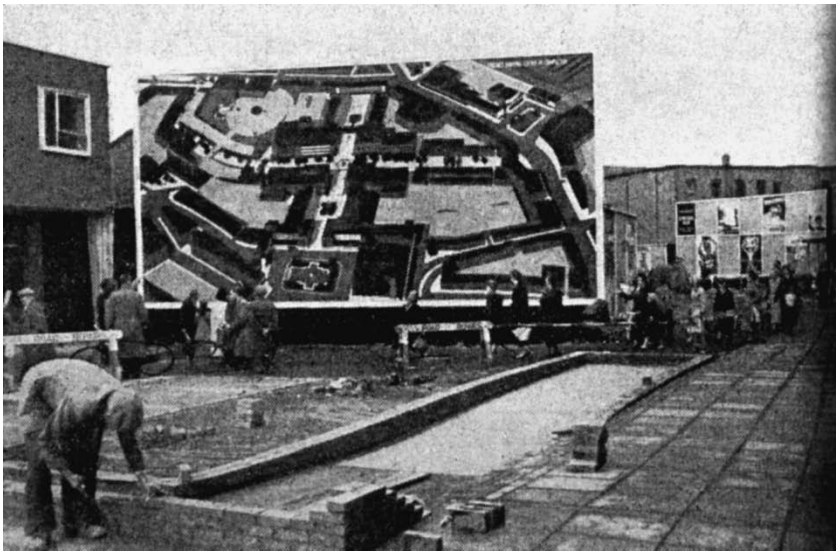
Experiences of the city in the 1950s were therefore different according to both age and outlook. The new Locarno Ballroom, the 'elephant on the mast' and the 'round café' were the new landmarks that Coventry people were beginning to use in their social lives as places to meet one another. In doing so, the young post-war generation seemed to adapt to the new city rather more easily than did older people, who continued to mourn the loss of the old Coventry with its trams and narrow streets.

Coventry's redevelopment has never stopped, for it still goes on today; but in terms of the plans for the new city set out by Gibson and then by Ling, the mid-1960s represented the stage by which the city had become rebuilt, complete with its new cathedral, ring-road and swimming baths. By the end of the 1960s, this was the new Coventry that people knew.



8.6
1960s postcard view of the finished Precinct area of Coventry.

8.7
Billboard showing the future Coventry in the mid-1950s, erected in the new precinct.



Conclusion – collecting memories/collective memory

What can be concluded from the various and varying memories of the rebuilding of Coventry? Obviously some people liked the new city and others did not. The details given by the interviewees are most revealing. It is the particular rather than the general that excites most interest. This is not to say that there are no generalities: for example, there is the apparently positive attitude of the younger interviewees who only really knew post-war Coventry, as compared with the attitudes of the older people, who were less enamoured of the rebuilt city. There are no apparent gender differences in people's attitudes, though clearly gender was important in what a person did at the time: the woman whose prime aim in 1945 was to look after her husband who had returned from the war told us: 'Whatever they proposed to do in the rebuilding, you sort of went along with it in a sort of zombie-like fashion.' Class was certainly an issue, or at least affluence was, for those with low incomes had to shop in Coventry whatever it looked like, as they did not have the option of going to Leamington or elsewhere. But in the details of their recollections of the time, interviewees made it clear that there was much more to life in Britain in the 1940s and 1950s than urban planning and reconstruction. Perhaps academics, seduced by the colourful imagery of plans and perspectives produced by the planners and architects of the period, overlook the point that for many people such matters were either of no interest or of no relevance to their own lives. Certainly a sobering picture emerged of austerity life in early post-war Britain.

One of the main outcomes of the research was a corrective to the many academic and professional planning discourses that seem to ignore the views of those who lived in the towns and cities that were so radically and comprehensively replanned and rebuilt. This is now done, but in a very minor way: so many more memories need to be collected. But whether hearing more voices would bring us

closer to what life was like at the time and so help us to understand even better how people felt is rather a moot point. There is the methodological dilemma of how to gain and interpret such oral testimonies – are we being told what people think we wish to hear? Are the views we are hearing anywhere close to what people actually thought at the time, or is it a case of some people looking back at a past more nostalgically than others, for whatever reason? Are the stories part of a collective memory of Coventry's people, a sort of communal story-telling about the city's past in which people either feel inclined to concur with the accepted version or fight against it? Such issues are, of course, critical in making sense of what the interviewees said. But it is far better to have recorded their stories than to have missed the opportunity and to have lost these memories for ever.[4]

Notes

1 Aspects of this research on post-war Coventry, with full bibliographical references, are to be found in the following articles: P. J. Hubbard, L. J. Faire and K. D. Lilley, 'Remembering Post-war Reconstruction: Modernism and City Planning in Coventry, 1940–1962', *Planning History*, 24 (2002), pp. 7–20; K. D. Lilley, 'On Display: Planning Exhibitions as Civic Propaganda or Public Consultation?', *Planning History*, 25 (2003) pp. 3–8; P. J. Hubbard, L. J. Faire and K. D. Lilley, 'Contesting the Modern City: Reconstruction and Everyday Life in Post-war Coventry, *Planning Perspectives*, 18, no. 4 (2003), pp. 377–97; P. J. Hubbard, L. J. Faire and K. D. Lilley, 'Memorials to Modernity? Public Art in the "City of the Future"', *Landscape Research*, 28, no. 2 (2003), pp. 147–69; P. J. Hubbard and K. D. Lilley, 'Pacemaking the Modern City: The Urban Politics of Speed and Slowness', *Environment and Planning D: Society and Space*, 22 (2004), pp. 273–94.

2 P. Johnson-Marshall, *Rebuilding Cities*, Edinburgh, Edinburgh University Press, 1966, p. 292.

3 W. Holford, in 'Coventry Rebuilds', *Architectural Design*, December 1958, p. 481.

4 The Leverhulme Trust funded the research for this project ('Modernising the City: Experiences of Urban Change in Post-war Britain', January 2001–January 2002), and their financial support is gratefully acknowledged. I would like to thank Phil Hubbard and Lucy Faire for their hard work in making the project a success; and Lucy's efforts in arranging, conducting and transcribing all the interviews is especially appreciated. Without the cooperation of the interviewees, the research would not have been possible, so I am grateful to those who helped us and gave us their time and told us their memories. I hope that I have represented their views fairly in this chapter. Thanks are also due to the staff of the Coventry City Record Office for their help with archival material on the reconstruction of Coventry, especially with regard to the 1945 exhibition.

Further reading

Phil Hubbard and Keith Lilley, 'Pacemaking the Modern City: The Urban Politics of Speed and Slowness', *Environment and Planning D: Society and Space*, vol. 22 (2004), pp. 273–94

Phil Hubbard, L. J. Faire and Keith Lilley, 'Contesting the Modern City: Reconstruction and Everyday Life in Post-war Coventry', *Planning Perspectives*, vol. 18 (2003), pp. 377–97

Phil Hubbard, L. J. Faire, and Keith Lilley, 'Memorials to Modernity? Public Art in the "City of the Future" ', *Landscape Research*, vol. 28, no. 2 (2003), pp. 147–69

Peter Larkham and Keith Lilley, 'Plans, Planners and City Images: Place Promotion and Civic Boosterism in British Reconstruction Planning', *Urban History*, vol. 30, no. 2 (2003), pp. 183–205

Keith Lilley, 'On Display: Planning Exhibitions as Civic Propaganda or Public Consultation?', *Planning History,* vol. 25, no. 3 (2003), pp. 3–8

Chapter 9

‘Into the world of conscious expression’[1]

Modernist revolutionaries at the Architectural Association, 1933–39

Elizabeth Darling

In his 1987 study of the school building programme which was enacted after the Second World War, Andrew Saint observed that historians had only the ‘haziest of historical notions’ about how the principles and practices of Modernism became part of architectural discourse in 1930s and wartime Britain.[2] Although Saint’s research and that of other historians have painted a clearer picture of the extent of Modernist work in this period and we now know more about some of the individuals who assumed its mantle, the haziness remains both about precisely how this activity occurred and about how it subsequently coalesced to produce the post-war landscape of the Welfare State.[3]

The suggestion here is that Modernism’s emergence in Britain was not, as its chief protagonists have argued in their more rhetorical moments, an inevitable response to the conditions of the age,[4] nor was it imported by outsiders and the influx of émigrés after 1933, though this latter group did lend authority and authenticity to what was then a young movement.[5] Rather there was a native origin for it, and the Modernist approach to the re-forming of space lies within the context of a broader engagement with the cultural project of modernity in inter-war Britain.[6] The activities of the first generation of British Modernists, those who formed the

Modern Architectural Research (MARS) Group in 1933,[7] can therefore be interpreted as an effort to build on existing attempts to modernize the designed environment, represented for example in the campaigns of the Design and Industries Association and in the work of Frank Pick and Charles Holden for the London Underground. They can also be seen as a way of redirecting these attempts towards a more explicitly modern mode of expression informed both by continental European Modernism and by an engagement with developments in English painting.

In placing themselves as a self-styled avant-garde at the helm of the modernization of Britain's spatial culture, the members of the MARS Group embarked on a campaign of persuasion directed, as Fry would later describe it, at converting 'the talkative intellectuals of the age', those who already had the power to effect reform or who had access to those who did.[8] This led to two particular reformist strategies. First, the MARS Group and its individual members sought to make strategic alliances with Modernists in other related fields – planning, housing reform and art – and thereby to reinforce their project with reference to an implied critical mass. Second, because their avant-garde status necessarily limited their circle of patronage to a particular, scarce type of client, they could not support their case by reference to an ever-growing number of buildings, and this required them to enact Modernism in other ways. Talks, exhibitions and service on RIBA and other committees all became means through which the Modernist message could be projected. At the same time maximum use was made of the Modernist buildings that had been constructed, through continual reference to them in the architectural press and other media.[9]

This first generation of Modernists represented by the MARS Group and its more politically radical offshoot, the Architects and Technicians Organization (ATO),[10] thus succeeded in laying the foundations for the adoption of Modernism in 1945 by infiltrating and influencing debates about Britain's modernization during the 1930s and through their participating in wartime reconstruction debates. The extent to which they benefited from their preparatory work varied, and it is a commonplace narrative of Modernist history that few enjoyed the benefits of their campaigns. This was certainly true for Wells Coates and, to a lesser extent, for Lubetkin, but it was not true for figures such as Fry or Yorke. Perhaps what is meant is that some of them did not remain central figures after 1945. That this was so might have been, as J. M. Richards suggested, because 'when the aims of a revolution are achieved it is often difficult for the revolutionary to adjust to another role requiring different qualities', or, more simply, that '[when] the opportunity to build was given to them, that's what they did'.[11]

It was another set of Modernist architects who would enjoy the primary benefits of the foundations laid by Fry's generation: practices such as the Architects Co-partnership (ACP), Powell and Moya, and Chamberlin, Powell and Bon, and all those who would find work in the now Modernist-oriented local authority architects' departments. How this generation learnt their Modernism is even less understood than the initial transformation of architectural culture that underpinned it. Therefore, it is important to map, contextualize and explain the activities of the generations

subsequent to the MARS Group – those 'born in the war'[12] and a little earlier – who built on the work of Fry, Coates and others, and brought their campaigns to fruition.

There were three distinct cohorts of students who attended the Architectural Association (AA) in London in the late 1920s and the 1930s, and who pledged themselves to Modernism as a complete project, for they firmly believed that Modernism could transform both society and space.[13] Through an analysis of the activities of some of these students, who included such figures as Tim Bennett, Elizabeth Chesterton, Anthony Cox, Leo de Syllas and Richard Llewellyn-Davies, it is possible to learn more about how the Modernist revolution developed in this country. Several significant themes emerge from such a discussion. First, they understood the importance of capturing and leading debates about architectural ideology, not least through the journal *Focus*, which was first published in the summer of 1938. Second, in student projects such as 'A New Town for 50,000 Inhabitants' of 1937–38, they developed methods of practice, as well as architectural propositions, which offered a significant leap forward in the approach to Modernism practised by the MARS generation and which should be understood, as they were intended to be, as critiques of that generation's working practices. Through both strategies these students were able to ensure that Modernism was kept sufficiently in the eyes of policy makers so that it would become an obvious solution to contemporary social problems. In addition, because of this, they were able to ensure a space for themselves and their particular ideology of Modernism in the emerging New Jerusalem, thus perhaps making it harder for Fry's generation to operate.

Who was who?

The first two groups of students, who might be labelled the Modernist second generation, were those who joined the AA between 1926 and 1931; most of them had been born before the First World War.

One group began their first year in either 1927–28 or 1929–30.[14] These were the young men who caught Berthold Lubetkin's eye and whom he recruited to form Tecton: Anthony Chitty, Michael Dugdale, Lindsay Drake, Valentine Harding, Godfrey Samuel and Francis Skinner. They formed the link with the first generation and the one that followed, and this was reinforced by the active involvement of Samuel in the MARS Group and by Skinner's leadership of ATO.

The second group was again drawn from those who entered the AA in the late 1920s, and its composition reminds us that the future was also woman-made. This group exemplifies the practice of engaging with 'talkative intellectuals' in order to promote the modernization of Britain; so while the young men who joined Tecton matched architectural skills to an architectural impresario, these women combined them with other ways of making space. In this group were Judith Ledeboer and Jessica Albery, who both entered in 1926, Mary Crowley who joined the following year, and [Margaret] Justin Blanco White who arrived in 1929. All would participate in the work of the central campaign arena for the reform of the British built environment before the period of high Modernism – the voluntary housing sector. The link to this world came from a slightly older student, Janet

Fletcher, who had entered the School in 1924 but whose final years at the AA overlapped Ledeboer, Albery and Crowley's first years there.

Janet Fletcher was friends with Elizabeth Denby. Before Denby began the work as a housing consultant for which she is best known, she worked in the voluntary housing sector and was a leading member of its campaign to end the slum problem in Britain.[15] This led to her role in coordinating what became a series of exhibitions called 'New Homes for Old' (NHFO) which were held as part of the Building Trades Exhibitions between 1931 and 1938. The NHFO exhibitions were designed to draw attention to the slum problem and to offer models for its resolution, and they became an important mouthpiece and training ground for the first and second generation of Modernists. Involvement enabled these Modernists to ally themselves with progressive attitudes towards social housing, learn from a sector that had highly developed campaign techniques, and make contacts with reformers and politicians in a field closely related to architecture.[16]

At Denby's invitation, Albery, Crowley, Fletcher and Ledeboer all contributed their skills as model makers and designers to one or both of the NHFO displays in 1932 and 1934. Ledeboer benefited most directly from this association. She became a central figure in the Housing Centre which was formed in response to the success of the NHFO shows and which operated as a think-tank on housing from 1934 onwards. From there she became Secretary to the wartime Dudley Committee which established the blueprint for housing policy after 1945. Denby's involvement also led to an invitation to the MARS Group to contribute to the NHFO Exhibition in 1934, something repeated in 1936 when it was also extended to the ATO.[17] Crowley and Blanco White worked on NHFO 1938, a year which saw the MARS Group take a separate stand within the Building Trades Exhibition.[18]

The third generation of Modernist students were those 'born in the war', who entered the AA between 1932 and 1938. They took an active role in the tumultuous events which unfolded there in that decade. They included Anthony Pott and F. L. Sturrock (who started their first year in 1932); Elizabeth Chesterton, A. J. Brandt, R. V. Crowe and Anthony Cox (1933); Peter Cocke, Richard Llewellyn-Davies and John Wheeler (1934); and Oliver Cox (1937). It was their modus operandi that would be crucial in the forging of post-war British Modernism.

The AA in the early 1930s

Thanks in part to the activities of the second-generation Modernists, the students who entered the AA in the early 1930s were given a window on to a world in which Modernism was a live and active force. Within the walls of 34–36 Bedford Square, however, things were as yet not quite so progressive, and the students still followed an essentially Beaux Arts curriculum, though some students were beginning to graft Dutch-inspired solutions on to their studio projects.[19] By the end of the decade, the situation had changed completely. The Orders were banished from the curriculum, a unit system was in place, and students worked in teams to research and design new towns and slum clearance schemes.[20] The shift began in 1933 and was at its most dramatic between 1936 and late 1938, after which relative calm was restored. It was caused by a combination of a series of new staff

appointments, pressures on the School's governing council from outside forces and the existence of an exceptionally politically motivated and politically sophisticated body of students. The result was an educational revolution.

The underlying triggers for the events of 1936 onwards were first set in May 1933 when E. A. A. Rowse was appointed the School's Assistant Director to work with the Director, Howard Robertson. The reason for Rowse's appointment is not yet clear, and he seems to have been a rather curious choice given his decidedly odd character – a student described him as 'impervious to conventional thinking, contemptuous of honours, incapable of compromise'[21] – and his very un-Beaux Arts commitment to the principles of Patrick Geddes. It would, however, be some time before such characteristics had an impact on the way the School was run.

The moment came in February 1935. While Beaux Arts principles still ruled in the main school, signs of a more progressive outlook were demonstrated in the foundation of a parallel institution, the School of Planning and Research for National Development, with Rowse as its Principal. The School 'offer[ed] to all those who must participate in the planning of the national life, an opportunity to study a subject of huge dimension in association with experts in all the allied branches' and awarded both the AA Diploma and Associate Membership of the Town Planning Institute.[22] It is evident that when it so desired, the AA Council could demonstrate an awareness of the need to develop new models of education, but it was as yet reluctant to extend this to the training of its architecture students, who were growing increasingly tired of their classically based curriculum.

In the same month, the first hints came of the issue that would lend a particular urgency to the events of 1936–39. For some time the government Board of Education, which supported the AA with a grant, had been expressing concern about the School's constitution and the fact that students had the right to vote at general meetings and could therefore potentially affect the running and hence the educational policy of the School.[23] In response, the AA Council proposed the introduction of a new class of probationary membership for students which did not include the right to vote. The motion was defeated at a General Meeting held that month by a show of hands, which at that point constituted the ballot. The Council then took another tack: at a Special General Meeting in July 1935 it received the authority to alter School regulations by a postal ballot rather than by the more manipulatable public vote. As far as the School was concerned, this resolved the problem and no further attention was given to the matter.

This period turned out to be the calm before the storm. In August 1935 a new series of staff changes began when Robertson retired as Director. After a brief hiatus during which Rowse seems to have led the School alone, the Council created the new, superior post of Director of Education of the School of Architecture, to which H. S. Goodhart-Rendel was appointed, while Rowse was made Principal of the Schools of Architecture and Planning. The two men could not have been more different: Rowse, in Geddesian fashion, saw architecture as part of a wider range of activities and encouraged students to experiment with methods and practices of design. Though Rendel has too often been dismissed as

reactionary, he was certainly no Modernist.[24] The subsequent course of events would suggest that Rendel's appointment was seen by the Council as a means to temper Rowse's more wayward tendencies and to keep the School on a steady track. It did not work.

Galvanized by his new position, Rowse set about transforming the way his architecture students were educated. In the spring of 1936 he ended the system of teaching by year, and introduced a system of teaching by units – fifteen in all across the five-year course, each led by a tutor, and with approximately seventeen students in each. On the model borrowed from the sociologically driven and team-based approach of Rowse's mentor Geddes, tutors were now encouraged to give the students live projects and to develop their analytical and group-working skills: enquiry would replace the *esquisse*. Perhaps to Rowse's surprise, the shift was met by the students not with delight but with shock, for it had not been introduced gradually, but as one of them noted, 'by the drastic method of changing the whole system of the whole school at the beginning of the Spring Term'.[25]

This was the catalyst for three tumultuous years in which a battle over the nature of architectural training was conducted around the banner of the unit system. In opposition to the new system stood Rendel and the AA Council, while in favour of it stood Rowse, most of the staff, and the students, who after the initial shock realized that there were benefits in unit teaching and that it meant more individual attention from the tutors, more constructive criticism, and the freedom to work on their own ideas.[26] It was the students who fought for the unit system most ardently, and it was under the leadership of Cox and Llewellyn-Davies that the third-generation Modernists were able to structure and manipulate this battle so that their ideological principles would henceforth underpin the education of architects.

'Into the world of conscious expression'

Although the majority of the students did not extend their level of engagement with the way the School was run by '[taking] their first important step away from the world of nail-brushes and soap in the lavatories . . . into the world of conscious expression on the way they were being educated'[27] until 1936, a small number of students had already begun the process of initiating the reform of their training in 1933.

Anthony Cox called this group 'our gang', and it included those who would go on to form ACP as well as the future town planner Elizabeth Chesterton.[28] It was a group of students who, from the moment they entered the School, realized that something had to change: 'we felt strongly that AA education was useless, hopeless and that the right sort of information, technical, social, historical, was not being taught'; they also felt that 'so few of the tutors had glimpsed it [the New Jerusalem] that it was a nuisance to have them around the drawing board, sketching in their urns and axes'.[29] As Cox's recollections suggest, the impetus for these feelings came partly from a knowledge of changes in the world of architecture. The work of Le Corbusier, 'difficult to justify intellectually but so exciting',[30] served as an immediate inspiration for an alternative mode of practice, but it was the political

situation that was the real catalyst for their disaffection. For Cox, the decisive moment came in 1934 when an awareness of what was going on in Germany saw 'conscious politics, left politics' become a part of his life.[31] This was furthered by the arrival in the same year of Richard Llewellyn-Davies from Cambridge, where he had been studying engineering. Llewellyn-Davies, whom Cox described as a man who '[had] a great deal of charm, [was] culturally far more mature and [had] a very good brain, spoke very well, [and was] articulate in a way we weren't', brought to 'our gang' the networking and political skills derived from his membership of the Apostles and the Communist Party of Great Britain.[32] With Cox he formed the nucleus of what is, perhaps, best understood as a Communist cell within the AA which was dedicated to furthering the cause of a new society through the overthrow of the staid Beaux Arts system. Cox recalled that:

> our policy [was that] it was no good just going round preaching revolution, because no one would listen to us. What we had to do was be very good at our job. We said we'll work in architecture, in the school. It was all, in a peculiar way, muddled up with the potential of modern architecture as a, not a style . . . but as a social instrument.[33]

The shift to the unit system in spring 1936 provided what can be imagined as a long-awaited opportunity for the cell to act. First, its introduction galvanized the mass of students into political consciousness for the first time, a state that was ripe for exploitation. Second, it transformed the way in which the School was organized. Whereas students had hitherto been locked into separate years and had rarely had the opportunity to meet or speak to those ahead of or behind them, the unit system mixed people together. This meant, as Cox put it, '[We were able to] infiltrate that much more easily', a process that came from their training in Party techniques: 'We knew how to work the system.'[34]

Although the unit system was the pre-condition for agitation, it did not necessarily follow that the teaching would be on Modernist principles. So the following year the cell started to build the framework on which its Modernist orientation could be secured. Having converted students to the cause, the next step was to fill the Student Committee with their comrades and lead it from a preoccupation with soap to one with education. The Student Committee then sought to ensure that the students' voice would be adequately heard, and it secured a system of official meetings between itself and the staff (and thereby an implicit alliance between the two). This effort culminated in the agreement in January 1937 that the students could prepare a report on their views about what form their training should take.

The preparation of what became known as 'The Yellow Book' received added impetus the following month when Rendel gave an address on 'Architectural Education' to the students.[35] Its content made it clear that the AA was now separating into two main camps: pro-unit students and staff versus Rendel and the Council. The main theme of the speech was the problem of how teaching could continue now that the Orders had been abandoned from the curriculum, and he

bemoaned the 'absence of a norm; a system of conventions to which the designer can refer'.[36] His conclusion signalled his clear disapproval of the approach to architecture which now prevailed: 'At the moment we are in an acutely romantic welter trying to stop the holes in our art with theories, with politics, with general benevolence and with a good deal of (rather bad) engineering.'[37]

The fact that no discussion of the speech was allowed gave 'The Yellow Book' report an additional undertone of protest when it was delivered in June 1937. Its declared aim was: 'The basis of the school must lie in the effort to produce a living contemporary architecture.' It advocated a greater emphasis on the teaching of construction and on the use of a wider variety of building materials, especially in the early years of the course. The students observed the lack of relevance of the study of ornament and decoration to their programmes, and suggested that their history courses should focus not on ancient history but on the developments in society since the Industrial Revolution.[38] As the report was published at the end of the School year, it was not until the new academic year that a response was forthcoming. This was manifested first in an attempt to stop group working and then in another speech by Rendel that was clearly intended and clearly understood as an attempted prelude to the abandonment of the unit system and to the return to Beaux Arts principles.[39]

Rendel's address to an Association General Meeting was called 'The Training of an Architect'. That he inhabited a different world of architecture from that of the students and staff was evident from the start when he asked: 'What should the finished product [of training] be? An architect should be a man capable of designing and looking after building works and of seeing that his employer pays a price that is fair for what he gets.'[40]

He continued by noting that all the principles underlying sound architecture were French, and dismissed the students' tendency for 'untimely and time-wasting research' when all the information they needed ought to be in the programme or to be covered in a preliminary lecture. His greatest disdain was reserved for group working: 'a little practice in smooth teamwork . . . may reasonably be in a school curriculum . . . but should never replace individual students tackling the programme alone'.[41]

On this occasion the students were allowed to reply; Llewellyn-Davies took the floor to declare that the Beaux Arts system was meaningless, and that in training an architect it should be remembered that:

> They were living in a period of profound cultural and social change, and in architecture they were on the verge of a new style which should surpass all the previous ones in strength and human character. Their task was to work out in cooperation the basis of that new style.[42]

The impasse represented in this discussion was given an added urgency by the resurgence of the complaint from the Board of Education about the student vote. The Board had made an inspection of the school the previous May, and in

February wrote again to the School to express its concern about this matter, adding that if the vote remained, then it would have to withhold its financial support. This threat was possibly the reason why, by May, Rowse had agreed to resign from the School, and was replaced temporarily by Fernand Billerey, a Beaux Arts man. The following month the Board suspended its grant to the School.

Against this backdrop the students embarked on a new venture. At the very moment when they had lost the man who had introduced the basis for their educational revolution and when the return to Beaux Arts principles seemed imminent with the arrival of Billerey, they decided that it was now time to bring the necessity of the new style to a broader audience. The tool for this would be *Focus*, 'a journal where we can develop our still chaotic ideas on the foundations of those built by certain older men (in age not spirit) . . . To continue, the widest support is absolutely necessary'.[43]

Focus

Cox recalled that it was Tim Bennett and Leo de Syllas who were the main instigators of *Focus*.[44] In the wake of Rendel's second speech, these two had approached the editors of the *Architectural Association Journal* with a request for some pages that could serve as a mouthpiece for the students' opinions. This was forthcoming, but when it transpired that anything they contributed would be subject to editorial veto, they decided to try to produce their own journal. They approached Peter Gregory, the managing director of Lund Humphries whose offices were on the other side of Bedford Square, with their idea. He was sympathetic, providing that funds could be secured. In a clear example of the first and third generation of Modernist infiltrators coming together to promote the cause, the students won the backing of Max Fry and, through him, that of Captain Fox-Williams of Williams and Williams Windows. This convinced Gregory, and he gave them the go-ahead to produce a quarterly magazine that would be entirely student-run.[45]

Bennett and de Syllas produced four issues of *Focus* between summer 1938 and summer 1939, with Cox who had by then graduated as back-up and main contributor.[46] Each issue was a carefully designed object, bound with the latest plastic spiral binding, the first with a cover by Cox's younger brother Oliver, who was then in his first year at the AA. Together these slim volumes form a remarkable body of evidence about Modernist sensibilities and abilities at the end of the 1930s. Contributors included Le Corbusier, Sigfried Giedion, Walter Gropius and Max Fry, and subjects ranged from analyses of recent buildings to discussions of economics and of rent strikes. There was also, as might be expected, a strong emphasis on education. Reports were encouraged from other students and extensive coverage given to events at the AA. *Focus* 1 contained Anthony Cox's riposte to Rendel's speech. The same issue included Le Corbusier's musings 'If I had to teach you architecture'. *Focus* 3, in spring 1939, carried a reprint of 'The Yellow Book' as part of its commemoration of 'The AA Story, 1936–1939'. With an initial print run of approximately 500 for *Focus* 1 and 1,500 for *Focus* 4, the editors' intentions were certainly to spread the AA message further and to convert others. Some idea of

these aims – and indeed those of all the campaigns at the AA in this period – is given in a letter written by Cox to the planner-architect Max Lock in December 1940. In it he discussed the failure to produce a fifth issue of *Focus* and how the cause might yet be continued despite the war. He wrote, 'we were just getting into the position of being able to see the immediate practical possibility of injecting younger and more progressive teachers into schools' when war was declared, and he continued:

> there is one thing that we can do – or rather, that perhaps you at Hull, as the secretariat of NASA [Northern Architecture Students Association] can do. It is this, plan a magazine that will keep things alive amongst the *students* in all the schools – make NASA into a kind of architectural vigilance association for education . . . If you have real contacts with the schools you might be able to make such an organisation a really useful fifth column, and a medium for keeping alive the rigorous thought in the schools that the oppression of war and the heavy hand of Authority is [*sic*] now blunting.[47]

Resolution

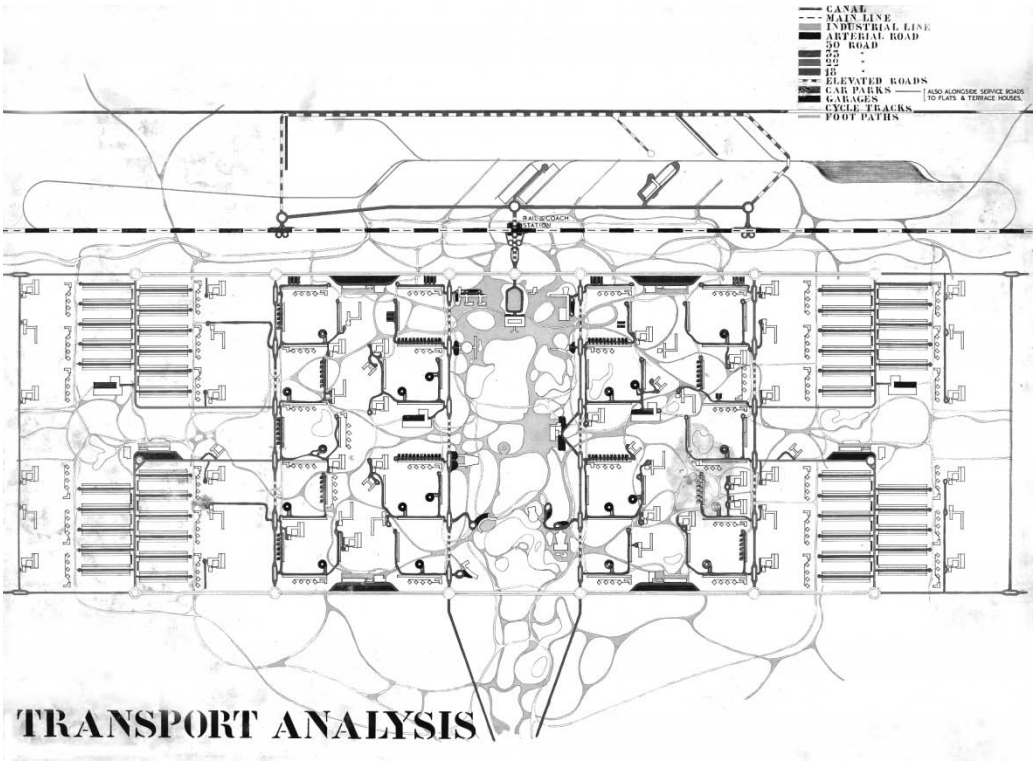
The creation of *Focus* had come at what must have seemed the darkest moment of the students' campaign, but as the author of 'The AA Story' in number 3 recounted, things did not turn out quite as expected. The suspension of the Board of Education's grant forced the Council to address its criticisms; the Council embarked on a series of votes which, in early 1939, resulted in the establishment of a probationary class of membership for students which did not include the vote. Whilst these events unfolded, the Student Committee continued its campaign for the retention of the unit system which, in an announcement made at midnight during the end-of-year dance, the students learnt was successful. When they returned to the School in October, they were greeted with the news that Rendel had resigned. By January 1939 the decision had been taken to merge the post of Principal and Director back into one post and Geoffrey Jellicoe, a benign but nevertheless committed Modernist, was appointed to this position. The students may have lost the battle of the vote, but they had won the war of the unit system: now students could work to produce a living, contemporary architecture.

The activities outlined above show how in Cox, Llewellyn-Davies and the rest of their 'gang', there was a group who understood the importance of infiltrating and influencing young minds with the ideology of Modernism and who sought to achieve this through a command of textual and organizational discourses. But Cox and his comrades did not just develop models of propagandizing Modernism that would continue the 'missionary' work of the first and second generations. Perhaps more significantly they also produced new types of practice that would furnish the next generation of architects with the skills needed for working in the conditions of the post-war Welfare State. One of the projects that exemplifies this was featured, manifesto-like, in the first issue of *Focus*: 'Town Plan, Faringdon, Berkshire'.[48]

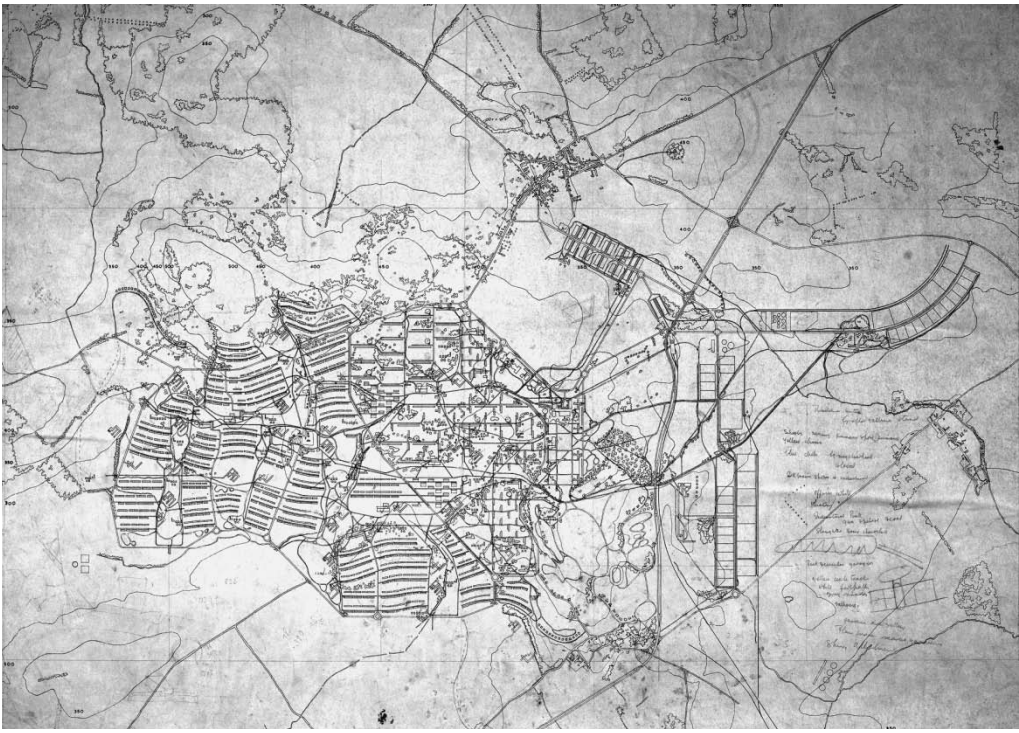
'Town Plan'

The town plan for Faringdon, which was also known as 'Tomorrow Town' – a much-disliked renaming by Rowse,[49] was a remarkable project. Both in its subject and in the method by which it was produced, it embodies the way in which this generation of AA students sought to rethink every aspect of their education. It was one of the first products of the unit system, and began as a Unit 12 pre-thesis project entitled 'A Plan for a Town for 50,000 Inhabitants for 1950 for a Hypothetical Flat Site' in the academic year 1936–37. The same group then reworked this project as Unit 15 for a real site in Berkshire, as their thesis submission in 1937–38.[50]

The project had its origins in the dismissal by Cox's group of the kind of teaching available at the AA; and it is clear that they simply chose to create their own briefs and ways of working, because as Chesterton recalled: 'We didn't like the ones written for us.'[51] The pre-thesis project was, she continued, 'us deciding to do it and that meant we decided to do it together, get facts collected – took us a long time'. Their subject was a significant one. They did not choose the traditional Diploma subject of the stentorian public building, but one that demonstrated their



9.1
'A Plan for a Town for 50,000 Inhabitants for 1950', Architectural Association School, Unit 12 pre-thesis project, 1936–37. The plan shows the central area, which houses administrative and public buildings, flanked by residential zones of flats and terraced houses interspersed with schools, crèches and garages. The railway line that runs across the top of the site serves to separate these zones from the arterial road and the industrial area.



9.2
'Town Plan, Faringdon, Berkshire', Architectural Association School, Unit 15 thesis project, 1937–38. The second plan is a refinement of the pre-thesis project and adapts its main features to a real site. This places the residential area to the west of the site, central areas on the southern part of the ridge that runs through it, and the industrial area to the east.

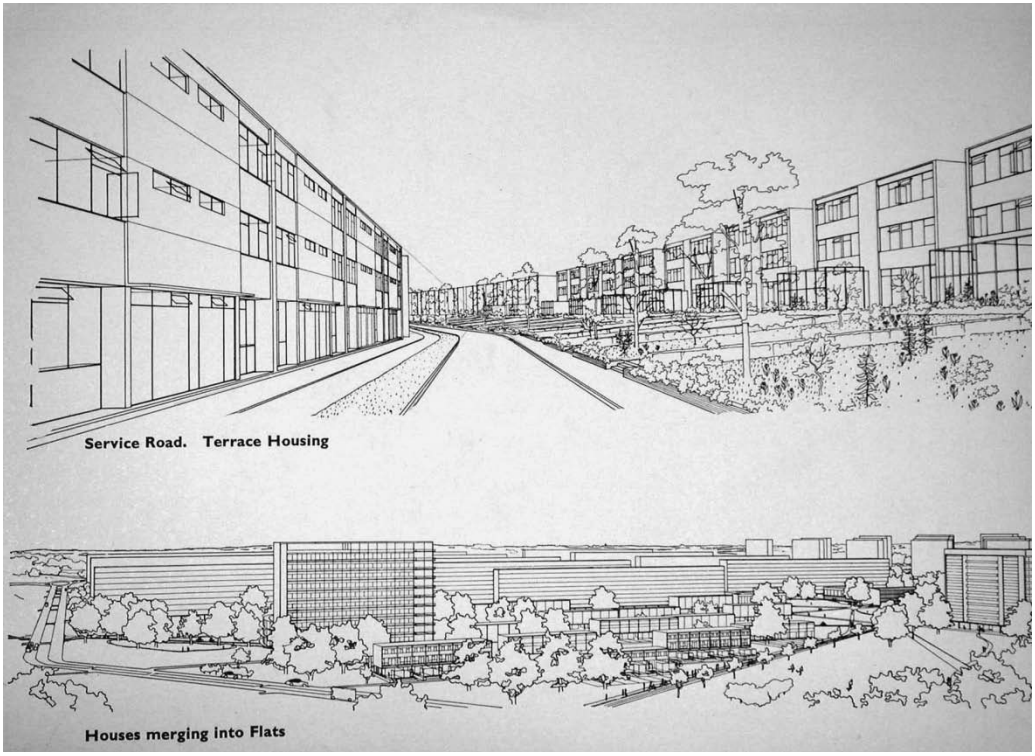
concern for society as a whole – the general benevolence at which Rendel would sneer – and, of course, a text-book Modernist subject. The approach to it was taken directly from Rowse, whose support and encouragement they acknowledged. For both the pre-thesis and the thesis schemes, each student was given a different research topic and area of the town to work on and was required to produce drawings, models and supporting documentation. This was then worked up into a final set of models and drawings and a series of group reports which were presented for assessment.[52]

If the students intended that their method of group-working should serve both as a training for, and as a model of, future practice, the content of both versions of the town plan was developed with an equal eye to the future. While the idea of a new town was not particularly new, and the students adhered to the standard Modernist principle of zoning areas according to use, their designs departed in one significant aspect from Modernist planning orthodoxy, in their preference for a mixed development of accommodation comprising both terraced houses and flats. This was highly unusual for this period: the MARS Plan for London, then under development, would include only high flats. The reasons for the

students' choice may have been partly from an awareness of popular demand for houses over flats, which at least some of them as good Communists must have been aware of. They may also have been aware of early versions of the MARS plan produced by William Tatton Brown, which incorporated houses and flats,[53] or the ideas about mixed-development housing proposed by Elizabeth Denby at this time.[54] Whatever the precise reason, the scheme as a whole represented a supremely confident statement of the students' ideas and ideologies for the new architecture, and it was very well received. Summerson, in his review of the end-of-year show, called it 'impressive and extraordinary',[55] while the reports from those who attended the final crits record unanimous approval.[56]

The inclusion of this project in *Focus* 1 demonstrates the students' awareness of its propaganda value, and its potential as a model of design practice and of the future form of the city was reiterated in various ways after 1938. In the spring of 1939 the model and plans were featured in the RIBA's Road Architecture exhibition, and a review by Ritchie Calder in the *Daily Herald* called it 'a city of young optimism and clear vision'.[57] Rowse puffed it further in an article for the *Journal of the Town Planning Institute*, which also noted that it was likely to be included in the 1939 New York World Fair.[58] The outbreak of war put a stop to that, but also opened further opportunities for its promotion as the shape of things to come: the plan was included in the RIBA's 1942 Rebuilding Britain exhibition.[59]

9.3
'Town Plan, Faringdon, Berkshire: Housing'. The plan contains three types of blocks of flats of eight, twelve and fifteen storeys to accommodate single people, childless couples, and couples with one or two children. Three-storey terraced houses were planned for larger families.



Conclusion

When Howard Robertson gave his leaving speech to the AA in May 1936, he made some prescient observations. He predicted that under Rowse's leadership 'work of a creative type but differently creative' would emerge in the school and that in fifteen years something 'will happen in architecture'.[60] This chapter has sought to demonstrate how this 'something' began to happen through the weaving of a narrative out of the heady events at the AA in the 1930s. More research remains to be done about the many other fascinating projects undertaken by the students in this period and about the influence of different tutors, but it is worth stressing the significance of the way in which Cox's 'gang', in their concern to effect a Modernist revolution, paid particular attention to educational discourses as well as to the written word, the building and the exhibition. Their Communist roots, perhaps, made them realize that only by controlling the means of production – making architects – could they control what would be built and by whom.

Notes

1 Anon, 'The AA Story 1936–1939', *Focus*, no. 3 (1939), p. 82.
2 A. Saint, *Towards a Social Architecture: The Role of School Building in Post-War England*, London, Yale University Press, 1987, p. ix.
3 Such work includes J. Allan, *Berthold Lubetkin*, London, RIBA Publications, 1992; C. Benton, *A Different World: Émigré Architects in Britain 1928–1958*, London, RIBA, 1995; J. Gold, *The Experience of Modernism, Modern Architects and the Future City, 1928–1953*, London, Spon, 1997; A. Powers, *Serge Chermayeff, Designer, Architect, Teacher*, London, RIBA Publications, 2001; N. Bullock, *Building the Post-War World: Modern Architecture and Reconstruction in Britain*, London, Routledge, 2002; J. Melvin, *F. R. S. Yorke and the Evolution of English Modernism*, London, Wiley-Academy, 2003.
4 See, for example, the content of the catalogue to the MARS Group exhibition of 1938 or J. M. Richards, *Introduction to Modern Architecture*, Harmondsworth, Pelican, 1940.
5 This is the most common way in which Modernism is explained as having emerged in England. See, for instance, Benton, *A Different World*; A. Jackson, *The Politics of Architecture*, London, Architectural Press, 1970; or J. Peto and D. Loveday (eds), *Modern Britain, 1929–1939*, London, Design Museum, 1999.
6 I explore this idea in far more detail in my book, *Re-forming Britain: Narratives of Modernity before Reconstruction*, London, Routledge, 2006.
7 The MARS Group was founded at a meeting held on 28 February 1933 which was attended by Wells Coates, Max Fry, David Pleydell-Bouverie and Philip Morton Shand (with Hubert de Cronin Hastings and John Gloag lending their support but not their presence). See 'Minutes of meeting between WC, MF, DP-B & PMS held at 26 Sutherland Terrace, SW1, 28th February, 1933, Relative to the formation of a British group of the association of the INTERNATIONAL CONGRESS OF MODERN ARCHITECTURE' [*sic*], Wells Coates papers, Fond 30, box 12, Canadian Centre for Architecture Archives. By April 1933, membership had expanded considerably and included John Betjeman, Geoffrey Boumphrey, Anthony Chitty, Amyas Connell, Lindsay Drake, Michael Dugdale, Frederick Gibberd, Valentine Harding, Berthold Lubetkin, Colin Lucas, Raymond McGrath, Christopher Nicholson, Francis Skinner, John Summerson, Cyril Sweett, Rodney Thomas, Basil Ward and F. R. S. Yorke – undated 'Memorandum, MARS Group' (about April 1933), Godfrey Samuel Papers, SaG/90/2, British Architectural Library.
8 M. Fry, 'How modern architecture came to England', tape and slide set, London, Pidgeon Audio Visual, no date given.
9 By way of example, Kensal House, a block of working-class model flats built at Ladbroke Grove, west London, in late 1936 and designed by a committee of architects led by Elizabeth Denby and Max Fry, was featured as an architectural model in the 1935 film 'Housing Problems', was the

subject of a film – 'Kensal House', British Commercial Gas Association, 1937, and in photographic reproduction was the last image visitors saw at the 1938 MARS Exhibition. It also featured on the cover of J. M. Richards's *Introduction to Modern Architecture* in 1940, and with the Finsbury Health Centre and Impington Village College was immortalized as a sign of things to come in Abram Games's 'Your Britain, Fight for it Now' posters which were produced for the Army Bureau of Current Affairs in 1942.

10 ATO was formed by Francis Skinner and Berthold Lubetkin in 1935 as a means to ally their architectural activism with more politically oriented work with tenants' organizations and with the campaign for air-raid precaution programmes. On ATO, see P. Coe and M. Reading, *Lubetkin and Tecton: Architecture and Social Commitment*, London, Arts Council of Great Britain, 1981, pp. 44–68.

11 S. Cantacuzino, 'Interview with J. M. Richards', in J. Gowan (ed.), *The AA, a Continuing Experiment*, London, The Architectural Press, 1975, p. 54.

12 Anon, 'Editorial', *Focus*, no. 1 (1938), p. 1.

13 The AA was not the only school at this date undergoing the convulsions of Modernism, and parallel events were under way elsewhere, in particular in Liverpool and Hull.

14 The years of entry are taken from the volumes of the *Architectural Association Journal* and the 'List of AA Students, 1901–1951' held in the AA Collection.

15 See E. Darling, '"A Star in the Profession she Invented for Herself": A Brief Biography of Elizabeth Denby, Housing Consultant', *Planning Perspectives*, 20, no. 3 (2005), pp. 271–300.

16 For these exhibitions and the voluntary housing sector's progressive approach to housing, see E. Darling, 'To Induce Humanitarian Sentiments in Prurient Londoners: The Propaganda Activities of London's Voluntary Housing Associations in the Inter-war Period', *The London Journal*, 27, no. 1 (2002), pp. 42–63.

17 For contemporary coverage of these exhibitions see J. Ledeboer, 'New Homes for Old', *Design for Today*, no. 2 (1934), pp. 407–8; and Anon, 'Special Exhibit', *Architect and Building News*, 143 (1936), p. 392.

18 The catalogue for the 1938 Building Trades Exhibition contains within it short catalogues for each of these displays.

19 For example, the AA *Prospectus* for 1931–32 (held in the AA Collection) illustrates Justin Blanco White's exquisite first-year rendering of the Greek Doric order and, a few pages later, her third-year project for a small sports club which displays strong echoes of Dudok's work at Hilversum. The leanings towards Dutch Modernism were undoubtedly influenced by the lectures and publications of the AA's Principal Howard Robertson. In collaboration with the AA's secretary Francis Yerbury, he produced a series of articles for the *Architect and Building News* and the *Architectural Review* which documented Modernism in continental Europe. On this work, see AA, *Travels in Modern Architecture 1925–1930, Howard Robertson and F. R. Yerbury*, London, AA Publications, 1989.

20 For this account of the events that triggered these dramatic changes, I rely on the papers of some of those involved, interviews, and contemporary reports, because the archives of the AA are extremely limited and to date no copies of Council minutes have been discovered.

21 K. Watts, *Outwards from Home: A Planner's Odyssey*, Sussex, The Book Guild Ltd, 1997, p. 3.

22 Anon, 'The School of Planning and Research for National Development', *Architectural Association Journal*, 50 (1935), p. 302.

23 This is not a factor that has been considered in any of the existing accounts of this period, but it goes some way to explaining the rather dictatorial and frantic way in which the AA Council sought to address student disaffection. The papers of Godfrey Samuel at the British Architectural Library include a series of memoranda from the AA Council which document the ongoing debate with the Board of Education; see in particular 'Memorandum from the AA Council' (about July 1938) in SaG/89/3. For existing accounts of this period in the AA's history see, M. O. Ashton, 'Tomorrow Town: Patrick Geddes, Walter Gropius, and Le Corbusier', in V. M. Welter and J. Lawson (eds), *The City after Patrick Geddes*, Bern, Peter Lang, 2000; M. Crinson and J. Lubbock, *Architecture – Art or Profession*, Manchester, Manchester University Press, 1994, pp. 100–10; M. Pattrick, 'Architecture Aspirations', *Architectural Association Journal*, 73 (1953), pp. 147–59; Saint, *Towards a Social Architecture*; and J. Summerson, *The Architectural Association 1847–1947*, London, Pleiades Books, 1947.

24 A. Powers, *'Look, Stranger, at this Island Now': English Architectural Drawings of the 1930s*, London, Architectural Association, 1983, p. 33.
25 Anon, 'The AA Story 1936–1939', p. 83.
26 Ibid.
27 Ibid., p. 82.
28 Interview between Andrew Saint and Anthony Cox, 12 July 1984, National Sound Archive, British Library. In the absence of more substantial evidence I am relying on Cox's recollections for this early phase of student activism.
29 Cox reported in Anon, 'Quo Vadis, AA', *Architectural Association Journal*, 67 (1952), p. 207.
30 Saint and Cox interview.
31 Ibid.
32 Ibid.
33 Ibid. This approach to Communist politics reflects the policy of the Communist Party of Great Britain at this time which, in a shift from its previously proletarian-focused line, now sought to encourage activism among intellectuals which would target middle-class institutions. This is discussed in S. Parsons, 'Communism in the Professions: The Organisation of the British Communist Party Among Professional Workers, 1933–1965', unpublished Ph.D. thesis, University of Warwick, 1991. I am grateful to Louise Campbell for this reference.
34 Saint and Cox interview.
35 The speech is transcribed in the *Architectural Association Journal*, 52 (1934), pp. 381–4.
36 Ibid., pp. 381–2.
37 Ibid., p. 383.
38 'The Yellow Book' is reprinted in Anon, 'The AA Story 1936–1939'.
39 For the whole text, and that of the ensuing discussion, see *Architectural Association Journal*, 53 (1938), pp. 403–16.
40 Ibid., p. 403.
41 Ibid., pp. 405–7.
42 Ibid., p. 413.
43 Editorial in *Focus*, no. 1 (1938), p. 1.
44 Saint and Cox interview.
45 My account of the *Focus* story comes from the Saint and Cox interview, and also from the correspondence between Cox and Fry, July 1980, and Cox and Jane Drew, September 1987, which forms part of the Anthony Cox papers now in the British Architectural Library and Victoria and Albert Museum archives. I am indebted to Eleanor Gawne for enabling me to use these papers prior to their final cataloguing.
46 In the interview with Saint, Cox states that it was his idea for the name. He wanted something that sounded like Leavis's *Scrutiny*, from which he also borrowed the small quarto format.
47 Cox to Lock, 9 December 1940, Max Lock Papers, box 11.7, Hull, University of Westminster archives (original emphasis). Lock had been a student at the AA alongside Ledeboer and Albery and in 1938–39 returned as a Unit Master. In 1939 he was appointed Head of the Hull College of Architecture.
48 *Focus*, no. 1 (1938), pp. 13–23. The article starts on the page opposite the end of Le Corbusier's article and is followed by Cox's letter to Rendel.
49 Interview between Andrew Saint and Elizabeth Chesterton, 15 February 1984, National Sound Archive, British Library .
50 The group comprised a town planning team of Elizabeth Chesterton, P. L. Cocke, R. V. Crowe, D. Duncan, A. Pott, P. M. Thornton and J. Wheeler, and a housing team of A. J. Brandt, R. L. Davies, D. S. Gladstone, J. C. de H. Henderson, A. W. Nicol, P. Saxl and F. L. Sturrock. See typescript, 'Tomorrow Town' by P. L. Cocke, 1973, among the Cox papers.
51 Interview between Andrew Saint and Elizabeth Chesterton, 2 November 1997, National Sound Archive, British Library.
52 Parts of the research notes, draft reports and reports survive among the Cox papers. They are remarkable for the quality and depth of their analysis.
53 These are discussed in Gold, *The Experience of Modernism*, pp. 145–63.
54 See Darling, ' "A Star in the Profession she invented for herself" '.

55 J. Summerson, 'Exhibition of Students' Work, session 1937–38', *Architectural Association Journal*, 53 (1938), p. 68.
56 Critics included George Pepler, Basil Ward and Dr E. C. Willats of the Land Utilisation Survey of Britain, Cox papers.
57 R. Calder, '"Optimopolis" is Dream City of Youth', undated clipping from the *Daily Herald*, in the Cox papers.
58 E. A. A. Rowse, 'The Planning of a City', *Journal of the Town Planning Institute*, 25 (1939), pp. 167–71.
59 RIBA, *Rebuilding Britain*, London, Lund Humphries, 1943, p. 27 (Cox authored this catalogue), and RIBA, *Towards a Modern Britain*, London, Architectural Press, 1943, pp. 117–18.
60 'Dinner in Honour of Howard Robertson', *Architectural Association Journal*, 51 (1936), p. 438.

Further reading

Anon, 'The AA Story 1936–1939', *Focus*, no. 3, 1939

Mary O. Ashton, '"Tomorrow Town": Patrick Geddes, Walter Gropius, and Le Corbusier' in Volker Welter and James Lawson (eds), *The City after Patrick Geddes*, Bern, Peter Lang, 2000

Mark Crinson and Jules Lubbock, *Architecture – Art or Profession*, Manchester, Manchester University Press, 1994

Elizabeth Darling, *Re-forming Britain: Narratives of Modernity Before Reconstruction*, London, Routledge (2006)

James Gowan (ed.), *A Continuing Experiment: Learning and Teaching at the Architectural Association,* London, The Architectural Press, 1975

A. Jackson, *The Politics of Architecture*, London, Architectural Press, 1970

M. Pattrick, 'Architecture Aspirations', *Architectural Association Journal*, vol. 73 (1953), pp. 147–59

John Summerson, *The Architectural Association 1847–1947*, London, Pleiades, 1947

Chapter 10

PLAN

A student journal of ambition and anxiety

Clive B. Fenton

It is important to consider the preoccupations of students in the schools of architecture in the years immediately after the Second World War, as this may provide some insight into the imperatives informing their subsequent careers. In addition, it is probable that this first generation of post-war architects faced unprecedented challenges, and that considerable anxiety resulted from these.

Judging by the press of the 1940s, Britain seemed to be obsessed with planning and reconstruction issues.[1] During the war, public expectations had been deliberately raised by propaganda, and afterwards, with the setting up of the Welfare State, the country appeared poised on the brink of a social revolution. Technology and professional expertise were to be the tools for transforming people's lives, and architects would be given responsibility for creating the environment in which the new society would flourish. Those who rose to that challenge must surely have possessed great ambition, and this has been confirmed by former architecture students of the 1940s who recalled their eagerness for change. But when questioned about their anxieties, they spoke instead of optimism and enthusiasm; they generally proceeded to talk about the disillusionment of the 1960s, which we know of from books describing the 'Broken Wave' of British post-war reconstruction.[2]

Few would deny the remarkable momentum of post-war optimism, but there was an atmosphere of gloom and despondency too. This was a result of the hardships and shortages that still had to be endured, as well as of the absence of any immediate signs of significant reconstruction or of improvement in living standards. In this context, the Festival of Britain was promoted as 'A Tonic to the

Nation' to boost flagging morale, and contained a number of exhibitions depicting the benefits of a man-made future. So, while the enthusiasm of youth may well have fired the ambition of the architecture students, there were many potential sources of anxiety for them also. Crucially, full participation in the Modern Movement demanded that they come to terms with the multi-disciplinary science of Town and Country Planning; in addition, they had to master radical architectural design involving techniques of mass production.

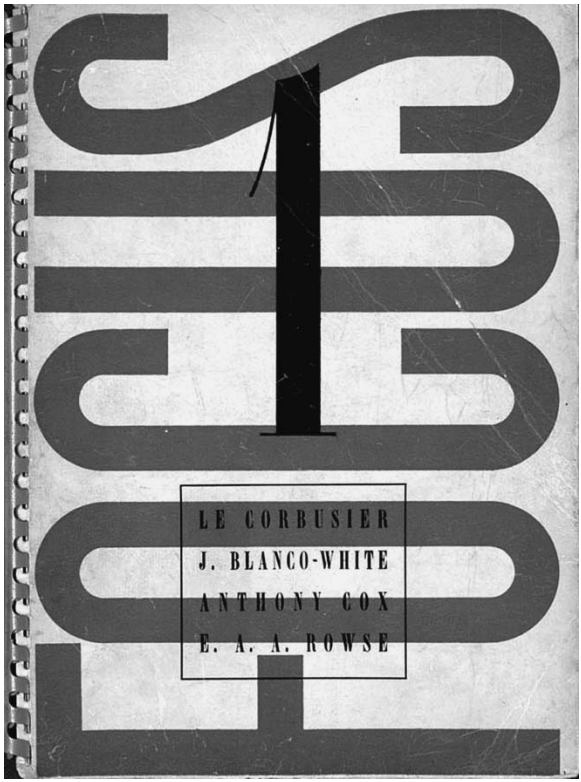
One compelling source for an inquiry into the ambitions and anxieties of post-war trainee planners is a magazine produced between 1948 and 1951 by students for students. The Architectural Students Association (Arch.S.A.) chose a highly significant title for their journal; while they might have called it something such as *New Radical Design*, it was actually entitled *PLAN*. This emphasised the primacy of the relatively new discipline of Town and Country Planning over the traditional practice of architectural design.

Overview

PLAN was first produced in London in the summer of 1938. Editorship of *PLAN* was not static, but regularly passed between the regional groups of the Association. In 1942 it was produced in Liverpool, but in 1943 and 1944 it was published in Cheadle and printed in Manchester, while in 1945 it was produced again in Liverpool. Wartime issues and the numbering system were irregular, but it seems to have become a quarterly by 1944. The design of the cover of the February 1942 issue was rather plain, with just the title and name of the organisation – certainly more Art Deco than Bauhaus.[3] It was priced at 7*d.*, so was a reasonably cheap journal. In 1944 some of the aims of the Association appear on the cover of no. 1 – promoting unity in architectural ideals, coordinating proposals for the improvement of architectural education, encouraging the interchange of views, and widening the sphere of activities of the Association.[4] This cover also has a photograph of the international committee president, Marten J. Larsson, working at his desk, and it is rather crudely embellished with egg and dart moulding. Nor is there anything radical about the cover design for no. 3 in 1945, which features a perspective sketch of a tempietto with the caption 'The Gracious Georgians'.[5]

In contrast, the 1948–51 run has an entirely different format and character. It was produced by the London-based PLAN GROUP, as they called themselves, with the final two issues produced by the Birmingham group in 1951. *PLAN* from 1948 to 1951 was clearly inspired by the journal *Focus*.[6] As seen in Chapter 9, *Focus* was produced by students at the Architectural Association School and launched in 1938 with the famous opening paragraph, 'We were born in the war . . .'. This of course referred to the First World War, but the journal ran to only four issues before it was halted by the next war in 1939.

Focus no. 1 made quite an impact with its radical look and content, and a second edition had to be printed. The design was by Oliver Cox, with articles by Le Corbusier, Justin Blanco-White and Ambrose Rowse, the former Principal of the AA School and Head of the post-graduate School of Planning. Contributors to subsequent issues included László Moholy-Nagy, Walter Gropius, Marcel Breuer,



10.1
***Focus*, 1938, no. 1**

Sigfried Giedion, Arthur Korn (chairman of the MARS Group and an Architectural Association tutor) and Robert Furneaux Jordan, who became Principal of the AA School in 1949.

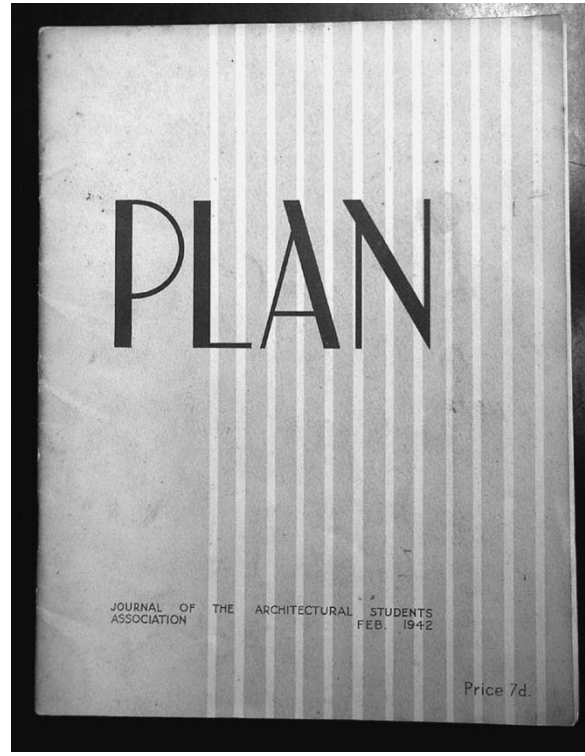
The resemblance of *PLAN* to *Focus* appears to have been intentional. And, although they had not actually been born in a war, these students had been largely formed by their experience of one. Like *Focus*, the series of *PLAN* which began in 1948 had its editorial group based at the AA headquarters in Bedford Square and it was printed by Lund Humphries.[7] In addition, Oliver Cox was initially in charge of design, adopting the celluloid comb binding and a similar text-oriented style of cover. Despite its success in attracting advertising, it was now priced at 2*s*. 6*d*. Compared with the wartime issues of *PLAN*, this was rather expensive, and was obviously not intended for the casual browser.

With the formation of the editorial and layout team of Andrew Derbyshire and John Killick in 1949,[8] the cover design changed: the text became minimal – just the title, the name of the association, the year and number.[9] This was accompanied by esoteric motifs superimposed on primary-colour backgrounds. *PLAN* no. 5 emulates an engineering blueprint with a detail of a connector bracket,[10] while nos. 6, 7 and 8 appear to be influenced by Constructivist and Soviet Agit-Prop designs. From *PLAN* no. 6 onwards the name of the association was dropped from the front cover – evidence of a growing gulf between the PLAN GROUP and

the wider association. These changes in appearance signified a change in the tone of the content.[11]

Wartime ambitions

The wartime issues of *PLAN* have a mixture of reports and articles typical of student journals, with contributions by students and guest writers, as the editors clearly struggled to find material to publish. For example, around the end of the war there is a piece by the Society for the Protection of Ancient Buildings on the treatment of war-damaged buildings, and there is also a feature on the work of the Polish School at Liverpool University.[12] 'Coal Economy and District Heating'[13] seems a peculiar sort of article now, but was typical for the period when even members of the general public were acutely interested in the economics of the country's infrastructure and utilities. In the unnumbered February 1942 issue, Hope Bagenal's 'Architecture and the Contemplative Principle' is an essay on the poetics of architecture from a Christian perspective, in which she asserted the intrinsic beauty of the Classical orders; perhaps she was searching for order and certainty in a time of crisis.[14] Similarly conservative is 'The Gracious Georgians', by Fleet Street journalist Neville Penry Thomas in no. 3 of 1945.[15] Thomas extolled the virtues of Georgian architecture, which he believed to be threatened by reconstruction and redevelopment, and he pleaded for architects to refuse any commissions that would involve demolition of eighteenth-century buildings.



10.2
***PLAN*, February 1942, cover**

However, planning was the crucial issue and this included all aspects of social and economic planning, not just urban design. In February 1942, Max Lock, the architect and planner, contributed a critical article that anticipated the preoccupations of the post-war PLAN GROUP. In 'Training the Post-War Architect', Lock advocated the setting up of a Ministry of Planning, and after the war the Ministry of Town and Country Planning became a reality. Lock also proposed that such a ministry should organise Colleges of Architecture, Technics and Planning in every sizeable town: in this he was both echoing Geddes' ideas and pre-empting Percy Johnson-Marshall's proposed Faculties of Planning, Design and Technics for India.[16]

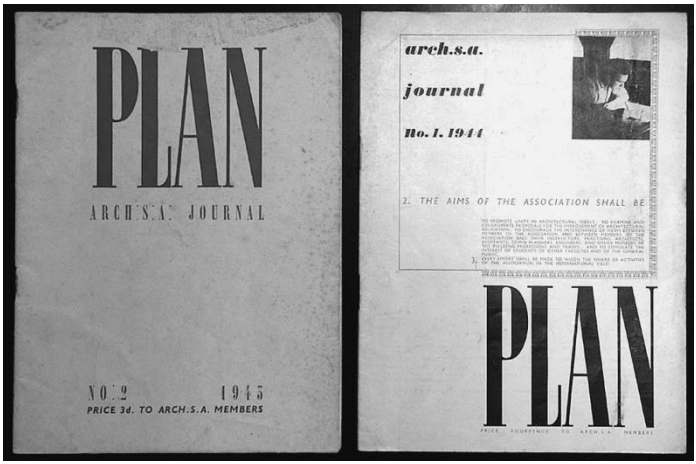
Lock was responding to what he saw as a complete transformation of the view of the architect's function in society. He asserted that training should aim to produce public service architects, since he thought that private practice would decline and eventually disappear. He believed in architecture as a social art, with no room for either monumentalism or individualism. Instead, technical, sociological and planning skills should be brought together for a cooperative approach. He envisaged a sort of National Health Service of architecture, where the proposed faculties would function rather like hospitals and deal with important cases of planning and design, while smaller group practices or cooperatives would be like local clinics. Challengingly, Lock declared: 'We ought to reorganise ourselves as an active part of the historical process, rather than somewhat casual partisans of the functionalist versus defunctionalist point of view.'[17]

Evidently this was a call for the students to stop bickering about the essence of functionalism and become politicised. The editor, however, tried to pull the architect back from the front line and maintain some sort of political neutrality, explaining that society must change itself first. He declared that only when the post-war political system had been established – whether Communist, Capitalist, Liberal or Totalitarian – should it be decided what sort of architecture there would be. The editor clearly saw the war as a state of flux with a variety of possible social and political outcomes: for him the architect should be merely a servant of the prevailing system and produce the appropriate architecture, whereas Lock believed that the architect should be a protagonist in social change.

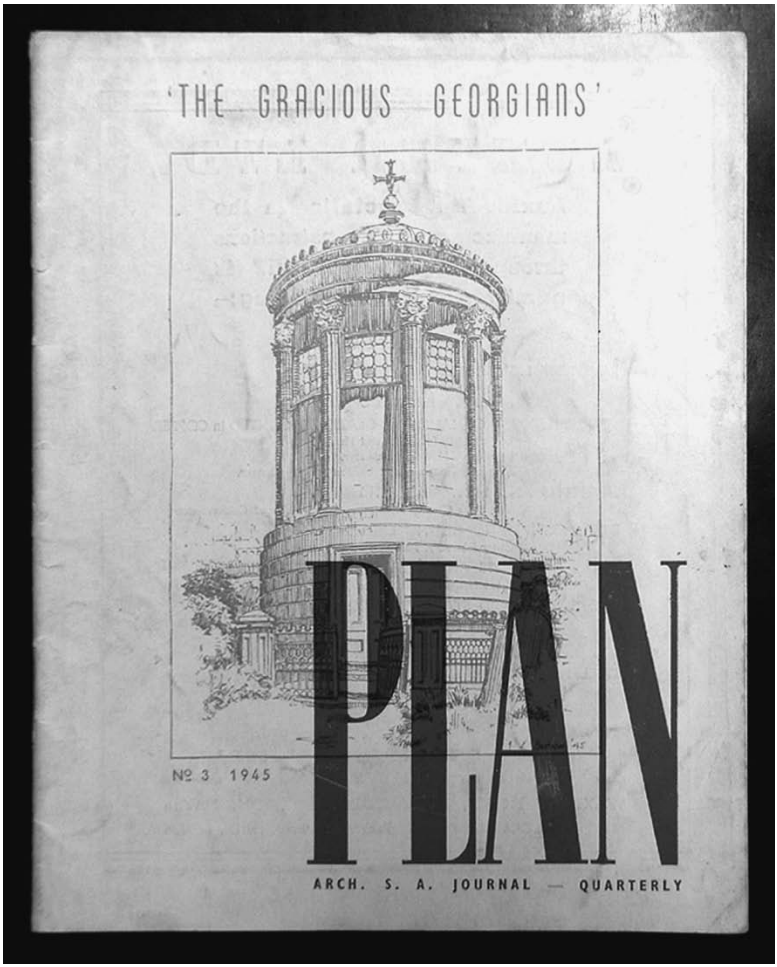
Although Lock had set the agenda for radical architecture and planning, the Arch.S.A. took some time to rally to the cause. In *PLAN* no. 2 of 1943,[18] the editor discussed the London congress of the Association and summarised the general feeling as 'Action Now!'. However, this was no revolutionary call to arms, but an exhortation to educate the public about the 'principles of good architecture'. Although these principles were not actually defined, individual students were encouraged to do their bit by approaching local branches of the Workers Educational Association, the Communist Party and, this being England, the local vicar!

In *PLAN* no. 3 of 1945, one of the assistant editors, John Millar, contributed a piece, 'About Arch.S.A. – The Institute, the Public and *PLAN*'.[19] The aims of the organisation were outlined, but for a post-war manifesto they were perplexingly vague. Millar accepted the existence of deep and fundamental problems that architects had to confront, but was unable to put his finger on quite

10.3
***PLAN*, 1943 no. 2; Plan, 1944, no. 1**



10.4
***PLAN*, 1945, no. 3**



what they were. In later years much energy was expended on clarifying the nature of the problems, but here Millar called for solidarity within the profession and the education of the public so that they would understand that architects, as opposed to builders or surveyors, were necessary for the design of *every* building. These conservative aims differed little from those of the RIBA, which sought to protect professional status and exclusivity, while demanding respect from the public.

In the same issue, the article 'Community', by the other assistant editor, Lisbeth Ridley, was more indicative of the principles of post-war *PLAN*. Ridley specifically discussed the 'brave new world' and how it might be achieved: the value of possessing a sense of community is repeatedly stated, for without it the ills of poverty, crime, immorality, disease and loneliness are accentuated. She concluded:

> Now is the time for architects to show that they are not only planners of houses, estates and towns, but men and women who realise the needs of human beings, and with their support will help to give them the means for a better, fuller and more satisfying life.[20]

This territory was shortly to be explored in a conference organised by the Association for Planning and Regional Reconstruction (APRR) and entitled 'Human Needs in Planning', held at the RIBA in1946.

Ambitions in post-war *PLAN*

On the evidence of the post-war issues of *PLAN*, the ambitions of the student body became much more radical and sharply focused in the later 1940s. In terms of design and construction, their vision of the future was fairly straightforward: they demanded nothing less than a revolution in design and production that would result in 'light buildings', with thin walls of non-traditional materials and rapid, efficient construction using prefabricated components. But there was still evidence of tension between professional self-interest and the common good. Although they yearned for a society where men in white overalls would bolt together exquisite prefabricated Modernist buildings, every building would still be individually designed by architects, albeit working with a team of experts in various disciplines. By this stage it is clear that no one wanted to build the monumental banks, insurance offices or town halls that had been the staple projects of the 1930s. Schools, clinics and community centres had become the preferred projects.

The enthusiasm for revolutionary building systems in a clean white world was matched by a loathing of traditional building practice and of the reality of the construction industry, as well as apprehension about the political power of large construction companies and manufacturers who preferred to maintain the status quo. In *PLAN* no. 10[21] an article entitled 'Site' related the experiences of a student employed as a labourer on a building site during the construction of three blocks of three-storey flats in load-bearing brick for a local authority. The author wrote of the horror of it all as if describing a First World War battlefield. The site was chaotic and was plagued by a litany of errors – foundations were laid in the wrong place; work

was done in the wrong order and had to be undone and redone; lorries got stuck in the mud; and there were mistakes, carelessness, accidents, and a lack of the most ordinary tools and materials (carpenters having to spend many hours each day straightening old nails for re-use). While this might sound like a typical building site at any stage in history, the PLAN GROUP regarded it as satanic – in stark contrast to the rigour, rationality and military precision of the Hertfordshire Schools programme to which they aspired.

Traditional practice was attacked again in *PLAN* no. 10 in a report on Ernest Marples' Conservative Party statement on housing. Marples wanted a reduction of controls on construction and a return to speculative development. The PLAN GROUP argued for the abandonment of traditional building methods and for the complete reorganisation of the building industry in order to include prefabrication for the production of flexible and adaptable buildings. 'The War of Opinions and Ideas – a Fairy Story', an article in *PLAN* no. 9, was a satirical attack on the folly of traditional load-bearing houses and the poor value for money that they offered, while Le Corbusier's domino frame was presented as a work of supreme rationality.[22]

The curiously entitled 'New Feelings New Techniques', in *PLAN* no. 8 (1950), was another contribution to the campaign for a revolution in design and construction. The article actually consisted of a brief history of the early pioneers of aviation, and it made no direct reference to architecture whatsoever. However, it was implied that any engineering design process could serve as a model for architectural design, and with similar excitement and patience to those of the aviators, one could achieve what was described as 'The perfect response to a new situation'.[23]

PLAN no. 5 (1949) was a remarkable issue because of its extensive feature on the then new RT3 London Transport double-decked bus. Twelve pages of description and diagrams were dedicated to its design, construction and production. The PLAN GROUP declared:

> We believe that the contemporary architect must learn as soon as possible to reject the old-fashioned and uneconomic building techniques at present in use, and that the future of architecture lies in the full and creative use of machine production which reflects the true economy of the times.[24]

Although this might sound rather like a Futurist manifesto, it was actually inspired by the inaugural speech in 1949 of the AA principal, Robert Furneaux Jordan, part of which was used as a preface to the RT3 article. Jordan wanted students to be able to understand the working drawings for precision machinery and to spend time in factories in order to learn the processes and requirements of mechanised production: this was proposed for a new AA course in Industrial Design. But it is not clear whether the authors of the article were simply citing Jordan or actually reminding him of the Modernist agenda that he had promised.

A growing gulf between the AA-based PLAN GROUP and the rest of the Arch.S.A. was commented on in *PLAN* no. 5 (1949),[25] and the Birmingham group carried on this radical tradition when they took over the journal in 1951. They refused to produce a special Festival of Britain issue, forcing the London branch of the Arch.S.A. to publish their own unnumbered *Festival PLAN*. The latter was an entirely conventional festival souvenir publication, which praised the South Bank buildings and contained a foreword by Hugh Casson. The PLAN GROUP was allowed to make an explanatory statement in this edition: in this, they advertised their own *PLAN* no. 9 and distanced themselves from the Association, the Festival and the South Bank Exhibition. The Festival was described as a 'Roman Circus' masquerading as a symbol of social progress, and the South Bank site was hailed as 'a propaganda dream world'. Even the so-called Live Architecture Exhibition at Poplar, the London County Council architects' attempt at Social Realism, was lamented as 'an architectural tragedy'. This was partly because of the conventional materials used in it and because of its appearance, but also because they felt that the designers had failed to provide any 'solution to community living'. They demanded 'reality', by which they meant the harnessing of all possible techniques in order to address urgent social problems.[26]

Anxiety

Architecture students were not immune to the greatest fears of the era – a further war and nuclear destruction. In fact, *PLAN* no. 8 (1950) was something of an anti-war issue. The editorial declared: 'We will not contribute to armament. We will not support anyone who is blind enough to gamble with his own survival and the survival of us all.'[27] A letter urging for a petition to ban nuclear weapons had signatories that included Maxwell Fry, Jane Drew, Ernö Goldfinger and Berthold Lubetkin. There was even an article on how to refuse to do National Service, which meant undergoing a prison sentence instead.

Perhaps the other greatest genuine cause for concern was that, despite all the recent city development plans, regional plans and the New Towns Act, there was a chronic lack of action and few concrete results. This seemed to have generated fear about the failure of national reconstruction generally, as well as about the economic and social programmes that were expected to accompany it. In *PLAN* no. 5 (1949), Geoffrey Jellicoe, William Holford and Arthur Ling, all leading authorities on physical planning, were asked to comment on a statement by A. S. Hunt, who raised the possibility of the failure of all the post-war plans and mentioned the lack of a genuine integrated and comprehensive National Plan. Hunt asked: 'Where are our new towns? When will paper planning become a reality, and why does the building that is going on bear little relation to the original proposals?' In response, Jellicoe carefully pointed out that there is no connection necessarily between what is desired and the means of achieving it, just as there is a conflict between the reality of nature and the desire to overcome some of its worst phenomena. He remained optimistic for progress, but felt that there was too much emphasis on the dimensions of time and space and not enough on the fifth dimension – the platonic world of ideas. Alluding to the dangers of instrumentality

and totalitarianism, Jellicoe observed that the bee colony might well be the triumph of the discovery of the common will, but 'So what?' he asked.[28]

Ling said that Hunt's questions were being asked because the economic crisis had brought the basic problem into focus. There were many plans and ideas, but the architects and the public had allowed themselves to be hypnotised into thinking that the planning millennium had arrived, despite the fact that no sound economic basis for achieving it actually existed. He maintained the belief that combined action could lead to success, but only when people demanded that the fundamental economic problems were tackled and solved.

Interestingly, Ling thought that the profession was suffering from 'globalism', devoting too much attention to the larger picture. He was probably gently warning the students not to try to tackle all the problems of the world. He must have felt that attempting to come to terms with the enormous scope of planning and the many specialisms involved in the technocratic agenda was just too great a task. Some of the prophets of planning, such as E. A. A. Rowse, were encouraging the broadest possible outlook on planning, even proposing to move entire populations to more suitable zones. Indeed, the School of Planning's student team project for 1951, the Colne Valley scheme, began with a survey of world resources and inter-continental transportation routes before gradually spiralling down to national and regional aspects.[29] Was this just youthful ambition for a world of plenty or was it control mania? Before dealing with the Colne Valley itself, the region was considered as merely a component in a world system. Such an approach was a potential source of anxiety, if not of paralysis and despair. The planning student might have been struck by the futility of making recommendations for a region whose economy was entirely dependent upon forces over which there was absolutely no possibility of control.

In order to alleviate the mental burden caused by what Ling called 'globalism', Rowse formulated his 'Composite Mind' theory. The principle of this was that 'experts' in all the relevant specialisms would perform as individual neurons of a great brain dedicated to world planning. Esoteric diagrams lent it a quasi-mystical quality, but there was no explanation as to how it could function and it still seemed to require a great dictator to coordinate the components and make the decisions. It might be argued that the act of designing a great brain, in those very early computer days, was as much a symptom of anxiety and stress as a remedy.[30]

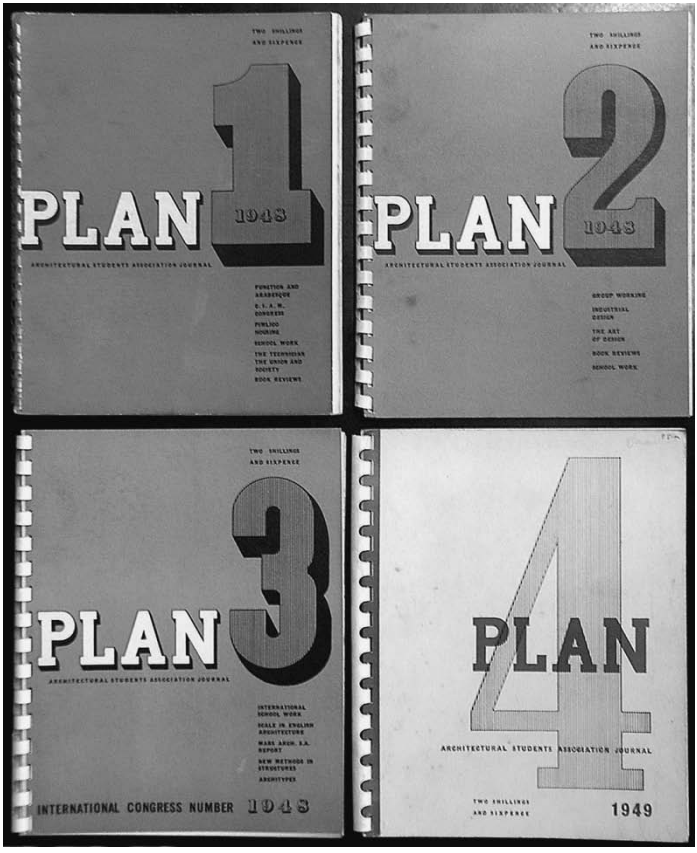
The PLAN GROUP's anxieties about the stasis in reconstruction and the economic crisis appear to have been at least partly diverted towards questioning the validity of the education they were undertaking, believing that the fundamental problems could be solved only if architectural education was reformed.

PLAN no. 2 (1948) was dedicated to architectural education, with an article by Gropius on the importance of manual skills and familiarity with materials.[31] The editor criticised current teaching methods and there was a discussion on the benefits of group work with Howard Robertson (the AA President), Stirrat Johnson-Marshall (the Deputy County Architect for Hertfordshire) and Carl Koch, Professor at Massachusetts Institute of Technology. In *PLAN* no. 5 (1949), the PLAN GROUP

proposed that all training should take the form of group work, with students working on real design programmes and dealing with clients.[32] They should also work on building sites and in experimental workshops within schools. Furthermore, the PLAN GROUP demanded the opportunity to comment on current planning proposals and to participate in joint programmes with other faculties such as medicine, sociology and engineering. Free discussions should replace lectures, and students should have joint control of the curriculum. If these demands had been implemented, it would have been tantamount to the students having complete control over their own education and significant influence on professional planning decisions. These somewhat unrealistic ambitions were surely born of frustration and anxiety.

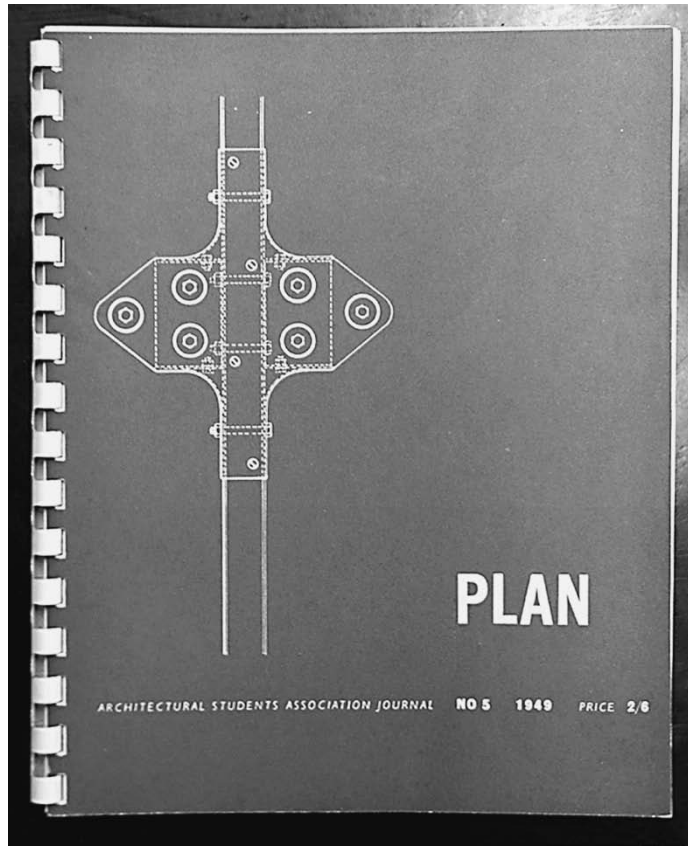
Health and social dysfunction

The dominant theme that emerges from the pages of *PLAN* is of upper middle-class liberals trying to tell the working classes how they should live. This is perhaps inevitable when architecture is aligned with sociology. For what is the purpose of a much-vaunted social survey if not to demonstrate the unsatisfactory behaviour and lifestyle of the workers and therefore to justify the implementation of corrective



10.5
***PLAN*, 1948, nos. 1, 2, 3; *PLAN*, 1949, no. 4**

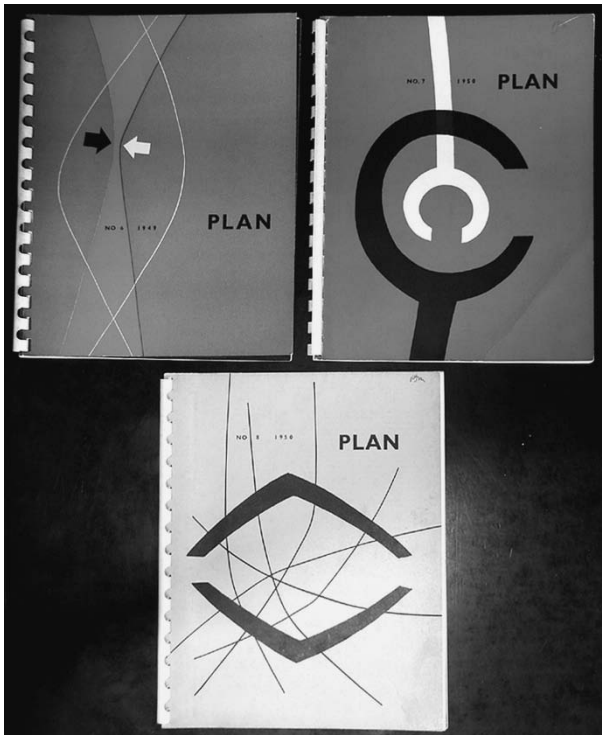
10.6
***PLAN*, 1949, no. 5**



measures? Although the mechanisms of the Welfare State were being assembled at the time, government policies were seen as simply not radical enough. Housing programmes were deemed inadequate in scale and uneconomical, while the health service was designed to correct rather than prevent illness. Despite reform, education was failing the individual and society by not producing well-rounded and intelligent people.

PLAN no. 6 (1949) provides the most explicit social criticism, revealing the PLAN GROUP's progressive advocacy of community health and education. Three key factors in the health of society were surveyed in parallel: building, architecture and education. The result was an extremely pessimistic diagnosis of contemporary British society, as each was examined and judged to be a failure. The group claimed that the uncoordinated expansion of society had created disintegration of the whole and isolation of the part, and that progress had been derailed because knowledge was divided into specialisms, with the specialists themselves isolated from society.

> Community has died and we are left with the connurbations filled with units of economic man lurching about in a welter of disease and war, unhappiness, frustration and death.[33]



10.7
***PLAN*, 1949, no. 6;**
***PLAN*, 1950 nos. 7, 8**

A split between education and the lifelong development of the individual was identified. The Victorian school buildings were like prisons, walled off from society at large, while the education system itself resembled a factory process, divorced from the rest of society. Thus society had deprived itself of the simplicity of outlook and zest for life found only in children and young people (including architecture students, one must presume). Furthermore, the system was fragmented, with many types of school and different controlling bodies. Obviously, the PLAN GROUP favoured 100 per cent state control. The existing education system was blamed for social and/or physical dysfunction, including homosexuality, which was attributed to single-sex schools. A piece entitled 'Scene' is a sort of nightmare scenario in which the educators behead children, while satirical characters named Mister Ariba, Portland Bill and John Bitumen, utter irrelevancies. The PLAN GROUP asserted that people were being turned into machines, fit only for the production line, and that their sole recreation consisted of cheap mass entertainment, such as football pools and pornographic films. And they cited a report which found that 36 per cent of female and 28 per cent of male factory workers suffered from neurosis.

But the final section of *PLAN* no. 6, entitled 'Argument', is more optimistic: it suggested some prescriptions for social improvement. Schoolchildren should be encouraged to do handicrafts and jobs with a social purpose, while drama, dance and nurturing were advocated for the formation of the well-rounded

individual. Salvation for the worker was also deemed possible and, as with schoolchildren and architecture students, teamwork was considered essential for their well-being. As William Morris and John Ruskin had done before them, they preached skilled work and variety, as opposed to the tedium of the production line, which they regarded as 'the misuse of technics'. There is certainly some tension between the latter demand and the PLAN GROUP's desire for mass-produced prefabricated building components. Naturally, the break-up of the class system was demanded as a prerequisite for all these proposals.

Essentially, the PLAN GROUP prescribed 'work within the community' as a cure for all the prevalent ailments of society, which were diagnosed as alienation, dysfunctional behaviour and neurosis. This preoccupation with mental health and dysfunctional social behaviour is interesting, because it is often said that an obsession with behavioural psychology is, in itself, a sort of neurosis. If this is true, then the symptoms of society's mental ailments might be the sublimated anxieties of the students themselves. They were certainly very anxious to work within the community as architects. Was this for the benefit of their own mental well-being and social rehabilitation?

Of course, concern for the welfare of the workers was typical of the period. It was part of the liberal crusade against the social symptoms of want, ignorance and disease, and it was the drive behind the Welfare State. Nevertheless, these students appear to have been anxious about the further moral degeneration of the lower classes within that Welfare State, since they were financially better off than before the war, but were creatively stifled and vulnerable to immoral influences. Their support for a democratic socialist system seems to have been accompanied by a fear of the possible tyranny of the neurotic, pornography-obsessed masses.

Helpfully, *PLAN* no. 6 has a bibliography, and this explains the origin of some of the group's ideas. Books such as Geddes' *Cities in Evolution*[34] and Giedion's *Mechanization Takes Command*[35] are no surprise, but we also find more overtly political works, such as Marx's *Wage Labour and Capital*[36] and Kropotkin's *Fields, Factories and Workshops*.[37] In his anarchistic treatise on neo-technics, Kropotkin railed against the crisis-prone, laissez-faire system and the capitalist appropriation of the surplus of human production, drawing attention to the burden of rent and the tedium experienced by the unskilled industrial worker. He declared that production must be directed towards real human needs rather than shareholders' profits, and provided statistics to demonstrate that twenty-four months of labour should be enough to secure for ever a modern house for a family of five persons. The PLAN GROUP may also have been attracted by his opposition to specialised education, for he favoured instead a system geared towards a well-rounded 'complete human', socialised, moral and scientifically capable by the age of 18 years.

The spiritual underpinning of the PLAN GROUP was provided by *Between Man and Man*,[38] a compilation of five works by Martin Buber, the philosopher so beloved of the kibbutz movement. An important concept for Buber was the authenticity of the individual, or what he called the 'genuine person', who can be only the product of a 'genuine community'. Buber believed that the 'I' exists

only in relation to the 'Thou', and that the essence of man can be directly known only in a living relationship, one of reciprocity and mutuality. This dialogue is said to transcend mutual self-interest. Buber's book also contained a paper entitled 'The Development of the Creative Powers in the Child', which appears to have been the source of the PLAN GROUP's pedagogical ideas.

Revealingly, Wilhelm Reich's *The Function of the Orgasm*,[39] a work of clinical psychology, also appeared in the bibliography.[40] While an interest in psychology was usual for students of any discipline at this time, one would have expected a book by Freud or Jung to be listed, rather than this title by their somewhat obscure contemporary. Reich asserted that no neurosis was possible in the presence of a normal sexual life, but that neurotics suffered from 'orgastic impotency', in which 'the sexual behaviour is rigid and, although a certain narcissistic pleasure is felt, this is not the relaxation of a full orgasm'. Lewis Mumford later criticised Reich for his obsession with the orgasm as a panacea for the ills of mankind.[41]

One might speculate about the obsessions and neuroses of these students, and whether some sort of extremist functionalism had led them to Reich. However, they may have been using sexual neurosis as an analogy for the inherent dysfunction in society. Thus, although the social and economic mechanisms superficially appeared to be operating, like the love-making of the neurotic couple discussed by Reich, they were in fact unhealthy and unsatisfying.

However, the most influential book appears to have been *The Peckham Experiment* by the physicians/sociologists Innes Pearse and Lucy Crocker.[42] This seems to have provided the group's impressions of the working class and informs their belief in the role of the architect as a social scientist. The book recounted a social project that combined Buber's emphasis on the importance of community and Reich's obsession with finding the causes of neurosis. Pearse and Crocker were convinced that the neuroses of the workers were due to the dysfunctional communities they inhabited, and that many of their health problems arose from this. Their resulting social incompetence, together with a general ignorance about nourishment, meant that they were unfit both mentally and physically, in addition to being unfulfilled in their personal relationships.

Pearse and Crocker's theories were tested in a physical and psychological experiment in the community of Peckham, South London. The Pioneer Health Centre was a sort of prototype for the Welfare State set up by Pearse and her husband, George Scott Williamson. In 1926 they started a project for the study and cultivation of health based on preventative treatment, but had to close down in 1950 because it was too radical and experimental to operate alongside the NHS. In 1935, they opened a purpose-built, explicitly functionalist health centre designed by the structural engineer, Owen Williams. It had acres of glazing and a swimming pool among its features.[43] Unlike the more famous Finsbury Health Centre, it was not simply a clinic, but a social club with facilities for sport, art and leisure. Its aims were social engineering, as well as clinical observation and treatment. Clearly the PLAN GROUP saw this as the way forward. Using the Peckham model, the working classes could be socialised and rehabilitated. Crucially, the building was a Modernist landmark: had it been in a mock-Tudor style, the PLAN GROUP's view of the experiment might have been less enthusiastic.



10.8
Owen Williams, Peckham Health Centre, Peckham, London, 1935

Conclusion

PLAN no. 6 epitomised the anxieties and ambitions of the Arch.S.A. It paid a thinly veiled homage to the Hertfordshire Schools project, which was regarded as a paradigm for good practice in planning, education and design, with teams of designers and technicians working together to provide the best possible environment for the client community. It and the other issues of *PLAN* demonstrate how, alongside the anxiety, there persisted great ambition. Given the political will and the right expertise, the happy creative children in the open-plan classrooms of Hertfordshire would become the fulfilled citizens of the man-made future.

Notes

1 See Chapter 8. Keith Lilley demonstrates that the interest of the general public in these matters was considerably less than that of the interested professionals.
2 See Lionel Brett, *A Broken Wave: The Rebuilding of England, 1940–1980*, London, Allen Lane, 1981.
3 *PLAN, Journal of the Architectural Students Association*, Liverpool, February 1942.
4 *PLAN Arch.S.A. Journal*, Cheadle, no. 1 (1944).
5 *PLAN Arch.S.A. Journal*, Liverpool, no. 3 (1945).
6 *Focus*, London, Percy Lund Humphries and Co., nos. 1–4 (Summer 1938–Summer 1939).
7 See *PLAN, Architectural Students Association Journal*, London, no. 1 (1948); *Plan, Architectural Students Association Journal*, London, no. 2 (1948); and *PLAN, Architectural Students Association Journal* (International Congress Number), London, no. 3 (1948).
8 The following is a summary of the membership of the PLAN GROUP from 1948 to 1950. For *PLAN* no. 1 (1948), the editorial committee consisted of N. Hyams (Chairman), H. S. Scorer and A. Hunt. The cover design was by Ian Baker, with illustrations provided by Oliver Cox and Michael Ventris. For *PLAN* no. 2 (1948), Cox and Hugh Morris joined Hyams, Scorer and Hunt on the committee, and the cover design was by Baker, with illustrations by Dennis Jones, Cox and Scorer. For *PLAN* no. 3 (1948) Julian Keable, John Killick, T. Williams and Stephen Macfarlane joined Hunt, Keable and Scorer (Chairman). The layout was by Hunt, with Scorer in charge of advertising and business, and Michael Willis dealing with publicity. John Killick and Andrew Derbyshire took over as editors for *PLAN* no. 4 (1949), with Stephen Macfarlane, Michael Willis, Tim Bidwell, C. D. Boatman, Michael Cartledge and Elizabeth Shawcross on the committee. The editing and layout of *PLAN* no. 5 (1949) were in the hands of Derbyshire, Killick, Macfarlane and Willis, with Tim Bidwell as advertisement and publicity manager, Tony Moore as circulation manager, Michael Cartledge as treasurer and Eizabeth Shawcross as secretary. The cover design was by Jeffrey Howlett and W. J. G. Godwin. *PLAN* no. 6 (1949) saw the return of H. Morris and the departure of Willis; Alan Emmerson, Alan Gore, Bill Howell, John Ollis, John Turner and John Voelcker were added to the team, who now

called themselves the 'PLAN 6 GROUP'. Killick was the advertisement manager, Moore the circulation manager, Cartledge the treasurer and Anita Flateau the secretary. This group also produced *PLAN* no. 7 (1950), while Derbyshire, Flateau, Macfarlane and Turner were joined by Pat Crooke for *PLAN* no. 8 (1950). *PLAN* nos. 9 and 10 (1951) were produced by the Birmingham Group of Michael Keyte, John Kitchin, David Meylan, John Parsons and Geoffrey Daniel (secretary), who acknowledged the previous group and pledged to continue its work.

9 For an example of this, see *PLAN, Architectural Students Association Journal*, London, no. 4 (1949).
10 *PLAN, Architectural Students Association Journal*, London, no. 5 (1949).
11 *PLAN*, London, no. 6 (1949).
12 Both of these were in *PLAN* no. 3 (1945).
13 *PLAN* no. 1 (1944).
14 *PLAN*, February 1942.
15 *PLAN* no. 3 (1945).
16 Percy Johnson-Marshall, 'Memorandum prepared for the Viceroy's Executive Council', in *Introduction to Planning*, Assam, private press, July 1944.
17 M. Lock, 'Training the Post-War Architect', *PLAN*, February 1942.
18 *PLAN Arch.S.A. Journal*, Cheadle, no. 2 (1943).
19 *PLAN* no. 3 (1945).
20 Ibid.
21 *PLAN*, Birmingham, no. 10 (1951).
22 *PLAN*, Birmingham, no. 9 (1951).
23 *PLAN*, London, no. 8 (1950).
24 *PLAN* no. 5 (1949).
25 Ibid.
26 *Festival PLAN*, London, 1951.
27 *PLAN* no. 8 (1950).
28 *PLAN* no. 5 (1949).
29 The School of Plannning and Research for Regional Development, *A Study in Collaborative Planning – The Colne Valley Regional Survey*, London, 1951.
30 The Rowse Papers, Special Collections, Edinburgh University Library.
31 *PLAN* no. 2 (1948).
32 *PLAN* no. 5 (1949).
33 *PLAN* no. 6 (1949).
34 Pattrick Geddes, *Cities in Evolution*, London, Williams and Norgate, 1949.
35 Sigfried Giedion, *Mechanization Takes Command: A Contribution to Anonymous History*, New York, Oxford University Press, 1948.
36 Karl Marx, *Wage Labour and Capital*, introduced by F. Engels, Moscow, Progress Publishers, 1952.
37 Petr Kropotkin, *Fields, Factories and Workshops*, London, Thomas Nelson and Sons, [190-].
38 Martin Buber, *Between Man and Man*, translated by R. G. Smith, London, Kegan Paul, 1947.
39 Wilhelm Reich, *The Function of the Orgasm*, trans. T. P. Wolfe, New York, Orgone Institute Press, 1948.
40 Nowadays Reich is popular only among conspiracy theorists, as a result of his mysterious climate machine experiments in America in the 1950s. For these he was sent to prison, where he died in 1957.
41 Lewis Mumford, *The Conduct of Life*, New York, Harcourt Brace Jovanovich, *c.*1951.
42 Innes H. Pearse and Lucy H. Crocker, *The Peckham Experiment: A Study in the Living Structure of Society*, London, published for the Sir Halley Stewart Trust by G. Allen and Unwin, 1943.
43 'Designs and Contractors' Drawings for the Pioneer Health Centre, Saint Mary's Road, Southwark, London, by Sir E. Owen Williams and Christopher Nicholson', *Architectural Review*, 77 (May 1935).

Further reading

Martin Buber, *Between Man and Man,* trans. R. G. Smith, London, Kegan Paul, 1947

Petr Alekseevich Kropotkin, *Fields, Factories and Workshop,* London, Nelson, 1912

Innes H. Pearse and Lucy H. Crocker, *The Peckham Experiment: A Study in the Living Structure of Society,* London, Halley Stewart Trust/Allen and Unwin, 1943

Wilhelm Reich, The *Function of the Orgasm,* trans. T. P. Wolfe, New York, Orgone Institute, 1948

Chapter 11

‘Destroy all humans!’[1]

Simon Richards

In 1966 a team of American planners published an article called ‘Planners’ People’.[2] They wanted to find out why drawings for new development schemes were always populated with the same cast of six characters: the ‘gentleman with briefcase’, ‘fashionable lady’, ‘mother and child’, ‘young lovers’, ‘voyeur’ and ‘flâneur’. Where were the bums, beggars, prostitutes and pickpockets? Where were the blacks and the gays? And where were the police? Although it was presented as a provocative joke, the authors were making an important point: representations of the city often contain assumptions about the ‘good life’. In this case, the good life was white, prosperous, law-abiding, cultured and heterosexual. Maybe this reflected the planners themselves, or maybe it reflected those who were in line to purchase or rubber-stamp the scheme.

The arbiter of taste, Geoffrey Scott, had made a similar point some fifty years earlier. Scott observed that architecture and its theory often ‘indicated’ or ‘promoted’ a certain ‘kind of human character’, and he called this the ‘ethical fallacy’ of architecture. Scott was referring to the way that Ruskin and Pugin had associated classical architecture with the heathenism of ancient Rome or the extravagances of Catholicism. Gothic architecture, on the other hand, not only symbolized but also might help to inspire a truly pious lifestyle.[3] More recently, the architect and planner Denise Scott Brown has observed that ‘[u]rban designers have tended to place themselves above the morass, planning for a subjectively defined “good of the people”’.[4]

Architects and planners routinely make statements about what people are, what they need, and how they should be living. And many others who comment on the built environment do the same, for example sociologists, geographers and philosophers. This seems to be one of the defining characteristics of these professions throughout their history, and it occurs for a number of reasons. It may, for example, reflect a genuine commitment to understand and improve

people's lives; it may be a rhetorical trick intended to lend weight to the architectural style or planning ethos that is being promoted; or it may be simple snobbery about the lifestyles and consumption habits of certain people. But even though we are dealing with imaginative representations of 'defective' lifestyles and 'ideal' lifestyles, we cannot underestimate the power of imagination. It has had a real influence over planning policy and, consequently, over the lives of ordinary people.

The following examines how these issues arose in relation to suburbia and community in Britain and more particularly in the US in the middle of the twentieth century.[5] The first section presents a typical cross-section of representations of suburbia. The second explores the origins of these representations in American sociology from the 1950s onwards. Finally, we shall test them against some recent empirical research in the field.

Representations of suburbia

Demands for a community-oriented approach to the built environment gathered momentum shortly after the Second World War. Increasingly it was thought important to involve people in the regeneration of their neighbourhoods and to create buildings and street patterns that inspired and sustained this involvement. This was forwarded as an antidote to the Modernist planning orthodoxy that, under the auspices of CIAM, was then laying the groundwork for the high-rise council flats and projects that would become infamous throughout the world.[6]

A good indicator of this shift was when the Brazilian Modernist José Luis Sert asked the American urban historian Lewis Mumford to write the introduction to his new book, *Can Our Cities Survive?* (1942). Mumford refused for the following reason:

> [There is] a serious flaw in the general outline which CIAM prepared . . . The four functions of the city do not seem to me to adequately cover the ground of city planning: dwelling, work, recreation, and transportation are all important. But what of the political, educational, and cultural functions of the city . . . The leisure given by the machine . . . frees [modern man] for a fuller participation in political and cultural activities . . . The organs of political and cultural association are, from my standpoint, the *distinguishing* marks of the city . . . I regard their omission as the chief defect of routine city planning; and their absence from the program of CIAM I find almost inexplicable.[7]

But as well as challenging the Modernist city, community planning was also forwarded as an antidote to sprawl. In the US this meant the post-war 'motopia' of malls, automats, drive-thrus and drive-ins that catered for the ostensibly shallow lives of 'organization man', his domestic goddess wife, and their 'cookie-cutter' sub-division. In Britain it meant the semi-detached house of the inter-war suburbs with their privet hedges, neat lawns and ornamental gnomes. Again, Mumford was at the ready with a derisive comment:

> In the mass movement into suburban areas a new kind of community was produced, [a] multitude of uniform, unidentifiable houses, lined up inflexibly, at uniform distances, on uniform roads, in a treeless communal waste, inhabited by people of the same class, the same age group, witnessing the same television programmes, eating the same tasteless prefabricated foods, from the same freezers, conforming in every outward and inward respect to a common mould.[8]

These views have become the norm. Indeed, there appears to be an entire cultural industry dedicated to keeping them alive. This finds its most extreme form in the work of the English novelist J. G. Ballard. In his novel *High Rise* (1975), Ballard describes how vertical living corrupts all those who live in tower blocks, and not just the working classes.[9] He introduces us to the lives of affluent professionals in a brand-new luxury high-rise building in the Docklands area of London. The initial phase of cocktail parties and casual affairs soon passes. Isolated from the censure and support of society, with their every comfort supplied by cleaners, caterers and mechanical services such as lifts and thermostats, the inhabitants start to find satisfaction in vandalism, incest, murder and eventually cannibalism. More recently the BBC made a film of one of Ballard's short stories about another affluent professional – Gerald Ballantyne – who embarks on an experiment never again to set foot outside his suburban home. Instead, he commits himself to survive only on the food that he can find inside it or the wild animals and neighbourhood pets that he can lure into his weighted trap. As he descends into madness, the inner space of Ballantyne's home appears to him to become a landscape of infinite scope, beauty and wonder. Having set up his base camp in the dining-room, he conducts expeditions upstairs and into the loft in the manner of an arctic explorer. But fearing at last that his home may be nothing special, he clambers into his freezer with one of his murder victims to become entombed in ice.[10]

One might think that it would be difficult to find such vicious parodies of the insularity and menace of high-rise and suburban living. Yet representations like these – proceeding from a sense of boredom, through futility and despair, into madness and homicide – are expected among the metropolitan intelligentsia. For example, in her brief history of the literature of suburbia, Kate Flint focuses on novels that give a positive spin to all the crass values, tastes and 'repressive structures' of suburban society, such as William Pett Ridge's *A Clever Wife* (1895). Here an outspoken suffragette, a considerable success in London literary circles, stubbornly refuses to take her husband's name or move into his chambers. After a period of separation, however, the couple are reconciled blissfully as Mr and Mrs Halliwell of Clapham. Flint argues that the conventional plots and writing styles of these novels reinforce the conventional 'ideological assumptions on which this suburban fiction was consciously or unconsciously grounded, and which it attempts to serve or perpetuate'.[11] The novelist and self-styled 'mythographer' Marina Warner has added her own imaginative twist to the suburban myth: shuffling from our semi-detached homes to the high-rise blocks of the city, we fail to recognize

that we have become zombies, for the Haitians put a voodoo curse on us in revenge for the unoriginal sin of colonization. Finally, Hugh Freeman, the historian of psychiatry, remains concerned about the psychological dangers of suburban living. What with the lack of social life, amenities and entertainments, it is little wonder that 'This Place is Driving Me Mad'.[12]

Assumptions like these have spread far and wide. Even a videogame has been applauded for giving insights into 'the soulless existence of mid-twentieth century US suburbia . . . [and] the quiet insanities of suburban life'. 'Destroy All Humans!' recreates the classic 1950s B-movie scenario of a hostile alien who has crash-landed on Earth, and allows the player to fly around and zap suburbanites out of their misery.[13]

Underlying all this is a confused unease that there is something wrong with life in the suburbs. It is assumed that suburban people have become preoccupied with trivial concerns and questionable values, and are much too likely to purchase goods in bad taste. More alarmingly, they have lost all sense of self-worth, community, and perhaps even their sanity. These representations would be of no consequence were it not for the fact that they nourish powerful contemporary approaches towards planning.

The most trenchant critic of suburbia in terms of architecture and planning is the Congress of New Urbanism, which was formed in America in 1993 and frequently airs its commitment to reform human behaviour for the better. Vincent Scully, an advocate of New Urbanism, proclaims the 'subversion' of community to be 'cataclysmic' because '[i]t is within that model that human beings live; they need it badly, and if it breaks down they may well become insane'. The suburbs are spawning grounds for neuroses and madness, whereas community provides 'psychic protection'. Scully maintains that the New Urbanist village of Seaside on the Florida panhandle is the pre-eminent 'image of community' for modern times, and he compares it favourably with the Siena which is represented in the fourteenth-century frescoes of Ambrogio Lorenzetti, the 'Allegories of Good and Bad Government'. According to this reasoning the ideal community is a combination of holiday village and murderously divisive city-state.[14]

Andres Duany and Elizabeth Plater-Zyberk, co-founders of the Congress of New Urbanism, express concern not only with 'physical form', but also with the 'life that form would generate'. Their proposals are tailored to satisfy 'the human need for communication and personalization'. Duany and Plater-Zyberk go on to say that there is no need to answer the question of 'whether the design of the built environment exerts any influence on human nature itself . . . [because] human nature is not at issue here, but simply whether people behave differently in different physical surroundings'.[15] Peter Calthorpe, another co-founder of this Congress, proposes a new kind of 'Regional City' that will provide the 'social capital' necessary to 'broaden people's sense of self from "I" to "we"'. The 'everywhere community' of internet chat-rooms and mail-order is a threat, he says, for it makes us believe that meaningful relationships and civility can be sustained in ways divorced from physical place.[16] The movement's Charter, published in 2000, contains countless more statements of this kind.[17] Not once are they explained. This is extraordinary,

seeing as it is largely on the claim of improving community that the whole movement is founded. And this has become fundamental also to the parallel shift in British planning which it influenced, as represented by the Urban Task Force report of 1999 and subsequent policy initiatives to build 'sustainable communities' on inner-city brown-field sites.[18]

But the concept of community is vague and none of its advocates wants to clarify it. As the political theorist Adrian Little has observed, this lack of clarity is useful: 'it is perhaps the lack of conceptual clarity around community that has made it such an attractive tool for politicians, theorists and policy makers.' Admittedly, the great 'variety of forms of association, membership and inclusion' mean that community can never be defined absolutely. But nonetheless it remains a 'key ingredient in the complex matrix of social organisation and individual self-identity', and therefore, Little maintains, we should try to be more specific when we use the term.[19] It appears that we should be very careful when using it to justify planning, especially when that involves seeking to channel people away from their suburban homes and allegedly inferior lifestyles.

The origins of these representations

Contemporary thinking about community, among planners and policy-makers at least, is based on an influential current of opinion formulated by a tiny group of like-minded Americans over fifty years ago. In the immediate post-war years there was keen interest in the new developments that sprang up under federal housing initiatives, largely to house returning ex-servicemen and their families. Increasingly, the critics maintained, the word 'community' was used as a key part of the suburban estate agent's marketing campaign, and was packaged as a value-added extra along with a double garage or a bigger lawn. The most influential critics were the sociologists David Riesman, Vance Packard and William H. Whyte.[20] The arguments about suburban living were much more complex in that period than they are nowadays. It was not a simple matter of lamenting the loss of community. They said that community did indeed exist there, but it was shallow and meaningless. And the reason that people were ready to get involved in this kind of community was because of a deeper problem: they lacked a proper sense of their value as individuals. In other words, neither the community nor the individual was properly able to develop in the suburbs.

These are extraordinary arguments and they need to be considered further. David Riesman was worried about the emergence of a new type of 'social character' in the suburbs of America. By 'social character' he meant the part of an individual's character 'that is shared among significant social groups and . . . is the product of the experience of these groups'.[21] But it is also a 'mode of conformity', circumscribing the behaviour required by a particular society in order for it to function.[22] As a result of suburban living, the modern character was becoming 'other-directed': people were displaying 'an exceptional sensitivity to the actions and wishes of others'.[23] This was caused by planners who cultivated sophisticated tastes and travelled widely, yet sought to withhold this privilege from the less well off.

> They would freeze [them] into communities in which friendship will be based largely on propinquity . . . Here we find the classes attempting to force 'roots' upon the masses just as the Dobuans try by magical incantations to keep their yam tubers in place![24]

And in order to root people to their suburbs, some planners went further and maintained that 'enforced hardship' and 'catastrophe' were 'the only practicable source of group cohesion and individual strength of character'. In other words, all was well when planners provided a rich diet of community issues which stimulated people into action, such as the inadequate provision of hospitals and schools. But this could not last: 'The dispiriting sequel is familiar: the community, its major problems of sheer existence surmounted, became less interesting to live in, its cooperative store, built by so much energetic and ingenious effort, folded up.' Riesman thought this entire enterprise was misguided because the changeable economy and job market 'means that no one can ever settle down assuredly for the rest of life'.[25]

This was his diagnosis of the problem, but Riesman's main concern was for the development of greater personal autonomy. Social entanglements at home in the suburbs led to conformity. And this also happened at work, in particular through the sociable atmosphere that many white-collar companies sought to inspire among their staff. Far from expediting the work to be done, this emotional 'harvesting' only 'drains' and 'exhausts' the worker. Similarly, Riesman objected to the emotional exchange that accompanied transactions between customer and salesperson. In order to eradicate these interpersonal burdens, Riesman advocated individual office rooms to replace the modern open-plan office space, and supermarkets, automats, and mail-order to replace traditional shops.[26]

Riesman's *The Lonely Crowd* became the highest selling sociology book of all time, yet its quasi-scientific pretensions were undercut somewhat by his essay of 1958, 'The Suburban Sadness'. The opening line runs as follows: 'I speak in this paper from the perspective of one who loves city and country, but not the suburbs.' This is a 'value-filled' rather than a 'fact-filled' project, Riesman concedes, yet he goes on to justify it as belonging to the 'behavioural sciences'.[27] One of the main themes of this essay is how the suburbs represent the emasculation of men. Men are no longer the rugged, resourceful types needed for mining, manufacturing or farming; they work instead in the clean industries of aviation, plastics and electronics. Their effeminacy is further evidenced by their 'politics'. A man is content to be malnourished on a diet of trivial suburban issues that are easily resolved rather than chewing on the tougher politics of the city: 'he is apt to be an Eisenhower Republican, seldom informed, rarely angry, and only spasmodically partisan.' He is in fact so weak that he has allowed himself to be pushed out of the city centre by an invasion of working classes, 'subcultures' and 'colonials', rather than standing his ground and 'Americanizing' them.[28]

However, when Riesman conducted a survey of several hundred male students in twenty American universities, he confessed to being 'struck by the fact that the great majority planned to live in the suburbs' and get married to

'station-wagon types: educated, companionable, civic-minded and profoundly domestic'. 'Those who hailed originally from the suburbs,' he noted, 'suffered from no disenchantment, and wanted to return to them – often to the same one – while both city-bred and small-town boys also preferred the suburbs.' Clearly '[p]eople brought up in the suburbs may not realize what they are missing'.[29] Despite their obvious contentment, however, Riesman did not shy away from the diagnosis that '[t]he suburb is like a fraternity house at a small college, in which like-mindedness reverberates upon itself as the potentially various selves within each of us do not get evoked or recognized'.[30] The fact that suburbanites do not realize this is sure proof of the extent of their sickness.

Closely related to Riesman's work was Vance Packard's *The Hidden Persuaders* (1957), which explored 'Motivational Research'. Motivational Research was a branch of psychology that was developed in tandem with commercial firms and advertising agencies, and which sought to manipulate consumer needs by appealing to subconscious desire: 'If people couldn't discriminate [between products] reasonably, marketers reasoned, they should be assisted in discriminating *unreasonably*, in some easy, warm, emotional way.' One of the most effective ways in which the marketing agents did this was to give their products 'personalities' that sought out the prospective buyer by appealing to his or her narcissistic 'self-image'. The Marlboro Man was a brilliantly successful example. And high on Packard's list of 'insidious' examples were the new model suburbs: 'A vast development of homes going up in Miramar, Florida, is being called the world's most perfect community by its backers.' Its advocates publicized this as an emerging 'trend to "packaged" homes in "packaged" communities', and celebrated the 'regimented recreation' organized by the neighbours who pestered newcomers for immediate involvement in the bridge club, literary teas and fish breeding. Packard considered this a 'portentous' development, the 'ultimate' vindication of Riesman's thesis against 'other-mindedness' and 'group-living': 'Miramar . . . may also package your social life for you . . . friendship is being merchandised along with real estate, all in one glossy package.' The packaged community catered to the 'packaged soul': 'The most serious offence many of the depth manipulators commit . . . is that they try to invade the privacy of our minds.'[31]

Another important urban sociologist, William H. Whyte, was more willing to endorse the benefits of suburban communities, but this endorsement was not unconditional. In *The Organization Man* (1956), Whyte investigated the new 'social ethic', which he defines as 'that contemporary body of thought which makes morally legitimate the pressures of society against the individual'. In this case,

> it rationalizes the organization's demands for fealty and gives those who offer it wholeheartedly a sense of dedication in doing so . . . Its major propositions are three: a belief in the group as the source of creativity; a belief in 'belongingness' as the ultimate need of the individual; and a belief in the application of science to achieve that belongingness.

Whyte traced this to the 'human relations' school of industrial sociology that was developed to achieve equilibrium in the workplace. The union and corporation had

become the basis of our 'adaptive society', and conflict was now condemned as 'sickness' or as the result of a 'breakdown in communication'. The central tenet was as follows: 'Man exists as a unit of society. Of himself, he is isolated, meaningless; only as he collaborates with others does he become worth while.'[32] But this compromised the 'autonomy' of the individual. Like Riesman, Whyte argued for a movement away from group-mindedness.[33]

But Whyte was not entirely critical of the new social ethic: 'there is a real moral imperative behind it.' This was best represented in the 'packaged villages' of suburbia. Although these were quite pathetic as communities, they did provide a 'new kind of rootedness' to counter the 'transiency' of organization life.[34] Whyte's explanation was as follows: the need for a career forced people to relocate frequently, but this should be considered a 'positive good' for creating the 'well-rounded' individual.[35] Initially, people settled in the new suburban developments because they represented good value for money and at first they were mildly put off by having so many near neighbours, 'so much propinquity'. It was only later that a weird kind of community began to take shape, and later still before the advertising agents and planners seized on this and started selling 'belonging' and 'happiness' – homes rather than houses. Nonetheless, participation in the affairs of these new suburbs was real and disproportionately high, albeit odd: 'They hate it and they love it. Sometimes it seems as if they are drawn to participation just for participation's sake . . . Nor are meetings necessarily directed to any substantive purpose.' This participation replaced the old roots, a 'complex of geographical and family ties', with something more appropriate to the mobility of the times. Whyte makes an analogy here with forest nurseries, which cut the long roots of trees in order to encourage the growth of the short feeder roots and thus make transplanting easier. The 'new roots' of suburbia are of the same nature. They are shallow, but 'even shallow roots, if there are enough of them, can give a great deal of support'. Because people have to move from place to place, these temporary roots provide a workable alternative to the old ones, helping 'make a home of the home away from home'.[36] Clearly, Whyte's view of suburbia was more positive than those of Riesman and Packard, but it is still rather grudging: simply put, suburbia is the best that these unfortunate, unhappy people can expect.

These summaries give us an indication of the debate about community in mid-twentieth-century America, particularly in relation to suburban development and its effect on the individual psyche. The debate had two conclusions: the first was that the suburbs eroded people's capacity for free thought and free action; and the second was that the suburbs enslaved people to trivial community issues. These conclusions – or preconceptions – have been reiterated ever since.

The real suburban experience

The main question is whether these conclusions correspond with what people living in the suburbs actually thought and experienced, then and now. The architecture theorist Charles Jencks has offered the following comment, which neatly reveals the confusion over whether these things were happening or not:

> [A] thousand studies . . . showed the urban anomie, and showed it as stemming from lower-middle and middle-class deracination or [the] uprooting of traditional societies. [But this is] really the middle-class sociologist talking about himself and his own angst. In other words, it *wasn't really*, *completely* happening, but it *appeared* to be happening, particularly in America. And it *was* happening in downtowns all around the world. So it had a real sociological truth to it and the architecture came along to reinforce it. And we were attacking the way that modern economics was reductivist, it was reducing people's rich life to stereotype. Norman Mailer talked about 'empty landscapes of psychosis' and for him the uprooted downtowns [revealed] the fact that people's psyches were as empty and broken apart and void and nothing as the architecture.[37]

In his book *Suburban Century* (2003), Mark Clapson argued that representations like this are based on snobbery and 'erroneous value judgment[s]', and he traced the emergence of an optimistic new suburban historiography that is no longer 'embittered by urbanist preferences'. His book is, in part, 'an attempt to rescue suburbia from the enormous condescension of the rich, young and trendy',[38] and he marshalled powerful evidence, often in the form of oral histories and surveys of actual suburbanites, to demolish these prejudices.

Were people in England and America forced to live in the suburbs? No, they went there because they wanted to escape the crowded, unsanitary conditions of the industrial city centre and were attracted by the prospect of high-quality homes and gardens. It was a matter of choice: 'People caught buses and trains to the suburbs, the buses and trains did not catch them. Motorists drove their motor cars to and from home; the cars did not drive them.' Was the architecture of suburbia homogeneous? No, private builders provided a wide variety of styles including Cape Cod, Spanish Colonial and Ranch in the US, and mock-Tudor, Neo-Georgian and Art Nouveau in Britain. Experiments with more avant-garde styles were not especially popular, but they were not that popular in city centres either.[39]

Was there a lack of community in suburbia? No, there was an enormous amount of group association. Initially, this included widespread mixing across racial, age, gender and class divisions in order to lobby for better amenities such as schools, clinics and shops. Once these had been secured, the groups usually broke up into smaller groups centred upon common interests such as sports, reading, religion, charity and politics. Indeed, surveys showed that there were slightly higher levels of group activity in the suburbs than in the inner cities. Moreover, some new towns appointed professional social planners to help to stimulate the community, and there was considerable transatlantic consultation in this.[40]

Of course, this did not mean that everything was perfect. Many people moved to the suburbs precisely because they did not 'particularly want to live cheek by jowl with family and friends within the ostensibly close network of urban communities'. Also, the professional classes often used groups as a means of

status advancement, which meant that manual workers participated to a lesser degree. And many groups were split along gender and – in the US especially – racial lines. Women, Jews, Blacks and Asians were often barred, although they had diverse and exclusive clubs of their own. But even if this was not a picture of absolute harmony, these patterns of group association were comparable with those in the inner cities.[41]

Was there too much isolation in suburbia? Did suburban living genuinely result in 'suburban sadness' and eventual madness? No, this was not the case, although it was true that there were some adjustment problems especially among young women who were left at home while their husbands went out to work. Even so, research suggested that this was a complaint common to anybody who moved to anywhere new, whether to the suburbs or to the city, and it usually faded after a while. In the 1930s Dr Stephen Taylor, a mental-health practitioner working in south London, diagnosed a condition known as 'suburban neurosis' which manifested itself in the symptoms of 'backache, weight loss, loss of breath and insomnia'. He said that it was caused by various things, including isolation from community and kin; having too much free time as a result of too many labour-saving devices; and becoming infected with 'false values' as a result of exposure to too much commercial advertising. Subsequent studies, however, and especially those conducted by women, concluded that there was no such thing as suburban neurosis. Suzanne Beauchamp, who was in charge of social policy for the new town of Milton Keynes, argued that adjustment problems were common to all environments. And a survey of the literature by E. H. Hare in 1966 concluded that there was 'no significant difference in the prevalence of neurotic ill-health under widely differing conditions of urban life'. By the mid-1960s Dr Taylor had abandoned his ideas, concluding that neuroses can be found anywhere, and that individual instances do not make a pattern: 'It is easy enough for enterprising enquirers to find such people . . . But a similar group of similar size can be found in any community, new or old, if it is sought.'[42]

Even so, many women did feel isolated, at least initially, when the husband tended to have main use of the sole car. This was especially true in Britain where car ownership was less widespread. But when households came to own two or more cars this problem evaporated as well. Interestingly, despite these problems, surveys of women who had been born and grew up in the suburbs showed evidence of an overwhelming desire to stay there or thereabouts.[43]

Clapson's exposé of these fallacious anti-suburban ideas is systematic and devastating, and he takes it yet further to debunk preconceptions about the alleged racial and ethnic homogeneity of the suburbs, as well as about their allegedly conservative voting tendencies.

I interviewed Andres Duany, one of the founders of New Urbanism, to ask if he could clarify what he and his colleagues meant when they talked about the benefits of their communities over suburban ones. He said that their idea of community was purely physical, involving such things as walkable distances and mixed uses: 'And we seldom question at the level you do "What is community?" You know, we're American pragmatists. If it works, fine. We're not going

to agonise over the ideology of community.' So it seems the New Urbanist 'community' is a kind of planning tool and not a value-laden assessment about lifestyle. But when I reminded Duany about Scully's remarks on suburbia, I got the following response:

> Scully's completely right! They're going completely nuts! Don't imagine that they're sort of wild-eyed. They're just sort of fat, ugly, unhappy, and not operating in their best interests. Yes, I think they're going crazy, in a very American way. I actually hate going to these places. I have to be paid a lot because they're so unpleasant.[44]

Conclusion

Planning proposals frequently rest upon ideas about human nature. They rest upon ideas about what people are and what people need, which turn into ideas about how people should and should not be living, loving, consuming, and so on. In the case of suburbia, this manifests itself in a buoyant industry of baleful statements which rehash a few opinions formulated in the 1950s, and which are deaf to the mounting evidence that people in the suburbs are not at a loss for living there. This phenomenon is so irrational that one commentator has attributed it to 'man's myth-making imagination in general', which in this case generated a 'cultural lie' 'that has outlived its time, but which continues to shape the minds and actions of a people'.[45] This is a possibility, but maybe it also has something to do with what Geoffrey Scott called the 'ethical fallacy' of architecture: discussions of the built environment often contain assumptions about 'human character'. Do representations such as these involve a genuine commitment to a particular vision of human nature, or are they a trick intended to lend a sense of urgency to a particular design preference or real estate venture? Maybe the question answers itself when it is put another way: who benefits from this industry of representations about suburbia?

The fact is that the dwelling place is seldom the determining factor in the quality of a person's life, except in extreme cases. On the other hand, representations of the quality of life are often the determining factor in the types of dwelling that might be made available for people to live in. And this means that it is in everyone's interest to know what truths are being claimed on their behalf.

To end with some more science fiction, in 1952 Frederick Pohl and C. M. Kornbluth published their classic novel *The Space Merchants*, which offered a brilliant parody of the real estate marketing techniques discussed a few years later by Packard. The novel details an overpopulated future society in which people jostle for space to live on stairs, in corridors, and exposed on rooftops. The wealthy might enjoy a minuscule private cell. The ordinary person is fortunate to afford a lease on a single step on a stair. In the midst of this comes an advertising man who hatches the idea of marketing properties on the planet Venus. His sales pitch is rebuffed by those with an economic interest in the status quo:

> [The] Industrial Anthropology [department] gave me a setback. [They] complained: 'You *can't* make people want to live in a steam-heated

> sardine can. All our folkways are against it. Who's going to travel sixty million miles for a chance to spend the rest of his life cooped up in a tin shack – when he can stay right here on Earth and have corridors, elevators, streets, roofs, all the wide-open space a man could want? It's against human nature . . .! [It's against] the American way of life.'[46]

Thrown into the midst of the classic anti-suburban debates of the 1950s, it seems as if Pohl and Kornbluth were implying that the relationship between planning, human nature and desirable lifestyles is every bit as pliable as architects and advertising agents need it to be.

Notes

1 'Destroy All Humans!', developed by Pandemic Studios, published by THQ, 2005.
2 Sidney N. Brower *et al.*, 'Planners' People', *Journal of the American Institute for Planning*, vol. 32, no. 4 (1966), pp. 228–33.
3 Geoffrey Scott, *The Architecture of Humanism: A Study in the History of Taste*, London, Constable and Company Ltd., (1914) 1929, pp. 121–64; quotation from p. 123.
4 Denise Scott Brown, 'The Public Realm, The Public Sector and The Public Interest in Urban Design', *Architectural Design*, vol. 60, no. 1/2 (1990), pp. 21–9; quotation from p. 23.
5 I have discussed some of these issues previously in 'Communities of Dread', in Sarah Menin (ed.), *Constructing Place: Mind and the Matter of Place-Making*, London, Routledge, 2003, pp. 111–20.
6 Formed in 1928 and disbanded thirty years later, the Congrès Internationaux d'Architecture Moderne (CIAM) was the official body of Modernist architecture and planning. Its members worked to forge an international consensus towards the built environment and to enshrine this at the centre of planning education and policy in governments worldwide. See Eric Mumford, *The CIAM Discourse on Urbanism*, Cambridge, MA, MIT Press, 2000, especially pp. 9–16.
7 Lewis Mumford to José Luis Sert, 28 December 1940, cited in Mumford, *The CIAM Discourse on Urbanism*, pp. 133–4. (Italics in original.) Mumford reiterated the absence of this 'fifth function' in a letter to an associate: 'Did I tell you that Sert . . . had in accordance with CIAM instructions written his whole book . . . without a single reference to the functions of government, group association or culture?' See Mumford to F. J. Osborn, 27 November 1942, cited in ibid., p. 132; see also p. 142.
8 Lewis Mumford, *The City in History*, (1961) 1979, cited in Mark Clapson, *Suburban Century: Social Change and Urban Growth in England and the USA*, Oxford, Berg, 2003, p. 5.
9 J. G. Ballard, *High Rise*, London, Flamingo, (1975) 2003.
10 *Home*, directed by Richard Curson-Smith, BBC TV, 2003; adapted from Ballard's short story 'The Enormous Space' in J. G. Ballard, *War Fever and Other Stories*, London, HarperCollins, 1990; broadcast on BBC 2, Saturday 15 January 2005.
11 Flint begins her essay with a passage from Arnold Bennett's novel *A Man From the North* (1898). Suburbs are wonderful places, Bennett remarks, with a single street containing more intrigue and richness than 'a hundred Balzacs could analyse in a hundred years'. The novel unfolds, however, to show how a promising young writer is sapped of ambition by his work as an accountant; he ends up marrying a dreary wife and retreating to what Flint calls the 'cultural desert' of the suburbs. It ends with Bennett reversing his earlier, positive assessment of suburbia, which has now become symbolic of the end of creative endeavour: 'it would be impossible to write in the suburban doll's house which was to be theirs.' Thus: 'suburbia,' says Flint, 'rather than being perceived as the initially promised complex of choice, now appears no more than a limited set of known systems.' See Kate Flint, 'Fictional Suburbia', *Literature and History*, 1982, vol. 8, no. 1, pp. 67–81, especially pp. 70–80; citations from pp. 67, 79; quotations from pp. 76, 79–80.
12 Marina Warner, 'Our Zombies, Our Selves', paper presented to the Department of Art History and Theory, University of Essex, 20 January 2005; and Hugh Freeman, 'This Place is Driving Me Mad', paper presented at The Good Life Conference, Centre for Suburban Studies, Kingston University, 24 September 2004.

13 'Destroy All Humans!', developed by Pandemic Studios, published by THQ, reported in *Edge*, June 2005, p. 42, and July 2005, p. 87. For a more extensive list of negative accounts of suburbia, encompassing literature, film, TV and pop music, see Clapson, *Suburban Century*, pp. 5–15.
14 Vincent Scully, 'The Architecture of Community', in Peter Katz, *The New Urbanism: Toward an Architecture of Community*, New York, McGraw-Hill, 1994, pp. 221–30.
15 Andres Duany and Elizabeth Plater-Zyberk, *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*, New York, North Point Press, (2000) 2001, pp. 209–10, 237–8.
16 Peter Calthorpe and William Fulton, *The Regional City*, Washington, DC, Island Press, 2001, pp. 31–40.
17 Michael Leccese and Kathleen McCormick (eds), *Charter of the New Urbanism*, New York, McGraw-Hill, 2000, passim.
18 Urban Task Force report, chaired by Lord Rogers, *Towards an Urban Renaissance*, London, Spon, 1999.
19 Adrian Little, *The Politics of Community: Theory and Practice*, Edinburgh, Edinburgh University Press, 2002; quotations from pp. 1–3, 6–7.
20 I omit Jane Jacobs from this list as she was concerned with inner-city community relations rather than suburban ones.
21 David Riesman, in collaboration with Reuel Denney and Nathan Glazer, *The Lonely Crowd: A Study of the Changing American Character*, New Haven, CT, Yale University Press, (1950) 1960, pp. 3–4.
22 Ibid., pp. 5–7.
23 Ibid., pp. 9–36, 256; especially pp. 16, 18, 22.
24 Ibid., p. 278.
25 Ibid., pp. 295–7.
26 Ibid., pp. 239–75, 304–7.
27 David Riesman, 'The Suburban Sadness', in W. M. Dobriner (ed.), *The Suburban Community*, New York, Putnam, pp. 375–408; quotation from p. 375.
28 Ibid., pp. 380–3, 399–400; quotation from p. 377.
29 Ibid., pp. 380–1, 384.
30 Ibid., p. 386; see also p. 377.
31 Vance Packard, *The Hidden Persuaders*, London, Penguin, (1957) 1981, pp. 27–37, 45–53, 190–6, 207–16; quotations from pp. 45, 191–2, 216. (Italics in original.)
32 William H. Whyte, *The Organization Man*, New York, Doubleday Anchor, 1956, pp. 6–8, 16–66; quotations from pp. 6–8.
33 Ibid., esp. pp. 9–15, 33–4, 51, 64–6.
34 Ibid., pp. 6, 10–11.
35 Ibid., pp. 295–309; quotations from pp. 296, 305, 309.
36 Ibid., pp. 310–29; quotations from pp. 314, 318, 320, 323–5, 328.
37 Private interview, London, 5 February 2003. Author's italics.
38 Clapson, *Suburban Century*, pp. 8–9, 13.
39 Ibid., pp. 51–69; quotations from p. 51.
40 In the early 1960s Carol Lubin, the social planner for Reston in the US, visited England in order to learn from the first generation of English new towns which had been established shortly after the war, such as Harlow and Stevenage. Later in the decade Suzanne Beauchamp, the social planner for Milton Keynes, absorbed the ideas of the American sociologist Melvin Webber, who famously advocated the new types of community that could be sustained by advances in telecommunications and transport. Community need no longer be based on 'propinquity' alone, although people should be encouraged to make face-to-face contact when it suited them. For the careers of Carol Lubin and Suzanne Beauchamp, see Clapson, *Suburban Century*, pp. 152–6, 158–9 and 161–2.
41 Ibid., pp. 69–72, 143–67; quotation from p. 51.
42 Ibid., pp. 125–41, esp. 126–34; quotation from p. 126; citations of E. H. Hare, 'Mental Health in New Towns: What Next?' (1966) on p. 128, and Stephen Taylor and Sidney Chave, *Mental Health and Environment* (1964) on p. 129.
43 Ibid., pp. 134–8.
44 Private interview, 1 August 2003.
45 S. Donaldson, *The Suburban Myth*, New York, Columbia University Press, 1969, pp. viii–ix.
46 Frederick Pohl and C. M. Kornbluth, *The Space Merchants*, (1952) Gollancz, London, 2003, p. 33.

Further reading

Mark Clapson, *Suburban Century: Social Change and Urban Growth in England and the USA*, Oxford, Berg, 2003

Scott Donaldson, *The Suburban Myth*, New York, Columbia University Press, 1969

Andres Duany and Elizabeth Plater-Zyberk, *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*, New York, North Point Press, 2000/2001

Peter Katz, *The New Urbanism: Toward an Architecture of Community*, New York, McGraw-Hill, 1994

Adrian Little, *The Politics of Community: Theory and Practice*, Edinburgh, Edinburgh University Press, 2002

Chapter 12

The English university of the 1960s

Built community, model universe

John McKean

Autobiographical introduction

I was, as far as I can tell, the first architect to live on the campus of one of the new English universities. This admission helps contextualise mine as an unusual student experience, on both sides of that crucial divide which dates from *les événement*s of May 1968. First, for my 'year out', I worked with Bernard Feilden as a semi-qualified architect in the mid-1960s. Feilden & Mawson, architects in Norwich, built a 'university village' which began decamping across the road as Lasdun's blocks became finished, and I spent most of my free time on that very new campus of the University of East Anglia, where I sang in Philip Ledger's new university choir and socialised with the small core of students who were all engaged in this rather exciting new experiment in living. The first pyramid residences and spine blocks were becoming occupied. The architect, Denys Lasdun, came and gave us a talk – poetic images of landscapes, paintings and hill towns. He was visibly shocked and hurt by the questions at the end which focused on acoustic problems in the new flats and the fact that the hot water system did not perform correctly.

Second, a few years later, having both practised and taught architecture, I went as a graduate student to keep warm round the famous winter bonfire on the megastructure deck of the University of Essex – this made outraged headlines in *The Daily Telegraph* in 1970 as the 'University of Revolution', not long after *The Sunday Telegraph* had dubbed Sussex the 'University of Sex'.



12.1

'Bonfire' at the 'town centre' of the University of Essex, during a brief, mid-winter student protest against double jeopardy policies: the university (seeing itself as a separate community) punished three students convicted and fined (by the wider community) on drug charges. Testing the boundaries of discrete, built community – model universe? From *Illustrated London News*, 16 January 1971.

Windows smashed, fire hoses

CAMPUS FREEDOM PLAN CRASHES IN WAVE OF VIOLENCE

By R. BARRY O'BRIEN

AN attempt to create a new type of university in Essex by housing students in restric-on-free tower blocks of flats instead of upervised halls of residence is collapsing in a ave of student vandalism and drug taking.

Broken windows, smashed light fittings, slashed fire ses and other violent damage have become common-ce on the campus at Wyvenhoe Park, near Colchester, ere students fought firemen who were trying to put

so adult it makes you fe childish."

While some students tu violence and vandalism, turn to pot. Many who di smoke pot before they we Essex have since b smokers through daily c with flat mates who obtai drug when they visit L at weekends.

Socially acceptable

One such smoker said: claustophobic atmosphere pot-smoking socially accep I am sure there are stu who wouldn't smoke if th vironment was different.

"They have given us so freedom here, but nothing with it. That's why some smoke pot. It's a sociable to do, and at 10s an oun cheaper than alcohol. Y

Telegraph **ANARCHY AT ESSEX** 26/11/70

YESTERDAY WE REPORTED a disgraceful disturbance at Essex University, in which 1,000 "students" went on strike and firemen attempting to put out fires on the campus were assaulted by foulmouthed ruffians. Today we present an account of what life at this place is ordinarily like. It is hard to see how any parent or responsible person, believing it to be true, as we do, could read it without profound disgust and alarm. "At Essex," the proctor remarks, "we try not to repeat our mistakes." What Essex appears, in fact, to be repeating is one of humanity's oldest and most tragic mistakes—the idea that law and order in some way degrade man and that it is only in anarchy that he can find perfection.

Who is to blame for the result? Not surely the students, though many misfits must be drawn to Essex by its unenviable

12.2

The perception of that bonfire and strike in the *Daily Telegraph*, article and leader from 26 November 1970.

Living in the Essex towers for a year, I shared a student flat with eleven others. (Daniel and Nina Libeskind had a little married flat to themselves.) I would stand at the window of my room, often having walked up the ten flights of stairs when the lift was out of order, and survey the strange place below me. Mimicking life on a council estate, seeing that fragment of an archetypal modern city, I wondered at this extraordinary enterprise. Whatever *was* this new identity so boldly and crudely sketched here?

Many years earlier, John Dewey argued that 'education is a process of living, not a preparation for future living'.[1] I believe that learning happens in communities of practice. If the university's goal is education, then one wide stream of planned and built possibilities follows. But if the university's goal is enculturation – the initiation into, or rite of passage through, a cultural condition – then the planned and built consequences are very different. From this perspective, while I was standing in 1971 looking out over Essex, it seemed to me that the replacing of ivory towers with tower-blocks did nothing to re-engage learning with the world, but simply replaced one image of a separated universe by another. What was going on?

Four questions

One architect, a university planner from the early 1960s till today, articulated these underlying issues clearly. With his thinking liberated by the excited heady air of 1968 he posed four questions:

1 Is it really necessary for contemporary society that higher education be organised in a stable and codified institution?
2 Must the activities of higher education take place in buildings designed especially for that purpose?
3 Is there any direct and reciprocal relationship between that educational activity and the quality of the buildings in which it goes on? and
4 Must the planning and construction of buildings for higher education be entrusted to specialists?

In this last question, its 'how' implications might quickly obscure the 'why' core, so it could perhaps more clearly be rephrased as:

4 Must decision-making about university building be entrusted to specialists themselves so formed within that institutional frame that it is requirements of the institution which seem to them fundamental?

Giancarlo De Carlo posed those questions, in these words, at the end of the 1960s.[2] And so this chapter will use his European distance to frame the English situation. Three years later, at the start of the 1970s and unaware of De Carlo's paper, I wrote an article on the first post-Robbins university (Stirling) in *The Architectural Review*. I ended a comment on its beautiful campus, which is set beyond the city in a country park, with the words:

> One may question this role for the university today: the élite, separate, breeding ground of an unreal discontent [it *was* the early 1970s]; a profligate waste of public resource in operating for only half the year; a snub in the face of the homeless by offering new university residences as holiday homes on a commercial basis; the clear division from polytechnics and other second-class establishments, and so on. Need a university be a series of neurotic country house parties (two or three a year), with far too many guests and going on unbearably long? Or can one slowly work back, socially and politically, from the new campus élite which is largely a UGC [University Grants Committee] invention, from the distanced but self-conscious campus student to the outside world of ordinary people, of which the university could be a more mature part? Although architectural implications from such lines of thought may not be immediately obvious, one remembers the visiting vice-chancellor quoted in Gilbert Ryle's *Concept of Mind* who – after being shown round Oxford's wonderful colleges, halls, libraries and offices asked: 'most impressive, yes; but where is the university?'[3]

And in another essay written shortly after that, I added:

> Not only is the campus university, by its independent existence, depriving the city beyond its walls of qualities which would add to its positive thriving complexity. But by simply *being* a separate body, it is diminishing the urban society beyond. For this is an adolescent attitude.[4] It is not only socially just, but it is humanely more mature for the university to grow up, discard its residential enclave, and face the positive disorder out here.[5]

In the earlier 1960s there had been a few similar noises. For example, many people in Norwich had wanted the university to be integrated within the city. And Lionel Brett, when arguing in *The Architectural Review* about new universities, stated that 'any activity that takes itself out of the city or refuses to come into it, impoverishes the city and impoverishes itself'.[6]

But the prevailing mood was far too strong to heed that. The University Grants Committee demanded a site of at least 80 hectares for any application for a new university,[7] and paid considerable attention to the physical attractiveness of competing locations.

There was an optimistic, elated atmosphere surrounding the new British universities during the decade after the foundation of the Univerity of Sussex in 1958 until 1968, when the student world erupted following *les événements* in France – and shortly after which De Carlo's and my comments were made. For English architects, the universities had become the 'institutional archetype' of their age, to quote the title of Joseph Rykwert's article in the Italian journal *Zodiac*'s issue on Britain.[8] Hopes and visions during that decade were high both architecturally and socially. The mentalities forming the new map of learning in these new institutions

had been formed in the struggle against its ideological nemesis, Nazism.[9] And there was a new belief in youth – young President Kennedy had routed the McCarthy years. The social purpose for which modern architecture had been stumbling through post-war Britain found its epitome. The image of the brave new world, the final phase of post-war reconstruction was to be epitomised in these few special places for those few chosen blessed youths.

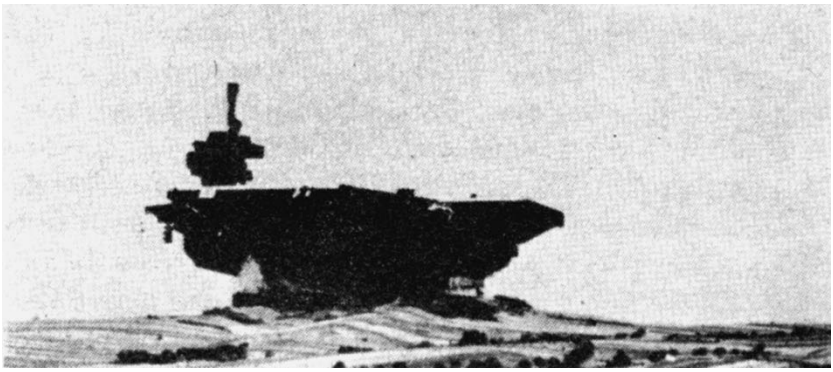
What actually was the size of this enterprise? In 1960 barely 2 per cent of the population in the UK went to university. 'Even at its most optimistic estimate, it seems unlikely that the proportion [of young people] in a position to make a [university] application could rise above 8 per cent of the population', said a contemporary study.[10] Quoting this, the Robbins Report hoped that, if the government were to back university education wholeheartedly, 'the percentage of the age group entering Further and Higher Education . . . will reach 15 per cent towards the end of the first quarter of the twenty-first century'.[11]

Despite this small-scale expectation, the symbolic importance was immense. 'The great new university movement afoot in Britain is somewhat similar to, and perhaps as exciting as, the cathedral building movement of the early twelfth century', exclaimed an overexcited editorial in *The Architectural Review* in July 1964.[12] By that time the architects for the new universities had been appointed: Capon at Essex, Lasdun at Norwich, and the three knights Matthew, Holford and Spence for York, Kent and Sussex, respectively.

In this heady atmosphere, *Higher Education*, better known as the Robbins Report, sold more copies than any previous government document when it was first published in 1963. But it seeded few new institutions, and the first generation of new babies – the Shakespearean Seven as they were known[13] – all preceded it.[14] Actually the metaphor of children is appropriate: many towns wanted a university, although very few knew clearly why, and forty applications were received by the University Grants Committee in the early 1960s. And most parents, even those who carefully plan for their children, are affronted by the rowdy independent adolescents they produce – which all seven of these new institutions were to become a decade or so later, before they achieved a benign, superior middle-age from which they could in turn condescendly look at another generation of 'new university babies' in the 1990s.

Confusion around separate worlds

One of the key themes of the seven new universities was the building of a community, and university residence was therefore central to the formation of what, in many cases, was trying to be a model town, or at least a paradigm for the town. The very first post-Robbins conception, Stirling University, whose brief was prepared in 1966, would have liked to escape that dream; its first Rector clearly felt that being a landlord was no part of the university's role.[15] However, the university authorities had to provide accommodation: the UK policy of *national* universities, which involved maintenance grants to enable students to live at any British university where they were offered a place, made that inevitable. The first seven were unashamed of their aim of building a separate community. And the proportion



12.3
Hans Hollein, Aircraft Carrier City, a 1964 image referred to in contemporary new town critiques (especially Cumbernauld), was even more resonant with the new universities.

of their buildings allocated to housing students was from two-fifths to a half of the total university floor-space.[16]

These institutions were to be novel and innovative. The intellectual programmes of Sussex and Essex – both of which were published as books – were indeed innovative, even modestly radical.[17] 'The foundation of a new university provides an unparalleled opportunity to fashion a whole curriculum', is how Asa Briggs opened his essay on Sussex.[18] And Noel Annan, the chair of Essex's Academic Planning Board, wanted his new university to be 'as experimental as any university, hopefully more so'.[19]

However, their open and exciting intellectual programmes were often allied with equally regressive and conservative architectural programmes. None of the architectural responses could be said to have taken up the challenge of 'an unparalleled opportunity to fashion wholly new types of *places*'.[20] Even when built at York in CLASP (a prefabricated system for public-sector buildings), they were based on a collegiate structure, while at Essex the explicit model was a medieval Italian hill-town on to which were collaged tower blocks of housing. Basil Spence said, 'to be given an attractive parkland, a beautiful downland valley rich in mature trees, and then be asked to build a university on it, this must be the dream of every architect'.[21] Spence may have been the most romantic and reactionary of the English university architects of the 1960s, but here he was surely voicing what they all felt.

Interestingly, despite all the 'new' debates about the ownership of space – which of course became a key issue in the May '68 events in France – and while many new universities attempted to democratise space (often they had no Junior Common Room, no Senior Common Room, no collegiate structure, and no student union building), their camouflaging of institutional realities could lead to extreme conflicts. I carefully described what happened at Essex in 1970,[22] when boundaries of the ideal universe were tested – just as might be seen in *The Truman Show* or *Pleasantville*. The incompatibility between the concept of 'university' (a closed hierarchical institution) and what I called 'anti-university' (the image of no institutional control structures, no boundaries beyond those in the civil society beyond) – a paradoxical position to which the university did not grasp that it was committing

itself – produced disruptive behaviour exactly like that presented by an adolescent individual in a parallel social family, a situation not uncommon in British parenting practices at the end of the 1960s.

When John Fulton addressed the Home Universities Conference in December 1960, he put the issue of residence low down in priority on his list of key questions about the nature of new universities.[23] Yet, inevitably, residence was one central issue in forming the university space, in forming the corporate shape of these institutions. And the medieval origins of the separate, residential university were clearly in the minds of those behind the universities programme in the 1960s. (Fulton happily dubbed Sussex 'Balliol-on-Sea'.)

The traditionally separated '*universitas*'

Deep in the university subconscious we were sure to find Plato, the classical spirit of rationality, of unfettered Socratic thought, and of dissenting democracy in the groves of academe. And post-68 it surfaced not just in books such as Anthony Arblaster's *Academic Freedom*,[24] but in architects' forms: new universities of that moment had central student spaces called, in all seriousness, the agora;[25] and Spence, not university educated himself, talked of how the Athenian *stoa* had influenced him when he was planning Sussex.

But, in fact, the university as we know it comes from the medieval spirit of corporate association. The term '*universitas*' [a whole] implied separation, social totality, a little universe – and this was the essence of the first three virtually simultaneous foundations in Bologna, Paris and Oxford. *Universitas* did not imply a totality of knowledge to be studied therein, but rather the reverse – a guild or closed group, which had come together for a specific (and originally not necessarily educational) purpose. Precisely echoing that, all the Shakespearean Seven were to be on green-field sites away from the contamination of urban society. Thus, the first action – whether eight centuries or forty years ago – was neither intellectual nor academic, but the formation of the exclusive unit, and its location was safely quarantined beyond the city, in the 1960s almost always in the centre of a country park.

In addition, in their early forms, one or more medieval *universitas* formed a *studium generale* of which the distinctive feature was that the teachers and students were not local; this was taken over unquestioningly by the new foundations of the 1960s.

Until the fifteenth century, the *universitas* was a body with corporate rules and privileges and degrees but no corporate property,[26] and simply met in halls or churches to hear the discourses of their famous doctors. Then they formed colleges (Paris at one time had fifty), but only at Oxford and Cambridge did they establish the residential academic communities that we know. These 'separate' communities were as visibly different in their dress as in their architecture, in many ways similar to monks in their monasteries. As an Oxford University edict of 1358 imperiously put it, those whom God 'had distinguished from laymen should also be distinguished from laymen in appearance'.[27] They were often the deadly enemies of the nearby townsfolk: in 1375 the people of Cambridge burned

university documents, and in 1975 skinheads in Oxford roamed the streets looking for long-haired students to attack. That in 1965 Sussex students passed an important vote not to wear gowns, particularly when in Brighton, shows how the distinction remained uppermost – even in its confusion.

The essentially heterotopic nature of the university, both ancient and modern, does not need more elaboration. Rather than continue the historical tale, two notes from the centuries between the medieval and the mid-twentieth-century establishments can frame the story of the 1960s. First comes the notion of the university as a playground for the sons of the gentry: the seventeenth- and eighteenth-century university, besides training priests for the established church in England, was a pleasant club for the idle and rich, far from intellectual excellence. As access became more open, so university – along with the so-called 'public school' – became a way of socialising the aspirant to elite status. Second, linked to this, the nineteenth-century university became a finishing school where upper-class manners were inculcated, with team games and communal exercise added in.

In other words, the aim of university was initiation into a particular cultural condition. Basil Spence said his goal at Sussex was 'mothering and fathering' the students, 'helping them over the fence into manhood and womanhood'. (His next words speak of how 'The gentle courtyards of Oxford and Cambridge have proved' this.)[28] Even today, in many British universities Wednesday afternoons are free of teaching, to allow for the Arnoldian bonding exercise of team games. The campus university, then, is an instrument for prolonging adolescence.

The key to this is its very visible corporate identity, the distinct physical university body wrapped round the separated university community. The idea of difference, even without the layering of privilege and so on already mentioned, is imaged in absurd microcosm: commonly through the 1960s sensitive architects were treating students as a separate species. Designers were not just proposing social groupings and organisations for them, but were designing special desks, light fittings, even chairs, for them. Student chairs, somehow, were different from ordinary chairs: Spence designed one range called 'campus'. Immediately after the Second World War and into the early 1950s, with the dearth of good economic designs on the market, it was reasonable for a new public building to commission chairs, from Robin Day for example. But a decade later, a university was doing something quite different when it created the exclusivity perhaps seen at its most extreme in Arne Jacobsen's *gesamtkunstwerk* of St Catherine's College, Oxford.

What was so bizarre about all this was that here were fine architects designing careful accommodation. There was a sensitive textbook on the subject by Bill Mullins and Phyllis Allen,[29] and there was Andrew Derbyshire, arguing for,

> in one [town], a wide choice of [people], work, leisure and everyday living facilities, within a concentrated spatial compass. Identity, choice and comprehensiveness locate, reassure and challenge [people] in a free but humane structured environment. Experience suggests that people find it difficult to be negative and destructive in such a context.[30]

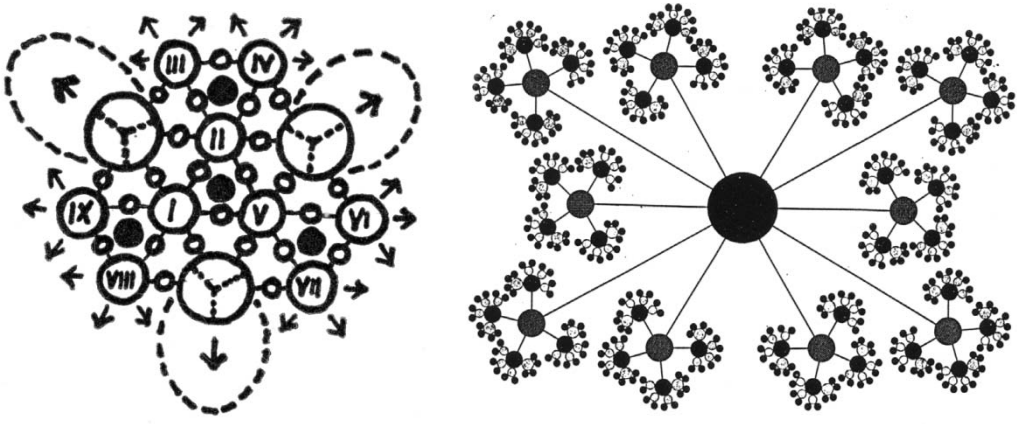
Actually he did not say 'town' or 'people': Derbyshire was designing York University at the time, and he said 'university' and 'staff and students'. That is the point, and it aroused my response:

> What a fine notion he describes. It is a recipe for the kind of humane environment for which our cities are crying out. It is a model of the kind of supportive structures which particularly the *less* capable, the *less* mature, the *less* secure, the *less* advantaged among us would thrive within. But is it not iniquitous that, instead of coming out into the wider society, such fine concepts are sensitively developed – and lavishly built – for an exclusive, already vastly privileged minority rather than for us all?[31]

Whether the architects and planners were trying to create model communities (as at York) or quite explicitly parody current notions of towns (as at Essex, with its vertical traffic segregation and high-rise housing), they were all seduced by the idea of the model, the separate complete place. As an editorial in *The Architectural Review* transparently put it in 1963, 'university architecture in the 1960s in Britain has released, and is consuming, a long pent-up flood of interest and skill in the planning and shaping of total environments'.[32]

Challenges to the architects' ideal worlds

However, at that same time and in their own ways, some free-spirited English thinkers from Cedric Price to Michael Young were offering quite different, and more grown-up, models. Price's idea of the 'Potteries Thinkbelt' (utilising the derelict railway network of the Potteries district as the basis for a new technical higher education) and Young's notion of 'Brain Trains' (where commuters would teach each other) both offered radical thoughts allied with that quintessentially English



12.4a and b

Diagrams of spatial/social relationships for new model communities: (a) from York University's development plan (Robert Matthew Johnson Marshall) and (b) from Surrey University's plan, (Maguire & Murray).

trope – the linking of education and rail travel. Of course, Price's little Inter-Action Centre (designed with young Will Alsop in the 1970s) gave a few hints of these models, while Young's greater brainchild, the Open University, was launched in 1964.[33]

Meanwhile Reyner Banham argued:

> At a time when ideas on the function and nature of universities are in the melting pot . . .; when pedagogic methods and course contents are subject to overnight revisions; . . . when the social backgrounds and life styles of students can be taken less and less for granted . . . at this time architects are offering to paralyse change by fixing the first concept in expensive and monumental structures.[34]

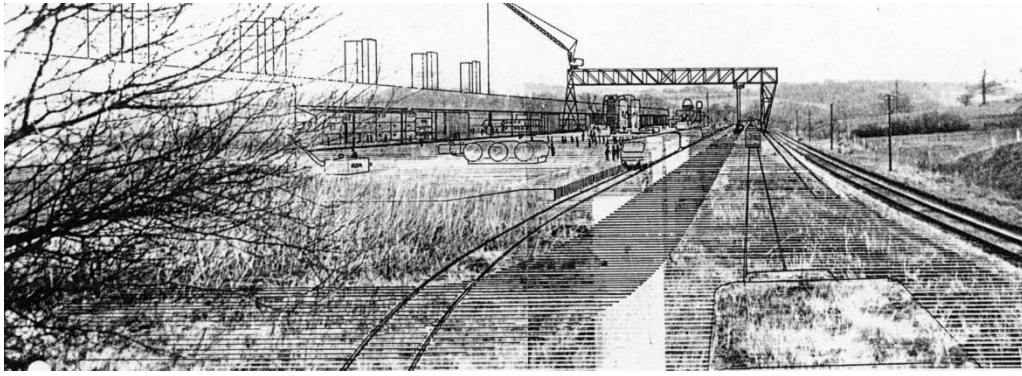
This statement was published in 1966, not long after Price had suggested the Potteries Thinkbelt scheme in *Architectural Design*.[35] In an accompanying article, Price made his objections to the new campuses quite clear:

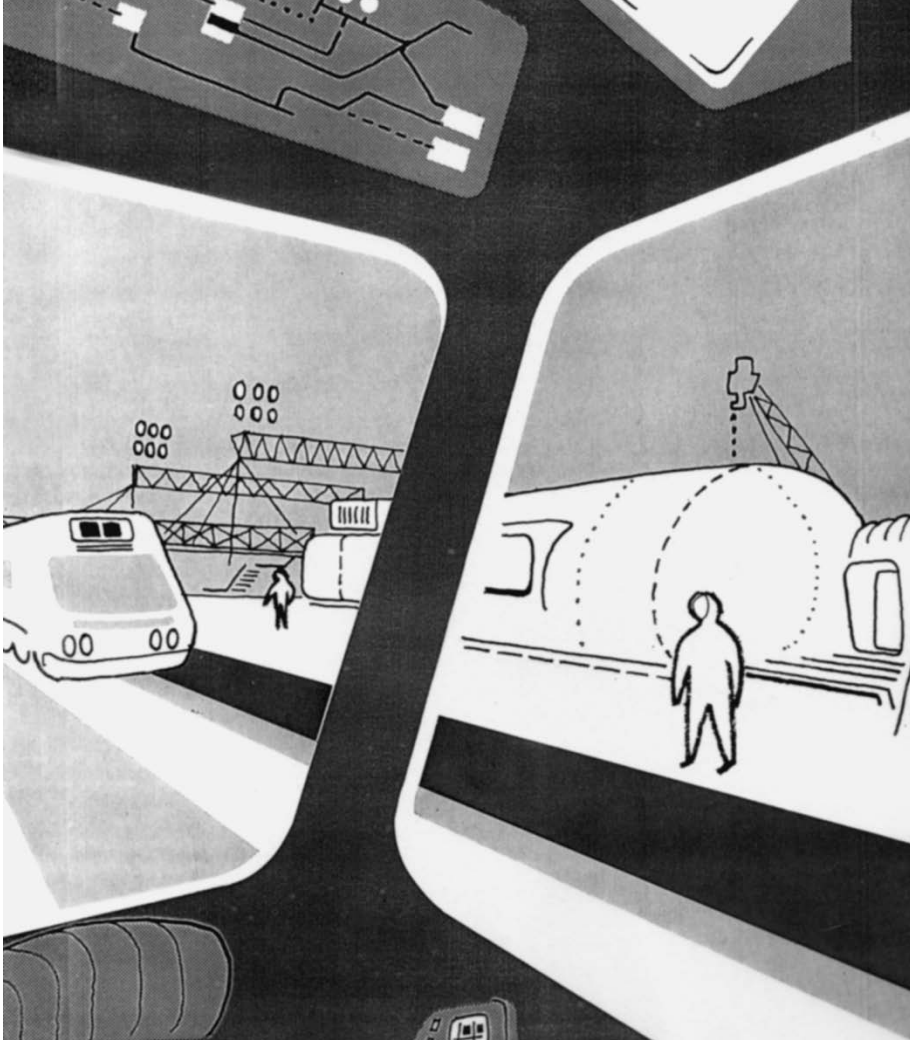
> The housing of a major activity such as higher education should be viewed in architectural terms as a demand to increase the availability of such a service on a national scale, though its dispensation may through necessity require a limited locale. This would appear to be in opposition to the current higher educational practice where the containers are dressed up to look like a medieval college with power points, and are located in gentlemanly seclusion.[36]

In fact, he concluded that this activity 'should be in contact with areas near and far where the rest of life is to be spent'. Price elaborated this notion of higher education as a universal service rather than an elite initiation rite for the few in considerable verbal and visual detail. It led Bianca Raboni to write:

> What is of particular interest in this formulation is the attempt to rise above the codified image of university *as a place which is physically*

12.5
Cedric Price, Thinkbelt proposal





12.6
Cedric Price, Thinkbelt proposal

> *defined with precise, formal boundaries*, as the expression of an alternative privileged function with respect to the normal home/work routine; and to *re*-propose it as an inseparable element of the life of every citizen, a fulcrum, open to relationships which make the values felt throughout the territory and thus, on a new scale . . . It seems to me that this proposal represents a useful hypothesis for future interventions to refer to.[37]

This interesting Italian comment from 1968, in an essay coolly entitled 'Universities in England: Still an Open Question', leads back to De Carlo and his radical questions.

'Education is the result of experience. The wider and more complex the experience, the deeper and more intense the education.' That was how De Carlo started to answer his first question. Dewey's 'education as part of life, not preparation for it' is only half the story; the richer the real life is already – with all its conflicts and difficulties – the richer the potential education.

The underlying contradiction was unavoidable: while the new universities' curricula in England were often formed of radical ideas, socially and spatially they were always producing regressive backward-looking educational environments, by being cut-off, isolated and seen as complete worlds in themselves. And while the basic decisions were taken far away from the architects, they were only too happy to go along with them – as already quoted, Spence said that to design a new university was 'the dream of every architect'. Added to this was their own sentimental view of the university – as seen from the outside; for virtually none of the architects involved in creating the new universities had been university-educated themselves.

And why did there have to be universities anyway? De Carlo continued his answers with a glance through history: 'In periods of expansion, societies had no need to organise educational activity. The problem arose only when societies began to generate institutions, that is, when they passed from the stage of self-definition to the stage of accumulation and preservation.'[38] To paraphrase De Carlo, the Greeks had no formalised education until the late Macedonian period, the Romans until the Empire, and the Renaissance states until the Reformation and Counter-reformation. In adddition, in revolutionary times education took place in the streets and clubs (in Paris 1790), and in the factories, soviets and ateliers (in Moscow in 1919).

I would add that our own revolution, the very British Industrial one, was engineered by men such as Telford, the Brunels and the Stephensons who had no formal education; and its key building, the Crystal Palace, was produced by Fox and Paxton in 1851 – men who were quite uneducated in the institutional sense. Such men scoffed at the universities in their day – as indeed some still do today – for being simply the regulators and codifiers rather than the originators of knowledge. They argued that anyone with anything original to say was outside the universities, which simply formed knowledge into systems – more or less arcane, and more or less comprehensible – and repeated them as if these systems themselves were valuably original.

By the nineteenth century the modern world was no longer going to accept that – a point exemplified by the institution where I studied architecture, John Anderson's University (now, after a mixed history, called The University of Strathclyde), which broke away, with its medical, law and science schools, from the corrupt Glasgow University at the end of the eighteenth century. And if post-war British architecture showed any ability to embody *that* university image, it is in the ostentatiously assertive red brick (plus aluminium, glass, concrete and red tile) engineering building designed by two young expatriate Scots in 1957 for Leicester University.[39]

But by the 1950s, Britain had lost its empire and was struggling for a role, and its elite was looking far from angry young men in redbrick Midland colleges: it is understandable that it grabbed at the chance of representing and reproducing itself afresh in the form of utterly new universities. Therefore, these were very clearly *not* modelled on the pragmatic, sharp institutions that had grown out of nineteenth-century realism – even though it was scientists, technologists and

doctors who were so badly needed. Instead, they derived from that more ancient (conservative and decadent) tradition outlined above – whatever they might have said about radical curricula. After all, it was 'the first chance for seven centuries to start new universities from scratch',[40] said the first Essex vice-chancellor. Considering the fact that by the 1960s most of the universities in England (though not in Scotland) had been nineteenth-century creations, his comment is very revealing, encapsulating the universities' intuitive reaction against the non-collegiate, integrated, professional, civic institutions.

The campus inevitability

Hence, inevitably, the crop of new English universities were retrogressive *physical* institutions; even if they were not formally backward looking, their architectural Modernism aimed to preserve all the institutional and class integrity of university education. Their closed organisational structures were to be reflected in monumental architectural forms on isolated, extra-mural, campuses.

This was using architectural form in an attempt to prolong adolescence, though perhaps only in the US was this aim unashamedly explicit. There, Woodrow Wilson, as President of Princeton from 1902–10, had urged their architects to build campuses 'with inner quietness', where there was 'containment and common purpose'[41] – in other words, the opposite of 'the city'. Of course it was an opposition that Modernism did not mind at all. After all, urbanism's obsessional purifier, Le Corbusier, had once likened the American university to 'a green city', leading Raymond Rhinehart to call Princeton 'the ideal city – a market-place for ideas set in a garden'.[42]

Interestingly, the *Oxford English Dictionary* sees the concept of the university campus as North American, with the first recorded use of 'campus' in this context being to describe 'the open space between and around the buildings' of Princeton University in 1774. Its first usage in England is precisely contemporary with the Shakespearean Seven universities discussed here, and is recorded by the *OED* as dating from 1958.[43] The essential quality for the tradition of American universities, which was so happily taken over in England from the late 1950s, remained a sense of non-urban openness and a perception of separation. There is no simpler definition of the pre-war Corbusian city idea.

Thus in England, the collegiate memories and Oxbridge dreams of the radical vice-chancellors, with their own youthful and transatlantic visions, incorporated the model, if not the images, of American forms. For after the Second World War, it was said that 'only in the USA do the true well-springs of "Western Civilization" still flow'.[44] This, then, easily influenced the English architect-planners' more or less Modernist, but equally romantic and socially deeply conservative, hopes to create these forms for new institutions that would stand for a renewed Britain.

Separate isolated seedbeds for the future, in model places, all trapped in their artificiality, whose 'mothering and fathering' – even if often taken less literally than at Sussex – simply prolonged adolescence. Even today this remains the unquestioned model in the US. 'The University of Cincinnati wisely cultivated a

plan that would communicate a strong sense of safety and insulate student life within a secure perimeter.' This, from the former head of the Cincinnati architecture school, is a typical comment.[45] Donlyn Lyndon recently politely noted: 'That universities might be responsibly engaged agents of change in the formation of cities, rather than sequestered and isolated campus units, is a topic which has only recently come into mature consideration in the US.'[46] Lyndon's essay centred on De Carlo's influence in the US[47] and leads back to De Carlo's pertinent questions.

Approaching De Carlo's four questions

In the article that discussed the four questions, De Carlo argued that education is a search for both knowledge and for types of behaviour to help individuals flourish appropriately in society. The search for knowledge implies some apparatus, which he called the 'nucleus', that might be quite specialised. The behavioural education implies a place – which he called an 'orbit' – that encourages the kind of social confrontation referred to in the quotation above from Andrew Derbyshire. The concentrated 'nuclei' can aggregate themselves within the structure of the 'orbit' which is permeable with the city and territory.

And so his theme developed, and led De Carlo to argue for a 'refusal to produce objects, finished and defined in every aspect, whatever their scale'.[48] He saw design becoming a process, with no prefigured model as the final goal.

As he tried to respond to his fourth question (about the planning of higher education being based on the presumptions of designers trained within that system and so ideologically reinforcing the *system*), he said:

> The work of the architect should be limited to the definition of the supporting framework – which is not neutral but full of tensions – on which should be able to develop the most disparate organisational modes and formal configurations which stimulate the richest disorder.[49]

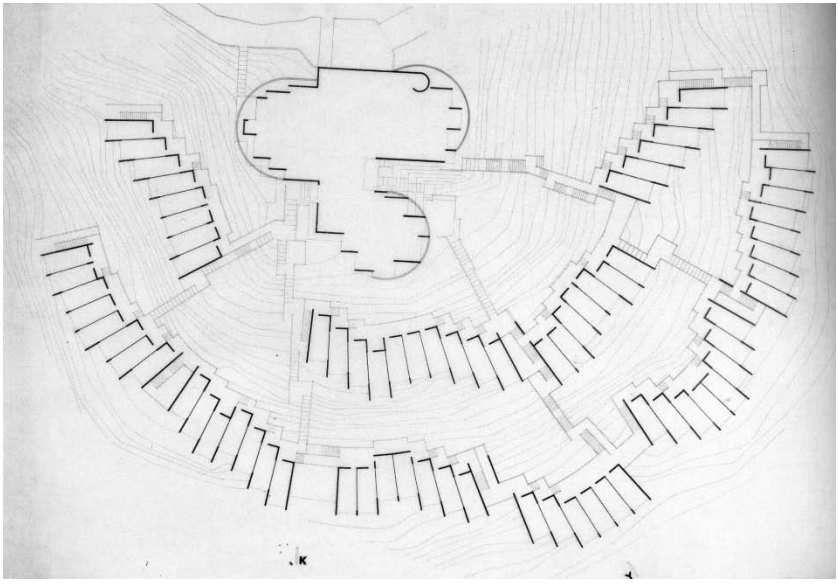
However, unlike his natural ally Cedric Price, De Carlo was actually building. At the time when he wrote this essay, De Carlo had worked as the architect for the Free University of Urbino and its Rector, Carlo Bo, for a decade. He had built a new residential college which had been widely written about in publications, not least in a poetic description by Aldo van Eyck.[50] I had even contrasted his Urbino college with Capon's University of Essex.[51] De Carlo had also produced a subtle, complex open master plan for Dublin University in 1963, similar to that created by his friend Shad Woods for Berlin in the same year.[52] He would soon work on many others in Italy. In Urbino, for example, he had built the Law School, was designing its School of Education, and was shortly to start work on colleges for a thousand more students.

Conclusion

As a useful frame for looking at the British experience, De Carlo is a very anglophile Italian. He is the translator of Geddes' *Città in evoluzione* and a builder of Outlook Towers himself, as well as the architect of the first university in Italy to be residential



12.7
The historic city of Urbino with university faculties by Giancarlo De Carlo (outlined in white) integrated within and among the old fabric; the university plan closely dovetailed with the city's town plan (also by De Carlo) from 1966.



12.8
The first residential college for Urbino University by De Carlo (1962–66), with its own 'town centre' and housing spilling down the hillside.

in the same way as the universities in Britain, and whose educational and building programmes were in many ways very similar to the UK ones of that time.

But his focus could not have been further from the British romance about roles (the planner's city) or images (the ideal town, the arcadian university) or even obscure formal associations (towers signifying academic rigour[53]). De Carlo held to a theoretical position about *action* – the nature of citizenship, the nature of learning – rather than those dangerous formal romances. And in so doing, he has left us a very different built legacy from that period – and perhaps therein a hint of what might have been possible in England.[54]

Notes

1 Reprinted in John Dewey, *Experience and Education*, New York, Collier, 1963. Nearly all the references in this chapter are from the few years on either side of 1968. One exception is Lubbock's interesting essay on Essex University – Jules Lubbock, 'The Counter-Modernist Sublime: The Campus of the University of Essex', *The Sixties, The Journal of the Twentieth Century Society*, no. 6 (2002), pp. 105–18. Lubbock repeatedly uses the term 'Team X' as an art-historical movement which he says influenced ACP's design there. A less English-blinkered view might show the texts by De Carlo in note 2, below, to be more representative of the small Team X group than its reduction to 'the Smithsons' foreign policy', as it has been seen from these islands.

2 Giancarlo De Carlo, 'Order-Institution vs. Education-Disorder or Why/How to Build School Buildings', *Harvard Educational Review*, Cambridge, MA, no. 4 (1969), pp. 12–28. At that time De Carlo was also central to a larger study generated from research for the Programme in Urban Territorial Planning at the University of Venice School of Architecture, where he taught; see G. De Carlo, *Pianificazione e Disegno delle Università*, Rome, Edizioni Universitaire Italiane, 1968.

3 John McKean, 'University of Stirling: A Criticism', *The Architectural Review*, vol. CLIII, no. 916 (June 1973), p. 362.

4 I was taking the use of 'adolescent' from R. Sennett, *The Uses of Disorder*, London, Allen Lane, The Penguin Press, 1974.

5 John McKean, 'Do University Students Need Special Housing?', *Journal of the RIBA*, vol. 82, no. 10 (October 1975), p. 17. (Italics in original.) This article started life as a paper given to a British Council course for university planners and vice-chancellors, at the Universities of Cambridge and Essex, 3–5 September 1974.

6 L. Brett (Lord Esher), 'Site, Growth and Plan', *The Architectural Review*, vol. 134, no. 800 (October 1963), p. 257.

7 J. Fulton, 'New Universities in Perspective', in Daiches, D. (ed.) *The Idea of a New University: An Experiment in Sussex*, London, Deutsch, 1964, pp. 14. (Sir John Fulton actually says 200 acres.)

8 J. Rykwert, 'Universities as Institutional Archetypes of Our Age', *Zodiac 18*, undated – end 1968?, p. 61.

9 However, how Jules Lubbock turns the Essex towers into war memorials is too far-fetched for me. See Lubbock, 'The Counter-Modernist Sublime', p. 116.

10 W. D. Furneaux, *The Chosen Few*, Oxford, Oxford University Press, 1961.

11 *Higher Education*, London, HMSO, 1963. This was the report of the committee chaired by Lord Robbins, so is better known as The Robbins Report. Robbins led the UK universities towards forty institutions. Today there are about 170 members of Universities UK, the committee of vice-chancellors, and the sector offers education to virtually 40 per cent of the UK age group. The government target is 50 per cent by 2025. See A. Wolf, *Does Education Matter?*, London, Penguin, 2002, p. 170 ff.

12 *The Architectural Review*, vol. 136, no. 809 (July 1964).

13 These were Sussex, York, Norfolk (later changed to the University of East Anglia – UEA), Essex, Kent, Warwick and Lancaster.

14 *Higher Education* was actually published in late 1963, the day after the Essex University development plan, and even longer after the Sussex, UEA and York ones.

15 In interview with the author, while he was preparing 'University of Stirling: A Criticism'.
16 M. Brawne, 'Student Living', *The Architectural Review*, vol. 134, no. 800 (October 1963), p. 294.
17 D. Daiches (ed.), *The Idea of a New University: An Experiment in Sussex*, London, Deutsch, 1964. And A. Sloman, *A University in the Making, The BBC Reith Lectures for 1963*, London, BBC Publications, 1964.
18 A. Briggs, 'Drawing a New Map of Learning', in Daiches, *The Idea of a New University*, p. 60.
19 Reported to the author by Lord Annan's subsequently chosen vice-chancellor, Albert Sloman, and quoted in J. McKean, 'University of Essex: A Case Study', special issue of *The Architects' Journal*, 20 September 1972, p. 642.
20 As a parallel to Briggs' comment on curriculum.
21 B. Spence, 'Building a New University', in Daiches, *The Idea of a New University*, p. 201.
22 Later published as McKean, 'University of Essex: A Case Study'.
23 Quoted in Fulton, 'New Universities in Perspective', p. 12.
24 Anthony Arblaster, *Academic Freedom*, Harmondsworth, Penguin Educational, 1974.
25 For example, at La Trobe University, Melbourne, Australia, in the early 1970s.
26 By the 1970s, however, many adolescent new universities were bodies overloaded with property, but lacking corporate rules.
27 Quoted in K. Minogue, *The Concept of a University*, London, Weidenfeld and Nicolson, 1973.
28 B. Spence, 'Building a New University', in Daiches, *The Idea of a New University*, p. 203.
29 W. Mullins and P. Allen, *Student Housing: Architectural and Social Aspects*, London, Crosby Lockwood, 1971.
30 A. Derbyshire, 'Student Residence in the 1970s', unpublished paper dated July 1971, quoted in McKean, 'Do University Students Need Special Housing?'
31 McKean, 'Do University Students Need Special Housing?'
32 Editorial, 'The Universities Build', *Universities*, a special issue of *The Architectural Review*, vol. 134, no. 800 (October 1963), pp. 231–2.
33 A social mapping of the physical campus of 'The University of the Air' would be a fascinating study.
34 R. Banham, 'The Outhouses of Academe', *New Society*, 6 October 1966, p. 547.
35 C. Price, 'Potteries Thinkbelt', *Architectural Design*, vol. XXXVI, no. 10 (October 1964), pp. 484–97.
36 C. Price, 'Life-conditioning', *Architectural Design*, vol. XXXVI, no. 10 (October 1964), p. 483.
37 B. B. Raboni, 'Le università in Inghilterra: un problema aperto', *Zodiac 18*: Ivrea, Olivetti, undated – end 1968?, p. 212. (Author's italics.)
38 Giancarlo De Carlo, 'Order-Institution vs. Education-Disorder or Why/How to Build School Buildings'.
39 See J. McKean, *Leicester University Engineering Building*, London, Phaidon, 1994.
40 Albert Sloman in interview with the author and used in McKean, 'University of Essex: A Case Study'.
41 Quoted in editorial, 'Considering the Place of Campus', *Places*, vol. 17, no. 1 (Spring 2005), pp. 6–7.
42 Ibid., p. 60.
43 Ibid., p. 38.
44 N. Davies, *Europe: A History*, Oxford, Oxford University Press, 1996, p. 31.
45 D. S. Friedman, 'Campus Design as Critical Practice', *Places*, vol. 17, no. 1 (Spring 2005), p. 14.
46 D. Lyndon, 'Giancarlo De Carlo in the US', in F. Samassa (ed.), *Giancarlo De Carlo Percorsi: Archivio Progetti*, Padova, Il Poligrafo, 2004, pp. 247–57.
47 However, he does not refer to the De Carlo essay used to frame this chapter.
48 G. De Carlo, 'Order-Institution vs. Education-Disorder or Why/How to Build School Buildings,' p. 29.
49 Ibid.
50 Aldo van Eyck, 'University College in Urbino', *Zodiac* No. 16, 1966, reprinted in John Donat (ed.), *World Architecture 4*, London, Studio Vista, 1967, in *Urban Structure, Architect's Year Book 12*, London, Elek Books, 1968, and elsewhere.
51 McKean, 'University of Essex: A Case Study', p. 665.
52 They are tersely discussed together – between the Milton Keynes plan and Tange's Tokyo Metropolitan Bridge plan – in S. Chermayeff and A. Tzonis, *Shape of Community*, Harmondsworth, Pelican Books, 1971, pp. 229–35.
53 This last was Capon's notion at Essex, as reported by Sloman in Lubbock, 'The Counter-Modernist Sublime'.
54 On De Carlo, see J. McKean, *Giancarlo De Carlo: Layered Places*, Stuttgart and Paris, Menges and Centre Pompidou, 2004.

Further reading

Giancarlo De Carlo, 'Order-Institution vs. Education-Disorder' or 'Why/How to Build School Buildings', *Harvard Educational Review*, 4 (1969), pp. 12–28

Cedric Price, 'Life-Conditioning' and 'Potteries Thinkbelt', *Architectural Design*, vol. 36, no. 10 (October 1964), pp. 483 and 484–97

'Considering the Place of Campus', *Places: a Forum of Environmental Design* 17, no. 1 (Spring 2005)

Joseph Rykwert, 'Universities as Institutional Archetypes of Our Age', *Zodiac 18* (1968), p. 61

Albert E. Sloman, *A University in the Making, The BBC Reith Lectures for 1963*, London, BBC Publications, 1964

Chapter 13

The tall barracks artistically reconsidered[1]

Hyde Park Cavalry Barracks and the total environment of modern military life

Miles Glendinning

Army architecture: a suitable case for Modernist intervention?

There was a strongly marked process of diffusion of modern architecture in post-war Britain, from the prototypes of Utopian idealists in the 1940s to the realisation of totally planned environments in the 1960s. But that process of diffusion was unevenly distributed – not just between London and the rest of the country, but also between different building types.[2] Modern architecture was bound up from the beginning with programmes of social betterment, such as public housing, health centres and primary schools, but some types, notably speculative housing, largely escaped its influence.

The architecture of army barracks might seem a prime candidate for this latter category, being concerned with some of the most apparently conservative and class-stratified organisations within society.[3] But the reality is not quite as simple, as the army has not been devoid of the ideals of Utopian progress that were central to modern architecture. Over the past two centuries, it tried to foster

a strong element of character-building, and its traditional regimental organisation strongly emphasised a community spirit. In some ways, paradoxically, the army provided potentially fertile ground for the Modern Movement's ideals of building a man-made future and of the total environment. A surprisingly diverse range of architectural solutions resulted,[4] including the Hyde Park Cavalry Barracks in central London designed by Basil Spence in the form of a multi-storey megastructure – the focus of this chapter.

The conservatism of traditional barrack design

The emergence of barracks in the eighteenth and early nineteenth centuries – to replace billets in civilian lodgings by closed communities insulated from the menace of radical sedition – was at first associated with only a limited degree of Enlightenment architectural determinism.[5] The main emphasis, as at the gigantic Fort George (1748–68) designed by engineer W. Skinner, was a hierarchical stateliness akin to the planning of contemporary urban terrace housing. Living and working quarters were freely mingled – a mixture symbolised by the single word 'barracks', in contrast to the careful French differentiation between *caserne* and *quartiers*. In the mid-nineteenth century – in contrast to working-class housing – there were almost no model schemes. But at the Hounslow barracks in Middlesex an experimental block of separate married quarters was built in the form of balcony-access flats, like philanthropic housing.[6] And a competition sponsored by the War Office was held in 1855 for model designs for infantry and cavalry barracks, and this led to the first rebuilding of the Hyde Park Cavalry Barracks.

These had originally been built in the post-revolutionary panic year of 1792–93. Because of the site's awkward wedge shape, they were laid out with a stable courtyard at the wider east end and the officers' accommodation at the west. By the 1860s, they had become intolerably squalid and had attracted protests from local residents, so in 1876 they were demolished. T. H. and M. D. Wyatt (the winners of the War Office competition for cavalry barracks) were then commissioned to design the Hyde Park redevelopment (1878–80). But the new barracks used exactly the same layout as before, down to the rectangular courtyard and the married quarters above the stables.[7]

In the late nineteenth and early twentieth centuries, military architecture in Britain followed the general trend in domestic and community building types away from monumental institutions to dispersed colony or garden-city layouts. It shifted straight from massive multi-storey blocks such as Harry Measures' monumental Redford Barracks at Edinburgh (1909–15) to the low-rise First World War hutted encampments. There were some inter-war attempts at lower-density barrack designs, such as the two-storey, H-planned 'Sandhurst' block, but even in the low-density designs there was no attempt at systematic zoning to separate different functions – this was no military equivalent of the garden city.[8] However, during the Second World War, military architecture began to extend feelers towards Modernist architectural ideology, in the prefabricated construction of war-related emergency buildings such as army camps or munition workers' hostels.[9]

This frenzy of innovation abated with the return of peace. In contrast to the push towards more progressive housing and planning manuals, 1948 saw the issue of a revised version of the Barrack Synopsis, which listed standard elements and fittings, down to towel rails and hat stands. As for the buildings, it merely stated that they could be one, two or three storeys high. This synopsis was applied to new projects in conjunction with a limited provision for user feedback through the commanding officers of the regiments, who would help the engineers draw up a specific Q Brief for any individual project.[10] And while state sponsorship in social housing allowed Modernism's parallel scientific and Utopian concerns to find diverse expression in a variety of architectural patterns during the 1940s and 1950s, military architecture saw no such integration of practical and architectural modernity: a wartime project of 1940 by Arthur Kenyon for the radical redevelopment of London's Wellington Barracks envisaged a massively symmetrical classical layout avoiding 'shock or affront to established tradition',[11] and a post-war scheme for married officers' flats at Putney (completed 1952) combined functional innovativeness – in its firm separation of living from working accommodation – with a conservative neo-Georgian architectural pattern.[12]

Modernist design for the modern soldier

During the 1950s, it was in the US that the first decisive moves were made towards a modern architecture for the armed forces. This was symbolised above all by the building of a stately ceremonial academy in Modernist style – the US Air Force Academy at Colorado Springs, designed by corporate firm Skidmore, Owings and Merrill (1954–62). In its juxtaposition of elegantly rectangular blocks with an iconic spiky chapel, the Academy showed that a de-ideologised Modernism could be co-opted by a progressive, modernising military.[13] Under the proselytising banner of Americanisation, these lessons were exported to allied countries in more practical, prosaic forms. In Britain in the 1950s, a crash programme of base expansion for US strategic bombers saw the building of aircrew barrack accommodation with an unprecedented standard of comfort, including two-storey blocks of two-man bedrooms; the contemporary British norm was represented by the ten-man dormitories of 1940s Sandhurst blocks.[14]

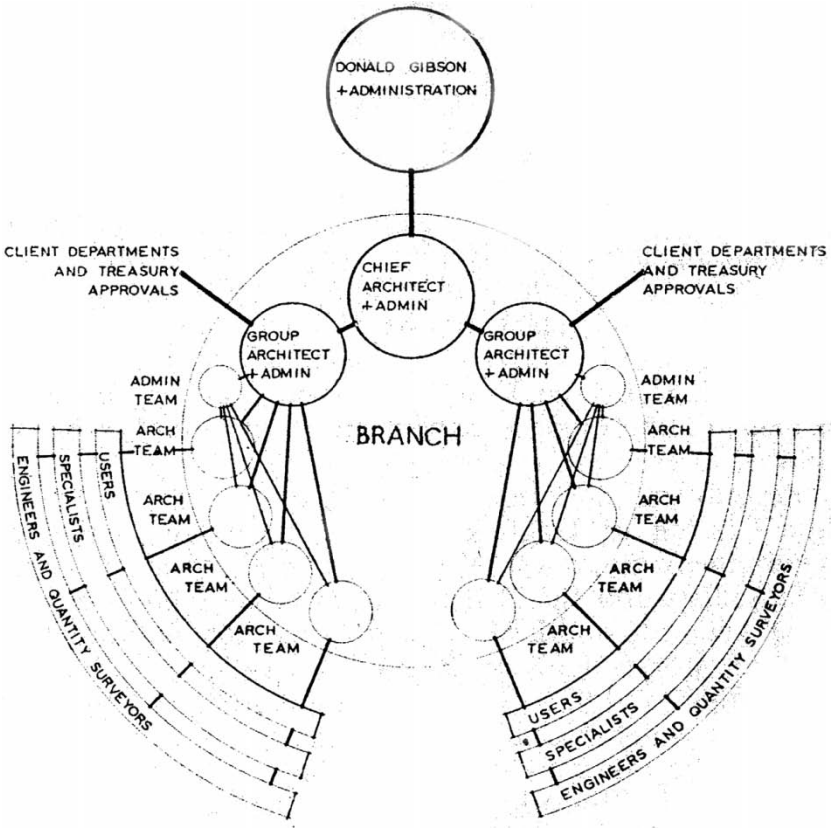
However, the extension of modern architecture to the British military establishment followed not military triumph but disaster. The renewal of Tory government after the Suez debacle of 1956 unleashed a wave of modernisation in the armed forces, led by Duncan Sandys, the Minister of Defence (1957–59), and Lord Louis Mountbatten, First Sea Lord (1955–59) and Chief of the Defence Staff from 1958. With the ultimate aim of creating a unified Ministry of Defence – which was finally achieved in 1964 – they pushed through preparatory reforms while leaving intact the structure of separate ministries for each service. Thus, while Sandys himself was noted for his architecturally enlightened views, it was the successive Ministers of War – John Hare, Christopher Soames, John Profumo and James Ramsden – who oversaw the army building programme. The Minister of Defence was in charge of strategic policy formulation, and during Sandys' tenure he secured approval for a comprehensive modernisation programme: a 1957 White

Paper[15] foresaw the radical reorientation of the armed forces from traditional foot soldiering to high-technology cold war fighting. Conscription was phased out in 1959–60 in favour of a new ideal of the professional soldier-technician, although army numbers rose again from 180,000 to 196,000 by 1968.[16] The reforms were continued by Sandys' successors and by the post-1964 Labour administration.[17]

A new rhetoric of the 'modern soldier' began to gain currency, emphasising integration into the wider community, both in lifestyle and preferred living environment. 'The soldier of today is a young man with a working day and leisure time interests similar to those of a young worker in an office or factory. He likes to spend some of his time in a civilised domestic environment.'[18] Many had a flourishing family life, with wives who would demand an environment as good as that in a new town, with housing of civilian standards; the old 'makeshift quarters' were 'no longer good enough'.[19]

Donald Gibson – marshal of military Modernism

But how was the military tradition of 'quartering' to be brought into line with modern public authority architecture, which was already well stocked with many progressive leaders? The simple answer was to import one of these leaders into a



13.1
Organisational diagram of Donald Gibson's department at the War Office, and its external relationships, October 1960.

central role within the War Office, following a report that recommended the establishment of a new, progressive Works Directorate run jointly by an architect Director-General of Works and an administrative under-secretary. In 1958 Donald Gibson, already famous for his post-war reconstruction work as Coventry City Architect, was appointed Director-General. He immediately began the process of reforming War Office design along familiar public authority lines; this included grouping his own architects into autonomous teams and enlisting Modernist firms to carry out the work assigned to private practices on the principle, 'Here is the problem – you work it out!'[20]

Perhaps most important of all was a section dedicated to research and development.[21] Modernist practice encouraged research into the user's needs and preferences – which fitted well with the army's emphasis on close consultation with unit commanders. Following this, the *Architects' Journal* argued that 'it will be surprising if, with a good leader, a good set-up and well trained architects, some good architecture does not come out of the War Office during the next few years'. The War Office was now emerging as a 'substantial new corporate client' for architecture.[22]

Industrialisation, decentralisation: everyday army architecture in the 1960s

Bearing in mind the rapid shift away from collectivist scientific rationalism to a more individualistic design approach in the work of designers such as the Smithsons, Stirling or Lasdun,[23] Gibson's dogged adherence to the public authority model might reasonably have been a matter for some unease: was the War Office jumping on a sinking ship? But that issue was completely concealed by the coincidence of the establishment of Gibson's new organisation with the new craze for prefabricated system building during the early 1960s, driven largely by building industry shortages and the demand for public housing.[24] The overwhelming concentration of architectural intervention in system building was with low-rise buildings, with module-based open systems suitable for free architectural design, in contrast to closed proprietary systems directed by contractors. The 'steady progress' hailed by Gibson lay in moving from systems tailored to specific needs, such as CLASP for schools, to systems with more generalised uses. A team of War Office architects led by Frank Iredale developed a new open system, NENK, suitable for buildings up to four storeys high. This was based on pyramidal space-frame steel deck units to make up the floors and roofs, linked by columns. Another open system, G80, was developed in partnership with building firm Gee, Walker and Slater using a standardised post and beam precast concrete frame.[25]

The other main task of Gibson's research and development branch was to devise more flexible and individualised internal planning and finishing, influenced by what individual soldiers wanted. The intention, on the model established by the Hertfordshire Schools,[26] was to use the economies of more compactly planned communal spaces to make possible higher standards of privacy in bedroom accommodation, including clusters of four-bed dormitories with built-in wooden

furniture. This was first tried out in single-storey prototype blocks built at the Hounslow Eastern Command Headquarters barracks.[27]

The two strands of the research and development work were brought together for the first time on a significant scale during the £850,000 redevelopment of the Invicta Barracks in Maidstone, using a mixture of communal buildings and four-storey clustered brick housing blocks to serve over 1,000 soldiers and their families. Because of the urgency, NENK was used for the barracks, but CLASP for the communal buildings. The aim was 'to give the Regiment not what it thought it desired, but everything which it could show was required, whether or not those had been provided in the past'.[28] The residential and working spheres were separated, in order to create a 'club' environment for the ordinary soldier; the cost limit was raised to 79*s*. 8*d*. per square foot (compared to 54*s*. 6*d*. for traditional barracks) (roughly £40 per square metre, compared to £27). The concept of the mess as a garrison club conflicted sharply with the old-style segregated regimental mess: the architects argued that their formula would 'allow a unit to encourage the corporate spirit that exists within its community'.[29]

Gibson's department focused on the redevelopment of hutted or barrack camps on the outskirts of urban areas, replacing them with spaciously laid-out low-rise communal buildings and medium-rise barracks, and with terraced married accommodation grouped separately on the edges of the sites: 'the homes of the modern army, of the technologist-managers'.[30] The focus of this vast programme was the staged redevelopment from 1961 onwards of the Aldershot military town with its population of 25,000 for the new professional army, designed both by Gibson's staff and by private practices such as Building Design Partnership.[31]

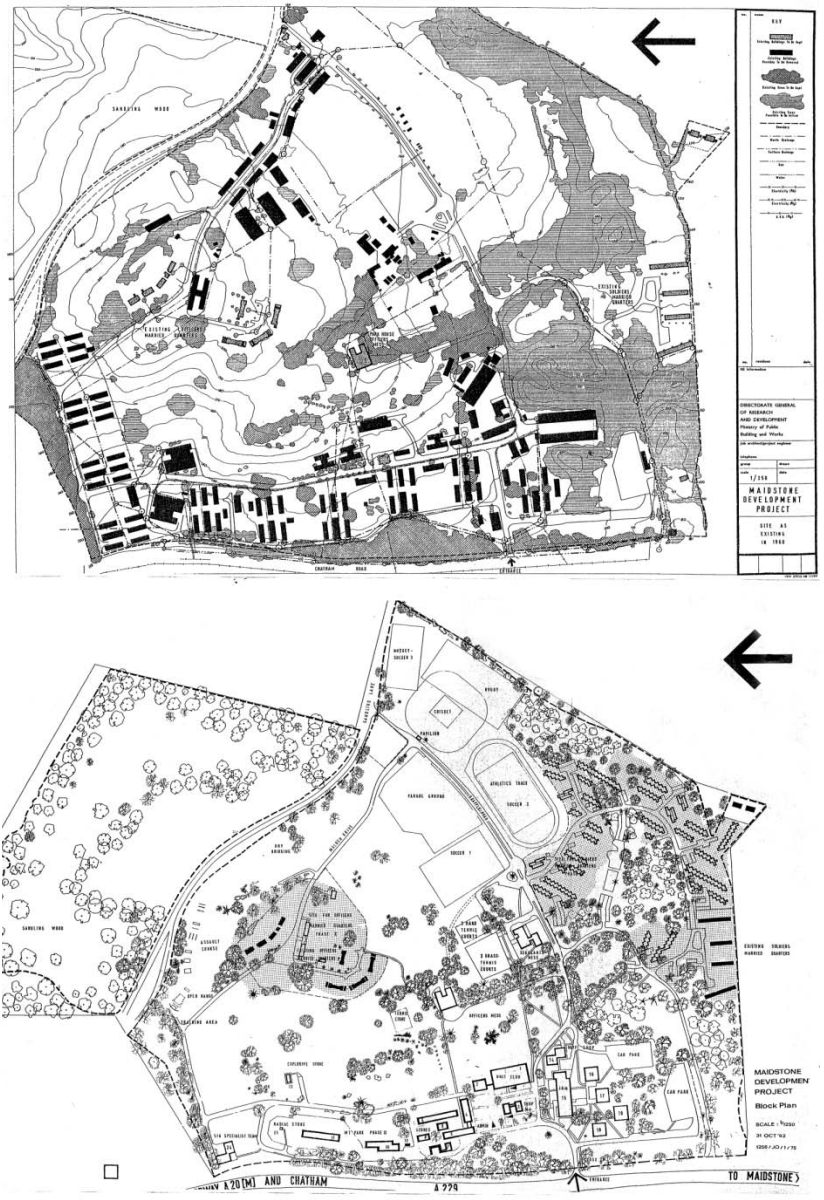
'The new monster': Gibson's public building colossus

Following the formation of the Ministry of Defence in 1964, the same principles were extended to the buildings of the other British armed services. These included 12M Jespersen system-built terraced and flatted married quarters for the navy at Gosport[32] and the Heathrow air traffic control barracks of 1965–71 at West Drayton, Middlesex, for the RAF. The latter was designed by Gollins, Melvin, Ward and Partners as an introverted neighbourhood of one- to six-storey buildings in striking white concrete blockwork.[33]

Yet the very size and apparent homogeneity of all these 'modern barracks' began to provoke misgivings, and from the early 1960s architectural praise began to change into criticism, which focused on the low-density sprawl of the developments. In 1962, the *Architects' Journal* wrote of the expanded Ministry of Public Building and Works as the 'new monster' and argued that under Gibson, War Office design standards 'have improved considerably, though not as rapidly as might have been expected'.[34] The same applied to private practice designs: for example, when reviewing a newly completed youth barracks at Shorncliffe in Kent (1964–67), the *Architects' Journal* criticised the 'wide scatter' of buildings and the 'undefined' spaces.[35]

Gibson's programme seemed increasingly to be a mono-culture, redolent almost of the self-contained, spacious, New Town neighbourhoods of the

13.2
'Before' (top) and 'after' (bottom) layout plans of Gibson's CLASP/NENK Invicta redevelopment at Maidstone, showing the perpetuation of the low-density layout.



early 1950s. Almost entirely lacking were high-prestige Modernist developments on the US Air Force Academy model. One exception was Gollins, Melvin, Ward and Partners' East Block extension of the Royal Military Academy at Sandhurst (1967–70) with a low, stately echo of the existing nineteenth-century classical blocks in their lavish landscaping.[36] In keeping with the then British economic decline, the Sandhurst budget of £1.5 million for 330 cadets was only a quarter (per cadet) of that of the US Academy.

Within the declining British Empire, the projects designed by J. T. Redpath's Works Abroad branch gave more scope for individual statements.[37] The last spasms of the colonial cantonment system generated some outstanding exercises in Modernist community building. These included Farmer and Dark's 'Little Aden' project of 1960–63 – a complete zoned community for the Aden command garrison, built in a bleak desert setting in a high-density layout of low-rise white-roofed houses.[38] The normal mix of medium-rise barrack blocks and low-rise communal buildings was adapted slightly for hillside settings such as the Lathbury Barracks on Gibraltar (1963–67), designed by Redpath's staff in a dramatically stepped pattern that incorporated Moorish walls.[39] And a limestone-built cluster of married officers' quarters in Malta (1961–63) was designed by J. M. Austin-Smith and Partners in stepped rows so as to appear like 'a walled fortress rising in one piece from the rock'.[40]

Set pieces of redevelopment

What had been lacking in Gibson's programme for barrack buildings was high-density urban redevelopment – a strand that played such an energising, controversial role in town planning generally. The army maintained a strong presence in several historic barracks in town centres, as at Edinburgh Castle, but, in general, modern rebuilding was associated with displacement rather than in situ renewal. It was only in London, with its continuing constitutional and tourist requirements for city-centre bases for the infantry and cavalry Guards regiments, that a significant exception was made to this rule, in a series of three major redevelopment projects whose centrepiece was Spence's reconstruction of the Hyde Park Cavalry Barracks. All three were commissioned by Gibson's department. Chelsea (for infantry) was designed by Tripe and Wakeham in the late 1950s and built from 1960 to 1962; Hyde Park (designed 1960–63) was built from 1967 to 1970; and Wellington (again for infantry) was designed by George Trew Dunn, Beckles Wilson, Bowes (1972–73) and built from 1979 to 1985.

Because of the prestige of their elite regimental identity and because of their location, each of these projects was architecturally *sui generis* and had to carry a huge symbolic burden as virtually the sole representative of important phases of Modernist redevelopment thinking in this field. The issues were, in fact, the same as in housing redevelopment – how to reconcile a large number of people with the Modernist demand for segregation and adequate amenities. But whereas the fluctuations of urban polemic and theory in mass housing were carried forward by a wide variety of projects and designers, each of these three redevelopments had to fight its corner alone, each one a microcosm of an entire generation of visions of the totally planned environment, and relying only on each other to establish a narrative of progress in modern barracks design.

Chelsea

The £440,000 redevelopment of Chelsea to house two infantry battalions of the Brigade of Guards (1,000 men in total) represented a fairly straightforward attempt to translate the nineteenth-century urban barracks into the familiar forms and

spaces of the mid-twentieth-century International Style, by replacing one type of widely spaced, rectilinear design with another. It was the first major post-war War Office project in the capital, and so it had to pioneer the cause of International Modernism in barracks architecture almost single-handed. With its long four-storey barracks range, the site was still dominated by the main barracks block, which contained eight-man rooms subdivided into cubicles of four. It was split in the middle between the two battalions, with no functional connection whatever between the two. There were a number of other shorter slab blocks and a large square-plan block of communal services, all patterned in the same way in spite of the great variety of internal accommodation.

When Chelsea was completed in 1962, the architectural climate had shifted to stronger juxtapositions of forms, exploiting and echoing existing contexts, and its design was strongly criticised as anaemic and lacking in military forcefulness: 'The fact is, the layout lacks guts.'[41]

Hyde Park Cavalry Barracks

Where Tripe and Wakeham's design for Chelsea represented the early post-war phase of orthodox abstracted CIAM Modernism, Basil Spence's design for the Hyde Park Cavalry Barracks addressed the following phase. This tried to evolve a more complex, densely mixed urbanity through forms such as multi-layered megastructures, street decks and cluster or spine planning. Within social housing tower blocks were now integrated into denser complexes, such as Chamberlin, Powell and Bon's Barbican (built from 1962) and the Greater London Council's Thamesmead (from 1966). There was sometimes also an attempt to reflect the muddle of the previously reviled Victorian city, not least through traditional materials such as red brick – as seen in medium-rise, high-density projects such as Camberwell Borough Council's Bonamy-Delaford development (from 1964).[42]

In the context of Spence's own career, the Hyde Park Barracks and the British Embassy Chancery in Rome were the two major projects of grand national symbolism which followed his work on Coventry Cathedral. He restructured his

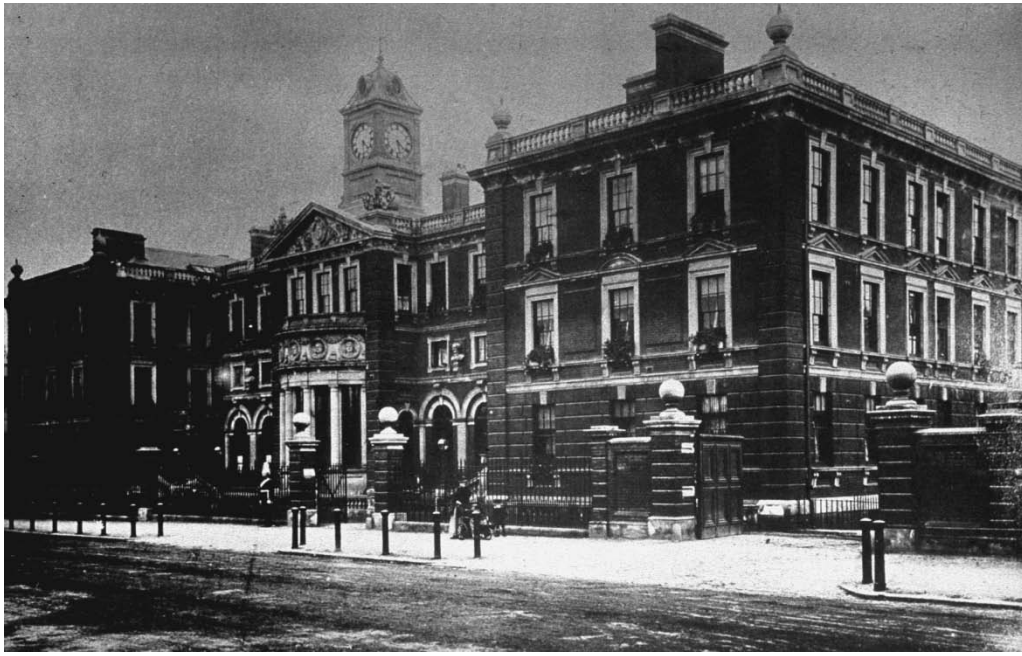


13.3
Chelsea Barracks, view of the main south-west front of the barracks block

practice in 1963 to be able to devote maximum attention to them. The two projects ran almost in parallel, starting in earnest in 1959 and taking up the whole of the 1960s. Both were commissioned by the government for prestigious and socially conservative user groups – cavalry guardsmen and diplomats – on elite sites that would inevitably excite opposition from amenity groups, and both suffered the difficulties in gaining approval and in construction that were common to many high-prestige public-sector projects. But there were equally important differences, not least in the overall budget, which was four times higher for the Hyde Park Barracks, and in the fact that while Rome was an isolated palazzo-like building in a garden, Hyde Park was really a chunk of city, embedded in the wider urban fabric. And this was not just any fabric, but the wealthiest part of London; and the barracks' occupants, however much an army elite, were also viewed by some neighbours as anti-social – in October 1960 the residents of the exclusive adjoining Albert Gate Mansions lobbied against any increase in the smell from the horses stabled on site.[43]

The Household Cavalry Regiment had returned to Hyde Park in 1932 after several years in Regent's Park. In June 1956, they reached the end of their patience with their dilapidated home, and the Guards Regiments' London District Commander, Major General Rodney Moore, authorised the preparation of a formal proposal for redevelopment of the complex, which was condemned in February 1957 by the War Secretary John Hare as 'completely out of date'.[44] Moore asked his chief engineer to approach Spence. Spence was probably recommended by Lord Mountbatten, who was intimately concerned with the Household Cavalry (in his roles as Colonel of the Life Guards and Gold Stick in Waiting) and also knew

13.4
Hyde Park Cavalry Barracks, view of late nineteenth-century complex replaced by the Spence design



Spence well from numerous official functions. 'They simply said, "Will you do it?" – there was no question of any process of selection from a short list, or anything like that!'[45] Spence had also met the Queen on several occasions, and with his military service and royalist leanings seemed a natural choice for the job.

During the following year (1957–58), Spence helped a team established by Moore to draw up a Q Brief for Hyde Park, based of course on the standard Barrack Synopsis, and in June 1959 Moore wrote to him again, apologising for the 'prolonged . . . silence', but explaining that with the establishment of the new Directorate, 'the planning of these Barracks has been taken out of our hands by the War Office'. Spence replied that he had heard through his Royal Fine Art Commission membership that the project was 'not dead' and had just drawn his own conclusions.[46] From that point onwards, Gibson and his architect-administrator deputy, C. A. Richards, became Spence's chief liaison contact with the War Office and with his local 'client', the Household Cavalry Regiment. Following the formal War Office letter of commission in November 1959 inviting Spence to prepare a master plan, Gibson wrote informally to him, making clear the exceptional status accorded to this project, and emphasising from the beginning the gulf between its somewhat traditional 'artistic' character and the mass systems programme he himself was developing. He stressed that Spence would be encouraged to design in a way that added 'beauty' and 'art' to the basic barracks carcase: 'It is my hope that (within the cost limits) you will feel free . . . to invest some of your money in the more enjoyable things of life', including decorative features such as ornamental panels of regimental insignia. Spence's reply stressed his hope that 'I won't fall short of the very high standard that you are obviously setting for this building', and that 'we can produce something new in the way of barrack design'.[47]

The masterplan development work began immediately, steered by Spence himself, with his son-in-law Anthony Blee as associate in charge, and various assistants. They had to work out the internal planning of the complex with the local army authorities. Among these was the London District Headquarters of the Household Cavalry Regiment at Horse Guards, whose Deputy Assistant Quartermaster-General (initially Major A. O. Greenwood) acted as regimental liaison officer and helped to coordinate the unit's response to an array of user-research questions. They explored how the bald statements in the Q Brief could be related to the activities of the soldiers: for example, how was a forage barn or a guardhouse actually used?[48] John Church, who became the project architect for the barracks in September 1961, recalled that

> Greenwood . . . used the Barrack Synopsis like a kind of Bible-cum-quartermaster's list, endlessly checking it and ticking boxes to make sure we'd done every single tiny thing to the letter – three rather than four light bulbs, and so on – and if we ever tried to deviate from it, he'd kick up merry hell! We spent a lot of time with him down at Horse Guards, and we also spent many days with the regiment itself at the old barracks . . . Their problem, though, was that their attention span was very limited – what they were really interested in was horses![49]

Spence and his team also had to work with the national authorities that had to decide whether or not the project should go ahead at all. These external vetting activities were of bewildering complexity. They included three ministers – the Secretary of State for War as 'patron', the Minister of Works who was responsible for the royal parks, and the Minister of Housing and Local Government who oversaw planning aspects – in addition to the non-binding evaluation by the London County Council and the advisory but hugely influential Royal Fine Art Commission. For all these authorities, the chief concern was the project's highly sensitive location, because it occupied a strip of Hyde Park. The further hurdle of Treasury financial approval of a detailed, costed scheme would follow planning approval.

The project seemed to be controversial from the beginning, owing to the fundamental conflicts within the brief, which paralleled those within contemporary high-density housing. The site was restrictive: it was a narrow strip, totalling only 1.5 hectares. And there were two different requirements. First, there was to be full accommodation for two cavalry squadrons (one from the Life Guards, one from the Royal Horse Guards, or 'Blues'), with stables for the horses, a riding school and a forage barn, and for the soldiers' three messes, the other ranks' barracks, and the officers' and married soldiers' flats. Second, the accommodation had to be spaced out as much as possible, in order to segregate the horses from the men[50] and keep apart the different classes of soldier, while providing a stable yard (parade ground) on which the two squadrons could be drawn up in full parade order prior to emerging into the south carriage road of Hyde Park.[51]

It quickly became clear that all the requirements except one could be easily satisfied by a low or medium height structure in decked form, set above a podium base exploiting the north–south fall of the ground to create a lower ground-floor vehicular service level facing Knightsbridge. The one exception was the other ranks' married quarters. It was agreed by all that the minimum requirement for the daily functioning of the on-site element of the regiment was 120 flats, but shortage of married army flats in Central London made it highly desirable to include more, and the initial commissioning letter suggested 170.

The simplest solution to the married quarters problem at Hyde Park was to group all the flats together into a single tall block, and Spence immediately began to explore that. A sketch of April 1960 indicates already in outline the layout that was eventually used, with the stables at the east end, and the residential and communal accommodation strung out to the west, with a tall tower rising from the centre. By going for a tall tower, Spence immediately projected the scheme into a lively debate about the need for an official policy on tall buildings in central London, especially those overlooking the royal parks. This debate had been brewing since Robert Matthew's success in early 1957 in securing permission for the fifteen-storey New Zealand House, adjacent to St James's Park. At Hyde Park, the tower solution was driven forward by the Ministry demands for 'a terrific number of married quarters – there was never any getting away from that!' and by Spence's own personal preferences: 'I'm sure that if the tower had gone from the project, he'd have given it up!'[52]

The period between June and December 1960 was a time of fast-moving debate behind the scenes over the planning aspects of the Hyde Park project. Spence proposed a succession of alternative proposals for the tower, mostly at first in perspective form. Speaking of the later period of design development in 1961, Church recalled that

> Basil's main concern was always with the tower, and with each objection or hiccup, he'd keep changing it, always using perspectives . . . He'd just go upstairs and do a new perspective and say, 'That's what I want!' . . . and then he'd do another, different perspective, which would set things charging off in another direction for a while. And so it would go on, until one variant began to emerge as the favourite – when a model might then be made.[53]

In an initial scheme and model, an 82-metre high, T-shaped tower twenty-seven storeys high and containing 114 married quarters was proposed, but then Spence and Blee proposed first a reduced 67-metre tower, and afterwards a long slab or cliff block which actually increased the total number of married quarters to 168. As Spence hoped, the Royal Fine Art Commission appreciated how 'elephantine' the cliff block would seem overlooking the park, even if lightened by cutting the number of flats back to 110 or 120. But by October 1960, the scale of the tower moved in the other direction, to a height of 97 metres and a total of 175 flats.

By November 1960, Spence was suggesting to Gibson that 'I have done all I can at my level to push the matter forward', and that now it was 'a policy matter outside my orbit'. He and Gibson collaborated closely in drawing up a revised submission to the December Royal Fine Art Commission meeting, and by the beginning of January 1961, the Commission, while still insisting that any kind of high block would be 'highly undesirable in its effect on the amenities of Hyde Park', nevertheless conceded that 'a well-designed tower block for the married quarters would be preferable to any form of long slab'.[54] On this basis, Spence's team produced sketch drawings which included the 97-metre high tower to enable the appointed quantity surveyors, Reynolds and Young, to produce in April 1961 the cost estimate for the project of £2.2 million, excluding possible 10 per cent building cost increases. The officers' and other ranks' flats were costed at £8,000 and £4,500, which was considerably more than contemporary council flats.[55]

Now that detailed discussions with the War Office and the regimental 'users' were about to commence, and despite pressure from Richards that the project should assimilate the most up-to-date practices of Gibson's department, Spence's team actually paid relatively little attention to the circulars and other information sent by the War Office: Church recalled that 'we never looked at any of their work, or the endless drawings and reports that Chessington sent us – they didn't seem relevant to our project at all'.[56] In May 1961 a group of officers from the regiment attended Spence's office, and he explained the

design personally to them with the aid of a model.[57] Detailed discussions with Major Greenwood about the design of the barracks block and the rest of the complex continued apace, leaving the married quarters tower issue to be negotiated separately. Here the focus of obstruction had now shifted to the Treasury, which began to press for cost targets to be reduced to match the much lower cost of multi-storey council flats in blocks such as Westminster City Council's twenty-one-storey Hide Place tower.

In early July 1962, after Spence had produced further alternative perspectives, the debates on the form and cost of the tower culminated in a final radical change of plan. Instructed definitively by the War Office to plan once again for the basic minimum number of 120 married flats, Blee and Church finally devised a plan for a 'simple, square, slimmer, taller tower'. The new tower would still be 97 metres high, but would have only four flats on each floor above podium level. And at the top there would be several floors of officers' flats, crowned by the officers' mess. Spence immediately adjusted his advocacy language to fit the new scheme, comparing the townscape effect of the slender 'pencil' block to the towers of the Palace of Westminster or the Pagoda of Kew Gardens.[58] The Royal Fine Art Commission finally agreed to the new plan as an 'improvement' in mid-September 1962.[59]

The Permanent Secretary Sir Edward Muir assumed a central position in the final negotiations with the Treasury. Muir wrote to Spence in March that he was trying to push through the scheme 'though the difficulties are formidable',[60] and J. T. Redpath (now Deputy Director of Works) wrote to Blee a week later that the project was 'a doubtful runner' owing to the continuing high cost of the tower. Although Spence himself was on holiday, Redpath and Blee agreed at an emergency meeting that decisive savings could be achieved and the ceiling of £2.2 million could be maintained, by abandoning the extravagant gesture of housing the officers' mess and flats in the tower (complete with a separate lift large enough to transport a ceremonial horse and rider up to the mess!) and relocating them in place of the scissors block at the west end of the site; the tower would now contain only other ranks' flats, and the forage barn would be relocated under the stables.[61] Almost immediately, however, some of the saving in the tower costs was counterbalanced by a decision to shift from gas to hot water heating, so that further economies were necessary in order to maintain the £2.2 million ceiling and reduce the average cost of each of the other ranks' flats from £5,344 to £5,200.

In April 1963 it was at last possible to issue a formal, high-quality report on the project. The overriding aim was to secure the final sanction from the Secretary of State for War to proceed with working drawings, but only days after the unexpected downfall of Profumo in the Christine Keeler scandal and his replacement by his deputy, James Ramsden, there loomed the final hurdle of a Plans Acceptance Meeting on 26 June at Horse Guards with not only the usual regimental staff, but also officers from Eastern Command – a further level of army hierarchy of which Spence's team had hitherto been unaware and which now generated a lengthy list of detailed amendments (including the addition

of a laundry to the tower block).[62] After a site visit to the old barracks by a large delegation from the Ministry, 'Everyone breathed a sigh of relief when [Ramsden] said that it must go forward!'[63] The architects also had to take account of the special requirements for ceremonial uniform storage and changing areas. Church recalled that

> whereas Greenwood would have specified tiny cupboards like shoe boxes, we were well aware that the officers had a simply colossal amount of stuff – private uniforms for Ascot, thousands of pairs of boots and so on – and they all had their own batmen, constantly at work ironing all their things![64]

After final discussions with Ramsden, authorisation to proceed was at last received by telephone on 19 July 1963. From this point on, the project was never again seriously in doubt.

In 1966 tenders were invited from a range of national and London contractors, on the traditional competitive-tendering basis still favoured in the capital. At the final stage of tendering, which became a two-way play-off between McAlpine and Costain, the cost was finalised: £2,989,295 for a 33-month contract period. This was certainly more expensive than contemporary council housing, but it was still remarkably economical for such a complex building, and only half the cost of the US Air Force Academy per soldier.

Before any construction work at Hyde Park could start, temporary alternative accommodation for the regiment had to be arranged. The solution was to redevelop part of Wellington Barracks with temporary cavalry quarters, and this led to the permanent rebuilding of Wellington as the third and last of the big London redevelopments.

At Wellington Barracks there were two major constraints: a budget of only £135,000, and the requirement to preserve the classical façade of the early nineteenth-century barracks on Birdcage Walk. In order to leave the main parade ground intact, Spence's team eventually decided to demolish some buildings to the rear of the old block and build two large timber frame and infill blocks of stables – one for 145 Life Guards horses, the other for 111 Blues horses. Within this 'terrific exercise in prefabricated timber construction',[65] the pièce de résistance was the riding school. Following completion of the permanent Hyde Park barracks in 1970, the timber buildings were sold, dismantled and re-erected at a racing stables in Newmarket.[66]

Back at the Hyde Park Cavalry Barracks, Spence carefully integrated the disparate elements into an architecturally coherent whole. Once the key planning requirement of the stable yard had been established, the decked accommodation could then be distributed along the site from east to west, so as to slide functionally from stables to family accommodation, and in rank from other ranks to officers. The enclosed character of the nineteenth-century barracks was replaced by a more outward-looking and (apart from the tower) smaller-scale approach. Each of the new elements – the air-conditioned stables, the various messes, the barracks block,

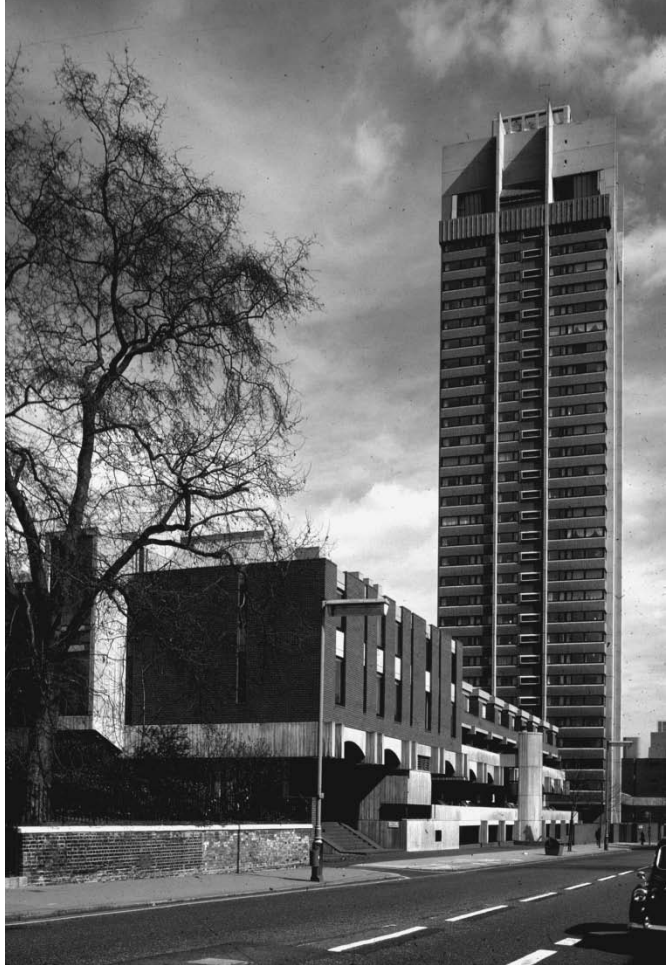


13.5
Basil Spence, Hyde Park Cavalry Barracks from the east, with multi-storey stable block in foreground, 1970

the married quarters' tower, and the officers' flats – was expressed in a distinct manner, in contrast to the artificial homogeneity of the Chelsea blocks. Internally also there was differentiation, from the four-man rooms of the barracks block to the unified interior of the officers' mess. In contrast to some megastructural developments such as Thamesmead, the 94-metre high tower was separately articulated with an aerodynamically profiled top, so as 'to read as a true tower, with a proper base, a definite body and a head which would cut a good silhouette against the sky'.[67]

There was also the vertical layering of the site, 'welding together buildings for such diverse requirements'[68] in a differentiated way. The public and service character of the ground floor and lower ground floor levels – where horses and vehicles would predominate – was expressed by a generally open concrete column and beam finish, with the first level spanned by 2-metre thick cross beams and precast arched shell ceilings (which had originally been designed for Sussex University) whose height would allow a mounted soldier in ceremonial uniform to pass beneath. The officers' mess was treated as a single fluid space, spanned dramatically by a concrete minstrel's gallery. Above the platform level, the more private and segregated nature of the different functional and rank areas was expressed through the greater solidity of brick masonry walls punctuated by relatively small openings – although the tower block was set apart by its banded windows and precast cladding.[69]

During the three-year construction process of the main barracks, a succession of military delegations visited the site. During this time there was some apprehension as to how the project would be received on completion. Spence wrote:



13.6
Basil Spence, Hyde Park Cavalry Barracks from the west, with officers' mess in foreground



13.7
George Trew Dunn, Beckles, Wilson, Bowes, Wellington Barracks, rear (south) front, showing 'decked' medium-rise massing

> I was first appointed in 1957 and I sincerely hope that [when the barracks are finished] we will not have the complaints that have attended this design all the way through. The soldiers are satisfied, I am glad to say, and I sincerely hope that the horses are too!

When the Queen visited the barracks after completion, she

> greeted Basil . . . and before the Commanding Officer could do his formal introduction, she said, looking over Basil's shoulder at the tower, 'Well, Sir Basil, whatever are you going to do next?' – with a note of slight foreboding in her voice! Without a second's hesitation, he replied, 'Duck and run for cover, Ma'am!' – and she doubled up with laughter![70]

By late 1970, the Hyde Park project was passing from the phase of creation to the more unpredictable phase of reception. Spence's national standing and the visual prominence of the building ensured a robust press debate. There were articles straightforwardly praising the architectural solution: Michael Manser stated that the barracks were 'robustly modelled, romantically flamboyant, and slightly whimsical', with 'the most comely post-war tower block in London'.[71] But there was also criticism. Some argued that the high-density barracks should not have been built on the site at all; while others attacked the architecture of the tower or of the entire complex.

Spence, in contrast to some other key Modern architects (such as Robert Matthew), was surprisingly sensitive to public criticism of his designs. He was also sorely tested by mounting controversy about overspending and constructional difficulties, which began in early 1972 and carried on up to his death in 1976. The problems were finally only resolved in 1980. The first of the two principal areas of trouble was the overall overspending (an excess which by September 1973 had reached £1,225,000 above the £3,175,000 contract estimate of 1967). Church recalled that

> part of the problem . . . was the social prestige of the Household Cavalry and its commanders. When you had someone of the stature of Lord Mountbatten directly involving himself, and asking for specific changes and costly enhancements, you weren't going to say to him, 'Hold on, I need to check with the Ministry!' You'd just issue the variation order![72]

The second problem was corrosion damage to the concrete structure of the stables caused by defective workmanship to the stable 'heel posts' and the hippuric acid contained in horse urine. Church recalled that 'you couldn't imagine a more destructive combination – horse urine being washed everywhere, and horses with nothing to do all day other than knock the hell out of everything around them, including the cast iron posts!'[73]

Wellington Barracks: showpiece of 'conservative surgery'

In a letter to *The Times* in May 1970, two Tory MPs condemned Hyde Park Barracks as 'an architectural disaster . . . faceless and devoid of form and character' and expressed the hope that the Wellington Barracks project would 'not suffer the same fate'. By then the redevelopment of the barracks was under serious consideration. Although construction itself was delayed until 1979–85, the complex had been designed in 1973 as a Geddes-style exercise in 'conservative surgery' at the height of the reaction against the Modern Movement.[74]

On this site a Guards infantry battalion had to be accommodated, as well as the headquarters for all five regiments of Foot Guards. The keynote was conservation: the entire redevelopment was planned around the retained main listed classical frontage of 1832–34, as well as George Trew Dunn's 1963 chapel (which replaced a casualty of wartime bombing); and there was an absolute ban on multi-storey building or on anything higher than the 23-metre height of the trees on Birdcage Walk. So the project reacted not only against the Hyde Park Barracks, but also against the even more controversial neighbouring Queen Anne's Mansions government office complex, whose forcefully modelled profile had been the work of Spence as consultant to the commercial architect Fitzroy Robinson.

Although the eventual architectural solution for the Wellington Barracks looked very different from that of the Hyde Park Barracks, it actually had quite a lot in common with it in the way in which it managed to fit a lot of accommodation on to a small site. It was megastructural in character, with a podium and pedestrian deck on top, linking up the entire rear portion of the site behind the 1832 building; and the residential accommodation was placed in medium-rise blocks around the rear edge of the site. But unlike Hyde Park, all this was concealed at the rear: in a slightly postmodern way, the classical character of the front was accentuated by building the officers' mess to appear as a flanking pavilion to the main block and parade ground, with the Guards chapel forming the other pavilion.

The enforced concealment of overt modernity at Wellington Barracks ensured that its eventual completion was not accompanied by public controversy. This reflected the wider crisis of modern architecture in the 1970s – a loss of confidence.

What one could not foresee was that private architects such as Spence represented 'the future' of architectural practice in Britain as well as in America. No one in the 1960s and 1970s could have foreseen the almost complete collapse during the 1980s and 1990s of the once dominant and prestigious system of public architecture, with vast and influential organisations either privatised or reduced to a technical rump status. Gibson's old department mutated back into an estate-management and engineering bureaucracy, and new blocks of barracks became almost indistinguishable from contemporary speculative blocks of low-rise flats.[75]

Conclusion: the assimilation of army architecture

Arguably, barracks architecture had much in common with the architecture of public housing – not least in the hard treatment of the buildings by the users, which, as in the case of the Hyde Park stables, mercilessly and rapidly exposed construction difficulties.[76] But unlike public housing, the small number of show-piece projects ensured that military architecture never stood out in the public mind as a coherent bloc of activity. This sharp polarisation only changed in the 1970s and 1980s when all Modernist military architecture began to fade from public view. It met not with loud public condemnation but with deafening silence: even Hyde Park, as Church recalled with bafflement, was 'simply swept under the carpet – everybody turned their back on it – I couldn't understand why!'[77] In that respect the reception of the Modernist barracks turned out to be the same as that of most Modernist buildings. So Gibson, Spence and all the other private architects involved in the military building programme had posthumously succeeded, with all their diverse architectural approaches, in assimilating the barracks into the mainstream of the Modernist concept of the total planned environment.

Notes

1 Compare L. Sullivan, 'The Tall Office Building Artistically Considered', *Lippincott's Magazine*, March 1896.
2 J. Gold, *The Experience of Modernism: Modern Architects and the Future City*, London, E. & F. N. Spon, 1997; N. Bullock, *Building the Postwar World*, London, Routledge, 2002.
3 See Ross McKibbin, *Classes and Cultures, England 1918–1951*, Oxford, Oxford University Press, 1998, p. 35; H. Perkin, *The Rise of Professional Society: England Since 1880*, London, Routledge, 1990, pp. 83–4, 121, 368; and Q. Colville, 'Jack Tar and the Gentleman Officer', *Transactions of the Royal Historical Society*, 2003, pp. 105–7.
4 J. M. Richards, 'Towards a Rational Aesthetic', *Architectural Review*, LXXIII, no. 135 (December 1935), p. 216; A. Jackson, *The Politics of Architecture*, London, Architectural Press, 1970, pp. 50–1.
5 J. Douet, *British Barracks 1600–1914: Their Architecture and Role in Society*, London, Stationery Office, 1998, p. xiii; I. MacIvor, *Fort George*, Edinburgh, HMSO, 1970; and M. Glendinning and A. MacKechnie, *Scottish Architecture*, London, Thames & Hudson, 2004, p. 114.
6 Douet, *British Barracks*, pp. 145–6, 200.
7 John Greenacombe (ed.), *Survey of London, Vol. 45, Knightsbridge*, London, Athlone Press for English Heritage, 2000, pp. 64–76.
8 Douet, *British Barracks*, p. 189.
9 G. E. Cherry and L. Penny, *Holford: A Study in Architecture, Planning and Civic Design*, London, Mansell, 1986, pp. 81–2; A. K. Mallory and A. Ottar, *Architecture of Aggression: A History of Military Architecture in North West Europe, 1900–1945*, London, Architectural Press, 1973.
10 'Building Study: Navy Housing at Chatham', *Architects' Journal*, 4 February 1970, pp. 283–5.
11 'Architecture at the Royal Academy', *The Builder*, 10 May 1940, p. 557.
12 'Oake Court, Portinscale Road, Putney, S.W.15', *The Builder*, 22 August 1952, pp. 264–5.
13 R Bruegmann (ed.), *Modernism at Mid-Century: The Architecture of the US Air Force Academy*, Chicago, IL, University of Chicago Press, 1994.
14 W. D. Cocroft and R. J. C. Thomas, *Cold War*, London, English Heritage, 2003, pp. 57–8.
15 Command Paper Cd. 124, *Defence: Outline of Future Policy*, London, April 1957; Cocroft and Thomas, *Cold War*, p. 58.
16 L. James, *The Rise and Fall of the British Empire*, London, Little, Brown and Co., 1994, p. 593.

17 Command Paper Cd. 2592, *Statement of the Defence Estimates*, London, February 1965.
18 *Interbuild*, September 1960, p. 38.
19 Ibid.; *Architects' Journal*, 27 October 1960, p. 904; 'WD Development Group: Accommodating the Young Soldier', *Architects' Journal*, 1 November 1961, p. 812; C. P. Snow, *Science and Government*, Cambridge, MA, Harvard University Press, 1961; pp. 82–3.
20 'Group Working at the War Office 2', *Architects' Journal*, 22 December 1960, p. 903; *Architectural Review*, January 1962; A. Saint, *Towards a Social Architecture: The Role of School-building in Post-war England*, London, Yale University Press, 1987, pp. 162–5.
21 'Group Working at the War Office 2', p. 903.
22 'Group Working at the War Office', *Architects' Journal*, 27 October 1960, p. 603.
23 J. M. Richards and Nikolaus Pevsner (eds), *The Anti-rationalists*, London, Architectural Press, 1973.
24 Miles Glendinning and Stefan Muthesius, *Tower Block: Modern Public Housing in England, Scotland, Wales and Northern Ireland*, London, Yale University Press, 1994, Chapter 22.
25 For NENK, see *Architects' Journal*, 13 March 1963, pp. 569–76; *Architects' Journal*, 25 March 1964, pp. 697–706; 'Progress on Nenk Construction', *Architects' Journal*, 17 April 1968, p. 793; B. Russell, *Building Systems, Industrialisation and Architecture*, London, Wiley, 1981, pp. 418–27. For G80 standard precast-concrete-clad, framed Mk.IV system and large-panel prefabricated concrete infill Mk. V system at Stanhope Lines, built by Gee, Walker and Slater, see *Architects' Journal*, 9 October 1968, pp. 801–7. For NENK and G80, see also A. F. L. Deeson (ed.), *The Comprehensive Industrialised Building Annual (Systems and Components) 1966*, London, House Publications, 1964; R. M. E. Diamant, *Industrialised Building 2: 50 International Methods*, London, Iliffe Books, 1965.
26 Saint, *Towards a Social Architecture*, pp. 58–111.
27 *Architects' Journal*, 9 February 1961, p. 208; *Architects' Journal*, 1 November 1961, p. 812.
28 'Barracks, Maidstone', *The Architect and Building News*, 12 May 1965, pp. 896–904; Ministry of Public Building and Works, Directorate of Building Development, *Maidstone Development Project, Invicta Park*, London, HMSO, 1969.
29 'Barracks, Maidstone', p. 901.
30 'Building Study: Married Officers' Quarters', *Architects' Journal*, 2 April 1969, p. 1.
31 *Architects' Journal*, 18 February 1960, p. 285; 'Barracks, Aldershot', *Architectural Review*, January 1961, p. 6; 'Barracks, Aldershot', *Architectural Review*, January 1962, p. 5; 'Barracks, Aldershot', *The Architect and Building News*, 6 October 1965, pp. 631–5; *Architects' Journal*, 9 October 1968, pp. 801–7.
32 J. Woodward, 'Modular Precast Concrete Frame', *Architects' Journal*, 4 May 1966, pp. 1127–9.
33 'Per ardua ad astra', *Architects' Journal*, 28 March 1973, pp. 734–5.
34 'New Monster', *Architects' Journal*, 31 October 1962, p. 1003; 'Sir Donald Gibson Appointed Director-general of Research and Development', *Architects' Journal*, 7 November 1962, p. 1098; 'Gibson, Sir Donald', *Architects' Journal*, 19 December 1962, p. 1355.
35 'Breakaway barracks', *Architects' Journal*, 7 August 1968, p. 212; 'Building Study: Moore Barracks', *Architects' Journal*, 28 February 1969, pp. 568–71.
36 *Architectural Review*, January 1966, p. 29; *Concrete*, July 1970, pp. 281–3.
37 See Astragal on the 'liberalisation' of East of Suez architecture in *Architects' Journal*, 10 August 1966, pp. 314–15.
38 'Aden: New Town in the Desert', *Interbuild*, June 1961; *Architects' Journal*, 24 July 1963, pp. 163–4.
39 'Lathbury Barracks, Gibraltar', *Building*, 10 November 1967, p. 155.
40 *Architectural Review*, January 1962, pp. 4–6; 'Officers' Married Quarters, Malta', *Architectural Review*, April 1965, p. 7.
41 'AJ Building Study, 2nd Series: Chelsea Barracks', *Architects' Journal*, 9 January 1963, pp. 85–95. See also S. Bradley and N. Pevsner, *London 6: Westminster*, London, Yale University Press, 2003, p. 768.
42 Glendinning and Muthesius, *Tower Block*, pp. 138–41.
43 English Heritage, *Survey of London*, vol. 45, London, 2000, pp. 68–73; RCAHMS, Sir Basil Spence Collection, Hyde Park Cavalry Barracks Manuscript Boxes (hereafter HPCBMB), letter of 24 October 1960 from Spence to War Office. See also *The Sun*, 25 February 2005, p. 1.
44 *Survey of London*, vol. 45, p. 71; *Guards Magazine*, no. 1 (1970), pp. 203–4.

45 Interview with Anthony Blee, 2004; HPCBMB, letter of June 1959 from Moore to Spence.
46 HPCBMB, Spence and Moore's correspondence of June 1959.
47 HPCBMB, letter of 2 November 1959 from War Office to Spence; HPCBMB, letter of 23 November 1959 from Gibson to Spence and reply of 25 November 1959.
48 HPCBMB, correspondence of March 1960 between Spence and DAQMG about Q Brief of 12 August 1959; cf. War Office, *Barrack Synopsis*, London, 1948.
49 Interview with John Church, 2005.
50 Ministry of Defence, *Hyde Park Cavalry Barracks* (commemorative booklet), London, 1970.
51 Interview with Anthony Blee, 2004.
52 Interview with John Church, 2005; J. M. Richards, *Memoirs of an Unjust Fella*, London, Weidenfeld & Nicolson, 1980, p. 243; and HPCBMB, notes of 1957 for 15th report of the Royal Fine Art Commission (RFAC).
53 Interview with John Church, 2005.
54 HPCBMB, note of 3 January 1961 from RFAC Secretary to War Office.
55 HPCBMB, letter of 29 March 1961 from Gibson to Spence; letter of 12 April 1962 from Reynolds and Young to Spence.
56 Interview with John Church, 2005.
57 HPCBMB, letter of 1 May 1961 from Richards to Blee, and reply of 23 May.
58 HPCBMB, unsent letter of 6 February 1967 from Spence to *The Times*.
59 HPCBMB, letter of 6 September 1962 from Richards to Spence and reply of 12 September 1962.
60 HPCBMB, letter of 1 March 1963 from Muir to Spence.
61 HPCBMB, letter of 1 March 1963 from Muir to Spence, letter of 11 March 1963 from Redpath to Blee and Blee's reply of 13 March; *Survey of London*, vol. 45, p. 74; 'Astragal', *Architects' Journal*, 28 October 1970, p. 997.
62 HPCBMB, letter of 23 January 1964 from Spence to H. Leadbeater (MPBW); interview with John Church, 2005.
63 Interview with Anthony Blee, 2004.
64 Interview with John Church, 2005.
65 Ibid.
66 Ibid. See also M. Grant, 'Temporary Stabling at Wellington Barracks', *Arup Journal*, March 1967.
67 Interview with Anthony Blee, 2004; Ministry of Defence, *Hyde Park Cavalry Barracks*, London, 1970.
68 Interview with Anthony Blee, 2004.
69 E. Happold, 'The Reconstruction of the Household Cavalry Barracks', London, 1970 (paper prepared for the Public Works and Municipal Services Congress, 20 November 1970).
70 Interview with Anthony Blee, 2004.
71 'Towering Trouble', *Architects' Journal*, 7 August 1963, p. 256; 'Barracks at Knightsbridge: Overshadowing Hyde Park' (letter from Spence), *The Times*, 16 May 1970, p. 16; 'Astragal', *Architects' Journal*, 28 October 1970, p. 997; *Guardian*, 21 October 1970, p. 15; *Sunday Times*, 29 November 1970, p. 29; H. A. N. Brockman, 'Hyde Park Cavalry Barracks: A Tower of Controversy', *Financial Times*, 21 October 1970, p. 25.
72 'DoE issues writ against Sir Basil Spence over Knightsbridge barracks', *Building*, 12 April 1974, p. 40; interview with John Church, 2005.
73 Interview with John Church, 2005; Happold, 'The Reconstruction of the Household Cavalry Barracks', p. 3. On hippuric acid, see HPCBMB, letter of 11 September 1975 from J. Bowler-Reed to J. Dangerfield, and January 1978 report by Dangerfield on urine penetration.
74 *Building*, 13 April 1973, pp. 91–3.
75 For example, see Stride Treglown Ltd and Ministry of Defence, *Junior Ranks' Single Living Accommodation*, London, Defence Works (Design Guide), 1996.
76 Glendinning and Muthesius, *Tower Block*, Chapters 32, 33.
77 Interview with John Church, 2005.

Further reading

Brian Edwards, *Basil Spence 1907–1976*, Rutland Press, Edinburgh 1995

English Heritage, *The Survey of London*, vol. 45, *Knightsbridge*, London, 2000, pp. 64–76

Edmund Happold, 'The Reconstruction of the Household Cavalry Barracks', in *Proceedings of the Public Works and Municipal Services Congress 1970*, London, 1970

'Group working at the War Office', *The Architects' Journal*, 27 October 1960, p. 602

Ministry of Public Building and Works, Press Notice 307/1970, 'Household Cavalry Barracks, Knightsbridge', London, 1970

Index

Pages containing relevant illustrations are indicated in *italic* type.

Abbott, Robert 28
Abercrombie, Patrick 40, 100, 102, *103*, 113; *The County of London Plan* 44-9, *50*; influence on Donald Gibson 122–4, 126, 136
Aberdeen 113
'About Arch.S.A. - The Institute, the Public and *PLAN*' (Millar) 178, 180
'Above and Below, 1931' (Arntz) *23*
Academic Freedom (Arblaster) 211
Adams, Thomas 55n11
Aden command garrison 230
Adshead, Stanley 102, 110–*11*, 116
Adventure of Ideas (Whitehead) 81
advertisements in the urban landscape 130–1, 133
advocacy planning 30
Aircraft (Le Corbusier)86
Aircraft Carrier City *210*
Air Force Academy, U. S. 225, 229, 237
'Air Pollution in Bilston' (Neurath) *25*
air raids 99, 126, 132, 171n10; *see also* Blitz
Akhenaten 134, 136, *138*
Aldershot 228
Alexander, Christopher 80, 92, 94
'Allegories of Good and Bad Government' (Lorenzetti) 194
Allen, Phyllis 212
ambitions in *PLAN* 177–82
Annan, Noel 210
anxieties in *PLAN* 182–4
Arblaster, Anthony 211
Architect and Building News 127–9
architect-planner, new type of 121, 178, 180
Architects and Technicians Organization (ATO) 158–9, 171n10
architectural artists 102–6; *see also* architectural drawing
Architectural Association (AA) 159–62, 175, 181–2; dissent at 162–5; *Focus* 165–6; 'Town Plan, Faringdon, Berkshire' 166–*9*
architectural drawing 108, 111, 124; *see also* architectural artists; perspectives, architectural
Architectural Review 9, 36n17, 105–6, 108, 113, 207–9, 213
Architectural Students Association (Arch.S.A.) 175, 178, 180, 182; *see also PLAN*
architecture, 'ethical fallacy' of 191, 201
architecture-based planning 44
'Architecture and the Contemplative Principle' (Bagenal) 177
architecture and planning students 174–5; *see also* Architectural Association; education; *PLAN*
'Argument' 186–7
army barracks 223, 227–9, 242–5; Chelsea 230–1; Hyde Park Cavalry 231–40; Modernist design 225–6; traditional design 224–5; Wellington Barracks 241
Arntz, Gerd 22, *23*
Art (Bell) 86
art, public 134–40
art and science, synthesis between 42, 44
Arup, Ove 2–3, 41–2
Ashton, Mary 56n21
Association for Planning and Regional Reconstruction (APRR) *31–3*, 36n29, 56n26, 63, 78, 81, 180
Austro-Marxism 16, 18
axonometrics 110–11, 119n84

Badmin, S. R. 104
Bagenal, Hope 177
Ballard, J. G. 193
Banham, Reyner 11, 214
Barlow Commission 55n13
barracks *see* army barracks
Battersea Power Station 103
Bauer, Catherine 85
Bauer, Otto 18
Beauchamp, Suzanne 200, 203n40
Beaux Arts 105, 108, 123, 160–1, 163–5
Bedford 114
Bell, Clive 86
Bell, Gwendolyn 80
Benjamin, Walter 61, 72–3

Bennett, Arnold 202n11
Bennett, Tim 165
Berlin 67, 70
Betjeman, John 8, 14n53
Betterment Levy 6, 11
Between Man and Man (Buber) 187–8
Billerey, Fernand 165
Bilston 16, *25*, 26–31
Bird, E. L. 108
'Bird's eye view of New Osborne Street shopping centre' (Harvey) *103*
Birmingham 100
Bland, John 80
Blee, Anthony 233, 235–6
Blitz 2, 4, 100; Coventry 126–7, 129, 133, 145, 147–8, 153; *see also* air raids
Bournville Village Trust 55n9
Brain Trains 213
Brett, Lionel 208
Briggs, Asa 210
Britain by Mass Observation 7; *see also* Mass Observation
British Embassy Chancery in Rome 231–2
British Industrial Revolution 216
British Modernism *see* Modernism, British
British universities *see* universities, English
Broadgate, Coventry 127–8, *127–8*, 130, 134, 136–8, *137–8*, 152
Brower, Sidney N. 191, 202n2
Brown, Denise Scott 191
Brown, William Tatton 169
Buber, Martin 187–8
bungalows 8, 14n50
Burrett, Edward *67*
buses, double-decker 181

Cadbury, John 9
Calder, Ritchie 169
Calthorpe, Peter 194
Cambridge University 211–12
Campbell, Louise 121, 131–3, 141–4; Donald Gibson's career 122, *123*; Gibson at Liverpool School of Architecture 123–4; presentation of plans for Coventry 125–30; programme of public art for Coventry 134–40
campus, concept of the university 217
Canada 80–1, 89
Can Our Cities Survive? (Mumford) 192
capitalism, critique of 187
'Car Ownership in the World' *24*
Carpenter, Edmund 89
Carter, E. J. 32
Casson, Hugh 182
Castles on the Ground, The (Richards) 9
central place theory 53
chairs, student 212
Chapman, Dobson 110
Chaux 73, *74*
Chelmsford *105*
Chelsea Barracks 230–1, *230*
Chermayeff, Serge 80
Cherry, Gordon 1, 38
Chesterton, Elizabeth 162, 167
Chicago 60, *61*, 70
Chichester 108, 113
Childs, Derrick 100
Church, John 233, 235–7, 240, 242
cities, histories of 59, 61–3, 73–5; *The Culture of Cities* (Mumford) 60, 64–6, 71–2, 131, 133; *History Builds the Town* (Korn) 60, 66–9; *The Nature of Cities* (Hilberseimer) 60, 69–71
Cities in Evolution (Geddes) 40, 42, 187
Cities and Town Planning Exhibition 62–3
city of the future 59, 66, 69–74, 111
'City is Not a Tree, A' (Alexander) 80
'City Planning and the Proletariat' (Neurath) 19–20
City of Tomorrow (Le Corbusier) 116
'City Unseen, The' (Tyrwhitt and Williams) *93*
civic heraldry, revival of 133
civics 39
Clapson, Mark 9, 199–200
CLASP 210, 227–*9*
Clever Wife, A (Ridge) 193
Coates, Wells 158–9
Cole, G. D. H. x, 24–5, 30–1
collecting 61, 72–5
Colne Valley 183
commerce, unplanned city of 131
Communist Party 163, 170, 172n33, 178
community: new types of 203n40; real suburban 198–201; representations of suburban 192, 194–8; university 209
Community and Privacy: Toward a New Architecture of Humanism (Chermayeff) 80
comparative city planning 23–4
composite mind 42, 56n21, 183
comprehensive planning 43–4, 53–4
Congrés internationaux de l'architecture moderne (CIAM) 23–4, 80, *83*, 85–7, 192, 202n6
Congress of New Urbanism 194
Connell, Bryan *152*
Conservative Party 1, 5, 7, 11, 181
construction, prefabricated 87, 153, 180–1, 187; army barracks 224, 227, 237
co-ordination of knowledge 39, 41
corporate state 38
Council for the Protection of Rural England (CPRE) 5–6, 10
County Borough of Middlesbrough: Survey and Plan, The (Lock) 44, 49–53

County of London Plan, The (Abercrombie) 44–9, *50*
County of London Plan, The (Carter and Goldfinger) 32
Coventry ix–x, 121–2, 124, 131, 141–5, 155; the Blitz 147–8; new cathedral of 132–3, 142n52; oral histories of post-war reconstruction 146–7, 156; presentation of plans for 125–30, 148–51; programme of public art for 134–40; public opinion of rebuilding 152–4
Coventry Evening Telegraph 146–9
covers, reconstruction plan 109–10
Cox, Anthony 162–3, 165–6, 170
Cox, Oliver 175–6
Creative Demobilisation (Gutkind) 41
Crocker, Lucy 188
Cronin Hastings, Hugh de 36n17, 108
Crystal Palace 216
Cullen, Gordon 105–6, *107*
Cullingworth, J. B. 6
cultural history 72
cultural theory 79–80
Culture of Cities, The (Mumford) 60, 64–6, 71–2, 75, 131, 133

Daily Telegraph, The 205–*6*
Dale, Lawrence 109, 113
Darling, Elizabeth 157, 161, 170–3; dissent at the Architectural Association 162–5; first and second generation of British Modernists 158–60; *Focus* 165–6; 'Town Plan, Faringdon, Berkshire' 166–9, *167–9*
'Deaths in the First Year of Life in Bad and Good Houses' (Neurath) *29*
De Carlo, Giancarlo 207, 215–16, 218–20
decolonization 88
Dehaene, Michiel 38–43, 54–8; *The County Borough of Middlesbrough: Survey and Plan* (Lock) 49–53; *The County of London Plan* (Abercrombie) 44–9
Delos conferences 81–2
democracy 5, 10, 25, 31
Denby, Elizabeth 160, 169
Derbyshire, Andrew 176, 212–13, 218
design 42, 84–5, 106–10, 180–1; *see also* Modernism; Modernism, British
Design and Industries Association 158
'Destroy All Humans!' 194
'Development of the Creative Powers in the Child, The' (Buber) 188
development rights 7
Dewey, John 207, 215
diagrams 49
Dialogues with Delians (Pesovic and Tyrwhitt) 81
'Distribution of 100 Persons by Age Groups and by Families in 1950' (APRR) *31*, 32
drawing, architectural 108, 111, 124; *see also* architectural artists; perspectives, architectural
Duany, Andres 194, 200–1
Dublin University 218
Durham 110
Dutch Modernism 160, 171n19

Edinburgh 62
'Eduard Fuchs, the collector and historian' (Benjamin) 72
education 185–6, 188, 207, 215, 218; of architects and planners 55n21, 56n26, 63, 124, 174–5, 178, 183–4; *see also* Architectural Association; *PLAN*; universities, English
Eesteren, Cor van 23–4
Ekistic grid *82–3*, 94
Ekistics 79, *82–3*, *88*
electronic age 80
Elizabeth II 134, 152, 240
Eltham 46, *49*
English Journey (Priestly) 9
'Environment of the Olympians' (Mumford) 72, *73*
'ethical fallacy' of architecture 191, 201
eugenics 39
Europe, central 69
Exeter *109*, 109–10, 113
Explorations 79, 89, *90–1*, 92–*3*

Faire, Lucy 140
'Families of Different Sizes Need Dwellings of Different Sizes' *34*
family planning 2
Faringdon 166–9, *167–9*
Fayasuddin, Shri 88
Feilden, Bernard 205
feminism 84
Fenton, Clive 174, 190; ambitions in *PLAN 177*, 177–82, *179*; anxiety in *PLAN* 182–4; overview of *PLAN* 175–7, *177*; social criticism in *PLAN* 184–9
Festival of Britain 174, 182
Festival PLAN 182
Fields, Factories and Workshops (Kropotkin) 187
Fletcher, Janet 159–60
Flint, Kate 193
Focus 159, 165–6, *169*, 175–6, *176*
Ford, Ernest 125, 127, 134, 148, *152*
Forever England (Light) 9
Fort George 224
'Frankfurt Römerstadt: Biotechnic Order' (May) *65*
Freeman, Hugh 194
Free University of Urbino 218, *219*
Fry, Max 158–9, 165

Fulton, John 211
Function of the Orgasm, The (Reich) 188

Gabo, Naum 138
garden cities 18, 62–4, 136, 224
Gardner-Medwin, Robert 124
Geddes, Patrick 81–2, *82*, 161–2, 178, 187; surveying 39–40, 42, 44, 53–4, 55n11, 126
Gee, Walker and Slater 227
G80 227
gender 4, 80, 82, 84–5, 155, 196, 199–200; *see also* women
genealogies of the city of the future 59, 75n4; *see also* cities, histories of
geographers 53
geometric grids 69–70
George VI 129
Gesellschaft und Wirtschaft: Bildstatistisches Elementarwerk (Neurath) 22
Gibson, Donald ix–x, 121, 131–3, 141–6, 148, 151–2; career 122–3, *123*; Liverpool School of Architecture 123–4; presentation of plans for Coventry 125–30; programme of public art for Coventry 134–40; War Office *226*, 226–30, *229*, 233, 235
Giedion, Sigfried 61–2, 63, 71, 80–2, 136, 165, 187
Glasgow University 216
Glass, Ruth 51–2, 56n26, 57n47, 80
Glendinning, Miles 223–9, 242–5; Chelsea Barracks 230–1; Hyde Park Cavalry Barracks 231–40; Wellington Barracks 241
global city 80
globalism 183
globalization 81
Goldfinger, Ernö 32
Gollins, Melvin, Ward and Partners 228–9
Gombrich, E. H. 22
Goodhart-Rendel, H. S. 161–4, 166
Gorton, Neville 132
Gosport 228
Gottman, Jean 81
'Gracious Georgians, The' (Thomas) 177
Gregory, Peter 165
group work *see* teamwork
Gropius, Walter 42, 56n21, 123–4, 165, 183
Großstadtarchitektur (Hilberseimer) 70
'Growth of Central Area and Surrounding Villages' (Abercrombie) *48*
Gutkind, E. A. 41

Habermas, Jürgen 34
Habitat 1976 conference 79–80
happiness, human 26, 35
'Happy Families' 82, *84–5*
Hare, E. H. 200
Harrison, Tom 7–8
Harvey, J. D. M. 102–3, *103*, 111
Hayek, Friedrich von 10–11
health, theories of mental and physical 187–9
healthcare, criticism of British 185
health services 7
Heathrow air traffic control barracks 228
Henrion, F. H. K. *109*, 109–10
Hertfordshire Schools project 181, 189, 227
Hidden Persuaders, The (Packard) 197
Higher Education 209
High Rise (Ballard) 193
Highrise City (Hilberseimer) 70
'High Street and Tindal Square, The' (Minoprio) *105*
Hilberseimer, Ludwig 59–60, *61*, 69–71, 73–5
history *see* cultural history; cities, histories of
History Builds the Town (Korn) 60, 66–9
History and Truth (Ricoeur) 82
Holden, C. H. 106, *107*, 110, 158
Holford, William 2, 6, 106, *107*, 110, 152, 182
Hollein, Hans *210*
Hounslow Eastern Command Headquarters 228
housing *34*, 131, 201; houses vs. flats 8, 14n50, 37n30, 168–9; New Delhi United Nations Conference on 87–8, *88*; post-War Vienna 18–19; prices 9, 12, 15n84; traditional vs. new 181; university 205, 207, 209–11, 214; voluntary housing sector 159–60; *see also* army barracks
Howard, Ebenezer 18–19, 64
Hubbard, Phil 140
Hull *103*, 113
human happiness 26, 35
Human Identity in the Urban Environment (Bell) 80
human nature, ideas about 191, 201
human needs, standardised 2, 8, 11
Hume, David 10
Hunt, A. S. 182–3
Hyde Park Cavalry Barracks 224, 230, 238–40; criticism of 241; planning stages for 231–7

'Ideal Cities and the City Ideal' (Tyrwhitt) 90
imagery 110–13, 134–40
industrial design 181
International Encyclopedia of Modern Science 24, 32, 34
International Picture Language: The First Rules of Isotype (Neurath) 31
International Style 231
International System of Typographic Picture Education: Isotype 20, *21*, 22, 26, 28, 31–2
Invicta Barracks 228
Iredale, Frank 227
Isle of Man internment camps 24, 36n13

Isotype *see* International System of Typographic Picture Education: Isotype

Jacobs, Jane 79
Jacobsen, Arne 212
James, C. H. 105
Jellicoe, Geoffrey 166, 182–3
Jencks, Charles 198–9
Jeremiah, K. 110
Jewkes, John 11
J. M. Austin-Smith and Partners 230
John Anderson's University 216
Johnson-Marshall, Percy ix–x, 116, 123–6, 131, 147, 178
Johnson-Marshall, Stirrat 123–4
Jones, Barbara 106
Jordan, Robert Furneaux 181

Kensal House 170n9
Kenyon, Arthur 225
Keynes, John Maynard 5
kibbutz movement 187–8
Killick, John 176
Koenigsberger, Otto 87
Korn, Arthur 59–61, 66–9, 73, 75
Kornbluth, C. M. 201–2
Kropotkin, Petr 187

Labour Party 5–7, 11, 125
Lady Godiva 134, 137
laissez-faire approach to planning 43, 127, 130–1
Lancaster, Osbert 114
Larkham, Peter J. 99–101, 116–20, 124; post-war reconstruction plan artists 102–6; public view of reconstruction plans 114–15; reconstruction plan form and layout 106–10; reconstruction plan imagery 110–13; reviews of reconstruction plans 113–15
Larsson, Marten J. 175
Lasdun, Denys 205
Laski, Harold 5
Lathbury Barracks 230
layout, reconstruction plan 106–10
Leamington Spa 100, *101*, 105, 134
Le Corbusier 81, 92, 131, 181, 217; *Aircraft* 86; and the Architectural Association 162, 165; *City of Tomorrow* 116; views on women designers 84–5
Ledeboer, Judith 159–60
Ledoux, Claude Nicholas 73, *74*
Leicester University 216
levelling stone at Coventry 134, *135*, 143n59, 152
Life and Death of Great American Cities, The (Jacobs) 79
Light, Alison 9
Lihotzky, Grete 18–19
Lilley, Keith D. 140, 145–56
Ling, Arthur 46, *48*, 152, 182 –3
literature of suburbia 193, 201–2, 202n11
Little, Adrian 195
'Little Red Boxes' (Samuel) 9
Liverpool School of Architecture 123–4
Liverpool University 177
Llewellyn-Davies, Richard 163–4
Lock, Max 44–5, 49–53, 80, 88, 114, 166, 178
London *60*, 67; army barracks 230–1, 241; Bloomsbury area 126, 136; reconstruction plans 102–3, 106, *107*, 110; *see also County of London Plan, The*; Hyde Park Cavalry Barracks
'London: Social and Functional Analysis' (Abercrombie/Ling) *48*
London Underground 158
Lonely Crowd, The (Riesman) 196
Loos, Adolf 19
Lorenzetti, Ambrogio 194
Low, David 11
'Low Paid Employment 1931' (APRR) *33*
Lubbock, Jules 1–15
Lubetkin, Berthold 158–9
Lubin, Carol 203n40
Lutyens, E. 102, *103*, 113, 116
Lyndon, Donlyn 218

machine production 181
McIntosh, Angus 113
McKean, John 205–7, 213–15, 219–22; concept of the university campus 217–18; history of universities 211–12, 216; new English universities 208–11
McLuhan, Marshal 79–80, 89, 92–4
Macmillan, Harold 5, 10
Madge, Charles 7–8
Malta 230
'Man in Equipose' (Giedion) 80
Man From the North, A (Bennett) 202n11
man-made future 175, 189, 224
Manser, Michael 240
'Man's struggle to control the world inside himself' (Ritchie) 137–8, *139*
'Man's struggle to control the world outside himself' (Ritchie) 137–8, *139*
Manzoni, Herbert 100
maps, reconstruction plan 114
Maps for the National Plan (APRR) 32, *33*
Marples, Ernest 181
Marx, Karl 187
Marxism 16, 18
Mass Observation 7–8, 14n48, 43
Matless, David 3, 5
May, Ernst *65*

May, 1968 205, 207–8, 210
Measures, Harry 224
Mechanization Takes Command (Giedion) 187
Mendelsohn, Erich 123
'Merchant Fleets of the World' *21*
Middlesbrough *see County Borough of Middlesbrough: Survey and Plan, The*
Millar, John 178, 180
Mills, D. Dewar 106
Ministry of Defence 225
Ministry of Public Building and Works 228
Ministry of Town and Country Planning, establishment of 40, 178
Minoprio, Anthony *105*
Miramar, Florida 197
Modern Architecture Research (MARS) Group *60*, 67, 86, 158–60, 168–9
Modernism 17, 82–5, 91, 95–8; challenge to 192; Dutch 160, 171n19; failure of 146; and history 60–2, 64, 69; and Jaqueline Tyrwhitt 78–81, 87–9, 92–4; Significant Form 86; Swedish 123; utopian thinking 90; *see also* Congrés internationaux de l'architecture moderne; Modernism, British
Modernism, British 157, 161, 170–3; and army barracks 224–7, 230–1, 241–2; in Coventry 122, 132, 152; dissent at the Architectural Association 162–5; first- and second-generation 158–60; and *Focus* 165–6; at Liverpool School of Architecture 123–4; and the new universities 217; Pioneer Health Centre 188–9; and *PLAN* 180–1; and post-war reconstruction plans 116; as source of anxiety 175; 'Town Plan, Faringdon, Berkshire' 166–9, *167–9*; women architects 85; *see also* Modernism
Modern Man in the Making (Neurath) 31
monuments 138
Moore, Rodney 232–3
Morley, Derek Wragge 28–30
Morris, Charles W. 24, 32
Morris, William 42, 187
Morrison, Herbert 3, 5, 10
Morrison, W. S. 40
mortgage rates 9
Moscow 22–3
Mosley, Oswald 5–6
Motivational Research 197
Mountbatten, Lord Louis 225, 232, 240
'Moving Eye, The' (Tyrwhitt) 92
Muir, Sir Edward 236
Mullins, Bill 212
Mumford, Lewis 188, 192–3; *The Culture of Cities* 60, 64–6, 71–2, 75, 131, 133; influence on Donald Gibson 122, 131, 133, 138
Mundaneum 22, 35n10
Museum of Economy and Society 20, *21*

nationalisation of land 1, 7, 131
national planning 38, 131, 182; *see also* Town and Country Planning Act of 1947
Nature of Cities, The (Hilberseimer) 60, 69–71
neighbourhoods 57n47
neighbourhood units 44–6, 51
NENK 227–9, *229*
Neurath, Marie 16, 24, *25*, 28, *29–30*
Neurath, Otto 23–5, 32–5, 86; Bilston years 26–31; early years 16–18; Vienna years 18–22
neuroses 186–8, 194, 200
New City (Hilberseimer) 70
New Delhi United Nations Housing Conference 87–*8*
'New Feelings New Techniques' 181
'New Homes for Old' (NHFO) 160
New Regional Pattern (Hilberseimer) 70
New Urbanism 194, 200–1
New York 45
Nikolow, Sybilla 30
nineteenth-century European cities 64–5, 69, 71, 131
'Non-Plan: An Experiment in Freedom' (Banham *et al.*) 11–12
Norwich 114
Nothing Gained by Overcrowding (Unwin) 45
nuclear disarmament, petition for 182

Oberlander, H. Peter 80, 87
Open University 214
Ordeal by Planning (Jewkes) 11
Organization Man, The (Whyte) 197
Otlet, Paul 22, 35n10, 39
Oxford *104*, 113
Oxford University 211–12

Packard, Vance 195, 197
'Paper Dream City' 133, 140
Parent, Claude 87
particular, the 82, 86
Patrick Geddes in India (Tyrwhitt) 81
Pearse, Innes 188
Peckham Experiment, The (Pearse and Crocker) 188
Pepler, Sir George 6, 12
Perham, Margery 84
Perry, Clarence 45
perspectives, architectural: Coventry 127–9; Hyde Park Cavalry Barracks 235; Liverpool School of Architecture 124; post-war reconstruction plans 102–3, 105–6, 110–16
Pesovic, Milos 81
Philip, Raymond 104, 108

phoenix symbolism *109*, 110, 134, *135*
Pick, Frank 158
pictorial statistics 20, *21*, 22
picturesque planning 27, 36n17
Pierce, Rowland 105
Pioneer Health Centre 188–9
PLAN: ambitions in 177–82, *177*, *179*; anxiety in 182–4; overview of 175–7, *176*, *177;* social criticism in 184–9
Plan for a Democratic Britain (Cole) 25
PLAN GROUP 175–6, 178, 181–3; critique of British society 184–9; membership of 189–90n8
Plan for the New Coventry 129
'Plan for a Town for 50,000 Inhabitants for 1950' *167*
'Planners' People' (Brower *et al.*) 191
planning, new 116; *see also* Town and Country Planning Act of 1947
planning, world 183
Planning and the Countryside (Tyrwhitt) 81
planning students *see* architecture and planning students
plans, post-war reconstruction *see* reconstruction plans, post-war
Plater-Zyberk, Elizabeth 194
Pohl, Frederick 201–2
population growth, British 11, 12n4, 14n51, *31*, 31–2, 125, 209
post-war atmosphere, British 174
post-war reconstruction plans *see* reconstruction plans, post-war
Potteries Thinkbelt 213–15, *213–15*
precincts 46, 57n36, 126
prefabricated construction 87, 153, 180–1, 187; army barracks 224, 227, 237
Price, Cedric 213–15, *213–15*
Priestley, J. B. 9
Princeton University 217
propaganda 2–3, 125, 129–30, 169, 174
public art 134–40
public experience in Coventry 140, 145–6, 155–6; of the Blitz 147–8; of post-war reconstruction plans 148–51; of rebuilding 152–4; *see also* Coventry
public opinion 13n42, 29–30; of Coventry's civic art 140; Mass Observation 7–8, 14n48, 43; of post-war reconstruction plans 114–15; *see also* surveying

Raboni, Bianca 214–15
racial separation 200
Rampen, L. *93*
Ramsden, James 236–7
rationality *see* scientific rationality
Rebuilding Cities (Johnson-Marshall) 147
reconstruction plans, post-war 99–101, 116–20; artists 102–6; form and layout 106–10; imagery 110–13; public view of 114–15; reviews of 113–15
Redford Barracks 224
Redpath, J. T. 230, 236
Regional Survey of New York and its Environs 45
Reich, Wilhelm 188
Reidemeister, Marie *see* Neurath, Marie
Reilly, Sir Charles 26–7, 119n84, 123–4
Rendel *see* Goodhart-Rendel, H. S.
'Re-planned Chicago View from Lake Michigan' (Hilberseimer) *61*
reviews, reconstruction plan 113–15
Rhinehart, Raymond 217
Richards, J. M. 9–10, 158
Richards, Simon 191, 202–4; real suburban experience 198–201; representations of suburbia 192–8
Ricoeur, Paul 82
Ridge, William Pett 193
Ridley, Lisbeth 180
Riesman, David 195–7
Ritchie, Walter 137–8, *139*
'Road Planning in Relation to Communities' (Abercrombie) *47*
roads 46, *47*
Road to Serfdom (von Hayek) 10
Robbins Report 209
Robertson, Howard 161, 170
Rock, David 133
Roman Britain 63–4
Rotterdam 138
Rowse, Eric Anthony Ambrose 31, 39, 56n21, 161–2, 165, 168–70, 183
Royal Academy 102–3, 105
Royal Fine Art Commission 234–6
Royal Institute of British Architects (RIBA) 121–2, 158, 169, 180
Royal Military Academy 229
RT3 London Transport double-decker buses 181
Ruskin, John 187, 191
Rykwert, Joseph 208

Saint, Andrew 157
St Mary's Hall 129, 133
Samuel, Raphael 9
Sandys, Duncan 225
'Scene' 186
School of Planning and Research for National Development 161
schools, elementary 46, 57n39; *see also* education
Science and World Order 2–3
scientific rationality 17, 32, 34–5, 39–40
Scott, Geoffrey 191, 201

Scott Commission 55n13
Scully, Vincent 194, 201
Seaside, Florida 194
Sert, José Luis 192
Settlement and Allotment Garden Association, Austrian 18–20
sexual neurosis 188
Shakespearean Seven 209, 211, 217
Sharp, Thomas 3–4, 100–1, 103–4, *104*, 106, 109–10, *109*, 113, 116
Shepheard, Peter 105
Significant Form 86
Silkin, Lewis 4–5
'Site' 180–1
Skelton, John 134, 136, *137–8*
Skidmore, Owings and Merrill 225
Skinner, W. 224
slums, British 160
social character 195
social criticism in *PLAN* 184–9
social engineering 188
socialists 5, 187; Otto Neurath 16, 18–19
'Society and Environment. A Historical Review' (Tyrwhitt) 63
Society for the Protection of Ancient Buildings 177
sociology 26, 51, 184, 195–9
Something in Linoleum (Vaughan) 8–9
Southampton *111*
Space, Time and Architecture (Giedion) 61, 81
Space Merchants, The (Pohl and Kornbluth) 201–2
spatial theory 92–3
Spence, Basil: Coventry Cathedral 133; Hyde Park Cavalry Barracks 224, 231–40; Queen Anne's Mansions 241; University of Sussex 210–12, 216;
sprawl 2–3, 11, 192
standardised human needs 2, 8, 11
standards 41–3, 49
Stansfield, K. 104, 114
Stopes, Marie 2, 12n4
students, architecture and planning 174–5; *see also* Architectural Association; education; *PLAN*
students, university 211–12; *see also* universities, English
Suburban Century (Clapson) 199
'Suburban Sadness, The' (Riesman) 196
suburbia 3, 8–11, 202–4; real experience of 198–201; representations of 192–8
Summerson, John 126, 169
Surrey University *213*
surveying 39–41, 43–4, 54; *The County of London Plan* 46; *The County Borough of Middlesbrough: Survey and Plan* 52–3; criticism of Patrick Geddes' approach to 55n11; and histories of cities 68, 71; West Midland Group 55n9
Swedish Modernism 123
de Syllas, Leo 165
symbolism in Coventry 134–40

Taylor, Stephen 200
teamwork 41–3, 49, 136, 164, 183–4, 187
Tecton 159
Teignmouth 102
Tel-al-Amarna 134, 136
Tennant, Trevor 134–6
Thatcher, Margaret 1
Thinkbelt 213–15, *215*
'This Place is Driving Me Mad' (Freeman) 194
Thomas, Neville Penry 177
Tichelar, Michael 6
Tilden, P. 100
Tory Party 7, 11, 225, 241
tower barracks 234–40; *see also* army barracks
Town and Country Planning Act of 1944 6, 100, 131
Town and Country Planning Act of 1947 1–12, 100, 114, 116; background 2–6; establishment consensus 6–7; opposition to consensus 7–11
Town and Country Planning Association (TCPA) 3
Town and Country Planning Textbook, The (APRR) 63
'Town Plan, Faringdon, Berkshire' 166–9, *168–9*
Town Planning and Road Traffic (Tripp) 46
'Training the Post-War Architect' (Lock) 178
Tripe and Wakeham 230, *231*
Tripp, Alker 46, 57nn36–7
Tut Joseph 136
typeface 106
Typographica 106
Tyrwhitt, Jaqueline 39–40, 42, 56n26, 81–6, 89, 94–8; career 78–80; contributions to *Explorations* 90, 92–3; and history of the city 61, 63–4; United Nations work 87–8

United Nations Housing Conference in New Delhi 87, *88*
United States 68–9; Air Force Academy 225, 229, 237; Congress of New Urbanism 194; neighbourhood planning 45, 56n35; suburbia 192, 195–8
universalism 86, 89, 94
universitas 211
universities, English 205–8, 213–16; 219–22; concept of the campus 217–18; history of

211–12, 216; new 208–11; *see also* individual universities
'Universities in England: Still an Open Question' (Raboni) 215
University of East Anglia 205
University of Essex 205–7, 210
University Grants Committee 208–9
University of Stirling 207–9
University of Strathclyde 216
University of Sussex 208, 210, 212
Unwin, Raymond 45, 81
urban histories *see* cities, histories of
Urbanism, New 194, 200–1
urbanism, research-based 40
Urbino University 218, *219*
USSR 68–9
Uthwath Commission 55n13

Vaughan, Paul 8–9
Vienna 18–22, 35
Vienna Circle 16–17
Vienna Method of Pictorial Statistics 20, *21*, 22
visual languages 22–4; *see also* International System of Typographic Picture Education: Isotype
'Visual Representation of Architectural Problems' (Neurath) 26
voluntary housing sector 159–60
Vossoughian, Nader 20, 23

Wage Labour and Capital (Marx) 187
Walsall 115
Warner, Marina 193–4
War Office 226–7, 231, 233, 235–6
'War of Opinions and Ideas - A Fairy Story, The' 181
Webb, A. C. 103–4, *103–4*, 117n26
Webber, Melvin 203n40
Weber, Max 68
Welfare State 157, 166, 174, 185, 187–8
Wellington Barracks 225, 230, 237, 241
Welter, Volker M. 59–63, 72–6; *The Culture of Cities* (Mumford) 64–6; *History Builds the Town* (Korn) 66–9; *The Nature of Cities* (Hilberseimer) 69–71
West Midland Group 55n9
Westminster *112*
Whitehead, A. N. 81
'Why Have We to Plan for Leisure Now?' (Neurath) *30*
Whyte, Iain Boyd 23–5, 32–7; early years of Otto Neurath 16–18; Neurath's Bilston years 26–31; Neurath's Vienna years 18–22
Whyte, William H. 195, 197–8
Williams, A. V. 27
Williams, D. C. 93
Williams, Owen 188
Williams-Ellis, Clough 6, 102
Williamson, George Scott 188
Wilson, Woodrow 217
Windsor Liscombe, Rhodri 81–6, 89, 91, 94–8; career of Jaqueline Tyrwhitt 78–80; Tyrwhitt's contributions to *Explorations* 90, 92–3; Tyrwhitt's United Nations work 87–8
Wolverhampton 115
women 3, 9, 82, 84–5, 159, 200
Woods, Shad 218
Worcester 110, 115
working classes 184, 187–9
world planning 183
Wyatt, M. D 224
Wyatt, T. H. 224

'Yellow Book, The' 163–5
York 102
Yorke, F. R. S. 158
York University 210, *213*
Young, Allan 6
Young, Michael 213–14

Zadkine, Ossip 138