

Matthew Carmona
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PUBLIC PLACES



URBAN SPACES

The Dimensions of Urban Design

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Architectural Press

AMSTERDAM BOSTON HEIDELBERG LONDON NEW YORK OXFORD
PARIS SAN DIEGO SAN FRANCISCO SINGAPORE SYDNEY TOKYO

Architectural Press is an imprint of Elsevier
Linacre House, Jordan Hill, Oxford OX2 8DP, UK
30 Corporate Drive, Suite 400, Burlington, MA 01803, USA

First edition 2003
Reprinted 2003, 2004 (twice), 2005, 2006, 2007, 2008

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British Library Cataloguing in Publication Data

Public places – urban spaces: the dimensions of urban design

I. City planning

I. Carmona, Matthew II. Heath, Tim

III. Oc, Tanner IV. Tiesdell, Steven

711

Library of Congress Cataloging-in-Publication Data

A catalog record for this book is available from the Library of Congress

ISBN: 978-0-7506-3632-2

For information on all Architectural Press publications
visit our website at www.architecturalpress.com

Printed and bound in *Great Britain*

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Acknowledgements

We would like to thank the many people who have helped us in bringing this book to publication. Foremost among them are:

John Henneberry for his valuable comments and positive suggestions on an early draft of what became Chapter 10. Bob Jarvis for his helpful and supportive comments on a draft version of this book. Jim Livingston, Alison Sandison, David Chapman, Elisebete Cidre and Steven Thornton-Jones for their work on the illustrations. Alison Yates, Liz Whiting and Colleagues at the Architectural Press for their patience. Margaret Downing

for all her help with editing the final text, and last but not least our students (past and present) at University College London, and the Universities of Nottingham, Aberdeen and Sheffield.

We are grateful to those who have given permission for illustrations to be reproduced. Sources of these are acknowledged in the captions.

All photographic and other non-referenced illustrations supplied by Matthew Carmona and Steven Tiesdell.

Preface

This book provides an exposition of the different, but intimately related, dimensions of urban design. It takes a holistic approach, which neither focuses on a limited checklist of urban design qualities nor – it is hoped – excludes important areas. By this means, it provides a comprehensive overview both for those new to the subject and those requiring a general guide. The structure is easily accessible, with self-contained and well cross-referenced sections and chapters. This enables readers to dip in for specific information, while the incremental layering of concepts aids those reading the book cover to cover.

Urban design is also treated as a design process in which, as in any such process, there are no ‘right’ or ‘wrong’ answers – there are only ‘better’ and ‘worse’ ones, the quality of which may only be known in time. It is necessary, therefore, to have a continually questioning and inquisitive approach to the subject, rather than a dogmatic view. The book does not, therefore, seek to produce a ‘new’ theory of urban design in a prescriptive fashion and, hence, no formulaic ‘solution’ is offered. There is, nevertheless, a broad belief in – and attitude to – urban design as an important part of urban development, renewal, management, planning and conservation processes.

Synthesising and integrating ideas, theories, etc., from a wide range of sources, the book is embedded in a comprehensive reading of existing literature and research. It also draws on the authors’ experience in teaching, researching and writing about urban design in schools of planning, architecture and surveying.

The motivation

The genesis of this book came from two distinct sources. First, from a period during the 1990s when the authors worked together at the University of Nottingham on an innovative undergraduate urban planning programme. Its primary motivation was a strong – and, in hindsight, we believe correct – conviction that, by teaching urban design at the core of an interdisciplinary, creative, problem-solving discipline, planning (and other) students would have a superior and more valuable learning experience, which would – in turn – provide a better foundation for their future careers. Although in many schools of planning, urban design is figuratively put into a ‘box’ and taught by the school’s only urban design ‘specialist’, our contention was that urban design awareness and sensibility should inform all – or, at least, most – parts of the curriculum. The same may be considered to be true of schools of architecture and surveying. Second, there was a need to prepare undergraduate lecture courses presenting ideas, principles, and concepts of the subject to support the programme’s design studio teaching. Although many excellent books existed, it soon became apparent that none drew from the full range of urban design thought. The writing of these courses generated the idea for the book, and provided its overall structure.

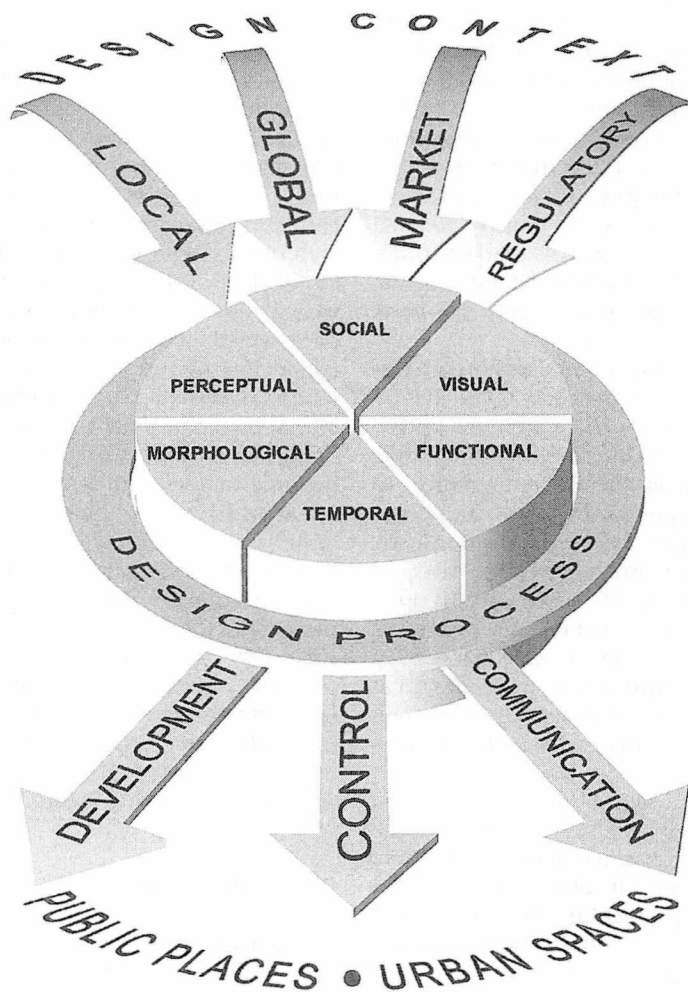
The structure

The book is in three main parts. It begins with a broad discussion of the context within which urban

design takes place. In Chapter 1, the challenge for 'urban design' and for the 'urban designer' – a term used throughout the book in its broadest sense to encompass both 'knowing' and 'unknowing' urban designers – is made explicit. The chapter deliberately adopts a broad understanding, seeing urban design as more than simply the physical or visual appearance of development, and as an integrative (i.e. joined-up) and integrating activity. While urban design's scope may be broad and its boundaries often 'fuzzy', the heart of its concern is about making places for people: this idea forms the kernel of this book. More realistically, it is about

making *better* places than would otherwise be produced. This is – unashamedly and unapologetically – a normative contention about what we believe urban design *should* be about, rather than what at any point in time it *is* about. We thus regard urban design as an ethical activity: first, in an axiological sense (because it is intimately concerned with issues of values); and, second, because it is – or should be – concerned with particular values such as social justice and equity.

In Chapter 2, issues of change in the contemporary urban context are outlined and discussed. Chapter 3 presents a number of overarching



contexts – local, global, market and regulatory – that provide the background for urban design action. These contexts underpin and inform the discussions of the individual dimensions of urban design principles and practice in Part II.

Part II consists of six chapters, each of which reviews a substantive dimension of urban design – ‘morphological’, ‘perceptual’, ‘social’, ‘visual’, ‘functional’ and ‘temporal’. As urban design is a joined-up activity, this separation is for the purpose of clarity in exposition and analysis only. These six overlapping dimensions are the ‘everyday subject matter’ of urban design, while the crosscutting contexts outlined in Chapter 3 relate to and inform all the dimensions. The six dimensions and four contexts are also linked and related by the conception of design as a process of problem solving. The chapters are not intended to delimit boundaries around particular areas of urban design. Instead, they emphasise the breadth of the subject area, with the connections between the different broad areas being made explicit. Urban design is only holistic if all the dimensions (the areas of action) are considered simultaneously.

In Part III, implementation and delivery mechanisms are explored – how urban design is procured, controlled, and communicated – stressing the nature of urban design as a process moving from theory to action. The final chapter brings together the various dimensions of the subject to emphasise its holistic nature.

Urban design: an emerging and evolving activity

It is only recently in the UK that urban design has been recognised as an important area of practice by the existing built environment professions, and even more recently that it has been recognised by central and local government, and incorporated more fully into the planning remit. The Urban Design Alliance (UDAL), a multi-profession umbrella organisation, has also been set up by the built environment professional institutes to promote urban design.

In certain states in the US, urban design has often been more fully conceptualised and better integrated into the activities of the established built environment professionals. Examination of the planning history of cities such as San Francisco and Portland clearly demonstrates this. More generally, as in the UK, recent initiatives at both public and

professional level have combined to give it a new prominence – in the public sector, through the spread of design review control as a means to promote better design through planning action, and in the professions with the emergence of, for example, the Congress for the New Urbanism. In addition, urban design is the focus of well-developed grass roots activity, with local communities participating in the design, management and reshaping of their own local environments.

Urban design is an expanding discipline. There is unprecedented and increasing demand from the public and private sectors for practitioners – or, more simply, for those with urban design expertise. This demand is being matched by a range of new urban design courses at both graduate and undergraduate levels; by greater recognition in planning, architectural and surveying (real estate) education; and by new demand from private and public practitioners wanting to develop appropriate skills and knowledge.

All urban designers – both knowing and unknowing (see Chapter 1) – need a clear understanding of how their various actions and interventions in the built environment combine to create high quality, people-friendly, vital and viable environments or, conversely, poor quality, alienating or simply monotonous ones. As a field of activity, urban design has been the subject of much recent attention and has secured its place among the other established built environment professions as a key means of addressing interdisciplinary concerns. In this position it is a policy- and practice-based subject which, like architecture and planning, benefits from an extensive and legitimising theoretical underpinning. This book draws on that, now extensive, underpinning, to present many of the key contributions aimed at beneficially influencing the overall quality and liveability of urban environments.

While urban design has developed quickly and continues to evolve, it is hoped that the structure adopted by this book will stand the test of time and, over time, will be able to incorporate advances in our thinking on the practice and process of urban design, as well as any omissions which – through ignorance or lack of appreciation – have not been included from the start. As a contribution to the better understanding of good urban design, it is hoped that it will contribute to the design, development, enhancement and preservation of successful urban spaces and cherished public places.

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PART I

THE CONTEXT FOR URBAN DESIGN

1

Urban design today

INTRODUCTION

This book adopts a broad understanding of urban design, which is focused on the making of places for people (Figures 1.1, 1.2). More precisely and realistically, it focuses on urban design as the *process* of making *better* places for people *than would otherwise be produced*. This definition asserts the importance of four themes that occur throughout the book. First, it stresses that urban design is for and about people. Second, it emphasises the value and significance of ‘place’. Third, it recognises that urban design operates in the ‘real’ world, with its field of opportunity constrained and bounded by economic (market) and political (regulatory) forces. Fourth, it asserts the importance of design as a process. The idea that urban design is about making better places is unashamedly and unapologetically a normative contention about what it should be, rather than what it is at any point in time.

Providing an introduction to the concept of urban design, this chapter is in three main parts. The first develops an understanding of the subject. The second discusses the contemporary need for urban design. The third discusses urban design practice.

TOWARDS AN UNDERSTANDING OF URBAN DESIGN

The term ‘urban design’ was coined in North America in the late 1950s, and replaced the narrower and somewhat outmoded term ‘civic design’. Typified by the City Beautiful Movement, civic design focused largely on the siting and design of major civic buildings – city halls, opera houses, museums

– and their relationship to open spaces. Urban design denotes a more expansive approach. Evolving from an initial, predominantly aesthetic, concern with the distribution of building masses and the space between buildings, it has become primarily concerned with the quality of the public realm – both physical and sociocultural – and the making of places for people to enjoy and use. Containing two somewhat problematical words, ‘urban design’ is an inherently ambiguous term. Taken separately, ‘urban’ and ‘design’ have clear meanings: ‘urban’ suggests the characteristics of towns or cities, while ‘design’ refers to such activities as sketching, planning, arranging, colouring and pattern making. Throughout this book, however, as used generally within the practice of urban design, the term ‘urban’ has a wide and inclusive meaning, embracing not only the city and town but also the village and hamlet, while ‘design’, rather than having a narrowly aesthetic interpretation, is as much about effective problem solving and/or the processes of delivering or organising development.

In a wide-ranging review of urban design, Madanipour (1996, pp. 93–117) identified seven areas of ambiguity in its definition:

1. Should urban design be focused at particular scales or levels?
2. Should it focus only on the visual qualities of the urban environment or, more broadly, address the organisation and management of urban space?
3. Should it simply be about transforming spatial arrangements, or about more deeply seated social and cultural relations between spaces and society?



FIGURE 1.1
A place for people –
Harbour Steps, Seattle,
Washington, USA

4. Should the focus of urban design be its product (the urban environment) or the process by which it is produced?
5. Should urban design be the province of architects, planners or landscape architects?
6. Should it be a public or private sector activity?
7. Should it be seen as an objective–rational process (a science) or an expressive–subjective process (an art)?

The first three ambiguities are concerned with the ‘product’ of urban design, the last three with urban design as a ‘process’, while the fourth concerns the product–process dilemma. Although Madanipour’s ambiguities are deliberately presented as oppositional and mutually exclusive, in most cases, it is a case of ‘and/both’ rather than ‘either/or’. As we ‘consciously shape and manage our built environments’ (Madanipour, 1996,



FIGURE 1.2
A place for people –
Broadgate, London, UK

p. 117), urban designers are interested in, and engaged with, both process and its product. While, in practice, ‘urban design’ can be used to refer to all the products and processes of development, it is often useful to use the term in a more restricted sense to mean *adding of quality* to them.

Attempting to sum up the remit of urban design, Tibbalds (1988a) notes a definition of it as ‘*Everything you can see out of the window.*’ While this has a basic truth and logic, if ‘everything’ can be considered to be urban design, then equally perhaps ‘nothing’ is urban design (Daganhart and Sawicki, 1994). Nevertheless, in acknowledging the potential scope and diversity of urban design, there is little value in putting boundaries around the subject. The real need is for definitions that encapsulate its heart or core rather than prescribe its edge or boundary. That is, for the identification, clarification and debate of central beliefs and activities rather than of boundaries and exclusions.

It is frequently easier to say what urban design is not, than to say precisely what it is. It is not, for example, architecture, civil or highway engineering, landscape architecture, estate management, or town planning. Equally, it is both more and less than any of these long-established activities (University of Reading, 2001). Relational definitions (i.e. those that define something in relation to something else) can, nonetheless, be helpful.

Urban design is typically defined in terms of architecture and town planning – Gosling and Maitland (1984) describe it as the ‘common ground’ between them, while the UK’s Social Science Research Council located urban design at ‘the interface between architecture, landscape architecture and town planning, drawing on the design tradition of architecture and landscape architecture, and the environmental management and social science tradition of contemporary planning’ (from Bentley and Butina 1991). Urban design is not, however, simply an interface. It encompasses and sometimes subsumes a number of disciplines and activities – prompting Rob Cowan (2001a, p. 9) to ask:

which profession is best at interpreting policy; assessing the local economy and property market; appraising a site or area in terms of land use, ecology, landscape, ground conditions, social factors, history, archaeology, urban form and transport; managing and facilitating a participative process; drafting and illustrating design principles; and programming the development process?

Cowan contends that while all these skills are likely to be needed in, say, producing an urban design framework or master plan, it is rare for them all to be embodied by a single professional. The best frameworks and master plans are drawn up by a number of people with different skills, working in

collaboration. Urban design is inherently collaborative and interdisciplinary, involving an integrated approach, and the skills and expertise of a wide range of professionals and others.

Scale has also been used as a means of defining urban design. Urban design has commonly been considered to function at an intermediate scale between planning (the settlement) and architecture (individual buildings). In 1976 Reyner Banham defined its field of concern as ‘urban situations about half a mile square’. This definition is useful only if we see urban design as an activity mediating between architecture and planning. Kevin Lynch (1981, p. 291) defined it more broadly as encompassing a wide range of concerns across different spatial scales, arguing that urban designers may be engaged in preparing a comprehensive regional access study, a new town, a regional park system, and equally, ‘may seek to protect neighbourhood streets, revitalise a public square, . . . set regulations for conservation or development, build a participatory process, write an interpretative guide or plan a city celebration’. It is important to appreciate that urban design operates at and across a variety of spatial scales rather than at any particular one.

Although consideration of urban design at a particular scale is a convenient device, it detracts from the fact that urban environments are vertically integrated ‘wholes’. Urban designers need to be constantly aware of scales both above and below that at which they are working, and also of the relationship of the parts to the whole, and the whole to the parts. In a necessary reminder to the built environment professions, Francis Tibbalds (1992, p. 9) argued that ‘places matter most’: ‘We seem to be losing the ability to stand back and look at what we are producing as a whole . . . We need to stop worrying quite so much about individual buildings and other physical artefacts and think instead about places in their entirety.’ In broad terms, Christopher Alexander’s ‘pattern language’ illustrates the range of scales at which urban design operates, with the patterns being ordered in terms of scale, beginning with patterns for strategic (city-wide) design, and working down to interior design. Alexander *et al.* (1977, p. xiii), however, stressed that no pattern was an ‘isolated entity’: ‘Each pattern can exist in the world only to the extent that it is supported by other patterns: the larger patterns in which it is embedded, the patterns of the same size that surround it, and the smaller patterns which are embedded in it.’

Traditions of thought in urban design

Two broad traditions of urban design thought stem from different ways of appreciating design and the products of the design process. In his paper ‘Urban Environments as Visual Art or Social Settings’, Bob Jarvis (1980) discussed this distinction in terms of a ‘visual-artistic’ tradition emphasising the visual qualities of buildings and space, and a ‘social usage’ tradition primarily concerned with the social qualities of people, places and activities. In recent years, the two have become synthesised into a third, ‘making places’ tradition.

(i) The visual-artistic tradition

The visual-artistic tradition was that of an earlier, more ‘architectural’ and narrower understanding of urban design. Predominantly product-oriented, it focused on the visual qualities and aesthetic experience of urban spaces, rather than on the cultural, social, economic, political and spatial factors and processes contributing to successful urban places. Influenced by Sitte’s *City Planning According to Artistic Principles* (1889) as well as (what appeared to be its aesthetic antithesis) the work of Le Corbusier, the visual-artistic tradition is clearly expressed in Unwin’s *Town Planning in Practice* (1909), and reinforced by the various contributions to *MHLG Design in Town and Village* (1953). It is typified by Frederick Gibberd’s concern for the pictorial composition of front gardens, rather than for considerations of privacy or of opportunities for personalisation (Jarvis, 1980, p. 53). Issues of pictorial composition also predominate in the ‘townscape’ approach developed by Gordon Cullen and others in the late 1940s and the 1950s. As Punter and Carmona (1997, p. 72) note, while Cullen’s *Townscape* developed his personal and expressive response to urban environments, it largely failed to acknowledge public perceptions of townscapes and places, which – by contrast – Kevin Lynch’s contemporaneous *The Image of the City* highlighted (Lynch, 1960).

(ii) The social usage tradition

The social usage tradition emphasised the way in which people use and colonise space. It encompassed issues of perception and sense of place. Identifying Kevin Lynch (1960) as a key proponent of this approach, Jarvis (1980, p. 58) highlights Lynch’s attempt to shift the focus of urban design in two ways:

- *in terms of appreciation of the urban environment*: rejecting the notion that this was an exclusive and elitist concern, Lynch emphasised that pleasure in urban environments was a commonplace experience;
- *in terms of the object of study*: instead of examining the physical and material form of urban environments, Lynch suggested examining people's perceptions and mental images.

Jane Jacobs – whose book *The Death and Life of Great American Cities* attacked many of the fundamental concepts of 'Modernist' urban planning and heralded many aspects of contemporary urban design – was a key proponent of this approach, arguing that the city could never be a work of art because art was made by 'selection from life', while a city was 'life at its most vital, complex and intense' (1961, p. 386). Concentrating on the sociofunctional aspects of streets, sidewalks and parks, Jacobs emphasised their role as containers of human activity and places of social interaction. The same kind of detailed observation informed subsequent work in this tradition, such as Jan Gehl's studies of public space in Scandinavia (1971) and William H. Whyte's (1980) *The Social Life of Small Urban Spaces*.

Christopher Alexander's work also epitomises the social usage tradition. As Jarvis (1980, p. 59) notes in *Notes on the Synthesis of Form* (Alexander, 1964) and *A City is Not a Tree* (Alexander, 1965), Alexander identified both the failings of design philosophies that considered 'form without context' and the dangers of approaching city design in ways that did not allow for a rich diversity of cross connections between activities and places. Alexander's ideas were developed further in *A Pattern Language* (Alexander *et al.*, 1977) and *The Timeless Way of Building* (Alexander *et al.*, 1979), in which he set out a range of 'patterns'. Rather than 'complete designs', each pattern was a 'sketched minimum framework of essentials', a 'few basic instructions' and 'rough freehand sketches' to be shaped and refined (Jarvis, 1980, p. 59). For Alexander, the patterns are intended to provide the designer with a usable – but not predetermined – series of relationships between activities and spaces. Even those patterns closest to the traditional visual or spatial concerns of urban design, in which Alexander frequently cites Camillo Sitte, are grounded in and justified by research and/or observation of people's use of places.

(iii) *The making places tradition*

Over the past twenty years, the concept of urban design that has become dominant is one of making places for people. This evolution of urban design thought is nicely summed up in the following definitions:

- In 1953, Frederick Gibberd argued that the 'purpose of town design is to see that [the urban] composition not only functions properly, but is pleasing in appearance'.
- In 1961, Jane Jacobs asserted that: '*To approach the city . . . or neighbourhood as if it were a larger architectural problem . . . is to substitute art for life.*'
- In 1988, Peter Buchanan argued that urban design was 'essentially about place making, where places are not just a specific space, but all the activities and events that make it possible'.

Synthesising the earlier traditions, contemporary urban design is simultaneously concerned with the design of urban space as an aesthetic entity and as a behavioural setting. It focuses on the diversity and activity which help to create successful urban places, and, in particular, on how well the physical milieu supports the functions and activities taking place there (Figures 1.3, 1.4). With this concept comes the notion of urban design as the design and management of the 'public realm' – defined as the public face of buildings, the spaces between frontages, the activities taking place in and between these spaces, and the managing of these activities, all of which are affected by the uses of the buildings themselves, i.e. the 'private realm' (Gleave, 1990, p. 64) (see Chapter 6).

In recent years, 'official' definitions have also embraced the concepts of making places, and of the public realm. In England, for example, planning policy guidance states that 'urban design' should be taken to mean:

the relationship between different buildings; the relationship between buildings and the streets, squares, parks and other spaces which make up the public domain itself; the relationship of one part of a village, town or city with the other parts; and the patterns of movement and activity which are thereby established. In short, the complex relationships between all the elements of built and unbuilt space. (DoE Planning Policy Guidance Note 1, 1997, para. 14)



FIGURE 1.3
A place for people – Darling Harbour, Sydney, Australia



FIGURE 1.4
A place for people – Waterfront Park, Portland, Oregon, USA

The Department of Transport, Environment and the Regions (DTER, previously the DoE) and the Commission for Architecture and the Built Environment (CABE, formerly the Royal Fine Art Commission) subsequently gave a more rounded definition, identifying urban design as the 'art of making places for people':

It includes the way places work and matters such as community safety, as well as how they look. It concerns the connections between people and places, movement and urban form, nature and the built fabric, and the processes for ensuring successful villages, towns and cities. (DTER/CABE, By Design: Urban Design in the Planning System: Towards Better Practice, 2000a, p. 8)

The guide identified seven objectives of urban design, each relating to the concept of place:

- *Character*: a place with its own identity;
- *Continuity and enclosure*: a place where public and private spaces are clearly distinguished;
- *Quality of the public realm*: a place with attractive and successful outdoor areas;
- *Ease of movement*: a place that is easy to get to and move through;
- *Legibility*: a place that has a clear image and is easy to understand;
- *Adaptability*: a place that can change easily;
- *Diversity*: a place with variety and choice.

Urban design frameworks

As part of the 'making places' tradition, there have been a number of attempts to identify the desirable qualities of successful urban places and/or 'good' urban form. It is useful to note the key content of five such attempts.

Kevin Lynch

Lynch (1981, pp. 118–19) identified five performance dimensions of urban design:

1. *Vitality*, the degree to which the form of places supports the functions, biological requirements and capabilities of human beings.
2. *Sense*, the degree to which places can be clearly perceived and structured in time and space by users.

3. *Fit*, the degree to which the form and capacity of spaces matches the pattern of behaviours that people engage in or want to engage in.
4. *Access*, the ability to reach other persons, activities, resources, services, information, or places, including the quantity and diversity of elements that can be reached.
5. *Control*, the degree to which those who use, work, or reside in places can create and manage access to spaces and activities.

Two meta-criteria underpinned the five dimensions: those of *efficiency*, relating to the costs of creating and maintaining a place for any given level of attainment of the dimensions; and of *justice*, relating to the way in which environmental benefits were distributed. Thus, for Lynch the key questions were: (i) what is the relative cost of achieving a particular degree of vitality, sense, fit, access, or control?; (ii) who is getting how much of it?

Allan Jacobs and Donald Appleyard

In their paper 'Towards an Urban Design Manifesto', Jacobs and Appleyard (1987, pp. 115–16) suggested seven goals that were 'essential for the future of a good urban environment':

1. *Liveability*: A city should be a place where everyone can live in relative comfort.
2. *Identity and control*: People should feel that some part of the environment 'belongs' to them, individually and collectively, whether they own it or not.
3. *Access to opportunities, imagination and joy*: People should find the city a place where they can break from traditional moulds, extend their experience, and have fun.
4. *Authenticity and meaning*: People should be able to understand their (and others') city, its basic layout, public functions and institutions, and the opportunities it offers.
5. *Community and public life*: Cities should encourage participation of their citizens in community and public life.
6. *Urban self-reliance*: Increasingly cities will have to become more self-sustaining in their uses of energy and other scarce resources.
7. *An environment for all*: Good environments should be accessible to all. Every citizen is entitled to a minimal level of environmental liveability, and of identity, control and opportunity.