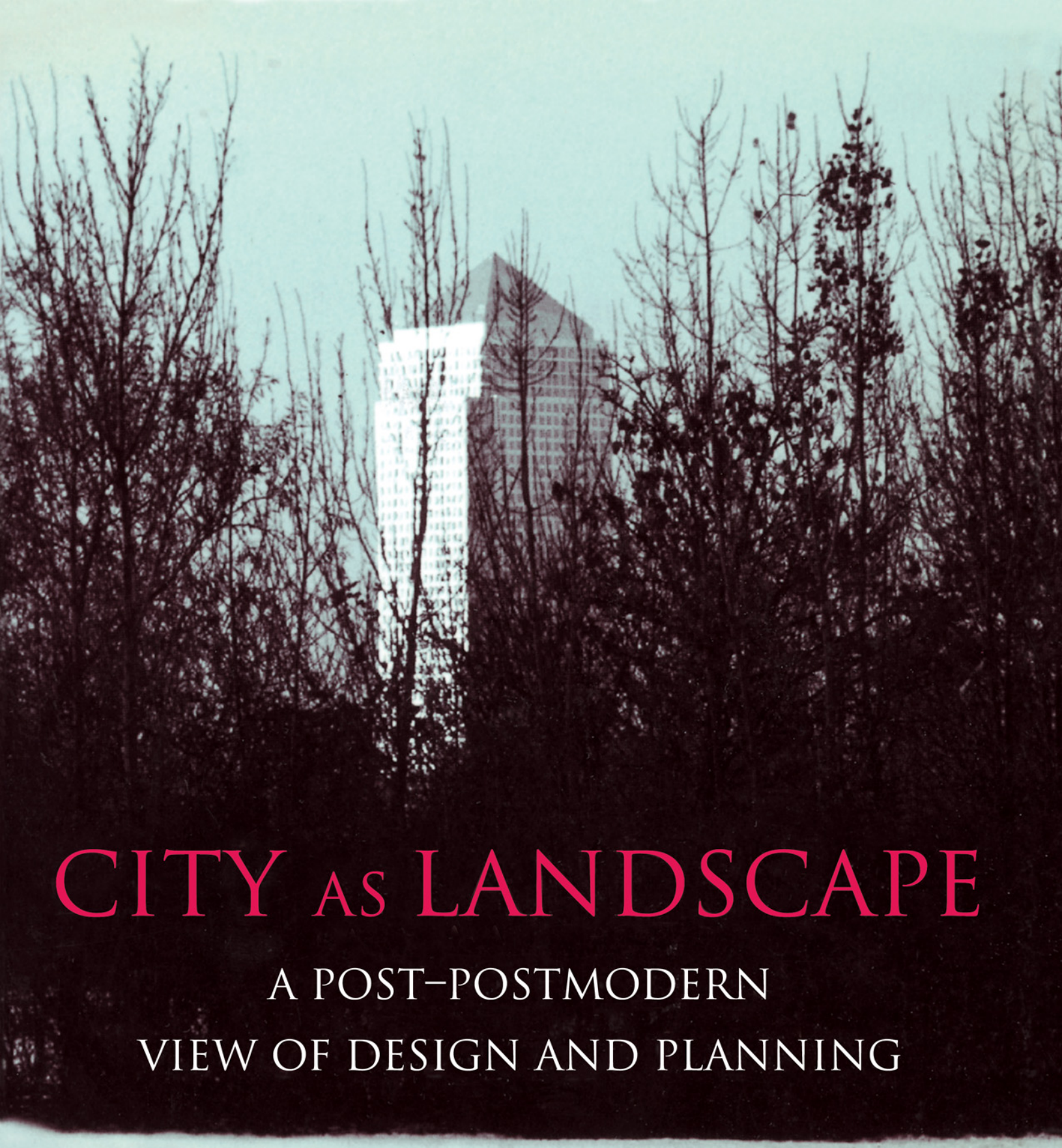


CITY AS LANDSCAPE

A POST-POSTMODERN VIEW OF DESIGN AND PLANNING

TOM TURNER

CITY AS LANDSCAPE

A POST-POSTMODERN VIEW OF DESIGN AND PLANNING

Tom Turner

Taylor & Francis
Taylor & Francis Group
LONDON AND NEW YORK

First edition 1996

Reprinted 2004
By Taylor & Francis
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

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

Transferred to Digital Printing 2009

First edition 1996

Typeset in 10/12 Times by Photoprint, Torquay, Devon

ISBN 10: 0-419-20410-5 (limp)
ISBN 13: 978-0-419-20410-7 (limp)

A catalogue record for this book is available from the British Library
Library of Congress Catalog Card Number: 95-74633

Cover photo:
Mile End Park, foregrounded. Canary Wharf to the rear.

Publisher's Note
The publisher has gone to great lengths to ensure the quality of this reprint but points out that some imperfections in the original may be apparent.

CONTENTS

CONTENTS

PREFACE

In the history books, cities are 'founded', 'taken by storm' and 'razed to the ground'. They are *objects*, which may be owned, conquered – or planned in two dimensions. Real places are perceived and seen as landscapes, dependent on physical and mental points of view, with foregrounds and backgrounds always switching positions. Some are ephemeral; others comparatively permanent. In these plural times, the day of the singular town plan has surely passed away. Individuals, communities and social groups wish to plan their own worlds. A new age of planning is on the horizon. Different plans will be required for different purposes. We shall see more planning, but less control. The city of the future will be an infinite series of landscapes: psychological and physical, urban and rural, flowing apart and together. They will be mapped and planned for special purposes, with the results recorded in geographical information systems (GIS), which have the power to construct and retrieve innumerable plans, images and other records. Christopher Alexander was right: a city is not a tree. It is a landscape.

The essays in this book are about plans, designs, towns, buildings, landscapes, parks, gardens and GIS. Their approach may be described as post-postmodern within the following schema:

- **Modern times** date from the Renaissance. The five centuries from c. 1450 to c. 1950 can be seen as a period in which reason helped to modernize society and came near to supplanting faith as the ultimate criterion of truth, justice and knowledge.
- **Modernism** describes the culture of the twentieth century. By 1950, reason had aspirations to become the one true God, jealous of all rivals. In public administration, she had no rivals.
- **Postmodernism**, by definition, comes after modernism. In these essays, it is seen as the endeavour to keep what was good in modernism but to move forward – to a more tolerant pluralism. Within post-modernism, one reads of post-industrialism, post-capitalism, post-socialism, post-communism, post-colonialism, post-confessionalism, and post-everythingism. Understandably, there is concern that a pre-Renaissance dark age of chaos will result from all these 'post-isms'.
- **Post-postmodernism** is a challenge to the 'anything goes' eclecticism of its predecessor. Reason continues to be held in high regard. But where reason falls short, one must turn to faith. Different faiths will see different landscapes. Post-postmodernism is a reaction to post-

> modernism's 'total acceptance of the ephemerality, fragmentation, discontinuity, and the chaotic' (D. Harvey in Jencks, 1992).

Some of the essays, including those on design theory and on parks, argue for more diversity. Others, including those on context and urban design, argue for limits to diversity. My own beliefs, which plainly underlie the essays, may be expressed as follows. Because of our inheritance, humanity has a duty of care: for the natural world, for our own interests, for those of others, for future generations. Civilization rests upon balance: between reason and faith, materialism and spirituality, tradition and imagination, self-interest and altruism. Reverence is due to the past; sacrifice may result in a better future. Beliefs are not capable of scientific proof – but a land ethic *is* necessary and citizens *do* require good landscapes.

The activity of 'planning' embraces two sorts of thing:

- **survey plan**: a two-dimensional representation of the world;
- **action plan**: a proposed course of action.

Many have believed that action plans could be derived, pseudo-scientifically, from survey plans. This approach, known as survey–analysis–plan, characterized much twentieth-century planning, architecture, landscape and garden design. It had the merit of diagnosis before treatment, but practitioners, seeing their work as a near-science, came to believe in one world, one way, one truth, one plan. Postmodern architecture, inspired by linguistic structuralism, sought to break the link between surveys and plans. Form would no longer be a slave to function. Pluralism would be the disorder of the day. Post-structuralists went further, arguing that surveys are dangerous, because they masquerade as value-free representations of the world. Each survey results from a judgement and is made for a purpose. Statistics, which once seemed coldly neutral, are now seen to be collected by organizations to serve particular interests. That is why 'lies, damn lies and statistics' became such a popular jibe.

Plans of action always relate to interpretations of the world. Communities and individuals have different world-views: men and women, rich and poor, flies and frogs, stockmen and stockbrokers, believers and non-believers. Means influence ends. Planning on paper is a specialized technique, which produces characteristically abstract results. Planning on landscapes produces other results. These essays, which are described as post-postmodern only for want of a better name, examine some of the implications of different world-views for planning, architecture, parks and gardens. Cities can be seen and planned as broad or narrow landscapes, ranging across the 'town', 'country', and 'nature reserve' of yesteryear.

Looking up, one Parisian landscape can be taken from beneath the Eiffel Tower. Looking down, another is to be had. On street maps, they could be represented by a single point. In section, upview and downview are 300 m apart. At other plan scales, that single point might become 16 points, or 16 billion points. Which representation should be used for 'planning the area round the Eiffel Tower'? It could be the Champs de Mars, a plant

community, an aquifer, the air, an alluvial plain, the Isle de France, Europe, or the world. If plans were made for each, there would be conflicts of interest, interpretation and policy. What is economically good may be ecologically bad, yet all need wise and imaginative plans. Without them, we may have no future.

There is some repetition in the essays. I have taken a layered approach to their writing to help make the case for a layered approach to environmental planning. In 1968, I saw myself as a town planner; in 1978 as a landscape designer; in 1988 as an urban and landscape planner. At the time of writing, I see it as folly to conduct design without planning or planning without design. To counter the modernist bent for ever-greater specialization, the essays take a fairly broad view, no doubt leading me into error. Science and the arts can learn from each other. Planning can learn from garden design, as it has often done in the past. Landscape design can learn from the arts and sciences. Garden design suffers when it is divorced from architecture and landscape. Parks should be planned in conjunction with other land uses. Architecture should make a just response to plans and to contexts. As individuals and as members of the public, we suffer from over-fragmentation and over-specialization.

May the city of tomorrow shine as a feast of landscapes.

Tom Turner
Greenwich, 1995

ACKNOWLEDGEMENTS

I should like to thank my family; my computers; my publishers; students and staff at the University of Greenwich; the many authors whose work I have read; the many designers and planners whose work I have admired; the editors who have published some parts of these essays in their journals: the essay on Feminine design in *Freescape*, Spring, 1993; the essay on Greenways in *Urban and Landscape Planning*, **3**, 1995; the essay on GIS, Structuralism etc. in *Urban Design Studies*, **1**, 1995.

The author and the publishers would like to thank the following publishers and individuals for giving permission to reproduce illustrations. We have made every effort to contact copyright holders, but if any errors have been made we would be happy to correct them at a later printing.

Figure 2, p. 5: *A child of six could do it*, Tate Gallery, London. Copyright © Patrick Hughes.

Figure 2, p. 22: Alexander, C. (1964) *Notes on the synthesis of form*, Harvard University Press, Cambridge, MA. Copyright © 1964 by the President and Fellows of Harvard College.

Figures 7 and 8, p. 26: Alexander, C. (1979) *A Pattern Language: Towns, Buildings, Construction*, Oxford University Press, New York. Copyright © 1977 by Christopher Alexander, Reprinted by permission of Oxford University Press, Inc.

Figure 11, p. 29: Jung, C.G. (1964) *Man and his symbols*, Aldus, London.

Figure 15, p. 33: Thompson, D'Arcy Wentworth (1961) *On Growth and Form*, Cambridge University Press, Cambridge.

Figure 8, p. 60: Tschumi, B. (1987) *Cinégramme Folie*, Butterworth, London. Copyright © Bernard Tschumi.

Figure 5, p. 67: from McLoughlin, J.B. (1969) *Urban and Regional Planning: A Systems Approach*, Faber and Faber Ltd, London.

Figure 4, p. 83: Howard, E. (1946) *Garden Cities of Tomorrow*, Faber and Faber Ltd, London. First published in *To-morrow: A Peaceful Path to Real Reform* by Ebenezer Howard, 1898.

Figure 5, p. 83: Hall, T. (1980) *Planning and Urban Growth in Nordic Countries*, Chapman & Hall, London.

Figure 5, p. 95: Van Lier, H.N. *Sustainable Land Use Planning*, Elsevier, Amsterdam (by permission of the Winand Staring Centre for Integrated Land, Soil and Water Research).

Figure 5, p. 127: Bacon, E. (1967) *Design of Cities*, Thames & Hudson, London.

Figure 7, p. 129: McHarg, I. (1971) *Design with Nature*, Falcon Press, Philadelphia. Reprinted by permission of John Wiley & Sons, Inc.

Figure 7, p. 113: Bjorn Axelsson.

THEORIES

This page intentionally left blank

1
POST-POSTMODERNISM

'Modernism', as a label, has currency in the arts, architecture, planning, landscape, politics, theology, cultural history and elsewhere. Politics can serve as a starting point:

> My friends, the past has been a time of woe. Let us go forward to a bright future, to a new age of Prosperity, Health and Happiness, founded on the principles of Liberty, Equality, and Fraternity.

Even now, who can resist the reformer's utopian cry? Yet we hear much talk of postmodernism. When, in its turn, the age of postmodernism draws to a close, as it must, will the next ages be known as post-postmodernism and post-post-postmodernism? Surely not. Time-based names have a limited shelf-life. Better labels will be found, especially for such a practical art as environmental planning and design. For the present, 'modernism' remains the best name for the trends that produced the culture of our times.

MODERNISM

In a broad sense, modernism can be used, as by Habermas, to describe the 'project of Enlightenment' (Habermas, 1987). By systematic doubt, Descartes arrived at the elementary principle 'I think therefore I am'. Thought was regarded as the very essence of existence, so that reason, rather than authority, religion or tradition, became the criterion of truth. Philosophers, and then politicians, became persuaded that the sustained application of reason would lead to truth, knowledge, freedom and happiness. These goals became the basis for utopian modernism in many areas of life.

J.C. Loudon, a child of the Enlightenment, applied reason to many environmental questions. He wrote famous magazines and encyclopedias on *Gardening*, *Architecture* and *Agriculture*, all of which propagated Enlightenment ideas. John Robertson, his admiring assistant, who later drew up Paxton's plan for the great public park in Birkenhead, penned an obituary poem to record Loudon's passing (Loudon, 1845):

> He wielded no sword in his country's cause,
> But his pen was never still;
> He studied each form of Nature's laws,
> To lessen each human ill.
>
> That voice is hush'd – and lost the sound
> Employ'd to raise the poor;
> But the echo shall, by his works, be found
> To reach the rich man's door.
>
> His pen is still! – and his spirit fled
> To brighten a world on high:
> The cold, cold earth is his lowly bed;
> But his name shall never die!

This is a noble statement of the means and ends of modernization: the pen will replace the sword; reason will explain Nature's laws; each human ill will be lessened; the poor will be raised up; the names of individuals who contribute to the enlightenment of mankind will be remembered forever. They contrast with the medieval beliefs of pre-Renaissance Europe: Nature was a divine mystery, inaccessible to human reason; Man, having fallen from grace, was condemned to a life of suffering and toil; works of art were inspired by God; individuals were of little importance; the

Church should wield the sword to restrain any manifestation of reason that threatened the one true faith, be it Christian or Moslem. By Loudon's time (1783–1843), reason had become a grand avenue to the modernization of society, art, religion and philosophy. Organized public education was a great hope for the future. In 1829 Loudon maintained:

> That individual cultivation carried to its greatest practicable extent in any one society, however corrupt or misgoverned it may be, will, sooner or later, effect, in the laws and government of that society, every amelioration, and, in the people, the highest degree of happiness and prosperity of which human nature is susceptible under the given geographical circumstances . . . We premise, however, that our plan is neither original on our part nor striking, being little more than what is already put in practice in Bavaria, Würtemberg, and Baden. (Loudon, 1829)

An enlightenment approach to the modernization of society spread from Europe to the whole world – and may indeed have produced 'the highest degree of happiness and prosperity' that is possible upon this earth. The technological benefits were great, and modernist principles led to parallel developments in the arts, architecture, planning and design.

Modern art

In painting and sculpture, 'modern art' is now used as a general term for the art of the twentieth century. This usage is found in numerous museums of modern art. Quite often, the work is abstract or non-representational. This was a response partly to the invention of photography and partly to the analytical spirit of the times. Classic non-representational works have had such titles as *Study No. 47* and *Composition No. 21*. The public found it difficult to appreciate these works, believing that paintings should be beautiful and representational, like Constable's *Hay Wain* or, perhaps, Manet's *Déjeuner sur l'herbe*. Yet 'modern art' developed over a long period.

Habermas sees in the development of modern art 'a trend towards ever greater autonomy' (Habermas, 1992). During the eighteenth century, the fine arts became separated from religious and courtly life. During the nineteenth century, this separation developed into the idea of 'art for art's sake'. From then onwards,

> colour, lines, sounds and movement ceased to serve primarily the cause of representation: the media of expression and the techniques of production became themselves the aesthetic object. (Habermas, 1992)

Art became autonomous. To abstract means 'to draw away from'. This is what much twentieth century art has been about: the abstraction of colours, shapes, forms, lines, tones, materials, sensations, concepts, words, textures, emotions, actions, gestures, bodily fluids. Everything abstractable has been abstracted. Geometrical shapes, drips of paint and piles of bricks have been the result.

The avant-garde became a characteristic of twentieth century art. In asking 'What is art?', in place of the former question 'What is beautiful?', artists have, again and again, tried to break away from the work of their predecessors. This produced what Robert Hughes (1991) described as the *Shock of the New*. Horror and ridicule have been typical responses. A Punch cartoon of July 1918 tells of the horror (Figure 1). 'A child of six could do it' tells of the ridicule (Figure 2). In addition to cutting themselves off from patronage, modern artists sought to cut themselves away from everything that went before. Being avant-garde was the goal of goals. Only thus could the poor struggling artist win a place in the art galleries of the world.

Modern architecture

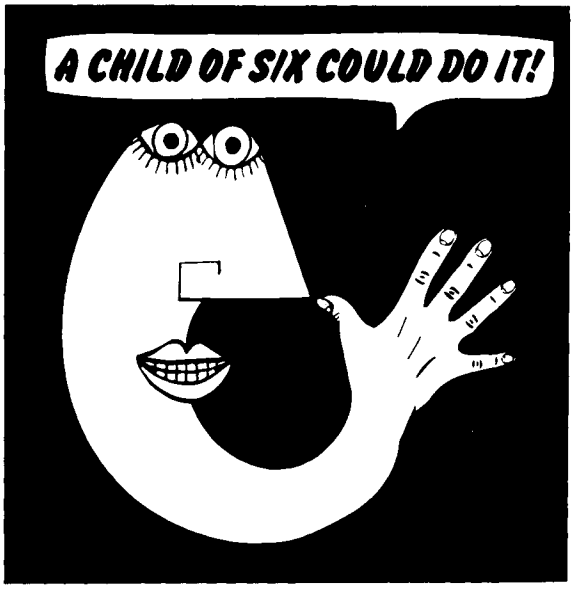
In architecture, Modern Movement is a general term for the new style of the twentieth century. Typically, it used a structural frame of reinforced concrete, in which floors, roofs and vertical supports formed a homogeneous whole. The famous names of this movement included Frank Lloyd

"WAR PICTURES"

THE MOTHER: "Of course, I don't understand them, dear; but they give me a dreadful feeling. I can't bear to look at them. Is it really like that at the Front?"

THE WARRIOR (who has seen terrible things in battle): "Thank heaven, no, mother."

1 The horror of modern art.



2 But a child of six could do it.

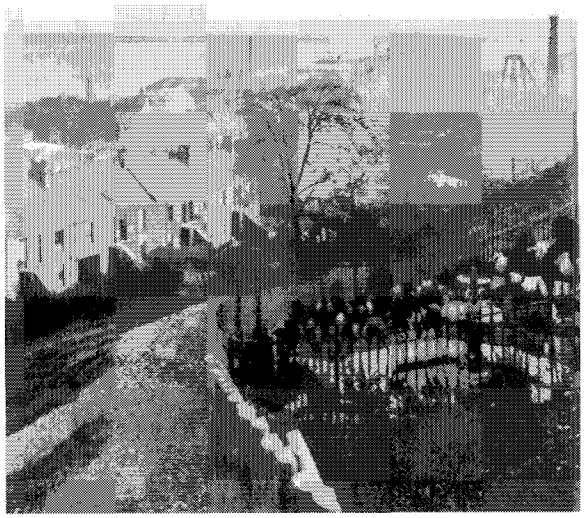
Wright, Le Corbusier, de Stijl and the Bauhaus. For the public, modern architecture was as puzzling as modern art. Abstract concepts are not easy to grasp and, because architecture is a public art, those who disliked modern architecture took it as a personal affront. It is one thing to put abstract paintings in private rooms; quite another to build them on street corners where they disrupt familiar scenes. The Prince of Wales encapsulated this feeling with his jibe to the Royal Institute of British Architects that a proposed addition to Britain's National Gallery in Trafalgar Square was 'a monstrous carbuncle on the face of a well-loved friend'.

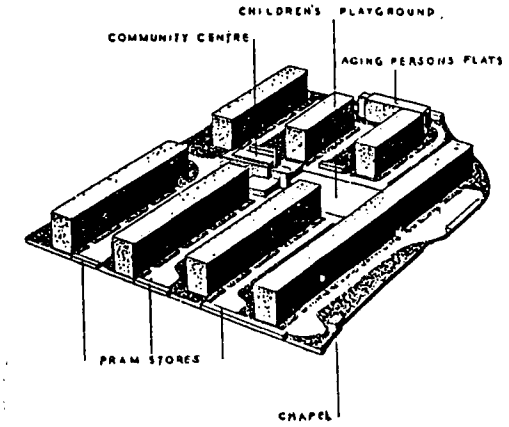
Modern planning

In planning, modernism is associated with the endeavour to make cities better, healthier and more functional. This began with nineteenth century public health measures. Engineers were given powers to lay drains and supply fresh water, to prevent infectious diseases. Laws were enacted to get rid of narrow streets because it was thought, incorrectly, that foul air caused the spread of infection. When traffic volumes increased, these laws were used to enable street widening for vehicles. The process of modernizing cities became known as 'urban renewal'. Typically, governments purchased huge areas of 'substandard' housing, destroyed the old buildings, constructed wide new highways and lined them with modern blocks (Figure 3). Every modern city has zones of this type, which are especially loathed by families with children. Moscow, and other cities in the former communist countries, are almost entirely built in this manner. 'If it were done,' the modernizers reasoned, 'when 'tis done, then 'twere well'. That old king, the European city form, was murdered in his sleep. Only the ghosts survived.

POSTMODERNISM

Doubts about the efficacy of reason and the project of the Enlightenment have grown during the twentieth century. French revolutionaries used the slogan '*Liberté! Egalité! Fraternité! ou la mort*' (Figure 4). And *la mort* (death) turned out to be one of the great products of modern revolution. Once the French Revolution was over, Europe basked in a century of near-peace, from





3 A 1945 book on *Planning our New Homes* (HMSO, Edinburgh) showed an example of 'the terrible squalid rows in the mining districts' (above) and an example of modern architecture (below) '400 modern working-class flats . . . grouped as a residential unit with its community centre, children's play space, pram stores and separate block of flats for ageing persons'.

4 *La mort* was one of the great products of revolutionary modernism.

1815 to 1914. Optimists could believe in Progress, until the opening salvos of the First World War. Since then, the pessimists have been able to gather much evidence for their view that human society is incapable of progress: Stalin's Great Terror, the Second World War, the Holocaust, the atomic bomb, the Vietnam War, the 300 lesser wars between 1945 and 1990, the industrialization of agriculture, environmental degradation and destruction of the world's primeval forests. Bernard Levin attributes many of these evils to utopian modernism (Levin, 1994).

A disturbing aspect of these twentieth century tragedies is that they were direct products of Reason and of Science, with the worst excesses in the most advanced or most advancing nations. This has led to a re-evaluation of reason. Soldiers are now taught to listen to their 'inner voice', as well as to their officers; scientists are urged to be ethically responsible; green politicians speak of restraining economic growth. George Steiner suggests that society may have entered Bluebeard's Castle: when Reason opens the final door, labelled Knowledge, our species will hurtle to its

own destruction (Steiner, 1971). It is no wonder that so many academic disciplines talk of 'post-modernism'. The term suggests, like postgraduate studies, the alluring prospect of moving to pastures new: 'Ladies and gentlemen, the past is behind us and the future lies ahead; let us go forward with confidence.' It promises much but means little. Some postmodernists have sought to strengthen their positions by forsaking rationalism. This makes texts very difficult to understand and puts one in mind of Bertrand Russell's observation that it is easy for irrationalisms to defend themselves with bad arguments. When the arguments fail to convince, it proves the limitations of reason (Russell, 1961).

In the fine arts, to be postmodern is to be post-avant-garde. Instead of producing religious art, art for art's sake, or art for the gallery's sake, art is produced to be sold. Critics speak of the commodification of art. Having tired of starving in garrets, many artists have ceased trying to express their views on the human condition, the nature of the world and the nature of art. Instead, they often produce what people would like to buy. Who can blame them?

In architecture, postmodernism means anything that comes after the Modern Movement. Charles Jencks opens his account of the subject by describing the detonation of the Pruitt-Igoe housing scheme at 3.32 pm on 15 July 1972. He explains:

> Pruitt-Igoe was constructed according to the most progressive ideals of CIAM (the Congress of International Modern Architects) and it won an award from the American Institute of Architects when it was designed in 1951. It consisted of elegant slab blocks fourteen storeys high with rational 'streets in the air' (which were safe from cars, but as it turned out, not safe from crime) . . . Moreover, its Purist style, its clean, salubrious hospital metaphor, was meant to instil, by good example, corresponding virtues in the inhabitants. Good form was to lead to good content, or at least good conduct; the intelligent planning of abstract space was to promote healthy behaviour. (Jencks, 1991)

The evil genie in the above tale is hygienic rationalism. Jencks invented the July date and time, to poke additional fun at this genie, but he has no proposals for Reason to be re-corked in its bottle and cast upon the oceans of time. Far from it. He identifies eleven reasons, described as 'causes', for the crisis in architecture. Only two are explained in detail: univalent form and univalent content. Univalent form is typified by the glass and steel 'matchboxes', which modern architects used as the 'solution' to every sort of architectural 'problem': one way, one truth, one style. Univalent content is seen as a consequence of the range of clients who commissioned modern buildings: faceless bureaucracies, large industrial combines, retail giants and mass housing organizations:

> With the triumph of consumer society in the West and bureaucratic state capitalism in the East, our unfortunate Modern architect was left without much uplifting social content to symbolise. (Jencks, 1991)

Good tailoring does little for an antisocial body.

After identifying univalency as the problem, it is no surprise that Jencks should name multivalency as the solution. His introduction to the 1991 edition of *The Language of Post-Modern Architecture* observes that 'If anything reigns [in modern Western society] – it is pluralism'. Pluralism is a strong and easy position to defend. Any who rattle their keyboards in opposition tar themselves with the worst brush of the twentieth century: totalitarianism. 'Postmodernism' is used as a label for a group of architectural styles that draw something from modernism and something from historical antecedents.

Postmodern planning is also pluralist. Jane Jacobs launched a bitter attack on the singular zoning policies of modernist planning in 1961. Hating the idea of hygienic zones for housing, industry and commerce, she admired the high density and diverse mixture of land uses in Boston's North End. Unlike her, modernist planners saw it

as 'a three-dimensional textbook of "megalopolis" in the last stages of depravity'. Harvard and MIT students, under the guidance of their tutors, spent time on 'the paper exercise of converting it into super-blocks and park promenades, wiping away its non-conforming uses, transforming it to an ideal of order and gentility'. For Jacobs, 'the general street atmosphere of buoyancy, friendliness and good health was so infectious that I began asking directions of people just for the fun of getting in on some talk'. She also described the streets to be 'probably as safe as any place on earth' (Jacobs, 1962).

Instead of trying to create a rationalist utopia, with a place for everything and everything in its place, postmodern planners have embraced the concept of diversity. Feminist critics, who attacked the literary dominance of DWEMs (dead white European males), have turned upon the WLMMPs (white live middle-class male planners) who dominated modernist planning. Dyckman writes that: 'From a poststructuralist perspective, it is no longer appropriate to assume that the search for a true or right way to plan is desirable or possible' (Dyckman, 1990). An inherent danger of plural planning is that the environment will become an unholy jumble of ill-assorted land uses and building styles, devoid of the coherence that we admire in the ordered places made by our ancestors.

POST-POSTMODERNISM

Giving names to periods is difficult. As cultural terms, 'Classicism', 'Neoclassicism', 'Romanticism', 'Impressionism' and 'Post-Impressionism' are imprecise. Yet we all find the terms useful, and arguing over their meaning keeps many scholars in gainful employment. With regard to time periods, 'Ancient World' is fairly secure; 'Middle Ages' is becoming progressively inaccurate; 'Modern Age' keeps moving forwards. 'Modernism' is partly a cultural term and partly a time word. Should its time reference make 'Modern' unusable as a cultural term, what might take its place? In art history, a case can be made for Age of Abstraction. In a wider context, 'Age of Analysis', 'Age of Reduction' or 'Age of Science' might serve. Each highlights a key characteristic of twentieth century thought: the endeavour to analyse everything into essential constituents. Abstract artists reduced art to shapes and forms; music was reduced to tones; novels became streams of consciousness; chemists hunted for the smallest components of matter; physicists looked for a single explanation of the universe. It is too soon for us to know what period label will take the place of 'Modern', but something will.

'Postmodern' may survive longer than 'Modern' because of its very eccentricity. It could however be replaced by Post-Abstract if Age of Abstraction came into use. In the sixth edition of *The Language of Post-Modern Architecture*, Jencks takes heart from his critics' proclamation of the death of postmodernism and classifies them, deftly, as Neo-Moderns. This places them after modernism yet before postmodernism. Jencks sees their criticism as proof of architectural postmodernism's continued vitality, 'for who is going to waste time flogging a dead style?' Actually, it is a very popular activity. Postmodern architecture can be seen as inherently trivial, glitzy and stuntish, appealing to the wallet, not to the mind and not to the soul. It belongs in shop windows and in cinemas, in Madison Avenue and in Tinseltown. No one who uses retail shops or watches movies should despise the great products of these great industries. But an 'anything goes' pluralist approach to urban design gives us the equivalent of a junk shop with, perhaps, an empty chocolate box, a kettle and an old TV set (Figure 5). Alone, each might be elegant, stylish or beautiful; together they are jumble. As a direct consequence of pluralism, the postmodern city street resembles an out-of-step chorus line. If anything goes, then nothing goes.

But there are signs of post-postmodern life, in urban design, architecture and elsewhere. They are strongest in those who place their hands on their hearts and are willing to assert 'I believe'. Faith always was the strongest competitor for reason: faith in a God; faith in a tradition; faith in an institution; faith in a person; faith in a nation. The built environment professions are witnessing

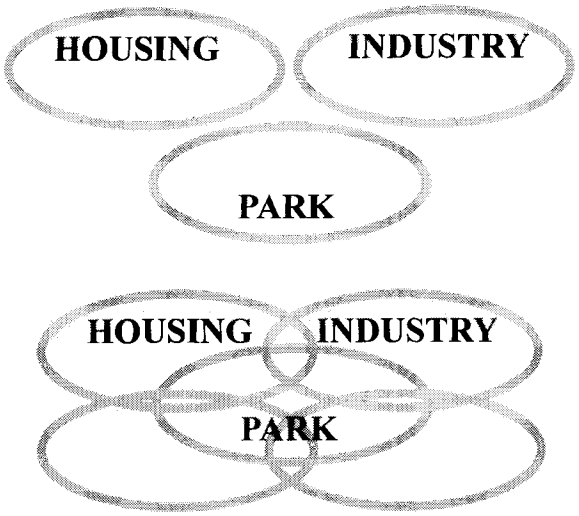
5 'Anything goes' postmodernism gives us the pluralism of the junk shop.

the gradual dawn of a post-postmodernism that seeks to temper reason with faith. Designers and planners are taking to the rostrum and the pulpit. Christopher Day has written a book on *Places of the Soul* (Day, 1990). Christopher Alexander's work is discussed at greater length later in this book, in essays on design methods and the Pattern Language.

As a youngster, Alexander was a mainstream technocratic modernist. When disillusion set in, he set forth on the road to San Francisco. Once there, he gathered a community of designers, read Taoist philosophy, and published books on the *Timeless Way of Building* (Alexander, 1979). Jencks classifies him as a postmodern ad hoc urbanist. Alexander, rightly in my view, rejects the label 'postmodern' (Alexander and Eisenman, 1984). The pattern language rests on deep faith as much as it does upon reason. It is post-Postmodern, or pre-Modern. Alexander starts and finishes the first chapter of the *Timeless Way* with a traditionalist creed:

> There is one timeless way of building.
>
> It is thousands of years old, and the same today as it has always been.
>
> The great traditional buildings of the past, the villages and tents and temples in which man feels at home, have always been made by people who were very close to the centre of this way.
>
> . . .
>
> To purge ourselves of these illusions, to become free of all the artificial images of order which distort the nature that is in us, we must first learn a discipline which teaches us the true relationship between ourselves and our surroundings.
>
> Then, once this discipline has done its work, and pricked the bubbles of illusion which we cling to now, we will be ready to give up the discipline, and act as nature does.
>
> This is the timeless way of building: learning the discipline – and shedding it.

The 'artificial images of order' that Alexander criticizes were rational, modernist and utopian. Postmodern 'planning' was anti-planning. When the hoped-for urban paradise turned into a hated 'concrete jungle', with streets in the air, criminal gangs, tall blocks and vacant open spaces, planners lost heart. Post-postmodern planning is a sign of returning self-confidence. Traditions are being rediscovered. In place of the old singular zones, for housing, industry, commerce and recreation, a plural zoning, resembling a pile of rubber bands (Figure 6), is being founded on belief and sentiment. Plural zoning has a greater similarity to natural habitats than singular zoning.



6 Singular and plural zoning.

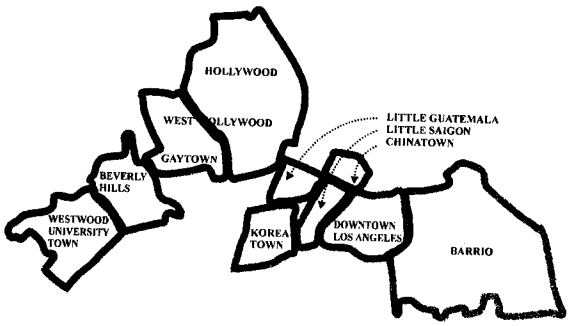
The waterfronts of the world are becoming Zones of Waterfront Character, with special regulations. Old high streets are now themed shopping areas, dominated by antique bistros. London and San Francisco have Chinatowns.

> In New York City, these generative rules are legion: a special district controls the

recycling of Union Square as a luxury enclave; new contextual zoning is abetting the development of the Upper West Side in a regenerated 1930s Art Deco format; while great parts of Manhattan stand cordoned off behind the boundaries of historic districts as large as Greenwich Village and the Upper East Side. (Boyer, 1990)

The zones are cultural, not functional (Figure 7). They overlap and there are other possibilities. Central Paris is a zone of low buildings. Bavaria has zones for timber buildings. Many cities now have ecological habitat policies. When London's Isle of Dogs was designated as an Enterprise Zone, it could also have become a 'Willow World', using *Salix* as the major tree species. With dock basins and high walls of mirror glass,

7 Cities can have many types of zone.



8 Cultural zones in central Los Angeles, based on Jencks' *Heteropolis*.

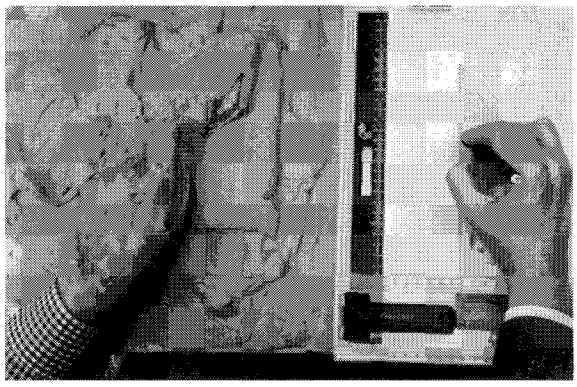
the willows would have been beautiful and the symbolism would not have been inappropriate.

New zones can be visual, historic, ecological, cultural, or they can give a spatial dimension to belief. Los Angeles has Koreatown, Little India, Little Saigon and Gaytown, which could become self-managed communities (Figure 8). There could also be a Green Town, based on conservationist principles, and an Esperanto Town, which uses the international language. As post-postmodernism is a preposterous term, we must hope for something better. The Age of Synthesis is a possibility. Coherent, beautiful and functional environments are wonderful things, which can be produced in different ways. The modernist age, of 'one way, one truth, one city', is dead and gone. The postmodernist age of 'anything goes' is on the way out. Reason can take us a long way, but it has limits. Let us embrace post-postmodernism – and pray for a better name.

2
DESIGN AND PLANNING METHODS

Design results from methods of working. A sculpture of welded steel differs from one chipped from granite or modelled with clay. Rodin was a modeller, Brancusi a carver, Picasso a constructor. Look at their work: different methods produce different results. A modern planned town is not like an organic town. A garden that is made by using a drawing to fix every detail before starting work will differ, markedly, from one that is made by choosing the plants and stones one at a time, year after year. Means influence ends.

Rough hands and smooth hands can both produce good design (Figure 1). The rough-hands method is practised in workshops and out of doors. It is the craftsman's way, the peasant's way, the ancient way. The smooth-hands method is to sit in an office working at measured drawings for implementation by others at remote sites. This is the modern way: the way of the engineer, the architect, the town planner and the landscape architect. Both methods have their strengths. In medieval times, the rough-hands method was universal. Today, it is the other way about. The change took place as part of a broad cultural trend, with the rise of modernism a significant factor. Planners can learn from designers.



1 Rough hands and smooth hands can both produce design.

PRE-MODERN DESIGN METHODS

Apprenticeship is a system of great antiquity. The Code of Hammurabi, a Babylonian king, required skilled craftsmen to teach the young. Books were not available, and technical knowledge was of great value. Those who possessed knowledge wished to keep it to themselves. In ancient Rome, most craftsmen were slaves. This was an effective means of retaining the ownership of knowledge. In the Middle Ages, craft guilds emerged in Western Europe, controlled by independent master craftsmen. Articles of apprenticeship bound trainees to their masters, often for seven years, to work for little or no pay. Some masons went on to become designers. This was the only way to become an 'architect'. The knowledge gained in apprenticeship was practical, not theoretical. In the great cathedrals, full-size drawings and large sets of dividers were used to set out masonry. Shapes and forms developed gradually in the minds of master craftsmen. Small-scale drawings came into use at a later date.

Under the master and apprentice system, design decisions were taken on traditionalist grounds. Things were done in special ways because they had always been done in such ways. 'If 'twere right for Old Bill, 'twill be right for me'. Changes came about very gradually, if at all. John

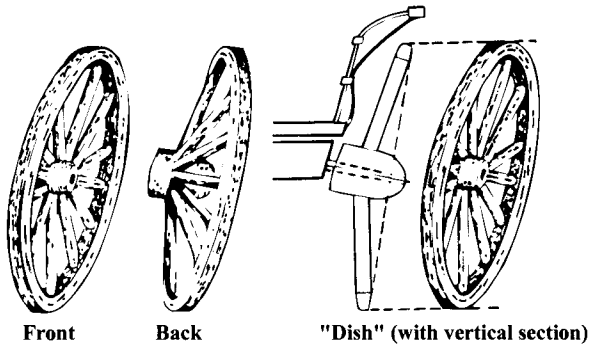
Christopher Jones, who published an extensive study of design methods (Jones, 1980), was greatly impressed by this aspect of craft evolution, and especially by George Sturt's book on *The Wheelwright's Shop*. He quotes Sturt's account of the waggon-builders' approach to what we call design:

> The truth is, farm-waggons had been adapted, through ages, so very closely to their own environment that, to understanding eyes, they really looked almost like living organisms. They were so exact. Just as a biologist may see, in any limpet, signs of the rocky shore, the smashing breakers, so the provincial wheelwright could hardly help reading, from the waggon-lines, tales of haymaking and upland fields, of hilly roads and lonely woods and noble horses, and so on . . . Was it to suit the horses or the ruts, the loading or the turning, that the front wheels had to have a diameter of about four feet?
> . . .
>
> I never met a man who professed any other than an empirical acquaintance with the waggon-builder's lore. My own case was typical. I knew that the hind-wheels had to be five feet two inches high and the fore-wheels four feet two; that the 'sides' must be cut from the best four-inch heart of oak, and so on. This sort of thing I knew, and in vast detail in course of time; but I seldom knew why. And that is how most other men knew. (Sturt, 1923)

Most design was done in this way, in most countries in most historical periods. It was used for carts (Figure 2), buildings, ships, cars, towns, gardens and every other thing. Admiration for the products of traditional design methods continues to grow.

MODERN DESIGN METHODS

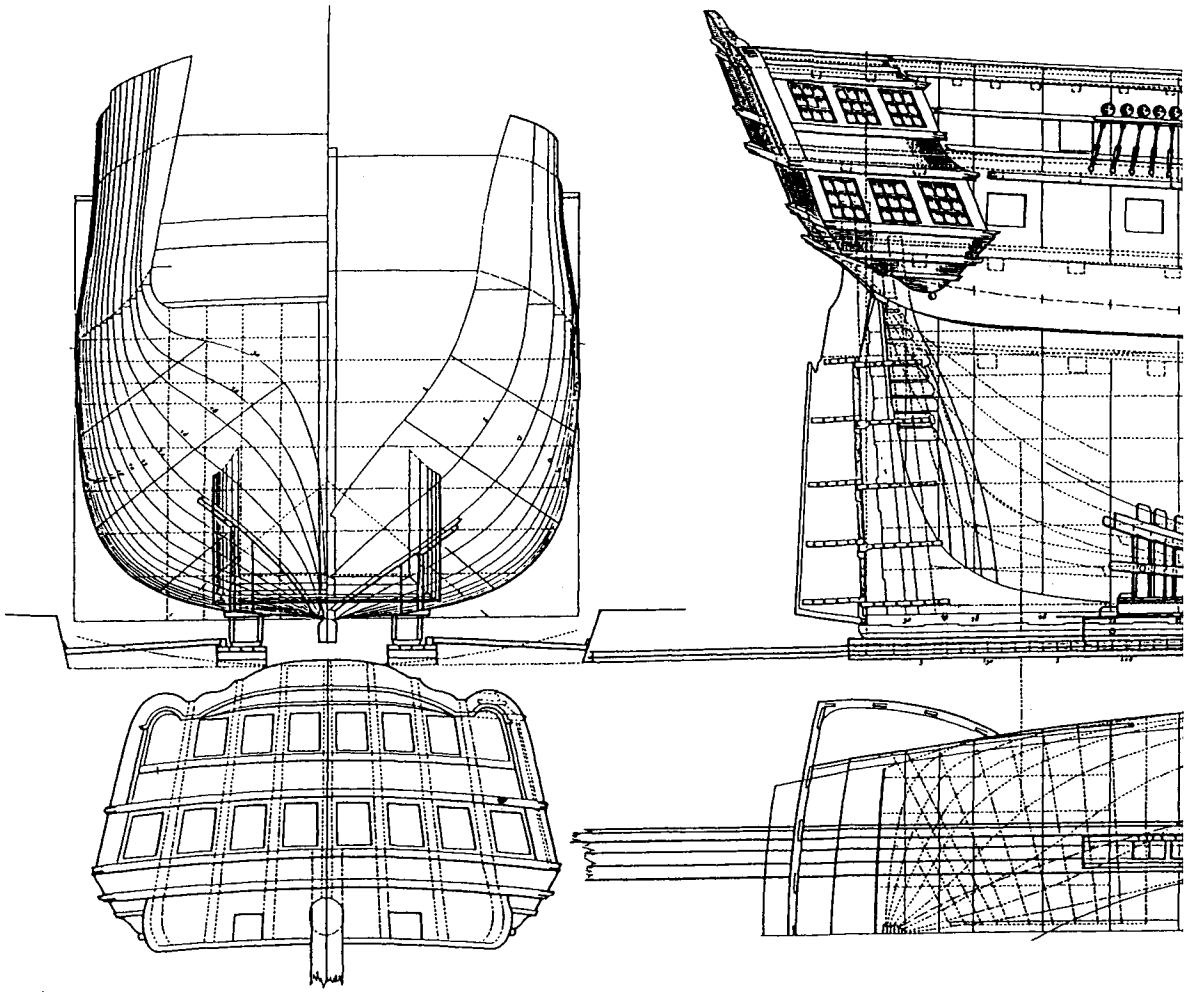
The master and apprentice system declined in the later stages of the Industrial Revolution.



2 A product of craft evolution, from George Sturt.

Machines caused a separation between skilled designers and unskilled workers. Craftsmen continued to make machines, but their hands became smoother as their need for theoretical knowledge increased. James Watt, the inventor of several steam engines, studied at university. Though he could, in his own words, 'work as well as most journeymen', he was refused admission to a trade guild. Eventually, the universities themselves introduced technical training, leading to *master's* degrees. When governments began to subsidize this type of education, the master and apprentice system declined further. So did the contribution of rough hands to design.

The modern approach, of design with smooth hands, has grown by degrees. It began in ancient times and resumed its advance with the Renaissance. Vitruvius wrote that the architect should be 'skilful with the pencil, instructed in geometry' (Vitruvius, 1914 edn). Since the translation of Euclid's *Elements* into Latin, in 1482, the activity of making new places and products has become steadily re-entangled with the process of drawing. To *de-sign* is to make signs, originally on paper, increasingly on computer screens. To *plan* is to make a projection on a flat surface. The early advantages of design-by-drawing were both technical and aesthetic. In shipbuilding, technical considerations were dominant. Drawings made possible calculations relating to structure and function (Figure 3). Orders could be sent to the forests, and tradesmen could proceed with the simultaneous fabrication of separate parts.



3 Design-by-drawing facilitated shipbuilding, through mathematical calculation and simultaneous fabrication.

In architecture, the early benefit was mainly aesthetic. But, as construction became more sophisticated, drawings were also required for structural calculations.

Smooth-handed designers use more abstract reason, and more self-importance, than their rough-handed counterparts. To represent a place or a thing on paper, abstract thought is required. 'Abstract', as a verb, means to draw out. The draughtsman's tools – geometry and arithmetic – are rational procedures, useful for drawing out. Book learning necessitates the use of reason. The whole procedure is one of simplification and of concentration on fundamental elements. In societies that believed reason to be the grand avenue to human progress, it was natural that rational design should supplant craft evolution. Town plans and building plans came to be founded on survey drawings.

During the nineteenth century, the technical and aesthetic reasons for producing drawings grew apart, as did the architectural and engineering professions. The architect became a gentleman-artist, reliant on experienced craftsmen and engineers to make buildings stand up and resist the elements. In the twentieth century, architects

sought to gain control of the whole building process through their drawing skill. So much knowledge was available in books that it became feasible to produce drawings and specifications for every aspect of the building process. When waggon building was replaced by car building, a similar change afflicted vehicle production. Men in smart suits subjugated those in boiler suits.

During the early years of automobile manufacture, vehicles continued to be designed and built by craft methods. Components were machined, one at a time. Each part was honed to slightly different dimensions and often embodied minor design improvements. It was a very expensive way of making cars. With his Model T, Henry Ford applied the techniques of mass production to automobiles. Each part was standardized. A gauging system was introduced. Parts were made in standard sizes to be attached in the simplest possible ways. Assemblers were given specialized tools and made to adopt a single task. Henry the First became king of the whole process. All design decisions were taken before the production line was started. Workers became operatives, not craftsmen (Figure 4). Uneducated immigrants to the New World could learn the job in a day. Each had responsibility for one tiny step in the production process and for an endlessly repeated operation, as satirized by Charlie Chaplin in *Modern Times*. Fordist production methods created the modern world. Not since the invention of gunpowder had smooth hands won such dominion over rough hands. Bronze defeated the peasant; the longbow defeated the knight; gunpowder defeated the castle; Fordism defeated the worker, temporarily.

4 Fordist production used operatives, instead of craftsmen.

POST-FORDIST DESIGN

By 1980, the Ford Motor Company itself was losing huge sums of money and market share, especially to Japanese competitors. Selected Ford managers were sent to Japan with sharp pencils and notebooks. They discovered that the Fordist system of mass production, named after their founder, had been overtaken by a new system, which came to be known as lean production. Compared with mass production, it required 40% less effort and resulted in products of superior quality. The Ford Motor Company adopted as many lean production principles as it could. Since then, people have been talking about post-Fordism in the same breath as postmodernism. Reflecting on how the company changed between 1980 and 1990, Ford's director of strategy observed that:

> We had to stop designing cars we liked and start designing cars the customers liked. The Japanese had teamwork. We had macho designers who found it difficult to sublimate their own ideas to the new realities. (*Sunday Times*, 1994)

The design teams brought rough and smooth hands together.

Between 1960 and 1980, Japan's share of world automobile production rose from 3% to 30%. Initially, Western companies attributed the growth to low wages and hard work. No doubt these factors played their part but, eventually, it became apparent that the main factor was their new approach to planning, design and manufacture. Lean production is lean in the use of energy, time and materials. Parts are delivered Just-in-Time, instead of being stockpiled. Manufacturing faults are identified at once and the cause is traced. Operational faults are reported to the

factory and the cause is traced. Production workers, salesmen and consumers all participate in the ongoing task of product improvement and design. Thought, by everyone involved, takes the place of waste.

The MIT study of car manufacture, on which the above account is based, also looked at the design and planning process (Womack *et al.*, 1990). The following differences were found between the two systems.

Design for mass production:

1. The design team starts small and expands (as staff are brought in to solve problems).
2. Design team membership varies from week to week.
3. Master plans are completed before component designs.
4. Component manufacturers work to drawings and specifications issued by the design team.
5. Planners and designers lack production line experience.
6. Customer feedback comes from market research studies.
7. The team leader is a powerless coordinator, seeking the agreement of all parties.

Design for lean production:

1. The design team starts large and contracts (as problems are solved).
2. The design team is dedicated and tightly knit.
3. Master plans are developed in parallel with component designs.
4. Component manufacturers are full members of the design team.
5. All planners and designers have experience on the production line.
6. Customer feedback comes from car salesmen and car users.
7. The team leader is a powerful boss, seeking the agreement of all parties.

Lean design and planning are more knowledge-intensive, less hierarchical and less demarcated. Everyone's experience and judgement is brought into the planning and design process. This includes customers, garage workers, production workers with experience of decision-making and decision-makers with experience on the production line. Despite the profusion of knowledge in books, lack of knowledge is the greatest drawback to the smooth-hands approach. You can learn much about the behaviour of steel, timber, brick and stone from books, but there is a great deal more that can be learned only by touching and using materials. You can also learn much about indoor and outdoor space in books, but there is a great deal more that can be learned only by knowing and using real places. Edwin Lutyens' ability to make good gardens was limited by his lack of interest in using gardens. First-hand knowledge comes from living in a place, driving a car or making a car.

In a lean production company, the MIT team asked to meet one of the directors, at the Honda plant in Ohio. 'He was unavailable, we were told: he had just joined the company and was busy assembling cars' (Womack *et al.*, 1990). In a mass production company, the MIT investigators found an engineer who had spent his whole career designing doorlocks without ever learning how to *make* a doorlock. Even knowing how to make doorlocks was the job of another engineer – not a craftsman. The large initial size of the lean design team signifies the assembly of knowledge, both practical and theoretical. The small initial size of the mass production design team signifies the focus on abstract knowledge.

The leadership role is crucial. In lean planning and design:

> The *shusa* is simply the boss, the leader of the team whose job it is to design and engineer a new product and get it fully into production. In the best Japanese companies the position of *shusa* carries great power and is, perhaps, the most coveted in the company. True, employees may seek the position as a stepping-stone to the top. However, for those who truly love to make things, the job brings extraordinary satisfaction. In fact, it's the best position in the modern world from which to orchestrate all the skills needed to make a wonderfully complex manufactured product, such as the

> automobile, come into being. One might even say that the *shusa* is the new supercraftsman, directing a process that now requires far too many skills for any one person to master . . . in an era when the skills involved are not so much technical as social and organizational. (Womack *et al.*, 1990)

Lean design has similarities to the way in which medieval cathedrals were made. A powerful master-craftsman controlled the whole project, while specialists had power to decide upon and regulate their own work. This is one of the things that Ruskin and Morris admired about medieval architecture. They hated industrialization, but as factories become *more* automated, the whole production process may become more like cathedral building. When the ultimate black-box factory is built, the lights will be switched off, the machinery switched on and the plant left to churn out products so long as they are wanted.

FORDISM AND THE BUILT ENVIRONMENT

Current design and planning practice in the built environment professions retains a disastrous similarity to Fordist production arrangements. The knowledge employed is abstract knowledge, gained in colleges. Professionals are 'advisers', not managers. The public are 'consultees', not planners. The design process begins with a big idea, traditionally scribbled on the back of an envelope. It is then passed down the design team, with more and more junior people checking the final details. At the 'coalface', on construction sites, workers are treated as indifferent automatons. They must obey written specifications, drawings and regulations, often drafted by people without practical experience of doing the job. Management contracting, and design-and-build, are bringing about changes, but component designers and clients still have little prospect of becoming involved.

Nor do users of places and buildings have anything but a marginal role in the design process, even if they are the owners, which is never the case for bridges, public parks, mass housing, or speculative office developments. As with design for mass production, design teams for built environment projects tend to start small and expand. Once formulated, the plans are submitted to municipal authorities, modified and agreed. When such plans are implemented, they often run into stiff opposition. 'Why weren't we consulted?' everyone wants to know. The technically correct reply, that 'You elected the people who hired the people who took the decisions', gives little comfort. It is Fordist autocracy. Henry took all the decisions himself. Lean design thrusts as many decisions as possible onto the shoulders of the workforce and the users. It deconstructs the Fordist hierarchy. It is knowledge-intensive instead of resource-intensive.

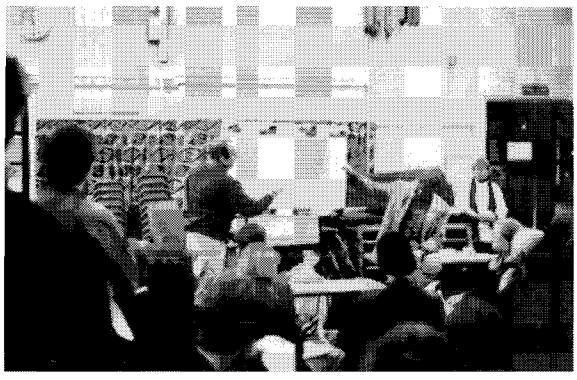
KNOWLEDGE-INTENSIVE PLANNING

Planners have responded to the public outcry against road building and other plans with offers of 'public participation in planning'. The idea is excellent. The practice is usually deficient. At worst, planners give an impression of treating the public according to the disdainful motto: 'They say. What do they say? Let them say.' At best, planners have shown skill in drawing fresh ideas from the public and putting them to work. Public participation can operate in several ways: advisory committees, written comment, public debate and design workshops. Each has value. Each can be criticized.

- **Advisory committees** can work in parallel with public committees, as in Germany and Holland. Authorities generally have subsidiary committees, of elected members, dealing with planning, parks, housing etc. Each is paralleled with an advisory committee. It is a good way of expanding the knowledge base for decision making. The difficulty lies in choosing the advisors. If they are professionally qualified in the subject, they will be an interest group. If they are volunteers, they will be unrepresentative.

If they are elected, they will come under the sway of political parties. Normally, they will lack knowledge, and the decision-making process can become very lengthy.

- **Written comments** can be invited on draft plans. A leaflet can be circulated or an exhibition mounted. The public can be invited to write letters and complete questionnaires. Sometimes, they receive written answers. Letters produce a good opportunity for individuals to let off steam but, generally, do not lead to constructive improvements. Too often, the minorities oppose one another. This leaves planners with the satisfying delusion that they have 'conducted the orchestra' and reached a balanced compromise.
- **Public debate** can take place after the planners have given an account of their proposals. This allows people who are happier talking than writing to make a contribution, but the results are similar to exercises in written consultation. It too often seems that planners listen to what is said, as a formality, and then do what they intended in the first place. This is not necessarily the planners' intention, but it is the impression received by the public.
- **Design workshops** can be enjoyable and productive (Figure 5). Public meetings are held. The planners come with open minds, large-scale models, white paper and fat pens. Members of the public put forward ideas, which are drawn on paper and then countered with other ideas. Such sessions can be very creative yet unrealistic. With idealism in the air, it is too easy to ignore economic realities and entrenched interests.



5 A community design workshop in Greenwich.

So what should be done? Use all the methods? Reject all the methods? Devise new methods? Each solution is workable, provided it brings together those with both rough and smooth hands: clients, owners, builders, component-makers, designers, planners and maintenance workers. For architecture, Hassan Fathy wrote of re-establishing 'the Trinity':

> Client, architect, and craftsman, each in his province, must make decisions, and if any one of them abdicates his responsibility, the design will suffer and the role of architecture in the cultural growth and development of the whole people will be diminished. (Fathy, 1973)

But for the environment, who is 'the client'? This is a central problem. For a private house, the client is the building owner. For speculative housing, shops and offices, the client is hydra-headed: financiers, insurance companies, property managers and, at the far end of a long list, those who merely spend their lives using the places. For transport schemes, too, there are many clients with divergent interests. When cycling, I want a vastly better provision of segregated cycle tracks. When driving, I can be heard muttering 'Bloody cyclists'. When walking, I feel threatened by cyclists on footpaths, and hostile to smug car drivers in comfortable seats pumping noxious fumes into my face. So what happens during public participation in planning? I am torn in three directions and have little to contribute.

A resort development can be used to illustrate Fordist and knowledge-intensive approaches to planning and design (Landscape Institute, 1990). The Hyatt Waikaloa is a typical American resort development, in Hawaii. It cost $350 million and has 1200 rooms. The project was designed in California. The Hawaii coastline was reshaped. Different transport systems were made to offer 'ways to your room via monorail, grand canal