

THE CHANGING ROLE OF URBAN DESIGN
IN CHINA'S URBAN DEVELOPMENT

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For the submission of PhD

2001-02

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ACKNOWLEDGEMENT

I would like to thank the following people for making the last three years so enjoyable. They have, in one way or another, been instrumental in aiding the research.

Firstly, I would like to acknowledge the help of my supervisor, Dr. Andrew McArthur. Without his help, the research would not have reached this stage. I would also like to thank Professor Urlan Wannop for his warm encouragement and advice for these years. Thanks to Professor Keith Hayton, Ms Margaret Dunn, Dr. Frank Ennis, Dr. Dory Reeves for the help they provided.

I would like to pay a warm tribute to the help provided by Tom MaCarteney and Irene Christy, the Director of Crown Street Regeneration Project and his assistant. Without their help, my work in Glasgow would not have gone as smoothly.

I would also like to thank the people who made the research in China possible. In particular, people from Guangzhou Planning Bureau and Guangzhou Planning and Design Institute such as Lin Jun, Li Zhi, Pan'an, Li Ying, Zhao Honghong and many others.

A huge thank you must also extend to all my friends, particularly Josephine Zhou and Andrew Zeng who indirectly aided the research by sharing their research problems and experience with me, and thanks for the mad times which kept me sane.

Finally, I would like to thank my family for their love and support over the years. Words can not express how much they mean to me.

ABSTRACT

The overall objective of the research was to evaluate the performance of the Chinese planning system on design, urban design in particular, and to search for ways to integrate urban design thinking with existing urban planning agendas to improve design control in China. The reason for undertaking this research was due to the general perception that urban design did not play the role that it deserved in China. Despite an increasing number of initiatives, the question of how to address urban design issues in planning and development control remains a source of controversy.

Focusing on the Chinese planning system, the research examined the approaches, the procedures, and the general effectiveness of design control in China. The research emphasised more at a local level by taking Guangzhou as a case study. It also evaluated the strengths and weaknesses of the recent urban design initiatives, namely, the Urban Design Plans for specific districts and the Model Community Program. Moreover, the research has examined the British design experience and looked in more detail at the recent experience of Glasgow.

The research revealed that the main defects were the incomprehensive design concerns in local policies and plans, the inability of current statutory plans to deal with design issues, the lack of appropriate design guidance, the poor understanding of the local character, and the lack of openness and co-ordination in the planning process. Recent urban design initiatives have generated interest but have achieved limited success due to the lack of strategic level thinking.

The examination of the British design experience has offered some valuable lessons. These include the incorporation of urban design principles at all levels of planning, an emphasis on the quality of the public realm, careful and detailed analysis of the local context as the basis for the development of design policy and guidance, and an appreciation of the value of public participation and involvement.

Combining this understanding of the inefficiencies of China's design control with the lessons drawn from the British experience, the thesis also makes a number of recommendations for improving China's planning and development control system.

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GLOSSARY – TERMS & ABBREVIATION

Area appraisal	An assessment of an area's land uses, built and natural environment, and social and physical characteristics.
Building line	The line formed by the frontage of buildings along a street.
Bulk	The combined effect of the arrangement, volume and shape of a building or group of buildings. Also called massing.
Context	The setting of a site or area, including factors such as traffic, activities and land uses as well as landscape and built form.
CIAM	The International Modern Architecture Congress, a forum for the development of modernist architecture and urbanism set up in the 1920s by the leading, mainly European, architects of the time, including Le Corbusier, Walter Gropius and others.
CSRP	Crown Street Regeneration Project, Glasgow. One of the leading urban regeneration projects in Britain.
Defensible spaces	Public and semi-public space that is 'defensible' in the sense that it is surveyed demarcated or maintained by somebody. Derived from Oscar Newman's 1973 study of the same name, and an important concept in securing public safety in urban areas, defensible space is also dependent upon the existence of escape routes and level of anonymity, which can be anticipated by the user of the space.
Density	Measures in relation to a given area of land. Built density can be expressed in terms of plot ratio (in commercial development), number of units or habitable rooms per hectare (for residential development), site coverage, or a combination of these.
Design Guide	A design guide is a general set of principles and standards required by the local authority and applying to a wide area and not just a particular site
Design Brief	A document prepared by local planning authority stating the requirements for a particular site, also known as development brief.
DETR	Department of the Environment, Transport and the Regions, UK
Development Brief	A document prepared by local planning authority providing

guidance on how a site of significant size or sensitivity should be developed. Site-specific briefs are sometimes known as planning briefs, or design briefs.

DoE	Department of Environment, Britain
Elevation	The facade of a building, or the drawing of a facade.
Enclosure	The use of buildings to create a sense of defined space.
ETDZ	Economic and Technological Development Zone. Special area established after the 1978 economic reform in China to attract foreign investments. These areas normally enjoy more flexible economic and political policies than the rest of the country.
Five-Year Plan	Economic development plan formulated in China to carry out socialist industrialisation as a means to improve people's living standard.
Form	The layout (structure and urban grain), density, scale (height and massing), appearance (material and details) and landscape of development.
GUPB	Guangzhou Urban Planning Bureau, China
Human scale	The use within development of elements which relate well in size to an individual human being and their assembly in a way which makes people feel comfortable rather than overwhelmed.
Landmark	A building or structure that stands out from its background by virtue of height, size or some other aspect of design.
Landscape	The character and appearance of land, including its shape, form, ecology, natural features, colours, and elements, and the way these component combine. In towns, 'townscape' describes the same concept.
Layout	The way buildings, routes, and open spaces are placed in relation to each other.
Local character	The positive features of a place and its people and its people contribute to its special character and sense of identity. They include landscape, building tradition and materials, pattern of local life, and other factors that make one place different from another.
Mixed uses	A mix of uses within a building, on a site or within a particular area. 'Horizontal' mixed uses are side by side, usually in different buildings. 'Vertical' mixed uses are on different floors

	of the same building.
MoC	Ministry of Construction, China.
Node	A place where activity and routes are concentrated often used as a synonym for junction.
Plot ratio	A measurement of density generally expressed as gross floor area divided by the net site area.
PPGs	Planning Policy Guidance Notes - documents embodying British Government guidance on general and specific aspects of planning policy to be taken into account in formulating development plan policies and in making planning decisions.
Public Realm	The outside space - the streets, spaces and lanes that will make up the cohesive, pleasant, safe, attractive and exciting matrix of a great city. It provides the setting for grand buildings, the thorough fares of commerce and the spaces for activity, street theatre, contemplation and promenading - the environment for living and working
Red line map	The map that specifies the street line for a proposed development area. It is one of appendix documents of the planning permission issues by Chinese local planning authority.
Site or area appraisal	A detailed analysis of the features of a site or area (including land uses, built and natural environment, and social and physical characteristics) which serves as the basis for an urban design framework, design policies and guidance.
Street furniture	Structures in and adjacent to the highway that contribute to the street scene, such as bus shelters, litter bins, seating, lighting, railings, and signs.
Sustainable development	The dissertation refers to the term defined by the Brundtland Commission (1987) as 'development, which meets present needs without compromising the ability of future generations to achieve their own needs and aspirations'.
UDP	Unitary Development Plan, UK.
UMP	Urban Master Plan - the document prepared by Chinese local planning authority to guide urban development for the entire city area.
Urban design	The art of making places. Urban design involves the design of buildings, group of buildings, spaces, and landscapes, in villages, towns and cities, and the establishment of frameworks

and process, which facilitate successful development.

**Urban design
framework**

A document which informs the preparation of development plan policies, or set out in detail how they are to be implemented in a particular area where there is a need to control, guide and promote change. Area development frameworks are also called a variety of other names, including urban design strategies, area development framework, spatial master plans, and planning and urban design frameworks.

Vista

An enclosed view, usually a long and narrow one.

CHAPTER 1: INTRODUCTION

1.1 The Origin of the Research

Rapid urban development over the past few decades has brought about dramatic changes and serious problems for China. From a design perspective, it is hard to point to recent developments that have enhanced the urban scene. Even the few individual buildings that have achieved a level of distinction seldom form part of any larger design concept. What are the reasons for this failure? As the planning system provides the fundamental means to secure design quality, the researcher decided to take a closer look at the subject of design, with a particular focus on urban design policy and administration.

The starting point for this research is that the quality of urban life and the environment is deeply affected by urban design. The quality of towns and cities depends very much on the design of the physical environment. Alongside social, economic and political measures, design interventions have a contribution to make on the overall quality of life in our cities.

Design quality is influenced by many factors such as professional skills and investments available. Design intervention by the government is a key factor among them. Design control, as part of everyday urban planning practice, is a feature of government that is here to stay. It aims to shape urban development in a direction that might run counter to prevailing market forces or the desire of powerful minority groups, or against trends in the development industry. Ideally, it exists to serve the public good.

The characteristics of a nation's urban planning system generally reflect the overall socio-economic and political environment within which it operates. Urban planning in China has a very long history. It can be traced back to the Imperial era when grand capital cities were constructed in accordance with the feudal ideology of social order and hierarchy. However, China seems to have

lost the art of designing cities, which was once such an important part of its rich urban tradition. Urban planning has not had a significant role in contemporary Chinese history until very recently.

It is argued by Xie and Costa (1993) that modern planning in China has started and has been given a totally different role since the establishment of the socialist system in 1949. This urban planning system was integrated with the overall national economic planning and was deeply affected by the political characteristics of the Communist regime. Under the dominant public ownership, urban development generally followed economic planning through which resources were distributed and decisions were made by the central government. Urban planning had a very weak position vis-à-vis sectoral based economic and industrial planning.

The role of urban planning has been fundamentally challenged once again by the changing social-economic circumstance since the 1978 economic reform. This opened China to the outside world and introduced the idea of the market economy. Various changes in the development industry coupled with new perspectives on society followed soon after. After being totally abandoned for nearly twenty years through a series of political turmoils (e.g. the Great Leap Forward, 1958-1960; the Culture Revolution, 1966-1977), urban planning and design has re-emerged as an essential tool for urban development. It has been receiving increasing attention since.

The 1978 economic reform has brought about a transitional economy characterised by the coexistence of planned and market economies (Bian and Logan, 1996; Nee, 1989). With the economic reform, conventional economic planning upon which urban planning relied, was gradually phased out. More importantly, the re-emergence of private property rights from the housing and land reforms means that urban planning needs to adopt methods of development control suitable for a market economy. The retreat from the socialist ideology, decentralisation of decision making and injection of foreign

investment into local economies have encouraged the municipality to adjust their planning and development control approaches.

These changes have increased the need for a comprehensive planning and design system, which can focus on urban development rather than on centralised economic planning and an ideological commitment to Communist values. The task of this system is to tackle the emerging problems associated with fast urban growth and the profound re-adjustment of urban spatial structures. In this context, the concept of urban design has been brought to light. It was introduced to China, along with other planning ideas developed in other parts of the world in the 1980s. (Chinese planners have started to look at urban design as one possible means of tackling today's urban problems. The qualities urban design pursues, such as people-friendly environments, historical continuity and environmental sustainability, could provide important future directions for our cities.)

With rising of general living standard, the public is also increasingly concerned about the quality of their living environment. In turn, the government's desire to encourage this quality has increased. Many local authorities in China have launched initiatives to address urban design issues in their planning and design practice. These include revising local plans/policies and experimenting with new design control instruments. It has been recognised by some that appropriate design control, accompanied by other management and financial instruments, is vital for successful urban development.

Despite the increasing numbers of new initiatives, the question of how to address urban design issues remains a source of controversy and debate. Although the term of 'urban design' appeared in the National Planning Act in 1989, further definition and explanation did not follow. Recent research and debate is at a theoretical level (e.g. Qi, 1997; Xiong, *et. al.*, 1998; Wang, 1999; *etc.*). Little has been done to link theory to design control practice. This has left a great gap between the rising concern on urban design qualities and the

planning system's ability to deliver them.

The existing situation in China offers an interesting research area. Focusing on the Chinese planning system, the main aim of the research is to understand the operation and effects of design control, particularly at a local level, by taking Guangzhou as a detailed case study. The study has also looked at the relevant literature, examined the British design experience and looked in more detail at the recent experience of Glasgow, the largest city in Scotland and the third largest in the UK. By comparing design control in China with valuable lessons extracted from reviews of British design, it was hoped that some suggestions for future improvement in China could be identified.

1.2 Objectives of the Research

The overall objective of the research is to evaluate the performance of the Chinese planning and development control system on design, particularly at a local level, and to search for ways to incorporate urban design into existing urban planning agendas in order to improve design control in China.

The study contains a thorough investigation of the operation of design control in China. This includes the examination of the control instruments, their design content, their preparation process, and how they are represented in development control. These issues are evaluated to identify the strengths and weaknesses of the existing planning control system in terms of design control. The importance of appraising local characteristics to underpin policy development, the role of the public in the process of appraising, and the perception and reactions of other participants involved in the design control process are all examined to gain a full understanding of current design practice.

Confronted with the problems caused by the lack of design control experience in China, there is a clear need for research, which draws together different perspectives on design, and looks to other countries for useful insights on this

subject. As Britain has experienced many urban planning problems over the last 50 years, and has been promoting urban design excellence in the last decade, British design experience has been given particular attention.

1.3 The Organisation of the Thesis

The thesis is organised into nine chapters:

Following this introductory chapter, **Chapter 2** gives a historical review of urban design practice in China. It provides a basic understanding of the country's changing social, economic and political circumstances, and highlights the impacts of recent reforms on urban development in China. It argues that confronted with the urban problems caused by fast urban development, and also the opportunities created by transitional social circumstances, design control is needed more than ever. It must, therefore, be derived from the public interest, and must also be a legitimate concern of local government organisations.

If urban design qualities are important in both functional and aesthetic terms, then it is necessary to debate how this quality should be defined and how it should be achieved. **Chapter 3** reviews the relevant literature to explore fundamental urban design principles and processes. This is then used to develop an appropriate theoretical research framework.

In **Chapter 4** the research methodology used in this study is set out and justified. It shows how the chosen research methods are consistent with the issues covered by the study. It also discusses the strengths and weaknesses of the methods used, and the problems experienced in the research process.

Chapter 5 takes Guangzhou metropolitan area as a case study and analyses the design content of local planning policies and plans. This helps us to understand the major urban problems and the defects of the planning and development control system in dealing with them. Local design control instruments are

identified and their design content analysed. Furthermore, the views of the content of these policies/plans gained from the interviewees are assessed.

Chapter 6 draws together the opinions of planning professionals about the effectiveness of design controls. This derives from interviews with planning control officers, developers, architects, and amenity group members. The chapter highlights the inefficiencies of the current planning system in dealing with design control identified by these key participants.

Chapter 7 concentrates on recent design-led initiatives in Guangzhou, in particular the Model Community Programme and urban design plans for specific districts. It aims to evaluate the successes and limitations of these initiatives, and argues that although they have achieved certain things, such as stimulating urban design thinking and making improvements in some parts of the city, their success will remain limited if they are not integrated into a broader urban design strategy.

Chapter 8 discusses British design control and explores what insights and inspirations it holds for China. To further explore design issues at a local level, the city of Glasgow is chosen as a case study. The chapter seeks to establish whether there are lessons for achieving good design quality that Chinese planners could learn from.

Chapter 9 concludes the research by calling for a new urban design agenda in China and fundamental changes to the current planning system. In the light of identified inefficiencies of the existing system and the lessons emerged from the British experience, the chapter makes a number of specific suggestions for improving the Chinese planning system's approach to design.

1.4 Key Research Questions

Five key research questions were identified. The first four questions are explored in the Chinese context with special reference to Guangzhou city. The

last question is concerned with the British design experience and the case of Glasgow in particular. Each of these key questions has a set of subordinate questions that will be discussed below. The five key questions are:

1. What are the general approaches to design control in China?
2. How does design control operate in practice in China?
3. How effective is control over design in China?
4. What recent changes have been made, and how effective they are in terms of improving urban design quality?
5. Can the British experience provide lessons and useful insights for design control in China?

1.4.1 The General Approaches to Design Control

This question is closely linked to the design control instruments employed by the planning authorities, the design content they cover, and the priority given to them in the development control process.

In China, the needs of urban planning were secondary to national economic planning prior to the economic reforms of 1978. Urban planning was required to support national industrialisation. Industrial land allocation and the supply of materials was to be guaranteed through physical planning. However, after 1978, a process of localisation emerged. Since then urban planning has been increasingly used by municipalities as a tool to stimulate local development. With the decentralisation of administrative power, local authorities have gained more power over planning and development control. Local design policies have started to play a pivotal role in the planning and design control system.

It is therefore, necessary to analyse design issues contained in these local policies/plans which form the basis of design decision-making. Meanwhile, applicants seeking planning permission also have to examine these policies/plans in order to establish what the design requirements are for a

specific development. Thus, the content and emphasis on design matters in local policies are worth examination.

It is also important to establish whether good design control is a priority within the local planning authority involved. If local authorities give too little weight to design quality, comprehensive policies would not be developed in the first place, or existing policies would not be implemented to a satisfactory degree. Design factors may have to be juggled alongside major land-use policy factors and may not be the most significant element in development. This is especially the case in cities with low economic activity. For instance, due to the severe shortage of urban infrastructure and housing, high design quality has not always been a priority in most Chinese cities.

More recently, design quality tends to be influenced by the new economic order. China's 'socialist capitalism' has brought about radical changes in and beyond its major cities. With the return of the free market and new laws permitting joint ventures with foreign parties, private domestic investments and investments from abroad have taken over the role of state investment and have become a strong force in the development industry. In order to convey an image of sophisticated modern living, developments which are characterised by a wide range of styles, predominately American, Japanese and European, are promoted everywhere. Against this background, design intervention from local planning authorities is needed to seek a balance between public interests and prevailing market trend. Thus, where the emphasis of design control lies is worth examination.

To explore design control at a local level, the research has chosen Guangzhou as a case study. It should be noted that there is great diversity across Chinese cities. However, the case of Guangzhou could represent the general trend in the evolution of the urban planning system in China. The specific reasons for selecting Guangzhou are discussed in chapter 4.

Three subordinate questions in relation to the role of general design control

approaches are addressed by the research:

- What design control instruments are employed by local planning authorities?
- What is their design content and emphasis?

1.4.2 How is Design Control Achieved?

The broad question of how design control is achieved calls for attention to be paid to design control procedures and the interrelationships among the various participants involved.

The key issues here are:

- What local mechanisms are used for operating design control?
- What procedures does design control follow?
- What roles do the different participants play in the design control process?

Many authors (e.g. Shirvani, 1985; Lang, 1994; etc.) argue that design is not only a final product. It is also a process. It is a process which includes establishing objectives, the preparation of policies, the tailoring of policies to specific local contexts, and their implementation through planning application and approval procedures. These factors all affect the delivery of a quality urban environment.

Meanwhile, various participants are involved in the process. How they relate to one another is a further factor affecting the operation of design control. The researcher has divided the main participants into four groups. They are the development control officers, the developers, the architects, and the general public. Since development control officers are directly involved in policy making and implementation, their role in design becomes very important. The developers use the policies when they initiate the development scheme and make planning and design applications. Their architects and design teams provide professional advice and draw up the design solutions. From this aspect,

these two groups of actors can be considered as the direct consumers of design policies (see DoE 1996, and Punter, 1997). The residents of cities are the ultimate users of the product of design policy and design control. Besides using and experiencing the built environment, their role in providing feedback and participation in the development process has been gradually recognised. Therefore, the question of public participation in the process of design control is also very important.

In short, the process of policy preparation and implementation, the role played by different actors in the design control process, the conflicts and interrelationships among these participants, and the context for policy formulation and implementation will all be explored in this thesis.

1.4.3 The Effectiveness of Design Control

The effectiveness of design control is an extremely problematic question due to the many dimensions it has. Views range from those who believe that, in general, design control has prevented numerous bad developments and improved on many more, to those who feel that such controls have not significantly improved the quality of design in developments, and may indeed have prevented exciting and innovative projects from being built.

Lewis Keeble' argued that 'planning was principally judged by the quality of development that was given planning permission' (Keeble, 1971, pp. 169-172). This assessment could only be done, whilst, focusing on examples of control or on cumulative evidence compiled in a locality.

Similarly, some authors argued that the ultimate effectiveness of design control could only be measured by the quality of the overall urban environment, i.e. its final product. However, it would be extremely complicated and time-consuming to analyse the influence of design policy on individual developments. And that until there is objective monitoring of design control, which is usually very subjective, there can be no clear cut measurement of

what it has achieved (Punter, Carmona, Platts, 1995).

Nevertheless, an attempt to investigate the effectiveness of design control constitute a necessary part of any serious investigation into that system of control. This research adopted a limited conception that focused on the acceptance of design control policies and the perceptions of process related factors among various participants in planning. Three specific perspectives were identified with regard to the measurement of effectiveness.

Firstly, as policy plays a vital role in assessing the design quality of a development proposal, its value providing useful criteria for planning officers to make design decisions is an important perspective.

Secondly, policy should also be able to provide useful guidance for developers and architects when they prepare a design scheme and make planning applications. To what extent it fulfils this role is another way to assess its effectiveness.

Thirdly, the extent to which design policies are understood and implemented by both planning controllers and applicants is another relevant issue. No matter how many design control plans/policies exist, if they are not understood and carried out, they will achieve nothing. Thus, the attitude towards design, the tensions among the various participants and the obstacles to effective design control are worth investigating.

1.4.4 The Impacts of the Recent Design Initiatives

In response to the planning system's design weaknesses, initiatives have been launched in Guangzhou. Among them, the Urban Design Plans (UDPs) prepared for some districts, individual public streets or squares, and the Model Community Development Programme are the two more relevant. The research undertook several case studies to assess the value of these initiatives. The main questions are:

- What is the content and emphasis of these recent design-related initiatives?
- In what ways do they differ from the traditional design control approaches?
- What are their impacts, strengths and limitations?
- To what extent have they achieved their original intention of strengthening design control and promoting good design?

1.4.5 Exploring the British Experience

As mentioned previously, there is a general lack of design control experience in China across central government, local planning authorities, planners and others involved in urban development. Thus, there is a need to look at experience outside of China, which might offer useful insights. With reference to literature on the British design experience, the researcher has gained a general impression that, at its best, the British planning process is a more effective system than the Chinese one. There have been enormous efforts made by the British government and local authorities to identify good practice (e.g. Punter and Carmona, 1997; DETR, 1998; The Urban Task Force, 1999; DETR, 2000; The Prince's Foundation, 2000) and there is much to learn from them. Therefore, the research has approached the topic with some general questions, such as

- What are the approaches to design control in Britain?
- How are design policies prepared and implemented?

The answers are then compared alongside the critique of the Chinese planning system in an attempt to identify appropriate lessons.

1.5 Background Information

1.5.1 A Brief Review of the Development of Urban Design

It could be said that Chinese urban planning in the past was influenced by the Soviet Union model, while contemporary practice traces most of its influence to the United States, as well as to the UK and other European countries.

Although it could be argued that urban design can be traced back at least to Sitte's seminal work *City Planning According to Artistic Principles* published in 1889 (Sitte, 1889), it is commonly agreed that the term 'urban design' came into use in the late 1950s in the United States (Sprieregaen, 1965). The idea quickly received a significant response in the professional design field elsewhere. Its emergence has been seen as a response to the failure of the Modern Movement to come to grips with the realities of the human experience and urban life (Lang, 1994).

After the Second World War, the changing nature of manufacturing, transportation and communication technologies in the cities throughout the world led to great need for urban rebuilding. Population expansion, new social policies, and changing social orders all contributed to an unprecedented building boom. This resulted in numerous new town developments and large urban renewal projects. However, the quality of developments varied despite the admirable goal of creating a liveable and delightful new world.

The Modernist Architecture Movement, represented particularly by Le Corbusier and the manifestos of CIAM (the International Modern Architecture Congress) around this time in America paved the way for what came to be known as the 'International Style' in architecture. This advocated the ideas of wholesale renewal of the contemporary city through zoned, single-use, high-rise developments. Meanwhile, in England, the Garden City Movement suggested a regional model of the city, decentralised, low-density and more

suburban in character, and hierarchically organised on the basis of community-based neighbourhood units or super-blocks. In practice, however, the new urban environments achieved by applying these ideas were far from a complete success. They were often challenged as failures in terms meeting the needs of the people who inhabited them even though such places might be highly photogenic (Jacobs, 1961; Brolin, 1976). They were also accused of increasing private car ownership, physically cutting off new estates from the general ebb and flow of city life, reinforcing segregation along social class lines and, in turn, resulting in severe physical and social problems (Lloyd-Jones, 1998).

The development of urban design resulted from such widespread dissatisfaction among architects, planners, and landscape architects. Challenges also came from people who had experienced the simplified, fragmented and frequently alienating forms of post-war urban development. They began to distrust the ability of architects and planners to improve the spatial form of their cities. Some users felt that architects were not concerned about their needs but rather pursued their own aesthetic ends. It became recognised that much more thought had to be put into the design of the built environment, not only to the aesthetic value of buildings and townscape, but also to what the environment would mean to its users.

In 1961, Jane Jacobs, published her powerful critique of modern town planning in *The Death and Life of Great American Cities* (Jacobs, 1961). This laid the ground for looking at the complexities of land use arrangements and high-density living in traditional city blocks and the shared activities of the traditional city street in a new light. It was a rich observation and analysis of the design, social use and economies of cities. Her concepts of 'mixed development', 'human density', 'the provision of natural surveillance' ('eyes on the streets'), and 'compact, environmentally sustainable urban form' have inspired many urban design initiatives. These ideas have experienced a renaissance and are being applied in many recent urban projects in Britain, Europe, and the United States.

Meanwhile, from a different angle, ideas about analysing and representing the perceptual structure of cities were emerging. In *The Image of the City* (Lynch, 1960), Lynch established the concept of 'imageability' based on five elements: paths, edges, districts, nodes, and landmarks. According to Lynch, these elements are used by people unconsciously to organise their 'mental maps' of an urban area. The significance of Lynch's work lies in the innovative use of graphic notation to link abstract ideas of urban structure with the human perceptual experience. Consequently, it challenged the traditional physical master planning approach.

Cullen (1961, 1971) was also interested in the way in which a city was perceived. He took up the idea of serial vision and investigate the form of the urban realm as the viewer moves through it. He identified three components of the way people appreciate townscape: serial vision, sense of place and content of places. Serial vision stresses the sequential and unfolding nature of the urban experience. The idea of 'sense and content of places' is concerned with the fabric of towns and cities: the colour, texture, scale, character, personality, and uniqueness. He observed that the older areas of towns and cities contained a variety of styles, scales and materials, and displayed interesting juxtapositions of layouts. The sympathy for historical townscape during the renewal of older towns and cities was highly emphasised in Cullen's work. It is seen as the origin of the townscape tradition in British urban planning (Punter, 1997).

Crane drew on the work of Lynch, Jacobs, and others and brought these ideas together in his concept of the 'Capital Web'. This is a physical and perceptual mechanism for structuring a city at a metropolitan scale, combining the main elements of public space with the main elements of physical urban infrastructure (Crane, 1960; Buchanan, 1988; Caulton, 1995).

Drawing on American sources as well as the British townscape tradition, Bentley and his colleagues published their work in the *Responsive Environments* (Bentley *et al.*, 1985). Here, they sought both to establish a

series of urban design objectives and to provide practical guidance on how such an environment might be achieved. They promoted the concept of 'responsive environment' as that 'the built environment should provide its users with essentially democratic setting, enriching their opportunities by maximising the degree of choice available to them' (Bentley *et al.*, 1985, p. 9).

A similar concern with making the urban environment more user-friendly was later published in Francis Tibbalds' *Making People-Friendly Towns* (Tibbalds, 1992). Tibbalds called for 'people friendly places' which are attractive, characterful, safe, equitable, and sustainable. With his set of criteria for urban design, he stressed the importance of small-scale change and a respect for place and history.

In the 1960s, Alexander criticised current planning concepts for the hierarchical distribution of facilities and services. In an early essay, *The City is not a Tree* (Alexander, 1965), he seeks to establish an organic way of designing and building. In his later work, *A New Theory of Urban Design*, (Alexander, et al. 1987), he goes a step further by attempting to establish a natural design process by which means the unity of the traditional town can be recreated.

Along with the development of urban design objectives and process, the concern with sustainability has begun to be added to urban design. Pioneering work of Carson (1962), Schumacher (1974), and Meadows (1972) has received global recognition. It is recognised that the pursuit of sustainable development is compatible with the current preoccupation of urban design in terms of quality urban spaces, the vitality and identity of urban areas, qualities of urbanity, respect for tradition and the preference for medium rise development of a human scale. According to the Brundland Report, 'sustainable development is development that meets the needs of the present generation without compromising the ability of future generation to meet their own needs' (World Commission on Environment and Development, 1987).

Three principles of sustainable urban design were identified by Moughtin. They include, firstly, 'placing priority on the adaptation and reuse of existing buildings, infrastructure and roads together with the reuse of recycled materials and components'. Secondly, 'placing a premium on the conservation of natural resources, wildlife and landscape'. And thirdly, 'minimising the use of energy consumed where new development is necessary' (Moughtin, 1992, p.11).

The impact of urban design approaches has varied with geographical location and cultural influence. In many parts of the world today, particularly in rapidly urbanising countries such as China, the old international style modernism with its high-rise blocks, urban motorways and disregard for traditional urban form still hold sway. In Britain and in some other industrialised countries, however, a general change in the approach to urban development reflects a concern for traditional urban patterns, people's urban experience, the sustainability of the urban environment, and especially a concern for the qualities of public realm.

1.5.2 The Scope and Definition of Urban Design

It is apparent that as the existing environmental disciplines – particularly architecture and planning – became professions with increasingly specialised and protected areas of activity, a gap opened up. Architecture's concern was with the design and production of a building or buildings within a defined site. Planning took responsibility for the general disposition of land use through policy formulation and plan making, and for the detailed and necessarily piecemeal regulation of individual building projects through the operation of the development control system. As these professional boundaries hardened and were institutionalised, 'it became clear that the gap was the public realm itself – the void between buildings, the streets and spaces which constitute our everyday experience of urban places' (McGlynn, 1993, pp. 3).

To respond to the gap, urban design has developed as a distinct discipline. Today, it is generally regarded as a design activity concerned with the built

environment of cities (and other human settlements) and the public welfare. Its main concern is the design of building configurations and the spatial relationship between buildings and spaces created between them. The focus of attention is on organising the public realm (Lang, 1994).

However, the definition and the scope of urban design remains a subject of great controversy. Town planners may believe that urban design is a component of modern town planning in detailed aspects such as pedestrianisation in townscape schemes. Some architects may see urban design as a larger extension of architecture and argue that urban design is an opportunity to extend the coherence and order of surrounding buildings to the public and semi-public space between the buildings (Cantacuzino, 1996). To urban designers, it exists as a subject and profession in its own right. To traffic engineers, the theme of urban design is traffic calming. Landscape architects are convinced that urban design is about landscaping in the city (Greed, 1998).

Each of these views contains a grain of truth. It is necessary to recognise that good buildings, in themselves, can not make either a good city or place. Also, no matter how well land uses are distributed, they will not, by themselves, lead to a good city. Therefore, urban design is not necessarily about planning or architecture. As a component of modern town planning, it is also a subject in its own right, which is located between planning, architecture, landscape architecture and transport planning and links them all. It lies both inside and outside conventionally defined professions, and indeed deals with some of problems, which lie at the edges of these professional interests.

Greed (1998) gives a brief example to illustrate the different roles of urban designers and planners. She argues that the siting of any major new development is of great importance to both town planners and urban designers. However, planners might be concerned about the environmental and economic impacts. Will the activities on the site affect residents? How many jobs will be provided? What services can it provide? And so on. Meanwhile urban

designers would be thinking about the design of the scheme itself, its layout, the relationships between buildings and space within the scheme and related access and circulation patterns, the design impact on the structure and layout of neighbouring areas, and its visual appearance.

Until now, urban design is still a confusing concept in China. It tends to be narrowed down to architectural design that concentrates on the external appearance of buildings. However, the research argues that the meaning of the concept is much broader. It embraces environmental design which is concerned with 'the natural and built environments and wider issues of sustainability, ecology, landscape, spaces, nature and urban conservation, and energy efficiency' (DoE, 1996, p. 5). It embraces urban design, which is concerned with 'the ensemble of buildings and the spaces between them, the public and private realms created, and their visual and functional qualities, as well as the settings for behaviour and activities they provide' (DoE, 1996, p.5). It also embraces architecture design, which deals with the appearance of buildings. This research deals with design control policies with a particular emphasis on urban design.

For the purposes of policy analysis, the following definition of urban design used by the PPG1 (Planning Policy Guidance 1, General Policies and Principles, England and Wales) is adopted by the research:

'...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; the nature and quality of the public domain itself; the relationship of one part of a village, town, or city with other parts; and the patterns of movement and activity which are thereby established: in short, the complex relationship between all the elements of the built and unbuilt space. As the appearance and treatment of the spaces between and around buildings is often of comparable importance to the design of the buildings themselves, landscape design, whether hard or soft, should be

considered as an integral part of urban design' (DoE, para.12, 1996).

CHAPTER 2: UNDERSTANDING THE CHINESE

CONTEXT

2.1 Introduction

This chapter outlines the Chinese context within which the overall question of design control will be studied. It starts with a review of the development of urban design practice, which gives an historical summary of the fragmented information available on planning and design over the last fifty years. Then, by analysing the major urban problems of the last few decades, together with some typical opinions towards urban design issues, it argues that design intervention is needed today in China more than ever before.

The chapter then moves on to examine recent changes in the socio-economic environment following various reforms. Their impacts, particularly relevant to the design control, are: the opening up of Chinese planning/design to various urban design theories and techniques; housing and land reform aiming to establish housing and land markets, thus, increasing the number of actors and conflicts of interests in urban development; the decentralisation of the central administration power which gives the local authorities more power to intervene on design; and finally, the changing urban planning system.

These changes have led to a growing pressure over the current development control system. Yet, they also provide the opportunities for re-thinking the role of urban design in urban development, and call for changes in the planning system that place design quality and environmental issues higher on the agenda.

2.2 The Review of Urban Design Practice in China

Since China's urban planning and design practice have been deeply influenced by the political climate, it could be argued that socialist urban design practices

have undergone three phases according to the major political changes of the past decades. These phases are:

1. the period of reconstruction and rehabilitation (1949-1952) and the First Five-Year Plan (1953-1957);
2. the period of political and economic disturbance (1958-1977), including the Great Leap Forward, 1958-1960; Economic Recovery and Adjustment and the Third Five Year Plan, 1960-1966; and the Culture Revolution, 1966-1977, and
3. the recent period after the economic reform (since 1978 - present).

(Xie and Costa, 1993. p106).

2.2.1 The Period of Reconstruction and Rehabilitation (1949-1957)

After the founding of the People's Republic of China in 1949, the new government faced the task of economic recovery. During the economic rehabilitation period (1949-1952), the principle emphasis in urban development was on the ideologically based effort to transform 'consumer cities' into 'producer-cities'. 'Consumer cities' were the old commercial and economic centres in the period of Nationalist control. They were viewed by Chinese communists as parasites. Thus, they should be changed into centres of production.

The transformation was achieved through massive industrialisation. The government thought that urban development should concentrate on production and construction of new industries (Lo *et al.* 1977). This policy resulted in substantial urban growth. According to China's first census in 1953, the number of people living in the cities increased by 20.6 million from 57.65 million in 1949 to 78.26 million in 1953. However, although industrial production and economic development in these cities were improved and expanded through the effort of communist planners, the urban form was not

greatly changed. The basic physical forms remained as they were before 1949 except for some additional buildings and expansion of urban land use. Urban design practice was left unchanged from what existed in pre-revolutionary China.

Soon after industrial production recovered, modern urban design practice began in China. At a conference on urban development held by the Central Finance and Economic Commission in September 1952, a decision was reached on the 'construction of key cities in co-ordination with the national economic development program'. This decision became the basis of urban planning in the First Five-year Plan period (1953-1958). Owing to a lack of planning experience, China started to copy the Soviet planning model. As suggested by the Soviet experts, Chinese planners considered urban planning as the continuation and realisation of the nation's economic development programme. Urban planning activity was characterised by the following points:

1. Under the political slogan of 'learn from the Soviet Union', Soviet design ideas and architecture styles proved a strong influence on China's urban construction practice;
2. Preference was given first to industrial production and second to civil construction
3. Emphasis was placed on seeking grandness for buildings and architecture, especially in the central city blocks
4. Western design theories and practice were criticised and abandoned, traditional Chinese symmetrical and regular urban form was recommended
5. Construction of tall buildings was restricted, except for a few Soviet-style buildings such as the Shanghai Soviet Exhibition Hall, the Beijing Soviet Exhibition Hall, and the Beijing National Culture Palace
6. Standardisation and equalisation of housing was the preferred socialist design goal (Xie and Costa, 1991, p. 281).

From a political view, this approach was used to achieve urban uniformity, which is seriously criticised today. But in reality, it was considered necessary to maximise the effectiveness of limited investment and to provide a certain degree of satisfaction of urban infrastructure needs.

Urban development during the First Five-Year period (1953-1958) was affected by Soviet dogmatism and formalism. As a result, urban planning swerved to the left under the influence of the ‘leftist’ slogan: ‘Give first place to production and second to livelihood’. A rigid and monotonous urban form, the so-called ‘socialist military camp model’ was advocated. The main features of the model include a regular physical urban layout, standardised ‘match-box’ buildings and apartments, and closed-yard-style construction units. The units were large rectangular parcels surrounded by enclosing walls. Within these parcels, buildings were arranged in row and columns, and divided into sub-compounds based on their functions, such as office, residential and service (Figure 2.1).

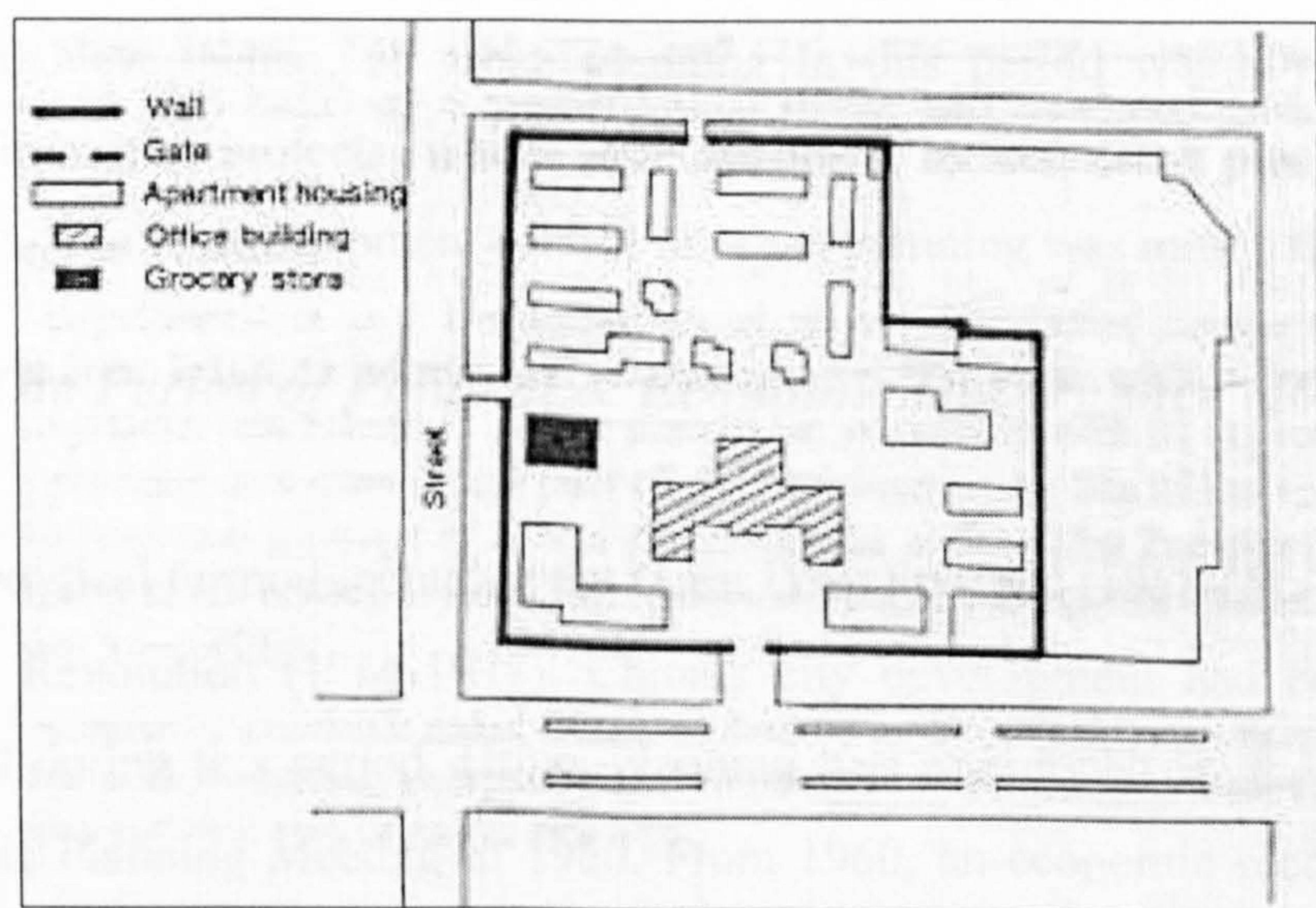


Figure 2.1: Example of the socialist military campus model (Source, Xie, and Costa, 1991).

Project based development was the main mode of land development in this period (Tang, 1994). Some of the industrial projects, which were funded by the sectoral ministries and departments of the central government and their local branches, constructed virtual 'factory towns' in which the factory was even more powerful than the municipal government. However, a lack of co-ordination under the project-specific development method began to emerge. In 1953, the central government stated in its report to the central Communist Party: 'factories are constructed according to our plans, but cities are not' (Editorial Board of Urban Construction in Contemporary China, 1990, p. 40). Thus, in the next year, it was decided that the comprehensive urban plan for major Chinese cities should be prepared. The microcosm of the two-tier planning system embracing the Urban Master Plan (UMP) and the Detailed Plan was set up in this period. UMPs were generally for co-ordination between newly built factories and existing built areas, while detailed layout plans were for the layout of factories and workers' villages.

This was the beginning of the preparation to set up a legalised planning system in China. Nevertheless, as urban planning in this period was supposed to support industrial projects, which were approved by economic planning, the actual function of development control in urban planning was minimal.

2.2.2 The Period of Political & Economic Disturbance (1958-1977)

Due to political turmoil including the Great Leap Forward (1958-1960) and the Cultural Revolution (1966-1977), China's city development had come to a standstill during this period. Urban planning was abandoned by the National Economic Planning Meeting in 1960. From 1960, an economic recovery and adjustment period started, however, it did not last for long. In 1966, when China entered the period of the Cultural Revolution, urban planning was totally abandoned, planning authorities were dismissed, and even planning institutions were wound up.

Because of political struggle during this time, China was forced into a position of isolation with little experience with modern urban planning and design. Traditional design ideas were revived and put into practice.

There are two basic historic urban forms in Chinese cities: the informal and the formal. The former resulted from incremental urban growth with an irregular layout suited to geographic features and unplanned commercial activities. The latter was the official urban design in ancient China, which was better represented in the layouts of some capital cities.

The general form of the traditional Chinese capital city consisted of three sub-cities, separated by three sets of walls: the imperial city, the inner city, and the outer city. Palaces, ceremonial and administrative buildings and elite residents were concentrated within the imperial and inner cities, while workshops, stores and the houses of common people were found in the outer cities. The city was a rectangle. Within the wall, longitudinal streets and transverse streets crossed one another at right angles so that the street pattern resembled a chessboard. Within the wall, buildings were arranged symmetrically (Figure 2.2). Residential houses were built into unvarying quadrangles, which is called – *siheyuan*, a compound with houses around a courtyard (Figure 2.3).

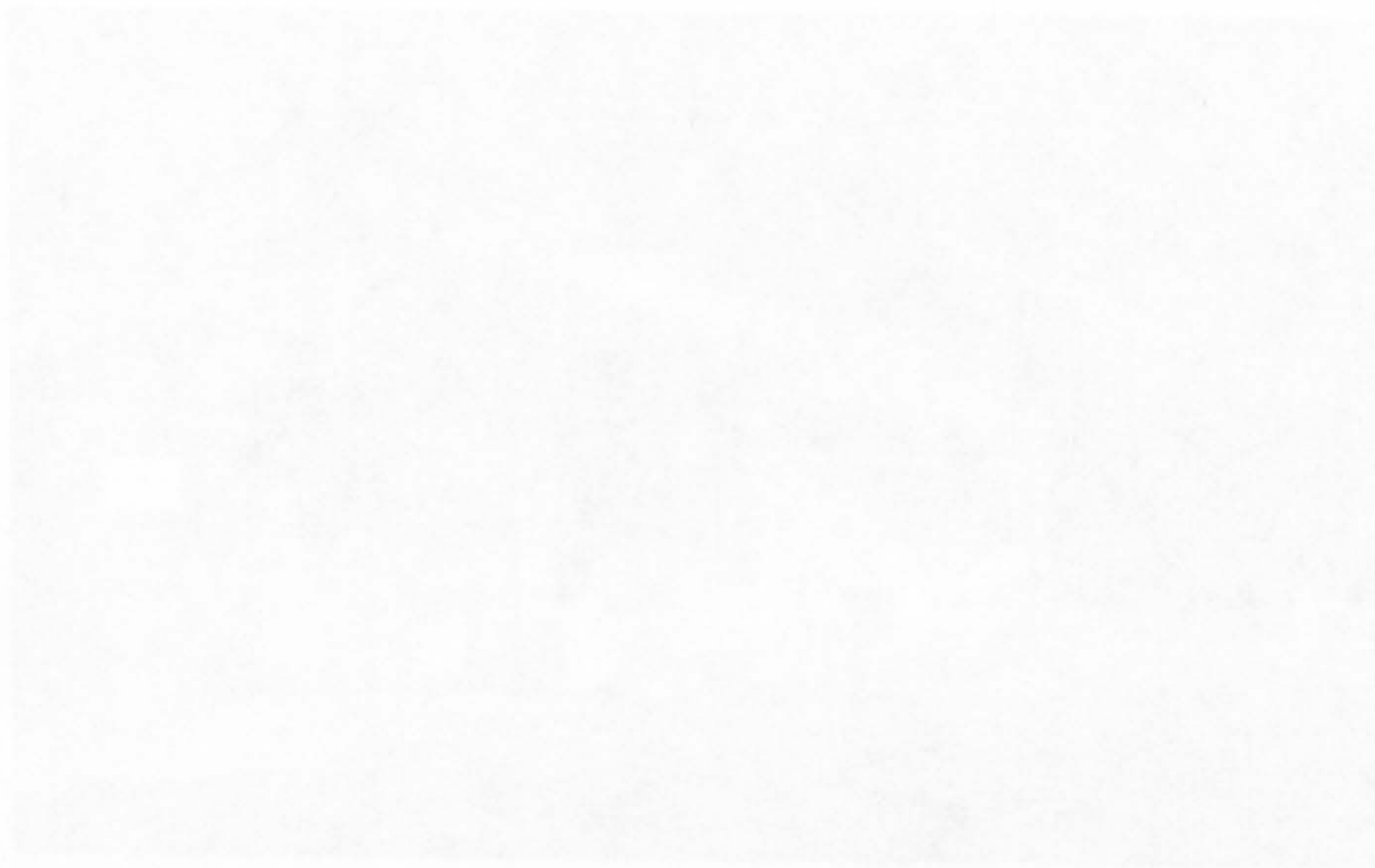


Figure 2.3 Traditional Chinese Imperial City (Source: The Sino-American Architectural Institute)

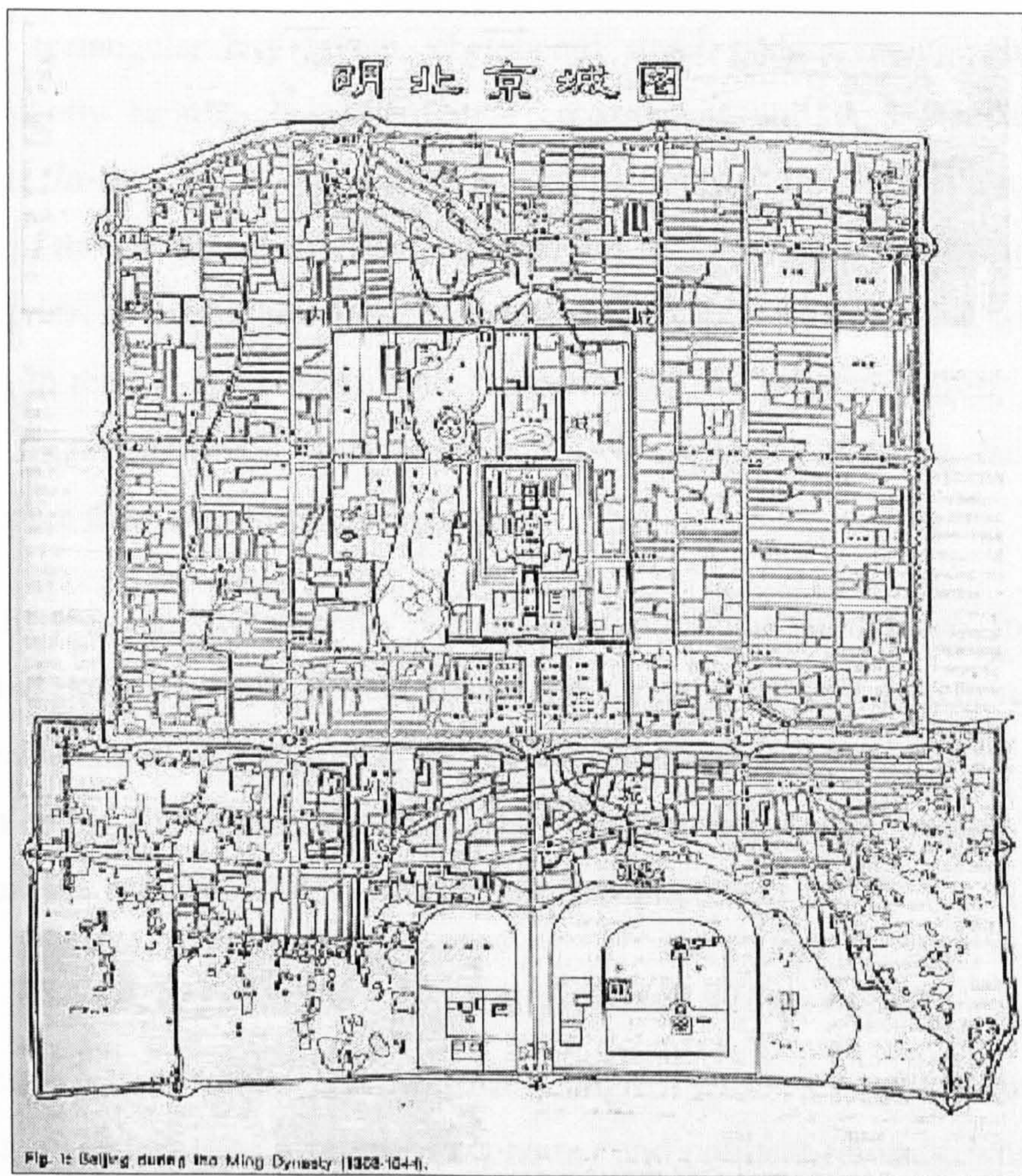


Figure 2.2: The urban layout of Beijing, capital of Ming Dynasty (1368-1644) (Source, Wu and Jin, 1987).

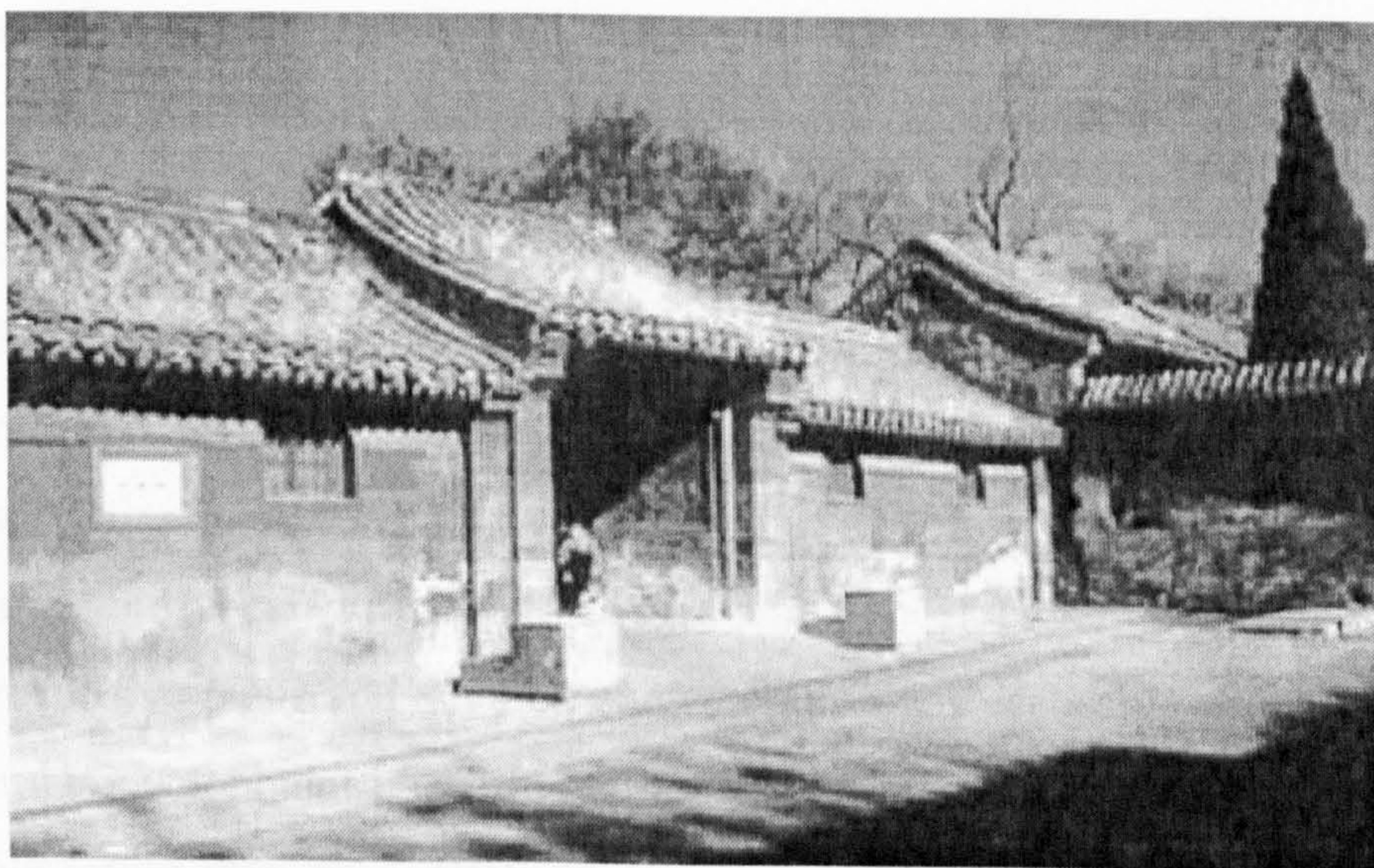


Figure 2.3: Traditional Chinese courtyard house (Source, Yan and Marans, 1995).

This traditional form was echoed in many aspects of the new socialist cities, such as rectangular city layout, chessboard street system, monumental or symbolic city centre, closed-yard-style construction unit, and standardised buildings. In fact, the closed-yard-style construction unit in 1950s is a modern version of the traditional Chinese courtyard houses (*siheyuan*). Each work unit or enterprise, no matter how large or small, is surrounded by enclosing wall. So the city, in reality, comprises a set of independent and isolated built-up areas. Several large enterprises or factories had a complete set of living facilities, which make them self-sufficient sub-cities.

Generally speaking, the centrally planned economy, socialist ideology, industry orientated project-specific development, and a state work unit system resulted in a mechanism of forming urban spatial structures that is different from that of western cities. The characteristics of urban planning and design practice before the economic reform of 1978 reflected this overall context.

2.2.3 The Period after the 1978 Reforms (1978-present)

The Third Session of the *11th National Congress of the Chinese Communist Party* in 1978 launched a series of economic and political reforms, which are seen as a landmark event in China's history. Special economic zones were set up which symbolised the implementation of an open-door policy in some cities. Four special economic zones and 14 coastal cities were 'opened' as means to attract foreign investment and promote economic development.

Meanwhile, people began to perceive urban planning as essential to guide the growth of city development. The importance of urban planning was once again recognised (Chen, 1987). *The Third National Urban Working Conference* required cities to restore the urban planning system to meet expected rapid economic and social growth. It also required local governments to prepare comprehensive plans and detailed construction plans according to the national economic development plans. Planning now focused on urban development as a whole rather than on centralised economic planning alone. Urban planning

authorities and institutions started to re-establish. The monotonous design practice of the 1960s-70s was criticised. However, with the sudden socio-economic changes, Western urban concepts flooded in with little time to be properly digested. City renovation in most coastal cities focused on the development of new business districts, 'high-tech', and tourist activities in order to attract foreign investment. In these new economic and high-tech districts, construction of high-rise buildings, luxury hotels and apartments were the major tasks of planners and designers (Figure 2.4).

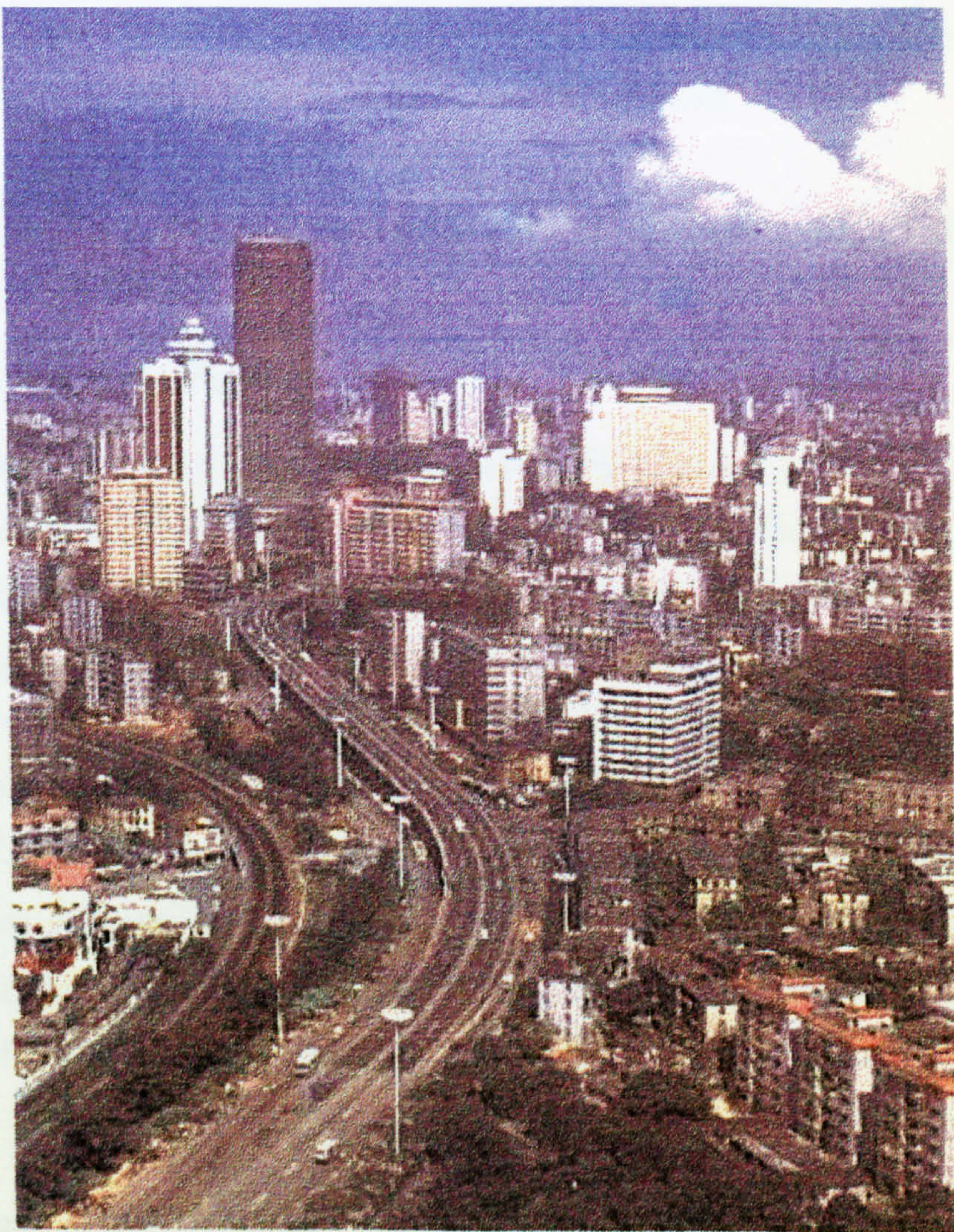


Figure 2.4: Cityscape of Guangzhou, (source, Internet, 1990).

The *Provisional Regulation for Preparing Urban Plan* and the *Provisional Standards of Urban Planning* were promulgated in 1980. They specified that the municipality was responsible for preparing urban plans. Responding to them, the master plans of some provincial capitals were prepared and approved by the State Council. In 1984, the State Council announced the *Regulation for Urban Planning*. The regulations stipulated various issues including the classification of cities, urban development goals, and policies regarding the plan preparation, approval, and enforcement of urban plans. The Regulation also stipulated that a planning permit would be required before any application for land or construction work could begin. Municipalities also announced their management regulations to complement the Regulations.

2.3 The Establishment of a Comprehensive Planning System in China

2.3.1 1989 City Planning Act

Past planning practice has been criticised by Chinese planners as having fundamental defects. These include the ideology of ‘planned development’ rooted in the superiority of socialism over capitalism, the reliance on economic planning measures, the assumption of the self-discipline of state work units, the neglect of the real decision making process, the lack of a mediation role for urban planning, the administrative-dominant style and so forth (Wu, 1998). Some changes were therefore taking place in a gradual manner along with the economic reforms. These changes led to the enactment of the 1989 City Planning Act, which is a major milestone in the history of urban planning in China. It set up a comprehensive urban planning system by law for the first time.

Based on the implementation of the *Urban Planning Regulation* promulgated by the State Council in 1984, the *City Planning Act* was enacted by the National People’s Congress on 26 December 1989, and has been effective since 1 April 1990. The Ministry of Construction (MoC) soon published the

Explanatory Notes of the City Planning Act to municipal planning bureau for the correct interpretation of the Act (MoC, 1990). Although the Explanatory Notes do not have legal status and the Ministry does not have the explanatory right of the Act in strict terms, the Notes provide guidance to local government in the preparation of local plans. At this point, the Notes are similar to *Planning Policy Guidance* (PPG) in the UK. The enactment of the 1989 City Planning Act means that China has established a comprehensive urban planning system.

The 1989 *City Planning Act* has been the most authoritative legislation in China's planning system (Ng, and Wu, 1995). As perceived by the Act, the function of urban planning is to 'define the size and economic orientation and structure of a city, to realise the goal of economic and social development of the city, to prepare 'rational' city plans and carry out constructions to meet the needs of development for socialist modernisation' (Act, 1989, Article 1).

The Act not only consolidates various practices listed in previous planning-related regulations, but also formalises and systematises various levels of plan formulations, which had been introduced to provincial and local authorities in order to cope with problems emerging from economic reforms introduced since 1978. As stated in Article 13, city planning has to forecast 'scientifically' the future need of the city so that the scale of development, the standards, 'norms and criteria of various items of development' can cope with the city's level of economic and technological development.

2.3.2 The Hierarchy of Plans

The hierarchy of plans listed in the 1989 City Planning Act is shown below (Table 2.1):

Hierarchy of Plans	
National and Regional Level	<ul style="list-style-type: none"> • Territorial plans • Regional plans • Water space plans • Comprehensive land use plans
Municipal Level	<ul style="list-style-type: none"> • Strategic outline for comprehensive urban plans • Urban Master Plan (Comprehensive urban plans) • Detailed plans

Table 2.1: The hierarchy of plans listed in the 1989 City Planning Act.

Territorial plans cover all levels from national to county level, and are made by the State Economic Planning Commission. Regional plans also cover all levels and are made by the Ministry of Construction. Like territorial plans, water space plans are made by the State Economic Planning Commission. Land use plans were mainly concerned with the use of agricultural land. Currently, they are taken care of by the State Land Administration Bureau.

‘The strategic outline should link the long-term national economic plan with the region-wide urban system plan and provide a basis for the preparation of comprehensive plans. It should analyse the technical and economic bases, opportunities and constraints of development; set goals for socio-economic development; clarify the role of the city in the urban system of region as a whole; and point out the function, scale and general layout and direction of development’ (MoC, 1990, pp. 42-43).

Using the strategic outlines, local municipalities prepare comprehensive urban plans that co-ordinate the land and infrastructure development required by various sectors. The duration of the comprehensive plan is usually 20 years. In addition, five-year short-term plans - a component of the comprehensive plan -

handle the spatial distribution of major construction projects (MoC, 1990).

The lowest hierarchy of plans is the detailed plan. As noted in the City Planning Act ‘the detailed plans should stipulate in detail land use requirements, building density and height, the general layout of all items to be built within the urban region’. These detailed plans are usually prepared by local architecture and planning institutes. Most of them include both text and maps.

Urban design is referred to as a design method in the Act: ‘the method of urban design should be used at every stage of city planning. The plan must consider the natural environment, social circumstance and the living and working needs of the residents, integrate the city as a whole, improve the environment quality, living condition and enhance the beauty of the townscape’ (MoC, 1990). However, there is no further consideration of the questions like which local authority should take charge of the making, approving and monitoring of design guidance? What principles and criteria should design guidance contain? These questions have led to the divergence, as well as confusions, in local design control practices.

2.3.3 Local Plans

A two-tier planning system at the city level is defined by the Act, which basically includes the Urban Master Plan (UMP) and the Detailed Plan (DP). At the top tier is the UMP that outlines the general land use pattern of the city. Below it is the Detailed Plan for the area that faces immediate development or is specified in the Master Plan.

2.3.3.1 The Urban Master Plan (UMP)

The content of the UMP is specified in the *Explanatory Notes of the Act* (MoC, 1990, pp 43) (see Table 2.2, Table 2.3). Not all UMPs can include all aspects listed below, but generally the master plan should ‘indicate the target size, the economic orientation, structure, and the spatial structure of the city’

(Yeh and Wu, 1999, p. 183). The content of UMP much depends on the requirements of the local environment and the extent of professional support.

Urban Master Plan (article 22)

1. Arranging the urban system, transportation system, infrastructure, ecological environment and landscape resources within the administrative area of the city and counties;
 2. Projecting target population size and area of land use with the planning period, delineating the boundary of urban planning district;
 3. Specifying future urban expansion and the land use structure; deciding the location of the city or town centre;
 4. Preparing the structure and layout of the urban transportation system and road system plan to decide urban road hierarchy, the system of main roads, main square, car park and cross sections;
 5. Preparing plans of urban water supply, drainage, flood-prevention, electricity supply, gas, heating, sanitation, environmental protection and co-ordinating these sectoral plans;
 6. Arranging development of water system (river and lake system) and green system plan;
 7. Preparing disaster prevention plan, air defence and earthquake plan;
 8. Preparing environmental protection plans, conservation plan of scenery sites, cultural relics and traditional streets; delineating conservation boundary and control area; suggesting countermeasures of environmental protection;
 9. Preparing special protection plans if the city is on the list of cultural and historic cities;
 10. Deciding the principle methods and approaches of urban renewal and land use adjustment; suggesting the requirements and measures to control population density within the old city area;
 11. Planning rural settlements, rural industrial land use and vegetable, pasture land, forest and orchard, non-staple agricultural products base; delineating the green space and separation belt;
 12. Studying the general technical and economic feasibility; suggesting implementation procedures and approaches;
 13. Preparing short-term plans; deciding the goal and content of the construction in the short term and the measures of implementation.
-

Table 2.2: The content of the Urban Master Plan according to *the Explanatory Notes of the Act*.

Technical issues
1. The planning document includes the text and the appendix; planning notice and basic data of planning should be put in the appendix;
2. The major maps includes the existing map of the city, urban system plan of the city region, the urban master plan, transportation and road plan, maps of sectoral plans and map of short-term planning;
3. The map scale of large and medium cities is from 1:10,000 to 1:25,000 and for small cities, form 1:5,000 to 1:10,000. The urban system plan is 1: 50,000 to 1: 100,000.

Table 2.3: Technical issues of Urban Master Plan according to *the Explanatory Notes of the Act*.

2.3.3.2 *The Detailed Plan*

According to the Planning Act, ‘the urban detailed plan should be based on the UMP or urban district plan to stipulate the detailed plan for the various construction projects within the short-term development area of the city’ (Act, 1989, Article, 20, Section 1). ‘The DP should include the boundaries of each construction project within the planned plot, control indices such as building density and building height, general layout plan, utility engineering plan and three dimensional site plan’ (Act, 1989, Article 20, Section 2) (see Table 2.4, Table 2.5).

The Detailed Plan (article 25)
1. Analysis of building conditions and study of technical and economic feasibility;
2. Layout of buildings and green space, landscape design, general layout drawing;
3. Transport and road design;
4. Green space system design;
5. Engineering and pipeline design;
6. Design;
7. Estimates of engineering works, demolition works, total cost-benefit analysis.

Table 2.4: The content of Detailed Plans according to *the Explanatory Notes of the Act*.

Technical issues of Detailed Plan

1. The document should be the plan and design explanatory notes;
 2. The maps should include the map of existing situation within the planning boundary, the general layout plan, various sectoral plans, 3-D pan, and perspective drawing reflecting the design ideas.
 3. The scale of the plan should be from 1: 500 to 1:2000.
-

Table 2.5: Technical issues of Detailed Plans according to *the Explanatory Notes of the Act*.

2.4 Two Waves of Massive Urban Construction and Urban Form Resulted

There are many forces that could shape urban change. Demographic forces such as population growth or decline, technological forces such as the improvement of transportation and communication technology, economic forces, and cultural and national influences are all important. However, political forces tend to be particularly influential in Chinese Society. The changing urban form and the amount of urban development in China are closely linked to the changing political climate. Thus, many authors have argued that China has experienced two massive waves of urban construction according to the major political and economic changes since 1949 (Yan and Marans, 1995; Dowall, 1994). The first wave was in the 1950s. The second is after the 1980s.

2.4.1 *The First Wave of Massive Urban Construction in the 1950s*

The urban population grew quickly during the stage of industrialisation (1952-1960) followed by a huge demand for housing. In consequence, Chinese cities experienced their first massive wave of urban construction. The main aim of the construction was to clear the slums and to solve the severe housing shortage.

Housing built before the liberation (1949) or even earlier was replaced by three

to five storey apartments with outside or inside corridors. One feature of these low-rise apartment buildings was the socialist ideology of ‘*standardisation*’ and ‘*equalisation*’, which became the major preferred socialist planning goals. Houses were arranged in a pattern of well-ordered columns and rows with hardly any distinguished appearance, the space around the dwellings was far from attractive. As the cities still had lots of vacant land at that time, new developments occurred mainly on the vacant land adjacent to existing urban infrastructure. Thus the built-up area did not see an obvious expansion.

Another feature is the emphasis on proximity between workplace and residence. The location of housing quite often corresponded to workplaces. The worker’s area correlated with industrial areas, cadres lived close to government department and offices, and academics close to universities and research institutes. Those people whose work units were too small and could not afford to build housing had to stay in the old city areas (Yeh *et. al.*, 1995).

The state work units played an important role in providing housing for their workers through a project-specific development method. The planning and design of housing developments was usually done by the sectoral department’s own design institute. They were carried out with only nominal approval from the municipality. The lack of co-ordination was obvious in this approach. Although some cities had a master plan at the time, it had little influence upon these developments. As work units were keen to provide shelters to meet their workers’ basic needs, little attention was given to the design quality of the housing itself and its surrounding environment. Many dwellings were in poor condition since the day they were built.

2.4.2 The Second Wave of Urban Construction since the 1970s

During the 1960s and 1970s, urban construction virtually stalled because of political and economic crisis. Since the late 1970s, the cities had undergone a second massive wave of urban construction (Yan & Marans, 1995). In some border cities in particular, the property boom following the 1978 economic

reform has led a steadily rising amount of housing construction since.

There was a major move of population from rural to urban areas in the 1980s and 1990s, where industry, jobs, and income would be found. The industrial cities grew enormously, causing problems of insufficient urban infrastructures and significant competition for agricultural and leisure uses of land. Due to a rapidly increasing population and very limited land, most apartments constructed during this period were over six storeys. Some apartments were built up to eight storeys without elevators. These residential areas usually reflect fairly high population densities (Figure 2.5). High-rise apartments also started to appear as a means of overcoming the severe housing shortage. They became very popular in the 1990s (Figure 2.6). Supported by rapid economic growth, the rate of housing construction is increasing steadily.



Figure 2.5: Apartments built in the 1970s in Beijing (Source, Yan and Marans, 1995).



Figure 2.6: High-rise apartments built in the 1990s in Guangzhou (photo, author, 2000).



Figure 2.7: High-class housing, Jin Cheng Garden, Guangzhou (photo, author, 2000).

A notable trend in recent housing development is new high-class housing in the central cities (Figure 2.7). Before the housing and land reform, the absence of land price and differential rents meant developments had to compensate

residents with housing and physical benefits and were unable to relocate residents on site. Constraints on plot ratios reduced the feasibility of redevelopment because, after compensation, the developer was left with limited additional space. On the other hand, owing to the tightness of the housing investment budget, demolishing of old housing had to be avoided. Therefore, the old city areas were largely neglected for a long period of time. However, with the onset of a housing market, especially after foreign developers were allowed to invest in the real estate market, things have changed. Many old residential areas are developed into high-rise residential and commercial complexes with a substantial increase in building density, which makes the project profitable enough for developers.

This type of housing is targeted at wealthy buyers with prices out of the reach of ordinary residents. Many residents have to be relocated to areas where the land is cheaper. This has resulted in the structural separation of housing and the workplace (Gaubatz, 1995b, 1999). Large communities have been built on the urban fringe after project-specific development was replaced by comprehensive development. The reorganisation of housing production has entrusted the municipality or semi-government real estate companies with undertaking development works. This housing is largely sold to work-units and then allocated by work-units to their workers and staff. They can also be sold to individuals.

The other change is the establishment of specialised commercial and business districts (Gaubatz, 1995b, 1999). Some cities, especially those in the 'Special Economic Zone', called for the development of a network of commercial centres to foster new concentrations of business activity. New large-scale office structures, hotels, entertainment, and service facilities were built with an orientation towards international and domestic business interests.

The increasing speed of urban construction, the separation of housing and the workplace, the emergence of specialised retail business districts have brought

dramatic impacts on the urban environment. New requirements have placed a heavy burden on the existing urban infrastructure. In many cities, urban congestion has become one of the main challenges. The average speed of cars is reduced to walking speed. Cities like Guangzhou seem to be collapsing but continue to work seemingly against all the odds.

2.5 Why is Urban Design Needed in China Today?

2.5.1 Sudden and Rapid Urban Changes

Economic, cultural and political life in China is shifting rapidly. The most visible change is the pace of construction in cities of different scales. Connected to this is the pervasive expansion and explosion of urban space and metropolitanization (Hanru & Obrist, 2000). Special economic zones and even new cities have emerged in the past few decades, such as Shenzhen, Zhuhai and the Pudong Area of Shanghai. Thousands of high-rise buildings have been erected on land that was agricultural or abandoned very recently.

The pace of urbanisation in China is rapid despite the state government's attempt to control growth. A huge national population is racing to become an urban population. Taking Guangzhou as an example, the city has grown from about 1.4 million in 1949 to about 3.5 million over 40 years (Guangzhou Statistics Bureau, 1989).

Seemingly unprepared for such sudden changes, the city's disadvantages, such as unbalanced urban development, an over-crowded urban environment and a serious lack of open spaces, traffic congestion, air and noise pollution, poor quality public realm, insufficient urban services, chaotic townscape and a general lack of local character, have become more serious. There is a need for strategic urban planning and urban design to channel urban developments into appropriate forms and structures. This, in turn, highlights the importance of urban planning and design.

2.5.2 Traditional Features in Crisis

Most Chinese city centres, unlike many western ones that have declined, remain the focus point of urban life. There are still a great amount of traditional markets, stores, and handicraft workshops in the old city centres. New commercial areas usually grow around or mix with the old. They also provide better transport services, public facilities, and a more stimulating urban life than the suburbs do. However, the long-term ignorance of appropriate planning and design and recent high-speed urban construction have led to congested development in the central areas.

More recently, these areas have been affected by China's 'modernisation', which has been a process of opening up to other cultures and places. It could be argued that the fundamental motivation of such a process is a desire to establish China's position in a modern world through competing with others, especially the western powers. An aspiration for a more modernised, somehow westernised way of living and society has become a strong dynamic. Many big cities, such as Shanghai, Beijing, Shenzhen and Guangzhou, have aspirations to become 'Global Cities'. This process is, ironically, often accompanied by a general deconstruction and disintegration of established values and cultural modes. In terms of urban development, modern and post-modern architectural style, functional architectural and western development models are expressed in many cities' urban images. Some basic aspects of the Chinese urban tradition are becoming more and more difficult to discern in such a context.

In identifying with local necessity and harmony, a critique of western modernisation is implied. Thus, at the same time as the modernist style buildings being built everywhere, the resistance to the domination of western style remains. This resistance leads to the exploration of new concepts of development in Chinese planning and design circles, taking account of local life, characteristics and the natural environment. These attempts often try and incorporate Chinese and regional styles derived from traditional architectural

practice. However, current practice frequently tends to be rather superficial. Simple imitation of the ancient street layout and a reconstruction of typical ancient Chinese architecture have become especially prevalent in some tourist areas (Figure 2.8).



Figure 2.8: Reconstruction of traditional shopping street (Source: Xie & Costa, 1991).

Nevertheless, as this strong desire remains, it may not be long for Chinese planners and designers to make their way to find a balance between progress and tradition. Indeed, there is a need to balance modernity and local necessity in order to create both human and urban spaces. This calls for a disciplined urban design strategic framework to be applied, which inherits the strength of traditional values into development processes.

2.5.3 The Necessity of Design Intervention

If the qualities of cities are regarded as an important public matter, it must also be a legitimate concern for local government organisations. As Hall cited, ‘It would, indeed, be surprising in a sophisticated society if there was not some public concern for quality in these matters and a desire that the machinery of

government should, in some way, attempt to ensure that this quality is maintained. Where town and country planning system exists, their outcome in the shape of settlements and landscape will be the basis on which their success is judged.’ (Hall, 1996).

Nonetheless, there are indeed some alternative viewpoints. Some argue that there are many old cities that are masterpieces of urban design that have developed organically without any formal planning. Overtime the bad elements have been lost and the good been re-enforced. However, the pace of urban change in China today means that there is no time to allow for a ‘trial and error’ approach to this evolution.

Many facts point to the failure of impulsive urban construction lacking strategic vision in design. For instance, according to Hanru and Obrist (2000), 8% of the high-rise buildings constructed during the last 4-5 years in Shanghai are empty, especially in the area of the ‘Special Economic Zone’ in Pudong. Similarly, numbers of buildings in cities like Hainan and Zhuhai are still waiting to be completed and occupied. Meanwhile, the speculation of developers continues to accelerate and the price of real estate remains excessively high.

One argument, especially among architects, is that good design is an absolute concept, which can stand over time and space. They argue for a strong interpretation by architects and planners at a high level. This argument stands on an assumption that professionals should be highly qualified and could deliver the best of quality to design. However, the fact is that many developments are carried out by people without formal training in design or planning. This point was revealed by Chapman (1996) and others in a British context. Since in China the number of architects and planners is even more limited, and a huge amount of development is taking place, the situation is even more sever (Lei, 1996).

Moreover, if planners and architects are natural allies in the cause of the quality

of our built environment, they should be blamed for creating uniformity in the city, diluting the city's characteristics by setting up undistinguished buildings, even for the new social problems caused by a sudden breaking up of old communities. However, in reality, they are now very much confined by the developer's concern for financial profitability and getting things built and sold. Constraints imposed by their clients or financiers may reduce the ideal design from the professional desires to the most economic, functional box.

Alternatively, some may argue that as good design itself sells, it should be left to market forces. They believe that only market forces deliver what people want. Individuals can determine their own aesthetic requirements without interference from public agencies. This viewpoint was particularly prevalent after the 1980s when the consumer boom touched almost everywhere. Many planners and designers shifted their concerns away from social and environmental ones to what the market wanted. Development became very market-oriented.

This viewpoint overlooked the issue that people's ability to take advantage of free-market choices depends on a number of factors. Economic power is the most obvious one. Others such as social class, education, age, gender and ability all affect people's choices. Design must, therefore, try to avoid the restriction of choice for those individuals and groups with less power to participate in the social and economic process.

Meanwhile, it is worth noting that China's market economy is immature and at a transitional stage as the political economy and free market economy are both at work. The politician and the developer often form an 'alliance' in urban development. Politicians and government leaders want to promote local economic growth by attracting investment and, at the same time, the impulsive and almost fanatical pursuit of economic and monetary power becomes the ultimate goal of developers. In these circumstances, policy vacuums and deregulation can only be harmful to design control, as public interests are

sacrificed to economic demands.

Furthermore, rapid urban construction has caused the loss of valuable land resources in China. 'This does not only lead to the environment degradation and reduction of green land coverage, but also jeopardises the long term economic and environment sustainability' (Wu, 1998, p. 225). As the built environment lasts for a long time, some efforts must be made to ensure that future options are not compromised by present profitability of development.

For all the reasons discussed above, the need for essential checks and balances provided by design control is justified. What design control should try to achieve can be summarised as below:

- Design control prevents 'outrages' and stop much 'bad' building
- Design control raises the standard of development by ensuring that more thought goes into design
- Design control encourage the architect to stand up to his client who may want only cheaper buildings to sell on to another user
- Design control is democratic (in a manner of speaking) because it incorporates the view of the public, which might otherwise be ignored
- Design control provides a necessary bridge between lay and professional tastes

(Punter and Carmona, 1997, p. 1).

There is a voice telling us that cities could be good for us 'if strategic planning was restored, population densities maintained, public transport preferred to private cars, and urban street housing re-established and improved upon' (Sherlock, 1999, p. 20). These suggested improvements would undoubtedly provide some of the essential qualities of a 'good' city, and, once again, they highlight the importance of urban design.

2.6 Recent Reforms and Their Impacts on Design - Opportunities for Re-thinking Design Control

There have been some notable changes in the socio-economic environment. Particularly relevant to design control are: the opening up to various design theories and techniques, the housing and land reforms, the decentralisation of administrative power, and changes in the planning system.

2.6.1 The Opening-up to Various Theories and Techniques

Changes in economic and political values have always been the major factors accounting for changes in China's urban form. Although the country has a long and varied urban history, it has had a relatively brief experience with modern planning and design. For a long period - especially from the 1960s to the mid-1970s - the country was isolated. Planning and design theories and techniques developed in other parts of the world were kept out of China.

Since the beginning of the 1980s, sudden exposure to the world and the huge influx of information has overwhelmed Chinese planners. Western concepts of urban design have been studied and introduced into modern Chinese urban development. New ideas resulting from the introduction of market forces have also affected the design of cities. The traditional socialist ideologies such as 'equalisation' and 'standardisation', which resulted in urban structural similarity, are no longer suitable today under the combined intervention of the planned economy and the market economy. The 'socialist monotony' which Sit (1995) identified and described as a general low standard and uniform provision of housing, public transport and other facilities and services in a centrally co-ordinated and planned fashion is giving way to new urban concepts.

The urbanisation and high speed construction in Chinese cities is also a process of international exchange of architectural/urban planning ideas and practice, especially for those coastal cities which are 'opened' for foreign investment

and a commercial economy in the 1978 economic reform. Many internationally known professionals are attracted by such a dynamic context. Chinese architects and planners are increasingly exposed to international influences. With contributions from a wide variety of architects, developers, planners, and entrepreneurs, a more varied and higher-standard design quality is expected.

Due to the uniqueness of Chinese urban forms, social, economical, and political circumstances, it is obvious that imported western concepts needed to be carefully tailored to fit in. There is still a long way to go for Chinese planners and designers to learn and evaluate these ideas, to re-consider the role of conventional planning, and to explore a system, which is suitable for the Chinese context.

2.6.2 The Housing and Land Reforms

Urban housing used to be regarded as welfare good provided to the populace by the state at minimal charges and by administrative means. Subsequent to the commencement of the general economic reform in 1978, local governments were encouraged by the State Council to experiment with housing reform according to their own situations.

Housing reform was launched after 1982. Because of the difficulties in the change from an administrative to a market mechanism, its process is rather slow. The main theme of the housing reform is to turn housing from a 'free good' to a 'subsidised good' and eventually to a 'commodity' (Wu, 1998). Major cities and towns in the country have implemented a variety of reform programmes since 1995.

Housing reform under the title 'commercialisation of housing' reduces government subsidy to housing, encourages individuals to buy houses, increases the source of income for building more housing, and aims to solve the nation-wide housing shortage. Various programmes have been tested and the Special Economic Zones are the pioneers in the reform (Chiu, 1995). As

part of the programme, some changes are being made on the following premises:

- Sell public-owned houses to private residents. Some cities began to do so in 1982 on a trial basis. Individuals could only pay one third of the price, while the enterprises they belong to and the municipality pays one third of the housing payment respectively.
- Organise residents to build houses by themselves. Individuals may build houses by themselves if they can find the land and building materials, or with government or neighbourhood assistance. In some cities, the local government buys the land, makes plans and designs, and organises people to build residential quarters in a planned way while the government builds public facilities. This policy gradually restored the abandoned concept of private property.
- Build commercial housing and set up a housing market. Real estate companies have been set up to build houses for enterprises and individuals. Foreign investors are allowed to invest in the housing market.

Housing reform has led to change in the building industry. It has freed the work units from the direct provision of housing. Thus, the housing estate can be developed at an economic scale and the municipality can prepare a comprehensive plan for housing construction and service facilities. The former pattern of self-contained development based on individual work unit has been broken and gradually replaced by overall planning and management by the local government. There has been a diversification of investment sources as private and foreign investors get involved in the real estate market. According to the State Statistics Bureau, urban individuals invested 12.51 billion RMB (US\$ 9.3 billion) in private housing construction in 1992, while foreign direct investment increased from US\$ 636 million to US\$ 4366 million in 1991 (State Statistics Bureau, 1991).

The reform has also increased the number of actors in urban development. Instead of the State going at it alone, which was the norm in the past, initiatives by the State, local authorities, enterprises, foreign investors, and individuals are now all playing a part in urban development, which means the involvement of multiple participators, and consequently more conflicts of interests.

2.6.3 The Decentralisation of Administrative Power

Urban development was mainly an aspect of central economic planning in the past. The local planning agencies were permitted relatively little autonomy. As part of a national network, municipal leaders found that what they perceived to be their 'special needs' were generally subordinated to the 'national interest' (Frolic, 1972). The state enterprises and their supervisory departments undertook the development. The state could control development through resource allocation. The interaction mainly took place between territorial and sectional government departments. The basic unit of urban development was the state work unit under the supervision of state sectoral departments.

The situation started to change after the 1978 reform, in which a continuing decentralisation and localisation of administrative power featured strongly in the transformation of the political economy. 'Localisation means that the decision making process is decentralised into localities, either municipalities or urban districts, through economic reforms' (Wu, 1998, p. 213). The municipality becomes the basic unit to control urban development. Local governments now exert significant control over the responsibility for planning, marketing and budgeting, especially in those 'opened' coastal cities in the Special Economic Zone.

With the reduction in the power of sectoral departments, service facilities begin to be provided by the municipal government rather than individual work units. Through local-wide provision of housing and land development, there is a trend towards localised urban management, which provides the opportunities for the local planning authority to play a more active role than in the past.

Meanwhile, local planning authorities have more freedom to take regional and local realities into account.

These emerging new actors and new interests and the changing role of previous state work units significantly transformed the role of municipality from a project co-ordinator to planning authority that is using development control to intervene in development processes. Local governments have to conciliate the conflicts and seek the balance of different interests and play a more active role in urban development.

2.6.4 Tendency towards Multiple Tiers of Plans

The conventional urban planning system only consisted of two layers – the master plan and the detailed plan. This has not been changed and was formalised by the 1989 City Planning Act.

Strictly speaking, the traditional detailed plan was a kind of layout design, which was prepared only before the commencement of construction projects. This short-term nature of detailed planning made it difficult to programme urban development in accordance with the master plan. The lack of co-ordination between the two traditional tiers of plans was apparent.

This problem has become more serious along with the shrinking importance of economic planning after 1978 economic reforms. Thus, various experiments have been proposed in different cities to introduce intermediate tiers of urban plans since the late 1980s. Urban district planning, detailed development control planning (DDCP) and other experimental approaches have been developed in order to strengthen planning/design control at the local level.

Figure 2.9. shows the change from traditional two-tier system to multi-tier of plans.

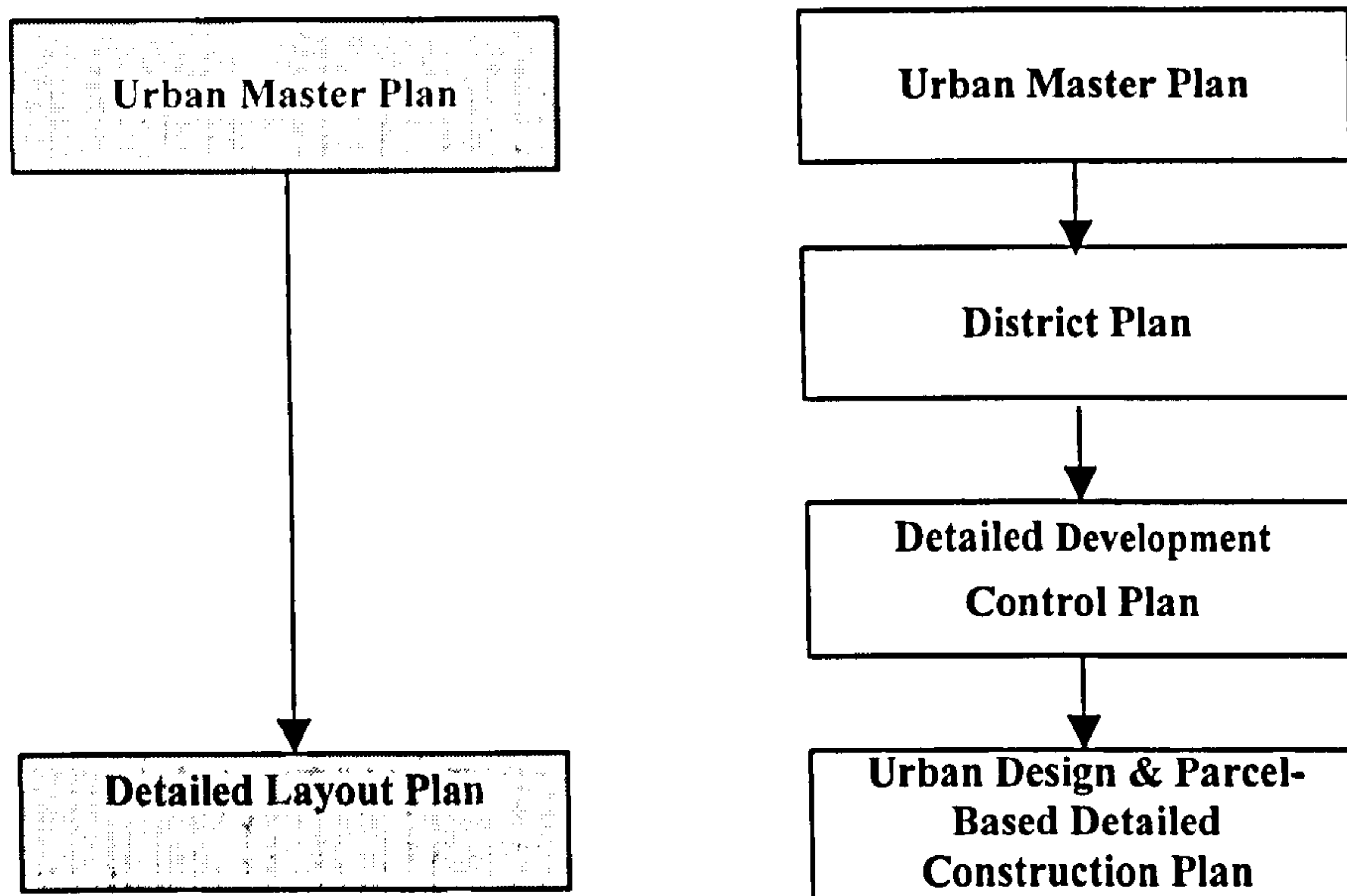


Figure 2.9: The change from two-tier to multi-tier planning system.

Urban district plan - the urban district plan is one of the efforts made to link the master plan with the needs of day-to-day development control. The traditional master plan is too general to indicate whether planning permission should be granted. It mainly works as a growth strategy, which shows the future urban structure. Urban district planning attempts to complement the master plan by desegregating land developments into urban planning districts. These planned districts are not necessarily the same as the urban administrative districts. Each planning district has a set of indices to control its development intensity. Population, jobs and public facilities are allocated to the planning districts following the planning norms to make sure there will be a balanced development.

District Plans can be prepared after making the UMP to further control land uses at the district level. According to Article 12 of the Act, the urban district plan is not compulsory and belongs to the master planning stage. The urban district plan may be prepared on the basis of a master plan for large and medium sized cities to further control and define land uses, the boundary, and development intensity of the districts, as well as to co-ordinate various infrastructures, public amenities and facilities in the districts. In practice, there

is great diversity in the style of urban district plans. Some are similar to the UMP in small areas, while some are similar to the detailed development control plan. The variation is dependent on whether the urban district plan is intended to clarify the general spatial structure of the master plan, or to define land uses and development intensity.

Detailed development control plan (DDCP) – the detailed development control plan is another effort to meet the needs of the new methods of land development. In land leasing, developers need to know the use and development intensity of the leased land so that they can calculate how much they should bid for it. The government is also anxious to make sure that the leased land will not bring about negative effects to the community. Thus, a plan needs to be made at the land parcel level. In practice, the style and content of the DDCP show a great diversity from city to city, ranging from one end of the spectrum which is close to urban district planning that is quite broad, to the other end which is close to urban design that is very specific. Generally, the DDCP sets down the land use types, intensity, and spatial relations.

In the early days when it was used, the DDCP was intended to specify the physical structure such as land use pattern and transportation network. Later, development intensity control was added to provide more specific guidance to the preparation of the lease conditions in land leasing. Compared to conventional urban planning, the DDCP has some new features – quantified control indices, supplemented regulations, geo-referenced location, design guidance and approval of design sketches. But it has not yet become a common practice in China (Xu, 1995).

Because of the introduction of the above plans, the urban planning system in the late 1980s is evolving from a two-tier system to a multi-layer system. The actual practice of urban planning is different from city to city, which reflects the various urban planning experiments that are taking place in the field (Yeh and Wu, 1997).

2.7 Conclusion

1. The review of the history of urban design practice in China revealed that although it has a fairly long history in China, it played a limited role in urban development until its legal status was set up in 1989. But urban design, as a new concept, is not well incorporated in the government advice despite the Planning Act's intention to do so.
2. With rapid urban development taking place in Chinese cities, urban problems have intensified. Urban design is recognised as one among many approaches that can contribute to the achievement of a high quality urban environment. More importantly, design intervention is especially needed due to the amount and speed of urban constructions, the lack of professionals to deliver the quality of design, the immature market forces, and low awareness of the importance of design quality among developing interests.
3. The transformation of political economy to a market economy accompanied by various reforms not only challenges the conventional development control, but also provides the opportunities for it to move towards a more realistic and active practice. The localised urban management makes local planning authorities more powerful to intervene in urban development than ever before. The housing and land reform led to the change of traditional project-based developments, which were undertaken by state work-units. These were replaced by overall planning and comprehensive development undertaken by the city government. They also caused the emergence of new participants and new conflicts of interests in urban development. For instance, real estate development companies have been set up. They are different from previous state construction teams in that they are developers motivated by profit. Planners and designers now have to face the new challenges and to satisfy the spatial needs of people in all walks of life.

4. As the current development control system is challenged, many experimental changes have been gradually emerging. These experiments include the introduction of intermediary levels of plans into the planning system, and special urban design initiatives in some cities.

More exposed to the international influence of planning and design, it is now time for Chinese planners and designers to re-think the role of urban design in current development control, to learn from more advanced experience, and to explore ways of using comprehensive urban design approaches to achieve better quality in Chinese cities.

CHAPTER 3: URBAN DESIGN OBJECTIVES AND PROCESS

3.1 Introduction

If indeed urban design is expected to play a more significant role in China's urban development, and good quality of urban design needs public policy for intervention, we then need to ask the following questions:

- What does urban design intend to achieve? Consequently, what needs to be addressed in design control?
- What are the design processes and how do they influence the quality of design?
- How can these processes be shaped by design intervention to achieve a better built environment?

While these questions are much debated in America, Britain, and many European countries, there appear to have been relatively few studies in China.

This chapter reviews the existing literature on urban design and design control. Through the examination of these schools of urban design ideas, some tentative statements about the content and process of urban design are made. Much of the relevant literature deals with western societies, however, the fundamental issues which affect urban design are common to all areas, and therefore, can be related to the Chinese context.

This chapter focuses on the ingredients of good urban design, and the appropriate processes that are needed to deliver these. It starts with an exploration of urban design principles in order to establish the range of considerations that could be addressed. It then proceeds on the basis that urban design is a process rather than a final product, and in turn argues that design control should replicate the design process it seeks to control in order to deliver

the desired quality. Finally, the chapter moves on to discuss the relationship between design control and the development control process, and argues that design control should be an integral part of the planning and development control system, interwoven at all scales of urban planning.

3.2 Substance of Urban Design

There is a need to clarify the full range of urban design concerns established in theory as a prelude to considering the whole question of design control. The central question is -what does good urban design try to achieve, and, therefore, what should be addressed in design policies and guidance?

3.2.1 Conceptualising Urban Design

To understand the influence that urban design can have on development, it is useful to consider the principles that it seeks to implement. There have been numerous attempts to develop principles of urban design. Some of the most influential works have been discussed in this section.

3.2.1.1 Good City Form

Kevin Lynch is perhaps among the most prolific authors in the field. Many authors have drawn their ideas directly or indirectly from his work. Lynch spoke of three kinds of theories that address the city as a phenomenon. He called the first type 'planning' or 'decision' theories. These are about complex decision -making that affects city development. He called the theories that attempt to explain the spatial structure and organisation of cities and their dynamics 'functional' theories. Finally, he characterised theories that articulate and interpret connections between human values and settlement forms as 'normative'.

He argued that the first two are about how the modern city works, the latter is about how the city *should* work as a human environment. Lynch's work began

with a concern for analysing how a city works (e.g. *The Image of the City*, 1960), then it increasingly moved to ask questions about what a good city should be. His normative theory was matured in the late 1970s, and published in *Good City Form* (Lynch, 1982), in which he argued:

‘The linkage of very general aims to city form is usually incalculable. Low-level goals and solutions, on the other hand, are too restrictive in their means and too unthinking of their purpose. In this dilemma, it seems appropriate to emphasise the aims in between. That is those goals that are as general as possible, and thus do not dictate particular physical solutions, and yet whose achievement can be detected and explicitly linked to physical solutions ... Performance characteristics of this kind might be a foundation on which to build a general normative theory about cities. Developing a limited and yet general set of them, which as far as possible embraces all the important issues of form, will now be our aim. This will be our alternative to the dogmatic norms that customarily guide discussions about the goodness of cities’ (Lynch, 1982, p. 108).

This statement cleared the necessity for seeking general design principles. Punter (1990) further argued that such principles ‘do have a value as learning devices, as organising principles for a vast field of writing which often uses impenetrable jargon or largely private language of criticism. As the architect-planner becomes an increasingly rare commodity in development control, it is correspondingly more important that all controllers are versed in the basic principles of urban design, and able to articulate them to prospective developers and, if necessary, to inspectors at appeal’ (Punter, 1990, p. 11).

In the essay *Quality in City Design* (Lynch, 1966), Lynch outlined the goal of city design which he considered the basic performance characteristics of good city form. In a way these are precursors to the performance criteria he defined as the core of the normative theory in *Good City Form*. They are described as:

- *Accessibility* - the cost in time or effort to move or communicate

between activity locations; the possibility of interaction, or choice of mode of communication;

- *Adequacy* - the amount and availability of facilities of an acceptable quality;
- *Congruence* - the fit of the system, the co-ordination of parts in operation. This may include the correspondence of physical facilities to the activities housed within them, the fit of circulation capacity to flow, or the match between the visible form of a city and its functioning.
- *Diversity* - the range of variation of facilities, qualities, and activities, and the spatial mix of this variation.
- *Adaptability* - the ability of an environment to adapt to new functions at minimum cost.
- *Legibility* - a perceptual characteristic: a sensuous form that is vividly differentiated and easily structured, making a pattern that is continuous in time and space, producing a strong image.
- *Safety* - the degree to which city forms tend to reduce the incidence of accidents, disease, death, or other calamities.
- *Stress* - an environment that places neither unduly much nor unduly little physiological or psychological stress on the individual, in regard to climate, effort, perceptual stimulus, etc.
- *Efficiency* - the balancing and limiting criterion: maximum benefit in terms of the other objectives at a given cost of building and operating the city, or minimum cost at a given level of achievement.

Based on these earlier works, Lynch (1982) distilled four main criteria of environmental quality including: *Sense* - concerned with the feel, appearance and identity of a place; *Fit* - concerned with matching an environment to user actions; *Access* - meaning the ease with which users can reach other persons, services, and resource; and *Control* - meaning the extent to which the users is

free of outside interference.

The emphasis on human perception and experience of an urban area in Lynch's work has made significant influence on the following authors involved in the research in this area. As Jarvis called in his landmark article - *Urban Environments as Visual Art or as Social Settings?*-the traditional British emphasis on visible form should be reconciled with an emphasis on public use and experience of the urban environment more commonly associated with American urban design (Jarvis, 1991).

3.2.1.2 *Responsive Environments*

Heavily influenced by Lynch's theory, the 'Responsive Environments Group' in Oxford Polytechnic derived their set of principles and titled as *The Responsive Environments: A Manual for Designers* (Bentley et al., 1985). It established a deceptively simple set of principles, which the authors wished could be used as a 'working manual' for designers. They argued that the design of a place affects people's choices at many levels:

- It affects where people can go, and where they can not: the quality we shall call *permeability*;
- It affects the range of uses available to people: the quality we shall call *variety*;
- It affects how easily people can understand what opportunities it offers: the quality we shall call *legibility*;
- It affects the degree to which people can use a given place for different purpose: the quality we shall call *robustness*;
- It affects whether the detailed appearance of the place makes people aware of the choices available: the quality we shall call *visual appropriateness*;
- It affects people's choice of sensory experiences: the quality we shall

call *richness*;

- It affects the extent to which people can put their own stamp on a place: we shall call this *personalisation*.

Later in the 1990s, as the environmental dimensions to urban design emerged steadily through the 1980s, the limitations of this set of design criteria on environmental issues have been recognised by its authors. The proliferation of writing on concepts of sustainable development has shifted the urban design agenda significantly towards broader environmental concerns. Thus, energy efficiency, cleanliness and wildlife support as sustainability concepts were added to the 'responsive' principles (Bentley, 1990).

Responsive Environments has considerable influence on the concerns of design principles, such as the work of the Urban Design Group (1996), Tibbalds (1988), Buchanan (1988), the Prince of Wales (1988), and Chapman & Larkham (1994).

3.2.1.3 *The Urban Design Group*

The Urban Design Group was funded in 1978 by a group of British professionals to promote a greater concern for the design of the physical environment and the quality of places, and to encourage professions to combine to this end (UDG, 1996). In their new urban design agenda, the Group sets out five basic principles which they promote as the essential considerations necessary to create a 'good urban environment'.

Firstly, the Urban Design Group promotes the principles of relating urban change to the best of what already exists, which they call *context*. This principle expresses the need for new alternations and additions to the environment to respect their context, fabric, and morphology.

Secondly, the Group encourages the variety that enlarges the interest or choice a place can offer, which they call *diversity*. They explain that the best urban

places offer a mixture of uses: living, working, shopping and playing all gain from being lined as opposed to being zoned and separated.

Focusing on the concept of mixed-uses from a sustainability argument, Jenks (1996) pointed out that an urban environment which is characterised by a mixture of uses can minimise the need for long distance travel, provide proximity and easy access to services and facilities and encourage the use of more ecological friendly modes of travel such as walking, cycling, public transport, etc. He explained that this kind of urban form also offers easy access to urban facilities to those members of the society who are not highly mobile, e.g. the poor, the disabled and the elderly.

The third promoted principle is *equity*. It is about making places, their facilities, and amenities accessible to people beyond the owner and immediate users. The Group explains that a good urban environment should offer choice in terms of mobility and is appropriate to pedestrians and cyclists as well as car users. They observe that to achieve this goal, the city should also be permeable to all, regardless of age, ability, or income.

There is a new principle - *stewardship* that has not been found in any other author's lists. It takes a broad and long-term view of the costs and benefits of any change. It also expresses the need to consider ecological and sustainability issues in urban development. Despite the new name, the ideas promoted by this principle are very similar to 'efficiency' and 'sustainability'.

Finally, the Group promotes the principle of *empowerment*, which is about building a sense of identity of the people who live and work in a place, their involvement in caring for its fabric and character, and their capacity to influence the forces which shape the environment. This principle deals with the design process and its interaction with environments and users.

3.2.1.4 *The Prince of Wales's 'Ten Commandments'*

The Prince of Wales may not be regarded as one of the classical authors of architecture and planning, but his 'Ten Commandments' has a very important place in contemporary British architecture and design.

The Prince's list begins with an emphasis on *place*. A respect for place is elaborated by an emphasis on *harmony, local material, enclosure, and human scale*. Added to these concepts, is the principle of *hierarchy*. Almost equal weight is given to architectural treatment as urban design principles. Besides the use of local and natural materials, the employment of *decoration, art, and skill in signing and lighting* are all emphasised. The final principle of *community* promoted by the Prince reflects his strong support of public participation in planning and architecture: 'people should be involved willingly from the beginning in the improvement of their surroundings...but participation cannot be imposed: it has to start from the bottom up' (HRH, The Prince of Wales, 1989, p. 96).

3.2.1.5 *'Bottom up' Instead of 'Top down'*

The 'bottom up' design approach was further conceptualised by Donovan and Larkham (1996) as a pyramidal structure based on Maslow's hierarchy of human motivation (Figure 3.1). They argued that the underlying principles of planning and design guidance should work from 'bottom up' instead of 'top down'. A new principle of *equability* (democracy) was thus established. It is regarded as a 'high-level' view of the design process and its interaction with environments and users. In this view, equability is more important than the minutiae of design.

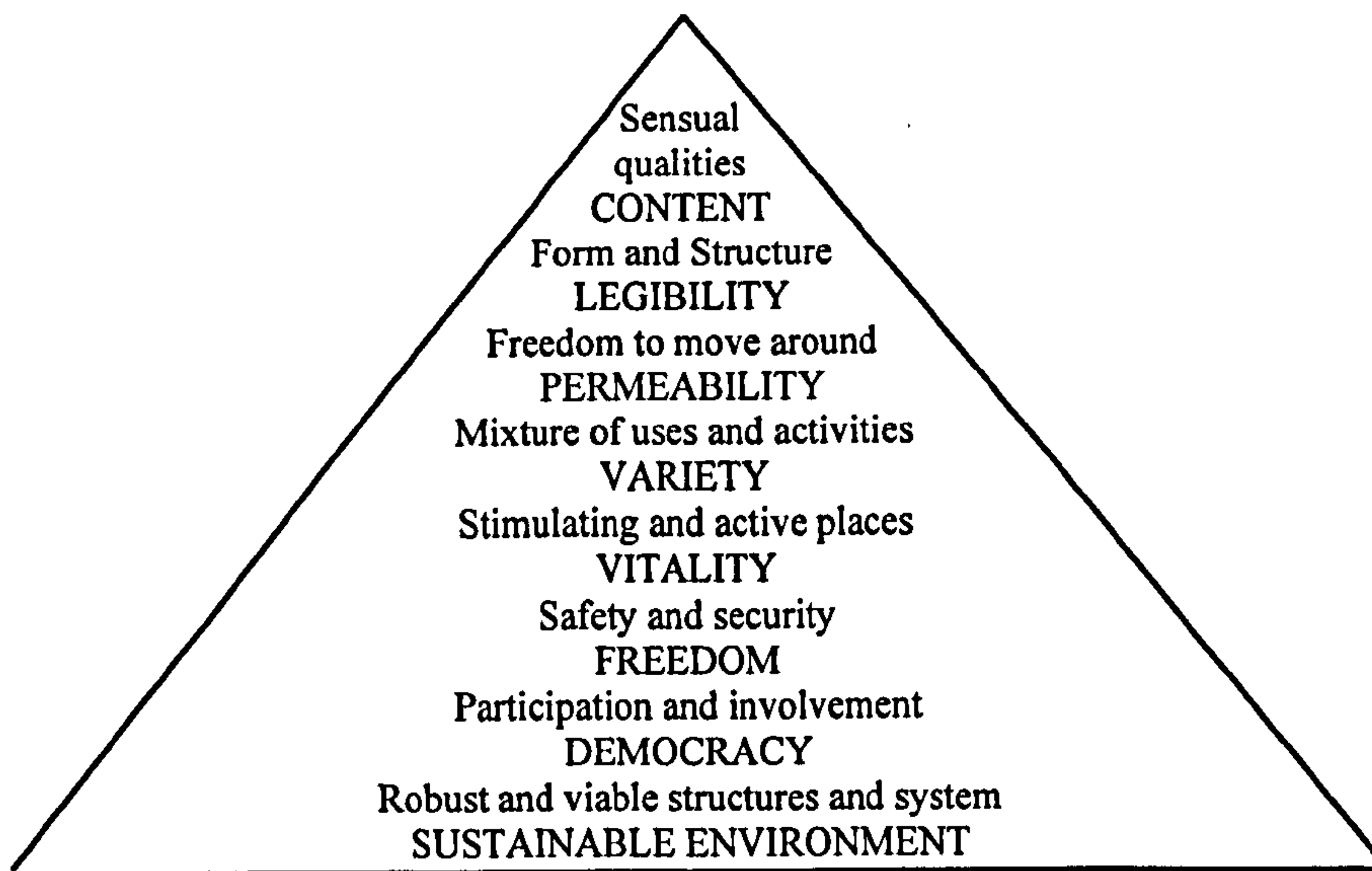


Figure 3. 1: A pyramid of design considerations, adapted from A. H. Maslow's hierarchy of human motivation. (Source: Donovan & Larkham, 1996).

A list of design considerations has also been developed, relating to key issues affecting how well people can benefit from their surroundings and some of the built form implications of maximising that benefit (Donovan & Larkham, 1996). The list includes

- *Mobility and Accessibility* - criteria to examine include consequences of interior layouts and detailing; accessibility by varying modes of transport; cluttering or otherwise of street furniture; visual, textural and other identification of facilities and so on.
- *Personal Security* - questions that relate to personal security include do public routes have long sight lines and no camouflage for potential attackers? Do buildings put their most active and public sides towards public space? Is the ground floor an active interface or devoted to dead uses? How interconnected are the development and its surroundings in terms of potential access or escape routes?
- *Pedestrian/vehicular bias* - questions relating to the relative bias of pedestrians to vehicles include: do materials, levels and detailed design suggest a series of connected shared spaces occupied by pedestrians rather than a continuous linear space for vehicle? Are pedestrian desire

lines established first and vehicular movement fitted around them, or vice versa? Are parking areas designed to serve other purpose when not occupied by cars?

- *Visual character* - such quality may well include considerations of form, scale, materials, style, detailing, and other visual features. The generally well known characteristics of place perception is observed by Lynch as paths, edges, nodes, landmarks and districts (Lynch, 1960).
- *Robustness* - development can be designed for flexibility and adaptation to the needs of society and individuals change over time. Good place should be able to accommodate many differing uses without compromising the ability of others to use the space for their own needs.

3.2.1.6 *The Design Principles and Development Factors*

Although given different names, it could be argued that these principles do share a certain degree of similarity. To compare the similarity and differences in their emphasis, Punter attempted to link them together. The list in Table 3.1 includes key pronouncements on urban design from which attempts have been made to distil a set of principles (Punter, 1990).

Kevin Lynch 1982	Bentley et. al 1985	Urban Design Group 1987	Tibbalds 1988	Buchanan 1988	HRP Prince of Wales 1988	Chapman & Larkham 1994
Vitality (include biological and ecological)	Responsive environment	Responsive forms	Places before buildings	Place making public realm outdoor rooms	The place	Vitality
see sense	Visual appropriateness		Respect history	Dialogue with context and history	Harmony and context	Context
see fit	Variety	Mixed uses	Encourage mixed uses			Variety
see vitality	Human scale		Scale enclosure		In scale with context	
Access	Permeability	Public access	Encourage pedestrian permeability	Public space and movement system		Permeability
Control	Personalisation	Consultation	Social mix and consultation		Community	Democracy
Sense (clarity with which it can be perceived)	Legibility		Legibility	Respect conventions Articulate meanings Connect inside and out	Hierarchy	Legibility
Fit (adaptability)	Robustness and adaptability					Freedom
			Small scale change			
	Richness	Stimulating	Visual delight	Natural, rich materials good weathering decoration	Material and decoration	
Two meta-criteria: efficiency (relative cost) justice (social equality)		Protection security comfort shelter			Sign and light	Sustainable environment

Table 3. 1: The various urban design principles (after J. Punter, 1990. Reorganised)

Based on these well-accepted principles, Punter and Carmona (1997) continued the search with his identification of ten key principles for urban/environmental design, and applied them in research on the design control development in England and Wales. He went on to link these principles to development form factors and developed a diagram as shown in Table 3.2.

Urban design principles	Architecture	Townscape	Urban form	Public realm	Landscape
Permeability		Morphology	Layout	Access, linkages, space	Green network
Legibility		Landmark, views, districts, identity			Landscape relationship
Variety		Character		Mixed use, active frontage	Ecological balance, Bio-diversity
Robustness	Adaptability		Enclosure, privacy, sunlight, daylight, building line	Servicing, safety, surveillance, active frontage, grain	Self-management, maintenance, sustainability
Appropriateness	Scale, bulk, expression, materials, vertical, horizontal emphasis	Context, massing, setting	Scale, height, density, over-development		Landscape design, species choice
Richness	Proportion, fenestration, detailing, etc. colour, stylistic, pluralism, visual interest, materials	Character			Bio-diversity, trees
Personalization	Largely permitted development except on list buildings				
Energy efficient	Local materials		Building orientation, shadowing, density, facility location	Pedestrian and cycle networks	Shelter
Pollution mini			Density, noise	Pedestrian and cycle networks	Carbon fixing and particulate removal
Ecosystem maintenance					Protection of hydrology, retention of key habitats

Table 3.2: Common control considerations and design principles (Source, Punter & Carmona, 1997).

The ten urban design principles are listed in the vertical axis against five dimensions of urban environment on the horizontal axis. These dimensions are derived from content analysis of English plan policies, and include architecture (individual building), townscape (the visual relationships between groups of buildings that make up the urban scene), urban form (largely three-dimensional characteristics of built form), public realm (the street and spaces and their character), and landscape (which focuses upon the natural environment).

The significance of this diagram is that it brings principles and development form factors together. As can be seen, urban design principles are rather abstract by themselves. Although they are helpful to clarify the desired urban qualities which should be sought to create a successful place, they have to be achieved by being translated into development factors. It is the task of effective design policy to focus on specific development forms, and to use them to achieve the objectives in a particular context. In this view, the diagram suggests a wide range of urban design matters that might be translated into policy, working from design principles (horizontally), or working vertically or working on the isolated component box by box. It attempts to provide guidelines for a comprehensive set of policies that will integrate these different 'schools of thought' into a coherent whole, and ensure that visual, social, perceptual, and ecological dimensions are integral parts of the evaluation of each design (Punter & Carmona, 1997).

3.2.2 Developing the Framework for Design Concerns in Policies

Based on these various attempts at searching for urban design principles and their relationship to development form, a list of concerns which can be used in design policies to guide development could be developed.

1. Local Character

'The positive features of a place and its people contribute to its special character and sense of identity. They include landscape, building tradition and

materials, pattern of local life, and other factors that make one place different from another' (DETR, 2000). It is an important urban quality that contributes to 'sense of place' and 'identity of place'. Designs should respect local traditions and relationships, and draw on them to inspire and guide new forms of development.

This quality can be achieved by taking into consideration many factors such as the local natural landscape and features, the continuity of urban fabric, townscape merit, the local building forms and details, and concerns of views, vistas, skylines, and landmarks to create a positive local identity.

2. Quality of Public Realm

'The public realm are parts of a village, town or city that are available, without charge, for everyone to use or see, including streets, squares and parks' (DETR, 2000). Public spaces can be built to create a variety of types of space (street, square, park, plaza, green), character of space (informal, civic, recreational, commercial), and scale of space. The quality of public realm is at the core of urban design. It must be given priority in design to create a hierarchy of public spaces, to encourage a sense of safety and community.

High quality public realm can be achieved by creating public space functioning for all users at all time, considering the natural surveillance and safety, promoting the activities in public space, and making use of public arts, street furniture, lighting, landscaping to make the place more attractive to users.

3. Accessibility

Accessibility can be defined as a measure of the convenience, safety and comfort with which people go to and pass through buildings, places and spaces. Whatever other qualities a development may possess, they will be of little use if people can not access them. A user-friendly urban environment should give priority to walking, cycling, as well as car use, and maximise the use of public

transport.

Accessibility can be achieved by establishing an urban network of connected spaces and routes, and integrate new routes into existing movement pattern, by considering the street as public spaces as well as traffic routes in the designation of transport routes, by minimising the walking distance between major attraction points, by arranging public transport close to users to promote its efficiency.

4. Legibility

Legibility refers to the degree to which a place can be easily understood and travelled. Places where form, layout and signage make them easy to understand are likely both to function well and to be pleasant to live in or visit.

By paying attention to the designation of development layout, the location of landmark buildings, by enhancing views and vistas, by improving the quality of signage, public art, and possibly the using of lighting scheme, the legibility of a place can be improved. Also the identity and character of the spaces can be reinforced.

5. Diversity

A place that has diversity can be defined as ‘a place with variety and choice’. ‘The mix of uses can help to determine how well-used a place is, and what economic and social activities it will support.’ (DETR, 2000*). The quality contributes to the robustness and vitality of urban spaces.

Diversity of activity and uses should be encouraged at different levels by promoting appropriate mixed uses in public spaces, and careful designation of development layout, building forms and tenureships.

6. Adaptability

Adaptability refers to the capacity of a building or space to be changed so as to

respond to changing social, technological and economic conditions (DETR, 2000). It is important that buildings and the spaces they create should be designed to be durable through changing social and economic needs, providing adaptable and flexible environments.

These concerns are not exhaustive, but as they can provide a set of ground rules for thinking about urban design qualities, they can work as a basic framework to remind us what could be addressed by policy to achieve good urban design. Also, they can provide the basis for criteria for assessing policies/plans and proposals. It works as a framework to guide the analysis of design content in local plans and design guidance in this study. By comparing the actual focus of local design control with the framework, it will be possible to identify the insufficiencies of the policies in use, and the defects that can result.

3.3 The Procedural Aspects of Urban Design

An understanding of design processes is as important as an understanding of the desired end products of design. Design theory has increasingly conceptualised design as both a process and a product (Rowley, 1994). In fact, many definitions of urban design are largely preoccupied with design as a process. There are a number of comprehensive models of the urban design process identified and given various names by different authors (e.g. RIBA, 1965; Markus, 1969; Darke, 1975; Culter and Culter, 1982; Shirvani, 1985).

As argued by many authors, design control policy making should seek to replicate the design process that they are seeking to control (Shirvani, 1985; Hall, 1996; Punter, 1996). They noted that since planners have to intervene in this process to influence the quality of built forms, they have to understand its decisive relationships and moments and to develop appropriate procedures for influencing and assessing development proposals.

3.3.1 *The Urban Design Process*

‘Planning and design method was for sometime based upon Geddes’s dictum: *survey - analysis - plan*’ (Moughtin, 1992, p. 18). Others have since amplified this method inserting additional intermediate steps.

Markus (1969) and Mayer (1970) argued that designers went through a decision sequence - *analysis, synthesis, appraisal* and *decision* at increasingly more detailed levels in the design process. The goals and objectives are classified and patterns in information are sought during the analytical stage. Ideas are generated at the synthesis stage. The following appraisal stage comprises a critical evaluation of alternative solutions against objectives, costs, and other constraints. And finally, decisions are made. The process is not a simple linear progression where each phase is completed before proceeding to the next step. Instead, it is cyclical having intermediate loops. For example, after evaluation of alternative plans, it might be necessary to refine goals, to collect additional data, or to analyse the data in a different way.

Jones describes the design process as a set of actions, or methods, to be carried out in series or in parallel, for getting from an initial brief or intention to a finished design (Jones, 1980). As he argues, most conceptions of design identify three essential stages: analysis, synthesis, and evaluation. These can be described in simple words such as ‘breaking the problem into pieces, ‘putting the pieces together in a new way’, and ‘testing to discover the consequences of putting the new arrangement into practice’ (Jones, 1980, p.63).

Jones also makes a helpful distinction between the process of design and the procedures of design. He describes the procedures as the paperwork. From the planning perspective, the development control system sets up a variety of formal and informal procedures that are part of the design process. These include the formal procedures of application, submission and presentation, as well as public consultation, consultation with specialists, and negotiation with

development controllers. These procedures are important components of a successful design process.

The phases of the urban design process, like any other design process, have been identified and given different names by different authors. Borrowing from Simon (1960, 1969), Lang noted that the phases of the urban design designing process could be called the *intelligence phase*, the *design phase*, the *choice phase*, the *implementation phase*, and the *operational (post-occupancy evaluation phase)* (Lang, 1994, p. 383). Each phase is in itself a design process involving the same basic intellectual activities: analysis, ideation, synthesis, prediction, evaluation, and decision.

Similarly, Moughtin suggested that there are four stages in urban design process, they are: *analysis*, *synthesis*, *appraisal*, and *decision-making* (Moughtin, 1992, p.19). He also argued that these stages were neither independent nor necessarily sequential. They were parts of an integrated, cyclical and interactive process, which reflected the nature of urban design as an on going process.

After all, it could be said that although different, all these ideas on design process share some common characters. Most of them recognise the importance of goal setting, analysis, the generation of alternatives, and the selection of workable alternatives as the main ingredients for successful design process.

3.3.2 The Procedures of Design Control

More closely linked to the development of design policies and guidance, Rowland (1995) identified six interdependent parts to the urban design process, they are:

1. establishing goals,
2. urban design audit,

3. urban design framework,
4. design briefing,
5. urban design guidelines, and
6. creating a vision.

The first thing he suggested is to establish the goals and ambitions of the town or city which sets the parameters for the character it wants to achieve. In some instances, some cities or areas may ask themselves what sort of place they want to be in 10-15 years time. 'This is not just a mission statement but includes an understanding of the future spatial implications for the area - the impact of infrastructure investment, the need for quality spaces, and the idea of areas of significance where care and attention is needed' (Rowland, 1995). The goals will inform the planning and other policies of the local authority.

To generate the appropriate vision for the city, the local context has to be fully understood. This leads to the 'urban design audit'. This phrase has a similar meaning to 'appraisal' as used in previous discussions. It suggests an analysis of the local strengths and weaknesses as well as a range of indicators such as spaces, animation, routes, movements, constraints and so on, not just in physical terms but in terms of social, cultural, and economic activities.

Such appraisal can inform an urban design framework which takes on the issues and indicates the means of addressing them and enhancing or maintaining character over time. It also provides the structure, which enables new developments to be inserted comfortably.

The next two processes Rowland identified could be seen as the development of different design guidance at different levels - design briefing and developing urban design guidelines. They have to conform to the general framework but also go on to offer more workable details.

Finally, a vision that illustrates the forms of development could be generated.

Rowland emphasised that this ‘vision’ is not ‘architecture writ large’. It is an indicative three-dimensional framework that the local authority can use to give a clear indication of the quality of development it wishes to entertain. It is also ‘a product of the players. A common vision is not a state plan but is about professionals, public and private sectors, and communities working together’ (Rowland, 1995).

Punter goes on to develop his synoptic framework for design control. He divided the general procedures of design control into strategy/policy writing and monitoring, and design control (see Figure 3. 2).

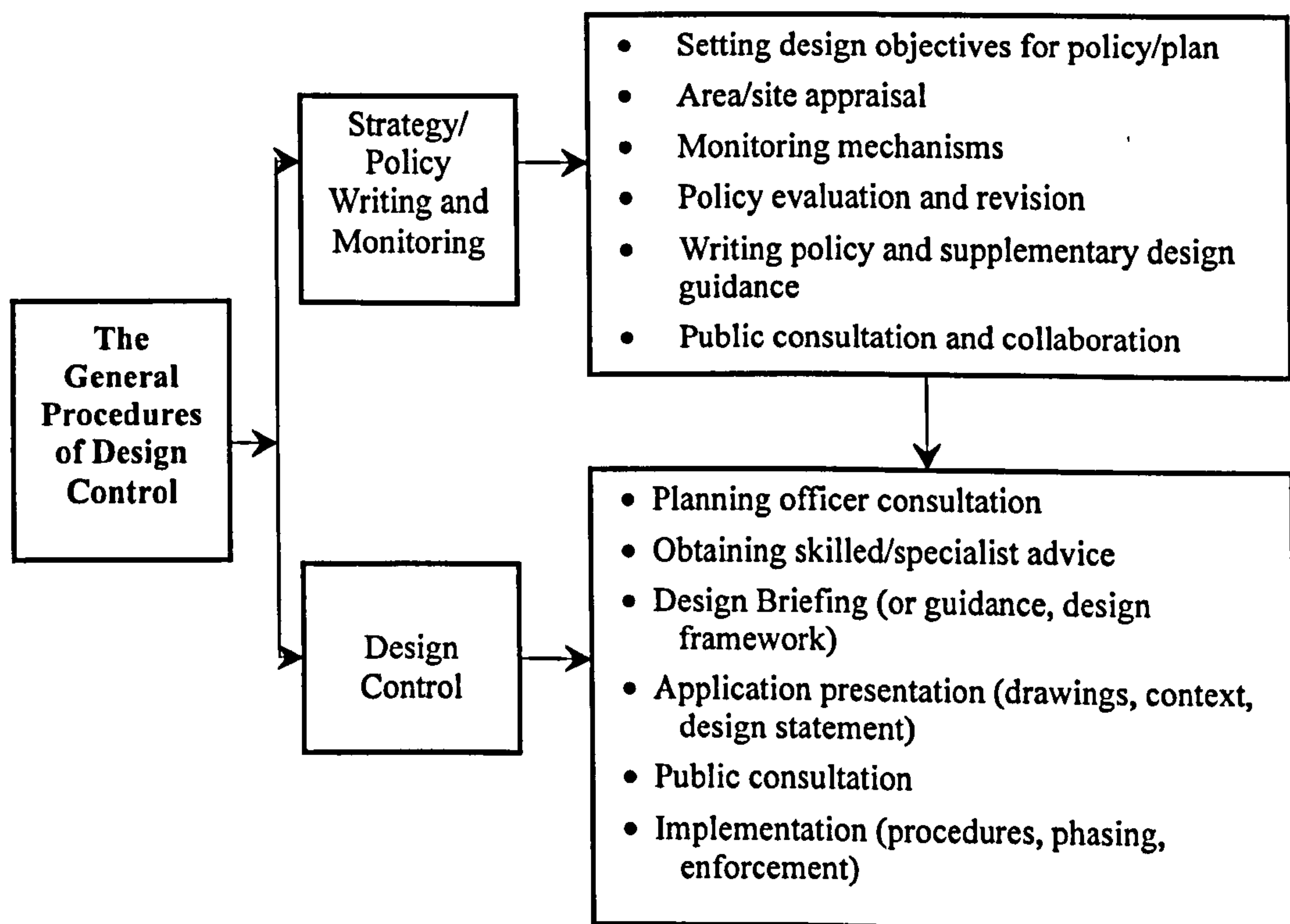


Figure 3. 2: The Procedures of design control (source, Punter & Carmona, 1997).

This is a helpful framework for considering design policy and control. This is because firstly, it stresses four distinct activities: the analysis or appraisal of places, the development of design principles, their translation into design frameworks or guidance, and then their execution in an actual design. Secondly, it draws together the design activities and the practical procedures,

which any policy or planning making would follow. Apart from the design activities, it emphasizes the effect of the monitoring mechanisms, the significance of professional consultation, and the importance of public collaboration in design control process.

A local public authority, normally the appropriate tier of local government, usually exercises control of development. There may, in some circumstance, be several branches of national public authorities. These public authorities exercise not only development control functions but also have direct responsibility for roads and public open spaces, all essential components of the design of settlements. It is important to acknowledge that design control takes only a limited perspective on the total creative process of design, and that many design issues will be outside the key concerns of the development controller but will still be of central importance to designers and their clients. Designers need to understand these wider concerns, and to appreciate both the limitation of negative control and the benefits of positive advice. There may also be various pressures brought to bear on planning authorities with regard to the importance that should be attached to design as criteria for development control. Thus, a local authority's attitude towards design control can be an important influence.

Design policies provide tools for the planning control officers to assess planning and design proposals. Planning officers are also directly involved in the policy making and implementation process. Thus, the extent to what design guidance is understood by planning officers can be an important factor affecting its effectiveness. As mentioned in Chapter 2, many development projects are not conducted by people with appropriate design knowledge in China. This shortage of appropriate design skills within contemporary planning practice has been well documented (Tian, 1996). One way around this problem is by means of consultation with design professionals and seeking specialist advice. Moreover, many new issues are being taken into account in design, such as environmental factors, social aspects, and aesthetic considerations, they

can not be reduced to technical standards but require professional judgement. Therefore, professional consultation has become particularly important.

Design policy is the means to provide information and guidance to the developers and their design advisors, to specify the local planning authorities' expectation on design quality. Through published plans and guidance, potential applicants should be in position to understand what development is likely to be accepted by the local authorities. It is also important that policy provides a framework within which skilled designers can operate with the necessary degree of freedom to exercise their creativity.

3.3.3 Area Appraisal

It could be summarised from the discussions above that goal setting, appraisal and the generation of appropriate design frameworks are the main ingredients for successful design process. At the heart of these ingredients lies the value and importance of *appraisal* which is worth specifying. Appraisal sets the initial parameters from which guidance and policy are drawn, and feeds back into and reflects the experience of implementation. It is seen as the basis to underpin the development of any policies and guidance (DoE, 1996; Punter & Carmona, 1997; Carmona, 1998; DETR, 2000).

It is important for policy to respond to the different character of context by clearly defining the key contextual factors. This requires the development of policies based on a proper assessment of the character of the surrounding built and natural environment. As suggested by Carmona (1998), the aim of such assessment must be to isolate those area characteristics which are particularly worthy of protection and to develop design principles and considerations which will ensure that development respects these qualities. Meanwhile, it is equally important to identify the potential for improvement in areas of average or poor quality, and to consider the opportunities for new development or environmental enhancement to upgrade such areas.

The components of an appraisal are identified in DETR's good practice guide, which include three elements. Firstly, a qualitative assessment of how the area performs in terms of urban design objectives. Secondly, an assessment of the area characteristics in terms of their constraints, opportunities and capacity for development. Finally, addressing those factors which overlay the local context, such as government advice (DETR, 2000).

To avoid being merely descriptive, it is important for such appraisal to be organised systematically. It might adopt a similar urban design structure to that discussed earlier to order relevant considerations. The emphasis on these considerations may differ depending on the different situations. It is likely that each situation will require the adoption of a unique approach in order to:

- seek out any coherent patterns
- understand a place's equilibrium
- discover its unique character
- develop concepts based upon understanding of the place's distinctive characteristics (Lynch and Hack, 1984).

It must be noted that 'such appraisal should be based on a thorough and ongoing public consultation, if the resultant policy and guidance are to be benefit from broad public support' (Carmona, 1998, p. 50). This leads to the issue of public participation and involvement in design process.

3.3.4 Public Participation in the Design Process

The promotion of public participation in design goes under various names such as the *community design process*' (Halprin, 1969), *advocacy design* (Stern, 1989), and *co-design* (King et al., 1989). Its earlier origin could be traced to the pioneer town planner Geddes who believed that shaping cities was a process that should involve every citizen in a learning experience which would help to give meaning to their lives (Geddes, 1905).

People who promote public participation hold the view that the public is the ultimate user of the final product of design - the built environment. If a democratically accountable system of control is to be achieved, then public opinion must be taken into account. As the goal of employing design policy and design control is to shape development in a particular direction that goes against prevailing market forces in order to achieve some public good (Barnett, 1974, 1982), it is important for design control to serve as a participatory process and to fully develop its consultative role. Many planners suggested that policy might reflect the public interest better if the public were thoroughly involved in the design process (Skeffington, 1969).

However, as Hubbard observed, 'demands for improved public participation are easily dismissed in the interests of speed and efficiency'. 'There appears to be a strong case for increased participation in design control, as currently, the public have little, if any, say about the suitability or quality of schemes foisted upon them ... Public opinion can often surprise and bring to the surface important issues that might have gone unnoticed.' (Hubbard, 1994, p313).

Moughtin (1992) also argued that it was evident that the architect and the planner have lost touch with his 'real client' in modern planning. And urban design, too, requires a return to its roots in method, that is, to recognise a wider client group which includes the general user of the city. He noted that it was possible that the expanded client group did not share the values of the designer groups, and argued that this gap could be bridged when the problem was recognised as existing and its nature defined.

As Lang identified, there are two opposite ways of running the urban design process in terms of its openness. One is the 'full public participation throughout the process', the other is that 'the design professionals do the analysis, synthesis and evaluation 'uncontaminated' by the politics of public participation before presenting the scheme for approval by public agencies. Between the two are a number of intermediate positions in which some parts of

the process are open to participation and others are not' (Lang, 1994, p. 385).

A more sophisticated model for citizen participation was developed far earlier by American sociologist Arnstein (1969). She presented a diagrammatic 'ladder of participation' (see Figure 3.3), which consisted of eight rungs representing the eight levels of public participation. They are, in an order from the bottom to top, *manipulation, therapy, informing, consultation, placation, partnership, delegated power, and citizen control*. She classified the bottom two of these as 'non-participation', the next three as 'degrees of tokenism', and the top three as 'degrees of citizen power' (Arnstein, 1969). Her ladder although now 30 year old, is still a good tool for analysis of participation.

Levels of participation	
Citizen Control	Degree of Citizen Power
Delegated Power	
Placation	
Consultation	Degree of Tokenism
Informing	
Therapy	Non-participation
Manipulation	

Figure 3. 3: Arnstein's ladder for the levels of citizen participation (Source, Arnstein, 1969).

From Arnstein's view, the more intense forms of participation require more techniques which actively involve the individual in plan making, design, constructional work, and responsibility for estate management. The mid-range levels of participation suggests the use of bureaucratic techniques usually advocated and organised by the professionals in administration. At the lower end of the scale, which Arnstein defined as non-participation, are the more objective methods of information gathering which can inform the planning and design process, but the result is still, in all its essential features, paternalistic.

It has been made clear that planning decisions by their nature are political and

cannot be considered simply as technical (Eversley, 1973). Urban design is akin to planning and deals with large parts of towns and cities. It too is concerned with the distribution of resources and wealth, which are political concerns. Moughtin compared Arnstein's ladder of participation with a scale with a simplistic form of political structures, ranging from anarchy through various forms of democracies to types of dictatorship which exist in the world (see Figure 3.4). It could be argued that participation in China tends to be tokenistic, in Arnstein's terms, associated with the representative democracy, as identified by Moughtin.

Political System	Levels of participation
Anarchy	Degree of Citizen Power
Participatory Democracy Representative Democracy	Degree of Tokenism
Totalitarian Government	Non-participation

Figure 3.4: Comparing political systems and the levels of citizen participation. (Source, Moughtin, 1992).

China operates a 'People's Representatives Congress' system. These representatives are elected from different levels of local administrations. Traditionally, the state work unit as the smallest administrative component was the starting level for electing representatives. Then, the chosen members would vote for the members of the congress at a higher level - the Urban District People's Congress. The process goes on till the National People's Representatives are elected.

Representative democracy does not require high levels of participation and interest in political affairs except from a small minority. Pateman pointed out that 'the apathy and disinterest of the majority play a valuable role in

maintaining the stability of the system' (Pateman, 1970). Planners and designers should be aware of the shortcomings of this rather cynical view of the political process whereby plans are legitimised and development is implemented.

'Dealing with problems such as where and how people live, work and educate their children, should lead us to question the necessity and desirability of decisions in these fields being handed over to representatives of the people. To remove people's right to make these decisions removes also their self respect and reduces their dignity as human beings' (Moughtin, 1992, p. 14). Moreover, with the recent breaking up of state work units and the emerging of new private and independent companies, some authors argue that this 'people's congress' system might have even less meaning as a way of genuinely representing majority opinion than in the past (He and Zhao, 1999).

In such a political context, it would be advisable for Chinese urban designers who wish to promote public participation to remain within the safety of a technical design process, and not to dabble with participation that confronts the designers directly with issues of the distribution of power and wealth, and hence, takes the subject right to the centre of politics.

Perhaps the best we can do at present is to make professional and technical expertise available to people who do not yet enjoy its benefit through a collaborative design process. Effective collaboration and public participation can help the urban design process by raising difficult issues at an early stage, and bring the public value's and appreciation of their living environment to the surface. This can also ensure that the final design decision made receives public support.

One major factor on which the success of this collaboration process depends is the use of suitable approaches and techniques. 'These techniques range from anthropological studies establishing essential cultural data, user studies, and planning surveys, through informative techniques, the exhibition and press

notices, to administrative procedures such as public enquiries and planning appeals. People's views can also be elicited at public meetings or through the electoral process by including planning matters in political manifestos. Finally, there is the group of more active forms of participation and community administration and control' (Moughtin, 1992, p. 14).

3.4 Urban Design and the Development Control Process

The relationship between the urban design process, the development process and the design control process was revealed by Punter (1990, p13) using a diagram which illustrates the interrelationship and the significant areas of overlap between them (Figure, 3.5). Design guidance and its enforcement, through what is known as development control, is a major aspect of design control. But it is not an end in itself. They can only be put into effect and made a reality through the development control process. How design guidance is used in the development control process determines whether they are respected and applied. 'Even the most thoroughly developed design policies will achieve little next to nothing if they are ignored in the development control process' (DETR, 2000).

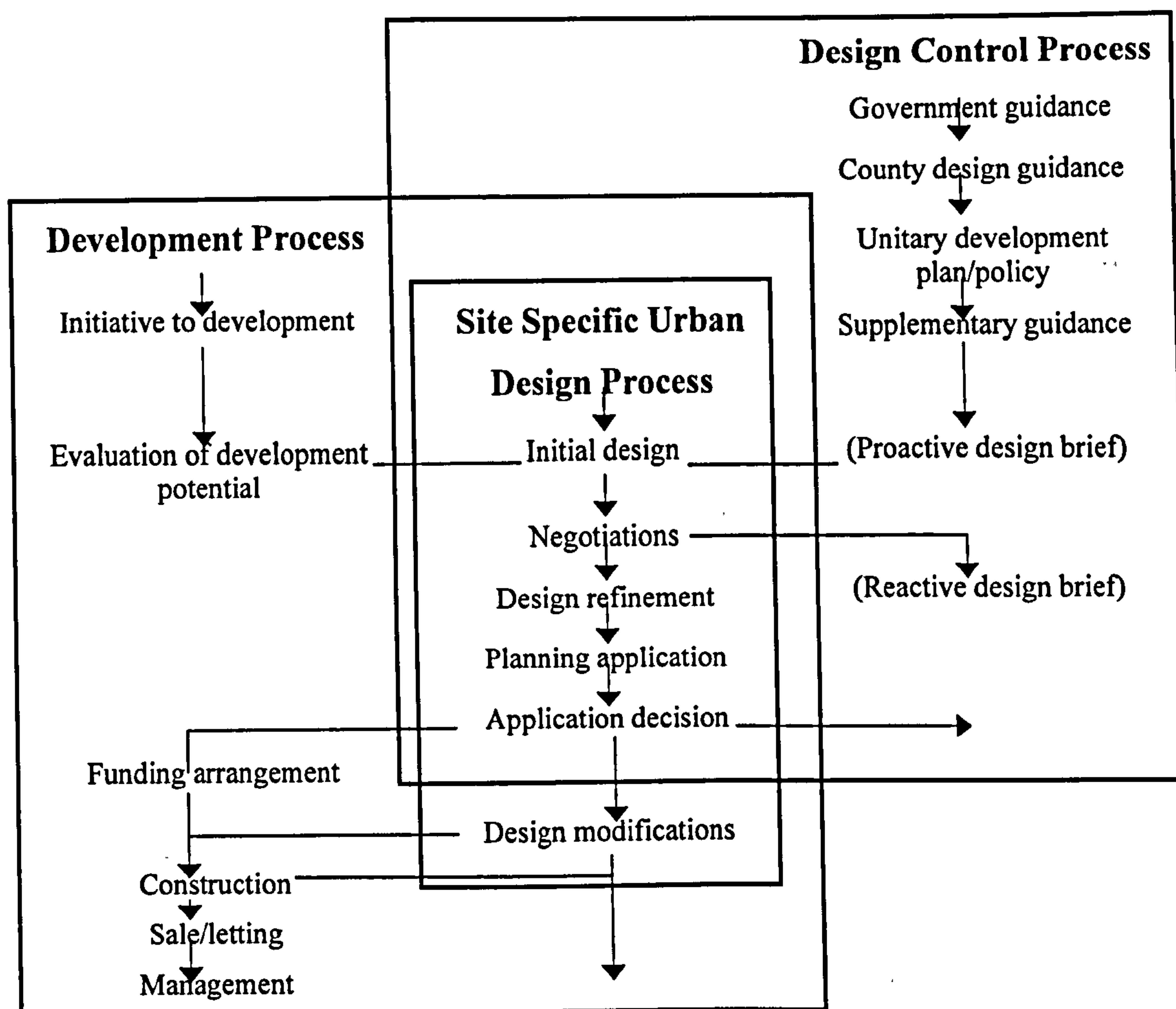


Figure 3.5: Diagram of the relationship between development, urban design and design control processes (Source: Punter, 1990).

3.4.1 One System or Two?

Concern among the public about the quality of their physical environment has figured in the development of urban planning. From this perspective, it could be said that the present day's planning system, in Britain, China, or elsewhere, deals with urban design issues in some respect.

While many planners and designers, including the author of this thesis, agree that urban design must always be considered in the context of planning and development control as a whole, there are alternative views.

There has been a debate about whether design control should function as part of the everyday practice of planning system. Or should it be exercised by a

separate system since the concept of urban design was introduced in China?

People who support the 'independence' of urban design from the conventional planning system argue that since urban design has been developed into a distinct intellectual field of enquiry, it has to be supported by a distinct system. The complexities in defining the boundaries of urban design are further enhanced this argument. That is, since urban design does not fit in neatly to either planning or architectural design, it has to be developed as another type of profession (Tian, 1996). However, the question of how to integrate this new 'urban design system' into the current planning and development control system, and how to accommodate the overlapping functions between them have never been made clear.

This view is criticised by many. They argue that urban design has always been a part of the planning function in Chinese practice. Its implementation must be supported by broad land use policies, public transport plans, infrastructure plans, as well as the capital investment plan. Thus, a new term 'urban planning and design' has been generated to emphasise the consistence between planning and design (e.g. Chen, 1992; Wang, 1998). These authors agree that integrating urban design into the existing planning system is the right direction for better practice, and this position appears to be the most convincing one to follow.

Therefore, this research will exclude the argument of developing an 'urban design system', and concentrate on the question of what impacts the existing planning system have on urban design in terms of its operation, design focus, intervention scope, mechanisms and procedures.

3.4.2 Levels of Intervention

For a long time there seemed to have been an agreement that urban design is concerned with the physical form and structure of an area of limited size. Urban design is concerned with 'urban situations about a half a mile square' (Banham, 1976, p. 130). This idea is supported with the argument that since

cities never have a finite physical form and structure, as they develop and change continuously, it is futile to develop an urban design framework for the city at large. Some architects tend to consider that urban design is 'large architecture'. This view has been expressed in focusing on the design of site-specific projects. The overlap between urban and architectural design hence occurs. However, the people holding an opposite view argue that taking urban design as large architecture fails to recognise that urban design is a different discipline that requires additional skills and knowledge of the urban context (Lloyd-Jones, 1998).

The view of urban design operates on a level beyond that of individual spaces or areas of restricted size is now gradually being accepted. Many urban designers see a role for urban design at the intermediate scale between site and city. They recognise that it is the essential task to ensure that the general urban fabric can adapt continuously without losing the formal and structural characteristics of cities. Restricting urban design to smaller areas is rendering urban design ineffective for such a task. They also recognise its role in coordinating individual developments and setting design frameworks for large-scale developments (Pittas, 1982). Some go further to argue that urban design should deal with the physical form and structure of the city region, of the city at large, as well as city districts, and individual sites (e.g. Lynch, 1976; Alexander, 1977; Buchanan, 1989; Carmona, 1998; Frey, 1999).

As Lynch stated, urban designers work on three different kinds of task. First, project design, which is concerned with the form of a definite geographic area in which there is a definite client, a concrete program, a foreseeable time of completion, and effective control over the significant aspects of the form. Second, system design, which considers the form of a functionally connected set of subjects. Third is city or regional design, in which there are multiple clients, interment programs, partial control, and constant change. 'It must be noted that design is not solely concerned with any single influence of form' (Lynch, 1974).

This strategic thinking requires hierarchical design intervention, which can be expressed into region/city wide, quarters or districts urban design strategies, specific initiatives, and guidance for individual sites/areas.

Thus, it could be said that the most essential task of urban design is to contribute on a strategic level to the improvement not only of land-use patterns but also of the city/city region's form and structure. Design framework at this level will help develop a balanced and functional relationship of the city with its hinterland, will generate a spatial and formal structure for the city's district, and will set the conditions for design on the next lower level.

Design at a city district level deals with the spatial, formal and structural interrelationship between the public and the private realm and with the generation of design guidelines for both the important public elements of districts and the urban fabric that generates their neutral background.

The next level of urban design intervention is to deal with individual site. As the overall urban environment is composed of multiple individual sites, the importance of urban design at this level can not be underestimated. In fact, this is generally the most common level of urban design practice. However, merely concentrating on individual site will preclude urban design from having a holistic view of the city.

The central argument is clear, that is, urban design is neither project-focused 'big-architecture', nor operates solely at the interface between planning and architecture (small planning), but is at all scales of urban planning.

3.5 Conclusion

1. Through reviewing various attempts at developing urban design principles, we see that the subject of urban design has been moving from urban form and aesthetic considerations towards a consideration of functionality for the user of the urban environment. This new socially and environmentally

conscious mood is reflected in many authors' works such as *Responsive Environments*. Several themes have been highlighted and a set of urban design objectives have been established in this chapter. They include: 1) local character, 2) quality of public realm, 3) accessibility, 4) legibility, 5) diversity, and 6) adaptability. Development form factors, which are relevant to the achievement of desired urban qualities are linked to each objective. This framework sets up the theoretical basis for the development of design policies/plans. To develop comprehensive urban design strategies, these desired urban qualities have to be addressed through the designation of related development factors. This framework is also used for the critical analysis of design policies/plans and their content.

2. It is argued that urban design is an ongoing process instead of a mere product. The main ingredients of a successful process embrace setting the goals, careful assessment of the local context, the development of the appropriate guidance or framework, and finally creating the three-dimensional vision for the development. This process is not a linear but a cyclical progression. For instance, it might be necessary to refine the goals, or shift the emphasis on to different issues along with the intensifying the process.
3. The research values the importance of area/site appraisal. It sets initial parameters from which guidance and policy are drawn, feeds back into the process, and reflects the experience of implementation. An appraisal should aim to assess how the area performs in terms of urban design objectives and assess the area characteristics in terms of its constraints, opportunities and capacity for development. It should be analytical instead of descriptive. It should take the broad cultural context and local people's perceptions into concern. It should not be confined in physical issues alone.
4. A successful design process depends on a collaboration between people who initiate and implement development, who guide and control design,

the designers who conduct the design, as well as the people who use the built environment. The participation and involvement of local people in the design process can bring new opinions to light and can help the design decision made receive public support. This collaboration also requires the use of appropriate approaches and techniques through which professional skills and people's opinions can be drawn together.

5. To counter the debate of 'urban design independence', which is taking place in China, the researcher argues that urban design should always be considered in the broad context of urban planning. It is neither 'architecture writ large', nor does it only deal with an 'urban situation of about half a mile square'. It should address its concerns to all scales of urban development. Design control is one among other dimensions of urban planning, and should be integrated within the planning system. There is a need to develop a strategic urban design thinking and a full hierarchical design intervention, which can be expressed into city-wide strategies, district urban design policies, area or site specific urban design, or guidance developed for specific technical issues.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

The aim of this chapter is to set out the research methodology employed. It shows how the chosen research strategies are consistent with the issues covered by the study. It starts with a brief discussion of quantitative and qualitative research, and shows how this study falls largely into the qualitative tradition. A case study approach is adopted for the investigation of design control at a local level. This is followed by identifying the specific research methods selected to investigate the key research questions. The content analysis, semi-structured interviews, and other research methods are linked with research questions. Benefits and drawbacks of the methodology are also discussed.

4.2 Quantitative Research vs. Qualitative Research

Before discussing which specific techniques have been adopted in conducting this research, it is worth examining the traditional distinction between quantitative and qualitative methods.

4.2.1 Quantitative Research

Quantitative research, in general uses large sample sizes that are controlled in such a way as to be representative of the population from which they are drawn. This allows greater confidence in accepting the reliability or generalisation of the findings. Its obvious strength lies in its comparability due to its standardised numerical format, thereby reducing the potential bias to subjective interpretation (Hart, 1987).

The increased numerical accuracy offered by employing quantitative sets of data has to be related to its loss of perspective. In this respect, quantitative data

can capture details more accurately than qualitative methods, but it usually lacks the contextual and situational sensitivity and scope of qualitative data.

A general sentiment echoed throughout the literature is that quantitative methods are more inclined to describe the verbally expressed sentiments and beliefs rather than describe the actual conduct. This increases the likelihood of rationalising behaviour after the event (Hart, 1987).

As summarised by Easterby-Smith *et. al.* the main strengths of quantitative research methods are that they provide wide coverage of the range of situations. They can be fast and commercial. Particularly, when statistics are aggregated from large samples, they may be of considerable relevance to policy decisions. On the debit side, quantitative methods are not very effective in understanding processes or the significance that people attach to actions (Easterby-Smith *et. al.*, 1991).

4.2.2 Qualitative Research

Qualitative research method is defined by Van Maanen (1983, p. 9) as ‘an array of interpretative techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world’. From a different perspective, Strauss and Corbin describe qualitative research as research ‘which produces findings not arrived at by means of statistical procedures or other means of quantification’ (Strauss and Corbin, 1990, p. 21). Thus they refer to qualitative research as non-mathematical analytic procedures that result in findings derived from data gathered by a variety of means, and these means of data gathering and analysis are therefore called ‘qualitative research methods’.

Manson has identified common elements to develop a sense of what is qualitative about qualitative research. He argued that qualitative research is:

1. grounded in a theoretical position which is broadly 'interpretivist', i.e. how the social world is interpreted, understood, experienced or produced;
2. based on methods of data generation which are flexible and sensitive to the social context in which data are produced, i.e. it is collected in the 'real life' or 'natural' social context and does not rely on standardised or structured experimental methods;
3. based on methods of analysis and explanation building which involve understanding complexity, detail and context, based on rich, contextual and detailed data (Manson, 1996, pp. 3-6).

Associated with the depth and richness of the data it provides, qualitative research is therefore best used for problems where the results will increase understanding, expand knowledge, clarify the real issues, generate hypotheses, identify a range of behaviour, explore and explain individual's motivations, attitudes and feelings. (Gordon and Langmaid, 1988).

The strengths of qualitative methods are their ability to look at change processes over time, to understand people's meaning, to adjust to new issues and ideas as they emerge, and to contribute to the evolution of new theories (Easterby-Smith *et. al.*, 1991). A weakness is that data collection and analysis can be time consuming and difficult.

As stated at the start of the thesis, the focus of this study is a detailed investigation into the planning and development system to better understand the design policy and control mechanisms that are key to the achievement of urban quality. Qualitative methods are more suitable for a study like this.

4.3 Research Method Justification

4.3.1 *The Case Study Approach*

A case study approach is taken by this research. Two cases are used. One is Guangzhou in China, and the other is Glasgow in Britain.

4.3.1.1 *The Strength and Weaknesses of Case Study*

The case study has long been stereotyped as a weak sibling among social science methods. Investigators who do case studies are regarded by some as having deviated from their academic disciplines, with their investigation having insufficient precision, objectivity and rigor (Yin, 1994). Another common concern about case studies is that they provide very little basis for scientific generalisation. “How can you generalise from a single case?” is a frequently heard question. The short answer is that case studies, like experiments, are generalizable to theoretical propositions not to populations or universes. In this sense, the case study does not represent a ‘sample’, and the investigator’s goal is to expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation) (Yin, 1994).

Despite the limitations, case study continues to be used extensively in social science because it allows an investigation to retain the holistic and meaningful characteristics of real-life events – such as individual life cycles, organisational and managerial processes, neighbourhood change and so on. As Hussey and Hussey (1997) noted, a case study allows in-depth and holistic understanding of multiple aspects of a phenomenon and the interrelationships between different aspects. This advantage is particularly valuable for this research.

4.3.1.2 *Selecting the Cases*

A key stage in case study research is selecting the cases. Before making the choice, the researcher briefly searched the recent literature on the development

of urban design in China. What occurred from the review was that the studies in this area are still largely confined to the academic field. There were few studies initiated by government or local authorities. Meanwhile, the concern and effort put into design issues among local authorities in China varies significantly from one to another. Most cities had little trace of a further development of urban design in their development control apart from what has already been addressed by the traditional planning system. Therefore, their design control experience will be little more than the general performance of the planning system on design, which has already been illustrated in Chapter 2.

Despite the narrow picture of slow changing local design control practice, several cities have shown great enthusiasm and made striking movements on this matter. Guangzhou, Shenzhen, and Shanghai are the three pioneer local authorities. They do not only promote research on urban design and design control, but put them into effect. For instance, Shanghai successively prepared the 'Shanghai CBD and Lu Jia Zui Central Area Plan', 'Urban Design Plan for the City Centre District', 'Spatial Strategy for Wai Tan Area', and some other improvement plans (Zheng, and Tian, 1995; Zhou, 1997; Zhong, 1997; Fu, and Fei, 1996). These plans stress the urban design dimension and differ considerably from conventional land zoning plans. Shenzhen goes even further by legalising urban design plans for important city districts in its local planning regulation, and clarifies that providing expertise and approval for such plans is the statutory responsibility of the Urban Planning Board of Shenzhen (Xue, 1999; Xue and Zhou, 1999). Like Shanghai and Shenzhen, Guangzhou has been making alterations to its local design control and has launched various urban design initiatives.

There are several reasons for choosing Guangzhou. First of all, in terms of the economic and political environment, Guangzhou is one of the coastal cities being set up as a 'special economic zone', and adopted relatively flexible policies in the 1978 economic reform. The deepening of economic reform has particular impacts on urban planning practice because the policy of speeding

up housing provision, land development, and foreign investment is closely related to urban development in China. The devolution of power to the Guangzhou municipal government from the central administration has resulted in the growth of local revenue and the expansion of the urban area. Guangzhou is also one of the pioneers in undertaking housing and land reform. This led to the city's property boom in the 1990s and a steadily rising amount of housing construction.

Such economic and political changes spread over China in a short period. By the end of 1992, the number of development zones reached 1951, while there were only 117 in 1991 (China Daily, 1993). It can be expected that the challenges as well as the opportunities brought by the changing social-economic environment will soon affect more Chinese cities. The impacts on urban planning from a free market economy, real estate development, and decentralisation of political power facing Guangzhou will also soon be faced by other cities.

A reason for choosing Guangzhou over Shenzhen, which is also one of the open coastal cities, is simple - Shenzhen's designation is basically drawn on a blank paper. Shenzhen Special Economic Zone is a brand new city designated in 1980 for attracting foreign investment by the State Council (Phillips and Yeh, 1989). It used to be a fishing village. With its recent economic success, the city has been changing over night with development tightly controlled. It has expanded its administrative boundaries many times in the last two or three decades. Nevertheless, it is not faced with the deterioration of the old city areas and the accumulated urban problems that other Chinese cities have to deal with. Moreover, with its adjacent location to Hong Kong, Shenzhen has adopted an urban planning system that is quite unique in China, but closer to that of Hong Kong (Wu, 1998). This uniqueness represents little of the general Chinese context.

Secondly, urban planning in Guangzhou has a long history that can be dated

back to the semi-colonial period in the early 20th century. Presently, it operates a typical two-tier statutory planning system similar to other Chinese cities. Nevertheless, it is one of the earliest cities in China that attempted to incorporate the idea of urban design into its local planning system. The local authorities have been trying to address the issue in various ways. Urban design quality is promoted in recent developments and reflected in many recent local plans at various levels. Improvements have been made in the local planning system, such as the introduction of the urban district plan as a medium level plan between the urban master plan and the detailed plan, the adoption of the development control plan, and the urban design plan for specific urban districts. Meanwhile, there are also some organisational changes and adjustment to the local planning application procedure. They all aim to strengthen planning and design control in the city.

In short, Guangzhou poses an interesting setting for studying China's local design control in the context of physical, culture, social and economic conditions. Its all-round local context can, to a great extent, compensate for the lack of generality of one case study. And its new initiatives can be explored to infer what changes and actions might be taken for the future improvement.

There is a need to learn from other countries which are more advanced in design control due to the lack of such experience within China itself. Therefore, the study also takes Glasgow in Britain as another case for study. This case is set against the broad context of the British experience on design. It is hoped that by doing so, some achievements in Britain, particularly at a local level in Glasgow, will provide useful inspirations for the improvement of the Chinese planning system.

Particular interest is paid to the context that has influenced these two cities design concerns and to the planning and development control system that translate their design goals into planning measures and actions. It is recognised that the two countries' differences suggest the need for design policy to

recognise the cultural, socio-political, economic and environmental character of cities. However, the common design and environmental concerns have drawn them closer to each other. It worth noting that this study is not an absolute comparison of the design experience between Guangzhou and Glasgow, or China and Britain. Instead, it concentrates on the Chinese context. The issues raised from the exploration of this context will be used to organise the examination of the case study in Britain.

Furthermore, the choice of these two cities reflects their convenience and familiarity to the researcher, which ensure better access and richer sources to the data needed.

4.3.2 Research Methods

Kinner and Taylor noted that a good research design will make sure that the information gathered is consistent with the study objectives and that the data is collected by accurate and economical procedures. There is no standard or idealised research design to guide the research, since many different designs may accomplish the same objectives (Kinneer and Taylor, 1991). The appropriateness of a research approach derives from the nature of the social phenomenon to be explored (Morgan and Smircich, 1980). Therefore, no research approach should be thought of as better than the other, as they are better at different things where the research emphasis lies.

The following research methods were adopted for the study. Their strength and weakness and the reason for choosing the specific method are discussed next.

4.3.2.1 Content Analyses

One of the key research questions is to analyse the focus of design in planning. In fact, part of the answer to this question lies in the plans and policies themselves. Because the plan is a statutory document it must contain all policies that are to be the basis of development control decision-making. It is

therefore necessary to assume that if something has been mentioned in the plan then it has to be considered in the design control process. Moreover, “applicants for planning permission will also examine the plan’s content and go through a similar kind of analysis trying to establish exactly what the plan has to say about design requirements for development” (Punter, 1996, p39). Thus, an analysis of the content of the plan at ‘face value’ is appropriate and useful.

The question then moves to what plans/policies should be chosen for such analysis.

Based on the literature, as well as consultations with local planning officers, six main types of policy were identified and selected for analysis:

- The Urban Master Plan of Guangzhou,
- The design-related local urban planning regulations and Ordinance,
- A representative sample of district plans (7),
- A representative sample of detailed development control plans (6),
- A representative sample of development briefs (14), and
- Recent urban design plans for some specific urban districts.

Design in Guangzhou is generally under the control of these above-mentioned plans/policies. A knowledge and understanding of these design control instruments is vital for this study.

Plans were chosen under two main conditions: the time of its preparation, and its quality on design. Only recent plans were chosen because a concern with urban design quality is relatively new. Consequently, the latest plans should represent the most sophisticated thinking about design issues. As a further aid to sampling, the views of planning professionals were sought on which plans were of particular interest from a design perspective.

It is worth mentioning the practical problems met in the selection of the district plan, detailed plan, and development briefs.

There are huge numbers of such documents prepared by the local planning authority. But getting hold of them was rather difficult. The development briefs are not formally filed in the local planning authorities. The only way to get a reasonable sample of these documents is to trace the development project's designers and developers. Thus, the developers involved in interviews were asked to provide briefs issued for their undergoing or very recent projects.

Similar problem also occurred during the collection of the local plans. Although the local statutory plans are filed in the GUPB, some of them were used at the time by different departments or government offices. Therefore, seven Urban District Plans and six Detailed Development Control Plans are chosen randomly from those remaining in the GUPB. Fourteen design briefs have been collected and analysed.

The number represents a small proportion of the actual documents existing. It could be argued that this is unlikely to produce accurate and representative results. However, as these documents have a fairly standardised form (required by the Planning Act and local planning management ordinance), and little variation occurred during the analysis, this problem seemed less significant. Thus, a small sample may yield very similar information to a large sample.

Another problem with plan collection is that these statutory plans are strictly under the control of national security regulations. This means the original plans are not allowed to be taken outside the GUPB. So the geographical maps contained in the plans cannot to be photocopied and demonstrated here. Normally, only people with authority are allowed to access them. The researcher got permission, but with the condition that the plans had to be read within the GUPB and no map containing the original geographical information should be revealed. Therefore, some maps that are used in this thesis are from published journals and books.

The content analysis, one of the two basic ways of analysing qualitative data, is used to analyse the design content of the local plan and its policies (see Easterby-Smith et al, 1991.). Through reviewing relevant literature on urban design, key themes and considerations were identified. The main issues the researcher wished to explore were marked down. Issues given detailed analysis had been identified as relevant beforehand. New themes that occurred in the analysis process were added as the research progressed.

The disadvantage of content analysis was noted by Easterby-Smith *et al*, (1991, p. 105) “the researcher will be unlikely to understand why the ideas occur and why individuals interpret things or issues in their different ways”. In this case, merely reading a plan provides no explanation of why local planning authorities have taken such an approach to design, of the logic or tactics behind their approach, or of how the policies have been translated into negotiation or decision-making procedures. It often provides little sense of how policies have emerged, what their analytical basis might be, and what exactly they are trying to achieve (DoE, 1996). Nevertheless, these questions are essential to this study. To seek the answers, further research need to be done, and other research methods need to be used (see below).

4.3.2.2 Interviews

Information collected during the research also derived from interviews. They were implemented to seek an insight into the rationales underlying the policy making logic and design control process, and to assess the effectiveness of design policies in terms of being accepted and understood by planning control officers, developers, their architects and design teams, and residents groups.

Researchers have shown that policy oriented studies can be particularly well served by in-depth, small sample, intensive interviews. “Because intensive studies allow the identification of causal agents in the particular context relevant to them, it provides a better basis than extensive studies for

recommending policies which have a 'causal grip' on the agents of change" (Morgan and Sayer, 1985, p154).

It worth mentioning research initiated by the Department of the Environment in Britain (DoE, 1996). In the research, a questionnaire survey approach was taken to evaluate the effectiveness of design policies in local planning authorities in England and Wales. Standard pro-forms were used as the basis for interviews in 18 local authorities with well-developed policies. A follow-up questionnaire was sent to developers, architects, and resident groups in each locality. Regrettably, the very poor response to the questionnaire survey (18%) undermined the validity of the survey and suggested a need to revise the survey method employed to achieve the research objectives.

This poor response rate could be caused by many reasons. Some people were unwilling to spend time to finish a fairly long questionnaire. In fact, the complex nature of design issues makes it difficult to answer questions in a few sentences. Some questions were difficult to interpret without further explanation. To answer such a questionnaire is especially difficult for those with limited knowledge of design, such as resident groups. As noted by the research, many respondents found it was extremely difficult to complete the questionnaire, and therefore, a significant number of respondents returned their questionnaires unanswered. Thus, the authors suggested that interview as the alternative method might have achieved better results (DoE, 1996).

There are two basic types of interviews as suggested by Easterby-Smith *et al.* (1991). They are structured and unstructured interviews. Those that focus on factual and pre-coded questions fall within the former category. Those that are open-ended fall within the latter.

As with this study, there was a compromise position. Miles and Huberman (1984) put forward a method of analysing qualitative data that is both simple and rigorous. This is the semi-structured interview where respondents have been allowed to give their views on a number of open questions. This method

allows the researcher to draw key features out of the data, while at the same time allowing the richness of some of the material to remain for illustration purposes.

The study adopted an interview style that follows a fairly standardised set of questions, whilst offering flexibility, and allowing the views of the interviewee to become known. This type of interview might be appropriate when research questions require a good deal of thought and when responses need to be explored and clarified (Miles and Huberman, 1984). Being much less structured and interactive than questionnaire survey, this type of interview was considered suitable for this study when trying to understand the conflicting logic that might underlay policy making and implementation.

A semi-structured interview schedule was adopted (see Appendix 1). This framework was revised during the research process to make it more precise as the research progressed. Analysis of the data resulting from this method of inquiry is generally accomplished by drawing up the questions on a specially pre-prepared matrix or analysis sheet. The researcher works through each interview or question in turn, cataloguing the various responses made to the main themes for which information is sought.

Although interview is often seen as the most useful method of data gathering, it has certain limitations. One of the limitations of this qualitative method is its lack of validity (Healey and Rawlinson, 1993). This can mean that different researchers can assert diametrically opposing viewpoints even though the same sample was interviewed. To overcome this point, the need to seek a number of perspectives is now accepted by most empirical researchers. (Sayer and Morgan, 1985).

To obtain a rounded view on the preparation and implementation of design policies, the four groups of participators in the overall design process identified previously were interviewed. The four groups include: 15 planning control officers from local planning authorities; 12 architects and planners from local

planning/design institutes, planning or architecture departments in local universities, and some planning research organisations; 10 people with development interests including developers and development project managers; and 10 amenity group members from two local communities. In total, 47 individuals were interviewed (see Appendix 2 for name lists of the interviewees).

The choice of planning officers, designers, and developers was largely done through personal contact. For instance, after a conversation with the president of the GUPB, people taking charge of design-related departments or other government offices were recommended for further contact. Planning officers from these various sections involved with design control were identified by them. These people then recommended the developers and designers they felt could be helpful on design control matters.

The interview schedule was used to standardise these interviews (See Appendix 1). A core of questions which is based closely on the key research questions were put to all interviewees. However, in some cases not all questions were appropriate to all interviewees. For instance, questions inviting comments on the general content and specific design issues of local plans were largely skipped in the interviews with amenity group members, because they tended to have almost no knowledge on these issues.

4.3.2.3 *Individual Case Studies*

The final stage of the research took the form of individual case studies. These case studies were selected from Guangzhou's recent urban design initiatives. Unlike the statutory plans, these recent experimental plans and projects do not have the legitimated form pattern and procedures. Thus, their design approaches and values could be better examined through individual case studies. These cases were selected after planning officers were asked to point to examples, which had better urban design input as well as output. Four cases

were eventually selected in this way. For each case, the relevant case files were studied. The planning control officer who had been closely involved and a member of the design team were interviewed. In this way, it was intended to establish in each case what had been achieved, how it had been achieved, and whether more could have been achieved. From this, an impression of the effectiveness of these experimental design control approaches was gained. Again, the arguable point is that the number of cases studied is too small to provide firm conclusions. Nevertheless, a general impression is perhaps the best that could be hoped for.

4.3.2.4 *Supplementary Research Methods*

Besides the main research methods mentioned above, some supplementary techniques were used, such as visiting the site of the selected individual cases, researcher's observation, and some informal conversations with local people. Bearing the general research questions in mind, some useful information has been obtained these ways.

4.3.2.5 *Exploring the British Experience*

Similar qualitative research methods were adopted for the examination of the British experience on design. But the data collection relied mainly on desktop research, which concentrated on relevant studies and government reports. This is because of going through the original plans and policies requires extensive resources and time that is beyond the means of a single researcher. The case study of Glasgow involved more detailed investigation. Local planning documents were examined. The Crown Street Regeneration Project of the Gorbals was studied as the project to demonstrate how urban design approach was adopted at a project level. The original plans and internal documents of the project were studied, interviews were implemented with a similar but smaller group of people including the project Director, the planner and architects involved, and the director of the New Gorbals Housing Association (see

Appendix 2 for the name list of interviewers).

4.4 Conclusion

From the discussion above, we can see how a qualitative approach is probably the best way to understand the research issues under examination. The research methods involved content analysis, which explore the nature of the design policies and plans in use in the control system; semi-structured in-depth interviews, which allowed a broad but systematic appraisal of the factors influencing local design control.

CHAPTER 5: GENERAL DESIGN CONTROL:

A CASE OF GUANGZHOU

5.1 Introduction

The following three chapters will focus on the researchers' detailed investigation into China's planning and development control system by taking Guangzhou metropolitan area as a case study. The aim is to analyse the design content of the local plans/policies, to identify the strengths and weaknesses of the design control process, as well as to evaluate the success and limitations of recent urban design related initiatives. This is accomplished, firstly, through a detailed examination of Guangzhou's local planning and design control mechanism. Secondly, through the interviews with the main participants in policy/plan making and implementation. And, finally, through four detailed case studies of the Guangzhou's design initiatives.

This chapter analyses how the local planning system incorporates design issues. The key questions explored are:

- Who is exercising design control?
- What are the general design control approaches?
- What is the plan/policies coverage on design matters?
- How are they respected in planning and development control?
- How are they perceived by their users?

5.2 Background Information

Guangzhou, the Capital of Guangdong province, straddles over 7434 square kilometres and has a total population of more than six million (including permanent and transient populations and those in the rural areas) (Xu and Ng, 1998). The administrative boundary of Guangzhou municipality region comprises the Guangzhou urban area, which includes eight districts (*Yuexiu, Dongshan, Haizhu, Liwan, Tianhe, Baiyun, Huangpu and Fangchun*), and four county-level cities (*Huadu, Chonghua, Panyu, and Zengcheng*). The urban area is about 1434 square kilometres (19.4 per cent of the whole municipal region) (See Figure 5.1).

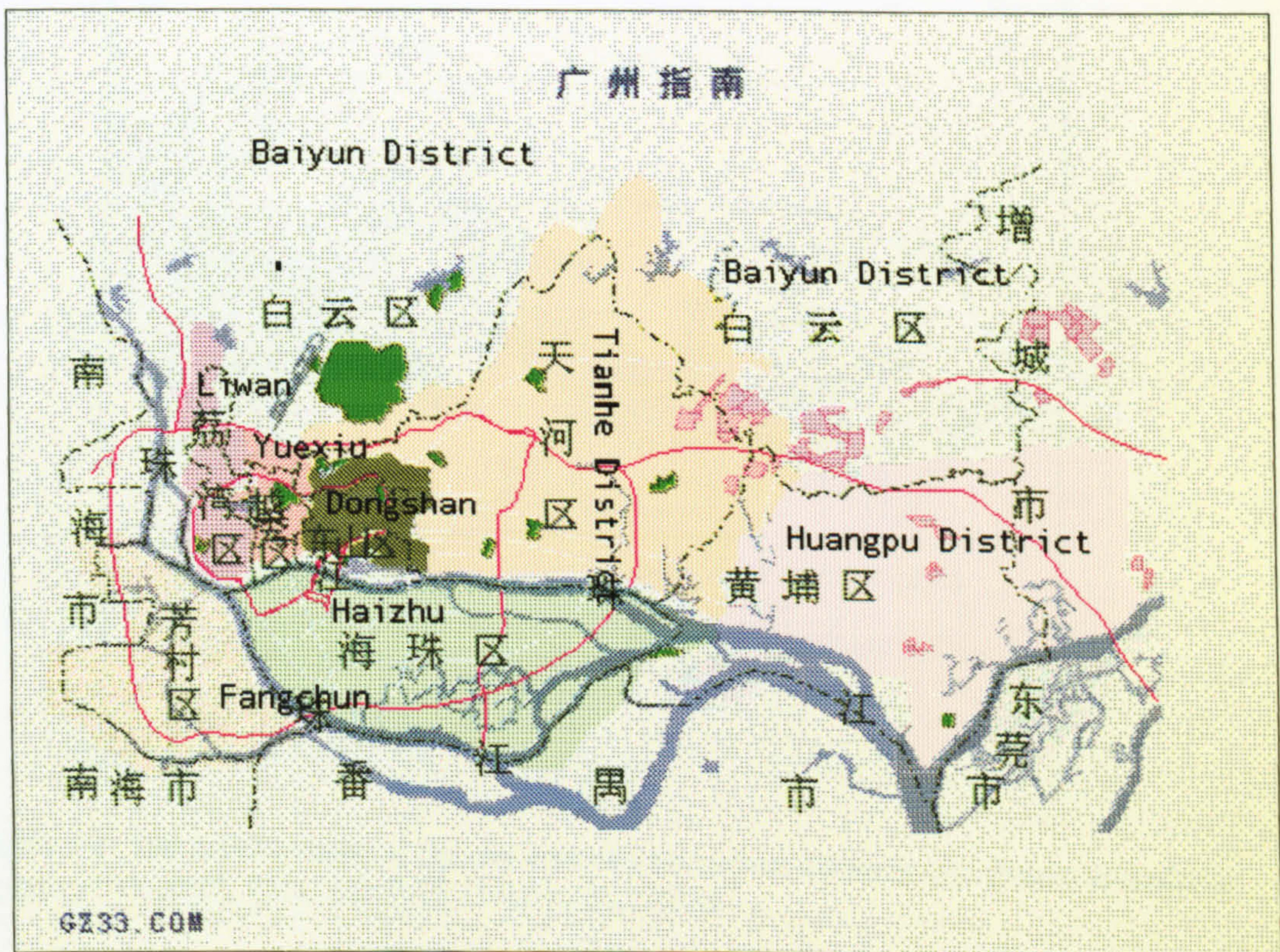


Figure 5.1: The main urban districts of Guangzhou (source: internet)

Guangzhou's urbanisation has been growing rapidly for the last 40 years, the urban land of the central city expanding particularly quickly. On the whole, the city has expanded westward and southward and, in more recent years, has expanded predominantly eastward (Figure 5.2). Many high-rise buildings appeared in the central city, forming new ultra-high density developments. New housing constructed since 1980 initially dotted the fringe area of the old urban centre, which was situated North and North-east of the Pearl River. Later it spurred to the eastern district of Tianhe, where a new city centre was developed. Recently, it stretched further to the far eastern district of Huangpu.

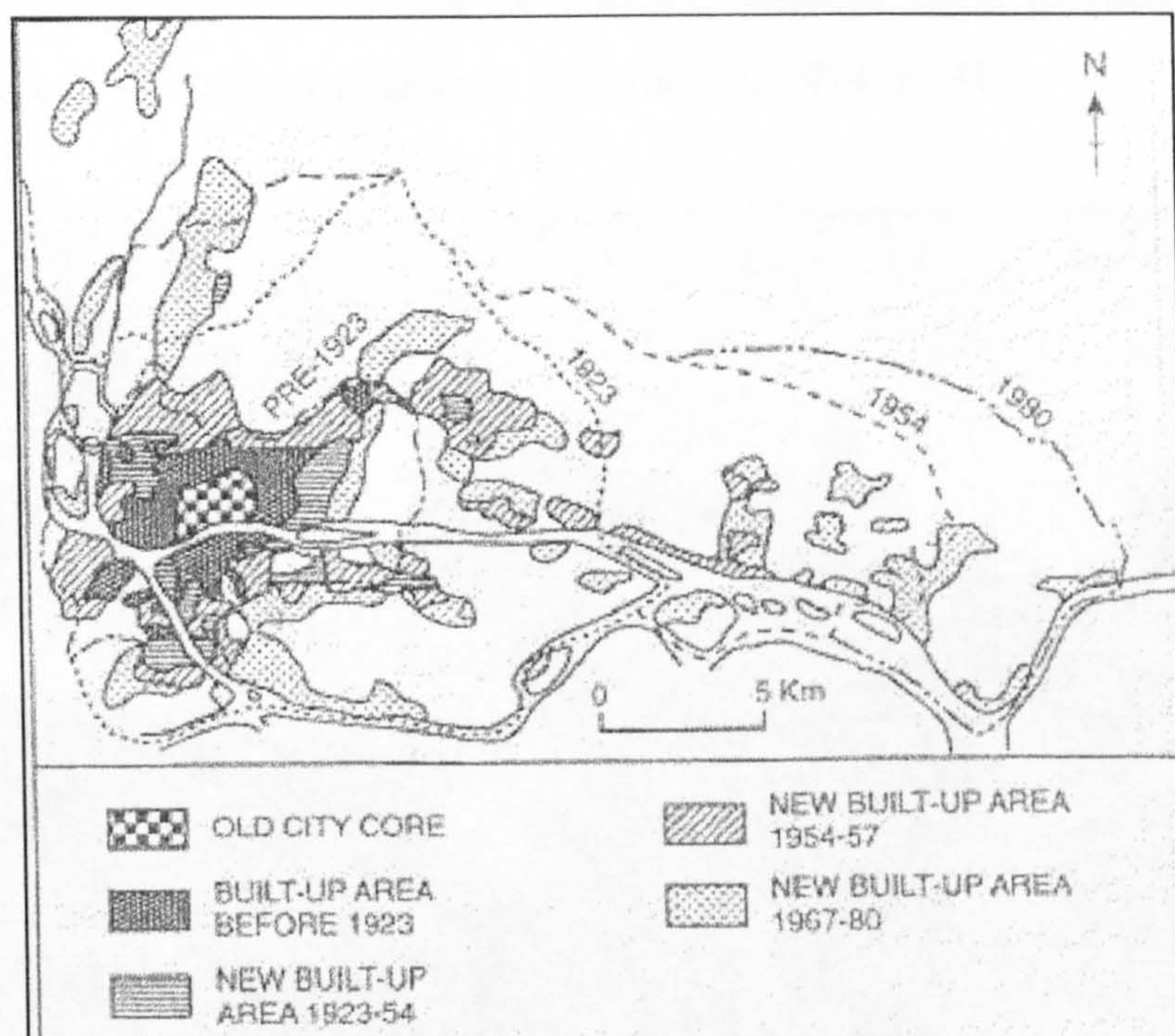


Figure 5.2: The growth stages of the city area of Guangzhou, showing city district boundaries in pre - 1923, 1923, 1954, and 1980 (Source, Xu, 1985).

The rapid and continuing urban construction has contributed to the accumulative complexity of the built form of Guangzhou City. It has caused new urban problems such as inappropriate land use mixture, dense and incoherent townscape (see Figure 5.3), an over-crowded urban environment, a severe lack of poor quality public open spaces, traffic congestion and pollution,

insufficient public service facilities and so forth.

Along with the physical development, Guangzhou's urban planning has also undergone significant changes under the influence of the series reforms following 1978. Among the first Chinese cities to benefit from 1978's economic reform, Guangzhou's local government has gained increased control of development with the devolution of central administration power. Its planning objectives are more localised and are more closely linked to local planning intentions. The planning objectives 'once site-specific and influenced by socialist ideology, they now emphasis planning for local needs'. 'This change necessitates the reconstructing of planning administration to show a growing flexibility towards local situations.' (Xu & Ng, 1998, p. 41).



Figure 5.3: Incoherent townscape of Guangzhou (Photo, author, 2000).

5.3 The Organisational Aspect of Design Control

To discuss the whole question of design control, it is necessary to ask who is responsible for preparing local plans and policies, and who is exercising

development control.

5.3.1 Design Control Related Organisations

Broadly speaking, there are two types of design related organisations. The first type is of administrative set-ups. They include the local planning authorities, their subordinate branches and departments, and relevant government agencies. The second type is the vocational organisations. These include planning and design research organisations, planning and design institutes subordinate to urban planning authorities, and urban design research or consultation organisations set up by universities. Administrative activities are handled in a co-operative manner among a number of government branches (Figure 5.4).

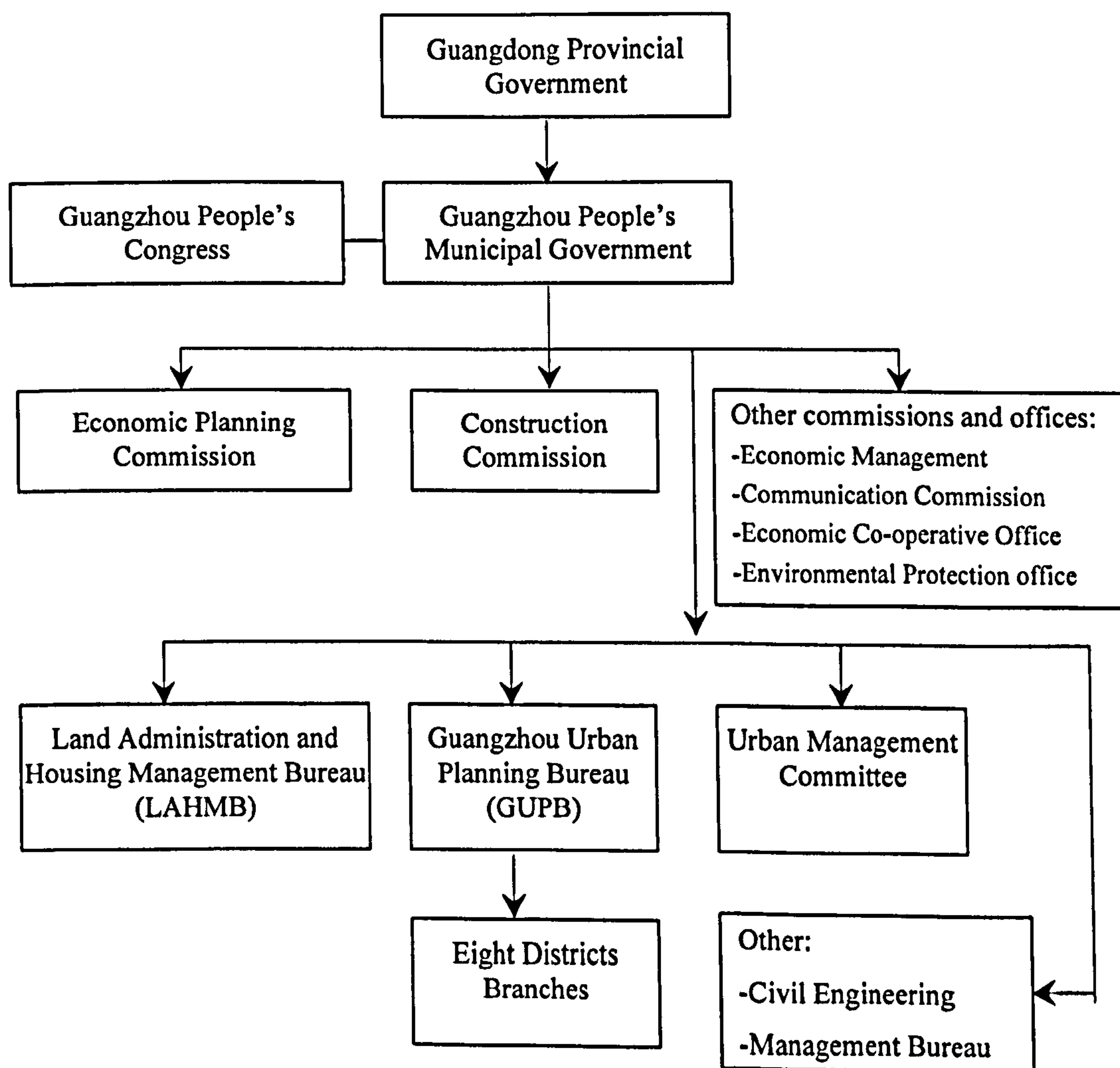


Figure 5.4: Planning related administrative structure in Guangzhou

(Source: Dai, 1996, adjusted by author after the interview with Pan'an, 2000).

The *Guangzhou People's Municipal Government*, made up of various commissions, departments and offices, is the local executive body of the State Council (the People's Central Government) and the Guangzhou People's Congress. The municipal government appoints directors for various agencies having an impact on urban planning, legitimises comprehensive urban plans, and negotiates co-ordinating actions for its subordinate branches.

Two separate agencies, the *Economic Planning Commission* and the *Construction Commission*, are responsible for economic planning and urban planning respectively. The municipal Economic Planning Commission takes direct responsibility for economic development plans approved by the central and provincial governments, checks the feasibility of urban planning projects, allocates resources and draws up budgets. The Construction Commission deals with the physical planning, development and construction control through its subordinate departments and agencies.

The *Land Administration and Housing Management Bureau* were separate agencies before 1992. Owing to rapid real-estate development, the two were merged and renamed. It takes responsibility for public land requisition and compensation. It also participates in determining the location of projects.

Guangzhou's Urban Planning Bureau (GUPB) is the leading municipal government agency responsible for urban planning. Through its subordinate offices and departments, it takes responsibility for preparing urban plans, planning guidance and administrative regulations, exercising planning and development control, and organising the study of urban development strategies (usually through the municipal institutes of planning, architecture, and design).

5.3.2 Recent Changes in Organisations

There have been some recent changes in Guangzhou's design organisations, which reflected an increasing emphasis on development control (compared to the previous dominance of economic-planning in urban development). They also reflected a growing interest in the design quality of the local government.

Since the economic reforms (1978), some modifications have been made to the administrative status of GUPB and other planning related organisations under the Construction Commission. Previously, they were all administratively subordinate to the Commission. However, with the increasing importance of urban planning, GUPB and other planning related agencies have gained the same administrative status as the Commission, and now are under the direct control of the city government. The Construction Commission has become a co-ordinating body among various planning related agencies.

The internal reorganisation of GUPB also reflected the increasing power of GUPB in planning management. In the previous structure, all the procedures to apply for development were done within just one office. This structure was set up after Deng's trip to south China in 1992* as a response to the demand for rapid urban development, which led to the deregulation of the development application process. However, this simplified system has resulted in weak planning control. As a result, the GUPB has recently been reorganised. Under the new structure, any one office is responsible for only one stage of an application. This change has demonstrated the desire for better checks and balances for controlling development.

(*Note: The political event of 4th June 1989 led to a slow-down of economic reforms in China. In fact, as early as 1988, the overheated economy and problems that emerged from the double-track system (the planned economy and market economy are both in operation) caused the government's hesitation

on intensifying reform. In his influential tour to southern China, ex-president Deng Xiaoping called for an expansion of reform, without further debates, as to whether the reform policies should have the name 'socialist' or 'capitalist'. This led to further acceleration of economic reforms in China).

There are some other changes such as the emergence of urban design related administrative and research organisations. For instance, an Urban Design Section was set up in GUPB, an Urban Design Group was organised by the leading planning institute of Guangzhou, and a City Environmental Art Committee was organised by the local government. The primary function of these teams is to provide expertise and specialist advice to local government when design quality is concerned. They also participate in design policies and guidance preparation. These changes all reflected the fact that more attention has been paid to design control.

5.4 General Design Control Approaches

Three main instruments for local planning and design control are employed in Guangzhou. The first is the local statutory plans. Similar to other Chinese cities, Guangzhou adopts the typical two-tier planning system which embraces the Urban Master Plan, also called the Comprehensive City Plan, and Detailed Plans as established by the City Planning Act. Nevertheless, changes have been made since the late 1980s. As an extra large city*, Guangzhou started to prepare its district plans in 1984. Lately, it also started practising a type of area-based development control plan as an intermediate level plan between the urban district plan and the detailed plan.

(*Note: according to the Act, a large or extra large city could prepare district plans if necessary. Based on urban population size, four levels of city can be differentiated in the Chinese urban system. 'Extra large cities' have 1 million or more residents. 'Large cities' have between 500,000 and 1 million residents.

‘Medium cities’ have between 200,000 and 500,000 residents. ‘Small cities’ have fewer than 200,000 residents. The urban population used here refers to ‘non-agricultural population in urban districts’).

The second control is through the application of planning related local regulations and guidelines. The most important local regulations to guide development control currently in use are the Regulations of Urban Planning Management (*Guangzhou Cheng Shi Gui Hua Guan Li Ban Fa*), and the Urban Planning and Management and Implementation Details (*Shi Shi Xi Ze*). They set up a series of codes, which covered almost all of the planning and design-related areas.

The third control is through the application of planning documents prepared by the local planning authorities during the planning application process, which give instructions on the selected site for a particular construction project.

Apart from some special control in specific districts and areas, developments in Guangzhou are generally under the control of these instruments.

5.4.1 Statutory Plans

The hierarchy of statutory plans used in planning control in Guangzhou is shown in Table 5.1 as below:

Statutory Plans	Content	Responsible Agents
Urban Master Plan (UMP)		
Strategic Outline for Urban Master Plan	To investigate and establish the principles for UMP	Guangzhou Municipal Government
Urban Master Plan	To study and justify the characteristics, dimensions and spatial development of the city To balance long term development and short term construction projects	Guangzhou Municipal Government
Urban District Plan	To base on the UMP to arrange and organise city land uses, population distribution, community facilities, infrastructure, etc. to tie in with Detailed Plan	Guangzhou Planning Bureau
Detailed Plan		
Detailed Development Control Plan	To control the nature and intensity of land use and spatial environment for urban management, and guide the formulation for detailed construction plan	Planning Bureau, County and Town Government
Detailed Construction Plan	To regulate ongoing construction and direct the design and the routine of all types of construction and engineering projects	Planning and design institutes

Table 5.1: The Hierarchy of statutory plans in Guangzhou's planning system.

5.4.1.1 The Urban Master Plan of Guangzhou

The Shifting of Planning Objectives

The Urban Master Plan (UMP) is the highest level of statutory plan at a city level. A total of fourteen UMPs have been made in Guangzhou since 1949. A brief historical review could demonstrate the way that the objectives of UMPs have shifted over the years in response to the changing economic and political

environment, which indicates a significant shift from ‘serving socialist ideological commitments to dealing with more practical planning issues’ (Kwok & Wang, 1981; Zhu, 1998) (see Table 5.2).

No. of plan	Year of preparation	Plan horizon (years)	Projected population (millions)	Principal goals and objectives
1	1954	40-50	2.2	To achieve the transformation from
2	1954	20	2.2	a ‘consumer city’ to a ‘production
3	1954	25	2.2	city’
4	1954	15-20	1.6	
5	1955	20	1.4	To reduce the differences between
6	1955	15	1.45	town and county
7	1955	15	1.45	
8	1956	15-40	1.45	To facilitate ‘socialist
9	1957	7-40	1.45-1.75	development’ and industrialisation
10	1959	15	1.85-2.5	To develop the city of Guangzhou
11	1962	10	2.2	into an industrial base for southern China
12	1972	10-50	2.5	To create a socialist production
13	1977	10-25	2.8	city and a foreign trade centre
14	1984	20	2.8	To provide adequate public facilities, improve the living environment and promote sustainable development

Table 5.2: List of Urban Master Plans in Guangzhou (Source: GUPB, 1993).

The plans formulated before 1978 have an apparent tendency to serve socialist ideologies (Lo, 1986). The first four UMPs formulated at the beginning of the 1950s aimed to serve socialist production, and to facilitate the rebuilding and transformation of the city of Guangzhou from a ‘consumer city’ to a socialist ‘Production City’ (Lo, 1994). In the following three UMPs made in 1955, the socialist ideological commitment to reducing the difference between town and

country was emphasised. As a result, planning was used to control the expansion of the urban population and the use of urban land. Socialist development and industrialisation were at the top of the agenda from 1956 to 1962. To cope with the industrialisation strategy, plans were amended to provide more land for industrial uses. This emphasis on industrial development became more evident in the following plans.

With the changing economic and political environment, the planning goals and objectives of the two comprehensive city plans after 1978 have been concerned more with practical planning issues.

The 14th Master Plan – *The Urban Master Plan of Guangzhou (1991-2010)* was prepared in 1980 and approved by the State Council in September 1984. Although it has been revised many times since 1990, it is still the most formal plan made in Guangzhou. It covers the Guangzhou urban area, 8 administrative districts, and 4 towns. The plan set its main objectives as:

1. To determine rationally, city development goals for the coming century;
2. A reasonable spatial pattern of development;
3. A better ecological environment;
4. Improved infrastructure;
5. A better living and working environment;
6. A modern cityscape with southern China characteristics
7. To examine how socialist market reforms have affected city planning and development mechanisms with reference to the floating population, economic restructuring, provision of infrastructure and hub-centre development, etc.
8. To emphasis plan implementation
9. To emphasis the planning of transportation (e.g. highway) networks and the ecology of the cityscape
10. To combine development and control, and to integrate long-term with

short-term planning
(GUPB, 1993).

As the general development guide for the whole city, the UMP designates the use and distribution of lands, the general development capacity for residential, commercial and industrial areas, and the distribution of urban infrastructure. It also divided the urban structure into three major clusters – the older city proper, the new urban area (the Tianhe District) and a fast growing suburb centre (the Huangpu District), which is a new Economic and Technological Development Zone (ETDZ) established in 1984 to attract foreign investments.

Main Feature of the UMP - Functional Zoning and Land-use Orientation

Broadly speaking, the UMP of Guangzhou is a functional zoning plan used to regulate the use of land and the physical structure of the city. It emphasis the designation of the use and land distributions, the general capacity for industrial, residential, commercial areas and the distribution of major roads and public infrastructure. Land use and urban infrastructure distribution are the main themes of the plan, alongside indicative means to convey future development and population growth. The land distribution follows the land usage type identified by the State Ministry of Construction in the *Classification and Regulations for Urban Development Land Use*. The main categories listed in the regulations are shown in Table 5.3.

Some socialist planning practices remain unchanged. Their implementation is highly questionable in the current social and economic environment. For instance, the ‘micro-district’ (*Xiao Qu*), ‘residential neighbourhood’ and ‘residential unit’ (*Zu Tuan*) are still being used for residential planning. Criteria are provided for land use, equal standards are applied to provide services according to the development scale. However, with the change in management and planning methods, it is not surprising that very often they can not be

implemented.

1	R residential use	R1	first class residential use	5	T transportation system	T1	railway
		R2	second class residential use			T2	road system
		R3	third class residential use			T3	port
2	C public facilities use	C1	administration & office use	6	S street and square	S1	road network
		C2	commercial use			S2	city square
		C3	recreation use			S3	social parking
		C4	sport facilities	7	U urban infrastructure	U1	Public facilities
		C5	hospital building			U2	transport facilities
		C6	education and research facilities			U3	postal facilities
		C7	conservation area and listed building sites			U4	sanitary facilities
3	M industrial use	M1	first class industrial use	8	G green space	G1	public green space
		M2	second class industrial use	9	D special use	D1	military use
		M3	third class industrial use	10	E natural environment	E1	waterways
4	W warehouse	W1	ordinary warehouse				
		W2	dangerous				

Table 5.3: Classified land use by State Ministry of Construction, China.

Urban Design Content

Comparing it to the city plans made before, the 14th UMP of Guangzhou is obviously in a better position to address urban design concerns, which include spatial structure, overall townscape, conservation, and environmental issues. But still, urban design is not clearly defined in the UMP. This, somehow, has

diluted the design inputs in the plan, and made them less enforceable. Evidence gleaned from interviews with some planners also bears out this point. Nevertheless, the analysis of the plan's content revealed that its 37 special sections do cover a wide range of design concerns. Major categories of urban design strategies are identified as following:

- Urban spatial system
- Urban renewal and new development
- Conservation of historical and cultural city
- Landscape

The UDP establishes the spatial strategies by dictating that the future development of Guangzhou city should be eastward toward the Huangpu District, following the northern shore of the Pear River. The spatial structure of the city should be developed in the form of 'linear clusters'. Table 5.4 is the extract of section one - the urban spatial framework of the UMP (Table 5.4).

Section 1: The Urban Spatial Framework

Overall description: Regard the old city districts as the core, and the Pearl Rive and main urban transport routs as axis of Guangzhou city to develop an urban framework that has linear clusters and well developed infrastructure network.

Three functionally separated clusters are defined:

- The old city district of Guangzhou, comprising the densely populated urban districts of Yuexiu, Liwan and Dongshan, requires renewal and strict control over industrial use. The development focuses on commercial, service, financial, and information activities.
- The Tianhe District is to be developed into a research and cultural centre with emphasis on education, sports, and scientific research units. This is an area to absorb excessive population from the old city districts as well as immigrants from

outside the city. Housing and commercial development needs to be strengthened.

- The Huangpu District is the outport of Guangzhou, where the Guangzhou Economic and Technological Development Zone (GETDZ) was established to attract foreign investment in local industries. This is also where industries from the Old City District will be relocated. Port facilities and heavy chemical industries will be developed in this district.

Table 5.4: Guangzhou UMP - the Urban Spatial Framework.

Strategies for urban renewal and new development are established. Firstly, excessive density, insufficient public facilities, air and water pollution, as well as traffic congestion are identified by the UMP as the immediate problems to be solved. Secondly, guidelines for building orientation, distance, and height are provided to decrease current district density and to ensure proper development intensity in future developments. Thirdly, land-use orientation features strongly in the guidance for new developments. Indices are given for land use combination in new residential development areas (see Table 5.5).

Use of Land	Residential District	Micro-district	Residential Unit
Residential use	45-60	55-65	60-75
Public building	20-30	18-27	6-18
Road system	8-15	7-13	5-12
Green landscape	7.5-15	5-12	3-8
Total	100	100	100

Table 5.5: Land uses combination indices for residential development in Guangzhou (GUPB, 1993).

It could be said that the conservation section provided the most explicit and comprehensive design-related strategies in the UMP. Not confined to small-scale preservation of special historical areas and listed buildings, the strategies

set out a much broader vision for the old urban structure, the traditional city axis, and valued natural landscape. Meanwhile, seven conservation areas, 42 national and provincial conservation units (buildings or plots), and 81 city-level conservation units are identified and listed in the Plan. The protected range for a listed unit starts five meters away from the unit boundary. The controlled area is classified according to distance, for instance, the ring area 50 meters away around the protected range is the first level of the controlling zone, which means strict control of any construction within it.

There are also some sections aimed at dealing with the location and future investment of urban infrastructure. Important aspects covered by these sections include the transportation system, road network, green space system, water supply and drain system, etc.

5.4.1.2 Views about the Design Content of the UMP

It is the statutory responsibility of planning officers to see that developments in the city are determined in accordance with the objectives and principles expressed in the UMP. This requires a proper understanding of these principles. Thus, in this research, the views of planners were tested with questions about their familiarity and perception of the design content of the UMP. In fact, these questions were also put to developers and amenity group members during the interviews, but these groups showed a very limited understanding of the plan content.

As might be predicted, planning control officers had a comparatively high level of awareness of the design content of the plan as most of them were involved in the preparation and revision process. Most planning officers had read the whole plan or parts of it. Some specific sections in the UMP, such as “Urban Redevelopment and New Developments Guidance”, “Historical Conservation Planning” and “Landscape and Green Space Planning” were the most commonly read sections. The UMP was considered a design control tool by the

planning control officers. They recognised that the UMP was essential to provide a broad urban spatial framework for the city as a whole. This would guide the individual development proposals in the right direction.

However, the opinion from developers and architects was another story. Only three among the twelve architects (and none of the developers) interviewed had some understanding of the UMP. The few architects who had some knowledge were directly involved in the preparation of statutory plans. Their opinion was that the UMP played a very limited role in design control due to its lack of design inputs. This response differs from the results obtained from the content analysis, which revealed that the UMP did cover a wide range of urban design issues. It could then be argued that the design content was largely overlooked in practice.

They also felt that the content of the plan was too massive to read through, and the principles set by it were far too general to help them with the daily work. Knowing it or not did not effect their practical work significantly.

Developers tended to hold the view that it was the planning authorities' responsibility to set up the development brief. This should indicate all the planning and design requirements according to the existing policies and plans, allowing them to prepare detailed construction plans accordingly. They felt it was unnecessary to go through the local plans. In fact, they seldom had a chance to do so. The statutory plans with original geographical maps were not open to public access, apparently for security reasons. Meanwhile, there are no further means to deliver the messages in the plans to the public.

For similar reasons, amenity group members could not say anything about the content of local design policies. But they showed a great interest in getting to know what was going on in the city and what impact changes would have on them.

It can be seen that there is some controversy here. That is, the UMP was considered as a design control tool by the planners and planning control officers, but it was largely ignored by the applicants.

There are several reasons for the low awareness of the design content in the UMP. The first could be an unclear perception of the urban design concept. Most respondents tended to adopt a rather narrow definition of urban design embracing mainly townscape issues and building appearance. Considering urban design from a strategic level was not commonly accepted. Even planners admitted that they lack the competence and experience to develop such policies.

The generality of the principles provided by the UMP is the other reason for why it was criticised as having limited design value. Some respondents pointed out that when it came to design, policies provided by the Plan were usually in the nature of general aims or goals, which were often referred to as 'motherhood statements'. In the words of one planning officer, the UMP stated that 'a high standard of design will be sought'. It was difficult to argue with this, but it did not take the reader very far.

Difficulty in accessing the original plan is the other reason for a low awareness of plan content. This suggests the need to adopt further means to provide design information to potential applicants and the public. Information in the form of supplementary guidance, government circulars and others can be very helpful in passing on information on the basic design parameters.

5.4.1.3 *Urban District Plans*

District planning, also called section planning or zone planning, aims to bridge the gap between the Urban Master Plan and the Detailed Plan to provide a more practical guide for day-to-day development. It is the main instrument for development control at a district level. Guangzhou is one of the earliest cities

that attempted to introduce district planning as a middle level planning in order to strengthen development control.

After the establishment of the latest Urban Master Plan of Guangzhou in 1984, implementation problems came to light. In view of the fact that master planning lacked depth to guide planning practice, planners advanced the method of district planning as a supplement to the phase of master planning. A total of seventy-four district plans (*Jiequ Guihua*) have been prepared, which cover all districts of street offices within the urban area. Population of the designed districts ranges from 20,000 to 60,000. The District Plan has become one of the basic control tools for planning and design management in Guangzhou.

Main Feature of the Urban District Plan

The formation of district plans largely follows the legitimate requirements established by the Explanatory Notes of the Planning Act, but with slight variations.

Through analysing the content of seven district plans, the main themes were summarised and described in Table 5.6. It could be seen that land use planning, urban infrastructure planning, transportation planning and intensity control are the four most commonly addressed themes in district plans. Moreover, conservation and preservation of listed buildings or areas of natural beauty is also a theme for the districts with valued historical heritage or natural landscape.

The Main Themes of Urban District Plans	
Land uses	<ul style="list-style-type: none"> Specify land uses within the planned district on a block to block basis.
Urban infrastructure	<ul style="list-style-type: none"> Indicate the requirements of infrastructure, servicing facilities within the district
Transportation network	<ul style="list-style-type: none"> Specify the road network, street lines. Building lines should be marked clearly for those wider than six meters.
Intensity control	<ul style="list-style-type: none"> Indicate six criteria for density control including 1) population, 2) public building areas, 3) plot ratio, 4) building density, 5) green ratio, 6) building spacing.
Conservation	<ul style="list-style-type: none"> Indicate other planning requirements that needed special consideration or controlling, such as preservation of historical buildings, etc.

Table 5. 6: the main themes of Urban District Plans, Guangzhou.

The distribution of land for various uses is the first task of a district plan. Taking the District Plan for He Xing District of Guangzhou as an example, a total of 19 categories of land usage have been identified according to the actual land use. A land map demonstrates the distribution of land uses in the district (e.g. Figure 5.5).

Besides, the plan divides the district into different blocks using natural boundaries such as main roads, railways, or waterways. A set of control indices has been established for each marked block to control its development intensity. These indices include: the nature of land use, the area coverage, plot ratio, building density, green ratio, population capacity, and population density (e.g. Table 5.7 and Table 5.8).

Land Use Planning
<p>5.3 Criteria for land use intensity</p> <p>(1) Divide the district into various street blocks using natural boundaries such as main roads, railways, or waterways. Land blocks should be grouped and marked according to their land use. The land for public infrastructure use should be marked.</p> <p>(2) Intensity control indices for street blocks</p> <p>The plan should indicate land use intensity, population capacity and needs for urban infrastructure for each street block. These indices include: land use and areas, population density, population capacity, building density, building plot ratio, maximum building height, and public green space areas.</p>
<p>5.4 Development criteria for special area</p> <p>Control criteria on water, air, noise pollution, architecture style, and development scale for Peng Kui ecological tourist area</p> <p>Control criteria on water, air, noise pollution, architecture style, development scale, pedestrian system, and public green spaces for the commercial areas around Pearl River tunnel exit.</p>

Table 5.7: The extract of land planning policies, Shi Wei Tang (F-1), Hua Di (F-2) District Plan. (Source: Guangzhou Urban Planning Bureau).

Block No.	Nature of land use	Land Area (ha)	Plot Ratio	Building Density (%)	Green Ratio (%)	Population Capacity (person)	Population Density (per/ha)
B27-0101	R3	0.88	1.0	35	30	176	200
B27-0102	G11	26.97	-	-	-	-	-
B27-0104	U29	0.15	0.5	20	35	-	-
B27-0202	R1	13.72	0.5	30	35	3430	250

Table 5.8: Intensity control indices table of Shi Jing District Plan (source: Guangzhou Urban Planning Bureau).

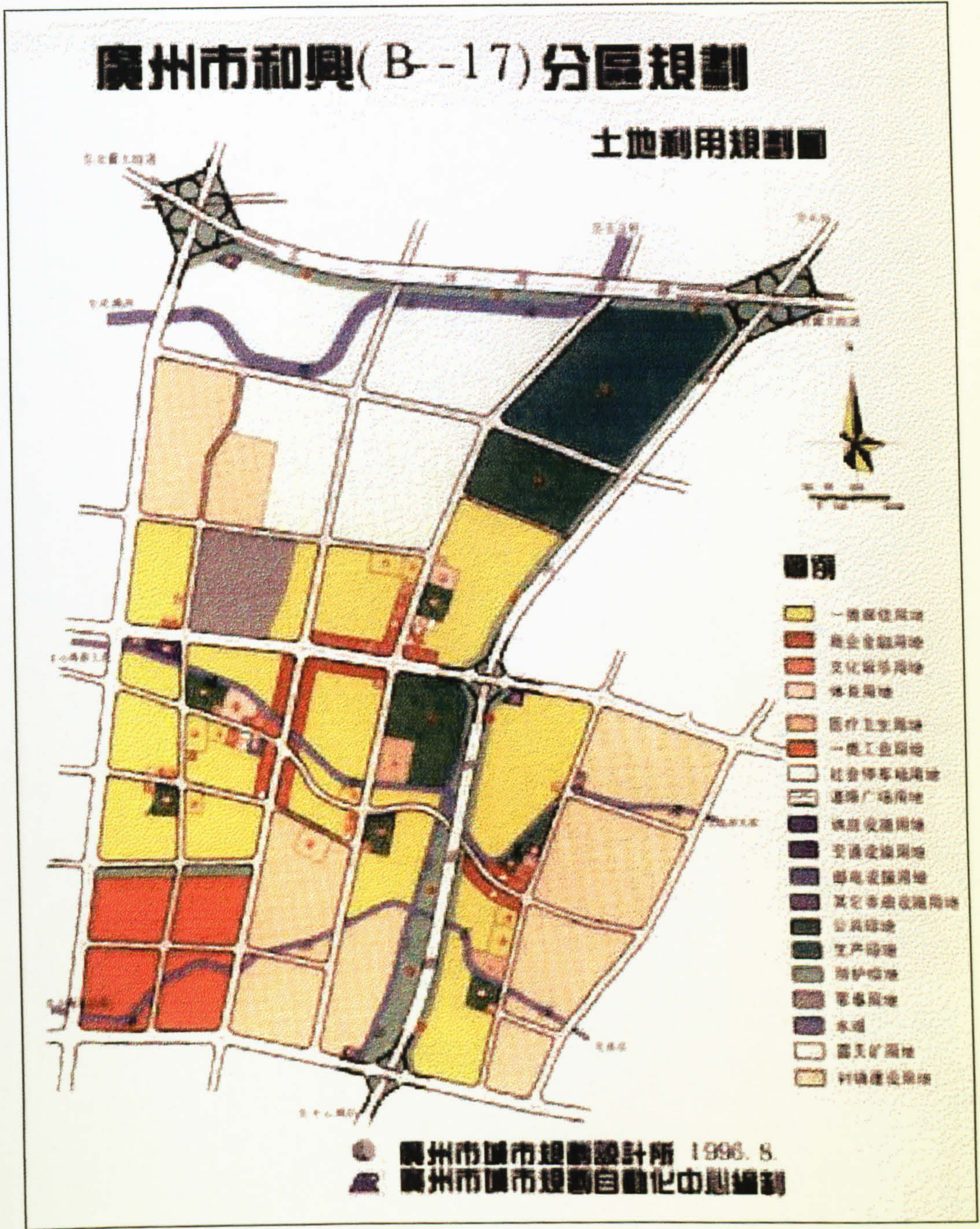


Figure 5.5: The land use plan for He Xing District of Guangzhou (Source: GUPB).

Public facilities are allocated to the district following the planning norms to make sure that there will be a balanced development. Although the district plan has further control over development, its main aim is to re-adjust the land-use patterns in the urban districts. Owing to its land-use orientation, it could be argued that district planning is basically an extension of the urban master plan and attempts to complement the master plan by regulating land developments of the district level.

Though there are planning principles in the written statement explaining the block structure and land use of the district, the plan provides only general principles for design control. The only criteria defining the built form of developments are land coverage, plot ratio and building density. The physical form and the impact of any development on its surroundings and the city are largely left to the developers and their design teams when they prepare a detailed construction plan within a plot.

The Urban Design Content

The analysis of Guangzhou's district plans found a strong **emphasis on development intensity control**. The objective of using strict intensity control to prevent over-development is clearly supported by all district plans.

There are several indices, which are contained by all plans as essential regulators for intensity control. They include building density, plot ratio, dwelling density, dwelling unit density, average floor area per person, and population density. The first two are generally applied to all areas, and the later four are used in residential development (See Table 5.9).

Plot ratio and building density are the most commonly used density control criteria. Normally, district plans contain a diagram that specifies the density for each allocation using the control of plot ratio, building density, dwelling unit

density, population density, and average floor area per person. Every plan indicates the upper limits of these indices for the whole area. For the plans in which the areas are divided into different urban blocks, the limits of these density indices are given for each block.

Name of criteria	Definition
Plot ratio (<i>Ronjilu</i>)	Gross floor area/net site area (10,000m ² /ha)
Building density (<i>Jianzhu Midu</i>)	Ground floor area/net site area (%).
Dwelling density (<i>Zhu Zhai Rongjilu</i>)	Housing floor area per hectare. (m ² /ha)
Dwelling unit density (<i>Jianzhu Tao Midu</i>)	Numbers of room suits per hectare in the planned residential area. (suits/ha)
Average floor area per person (<i>Renjun Yongdi Kongzhi Zhibiao</i>)	(m ² /person)
Population density (<i>Renkou Jing Midu</i>)	Planned population per hectare in the planned residential area (person/ha)

Table 5.9: Key indices for density control.

Because of the numerable nature of these indices, they are rather objective and strict. They have the advantage of being measures that are easily calculated and communicated. Although easy to use, density control needs to be carefully related to the local environment to avoid being the subject of rigid formula.

The controls on building spacing are used in conjunction with density control to control the distance between two buildings in order to ensure proper sunlight, avoid the problems caused by over-looking, noise and so forth. To some extent, plot ratio, building density and the requirement of building spacing partly determine the bulk and massing of a building. The distance between two buildings is determined by several elements including the height, orientation, and the street they are facing. Spacing for buildings of special use should be determined according to planning, fire control, and environmental requirements.

Daylight control is another means used to control building spacing, thus

indirectly putting limits on overall density. It aims to ensure that adequate light reaches both the building and the spaces around it. Most plans contain only passing mention of building distance and daylight concerns, but they require that certain local standards have to be met.

Conventionally, getting adequate sunlight to reach the building is a material concern in planning, however, with the recent appearance of high-rise buildings, overshadowing has caused more problems than before. The overshadowed spaces around the buildings not only create poor microclimate, but also make the public space less attractive. But few plans are able to consider the issue fully.

Among the few regulators in urban form policies, **building line** was identified as the most well developed and used criteria. Building line and the set back of a building from the red line are established by UDPs on a block to block basis.

All of the district plans examined contain a concern for **district character and identity**. Guidance on townscape issues is the main way of dealing with this. However, these plans only provide guidance in principle, which are more like a statement of design objectives. Typical examples of such general statements are frequently used in the plans such as ‘the development must respect the historical and physical coherence of the district’, ‘to create a positive image and identity for the area’, or ‘to promote the civil pride by creating a modern city image’. However, there was no further explanation and analysis to help define the ‘local character’. How to interpret these principles relies on the designers’ skills and professional morality.

Similarly, the question of how the development **responds to its surroundings** is also considered of major importance by local plans. Generalised policies such as ‘consider the compatibility with the existing urban fabric’, ‘development should be integrated with the local context’ are the common

form of such guidance employed by district plans. The analysis has found little mention of specific aspects of the physical context of a development, such as views and vistas, eyesores, skyline, landmarks etc. Since there is no further elaboration of these issues, many developments simply imitate the traditional building style as the way of 'responding' to the setting. Due to the lack of clear guidance, in the areas where contemporary building design and 'modern image' are desired, the imitation of western style, and the so-called 'high-tech' buildings, are constructed to convey an image of sophisticated modern living.

The inclusion of **public realm issues** in Guangzhou's district plans is rather limited. As the core of urban design, the issues of activity, safety, permeability, accessibility, social equity of the public space should become the main considerations of design policies. However, little evidence has been found that these concerns are embraced in district plans. Factors such as the space network, scale of street, street lighting, furnishing, landscaping, etc. are not covered.

The social equity theme that includes equal accessibility of place, crime prevention, and safety to children and women has not been a traditional concern in China. Some plans refer to it in a broad sense with statements like 'the development should provide a safe and comfortable living environment for the residents by considering accessibility and safety issues in the design of layout, and public space'. How to design a safer environment in terms of access, lighting, car parking and open space has not been fully researched, and no detailed guidance could be found.

The content analysis revealed that **landscaping policies** are well established in district plans, most of which, have a separate section normally titled 'public green network planning' or 'landscaping planning'. A green space system is often defined by the plan, composed of green chains and wedges, public parks, riverbank green belt, green protection belt along highways, planting along main

roads, and links them with topographical features.

The provision of open space also relies heavily on the **green ratio control**, which addresses this issue in a quantitative way. The green ratio is calculated as the green area divided by the whole planned area. Similar to some density control indices, it is mandatory on developers to take account of it in preparing detailed construction plans, and also for the local planning authority in decision making. The developer is further required to provide an illustrative diagram for the planning authority's assessment.

It is worth mentioning that the quantity of green space provision has been taken seriously, but it is not only the quantity that counts. The qualities and functions of an open space are even more important. The main defect of landscape policies could, therefore, be argued to be the lack of guidance to ensure the quality of open space. This type of guidance rarely appears in landscape considerations as contextual studies of landscape are almost entirely absent from plans. To meet the quantitative requirement of green coverage, some plans have to use most of a school patch, and count it as communal open space.

Some basic principles for green parks like 'they should be pleasure grounds for recreation, to be strolled through and enjoyed as a sequence of space and views' (Thompson, 1998, p110) are ignored by landscape policies. Relevant issues such as the choice of appropriate plant species, paving, floor space, street furniture, street lighting, etc. are rarely noted in local plans, and neither of them requires after-care and maintenance to ensure that the landscaping actually survives. This has partly resulted in the creation of blank community open spaces, which are often unpopular among residents.

5.4.1.4 *Views about the Design Content in UDPs*

The use of control indices over plot ratio, building density, street line, building height, and green ratio was perceived by most respondents as the most effective

means of design control. The district plans establish the requirements on these aspects, in some cases, on a block-to-block basis. Then, controls would be given to site-specific projects according to the district plan. By this means, the whole urban area is covered by these indices. Thus, they become the most widely used and referred to controlling policies in design terms.

These controls are also in favour with the planning control officers due to their ease of enforcement and use. Generally, developers and designers were asked to meet these basic requirements without any other conditions. Due to their legal status and clarity, mostly in numeral form, these control indices become the minimum negotiating points for applicants.

However, some limitations with control indices were revealed by both controllers and applicants. Planning officers felt that these indices could only reflect the basic needs of the city. For example, plot ratio, building density, and building height prescribed the maximum quantities of the requirements, while, green ratio gave the minimum quantity of the requirement. That is to say, once these limits were overstepped, the urban environment could be harmed, though merely remaining within the limits could not guarantee good design.

In fact, these basic requirements often become targets for developers who often insist on developing a site to its maximum plot ratio density. This also lead architects to meet the demand from their clients by seeking to achieve maximum plot ratio or density without carefully considering the local context and the public interest.

It has to be recognised that density per se is not an indicator of urban quality. A simplified density control will not necessarily result in a good urban form. There are some researchers exploring the relationship between density and good design (Shu and Hu, 1998; Zheng and Hong, 1999). They illustrated how different forms of architecture can be built to the same density and how

different the results could be in terms of the type and quality of the spaces they deliver. Therefore, the employment of simplified density control should be accompanied by considerations of other design concerns. This suggests a need for other forms of design guidance in order to compensate for the rigid index control. For instance, density bonuses can be used to reward developers who submit high quality designs compatible with a higher density solution, and who are willing to contribute towards improving the public infrastructure to accommodate a higher density development.

Opposite to the rigidity of design control indices, some principle statements in the district plan were considered as 'lack of real control'. Both the planning control officers and designers cited that although there were planning principles in the written statement, explaining the block structure and the land uses, the district plan has similar design defects as the UMP. That is, providing only general principles without explicit explanations. Consequently, planners and designers do not take these principles as material considerations in their daily practice. The use of ambiguously defined terms and motherhood principles has weakened policies by allowing planning officers, politicians and others to interpret them in a personal way.

It seemed that although the urban district plan attempted to bridge the gap between the UMP and the detailed plan to provide solid guidance for further design, it was still a variant of the UMP at a smaller scales. It was land-oriented with limited value on design control.

5.4.1.5 Detailed Plans

Detailed planning is the lowest level of statutory planning. Urban design issues are mostly dealt with at this level. So long as the local government approves of the development scheme, a Detailed Plan will then be prepared for it.

After the land reform, new development methods emerged. Urban land started

to be leased for private development. In land leasing, developers need to know the use and development intensity of the land before a detailed plan is made. The government is also anxious to ensure that the development will not bring negative effects to its surroundings and the city. Thus, a plan needs to be made at the land parcel level to control detailed construction plan making. Within this context, the Detailed Development Control Plan (DDCP) was advanced by planners in the late 1980s, and then affirmed by the Explanatory Note of the Planning Act as a sub-stage of detailed planning.

At present, there are two stages of Detailed Planning in Guangzhou – the Detailed Development Control Plan (DDCP) and the Detailed Construction Plan (DCP). The former is prepared for areas where future development is expected, while the latter is prepared for projects facing immediate construction. DDCP is generally used for large-scale developments in which a broader development framework is needed. For small-scale development projects, the two stages can be merged.

Guangzhou's Detailed Development Control Planning has evolved from district planning. In practice, DDCP is not always prepared for the areas with definite development schemes. Instead, it is sometimes prepared for the area containing development potentials. In this way, DDCP is in fact working in a similar way as district plans but with greater detail and more concern with environmental and design matters. It is also concerned more about the local situation of the planned area.

Compared to the UMP and the urban district plan, the Detailed Development Control Plan is more efficient in dealing with spatial issues. It takes a step further to provide spatial structure for the planned area. It also details the control indices such as plot ratio, building density, street lines, etc. for the site. Apart from these, it is at this stage that detailed design requirements are specified. Table 5. 10 demonstrate the main themes of DDCPs identified

through analysing the content of six plans. Land use, the planning for urban framework, road network, public infrastructure and intensity control criteria were contained in all plans analysed but the urban design concerns were only mentioned in one of the plans briefly.

Detailed Development Control Plan	
Land use	<ul style="list-style-type: none"> On the basis of urban master plan, indicate the scale and land uses of the developing area.
Urban spatial framework	<ul style="list-style-type: none"> Indicate the spatial structure and environment requirement of the developing area by considering local context and character.
Road network	<ul style="list-style-type: none"> Indicate road framework, street lines, and street width.
Public centres	<ul style="list-style-type: none"> Indicate the scale, location of the public centres and servicing facilities.
Public infrastructure	<ul style="list-style-type: none"> List necessary public and servicing buildings and facilities; indicate the scale, building area of these buildings and facilities. Indicate which of these should be provided by the local government, which should be built and sold or sold at a discount price to the developer. Indicate the penalty conditions.
Criteria for blocks	<ul style="list-style-type: none"> Divide the developing area into blocks according to the usage and spatial structure. Indicate required ten criteria for each block, such as 1) land area, 2) usage, 3) plot ratio, 4) total building area, 5) street line, 6) building line, 7) building spacing, 8) building height, 9) population density, 10) road network.
Assessment of plan implementation	<ul style="list-style-type: none"> Economical estimate of the development, assesses the feasibility of plan implementation.
Urban design concerns for special areas	<ul style="list-style-type: none"> Ensure good urban design quality for some special developing area or important block; provide guidance for building bulk, style, colour, material etc.
Landscape design	<ul style="list-style-type: none"> Provide urban design framework and landscape design for important area or block, and public centre.

Table 5.10: The main urban design concerns of Detailed Development Control Plans.

Building spacing is asked to meet certain local standards. When the density meets the requirement, the spacing can be adjusted in some cases. The location of the main building entrance is often suggested in residential developments.

For example, dwelling entrances are generally suggested on the south side of the building considering the local climate. The main entrance to the residential area should avoid the main road and busy traffic. Respecting the dominant local style and emphasis on compatibility with surroundings are the main kinds of statements given. Only in conservation-oriented plans are particular styles and materials suggested. Such prescriptions are sometimes very specific, but as they are based on the analysis of locality, they tend to be fairly acceptable. Apart from written policies, the DDCP requires a 3-D drawing or model to illustrate the spatial form of the scheme.

The adoption of DDCPs represent an effort to meet the need for comprehensive design control, as the DDCP seems detailed enough to provide guidance on specific design issues on which the applicant could comment. However, they do not cover the whole city area. For those areas which are not covered by the detailed plan, the basis of design control remains undefined, and the control of design matters in these areas still largely relies on the local planning ordinance and statutory plans which apply to the entire city.

5.4.1.6 Views about Design Content of DDCPs

Planning officers felt that urban district planning did help to achieve a better co-ordination between master planning and detailed planning. With the increasingly widespread use of detailed development control planning, planners have shown more interest in it. Most of the respondents regard detailed development control plans as potentially the most effective tool for design control. According to some senior planning officers from the local planning authorities, DDCP is expected to take over the role of district plans.

Since a DDCP is principally prepared for areas facing future development, it can fully consider the context and focus on the problems at hand. Because it is a type of detailed plan, it can deal with specific urban design issues in detail. Compared to the urban master plan and district plans, the guidance in DDCP is

more specific and easier to implement. Apart from traditional quantitative control indices, some new features were adopted by DDCPs to provide guidance on design, such as supplementary design guides and the use of design sketches and models.

The difficulties in writing design policy at a city-wide and district-wide level were highlighted by planners and officers. Plan preparation seems to be quite a heavy task for the planning authorities due to the time and human resource it consumes. Decisions about the controlled issues and mandatory indices are commonly made arbitrarily based on the planners' experience without consultation to those who might be affected by the plan.

Since the architectural concerns are generally seen as a matter of aesthetic value, many planners are against providing specific advice on these issues. However, the lack of clear criteria makes the judgement of architectural considerations very difficult. This problem calls for criteria and suggestions that could keep the balance between providing useful official guidance for architects, and also leave space for architects' freedom and innovation for design.

The detail that traditional Detailed Plan went into was criticised by planners as leading to an 'ideal' drawing that would never be implemented. Traditionally, this type of plan was prepared to the detail as it was hoped that individual building design could then follow. However, land development that was managed by various developers simply did not follow the planned pattern. In some comprehensive development projects initiated by private development companies, flexibility of moderate degrees was also required. One planning control officer from GUPB said,

“when detailed plan is mentioned, everyone thinks about allocating the project and arranging buildings. The real task of planning which is providing

guidance for further design and construction is mixed up with construction design. Because this 'building arranging' plan does not have a definite purpose, once the investment or the conditions of the project changes, or other factors of the outside world changes, all its detailed arrangements become invalid".

The unsatisfactory implementation of Detailed Plans has led to more doubts about physical planning. The emphasis on physical issues and the method of expression by plan drawing of coloured blocks were questioned. There tended to be an agreement that physical planning was no longer suitable for the complicated circumstances. A more sophisticated way of providing design guidance combining written policies, drawings and other means to indicate design requirements was demanded.

One particular problem of DDCP that attracted planners' attention was the 'blue-print style' plan making. The traditional Detailed Plan was called "building arranging" by planners who felt that in such plans, buildings were arranged according to the rule of 'pleasant to the eyes'. This often resulted in a photogenic model or drawing which could hardly be implemented. They argued that the products of physical planning - the ideal blueprint type urban plan was not suitable for developments today. Facing the fast changing economic, political and social situations, the problems of plural urban society are numerous. It was impractical to regard physical planning as the chief means to solve the problems of complicated cities. The continuous limitation of traditional detail plan in DDCPs was criticised by planners. They believed that DDCPs have to ease off its concentration on the aesthetic value of building appearance and building forms to highlight other social and environmental issues were largely undeveloped in current plans. Only by doing this can they be brought into further action in design control.

5.4.2 Main Design Related Guidelines

5.4.2.1 The Ordinance for Planning Management and Implementation Details of Guangzhou

The outline of any development is controlled by the uniformed rules regulated in *The Ordinance for Planning Management and Implementation Details of Guangzhou*. The ordinance is used as a catchall guidance, and has been called the ‘little encyclopaedia’ by planners in Guangzhou. It contains a series of codes and indices, which cover almost all the planning related fields. These regulations cover the areas of public transportation planning (Section Three), environmental issues (Section Four), the control of currently incompatible land and building uses (Section Five), and urban landscape garden and green spaces (Section Eight). It is estimated that the contents of these six aspects probably touch on over 50 design criteria. The main concerns are summarised and listed in Table 5.11.

Main Themes	Issues Concerned
Construction management	<ul style="list-style-type: none"> • Transportation development plan • Code for environmental protection • Road network plan • Code for residential planning • Code for preservation of historical site and listed buildings • Code for scenic district and urban green space management
Building management	<ul style="list-style-type: none"> • Management code for applying building permission • Building design management code • Code for building techniques • Code for the management of temporary construction
Public facilities plan and management	<ul style="list-style-type: none"> • Planning and management code for public facilities

Illegal construction management	<ul style="list-style-type: none"> • Code for illegal occupation and use of land • Management for illegal buildings • Management for illegal public facilities • Implementation rules
Supplementary guidance	<ul style="list-style-type: none"> • Indices for land use in residential areas • Indices for public building control in residential areas • Technical and economical indices for residential planning • Lists and guidance for conservation areas • Plot ratio and building density standard for individual building • Parking standards

Table 5. 11: The main design concerns of the Ordinance, Guangzhou.

Despite the wide coverage of design issues, the guidance only provides general design policies on a city-wide basis. As a catch-all planning and design regulation, these general policies tend to be quite sweeping. There is little evidence of differentiation in terms of different areas of character except in conservation areas. For the identified seven conservation areas, there are lists for the range of the controlled area and basic requirements for each one. But even in these cases, policies tend to be very general. Apart from the general principles, some specific design criteria are provided. Like the planning system's overall emphasis on density control, the criteria concentrate on building storey, density and plot ratio (e.g. Table 5.12).

No	Location	Requirements	Control indices		
			Storey	Density	Plot-ratio
1	Shamian	Conserve and restore the traditional architecture and landscape. Demolition and new development is principally prohibited	2-4	25%	0.7
2	Feng yuan street	Maintain the traditional townscape by preserving and refurbishing traditional buildings in the area	According to detailed plan		
3	Xin He Pu	Preserve low-rise, courtyard houses, maintain local characteristics. Demolition and new development is principally prohibited. New developments have to seek special approval from local planning office. The plot area and total floor area should not be enlarged for those approved constructions in the area	2-5	25%	1.0
4	Nong Lin Shang Road&Mei Hua Village	See above	2-5	28%	1.0
5	Dongao Street	See above	2-5	30%	1.0
6	Chang Hua Street	See above	2-5	30%	1.0
7	Hua Qiao New Village	Maintain the urban form of low-rise houses and traditional layout. Demolition and new development is principally prohibited.	2-3	25%	0.6

Table 5.12: The control requirements for seven conservation areas in Guangzhou (Appendix 6, GUPB, 1988)

The Ordinance specifies density measures on an area basis by dividing the city region into four areas and giving each area an upper limit of building density and plot ratio. Buildings are divided into two groups – PB – public buildings, RB – residential buildings. Maximum limits for building density and plot ratios are given for areas 1, 2, and 3. Area 4 is called special area, which includes military use area, special economic zones, natural scenery area, or areas for other special land uses. The density of this type of area is decided by the GUPB

according to the situation (See Table 5.13).

The general rules of setting back from the street red line are set out in the Ordinance as 2 to 5 meters according the specific situation. Buildings taller than ten storeys or located at a cross are obliged to set back further.

The building spacing code provides the means to control the distance between buildings through a fairly complicated calculation (See Table 5.14)

				Surrounded by main road	Two or Three sides against main road	One side against main road	Not surrounded by main road
PB	10 storey or over. Height over 30m	Area 1	BD	40	37.5	35	32.5
			PR	12	10	8	6
		Area 2	BD	40	37.5	35	32.5
			PR	11	9	7	5
		Area 3	BD	35	32.5	30	27.5
			PR	10	8	6	4
	9 storey or under, height under 30m	Area 1	BD	45	42.5	40	37.5
			PR	4.5	4.3	4	3.8
		Area 2	BD	45	42.5	40	37.5
			PR	4	3.8	3.6	3.4
		Area 3	BD	40	37.5	35	32.5
			PR	3.2	3	2.8	2.6
RB	10 storey or over. Height over 30m	Area 1	BD	37.5	35	32.5	30
			PR	8	7	6	5
		Area 2	BD	37.5	35	32.5	30
			PR	7	6	6	4
		Area 3	BD	35	32.5	30	25
			PR	6	5	4	3
	9 storey or under, height under 30m	Area 1	BD	42.5	40	37.5	35
			PR	4	3.8	3.6	3.4
		Area 2	BD	42.5	40	37.5	35
			PR	3.8	3.6	3.4	3.2
		Area 3	BD	40	37.5	35	32.5
			PR	3.2	3	2.8	2.6

Table 5.13: Indices control for the maximum building density and plot ratio in Guangzhou.
(Main road- wider than 16m or equals; BD-Building Density; PR-Plot Ratio)

Density Area	9-storey or less, H<30m	10-storey or over, H>30m
Area 1, 2 Building with a PR>1	95.1 South - North Oriented S-N Distance > 0.7H E-W Distance > 6.0m	95.3 In area 1. The part below 30m line applies rule 95.1 The part above 30m line, every 4 meters in height adds 1.0m in distance
	East - West Oriented Distance > 0.5H, or > 6m	In other areas, The part below 60m line applies rule 95.1
Area 3 and building in Area2 with a PR<1	95.2 South - North Oriented S-N Distance > 1.0H E-W Distance > 8.0m	The part above 60m line, every 4 meters in height adds 1.0m in distance
	East - West Oriented Distance > 0.7 H, or > 8m	
Note: For university buildings, school building, hospitals, and buildings for special use, the normal standard applies with 10% extra in old city district, and 20% extra in new development area.		

Table 5.14: Controls for the distance between buildings.

(PR-plot ratio, H-building height, S-N - south-north, E-W - east-west)

5.4.2.2 *The Guide for the Planning and Design of City square and Plaza (GDPG-001)*

Guangdong Planning Commission initiated a set of policies which aims to tackle prominent urban problems in current urban development, and to address special issues that concern the public. The quality of public open space is the first issue dealt with. The first episode of the series, the *Guide for the Planning and Design of City Square and Plaza (GDPG-001)*, came into force on September 1998. It has become the first urban design-oriented guidance adopted in Guangdong province.

Recognising the low standard of the public spaces as a serious problem, the guidance chooses the public squares and plazas as the starting point. The main body of the document sets guiding principles and technical guidance for the design, construction and management of city squares and plazas. The appendix demonstrates good examples chosen from local, national and even international practice and complements them with basic information and brief comment.

Section one of the Guide deals with issues such as the classification of the types of public squares, the assessment concerns for local needs and deficiencies of public open spaces. Six types of public squares are distinguished according to their primary functions:

1. Municipal Square - for political gathering, celebration, military inspection, and local festival events;
2. Monumental Square - to commemorate special people or historic events;
3. Cultural Square - normally allocated in the cultural centre surrounded by educational, sport, and recreational buildings;
4. Commercial Square - for market trade and commercial exhibition;
5. Recreational Square - provides open space for resting, tourist activities, and other public activities;
6. Transportation Square - normally allocated at the transportation core to divert people and traffic flow.

The guiding principles take on board such issues as the scale, spatial form, landscape, service facilities, circulation, and traffic organisation as well as infrastructure location. More detailed advice is set out under each topic which could be seen from Table 5.15.

Further advice is provided on matters of construction management, the approval and implementation of detailed city square design and post

construction management and maintenance.

Main Themes	Concerned Issues
Dimension	<ul style="list-style-type: none"> • Total area covered by public open space Big city-5-15 ha Mediate city-2-10 ha Small city-1-3 ha
Scale	<ul style="list-style-type: none"> • Appropriate scale for the function, and activities. • Suggested indices for the scale of central square Building height/length of the square=1:3-1:6 Vision distance/building height=1.5-2.5 Angle of view=18-27
Spatial form	<ul style="list-style-type: none"> • Five spatial forms are identified and defined
Landscaping	<ul style="list-style-type: none"> • Harmony in the surrounding buildings • Public art • Water features • Green landscaping • Pavement • Lighting
Service facilities	<ul style="list-style-type: none"> • Integrated planning and design of service facilities on the square • Elements include stall, telephone box, information signage, public toilet, litter, seats, etc.
Circulation and traffic	<ul style="list-style-type: none"> • Appropriate organisation of internal and external traffic flow, • Appropriate allocation for social parking • Pedestrian system
Infrastructures	<ul style="list-style-type: none"> • Incorporate drainage works, electricity network etc. in design

Table 5. 15: The main design concerns of GDPG - 001.

Importantly, an incentive scheme for open space provision appeared officially for the first time in the guidance. Apart from government initiated city square development, private developments are encouraged to provide public open space on site. The guidance suggests three situations for incentives:

1. On-site city plaza with area coverage over 1500 square meters;
2. Provision of open space which is over 1000 square meters in residential development;
3. Provision of open space, which should cover at least 30% of the development site area.

The incentives include: having priority on site allocation, partly reducing the land leasing price or land management charge, loosening intensity indices control to a certain extent, and government corporation and arrangement for urban infrastructure provision.

5.4.2.3 *The Limitations of the Main Design-related Guidelines*

The main characteristic of the Ordinance for Planning Management and Implementation Details is the specification of the required quantities or dimensions. They are applied either universally or in an 'if A exists, then B will apply' form. This characteristic created a subtle problem for them to be expressed in design policy. That is, because of the inflexibility, they are not tailored to different contexts. It often leads to a situation that whatever the design intention is, certain aspects of the development form are predetermined by a multiplicity of standard requirements. The best argument for the use of the Ordinance is that it is useful for holding the basic line for developments, and it is the last opportunity for design control in areas where no local plan has been prepared. Whereas this may be an essential part of the operation of development control, it cannot be said that the Ordinance is a creative instrument of design control.

Regarding the City Square and Plaza Guide, there is another defect. The guide tends to be descriptive rather than analytical. It contains more descriptive information such as what the general types of public spaces are, what forms they usually take, what the difference between these different types of squares

and plazas are in terms of scale, form, and what the main functions they have. But it did not go much beyond this. As a generalised guidance, the Guide is not capable of giving a clear indication of what open space is expected where and how to deliver them in planning and design. This problem was confirmed by the responses of some planners who also felt that the Guide might well provide some useful information and knowledge on the topic, but it was not a successful attempt in the sense of providing practical guidance.

Nevertheless, the existence of such a guide, which aims to highlight the quality of public spaces has indeed promoted thinking on this issue. Inspired by the Guide, Guangzhou local government launched its own city-wide plan for a public open space system. However, by the time that the researcher completed the fieldwork in China, the plan was still under preparation. The study is therefore not analysed it here. The question of how the plan addresses the guidance set by the GDPG and links it to the local context could usefully be the basis of further research.

5.4.3 Planning and Design Briefs

There is other planning and design guidance issued by the local planning authorities for a particular development site during the planning and construction application process.

The development control system operating in China is usually called the 'One Report and two Permits System' by Chinese planners. 'One Report' refers to the report prepared for the selection of the site (also called 'Site Selection Note'). The two 'Permits' refer to 'Construction Land Planning Permit' and 'Construction Project Design Permit'. These documents are not only permissions for planning and construction, but also contain requirements and guidance for the proposed scheme. From this perspective, they are very similar to design briefs used in Britain.

The City Planning Act stipulated that ‘the land use and all development projects within the urban planning area should conform to urban planning and be subject to planning administration’ (Act, Article 29). ‘The location and layout of construction projects within the urban planning area should conform to urban planning. The design assignment, when seeking approval, should attach the site-selection note issued by the planning administrative authority of the city’ (Act, Article 30).

5.4.3.1 *The Construction Land Planning Permit*

Management of construction land planning in Guangzhou is handled on a bi-level management system - Guangzhou municipality and county-level municipalities.

Land for key construction projects of the state, province and municipality located within the eight urban districts and four county-level municipalities will be reviewed and issued with construction land planning permit by the Guangzhou Municipal Urban Planning Bureau (GUPB).

Land within Guangzhou Economic and Technical Development Zone, Guangzhou Bonded Zone and Pear River Overseas Chinese Farm, will be reviewed by the planning control bodies of the management commission authorised by GUPB.

Land within county-level municipalities, will be reviewed by the planning control bodies of the county-level municipalities.

When the municipal government approves, the Administrative Department for City Planning (ADCP), which is a subordinate department of GUPB, issues a *Site-Selection Note* to all successful application after verifying the materials, checking city’s planning, on-site exploration and consulting relevant experts. With the note, Planning Approval Document, and other materials required, the applicants can apply for a Construction Land Planning Permission.

When the application is received, ADCP determines the location, boundary, nature of land usage according to contents of urban planning and the site-selection note, and provides conditions for planning and design. Then, it issues the Construction Land Planning Permit and its appendix documents. Generally, they include Land Planning Red Line Map, specified building density, plot ratio, parking spaces, and green ratio for the site. Apart from these compulsory requirements (most of them are in the form of indices), the content of the document varies according to the type, scale, and the significance of the proposed scheme. For instance, for residential development and the provision of required amenities, the distance between each building is emphasised to avoid overlooking, and the allocation of the building entrance has to consider the local climate conditions. For developments having a special impact on townscape, detailed design requirements might be brought to light. The appendix and annexed map are considered associated documents of Planning Permission of Construction Land and carry the same legal validity.

5.4.3.2 Procedure of Application for Construction Land

The land developer will apply for land from the Municipal State Land and Housing Management Bureau with a Construction Land Planning Permission issued by the GUPB. If the district bureau is entrusted with an application for land, it will be responsible for collecting relevant information and maps, and sending them to the Municipal State Land and Housing Management Bureau.

After the Municipal State Land and Housing Management Bureau have reviewed and approved the application, it will issue the Construction Land Use Notice and Announcement to the developer. The developer can then go to the District State Land and Housing Management Bureau to handle land use compensation and other land appropriation issues.

5.4.3.3 Application for Construction Projects Design Permit

After obtaining the land, developers have to go through five steps for the

application of a Construction Project Design Permit.

Firstly, the applying unit should apply for *Main Construction and Design Points* from the GUPB with the planning permit, its annexed documents, and document concerning main information of the application. This step can be skipped for those that have provided conditions on planning and design when the permit is issued. Secondly, the applying unit submits the construction design plan to GUPB for reviewing. Thirdly, the applying unit should submit the preliminary design plan to GUPB for examination. Fourthly, the applying unit should direct its application for construction to the GUPB with the final design plan, construction model, and other information required. And finally, after the planning body of the municipality approves the construction application, examines and approves construction design drawings, it will issue an Opinion Book Concerning the Examination of the Construction Project and then the Construction Project Design Permission. The developing unit can then start the construction.

5.4.3.4 Development Briefs

It can be seen from the above that the *Site-selection Note* and the *Main Construction and Design Points* are the two main documents issued by Guangzhou local authority that set out details of how local plans and policies should be implemented on a specific site. The Administrative Department of the GUPB issues the former at the stage of the Construction Land Planning Permit application. The latter is issued during the process of Construction Project Planning Permit application. These documents are prepared based on all existing plans and policies covering the site, and it is essential that the specific location, boundaries and other conditions required are met when approval for construction is sought. Despite the different names given to these documents, they play a similar role to planning briefs and design briefs in Britain, although they do have more legal enforcement.

As the documents produced in the development control process, these briefs interact directly with developers. They are perceived by developers and architects as the main source of planning and design information provided by the local planning authority. They are also considered by planning officers as the most influential design control tools. However, there are still questions about what a brief contains. Table 5.16 is an extract of design related requirements in the brief for De Bao Garden housing project. As a typical document of this kind, the density control is the central concern of design matters.

Although developers and architects largely prefer loose control on design, they still feel that the briefs do not fulfil the intended role as indicators. In some cases, when an application was turned down on design grounds (although this is seldom the case), the developer or his architectural team applying for planning permission complained that this was because of planning officers' personal opinions. Meanwhile, some officers felt that briefs in use had a tendency to be over-standardised and became stereotypes. For instance, one planner admitted that a brief would have a few changes made to it and then applied to another development project of the similar type. One officer cited that "*these documents have a great potential influence on design, we just have not made the most out of it*".

<p>One: Control Indices</p> <ol style="list-style-type: none"> 1. Building area within the building read line: 21340 square meter. 2. Building density: eight storey or lower - 30%; above - 28% 3. Plot ratio: eight storey or lower - 2 or lower, above - 2.5
<p>Two: Building spacing</p> <p>Building spacing should comply with Ordinance, regulation 109. If the overall density is lower than what is required in One/2,3, this could be adjusted at a case to case basis.</p>
<p>Three: The main entrance to the residential development should be at the south side of the development with public open space. The architecture design should be in high standard. External material's colour and texture should be in harmony with the surroundings.</p>
<p>Four: Plan has to be sent to landscape office for approval in order to ensure the landscape design is in high standard.</p>
<p>Five: The area should not be surrounded by enclosure wall. If it is necessary for walls to be built, report to local planning office for special approval.</p>

Table 5. 16: The extract of requirements of design brief for De Bao residential development project.

5.5 Conclusion

1. A highly structured planning system has operated in Guangzhou. The system is undergoing considerable change at present with important institutional shifts. This trend is reflected in the modification of planning related set-ups and the shifting concerns in planning objectives and approaches. New attention is being paid to the need for more localised planning management, and for it to be more directly geared to practical planning issues than socialist ideologies.

2. The local statutory plans, design related local policies, and development briefs are the three main design control tools employed by Guangzhou local planning authorities. While urban design issues have been included in these local plans/policies, the concept itself has not been explicitly defined and explained. The Urban Master Plan and the Urban District Plan are largely two-dimensional land use plans. The way of dealing with design concerns in these plans remains the provision of general principles. The tendency is to resort to bland phrases advocating contextual design rather than offering clear statements of design expectations. The main criteria provided by these plans defining the built form of developments are land coverage, plot ratio, and building density. This generality of design guidance partly resulted in the ignorance of design input by planners and designers, as discovered by the interviews. It is interesting to find out that design issues covered by these plans were largely overlooked by practitioners who felt that these plans had little design input and very limited value on design control.
3. It was revealed by the interviews that there was a fairly low awareness of the content of the local plans. Although planning officers and some planners had a comparatively better understanding, they could not go further to talk about the specific issues. The quantitative indices control over land usage, plot ratio, building density, and green ratio were considered as the main design issues covered by policies. In fact, these indices were covered by all statutory plans at all levels. Because of their wide coverage and strong enforcement, they have become the main 'material considerations', and sometimes, the only pursued targets in design. Other guidance concerning the public realm and environmental aspects were seldom mentioned by plans and were not perceived as material concerns by planners due to their unclarified legal status, low appearance in policies, and the vague expressions.
4. Urban design is mostly dealt with through the lowest hierarchy of planning

- the detailed planning. In the past, there was only one stage of detailed planning, which prepares plans for construction. There is a clear gap between district planning and construction. Thus, Guangzhou recently adopted a type of development control plan aimed to bridge this gap. It seems detailed enough to deal with specific design issues. But the analysis of its design content revealed that intensity controls and townscape issues remained as the central concerns, but other key areas which design policies should address such as the issues for qualitative public spaces, activities, safe and accessible streets, community identity and cultural continuity are largely undeveloped. This over emphasis on the physical appearance of buildings produced a blueprint style plan, which was considered unsuitable for today's complicated urban circumstances. The ideal arrangement of building blocks can easily become invalid when outside factors change, and are not followed by architects in the next stage of design work. The root of this problem lies in the absence of conceptualised urban design theory to underpin the policy/plan. This problem does not only apply to the development control plan, but also to the development of other local design policies/plans.

5. There is no design-oriented or topic-specified local guidance in Guangzhou. The most design related local policies are the Ordinance for Planning and Management and the provincial Guide for Planning and Design of City Square and Plaza. It is argued that the former is useful for holding up the basic line for development control, but it is not a substitute for proper design policy. The later is only a useful source of information, and can hardly be used as design guidance for public spaces.
6. The planning and design briefs prepared during the pre-application and application process form the means of deducing the existing policy by implication from the control decisions. However, they share the limitations of local design policies and density specifications. When there is no local

plan from which they could be derived, their derivation relies only on the Ordinance. The problem, as with the absence of design policy in general, is the uncertainty and difficulty in ensuring consistency.

To recap, it could be said that the planning system in Guangzhou is marked by a high degree of officer discretion and lack of policy documentation relating to urban design. Local plans, design guides and briefs are produced which, within their own objectives, can be effective instruments. However, the analysis of Guangzhou's design control instrument and practitioner perceptions of them revealed that they have played a very limited role in design control. Urban design has not been given an appropriate position in the system. Moreover, where guidance on design does exist, it does not attempt to address all key aspects of design, and has a tendency to resort to blank phrases and motherhood statements. The resulting lack of comprehensive design policy causes expense and inconvenience to all parties in the development process, not least to the planning officers themselves.

CHAPTER 6: THE GENERAL EFFECTIVENESS OF DESIGN CONTROL

6.1 Introduction

Notwithstanding the difficulties of researching into the effectiveness of design control, the research endeavoured to explore this issue with a limited conception, which focused on the acceptance of design control policies and the perceptions of process related factors among various participants from planning.

The question about the clarity and acceptance has been partly discussed in Chapter 5, which analysed the policies/plans content, as well as, assessing people's perceptions on it. It revealed some defects of policy per se. It also revealed a fairly low awareness level of the existing guidance on design and an insufficient knowledge of the detail of policies. But there is another important issue - the use of appraisal, which has not been covered by the last chapter. It is argued that if planning policies have to be carefully tailored to local circumstances to be effective, local characteristics have to be carefully appraised. Thus, questions as how important appraisal is perceived by planners and how it is conducted to generate policies/ plans are explored in this chapter through the analysis of interview responses.

Other process factors relating to the implementation of policies are a focus of discussion in this chapter. The various attitudes, perceptions, priorities and pressures that effectively shape the process of design control are all considered by this research. Subjective judgement is involved in this kind of evaluation. So the most satisfactory way to carry out this assessment was to base it upon the views of those closely involved in the design control process. Thus, detailed interviews were conducted with various representatives, such as planning control officers, architects and planners, developers, and amenity

group members. Instead of asking the interviewees to judge how effectively the system works, questions were put forward to invite comments on difficulties they encountered in the control process, and to identify the factors which have impeded effective design control.

6.2 The Use of Area Appraisal

A successful development depends on tailoring design principles to local circumstances in both drawing up and implementing planning policies. Understanding the context of the planned area and its relationship with the surrounding areas should be the prelude to the development of any design policies. 'Developing this understanding will involve considering a wide range of matters. Some will be matters of simple observation or professional judgement. Others will be matters of opinion, raising questions about whose perspective counts in particular circumstances, and how those people are to be involved in the process of appraising the context' (DETR, 2000).

Thus, this section discusses the planners' views towards area appraisal, how it is conducted and used to generate local plans/policies, and what role the public plays in this process.

6.2.1 Planners' Views of Area Appraisal

Opinions about area appraisal were tested among all planning control officers, planners, developers and designers. The responses showed a consensus on its importance and necessity.

All of the respondents tend to agree that a thoroughgoing understanding of the local context should form the basis of development plans. They noted that it has become common in practice when conducting appraisal work before drawing up a plan, no matter in what form, or to what extent.

However, some serious doubts about the value of appraisal were also

discovered. Many respondents considered the utility of existing appraisal work was highly questionable. They tended to think that most appraisal work could only provide basic information about the planned area, such as the existing use of land, conditions of local facilities, which are generally descriptive, but might not provide useful insights about establishing clear design objectives and principles.

There were some extreme negative answers. One planner said *“I sometimes do it for the sake of doing so”*. And another answered *‘because the procedure was required, and also because I have to use the quantity of basic data posed in advance to defend the authority and scientific basis of the plan ... so materials were collected as much as possible’*. But it seemed the work stopped here. Appraisal has become a descriptive presentation of the data collected.

These responses underlined the point that there has not been a clear vision and systematic approach to area appraisal. Most planners had no thoughts about which aspects of information should be obtained, and how to use it to generate design objectives and guidance. They were often confused by the huge amount of data they were facing and the possible ways that it could be used.

As established in the literature review chapter, the first step of an appraisal is likely to be a qualitative assessment of how the area performs in terms of urban design principles. These principles or objectives have to be clearly defined and conceptualised on the basis of urban design theory. It could be argued that it is due to the lack of a theoretical framework that data collected can not be well organised and properly analysed.

The urban design principles set out earlier can be used to order the considerations relevant to appraisal. But with the different local situations, there might be a different emphasis on certain objectives. This requires the local characteristics to be assessed against the general principles while identifying the constraints and opportunities of the area in terms of urban design performance.

In short, it is a good sign that the importance of appraisal in design has gained recognition among planners and architects. A simple assessment is better than not having one at all. However, the lack of a systematic approach for conducting effective area appraisal still needs to be addressed.

6.2.2 The Role of the Public

The public is the user of the city. Creating urban qualities to meet their needs is the ultimate task of urban design. Public involvement and participation in urban development is not a new topic in many western countries. However, is it necessary for the public to get involved in the planning process? If so, how should they be involved and to what aspect can they contribute? These questions are still under debate in China.

There was a general understanding that public participation and involvement in the planning process was undeveloped. This was recognised across professionals and the public alike.

Planners involved in the formulation of statutory plans held a very strong belief that planning should be a scientific endeavour. Well-trained professionals should be responsible for helping and defining the public interest in matters of development. Most planning officers felt that public involvement would not be very helpful due to poor public tastes and their exceeding emphasis on detailed issues.

One example, which was given by planning officers repeatedly during the interviewing was the exhibition of the Urban Master Plan of Guangzhou. After the UMP was prepared, an exhibition was held to inform the public about the general ideas in the plan and invite their views. This was very unusual because it was the first formal event of its kind. It was seen as a bold step forward in the development of public participation in Guangzhou. However, according to one senior planning officer from the GUPB, a very limited number of citizens came to view the exhibition. Even fewer of them commented on the plan, and the

value of these comments was rather questionable. In his opinion, the public's involvement did not make any contributions to the plan's revision.

Similarly, public involvement was considered as dubious by developers and architects. The main concern is the time and resources the exercise consumes. They felt that such exercise does not always return a compatible value, and would prolong the planning and design process, which is not suitable for rapid urban development in China.

The general opinion was that a real democratic participation of the general public was not currently being exercised in China. There is still a long way to go, and it will take an effort from all sides to finally progress. Planners believed that the most important issues today are to educate the public, and to promote public awareness of the importance of urban qualities. To do so, most planners and planning officers agreed that keeping the public informed of big planning movements and initiatives was necessary. Furthermore, thorough public consultation could be conducted to explore appropriate approaches to working with the public.

Residents' views towards public participation were rather contradictory. On one hand, most responses from the amenity group members revealed a lack of enthusiasm or a positive attitude towards participation in the planning process. On another hand, residents showed strong interest in the development going on in the city and its future movement. They were very concerned and wished to express their dissatisfaction over the problems, which seriously harmed their daily life and welfare.

In fact, only two among ten amenity group members could recall participating in the development of their areas. When asked whether they would like to participate, most were rather hesitant. They thought that urban development was the interior affair of local government. How to secure a good urban environment and good development quality should be the responsibility of the government and the local planning authority. Architects and planners were the

professionals who should be responsible for design quality. Some further questions revealed that they lacked self-confidence in their ability and planning knowledge. Yet, somewhat ironically, there was a lack of trust of the local government. They did not feel confident that their opinions, if expressed, would be taken seriously.

Normally, only specific problems that affected residents' personal welfare would raise their attention. Only when a development threatened to harm public interests and cause serious problems, would city residents make their views known via the citizen's hotline, public media, or other means. In fact, this type of participation is ex-post facto. The problems that should be solved at the stage of plan examination and revision were not faced up to and reappeared at this later stage. This delay intensified the conflicts, and caused social and economic losses that could have been avoided beforehand. The evidence from residents tends to square with comments about public awareness of the role that residents play in urban development.

Some developers indicated their willingness to consider public desires on design matters, particularly in housing developments. Potential customers' social status, desire for house type, expectation for outdoor environment and standards of servicing facilities, even the desired building style were the main factors to be thought about. But they mostly relied on market research or the prediction of the future market needs. There are a great number of failures due to the wrong market orientation and limited consideration of surrounding areas. Again, we see a need for careful investigation and appraisal as a necessity in the plan making process.

6.3 Planners' Views of Design Control Effectiveness

6.3.1 Local Policies are not Effective in Providing Principles for Decision-making

Design policies/plans should play a vital role in assessing the design aspects of a development proposal. But do they provide useful principles for decision making for planning officers? The question was tested with planning officers from different sections of the local authorities.

The responses revealed a strong criticism of the value of local plans and policies. One third of the planning officers interviewed believed the Urban Master Plan and district plans had no real role to play in design control since they gave little attention to design matters. They felt that although there were planning principles in the written statement, e.g. explaining the block structure and use of the district, the plan provides only basic design objectives which are far too general to help with their daily practical work.

The development of appropriate design guidance was commonly accepted by planners and designers. However, the format, content, and depth of details covered by this guidance caused a lot of debate. For instance, the DDCPs adopted in the 1980s, which intended to strengthen design control was criticised. In one planning officer's words, "*Guangzhou's DDCPs are largely a variant of traditional district planning at smaller scales, still, with limited design inputs. They share the similar inability on design with the District Plans which emphasise land use distribution and development intensity control*". For the DDCPs to play the expected role in design control, they should be more design orientated.

One particular weakness of statutory plans/policies as perceived by many planning officers was that they were not good at managing non-state piecemeal investments, such as joint ventures which are free from direct government

intervention. In recent years, foreign investments have increased in real estate development. One investment source is from Hong Kong and Macao. Actually, giving money to public welfare in one's place of origin was a time-honoured custom among Chinese emigrants. As the home of 80 per cent of overseas Chinese, Guangzhou attracted the lion's share of such generosity. With the introduction of market mechanisms and decentralisation of decision making, the planning and design of these projects is no longer undertaken by the same municipal planning and design institutes which have prepared, or are more familiar with, the statutory plans. Faced with planning applications put forward by private developers, planners felt that current design policies do not provide adequate criteria to evaluate them. It will take time for all actors involved to learn how the urban planning system works in a market economy where private property rights have to be protected.

6.3.2 Time and Resource Constraints

The main difficulty revealed by planners was the contradiction between the huge amount of development and time and resource limitations. Planning officers were anxious about work piling up on their desks and the lack of time to deal with it. They felt that any delay in the development process to accommodate design issues might be unwelcome for developers, and might even cause them to pull out of projects.

The pressure for a quick assessment of a development proposal also came from the local government. As the local government required all its agencies to raise working efficiency, planning authorities were being asked to speed up plan making and evaluation in the plan application process. Thus, many plans were only examined at the level of broad principal. This means that, as long as, the plan meets some basic requirements, such as the nature of land usage and intensity controls, it gets approved. As the most contentious dimension of planning, it is not surprising that design matters often receive little attention in such circumstances.

Many planners have experience of being required to complete a scheme in a rather short period of time. Budget constraints often pressure them to deliver the design results quickly. They are also aware that many small developments are designed by people with little or no formal design training, as one architect tried to explain in short: “*there are too many jobs, but very few good hands*”.

6.3.3 Political Pressure

Political pressure interfering with design control was frequently mentioned by planning officers. It was pointed out that political support would make a big difference in achieving good design quality. Enlightened attitudes towards design among city governors and politicians can therefore be a significant contributing factor to improving design control.

They noted that the politicians’ desire to use urban planning as a means to promote rapid local economic growth could sometimes severely impede the ‘scientificity’ of design control. The local political will for promoting economic growth, attracting outside investments and developments has always been a factor in the pursuit of high design quality. They cited that politicians tended to hold the view that economic prosperity must come first and that this is best achieved by a relaxed planning regime. Particularly, when a project is proposed in an area with a very low level of development interest, any kind of development was seen as important to the local economy. In these cases, getting something done on the ground frequently becomes the main priority for local government.

Officers from GUPB mentioned two housing development projects in Li Wan and Yu Xiu district as examples. These two urban districts are old city centre residential districts. The residential building density has reached 66.2% and 65.99% respectively, which is extremely high. For a long period of time, the high cost of land, removing old buildings, re-arranging local residents and providing public infrastructures stopped many developers from investing and

left these areas largely ignored. When development opportunities finally came, many compromises had to be made because of economic considerations and political pressures. *“Sometimes, even intensity control criteria and land use could be changed, let alone design issues”*.

With the transition of the development mechanism, there are still many vacuums and loopholes in the planning system and the developers know how to use personal contacts and other means to bypass planning control and maximise profits. ‘Back-door dealings’ were used to relax planning controls that interfered with the planner’s role. Although there was no hard evidence obtained from this research, planners hinted that corruption was indeed a serious problem in Guangzhou’s development control system.

Many planners also believed that the government would feel very uncomfortable when they have to abide by certain legislation because the officials get used to managing the city through ‘city mayor commands’ in which the commands from the city mayor can override all the plans. Some even felt this was the main resistance for a more comprehensive planning system.

However, if too many compromises are made, the process is rushed, mistakes can be made and it might take more effort to rectify these mistakes later than resolving them at the design stage. It has to be realised by all participants that good design does not necessarily cost more than bad. ‘In fact they should cost less and there should be always be a presumption in favour of design effort. Making time for design is the first rule of good design’ (English Partnerships, 1998).

6.3.4 The Lack of Legitimate Support for Urban Design

The lack of legitimate support from government and local policies was regarded as one of the main obstacles for effective design control. There is a lack of strong government back-up and legitimate support for urban design to

be interwoven into the policy making process but will eventually be successfully implemented. Although mentioned in the Explanatory Notes for the City Planning Act, it has not gained a firm legal status in the planning system. The methods and procedures of urban design policy making remain unclear. The question of which organisations are responsible for making and implementing such guidance has not been clarified. In other words, urban design is still not a 'material consideration'. This consequently, has led to deregulation in the design control process.

Among the actors in urban development, the politician tends to promote rapid growth to show the success of his administration. The developer knows how to use personal contacts to bypass planning control and make profits. The promise of investment and the development of community facilities are used in exchange for a relaxation in development control. Corruption and under-table dealings can even be utilised. The planner who is subordinate to the bureaucratic machine can not play his role properly in development control, and is often pressurised by other sections of the planning authority, higher level administrative organisations, and developers. The decision making process is separate from the 'real' decision making process. The closed door plan-making process and a lack of effective enforcement and monitoring often leads to planning delay, which in turn gives the politician the excuse to bypass planning control.

Because the current planning system heavily relies on administrative discrimination of the planning department in dealing with planning applications, interpreting design policies is generally left to planning officers. Thus, their professional skills and accountability become extremely important. A few planners admitted the lack of design skills and the lack of confidence about design judgements among planning control officers.

They felt that the discretion of planning is so large that it places the planning authority under enormous pressure from other government departments as well

as from developers outside the government. Thus, it is felt to be very difficult for officers to insist on their own professional knowledge, or to stick to certain planning principles without solid backing from statutory policies.

6.3.5 The Imperfection of Planning-related Organisations

Working relationships between different sections of the local government and planning authorities was not on the interview schedule at the beginning. However, the apparent conflict among these sections was revealed as one of the major obstacles for efficient design control. Many interviewees have pointed out the mix up of responsibilities of policy making, examination, revision and approval has often affected the quality of design that can be achieved.

Statutory plans are initiated by the local government and drawn up by GUPB or its subordinate planning institutes along with other relative departments. The final decision-maker is always the government at a higher level. For instance, the UMP should be submitted to the principal government and state council for approval; district plans and detailed plans must be examined and then approved by the municipal government. Normally, the planning bureau exercises the authority on behalf of the government. That is to say, in the case of Guangzhou, GUPB plays the roles of the initiator, the plan/policy maker, adjudicator and the executive body of planning policy.

The preparations of urban plans are undertaken by different teams and hierarchical urban planning and design institutes. Normally, these institutes can be divided into three levels: state-province-city. Besides, some universities' corresponding departments also participate in urban planning and design projects. Therefore, the roles are mixed up. Planning control officers could play the role of policy makers rather than policy executors. Planners and architects could also act as policy makers instead of applicants.

The functional overlap of different government agencies has also severely

hampered the effectiveness of the urban planning system as can be seen in the position of GUPB in the administrative structure. As the city government's planning authority, GUPB is also under the indirect technical supervision of the State Ministry of Construction (MoC). This dual leadership system creates a lot of tensions in GUPB, as the Guangzhou government and MoC often hold different views about urban planning and management. MoC favours tight planning control by city planning authorities, while the Guangzhou government prefers the devolution of planning power to facilitate economic growth at the local level.

The eight district branches of GUPB confront similar confusions invoked by the dual leadership, since they are not only under the administration of correspondent district governments, but also under the technical supervision of GUPB. The relationship between GUPB and its eight district branches has been debated in Guangzhou. The central issue is whether GUPB should exercise highly centralised control over its district branches or decentralise its planning power to various agencies at the lower level. The reality is in fact somewhere in between. Certain power is devolved to district planning agencies while GUPB maintains control of land-use planning at the district level. It is therefore not unusual for district planning authorities to follow the instructions of district governments and approve revenue-generating projects that may violate original planning intentions.

6.4 Developers and Architects' Views of Design Control Effectiveness

6.4.1 Local Policies are not Effective in Providing Guidance for Applicants

Design policies and guidance should also be able to provide useful guidance, explicit design requirements, and to work as a source of reference for prospective developers. Thus, whether they are efficient enough for

prospective developers and their design teams is another dimension to their effectiveness.

Through the published plans and guidance, potential applicants should be in a position to understand what development is likely to be acceptable to the local authorities. However, the interview responses revealed a surprisingly low awareness of local design policies among developers and architects. Only three among the twelve architects and none of the developers interviewed had a thorough understanding of the local statutory plans. These three architects cited that the reason they had some knowledge was because they were directly involved in some aspect of the plan making processes.

In most cases, developers and architects rely heavily on the Opinion Book on Location for Construction Program, and the Main Construction and Planning/Design Points issued for guidance. They are prepared by planning officers for the areas in which the project was sited. These specify the basic design principles and the main control indices. However, there was still a feeling among designers that they do not go far enough. In a few cases, the designers complained that their schemes were turned down simply by the personal opinion of planning officers. They expressed a desire for a more detailed and explicit design briefing and a wider approach to attain planning authorities' expectations on design.

6.4.2 Enlightened Attitudes towards Design

The consumers' attitudes toward good design were both positive and negative. It was evident that design has attracted more attention from all those involved in urban development. However, many respondents also emphasised that the rising concern for design quality was only one part of the picture.

Without exception, all of those interviewed regarded design as an important issue, which should be given high priority in development control. They recognised that the city's fast development, design quality and environmental

issues had become more important than ever before.

One architect said ‘Design quality has been given more weight currently than before. In the early stage of fast urban development in China, due to the shortage of basic urban infrastructure, how to meet people’s basic needs was the main aim of developments. Quantity and speed was emphasised over development quality. This pressure has gradually eased off with economic development. Today, people generally demand more from their living environment.’

The problems caused by the ignorance of urban design qualities have also been recognised. One planning officer noted that *“The rapid economic development has evidently resulted in changing the appearance of our cities through the construction of new buildings, the rebuilding and the expansion of roads. The city probably has changed more significantly in the past 20 years than it has in the last 200 years. In such a fast developing city like Guangzhou, there were many urban problems caused by overlooking urban design qualities. We are learning from these failures and are trying to overcome them in our future moves.”*

“Guangzhou is a densely built city with extremely incoherent urban forms. This partly arose from illegal construction, but the neglect of appropriate design control in the past cast more impacts.”

Another problem cited by many planners and architects is that the city is losing self-respect under the so-called ‘Globalisation’ process. One planner from GUPB said *“some people, not a minority, have such high aspirations that they believe modernity can only be shown by shaking off the traditional town appearance and keeping up with large western cities: the roads must be wide, the buildings must be high. Under the shadow of an ‘international city’, Guangzhou is pursuing greatness and modernity without self-respect”.*

“We’ve already realised that more comprehensive design intervention from the

government could help to improve these problems and others such as the poor quality of the public realm and environmental problems.”

People were pleased that more urban design initiatives and environmental improvement projects were taking place in Guangzhou City, and felt that these projects had helped to create a better climate for design.

It was admitted that more attention is likely to be given for developments in areas perceived to be ‘important’. But it was also made clear that this situation has not come about as a result of the planning officers caring less about good design in common development projects than those perceived as important ones. It was more to do with the fact that massive construction projects can not receive equal attention on design grounds due to the lack of design professionals and financial constraints. This was regarded as inevitable and unlikely to change in the near future.

6.4.3 Development Compromises

With the introduction of the market-led economy in China, the numbers of real estate development companies and private developers have increased significantly. Compared to the fact that the state and work units usually played the principle role in the past, private developers are now a stronger force in urban development.

This force has its own motive in urban development. As Booth stated, ‘Private developers are driven by the profit motive and by the requirements of their shareholders. Their concern for design stretches only so far as their marketing strategies allow; or if design either results in higher sales value for their products, or products which receive all the necessary approvals without delay’ (Booth, 1982, p. 21).

Developers cited economic pressure as the prime reason for not pushing up design standards, as this might push up the cost too. They remain ignorant both

of better ways of achieving the same end product and in improving their development's contribution to the environment. Nevertheless, due to more enlightened attitudes towards design among the general public, they admitted that design considerations had moved up the agenda. There was some evidence of a change in attitude in recent development. For instant, the case of Ming Ya Yuan housing development, which is described in detail in the next chapter demonstrated the developer's consciousness on quality urban design and architecture as a way of marketing their developments and attracting buyers.

The general opinion tends to be that although awareness of design quality is rising, only some important projects and some sensitive areas so far have received appropriate attention on design grounds. The approaches employed to deal with design issues in these projects often include special urban design studies, specialists consultations, with special attention drawing from the local government. These are not widely used in other areas (special urban design control approaches are discussed in Chapter 7). Therefore, the planning system has to take responsibility for encouraging good design, not just in sensitive areas, but everywhere. In China today, it is particularly important that high standards of urban design are set and upheld within the planning system.

6.4.4 Lack of Openness in Design Control Processes

Normally, professional consultation starts with planning officers handling the case consulting with colleagues within their team or in other related sections. It is only after drawing up the plans that experts are invited to comment. The lack of appropriate planning and design skills among the people who make the planning applications was pointed out by planning control officers. But this was not regarded as a problem within the local planning authorities. In fact, architects and planners staff the design sections and related departments in GUPB and other government offices almost exclusively.

Only for some important projects or developments in sensitive areas specialist

consultation adopted at the stage of plan examination and approval before the final submission. Public consultation was never mentioned by planners, and in fact, this stage is largely overlooked in Guangzhou's design control process.

The Urban Design Office is a new set-up under the GUPB. It has started to take responsibility for providing urban design advice and evaluating proposals on design grounds. Though not for all cases, some important developments with an emphasis on urban design have gone through the process of consulting with specialists in the office. There is also a standing body named "the Guangzhou Urban Art Committee" which is responsible for guarding urban design qualities for weighty development projects in Guangzhou. Specialists in the committee are from different planning related trades. They are nominated by the local planning authority or the city government. It is assumed that because they have a fairly high academic standing, their advice could be influential and should be recognised by government leaders. Occasionally, temporary committees are set up for specific cases.

The legislative power to monitor government administration is vested in the assemblies of elected members – the People's Congress at different levels. Examining local plans is also a part of its responsibility. Local plans must be submitted to the People's Congress Committee at the same level for deliberation before the decision is made. Municipal government should report to the People's Congress every three years according to the implementation of the Urban Master Plan and various detailed plans. Similarly, district or county governments should report to the people's congress and the municipal government every two years. The representatives of the People's Congress are elected by local citizens. Theoretically, they should be able to represent general public interests. In practice, however, when design issues are related to a development proposal, people who make up the committee to review the plans and raise suggestions are, once again, from offices in GUPB, its institutes or related trades. Thus, although the supervisory system exists, it was a real concern of many respondents that this highly centralised power of GUPB

provided scope for corruption, and at the same time, narrowed the opportunity to gather the views of the various participants.

6.5 Conclusion

1. It has emerged that a thorough understanding of the local context was generally recognised as the basis for the preparation and implementation of planning policies/plans. However, planners doubted the actual value of appraisal carried out in practice. Most planners tend to have a fairly low understanding of what information needs to be collected and how to analyse it in order to achieve the planned goals. Thus, instead of being analytical, appraisal has become a descriptive presentation of data collection. Complaints about massive data collected and its low value of utility emerged. While accepting that the current approach is not ideal, some planners showed a great willingness to explore a more comprehensive approach.
2. There was a general understanding that public participation and involvement in planning process was undeveloped. The resistance comes from both the professional side and the public side. As Turok has concluded, the lack of involvement in decision making may stem from disillusionment, apathy or a feeling of powerlessness, or it may stem from a non-consultative, 'top-down' style of political leaders, professionals and established bureaucracies. Either way, power remains beyond the influence of marginalised communities and decisions may be taken that are not in their best interests' (Turok et al, 1999, p. 380). The situation in Guangzhou is that the general public is only occasionally informed of the result after the decision was made instead of being involved in the planning process. In turn, they lose their enthusiasm for participating due to the local authorities' ignorance, and generally feel that their opinion would not be counted. Therefore, there is a strong argument for putting more effort in

public participation. It has to be recognised that ‘securing high quality urban environments has as much to do with the public level of awareness on urban design as it is about the skill of professionals involved in the day-to-day management and implementation of schemes’ (Urban Task Force, 1999, p.81). It also has to be recognised by planning professionals that ordinary people might not share the values of the planners and designers. It is frequently possible that this will separate the city builders and the users of the city. This gap can only be bridged by actively engaging local people in the planning process. To achieve this, it is necessary to develop methods and techniques for the involvement of the public to gain a balance of the interests from all sides.

3. The value of current design guidance mechanisms (design policies in local statutory plans, local planning regulations and guides, and planning and design briefs) was largely criticised. Both planning control officers and planning applicants (developers and their design teams) have considered that these mechanisms were not sufficient enough for either providing assessment criteria for decision making, or providing appropriate guidance for preparing planning applications. These tools were unsophisticated in their content and operation, and wedded to standards-based indices control of development intensity factors. They were not effective means to control design or to influence the delivery of better design quality development. A strong desire was expressed to seek more effective and innovative methods and to ensure a more objective, preconceived basis for design control.
4. Time and resources constraints and political factors were the main tensions among the participators in the planing process. When budgets are constrained, qualified professionals are limited. When there are pressures to deliver design results quickly, it is not always possible to meet the highest design standards. It is worth pointing out that political factors tend to hold strong influence upon planning control in Guangzhou. Design qualities are often compromised by the political ambitions of government officials and

economic needs. Government's concern for the wider public interest is often swept aside for bureaucratic convenience and in the pursuit of other planning demands such as local economic development. Decisions made on design are influenced, and thereby constrained often by a wide range of conflicting factors, particular to local economic circumstances. While the situation that not all the developments in the city would receive equal attention on design was seen as inevitable, nevertheless, the potential for planning authorities to encourage better design through statutory control and other forms of guidance is likely to continue to be of leading importance. The need for advocacy in design matters was felt to be particularly relevant to promote a higher public awareness of, and interest, in design, and to impress that higher design standards are expected from prospective developers. And particularly important, people with political and economic power in urban development have to recognise the value of design.

5. The main obstacles for effective design control were found in both the design management mechanisms and the current planning system itself. A mix up of responsibilities of policy making, examination, revision and approval among various departments and offices under the local authorities can impede the effectiveness of design control. On one hand, the responsibilities for design control spread through various sections. On the other hand, no one has a clear understanding of what responsibility they should take. In fact, urban design issues are sometimes left in no one's hand.
6. The decision making process is largely a black box. It is mostly done within the administrative network or through negotiations between the government and investors behind closed doors. Some kinds of professional consultation were undertaken, but normally only for the important projects or for developments in sensitive areas. The public is excluded from this process. The supervisory role, played by the local or district committee of

the People's Congress on development is fairly limited. This closed planning process encourages corruption and enhances personal interference from development interests and politicians.

7. Despite the local planning authority's concern for design and some new initiatives, the situation is that urban design still lacks a clear legitimate status in local statutory plans and guidance. This has not changed. In this context, developers and designers felt that there has been too much discretion left to the planning officers. Planning officers were unhappy with insufficient policy back up and felt it was difficult to deal with pressure from all directions without them. These conflicts have been intensified by recent political and economic circumstances. Planners found it especially difficult to handle non-state development and foreign investment projects equipped with current design policies. The main direction for change in urban planning system was felt to be the consolidation of the statutory status of urban design in local plans/policies.

It could be argued that due to the weaknesses discussed above, Guangzhou's current planning and design control mechanisms are unable to handle design control effectively. There are urgent needs for Guangzhou's planning system to be revitalised to improve the city's environment. The local authorities have shown strong interest in such an improvement. Some experimental approaches of design control aimed at tackling the problems from district-wide level to specific project level have begun. The next chapter analyses these initiatives and their effectiveness.

CHAPTER 7: DESIGN CONTROL FOR SPECIFIC DISTRICTS AND THE MODEL COMMUNITY PROJECTS

7.1 Introduction

Although it is argued that China has not established a comprehensive urban design control system, there are some experimental movements that have had a significant influence in recent years. Two types of approaches have emerged in the last decade in Guangzhou City. These are the newly introduced the Urban Design Plan (UDPs) for some specific districts, individual public streets or squares, and the Model Community Development Programme.

Although relatively small, these design initiatives have become the main experimental field for urban design practice in Guangzhou. This chapter discusses the use of UDPs and the spread of the Model Community Development Programme. It aims to evaluate their impacts, strengths and limitations in relation to improving urban design quality in the city.

7.2 Urban Design Plans

As the ineffectiveness of the current planning system in design matters has been gradually recognised, Guangzhou's local planning authorities have started to explore better means of tackling urban design issues. Urban Design Plans (UDP) emerged as an experimental urban design control instrument in the late 1990s. Recent UDPs are generally initiated by the local government. They are prepared by the planning department or planning institute under the Guangzhou Urban Planning Bureau. Some foreign planning/design companies are also invited to participate in design competitions. Once approved by the local government, the plans provide urban design guidance for the designed area. Started from the city centre area, a number of UDPs have been prepared in Guangzhou over the last ten years.

From local government's viewpoint, the uniform design intervention across the whole city is unsuitable in the present circumstance. Due to the amount of development undergoing in the city and the time and resource constraints, it is considered impossible to pay equal attention to their design quality. The economic and political pressure also made it a fact that design quality has to be compromised in some circumstances. Thus, the use of Urban Design Plan (UDP) is perceived as the proper approach to introduce tighter control in areas with 'special significance' or 'special impacts on townscape' at the current stage.

Reviewed here are plans for Guangzhou's major urban design projects which include *East Tianhe Train Station to Zhongxin Plaza Area Urban Design Project*, *Zhujiang New Town Urban Design Plan*, *Guangzhou City Government Area Urban Design and Improvement Plan*, and *Shangxia Jiu Road and Jiefang Road Improvement project*. The research has appraised these plans in terms of content, presentation and potential effectiveness. Broad conclusions have been drawn from this appraisal.

Through the researcher's personal site-visiting and interviews with the planners and planning officers involved, further case studies seek to examine the effectiveness of the plans in terms of their design outcomes, the added value they have contributed to the development, the wider public appreciation, and the extent of their dissemination as perceived by those they seek to advise.

7.2.1 Main Themes and Coverage of UDPs

Because UDPs are not statutory plans, their formation and content has not been officially regulated. There is a wide diversity of approaches to plan making. The coverage of urban design issues in UDPs is rather random and varies from one plan to another. However, they generally have a strong theme or a set of clearly promoted strategies with certain urban design issues emphasised.

One key consideration is how the proposed development scheme creates a

positive image, localised spatial structure and character for the area. This is largely backed by townscape policies based on site analysis. These policies provide guidance to deal with factors such as spatial axis, landmarks, views and vistas, skyline, building bulk and height.

How the development relates to its surroundings is the other main concern of the UDPs. The local context is identified as wider than the development's immediate surroundings. Historical, cultural, social and physical environments are covered. The development is also required to take account of area enhancement through traffic control, improving street lighting and furnishing, landscaping, replacing decayed public facilities and so on.

In conservation areas, special regard is paid to preservation. Listed buildings are strictly conserved. New developments in these areas are encouraged to make a positive contribution to the traditional character or leave it unharmed.

For new urban areas, urban design approaches are employed to generate a development framework dealing with the spatial, formal and structural relationships of the development. Experimentation in design is encouraged in non-sensitive areas. Creating a district image with strong local character, providing a well-organised transport system, qualitative public realm and a sustainable environment are major principles of this type of plan.

Compared to design guidance in traditional plans, the UDPs cover broader design matters. The coverage is more consistent and wider ranging than physical criteria alone. To avoid conflict with the existing Urban Master Plan and district plans, land use and intensity concerns are generally omitted in UDPs.

Urban design guidelines are usually contained in the first part of the plan. They aim to 'provide urban design principles and guidance for the main spatial elements within the designed area', and to 'build up a bridge between the construction, planning control department, planning and design institutes'.

‘Although it does not have legislative effects, it works as planning regulations and rules...to help achieve a more orderly visual environment, and to create more positive, active public spaces’ (Guangzhou Planning Bureau, 1995, p. 5).

UDPs provide design guidelines to deal with townscape and urban form issues, which include development form, spatial framework, layout, building orientation, sunlight and daylight, and public facilities. Specific guides are also placed on the spatial axis, road system, views, vistas, and building forms by relating them to the context of the development. Based on the analysis of the local context, important spatial elements are often identified.

Open space and public realm concerns feature strongly in improvement policies. These policies are frequently targeted at existing problems. General approaches adopted include creating new open spaces, traffic management, improving shop fronts and pavements, street lighting and furnishing, landscaping and replacing decayed public facilities.

Architectural policies embrace a wide variety of considerations in UDPs. They are generally contained under the section titled ‘Guidelines for Architectural Design’, or ‘Detailed Requirements for Building Design’. Some plans, such as East Tianhe area UDP, set up general policies advocating high-quality architectural and modern design, although they tend to be very general and are not explicitly explained. How to ensure new developments fit into a traditional street scene through architectural detail controls is the main concern for conservation and improvement-oriented plans, namely Shangxia Jiu Road and Beijing Road.

7.2.3 Target Audiences

Guidance is targeted at skilled and experienced planners and other professionals. The plan making and competition process is strictly controlled. Only people with proper authority and some experts are invited to comment. The time and human resources involved in plan preparation is considerable.

Normally, design competitions for plan making are held. Several planning/design institutes, even foreign design companies, are invited to take part. A provisional specialists committee or the Guangzhou Urban Art Committee will assess schemes for their urban design qualities. The winning plan will be revised according to the feedback before final approval by the local government. This process represents significant efforts by the local government and planning authorities. However, again, as with the lack of openness in statutory plans discussed previously, UDPs are poor at communicating with the general public.

7.2.4 The Emphasis on Area Appraisal

The emphasis on area appraisal has been a particular strength of UDPs. All of the UDPs studied showed a strong emphasis on area appraisal and site analysis. It is recognised by planners that appropriate appraisal is the basis for good policy making. Generally, two approaches are adopted for comprehensive appraisal: the historical review of the planned area, and an appraisal of local conditions. They compose a part of the plan (e.g. Table 7.1).

The review aims to put the development into a historical context. It addresses issues such as the social environment, localised traditions and culture, traditional townscape and architectural character.

The appraisal of the existing conditions embraces issues such as topography, development, movement patterns, visual and spatial structure, existing building forms, and architectural characters. Identifying the important public elements of the planned area is often an essential task.

Section 2: Project Background Analysis

This section analyses the historical background, spatial characteristics, cultural background, current land uses and transportation network of Guangzhou city government area. This is to recognise the historical and cultural value of this area, discover the existing urban problems, and to define the opportunities for its future development.

1.0 Historical Context

Reviewing historical development of the area. Defining the axis, landmarks, important public spaces, main commercial areas, localised tradition and so on.

2.0 Existing Conditions

2.0.1 The function of the area in the city

The area is considered the centre of civic life in Guangzhou with its political, commercial, and public functions.

2.0.2 Current land uses

Current land areas for various functions such as office use, park, road network, social parking etc. are listed.

2.0.3 Transportation system

Existing transportation system is analysed. Future need for expansion and alternation is considered.

2.0.4 Architecture and landscape

Identifying landmark buildings and their architectural styles including: the Guangzhou City Hall, Memorial Hall for Sui Zhong Shan, the constructions in the People's Park, etc.

3.0 Existing Problems

3.0.1 The broken spatial coherence

3.0.2 The transportation problem

3.0.3 The lack of public spaces in the area

3.0.4 The inefficient use of the Park

3.0.5 The isolation of listed building caused by the ignorance of their surrounding areas.

3.0.6 Poor maintenance and design of street furniture.

Table 7. 1: The extract of appraisal section as part of the UDP for Guangzhou city government area.

The methods used for area appraisal in UDPs tend to be more systematic than those in statutory plans. As many planners cited the main reason for the absence of comprehensive appraisal in statutory plans as being difficulties in responding to the variety of local contexts, we could expect these area-based plans to meet this need.

7.3 Urban Design Control for Specific Districts : the Case Studies

Three case studies have been selected to illustrate how UDPs help to achieve a better-controlled environment. They also aim to highlight the strengths and weaknesses of UDPs as a design-control instrument. The plans' overall quality of design coverage formed the basis of case selection.

7.3.1 Guangzhou City Government Area Urban Design & Improvement Plan

The planned area is located in the Yu Xiu district, the centre of the old city district of Guangzhou. The area is referred to as the Yu Xiu district plan area. The district has been developed as an administrative centre since 1949. Guangdong provincial government, Guangzhou City government, the People's Congress, and some other local administrative authorities are all located in the area. Comprised of some city level commercial zones, public spaces and historical buildings such as Zhongshan Wu Road and Beijing Road areas, Guangzhou People's Park, Memorial Hall for Sui Zhongshan and City Hall and so on, the area is also an important public activity centre with great traditions.

Guangzhou local government initiated *Guangzhou City Government Area Urban Design and Improvement Plan* in 1995. At that time, the main aim of the plan was to ameliorate the decaying public environment. After three rounds of specialist's assessment, the plan was approved and went into effect in September 1996. Three years later, with some recent developments, such as the completion of the underground line construction, the plan was revised (in 1999) to accommodate the recent changes.

7.3.1.1 The Plan

The plan outlines key objectives and guiding principles for the project to help the area to face new development opportunities while retaining its traditional

character.

The four general objectives established by the plan are:

1. Clarifying the stance of maintaining the local character and respecting the local context.
2. Setting out an urban design framework and guidelines to lead the future improvement of the area.
3. Emphasising spatial quality instead of appearance, aiming to provide more open and robust public spaces.
4. Taking this plan as an experimental case, to explore ways of improving urban design qualities in historic districts.

To achieve these general objectives, the plan adopted several strategies: the retaining and enhancement of local character; the creation of clearly defined and high-quality public space; the separation of pedestrians and vehicular traffic; and the provision of well-designed and maintained green and hard landscaping. As commercial uses are allocated around the City Hall and along two major roads, the plan also emphasises orderly shop fronts and advertisement and signage control.

A clear set of urban design principles was established for urban design elements. This constitutes the design framework for the project:

1. Streetscape
2. Public open spaces:
Opened ground level of several buildings,
Citizen's plaza,
The People's park, and
The City Square
3. Detailed requirements for building design
4. Pedestrian and cycle networks
5. Landscaping design guide
6. Public facilities and street furniture

These guidelines covered over 60 topics, which provide a comprehensive approach for dealing with urban design issues (see Table 7.2). To avoid overlapping with the District Plan and local standards, controls over some other important issues such as density, plot ratio, daylight and sunlight are not specified in the plan.

Category of Control	Urban Design Considerations
Streetscape	<ul style="list-style-type: none"> • Street paving • Refurbishment of old buildings should respond to surroundings • Suggested maximum or minimum heights are designed to primary blocks. Maximum height is 35m for the district. • Soft and hard landscape • For street safety, no obstacles at road crossing such as advertising signage. Clearly marked crossing-road footpath. • Spatial framework • Public art work • Control of signboard
Open spaces	<ul style="list-style-type: none"> • Abandon of bounding wall to enhance visual permeability • Open some buildings' ground floor and arrange chairs for resting use • Green landscaping, use of green fence. • Open the People's Park, which is previously closed and fenced. • City square
Architecture	<ul style="list-style-type: none"> • Retain the traditional urban scene and building form. • New development should respect the setting • All building set back from the street line for 5m. • Suggested building material and style • Parking control
Pedestrian network	<ul style="list-style-type: none"> • Separation of access for cars and pedestrian. • All areas with walking access should consider the legibility, accessibility by appropriate street furniture, pavement, and lighting, landscaping and public art design. • Consider accessibility for the disabled, young, and elder in design. Arrange special facilities when necessary.
landscaping	<ul style="list-style-type: none"> • Preserve old trees • Full hierarchy of green network • Variety of plants and trees • Proper use of green fence, hard and soft landscaping to lead pedestrian and prevent unwanted access. • Maintenance

Table 7.2: Summary of Urban Design Considerations. (The Urban Design Plan for Guangzhou City Government Area).

7.3.1.2 *Open Space*

It is recognised that high-quality public space is essential to counteract past mistakes in the district's development. This is successfully addressed in the urban design framework of the plan. Clear guidelines are established for landscaping design, generous building setback from the street, the opening up of previously closed park, green spaces and the creation of new public spaces.

Although not included in the plan, one planner interviewed revealed that an investigation was implemented during the plan making process through a survey of local residents and those from adjacent areas. It exposed an urgent need for open spaces within the area. The investigation discovered that the People's Park was perceived by the local residents as the most important space for public activities in the area. However, due to management problems, it has been closed and surrounded by boundary walls. Like most parks in Guangzhou, an entrance fee is required to support the maintenance of the park. Moreover, because the park is located at the intersection of several busy districts, the enclosure was considered necessary by the management team to prevent intensive pedestrian use which would have caused potential damage to the green and valuable old trees.

The opening up of the People's Park is the first step in tackling the lack of open space highlighted by the plan. The debate recognised that instead of contributing to the area's environment, the closed park had created a closed block in the centre of the district, which has become an obstacle on the spatial axis between the eastern and western parts. And in an area where open space is so scarce, access to the People's Park is of great benefit to local residents.

The plan therefore suggested opening up the park, replacing the existing enclosure with a green landscaped natural height difference between the pavement and the park to create a natural boundary. By doing so, the unnecessary passing through could be avoided, while the openness of the space

could be maintained. Mature trees and historical constructions in the park are preserved, along with the improvement of soft and hard landscaping. The adjacent block has been merged into the open space as a hard-landscaped Citizens' Plaza. To achieve this, an exiting road was cancelled. Furthermore, the ground floor of City Hall was opened up to create a grey space for public activities.

The Park area is becoming the most popular place for local residents. People use the place for gathering, performing, relaxing, and doing exercise (see Figure 7.1). The place also attracts a lot of tourists who come to view the civil culture of Guangzhou.



Figure 7.1 Local residents playing Chinese traditional drama in the People's Park (Photo, author, 2000).

7.3.1.3 'Added Value'

To many planners, the plan is also considered an important case to illustrate the 'added-value' UDPs have made to the built environment. It shows how they

revise and adjust weakness in statutory design control.

Because of the construction of an underground line, a main station is proposed at the site in front of the People's Park. Considering the potential development profit, two primary blocks – Y-9 and Y-10 on the site were originally planned for commercial use - were leased to the underground company for the construction of two 48-storey office buildings.

As revealed by the project planner, a study was carried out to assess the impacts that these two high-rise buildings would have on the surrounding built environment, and their influence upon traffic and pedestrian movement. Negative impacts were discovered. Based on the study, the UDPs provided a different proposal for the site in which the proposed two high-rise office buildings were replaced by a public square.

The planner stated *“This change was made not only on the consideration of visual impact of the two buildings over townscape, but also from the consequences they may bring to the area which may cause traffic and environmental problems”*.

7.3.1.4 Appraisal

An extensive area appraisal is contained in the first part of the plan. Through a review of historical development and an analysis of present local conditions based on historic and social diversity, spatial structure, built form, public spaces and open space, some important urban design factors and existing problems are identified. By responding to the synthesised local situation, the project's objectives are clearly directed. The development framework has been formulated on this basis and fed through into the following policies. Moreover, as mentioned above, a survey among the local residents was conducted to help obtain their perceptions and needs, which is a very rare case in Guangzhou. The planners considered that the clear linkage between the analysis, the established urban design objectives and the following policies is a noticeable

strength of the plan.

7.3.2 East Tianhe Train Station to Zhongxin Plaza Area Urban Design Project

Tianhe District has been developed into a new city centre in recent years. It is both a transportation core and a commercial centre for Guangzhou. Due to previous mistakes with regard to site selection, Tianhe Train Station is confined to a narrow space that makes it very difficult to expand and accommodate the increasing traffic flow. With the recent construction of several high-rise office buildings, the area is now facing increasing pressure from congestion, poor traffic conditions and severe lack of open space.

7.3.2.1 The Plan

The urban design plan for the area has three main objectives: to re-organise the traffic, to control and adjust the spatial relationship, and to create more open space. The plan is divided into two main parts. One is the urban design guidance and schematic drawings for the area. The other is a short-term improvement plan which is aimed at readjusting the existing illegal constructions, reorganising the transportation facilities, and improving the streetscape. Table 7.3 shows the major concerns of the urban design plan for the area.

Categories of Control	Issues Concerned
Urban form	<ul style="list-style-type: none"> • Consider urban context and historical continuity • Enhance the position of Landmark buildings and organise spatial order • To create rich, identical and rhythmic skylines through control of building height, mass and layout.
Open space	<ul style="list-style-type: none"> • Urban plaza and open space • Streetscape and green spot • Design for the disabled
Street	<ul style="list-style-type: none"> • Stricter setback to provide wider street and continuous pavement • Improve the linkage of pedestrian system by constructing bridge and subway • Provide pedestrian friendly street environment • The use of street furniture to enhance area identity • Service radiation for facilities such as public phone box, litter, street light etc.
Advertisement and sign board	<ul style="list-style-type: none"> • Restriction for advertisement display • Requirements for advertisement and signboard
Urban lighting	<ul style="list-style-type: none"> • Street lighting for safer street • Lighting to improve city scenery and atmosphere

Table 7.3: Major Urban Design concerns. (Urban Design Plan for Tianhe District).

7.3.2.2 Townscape

The UDP generated a lot of attention during its preparation and review process. Particular interest was expressed from the city government. It wanted to use the 'window zone' to demonstrate the city's 'modern image'. This desire is reflected in the plan's emphasis on townscape issues, especially in the three-level building height control: base layer – 15-30 meters, second layer – 100-160 meters, and the 200 meter high Zhongxin Plaza as the highest point of the city's skyline (see Figure 7.2).

Many planners saw this case as an important landmark in urban design planning for its contribution to the spatial structure of the district. For instance, during the planning process, developers and design architects wanted higher buildings to show off the builder's social and economical status and grandness. However, after a thorough investigation of its potential effect on the area's spatial structure and traffic conditions, a proposed 30-storey high-rise building for Shangri-La Hotel on the north side of Zhongxin Plaza was called off. This was considered by one planning officer as *"a big and difficult move for the city government and planning authorities due to the pressures from all sides"*, and *"a big step forward in urban design"*, because *"this decision was made from the urban design aspect and the city's interest instead of political or economical pressures"*.



Figure 7.2: The modern image of Tianhe District (Photo, author, 2000).

7.3.2.3 *Visual Richness against Functions?*

There has been some suspicion expressed over the emphasis on aesthetic value and visual richness in the project design. The mostly debated spot is the soft landscaped square constructed between Zhongxin Plaza and Tianhe Station, which covers nearly 40,000 square meters area.

Some considered it a success as it provided a green lung in the densely populated district and created a landmark. However, others felt it was designed as a “decorative door mat of the city” with no practical functions. Their view is that the design did not consider how to incorporate public activities, which is an important issue for such a large public green space. Access to the well-landscaped green is forbidden, and there are no other facilities to accommodate short staying or resting (see Figure 7.3).



Figure 7.3: Zhongxi Plaza (Source: internet).

7.3.2.4 Improvement Policies

The establishment of improvement policies aims to make some noticeable changes in the district within a short period. The plan contains a separate section for area enhancement and improvement with five topics highlighted following an exhaustive analysis of the area's existing situation. The five topics include:

1. temporary or illegal constructions
2. construction sites
3. streetscape
4. disordered parking and illegal occupancy of street
5. advertisement and sign boards

Improvement policies and detailed measures are established under each topic. (See Table 7.4 and Table 7.5).

No	Use	Located Block No	Existing Problems	Suggestion for Improvement
01	work shed	A-02-b	inappropriate location, untreated building appearance, sever harm to townscape	screen the site by large-scaled, high quality advertising board, or relocate if possible
02	see above	A-04-c	see above	see above
03	shops and eating house	B-13-A	inappropriate massing, decayed exterior appearance, impair to townscape	Suggest demolishing immediately. Further use of site will be open green or public square
04	see above	B-16-c	see above	suggest to demolish in good time
05	warehouse	B-19-a	decayed exterior appearance	suggest to demolish immediately, retreat enclosure
06	furniture market	B-20-c	inappropriate location	suggest to demolish in good time
07	shop	B-26-b	has exceeded street line	draw back to suit the planned street line
08	personally constructed houses	B-28-b	unpleasant appearance, illegally seized street pavement	demolish within a stated time

Table 7.4: Control for temporary or illegal constructions, Tianhe District.

Guiding Principles for Controlling Temporary or Illegal constructions

1. Classify all temporary buildings and constructions into illegal construction, approved temporary construction, and personally constructed houses.
 2. Demolish illegal constructions within a stated time, which includes those in block B-13-a, B-16-c, B-19-a, B-28-b, and B-31-b.
 3. Rectify approved temporary constructions, regular its boundary, land usage, street front. Namely temporary buildings and constructions in block A-04-c, A-05-c, B-20-c, and B-26-b.
 - Construction range - must not exceed the site red line and street line.
 - Land usage - retail shops and shops of service trades, strict control over restaurants and eating-houses.
 - Shop front - building on the street front should be two-storey high with integrated style.
 - Advertisement boards are not allowed to display on the elevation facing the street. Shop signboard should be paralleled on the wall, 3 meters higher from the ground. The distance from the outside edge of hanging signboard to the wall must be less than 0.5 meter.
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Table 7.5: Guiding Principles for Controlling Temporary or Illegal constructions, Tianhe District.

7.3.3 Shangxia Jiu Road Urban Design Project

The other kind of 'urban design' practised in Guangzhou is the improvement of existing 'important' streets, squares and other types of public spaces. These include Beijing Road, Shangxia Jiu Street, and the Pearl River Banks Urban Design Projects. They deal with individual urban spaces and the network of public spaces they form. Generally, conservation of the historical character, enhancing the area's identity, improving the visual amenity, and providing high-quality open space are their main themes. Examined here is the Shangxia Jiu Road Urban Design Project.

7.3.3.1 Visual Amenity

Shangxia Jiu Road is one of Guangzhou's most popular shopping streets. The

buildings along both sides of the street possess typical architectural features with three to four storeys and arcades on the ground level facing the street. They also provide protection for shoppers from intense sunshine and unexpected showers in Guangzhou's semi-tropical climate. Thus, one of the basic design concepts adopted by the UDP is to preserve traditional architectural characteristics. Suggestions for the style of shop front were incorporated into the design of open space with the replica of the historical arcade framing outdoor sculptures, plants and other landscape features. Also, the pedestrian space at the front of the shops was re-designed and re-built to make it more amiable to the public. Further restrictions and suggestions were established for future in-fill and refurbishment of the existing buildings to ensure that the street retains its scale, its characteristic elements, and continuity to the surroundings.



Figure 7.4: Streetscape of Shangxia Jiu Road (Photo, author, 2000).

7.3.3.2 *Public Spaces*

In order to avoid falling into the category of ‘skin treatment’ which this type of improvement project normally does, three strategies were set out to address the public realm issues. They are to:

1. strengthen the pedestrian system and gradually weaken the vehicle system to achieve a total pedestrianised street.
2. create more public open space for public activities.
3. unify the scale, style of shop elevations and street furniture to create area identity and to increase cultural atmosphere.

Concern for pedestrians is included in the definition of road functions and is illustrated in the road network section. Generous setbacks are designed on major roads. Suggestions are also made for weekday traffic control and access restrictions for motor vehicle during weekends in order to make the street more pedestrian friendly. The relationship between the pavements, the setback spaces, and ground floor activities are stressed in the guidelines.

Along with criteria prescribing setbacks on the street, the open space system section sets up design principles for public squares, parks, and encourages individual developments to create space open to the streets. The main designated public spaces include: City Square at the north end of the street; Historical Square in the middle part of the area; River-side Square at the west end of the street, near the Pearl river. Furthermore, a public park is also planned. According to one of the plan makers interviewed,

“The major difference between this plan and traditional street improvement plans is that we did not stop at improving only the ‘surface’ of buildings. The vitality of the public spaces is given more attention than pure architectural refurbishment in planning. Within practical and financial limits, we made great

efforts to create more squares, greens, resting spaces. Street facilities and landscape are designed accordingly - all aiming to create high-quality public spaces.”

Signboards, advertisement and lighting problems are highlighted in the plan. The negative impacts they make on the street scene, visual amenity, and sometimes traffic vision, are considered by the planners to be severe problems that need to be tackled. Many buildings in the area are masked by enormous advertisement boards and scrolls. They have made the building form and architectural features indistinguishable. Large-scale advertisements on the top of buildings invalidate the massing and height controls, which are intended to contribute to the townscape and skylines. Disorderly display hoardings are often criticised by drivers and pedestrians because they block their line of vision (See Figure 7.5).

Thus, specific guidelines for advertisements and signboard control were established in a stand-alone section. The location of advertisements is strictly controlled.



Figure 7.5: Disordered advertisement and signboard (Photo, author, 2000).

The project planner stated that *“Advertisements are prohibited on the top of landmark buildings, crossing-street pedestrian bridges, and major city squares. The advertisements along sidewalks should be carefully designed and arranged in conjunction with the design of street lights, bus stalls or information signboards. Co-operation between shop fronts and signage design is encouraged”*.

During the site visits, the researcher had the opportunity for informal conversations with shoppers and shopkeepers. They pointed out that the traditional streetscape, building forms and especially the arcades were some of the city’s most important traditional features. One local shopper said *‘I enjoy shopping in the area, walking around the streets ... These streets and those buildings are part of Guangzhou’s history, I cannot imagine they were turned into something else’*. Evidently, the plan’s intention to preserve some memory of the past has been welcome. Two shopkeepers interviewed commented that after the completion of the project, more shoppers and tourists have been attracted to the street due to the better environment and the enhanced historical street features.

7.4 The Model Community Programme

Housing development has always composed the main stream of urban construction in China. Many Chinese cities have experienced massive housing construction along with rapid economic development and various economic-social reforms since 1978. Living conditions and housing quality have been improved. Nevertheless, many problems remain.

To tackle these problems, the Ministry of Construction initiated the Model Community Programme in 1986. It aims to develop high standard residential projects, and experiments with new planning and design concepts and technologies in residential developments. The number of these model communities reached 244 by 1996. Only one year later (in 1997), there were

over 400 model communities all over the country (Zhu, 1998).

7.4.1 Present Situation and Problems in Housing

7.4.1.1 Uniformity in Housing

First, the planning and design methods employed in some residential developments are outdated. They could not meet people's changing needs for a better living environment. Under the influence of traditional socialist ideology of "standardisation" and "equalisation", houses in many developments are still arranged in a pattern of well-ordered columns and rows all with the same appearance (see Figure 7.6).



Figure 7.6: The standardised housing in China (Source, internet).

Standardised density and rigid intensity controls have helped create uniformity in housing. A lot of people feel that houses in the city suffer because of this uniformity. The exception are the high-class residences, but these are beyond the reach of ordinary residents.

The growing diversity of the social and economic context, along with the introduction of many foreign ideologies, economic systems and social structure, means that uniform housing design and planning could no longer fit into society. The issues of identity and variety in residential planning are now facing Chinese planners and architects.

7.4.1.2 *Poor Quality of Public Space*

The quality of common spaces has been largely ignored in the past due to the huge demand for housing. Rapid construction was pursued in order to provide more living areas in response to the housing shortage. Many residential areas in Guangzhou have a high density and lack open spaces. While some residents are not bothered by the lack of accessible common space, some research has shown that certain people, namely the elderly and the young, do suffer. These groups have less mobility and are likely to be more homebound than working people. The problem is also emphasised by parents who have pre-school children (e.g. Yeh, 1999).

Recently, an awareness of the importance of providing common spaces has been rising and it is now being given more emphasis in housing developments. The main pressure comes from the housing market as people start to place higher demands on the outdoor environment when they have the financial ability to chose their own home. 'The shifting attention from private indoor environment to public outdoor environment in the current housing market is an ideological change to both designers and users' (Nie, 1999, p. 7).

The overall lack of open space is one problem. At the same time, its designation and defined functions are also problematic. It could be argued that

the variety and multi-functions of the public realm need more emphasis. The public area needs to be more carefully planned and designed, and consider the distinctive needs of its different users.

7.4.1.3 *Social Environment*

One growing social problem in new residential areas is the decrease of local and neighbourhood-based socialising.

Up to the late 1970s, housing development was based on the project specific development method. The state work units built and provided houses for their workers. People who lived in the same area were very familiar with one another. With land and housing reform, large commercial housing areas have been built. Project specific development has been replaced by comprehensive development. The reorganisation of housing production has entrusted the municipality and real estate companies with undertaking development works. These new houses are largely sold to work units and then allocated by them to their staff. They are also sold to individuals. Consequently, the old community structure has disintegrated. The composition of residents in one area is more complicated than it was before. The situation has contributed to the decreased socialising in newly built housing areas, especially in commodity houses. The negative psychological impacts on their residents, particularly on the elderly and the young, are apparent, as they seldom step out of their homes and have little contact with neighbours.

The changing organisation of communities also causes safety problems. With the breaking up of old neighbourhoods, people stop relying on neighbourhood surveillance for crime prevention, and instead, use security devices such as burglar alarms, window locks or metal doors. These are popular in new developments. Although such security devices seem to have promoted people's feeling of safety, the statistics do not fully support this. A recent survey showed that the house break-ins accounted for 60 per cent of total crime, and it

has been increasing from the 1980s especially in the new built commodity housing areas (Pu & Liu, 1997). Therefore, ideas about improving neighbourhood safety through planning and designing have started to emerge, such as the adoption of 'the defensible space' concept. Neighbourhood surveillance and community control are encouraged, and activities in public spaces are promoted.

7.4.2 The Guidance for the Model Community Programme

Confronted with these problems, the Model Community Programme was carried out in many Chinese cities. As guidance for these 'special' housing developments, a *National Guide for Planning and Design of Urban Residential Demonstration Projects* was issued in 1994, and then revised in 1996. It represents an ambitious attempt to push housing quality a step forward.

The preparation of the detailed plan for these projects is generally under the control of the Guide along with other local legal requirements. The main design concerns of the Guide are illustrated in Table 7.6.

As with other generalised guidance, some of the design issues addressed by the Guide still describe general principles such as 'appropriate development scale and structure level', 'integrated design', 'local context' etc. Nevertheless, it does provide some guidelines which developers have to comply with. Such guidelines grant the local authority a degree of discretionary power, and also provide a framework to judge and interpret further planning and design.

Compared to the national residential planning and design standards for common areas, there are some significant changes and new directions.

The first is the introduction of the concept of 'Community' to replace the traditional 'Residential Unit'. This reflects the tendency towards considering people's behaviour, life patterns, and other social needs in design - as opposed to the narrow physical planning focus of the past.

Secondly, there is a clear commitment to achieve sustainability that involves concern about the conservation of resources, minimising pollution and maintaining a balance in ecological systems. Environmental concerns about location are considered from two aspects: the environmental significance of the particular site, and the environmental impact of the resulting urban form. Specific environmental issues such as site layout, infrastructure provision, water and sewage disposal, transport provision, building orientation and distance in between, individual building design are required to be considered.

Thirdly, to reduce the negative impacts of traditional planning methods on residential development, the Guide encourages diversity of site layouts (as opposed to the 'column and row style'), variety and innovation in building design and the identity of the community.

Fourthly, it shows special concern for public open spaces. Apart from the always-required green ratio, clear definition of the nature and the purpose of open spaces is seen as essential and is highly encouraged by the Guide.

Fifthly, there is a clear recognition of the importance of spatial qualities and sequences, rather than pure architectural details, as being central to good townscape. Developments are encouraged to pay attention to the organisation of spatial relationships and to create an identical image for the area.

Finally, measurements for car parking spaces are established officially for the first time. Parking spaces are set at a minimum of 20 per cent of the total household numbers, with 30 per cent for the southern coastal cities.

These guidelines form the basis upon which more detailed decisions can be taken and lay the foundation for further design policy making.

The following case of Mingya Yuan Model Community in Guangzhou demonstrates how these guidelines are reflected and translated into action.

Design Control Category	Concerned Issues
planning structure	<ul style="list-style-type: none"> • appropriate land use in residential areas • consider local context and organise the relationship with the surrounding environment • appropriate scale and structure levels • avoid negative influence from non-residential land use in the area
road system and transportation	<ul style="list-style-type: none"> • clear hierarchy of road system, consider the internal connection and integrated with the outside • well organised vehicle routes and pedestrian system • min. parking spaces-20% of the total households, in southern coastal cities-30%. • road system should consider the needs of the disabled
building groups	<ul style="list-style-type: none"> • appropriate combination of housing types considering local economical conditions • encourage multi-storey houses, and combination of low, mediate and high rise dwellings • individual building design should be integrated with area planning, special attention to community identity • proportional requirements and min. dimension for distance between buildings
greens and outdoor spaces	<ul style="list-style-type: none"> • min. green ratio-30%. • consider convenient access for residents, appropriate purposes of open space for different users. • specialise environment design or landscaping design, but must be incorporated within the whole planning process
technical and economical indexes	<ul style="list-style-type: none"> • comply national residential planning and design standard (GB-50180-93)
detailed design requires	<ul style="list-style-type: none"> • architectural variety in housing design • represent local cultural and architectural characteristics • with special attention to ground level, top, roof, corner and end of buildings

Table 7.6: The main design concerns for the National Guide for Planning and Design of Urban Residential Demonstration Project.

7.4.3 Mingya Yuan Model Community Project in Guangzhou

Mingya Yuan Model Community Project is considered a successful case of residential development, both ways in terms of achieving high development quality and good economic results. The incorporation of a strong urban design philosophy to its detailed plan has been a key ingredient in the success.

The importance of a clear hierarchy of open space is stressed in the plan. The nature and purpose of public spaces is carefully defined. As opposed to the conventional way of arranging a communal green space in the centre of the residential zone, the project adopts a more sophisticated approach which considers land form and the local context. Soft and hard landscaped open spaces with well-defined purposes are integrated around the buildings. At the same time, by opening up some buildings' ground floor for outdoor landscaping and planting, some semi-open spaces are created for public activities regardless of Guangzhou's tropical weather conditions. Each open space is overlooked, but not completely surrounded by buildings. Meanwhile, they also provide a sense of safety. Having spoken to some residents during the research, the results tended to be highly appreciated.

The detailed plan calls for a mixture of public open space for a variety of activities, which encourage the interaction of children, adults, and the elderly. The public areas have been well landscaped with grass and trees. Places close to the houses and semi-open spaces on ground floor are designed for sedentary activities such as chatting and playing chess or cards. For more active exercise, residents can go to a large public green nearby, which contains small children's tot lots, game courts, and picnic areas.

Creating an area with visual character and identity is another main objective of the plan. The architects' view was that the layout and building forms resulted from comprehensive considerations combining trying to make full use of the land, the local climate, daylight, safety issues, and, to create a pleasant visual

appearance and rich outdoor spaces.

High quality finishing materials and colours have been used to ensure that the buildings are constructed to a higher specification than the norm. Although there is only one design and planning institute undertaking the whole project, the intention of avoiding the creation of uniform architectural appearance across the site was clearly reflected in the plan. Individual buildings were designed according to the planned location with harmonised but varied architectural details. The combination of well-organised multi-storey flats and high-rise apartments together with saw-tooth shaped building outlines have created an interesting skyline for the area.

Generally speaking, the project has succeeded in creating a varied visual environment with a unified urban character. This is due in part to the urban design considerations in the detailed plan. Carefully defined open spaces delineate public and private space contribute to residents' sense of security and encourage social activities. While the local community did not play a major role in the stage of development, the established residential association suggests that residents will play a more significant role in the future.

It is worth mentioning that these model community plans generally possess better planning and design quality than normal housing developments. Despite increasing numbers, they still constitute a minority of the housing developments taking place. Although Mingya Yuan hardly represents the average, it does reflect the current attempts being made to achieve a better living environment. In addition, we see a new awareness of the role of urban design in residential planning.



Figure 7.7: Housing in Mingya Yuan (Photo, author, 2000).

There is a potential problem emerging with the increasing difference between the quality of housing developments. In the past, there was no obvious social segregation based on economic status. This is because, in the socialist economy, there was no big variation in family incomes and one's social and economic status often did not correspond to each other. After the establishment of a real estate market, a number of high-class housing developments were constructed for high-income residents. Along with increasing income differences and the proliferation of non-state ownership, differences in terms of social aspects are emerging. As a demonstration project, Mingya Yuan is such a case. The desire to protect the development from surrounding commercial

uses and other neighbourhoods is evident in the layout of the development. The perimeters of the development are marked by fences and the whole development has several security controlled entrances with security cameras all around. As a 'show piece' project, the development is outstanding. But it remains isolated from its surrounding neighbourhoods.

To explore the question a little further, the researcher also took the chance to visit another high-class residential development and spoke to leading planners of the project. Dexing redevelopment project in Guangzhou is located in Liwan District, which is one of the highest density districts in the old city centre. The district is extremely crowded. The building sites of some communities cover 60-70 percent of total land area. As an old city centre district, the area also has well-developed local community structures, and is convenient for local services and transport. Although the municipality has had plans to redevelop this area for a long time, the huge cost of relocation made it impossible to do so.

Recently, a joint-project with Hong Kong developers has radically re-planned part of this area with high-rise residential and commercial complexes. The substantial increase in plot ratio and the change in land use made the project profitable enough to relocate the former residents. Housing price is only a minor consideration as the commercial housing developed is aimed at wealthy buyers. Obviously, without heavy subsidies from their work units, the former residents who mainly work in small and collective enterprises cannot afford the new housing. They have to agree to be re-located, or accept the compensation to buy houses in other places where the land is cheaper.

The extremely high prices exclude ordinary local citizens. The method of property management, which is called 'close up management', totally isolates the area from its surroundings. Through redeveloping old municipal housing into commercial housing, changes in the social structure of the area have been brought about. As one planning officer said "*I am glad to see that, in terms of design outcomes, significant changes have been made in some areas, but owing*

to the project-oriented nature, most of them are still like islands in the city”.

The architects and planning officers involved in the development admitted that the development's integration with its surroundings and its social impacts were not considered. However, they also admitted that it was likely that social areas in Guangzhou would undergo further restructuring. Although social tensions among different areas are not apparent today, it is an issue that merits further consideration.

7.5 Conclusion

1. Initiatives such as urban design control for specific districts and the Model Community Programme are considered as a significant step forward on design control. They have attracted greater attention from the city government and local planning authorities. Specialist consultations, open design competitions, area appraisal, and occasionally public consultation, are all promoted in the plan preparation and approval process. The general opinion is that since it is unlikely that equal attention can be given to common plan making due to the constraints of time, manpower and other resources, these initiatives are appropriate for tighter design control to start with.
2. In terms of general effectiveness, these recent initiatives have responded to Guangzhou's urban problems of over crowding, chaotic townscape, insufficient open space, traffic congestion, and poor residential environment. There is no doubt that these initiatives have made positive contributions. More importantly, they have raised the attention towards urban design quality among local authorities, design-related professions, and the general public. As such they have helped to push design higher up the agenda than ever before. Nevertheless, the project-based nature means they could only improve the urban environment at a limited level. As these urban design controls have concentrated on selected areas only (e.g. of

historical significance), other areas which make up the major part of the city have been left untouched by new design thinking.

3. In terms of the policy content, it could be said that comprehensive urban design considerations are incorporated into the plans, and some design aspects are made more explicit than traditional approaches. With the loss of faith in physical planning, social concerns have begun to exert an increasing influence over policy writing. The emphasis in plans has begun to move away from traditional land use-based, two-dimensional blueprints towards strategic plans with a stress on written policies. Eagerness to enhance the localised characteristics and to improve the quality of public spaces is evident in these plans. The defect of the traditional two-dimensional plan is also tackled by having more integral three-dimensional conceptualisation of the urban fabric. Despite the wider range of urban design concerns, visually oriented policies are still more dominant than socially oriented public concerns. Landscape policies are also better developed, but environmental sustainability concerns are still in their infancy.
4. The consistency of plan implementation tends to worry some planners, particularly the planning officers involved. In the words of one planning officer *"It takes great efforts by planning authorities, strong financial and political back up from the city government, and support from related government agencies, development companies, and all parties to carry them out"*. *"Any alterations could effect the plan's implementation due to its un-clarified legal status. In Guangzhou, political and financial issues are especially influential"*. They felt that because UDPs are not statutory plans, their legal enforcement is limited. This can hinder the plan from being completely complied with and implemented fully.
5. At present, Guangzhou's urban design initiative practice concentrates on the district level and neighbourhood level. Although the visual quality of

some streets and districts is being improved, and new public facilities provided, the serious urban problems remain. Chinese urban planners and designers are still campaigning for a higher legal status for urban design intervention. Both groups wanted more comprehensive and effective urban design strategies which they can apply at all levels of planning from the neighbourhood to the city-wide scale. Despite these limitations, the recent urban design initiatives have provided the catalyst for further movements on design control. If this happens, then further initiatives would inspire more attention on design from a variety of people and would encourage them to take design more seriously.

CHAPTER 8: THE BRITISH DESIGN EXPERIENCE

8.1 Introduction

Previous chapters have already identified inefficiencies of the Chinese planning system. In this chapter, the research attempts to identify features of recent urban design achievements in Britain which are also relevant to Chinese practice.

Various design-related initiatives have been launched to explore the role of urban design over the past three decades in Britain. Today, the importance of developing a high quality urban environment has been firmly established. Many British cities have been practising urban design in the control of development through strategic planning and the provision of guidance. The question is, what inspirations can the British experience provide to help improve the Chinese planning system?

It has to be admitted that the British planning system differs from the Chinese one. The two countries are also different in terms of population size, urban form, social-cultural background, political structure and the economic situation. This makes it difficult to compare design across these two countries. Presented here is not a thoroughgoing comparison of the two countries' design control experiences. Instead, this chapter concentrates on identifying successful British design features which may have the potential to be adopted in China.

Due to the limited time period and resources of the study, the general points offered here draw mainly on desktop research of recent research papers and government and local design documents. To provide a clearer picture as to how urban design approaches are being used in Britain. Glasgow has been chosen as a case study. The Crown Street Regeneration Project was taken for a more detailed study to explore the use of urban design at a project - specific level. In this case, apart from the officially published plans, some internal documents

were examined. Moreover, some important participants in the project, including the project director, the director of the local residents association and some planners and architects involved in the project were interviewed.

8.2 Design control in Britain

8.2.1 The British Planning System

Compared to the Chinese system, which relies on highly structured planning control, the British approach is noticeably different. It is fundamentally a discretionary planning and development control system in which ‘decisions on particular development proposals are made “on their merits” against the policy background of a generalised plan’ (Cullingworth and Nadin, 1997, p. 49).

Central government has considerable power over local planning. In England, the Regional Offices of the DETR scrutinise all plans for conformity with national and regional guidance. The Secretary of State has the power to require applications to be referred to him for decision, although ‘such power is not often used and action is generally taken only if planning issues of more than local importance are involved’ (PPG1, 1997, Annex D7).

Local governments carry out their planning functions, the preparation and revision of development plans and development control. Apart from statutory plans, local authorities will consider ‘any other material considerations’ in reviewing a development proposal in accordance with local circumstances. The system is, therefore, ‘considered an informal planning system which operates within a formal structure’ (Cullingworth and Nadin, 1994, p. 45).

There is a range of national planning policy guidance to which local development plans have to respond.

1. The primary legislation which comprises the acts and the subordinate legislation, namely the statutory instruments, orders and regulations;

2. Ministerial statements and government white papers which contain statements of government policy, laid before Parliament;
3. Planning Policy Guidance Notes (PPGs) and circulars published by the Department of the Environment, Transport for the Regions (DETR), giving substantive statements and mandatory direction to local authorities; and
4. Development control policy notes on particular topics.

Local development plans provide the basis for planning decision making. In non-metropolitan areas, development plans can be *Structure Plans* or *Local Plans*, setting out strategic policies for development. In metropolitan areas, a *Unitary Development Plan* (UDP) combines these roles. The structure plan provides mainly policy statements about strategic land use matters. The typical concerns of a Structure Plan/UDP part I cover housing, industry and commerce, shopping, settlement pattern, transport and communications, agriculture and forestry, minerals, recreation and tourism, waste treatment, environmental protection and conservation, green belt, social amenities and so on. The local plan covers similar topics with more detailed policies for development and enhancement proposals (Davies, 1989).

8.2.2 Design Control

Many commentators have argued that design, particularly urban design, has not always been a priority area for central or local government in the UK. Design control 'has evolved through a number of distinctive stages and polar swings from pro- to anti-control since its evolution out of a concern for public health and amenity in the nineteenth and early twentieth centuries' (Carmona, 1998, p. 39). The planning system introduced by the 1947 *Town and Country Planning Act* did not mention design control explicitly. It 'took for granted that a unique plan presented in map form could be prepared to represent the public interests in each urban area' (Hall, 1990, p14). Stricter design control was only

exercised in conservation areas and sensitive districts, whereas non-sensitive areas were largely neglected.

However, the debate about the design control of development within the planning system and the role of design guidance within that process has been substantial. The debate has been going on for more than three decades, although its origin can be traced much further back. The history of design control/aesthetic control is comprehensively covered elsewhere it is therefore not repeated here (e.g. Punter, 1986a, 1987; DoE, 1996, etc.).

This study is more concerned about recent British design initiatives. Urban design related studies and government publications are detailed in the list (Table 8.1). They are considered as significant initiatives in the process of changing attitudes towards design.

Noteworthy is the design debate rekindled by the Prince of Wales in 1984. In his book (HRH, Prince of Wales, 1989), the Prince put forward 'Ten Commandments' for harmonising development of the place. Despite some criticisms of his theory, the Prince of Wales raised the profile of design by bringing the debate to the media's and wider public's attention through his outspoken attack on contemporary architecture and planning control.

The importance of urban design is further enshrined in National Planning Guidance. The emergence of the revised PPG1 (DoE, 1997) expressed a more positive attitude towards design issues for the British Government. The statement explicitly recognised design as a material consideration, and emphasised the importance of skilled advice throughout the design process. It laid a new emphasis upon spaces and landscape design in control, encouraged developers to present their applications better, and indicated that each scheme should deliver an environmental benefit in landscape terms. Most importantly, the statement suggested that local authorities enshrine their design expectations in development plans and supplementary guidance. PPG1 also argued that plans should avoid excessive prescription and concentrate on broad matters of

scale, density, height, massing, layout, landscape, and access.

Date	Publications	Impacts
1989	A vision of Britain	The design debate rekindled by HRH the Prince of Wales
1990s	---	Consensus view on design control established
1990	Birmingham Urban Design Study	City-wide strategy, and hierarchy of guidance established
1990	Planning for Beauty (RFAC)	Advocates design guidelines and a positive approach to design control
1991	RIBA/RTPI Joint Statement	7-point agreement on design control
1991	Planning and Compensation Act	Section 54A gives development plan priority
1992	PPG 1 Annex A: Design considerations	Design -a material consideration, new implicit emphasis on urban design issues
1993	Suffolk Design Guide	Urban design prioritised over architecture
1993	Design policies in Local Plans: A Research Report	Research in the writing of design policies in local plans commissioned by DoE, published in 1996
1993	PPG 13: Transport	Sustainable agenda actively promoted through government guidance
1993	What Makes a Good Building	RFAC attempt to define 'good' architecture
1994	Quality in Town and Country	Emphasis on urban design rather than on suburban development, on 'quality pays' and on mixed use
1994	Vital and Viable Town Centres	The value of mixed use, of social vitality and of preserving the urban realm
1995	Sustainable Settlements (LGMB)	Explores the link between sustainability and design
1995	Quality in Town and Country: Urban Design Campaign	Urban design defined, development briefs used as means to strengthen emphasis on urban design
1996	Promised Good Practice Guide	Good practice guide on design in the planning system promised by DoE
1997	Draft (Revised) PPG1 issues	A new emphasis on urban design, mixed use and local distinctiveness
1998	Planning for Sustainable Development: Towards Better Practice (DETR)	Actively promoted sustainable agenda in planning practice
1999	Towards an Urban Renaissance (Urban Task Force)	To promote design excellence as one essential element for urban regeneration
2000	Urban Design in the Planning system: Towards Better Practice (DETR)	To promote higher standards in urban design, to stimulate thinking about urban design.

Table 8.1: Recent design control initiatives and major publications (after Carmona, 1998).

More recently, the British Government commissioned an Urban Task Force to recommend practical solutions to reversing urban decline and to encourage people back to the city. Urban design is felt to be critical in efforts to deliver a better quality of urban life. In its final report the Task Force recommends the production of master plans for area-based regeneration initiatives, and suggests that local authorities should prepare a single strategy for their public realm and open spaces. Such mechanisms would allow principles of urban design to be applied to specific places and would encourage a comprehensive approach to delivering and managing existing and new public spaces (Urban Task Force, 1999).

Another very recent attempt by the Government to explain the tools that planning authorities might adopt in implementing the urban design agenda is the good practice guide on design - *By Design: Urban Design in the Planning System: towards better Practice* (DETR, 2000). The central message it delivered is that 'careful assessment of places, well drafted policies, well-designed proposals, robust decision-making and a collaborative approach are needed throughout the country if better places are to be created' (DETR, 200, p. 1).

Design control is now an integral part of the British development control system. The primary instruments of government advice on design are widely spread across the primary legislation, a wide range of PPGs and circulars and in a number of government publications. Local authorities also produce design guidance or conduct urban design research.

Generally speaking, the 1990s saw a U-turn in the British government's attitude towards design control accompanied by research and production of reports and documents on urban design. The message is clearly sent by the latest version of PPG1 that 'good design should be the aim of all those involved in the development process and should be encouraged everywhere' (DoE, 1997).

8.2.3 The Hierarchy of Design Guidance in the UK

The value of a full hierarchy of design guidance for effective policy implementation has been widely recognised in the UK (See DoE, 1996; Carmona, 1999; DETR, 2000; etc). Various organising frameworks have been developed to examine and classify design guidance. Chapman and Larkham have classified guidance in the form of a 'cascade', according to its level of operation - national to site-specific, its role in decision-making - appraisal, encouragement, guidance, control and its degree of prescription (Chapman and Larkham, 1993). Murray and Willie have classified design guidance according to its relative scale of operation - district, neighbourhood, street, site, etc (Murray and Willie, 1991).

Carmona argued neither of these classifications includes the full range of guidance currently in use in Britain. So he identified an eighteen-level classification of guidance types as illustrated in Figure 8.1 (Carmona, 1998).

Government guidance sets out and elucidates government policy on planning matters, including design control and a new stress on urban design. The main design advice provided by national planning policy guidance is in the form of PPGs. Government circulars can be used to provide more detailed and technical design concern, and to demonstrate good practice. For example, *Circular 5/94 Planning Out Crime* (DoE, 1994) provides advice on designing for community safety.

Although it is criticised that conventional British planning instruments have failed to provide opportunities to set out a spatial design framework at a city-wide or district-wide level (DoE, 1996), the situation has started to change. Some cities have been developing urban design strategies as part of the local plan or its supplementary guidance. Many cities such as Birmingham, Glasgow and Manchester have been developing their comprehensive urban design policies to apply to the city centre or the entire city area. These urban design

strategies have helped implement government guidance and form a framework for the more detailed guidance below.

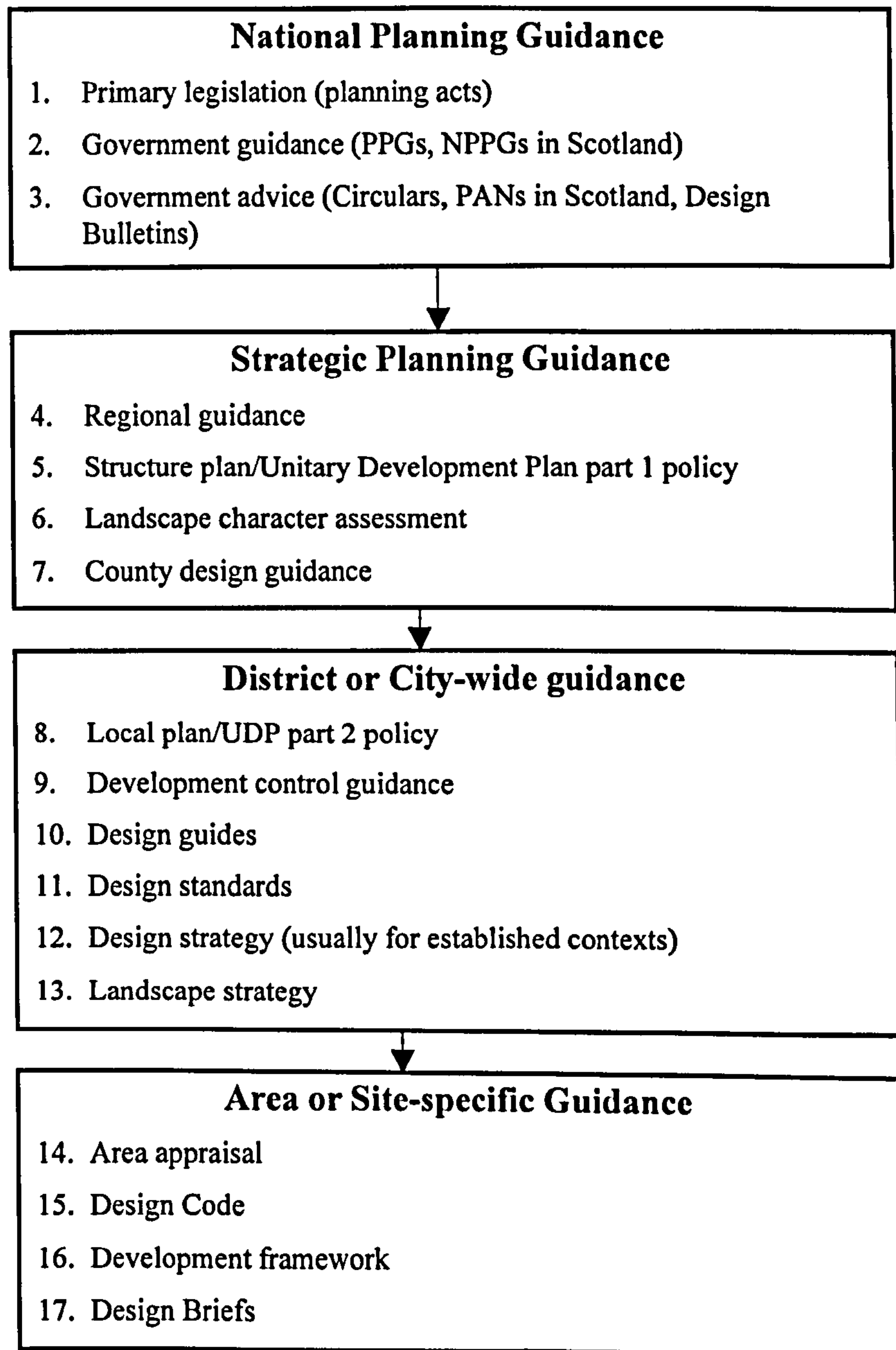


Figure 8.1: The hierarchy of urban design guidance in Britain (Source: Carmona, 1998).

More detailed urban design approaches such as area-based appraisal, design briefing, and master planning are all employed to ensure good design quality in small areas or site-specific development projects. For example, design/development briefing and master planning approaches are used in the Crown Street Regeneration Project, which is one of the UK's first projects to

seriously promote design in urban regeneration. These approaches provide a range of supporting guidance to design strategy framework from a higher level.

In short, such a hierarchical approach to structuring policies and guidance can help urban design to be operated at many different scales.

8.2.4 *Urban Design Strategies*

Urban design strategies emerged as a means of British design control about two decades ago. There are many initiatives claiming to fall into the category. However, as Biddulph attempted to define, ‘an urban design strategy should suggest a physical vision for a specific area, and provide the mechanisms for delivering that vision. It should be derived from an appraisal of the relevant area, a process of public discussion and debate, and the application of design principles to site-specific local circumstances’. ‘They might form a part of area-based urban regeneration initiatives, or might be produced for specific town or city centres or even for settlements as a whole’ (Biddulph, 1999, p.282).

In the final report of the Urban Task Force -*Towards an Urban Renaissance*, the Task Force suggested that local authorities should prepare a single strategy for their public realm and open space. Such strategies are also recommended in the latest government’s *Urban Design in the planning system: Towards Better Practice* (DETR, 2000), although this is referred to as an urban design framework instead of strategies.

Birmingham’s urban design study emerged from corporate initiatives to change the city’s image and to promote economic change and urban regeneration. Its City Centre Strategy has been in place since 1987, which highlighted the potential for a framework of good quality pedestrianized and enhanced streets, squares and canal sides establishing a new city centre environment (Birmingham City Council, 1992).

Following this, a more detailed 'City Centre Design Strategy' was developed by Tibbalds in 1989 (Tibbalds *et al.* 1990). It is considered as one of the most extensive pieces of urban design analysis ever produced in the UK. It assessed the urban quality of each of the 'areas of local character', and provided detailed suggestions as to how new buildings can help reinforce the identified characteristics. Although initiated as a consultant's report, it has served Birmingham City Council as a guide to developers and their architects and as a touchstone for the local Planning Committee.

The city centre design strategy has subsequently been detailed in Birmingham's Quarter Plans programme since 1994 (Birmingham City Council, 1994, 1995, 1996; Llewelyn Davies, 1994; EDAW, 1998). These plans carefully analysed the distinct areas, and then set out a more detailed planning and urban design vision covering almost all of the enlarging city centre. These urban design strategies and plans have been adopted by the City Council as design guidance, which is supplementary to the Birmingham Plan (Unitary Development Plan).

Birmingham's success in using urban design strategies in its city centre and neighbouring districts inspired other British cities to follow. Cities like Manchester, Bristol and Glasgow have also been developing their own strategies.

Manchester's Hulme Urban Design appeared first as a consultant's study, then was transformed into a community-based design guide (Hulme Regeneration Ltd and Manchester City Council, 1994). Based on well-accepted design principles such as those established in Bentley's *Responsive Environment* (Bentley *et al.* 1985), the Code provides a set of design criteria, including the street, integration, density, permeability, routes and transport, land marks, vistas and focal points, definition of space, identity, sustainability and a hierarchy of street forms.

Driven by key politicians and service heads, the code led to the production of a

city wide development guide – A Guide to Development in Manchester (Manchester City Council, 1997). Although the producer announced that much of the inspirational text had been cut out, ‘the code survived largely intact containing nothing very radical but retaining a power and clarity which has endured’ (Rudlin, 1999, p.321).

The specific approach to developing and applying such a strategy varies in practice. They differ in many ways such as origin, scope, document type, development process, levels of political backing, their status in the planning system, and so on. They can be expressed in various ways ranging from an underlying analysis about a place (such as Birmingham Urban Design Study) to criteria for evaluating development proposals (such as Manchester’s Hulme design code). Others work as supplementary guidance or become a part of the local plan.

It could be said there is not yet a consensus about where and how urban design strategies fit into the planning system. However, urban design strategies are now an indispensable component of the urban design framework in the UK (DETR, 2000; Urban Task Force 1999; Biddulph 1999; Punter, 1999).

8.3 The Case of Glasgow

Perhaps Glasgow is not the most advanced British city in terms of developing and using urban design strategies, but its recent efforts in learning from the planning errors of the past, its active promotion of design in urban regeneration, its real engagement of ordinary citizens in making places to live, and, particularly, the impressive achievements these efforts have resulted in all reflect the city’s energy and consistency in pursuing good urban design qualities.

There have been a series of initiatives taking place in Glasgow in the last two decades. They include the 1988 Garden Festival, the 1990 City of Culture, and

the successful host of a more recent high profile event - the European City of Architecture and Design in 1999. All of these initiatives have one thing in common - an emphasis on design (Carmona, 1998).

This great commitment to achieving urban design excellence is not only reflected in these initiatives. It is also a common theme developed and implemented in planning terms throughout a number of key documents and reports. Thus, as a city drawing great strength from its historical development and important innovations of the past, Glasgow has a good deal to offer.

8.3.1 A City with Strengths and Needs

Glasgow is a city with a high degree of spatial and formal cohesion. Its distinctive urban characteristics have been summarised by Frey (1999) as:

- A more or less regular, open-ended and non-hierarchical grid pattern, which is modified in places in response to contextual conditions (Figure 8.2).
- The perimeter block development principle, which has been applied over centuries in almost all traditional cities. Building mass, occasionally fragmented but mostly continuous, is located along the outer edges of a development plot or city block, with building entrances more or less directly off the streets, providing the possibility of good interaction between people in public spaces and private buildings, with semi-private court-yard sheltered by the perimeter buildings from the public, and continuously enclosed streets and squares appearing as though they have been carved out of a solid mass.
- The repetition of a few standard building types such as the tenement, the terrace, the urban villa, the multi-storey warehouse and office building
- High-density development throughout, in the city centre up to seven or so

storeys, in housing areas three or four storeys, whether the house type is a working -class tenement or a middle-class West End terrace or West End tenement

- Horizontal, and in shopping streets frequently vertical, mixture of uses, with living accommodation next to commercial and industrial uses and above shops.
- Moreover, the use of sandstone as the prime construction material and the application of some late Georgian and largely Victorian design principles added the perseverance of form, colour, pattern, and texture (Frey, 1999, p.78).



Figure 8.2: City block pattern of Glasgow City Centre (Source, Gillespies, 1995)

However, these characteristics have not been cherished in the past, particularly in the after-war period when grand scale urban redevelopment was considered essential. Programmes were developed to demolish slums and to build new estates to meet housing need. During this period, there was a general view shared by the Modernist movement that the traditional city did not provide a suitable environment for people, and thus needed to be replaced by a new urban morphology - the park with free-standing buildings in it (see Reea, 1993; Horsley, 1990). A few famous architects were involved in Glasgow's comprehensive development schemes, e.g. Basil Spence in the Gorbals with a scheme inspired by Le Corbusier. That was later demolished in 1996.

By the 1980s, Glasgow had suffered a dramatic decline. This was induced by a decline in the traditional heavy industrial work base of the city and associated job losses accompanied by deterioration in the physical environment of the city itself. The planning policies employed in the inter-war housing schemes, the post-war comprehensive reconstruction, the peripheral estate development, and largely uncontrolled development during much of the 1980s (for details see Galloway and Evans, 1991; Frey, 1999) are criticised for, at least in part, causing the problems. Glasgow had acquired a bad image. This contributed to increased disinvestment to the city, which in turn, led to the further deterioration of the city's image. Glasgow had been 'pushed to the threshold of a potentially disastrous spiral of decline' (Galloway and Evans, 1991, p11).

In response, urban design initiatives and strategies directed at improving both the image and quality of the environment have been developed.

8.3.2 Main Policies and Documents

Glasgow's various urban design initiatives and strategies of the last fifteen years began with a Scottish Development Agency/City funded study of the urban design possibilities for the city centre in 1983. It aimed to identify the opportunities for the city's regeneration. The final report - the *Potential for*

Glasgow City Centre was produced in 1984, from which Cullen distilled the essential character of the city centre and its local culture, and an urban design strategy for the centre was born (Cullen and McKinsey, 1984). The essence of the strategy was to emphasise Buchanan Street as the central axis with new development nodes at either end (Figure 8.3). The overall strategy was both stimulating and valid, and proved to be seminal in many of the regeneration projects of the 1980s (Galloway and Evans, 1991, p.13).

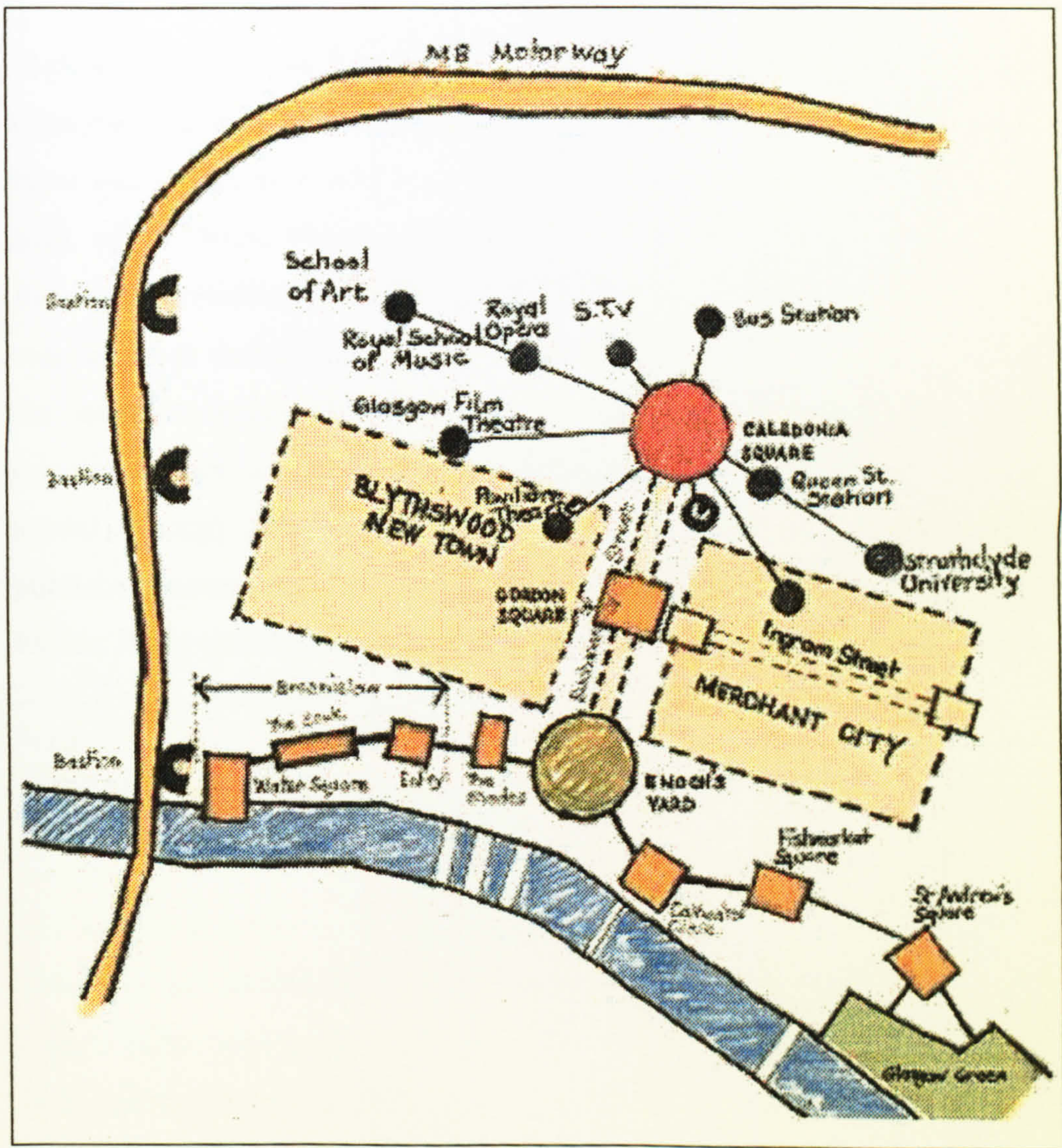


Figure 8.3: The spatial framework for the City Centre - Mackinsey Cullen (source: Gillespies, 1995, p. 6)

Inspired by the strategy, Glasgow City Council began to prepare the Central Area Local Plan (Glasgow City Council, 1990). The plan looked at the central area not simply as a collection of land uses, but rather as a place which meant different things to different people, as a collection of smaller areas with their own separate character, identity, issues and opportunities. Four of these small areas were declared as 'Special Project Areas'. These were Merchant City Area, the St Enoch Area, the Cathedral Precinct Area, and the Broomielaw Area. Design treatments were set out for each of them.

Meanwhile, the former Scottish Development Agency (now Scottish Enterprise Glasgow) and the City Council commissioned Gillespies in collaboration with Price and Cullen to produce a spatial framework to link the centre with the bank of the River Clyde. As the title of the documents - *Continuing the Renaissance* (Gillespies, 1990) indicated, the work is based on the previous seminal work undertaken by McKinsey. The framework aims to capitalise on the inherent quality of the City's grid and river to incorporate emerging initiatives, such as the Crown Street Regeneration Project, into a coherent spatial strategy (Figure 8.4). Although this document was not formally published, summaries were published in the *Architect's Journal* (Mulvagh and Evans, 1990) and the *Urban Design Quarterly* (Galloway and Evans, 1991).

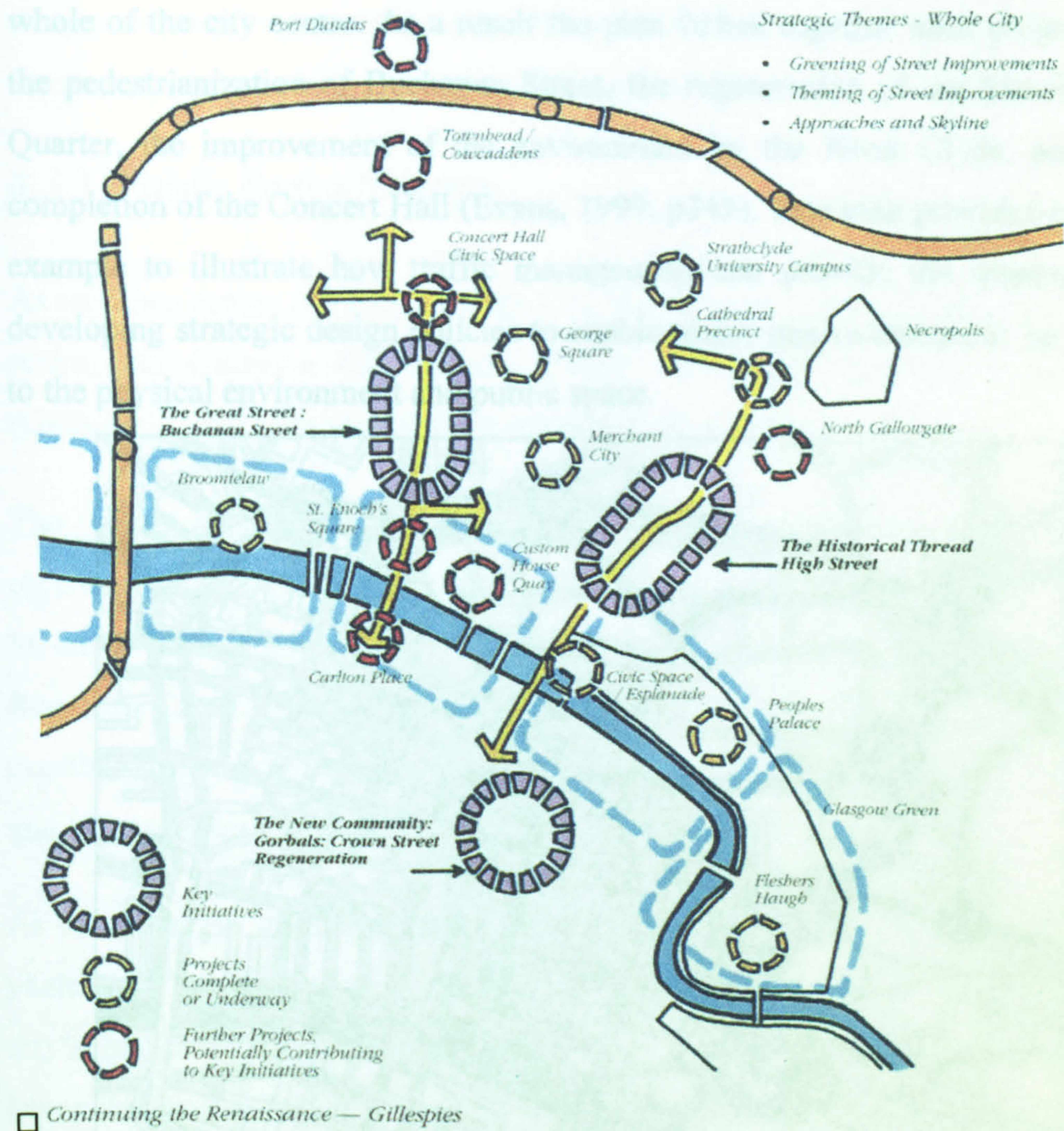


Figure 8.4: The spatial framework for the City Centre - Gillespies (source, Gillespies, 1995, p. 6).

In 1995, Strathclyde Regional Council, then the road authority for the city of Glasgow, promoted a radical plan for traffic management in the city centre - *the Millennium Plan*. This was part of a balanced transport strategy which combined investment in public transport with parking restraint in an effort to reduce traffic congestion and road traffic accidents, improve air quality and a poor and threatening physical environment (Figure 8.5) (Strathclyde Regional Council, 1995). A central feature of the plan was the aim to win more space for pedestrians in the city centre and to ensure that the quality and appearance of the space would contribute positively to the image and regeneration of the

whole of the city centre. As a result the plan linked together such projects as the pedestrianization of Buchanan Street, the regeneration of the Merchant's Quarter, the improvement of the environment by the River Clyde, and the completion of the Concert Hall (Evans, 1999, p345). This plan provides a good example to illustrate how traffic management can provide the impetus for developing strategic design policies to enable major improvements to be made to the physical environment and public space.

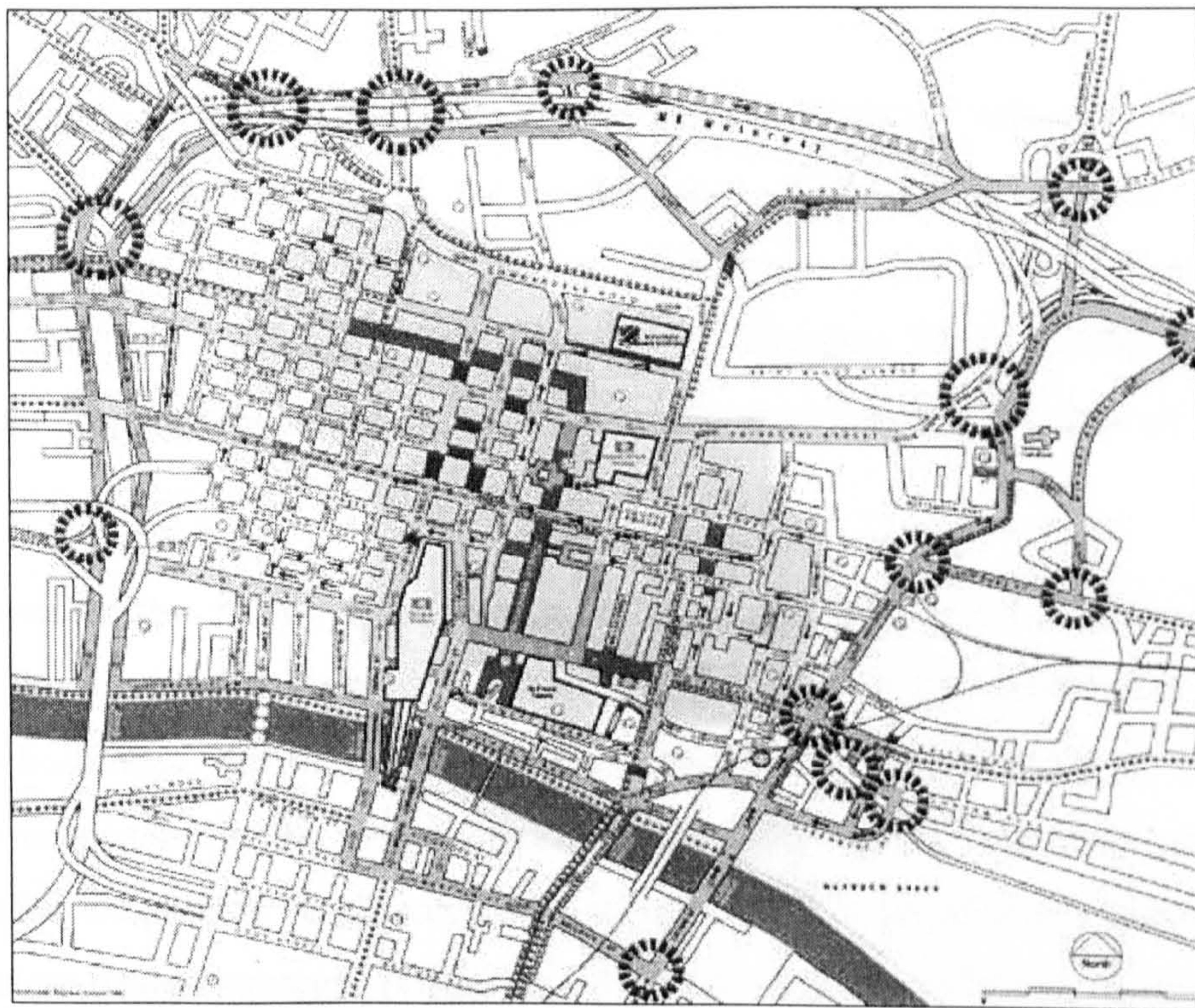


Figure 8.5: Glasgow City Centre Millennium Transport Strategy Plan. (Source: Strathclyde Regional Council).

The City Central Area Local Plan is now under revision (Glasgow City Council, 1996). The revised plan builds on the Millennium Plan, the Public Realm Strategy, and the 1990 plan. It has added new policies aimed at preserving the character of the city's river frontage, civic squares and pedestrian areas, emphasising corner sites and the individuality of the identity areas, and facilitating increased permeability. It also promised a new lighting strategy for the Glasgow City Centre.

All these local policies and documents have shown a clear emphasis on urban

design and environmental quality. It could be said that, in part, the recent success of Glasgow is down to the promotion of good design.

8.3.3 *Public Realm Strategy*

As an urban design oriented strategy with the emphasis on the quality of public realm, the *Glasgow City Centre Public Realm Strategy and Guidelines* (Gillespies, 1995) deserves further examination.

The need for more connection between individual enhancement and regeneration schemes led to the commission of Gillespies' Public Realm Strategy in 1995. Glasgow's public authorities, namely the Strathclyde Regional Council, Glasgow City Council and Glasgow Development Agency together prepared the comprehensive design strategy for the treatment of streets and places in the City Centre.

As stated in the strategy, the reason for its preparation is because 'in recent years there has been a very noticeable improvement in the appearance of the city's buildings, but the quality of the public spaces has lagged far behind. Many proposals for the improvement of the public realm have been prepared but these are mostly fragmented and together do not constitute a coherent or consistent design strategy' (Gillespies, 1995, p. 1). It is hoped that an improved image for Glasgow's highly visible centre will in turn act as a catalyst for a wider regeneration, thereby moving the whole of Glasgow towards a new prosperity.

8.3.3.1 *The Overall Approach*

The essence of Gillespies' approach is intended to improve public space through good design. The key thinking in previous works such as Cullen's *Potential of Glasgow City Centre* and Gillespies' *Continuing the Renaissance* are reflected in the Strategy. As argued by Evans (1999), the approach has also been informed by a number of seminal pieces of urban design thinking

including Christopher Alexander's view that the city is a growing whole (Alexander, 1987), the cognitive recognition of Kevin Lynch (Lynch, 1960, 1981), which helps designers to contribute to the legibility of the city, and the work of Gordon Cullen (1961), which provides techniques for illustrating the ideas generated.

The strategy contains four parts:

Part A: Sets the context and identifies aims and objectives

Part B: Identifies the inherent character and townscape of Glasgow City Centre

Part C: Formulates a series of design guidelines

Part D: Identifies demonstration projects where the guidelines will be applied

Part A reviewed and summarised relevant policies and publications referring to Glasgow City Centre. It also described factors influencing the city centre during the recent urban regeneration including area initiatives and landmark property developments. On the basis of this analysis, the strategy established a three-part prescriptive framework.

Firstly, Part B describes the urban analysis undertaken to understand the environment of the city centre. A hierarchy of streets and spaces through the inherent character of the urban form and townscape are identified. Perceptual aspects are also analysed in terms of the way people use, perceive, and inhabit the city centre. An ordering principle is established for the city's streets and public spaces. In the recognition that it would not be financially possible to propose the high-quality treatment of all streets in the centre, 'principal streets and spaces', 'major streets and spaces' and 'minor streets and spaces' are defined according to their function and prominence. Consequently, appropriate treatments are identified for each.

Secondly, Part C establishes a series of design objectives and detailed design guidelines for achieving quality in public spaces. The guidelines aim to lay

down appropriate ground rules for skilled interpretation by designers, to reduce street clutter and encourage boldness, simplicity, style, and elegance in the streetscape. They address, in turn: management and maintenance (including sustainability and security); surfaces, soft landscape; street furniture; signing; lighting; water; public art; and climate (including use of shelters) (Gillespies, 1995).

Finally, in Part D, a number of early action projects are identified to demonstrate how the strategy and guidelines might work in practice. These projects are tied in with the Millennium Plan (Strathclyde Regional Council, 1995). They are select in consideration of benefiting good numbers of people, reinforcing major focal points in the city, while effectively acting as dry runs for more ambitious projects in the future.

8.3.3.2 Significant Features

Some significant features of the Strategy can be identified as below:

- A concern for the needs of people lies at the heart of the Strategy. This concern is reflected throughout its objectives and guidelines. These are to raise the quality of environment as a whole, including wider issues such as public safety and air quality; to enhance people's comfort and convenience; to promote pedestrian and a cyclist friendly environment; to enhance people's 'sense of place'; and to create a pleasant environment for public interaction and personal contact. They set up a framework against which future developments can be assessed on urban design grounds without dealing with details.
- A thorough analysis of the traditional townscape, the way people use, perceive and inhabit the city centre is the basis for formulating the design principles. The inherent characteristics of Glasgow city centre, such as its grid street pattern, perimeter building blocks, the proportions of the streets, axes and landmarks are identified. People's perception of the city centre

environment in terms of their experience with urban facilities, transport network, pedestrianised streets, open spaces and their neighbourhood are analysed. These physical and perceptual aspects of the city's urban character have been taken account of in policy formulation and 'must be respected and enhanced by future action' (Gillespies, 1995, p.33).

- The document adopts a user-friendly form. Under each identified topic, the 'Design Principles' are set to give indications of what is appropriate and appreciated by the guide, then the 'Application' suggests how these principles can be applied in practice. Photographs, sketches, and maps are used to illustrate the suggestions, and to accomplish the text.
- The strategy further identified a series of demonstration projects through which the ultimate success of the Strategy could be measured. (The ultimate aim of the Strategy is '*creating a framework for and guiding the formulation of specific projects on the ground*' (Gillespies, 1995, p.107). Objectives and opportunities for each demonstration project are identified. They are used as a guide by the City Council in the control of development and in design interventions in the public realm

The strategy and the demonstration projects including the re-design of Candleriggs (Gillespies), Concert Square (Page & Park), Royal Exchange Square (Gillespies), Gordon Street (Hirst Associates) and Buchanan Street (Gillespies with MBM of Barcelona) were later awarded the Royal Town Planning Institute Silver Jubilee Cup, the UK's premier planning award (Figure 8.6).



Figure 8.6: One of the demonstration projects - Royal Exchange Square. A-the competition sketch (source: Gillespies); B - the finished scheme (source, author, 2000).

8.3.3.3 *Promoting Design among the Public*

The concept that the general public need to be more closely involved in the planning and management of the built environment is one that has gained widespread recognition and endorsement (Pieda, 1995; Strelitz *et al.*, 1996; Wates, 1996, 1998).

A range of approaches was taken in Glasgow to promote design among the public alongside the preparation of the Millennium Plan and the Public Realm Strategy. A detailed brochure was produced explaining the key elements of the plan and the strategy, together with their main objectives and targets. Exhibitions were held at a number of venues in the city over a period of months in 1995. A short video accompanied the exhibition and professional staff were available at the exhibition venues. A telephone helpline was set up to provide further information about the scope and nature of the traffic management plan and the Public Realm Strategy.

Strathclyde Regional Council estimated that the exhibition was attended by at least 10,000 people. Nearly 5000 questionnaire responses were received. A number of formal workshops were organised to enable those who represented different interest groups in the city to meet and debate the nature of the proposals. At the conclusion to the process, a formal report of the consultation was prepared. The exercise was the largest of its kind carried out by Strathclyde Council (Strathclyde Roads, 1995).

Other activities have also been carried out. In conjunction with winning the European City of Architecture and Design 1999, enormous events have been undertaken to promote the city's image and to raise public awareness of design. Various exhibitions and community programmes were undertaken to show the public how design is deeply involved in every aspect of contemporary life.

According to the official Monitoring and Evaluation report (DTZ Pieda Consulting, 1999),

- 26% of Glasgow residents went to one or more events
- 43% of Glasgow residents agreed that the programme had increased their awareness of architecture and design
- 49% said Glasgow 1999 made them more likely to think of Glasgow as a centre for architecture and design.

In short, urban design strategies devised for Glasgow City Centre demonstrate the importance of integrated strategies to an understanding of the character of a place, which in turn is so necessary to guide development, manage traffic, attract investment and gain public support for city improvements.

8.3.4 Urban Design for Site-specific Projects

Dealing with individual spaces and specific projects is the lowest level in the hierarchy of urban design intervention. There are various approaches being used, such as design codes, development frameworks, design and development briefs, and master plans. Crown Street Regeneration Project (CSRP) illustrates how these approaches are being used at this level.

The choice of CSRP is not only because it is one of the flagship housing redevelopment projects currently underway in the UK, but also because of its serious promotion of urban design throughout the development process, and ultimately, its highly visible achievements in creating a high quality urban environment.

The CSRP is located in the Gorbals district in Glasgow. The site is formerly occupied by the 'Hutcheston E' blocks, which were products of the post-war comprehensive redevelopment. They were demolished in 1987 and left a 40 acre vacant site close to Glasgow city centre. The CSRP was initiated in 1990 as a joint partnership between the Glasgow Development Agency, Glasgow City Council, and Scottish Homes. After ten years, the project is now in its final stages of completion.

8.3.4.1 *The Master Plan*

The incorporation of a strong urban design philosophy in the Master Plan is one of the key ingredients in the success of the CSRP.

The Master Plan was produced by CZWG Architects in conjunction with the CSRP team following a national urban design competition. It outlines the key objectives and guiding principles of the project. With a recognition of that previous processes of renewal in the area have failed to fully integrate and re-integrate exiting communities, the Master Plan sets a broad challenge ‘to improve the social, economic and environmental qualities of the Gorbals (and thereby add to the qualities of Glasgow as a whole) by a process of ‘careful urban renewal’ (CSRP Master Plan). The overall objectives are set on the basis of the lessons learned from previous failures, careful appraisal of the strength, weakness, and opportunities posed by the area. They are:

1. Make the Gorbals a place in which people want to live.
2. Develop a new and positive image for the Gorbals as a popular, well-balanced urban community.
3. Assist in the regeneration of the local Gorbals economy.
4. Physically, socially and economically integrate the new development with the existing community.

A number of key design concepts were identified in the Master Plan:

1. Liveable city

- The importance of internal and external privacy
- The street as the urban space of Glasgow
- Shared institutions to create a successful community
- The development adding to the character of Glasgow

2. Grid

- Residential areas of ubiquitous tenement buildings
- Predominantly straight streets with occasional circus or crescent
- Responsive grid layout with large private residential spaces

3. Block

- Every dwelling to face both the public and private side
- Shared communal garden to fill the centre of each block
- Ground floor dwellings to have private gardens

4. Street

- Rediscover 'joined up' architecture
- Reversal of the width hierarchy of streets
- Residential streets as wide, leafy boulevards
- Surveillance of cars parked along the centre of the boulevards
- Servicing of shops from the street front
- Public transport along the shopping street
- Commercial and community activities to be located on Crown Street

5. Tenement

- Glasgow's archetypal building form
- Desire to recreate a strong urban character
- Adoption of the tenement format to provide for family housing

(CSRP Master Plan Report, 1991)

A development framework for the site was set up by identifying a series of urban design elements and guidelines shown in Table 8.2.

Urban Design Elements	Guidelines
<i>Urban Design</i>	
Crown Street	<ul style="list-style-type: none"> • Crown Street as the major axis of the development and local shopping street
Caledonia Circus and Gorbals Park	<ul style="list-style-type: none"> • Creation of a new urban space, 'Gorbals Park' at the southern end of Crown Street • Caledonia Circus/Gorbals Park visual stop
East-West linkages	<ul style="list-style-type: none"> • Reinstatement of some of the former streets in the area to reintegrate the communities to the east and west of the site
Laurieston Road and Caledonia Road	<ul style="list-style-type: none"> • Laurieston Road retained as a major traffic route lines with trees and tenements set back behind an access road • Re-aligned Caledonia road to be treated in a similar way
Building heights	<ul style="list-style-type: none"> • Most of the development to be 4 storeys in height to present a strong, cohesive urban character • Crown Street to vary between 3-5 storeys • Some 2 and 3 storey development in the lanes
<i>Uses</i>	
Housing	<ul style="list-style-type: none"> • Tenements supplemented by town houses and terraces • Hierarchy of building scale • Sheltered housing above the shop units on Crown Street • Balance of tenure: 75% owner occupied, 25% for rent • Fully mix the housing tenure within the development
Shopping	<ul style="list-style-type: none"> • Relocation of the existing shopping centre to the triangular 'gushet site' at the northern end of Crown Street • Supermarket required with presence on a main road frontage and roof top car park • Parade of small shop units along both sides of Crown Street protected from the weather by colonnades • Relocation of Existing library within the new shopping centre • Additional ancillary uses also to be accommodated within the new shopping centre
Offices	<ul style="list-style-type: none"> • Small element of offices uses above pubs and hot food shops
Hotel and Student housing	<ul style="list-style-type: none"> • Budget hotel in the north west corner of the site to provide tourist accommodation and an entertainment/catering facility for the local area • Some student housing adjacent to the hotel
Pubs	<ul style="list-style-type: none"> • Sufficient premises for the local population to be located within purpose-built, free-standing buildings or in ground floor units below offices
Open Space	<ul style="list-style-type: none"> • New 'semi-passive' park as a central feature. Play and recreation spaces requirements provided by the private communal garden within the residential street blocks

Traffic and Transport

- | | |
|-------------------|---|
| Car parking | <ul style="list-style-type: none">• All residential parking to be located on-street along the centre of wide residential Boulevards• One parking space per residential unit to be provided• 130 rooftop parking spaces on the roof of the supermarket |
| Pedestrian routes | <ul style="list-style-type: none">• Strong framework of non-segregated pedestrian routes - pavements lining streets• Crown Street shopping street to be lined with colonnaded arcades for shelter |
| Public transport | <ul style="list-style-type: none">• Possible railway station to be provided at Cleland Street |
-

Landscaping

- | | |
|-------------------------|--|
| Public Streets | <ul style="list-style-type: none">• Large urban trees in the centre-street parking areas• Semi-private space between the building line of the housing and the public footpath to be hard landscaped and allow personalisation |
| Private amenity gardens | <ul style="list-style-type: none">• Retain of as many established trees as possible• Variety of trees within large areas of mounded grass and informal footpath• Scope for future adaptation by residents |
| Gorbals Park | <ul style="list-style-type: none">• Balance between an informal and formal landscape• Railings and gates to provide security• Bowling green and tennis court set within large urban trees, shrub and grass |
| Maintenance | <ul style="list-style-type: none">• Residential of each street block to be responsible for the communally owned private amenity gardens and centre-street parking areas |
-

Detailed Design Requirements

- | | |
|--------------------------|--|
| Building line and height | <ul style="list-style-type: none">• Master Plan building lines to be followed• Adjacent developments to share a party wall• Maximum and minimum building height for each development parcel |
| Materials | <ul style="list-style-type: none">• Selection dependent on inherent qualities of urbanity and endurance• In the vanguard of contemporary design but also an acknowledgement of the architectural tradition of the city |
| Architectural diversity | <ul style="list-style-type: none">• Avoidance of uniform architectural appearance• Ensure that individual architectural expression can flourish• High level of contemporary architectural diversity sought• Percentage for art policy to be applied |
| Technical performance | <ul style="list-style-type: none">• Robust construction techniques sought |
-

Table 8.2: Urban design elements and guidelines of the CSRP Master Plan.

The comprehensive vision and detailed principles set by the Master Plan are appropriate for the project. This is evidenced by the fact that, until today, the CSRP remains largely faithful to the original Master Plan. It has given a direction to the design process in a way which fits development parcels together to create a coherent whole.

It could be said that a clear vision for the development based on a thorough understanding of the local context, an appropriate set of urban design concepts and explicit guidelines to help deliver good urban design quality are some main factors in the project's success. The basic design approach employed by CSRP could probably be transferred to other areas.

8.3.4.2 *Responding to the Local Context*

Being sympathetic to its local context is another successful point of the CSRP. The project recognised that the site should not be developed in isolation from its surrounding area. Instead, it should be integrated with the Gorbals and the city as a whole. To achieve this, the traditional urban pattern, grid street layout, and the typical Glaswegian tenement building form were re-introduced in the project.

The re-introduction of the traditional urban form has benefited the development by creating a familiar scale and legible street pattern, which form a coherent urban framework and achieve a highly recognisable identity for the area. It also helps to integrate the CSRP with adjacent areas and become an organic part of Glasgow City.

However, these approaches are not superficial imitations of the past. They have been adjusted to fit today's circumstances. For example, the streets are widened to accommodate on-street parking and better landscape. This innovation has benefited the area in some ways. It has provided more secure parking (traditionally, cars are parked at the back of the block). It has given a

strong boulevard feel to the area. The street is now not only a place for passing traffic but is also a place for some public activities. Furthermore, it has freed the backcourt, which is designed as a recreation area without traffic disturbance. Likewise, instead of being a place for parking cars and keeping garbage, the inner court of the block has become a private communal garden for the residents within the street block. The fact that they will be totally safe and secure is an important factor in attracting families to the area. The basic form of the tenement is also adjusted. In a four storey tenement, the ground and the first floors are devoted to the creation of three and four bedroom family maisonettes, each with their own front and back door and back garden, which has made half of the tenement housing suitable for family occupation.

8.3.4.3 *Development Phasing and Briefing*

CSRP has also been able to learn lessons about the phasing and use of development briefs.

According to the Master Plan, the development is phased over an eight-year period. In advance of development, the CSRP undertook all major infrastructure works including major service diversions, ground consolidation works and road construction. Then a number of development parcels of varying size were formed and marketed to the private sector over a carefully programmed period. The proposed housing was sub-divided into 15-20 individual parcels. Developers can then anticipate the development in a co-ordinated manner set by the Master Plan but still keep some flexibility.

The CSRP is being constructed in six phases. Development briefs were issued to developers for each phase of the development. At the first stage, all developers with suitable experience were invited to respond to the brief, then 3 or 4 short-listed developer/architect teams were selected on their ability to meet the demands of the project in the light of their reputation, experience, and Stage 1 proposal. They then submitted a second proposal. A final judgement

was made on this basis.

The development brief covers aspects listed in Table 8.3.

Category	Element
Development Form	<ul style="list-style-type: none"> • urban design • building line and height • architectural form • car parking • percentage for art • window to wall ratio • finishing material
Building Design	<ul style="list-style-type: none"> • single aspects • robust/durable • security • service access • disable access
Road layout and Access	<ul style="list-style-type: none"> • car parking • street lighting
Landscape/Open space	<ul style="list-style-type: none"> • street trees • communal shared gardens

Table 8.3: The main aspects covered by the CSRP development brief (source, EDAW, 1997).

It could be said that the Master Plan urban design principles were clearly explained in the brief and adhered in the assessment. It gave a explicit explanation to developers about what quality of design was expected by the project. Meanwhile, as Glasgow City Council was involved in preparing the content of the brief, the amount of negotiation between the Planning Department and the developer/architect teams was reduced.

However, there was a criticism that the briefs prepared at the earlier stages were too rigid and detailed. In response to this, the briefs have been adjusted. Consequently, the briefs for the later phases became more flexible, especially on aspects of detailed design requirements. For example, the windows of the

earlier developments were required to reflect a standard tenement size, but now there is the confidence and the opportunity to use larger areas of glass. Nonetheless, this did not cause careless design. Instead, the housing being built is a lot more interesting as the pursuit of high standard design has already been established as a must. Thus, there is much greater pressure put on the developers with regard to design quality at the current stage. The result has also underlined the point that broader urban design concerns such as development form, scale and patterns could be more important in deciding the success of a project than architectural styles.

In short, the CSRP has achieved its intention of avoiding uniform architectural appearance. The subdivision of the site into development parcels has undoubtedly assisted in this objective. As a result of the individual briefing and bidding process, each block of housing has been developed in a cohesive manner with a unique identity and appearance. The provision of development briefs for each parcel ensured that 'while each phase respects the basic design ground rules, there is an opportunity for architectural expression to flourish (CSRP Master Plan Report, 1991).

8.3.4.4 *Local Community Involvement*

In an area like the Gorbals, which has been ripped apart in the past, it is more difficult to build up people's confidence in the area than to construct houses on the ground. Thus, the objectives of the project were developed with an explicit requirement for consultation and involvement of the surrounding residential community. It was felt that to develop a new image for, and to restore, community confidence in the area, the participation of the existing and new Gorbals communities should be established. The development strategy can, therefore, be developed in a way that is sensitive to the needs and aspirations of the existing local community as well as incoming residents.

Several approaches were adopted to promoting the project among local people:

- Professional consultants were engaged in advising on methods of public consultation, and a brief was set to:
 - 1 make contact with the local community and get to know them
 - 2 concentrate on representatives of local groups and associations
 - 3 make contact with media and convince them to stop being negative about the area
 - 4 convene open meetings and exhibitions, give out clear information about the project and answer people's queries
 - 5 assist the local community to develop as a full partner
- The people of the Gorbals were involved in public meetings in the Master Plan and its early revisions. Some of these were run as workshop sessions.
- A community-oriented newsletter (the Crown Street News) was published by the project, and project information sheets were handed out to inform its residents what was going on in the community
- Community representatives are contained in the project's steering group.

While there have been occasional difficulties in the methods that have been used in the CSRP to involve the broader community, there is no doubt that community involvement has always been a fundamental intention of the project. It is now commonly recognised that the regeneration project would not have been successful if it ignored the local community.

After all, as the Project Director cited, 'Crown Street is all about design for the community ... Time will tell if we have succeeded in creating a strong, integrated community, but the early signs are definitely encouraging'.

8.4 Conclusion

- 1 Perhaps the biggest lesson from British experience is that it is possible to develop a strong understanding of urban design principles, and to develop these principles into policies that influence real outcomes. This point is demonstrated by the successes of some British cities in achieving better environmental quality through urban design. The central message is clear. That is, careful assessments of places, well-drafted policies, well-designed proposals, robust decision-making and collaborative approaches can create better places.
- 2 Another lesson from the UK is that urban design principles and techniques are relevant at all levels in the corporate and physical planning process. From the aspect of policy formation, this means a hierarchy of design guidance ranging from government advice to site/project specific guidance. Although the Chinese planning system is fundamentally different from the British one, which means the form of British guidance can not be adopted directly into Chinese circumstance, this basic point remains valid.
- 3 Design control at a citywide level, which is the main concern of the study, is illustrated by the case of Glasgow. In this case, it is important to appreciate that prior to the late 1980s, the city had a bad reputation and physical deterioration was widespread. The urban design initiatives of the past decade have been widely seen to be successful and have captured the public imagination and generated local civic pride. It has revealed that urban design policy can be very helpful if the public's attention can be grasped and the real outcomes of good design convincingly demonstrated. This is extremely important in today's China where good urban design needs to be promoted among the public and especially politicians.
- 4 In terms of design policy formulation, Glasgow's experience has involved strategic planning and corporate strategies where some elements of the

physical vision have included broad urban design principles, such as improving the quality of the public realm, as well as the city's image. A strategic guidance was prepared for the city's public realm. This does not mean to say that such a strategy is capable of addressing the multiple issues facing those parts of the city which have not shared this vision, but the whole city can benefit from adopting such a focused attitude towards the core of urban design. It has become a catalyst strategy drawing conclusions for other broader local planning work.

- 5 One lesson from Glasgow has been the importance of the exemplar schemes. Few cities are fortunate enough to have an oversupply of economic or professional resources. This is why demonstration projects are important. Glasgow's experience has shown that the importance of the demonstration project can not be underestimated. These projects have lifted design standards generally, and have evoked a spirit of healthy competitive improvement in the city. However, it is also a fact that without a broader framework, they would have remained isolated. Thus, the lesson is that both demonstration projects and a strategic framework for them to be developed in a cohesive manner are needed in order to achieve both short-term and long-term results.
- 6 Another lesson from Glasgow is that progress in implementing the urban design agenda involved a very wide range of players including the local authorities, consultants, partnership combinations, private developers and their architect teams, local amenity groups and the general public. It underlines the point that a pooling of efforts can make things happen. Generally speaking, it has become common practice in Britain to use the local community and interest groups to highlight how the structure and character of a locality might be maintained and enhanced. Some mechanisms have been put into practice to encourage people to contribute to the process of both producing and implementing urban design strategies.

- 7 At a site level, the Crown Street Regeneration Project demonstrates what urban design can help achieve in urban regeneration. Through a comprehensive urban design approach which takes both physical and social challenges into consideration, the project is on its way to achieve its initial objective - creating a place that works for people. The incorporation of a strong urban design philosophy in the Master Plan - as opposed to a narrow architectural focus-has been a key ingredient of its success, particularly in terms of townscape impact.
- 8 The Project's success in integrating the site within the wider surroundings through urban design is also a good learning point. Apart from its attempt to create a more balanced urban community by mixing different economic and social groups, the project also adopted several design strategies to help achieve its major objective - to become a cohesive and integrated part of the wider urban area. Historical context and the area's physical character are taken into consideration. As a result, the reintroduction of the traditional street/perimeter block relationship, grid street pattern and tenement building form to create a traditional and legible layout is now a fundamental characteristic of reconstructing the area.
- 9 The CSRP has demonstrated how to embed urban design principles in day-to-day planning practice by making extensive use of a master plan and development briefs. The urban design route is a desirable ingredient in the development of a master plan and gives overall direction to the design process in a way which fits development parcels together to create a coherent whole. These means are also effective ways of using urban design to support development control. As development control staff are empowered by the prior existence of the guidance, and developers are explicitly informed of what is expected, an effective control could be expected. The basic design approach adopted by CSRP should be capable of wider application.

CHAPTER 9: CONCLUSIONS & RECOMMENDATIONS

9.1 Introduction

Urban planning and design in China has reached a new threshold. China has transferred from a central-planned economy to a market-led economy since the 1978 economic reform. With the declining role of state enterprise in the economy and urban development, the introduction of housing and land reform and the opening up of Chinese cities to foreign investment, the state and central-planned economy is now less influential in the development of Chinese cities than in the past. Decentralisation of decision making, market-led urban development initiatives and the increase in the number of actors and conflict of interests in urban development have radically challenged the practice of urban planning and design. Experiments are taking place in Chinese cities, whose aim is to meet these challenges and to provide a better guidance to urban planning and development control at such a transitional stage.

Within this broad context, the research examined the performance of Chinese planning system with a particular focus on urban design policy and administration. It concludes that there have been many deficiencies of the urban planning system in dealing with the rapidly changing socio-economic environment. Also, recent design related initiatives have generated interest but have achieved limited success due to the lack of strategic level thinking.

A brief examination of the British design experience has offered some valuable lessons. These include the incorporation of urban design principles at all levels of planning and design control, the incorporation of demonstration projects to broad-scaled urban design strategies, an emphasis on the quality of the public realm, careful and detailed analysis of the local context as the basis for the development of design policy and guidance, and an appreciation of the value of public participation and involvement.

Combining this understanding of the inefficiencies of China's design control with the lessons drawn from the British experience, the final part of the thesis makes a number of recommendations for improving China's planning and development control system. The author also suggests directions for future research that may be undertaken to improve China's planning system.

9.2 Conclusions

9.2.1 Recognising the Limitations of the Chinese Planning System

The study examined the role of urban design in the local planning system of Guangzhou. Although some conclusions deal with the Chinese planning system as a whole, it should be noted that diversity in local practice exists. However, as discussed in Chapter 4, Guangzhou operates a typical two-tier planning system like other Chinese cities do. Its recent initiatives can also represent a general trend in China today.

The main defects of the current system of design control identified by the researcher are:

- the non-comprehensive design concerns in local policies and plans,
- the inability of current planning system to deal with design issues,
- the poor understanding of local context and inefficient appraisal
- the inefficient co-ordination of policy framework and agencies
- the lack of openness in the planning process.
- and the limited success of recent initiatives

9.2.1.1 Non-comprehensive Design Concerns in Planning

The Chinese planning system is basically a land use planning system which

controls land distribution and development intensity by indicating the criteria for plot ratio, building density, etc. The local planning system of Guangzhou examined in Chapter 5 is an example of this, and is typical of the traditional planning system operating all over China. The system comprises the Urban Master Plan, the Urban District Plan, the Detailed Plans and other planning related regulations. The main design aspects of these plans and policies including building density, plot ratio, street lines and setbacks are controlled by numeral indices. The advantage of index control is in their explicit requirements, which enforce certain environmental standards related to density, daylight, and layout. On the other hand, they have the disadvantage of not being responsive to the context of particular sites, which can result in irrelevant uniformity.

Apart from the objective criteria included in local plans and policies, broader urban design issues have not received as much attention as they should. This is partly due to a lack of proper understanding of urban design qualities, which can be mistaken by many planners as a preoccupation with architecture. It is also because of the subjective nature of these qualities, which made them difficult for planners to handle.

Underpinning Guangzhou's recent urban design initiatives is an attempt to incorporate developing urban design theory that is moving beyond a concern for contextual, visual and functional considerations, to incorporate a broader concern for the social and perceptual use of urban spaces. However, in this context, the emphasis on architectural design is still strong, reflecting the desire among the local authorities to control architectural matters.

9.2.1.2 *Ineffective General Design Control Approaches*

The UMP and UDPs are perceived by planners as having limited value for design control due to their generality on design issues. Although attention to design quality has been rising, this has been reflected in the objectives and the

additions of design principles to these plans, they are still felt to be too general to have any real influence on practice. Design is largely dealt with at the lowest level of planning - the Detailed Plan. Based on the assumption that the more detailed a plan is, the more likely it is to be implemented, the traditional Detailed Plan puts undue stress on architecture and results in a blueprint style plan. It is often found impossible to follow by architects at the later stages of design. Thus, an intermediate level for Detailed Plan - the Detailed Development Control Plan - was adopted in Guangzhou. It is a type of Detailed Plan prepared for a specific development scheme but which attempts to avoid over prescribing for architectural detail. Many planners considered that the DDCP has the potential to be an effective design control tool. But, because its format and legal status has not been officially clarified, the preparation and implementation of DDCPs is still causing confusion among planners.

The planning and development control process focuses on development that is the subject of the planning application. Development proposals are assessed on an individual basis. However, apart from trying to meet certain intensity control criteria, the developers and their design teams rarely have any prior indication as to what local planning authorities are looking for. There is an absence of design-oriented local guidance, which can be applied to the whole city area or its districts. Nor is there a form of guidance for specific themes or technical purposes. While the control of design quality of a proposal largely relies on a planning officer's subjective assessment. This also leads to difficulty in design decision making for planning control officers. Without proper policy back up, they can hardly stick to certain design principles and expect developers to follow. This results in complaints from both sides that the system leaves too much discretionary power with the planners.

The planning system's weaknesses are particularly striking when dealing with private developers. With the establishment of the real estate market, urban development in China now involves not only the State but also foreign and domestic private developers. The loopholes in the planning system have made

it possible for personal contacts and backdoor dealings. Design quality is often sacrificed to political needs and market profit. Planners and architects are facing pressures from all sides from which they can hardly resist.

9.2.1.3 Poor Understanding of Local Context and Inefficient Appraisal

Local characteristics are not fully considered in the development of plans and policies. This is partly due to the Chinese mentality of pursuing 'modernity' and 'internationalisation' in city development. It is also because of the un-systematic methods and planners' lack of proper skills for conducting comprehensive area appraisal. Even when there is an analysis of the existing scene, it remains as background information, which is rarely translated into design guidance for developers and their architects. The general public is largely ignored at this stage of plan making. Most plans are formulated without taking account of public perceptions and views on their environment.

9.2.1.4 The Inefficient Co-ordination of Policy Frameworks and Agencies

One issue identified by the research for impeding progress on design quality was the overlapping design control functions between various government agencies and the inefficient co-ordination of policy frameworks.

Although past urban planning assumed a pure rational decisive process that believed it to be the basic feature under socialism (Wu, 1999), in reality, decision making was full of political/development compromises. Conflicts of interest existed between the central and local government, sectoral and territorial organisations, various work units and their supervisory agencies. However, conventional planning did not undertake a role of mediation between various interests, which is mainly within government departments and their enterprises. The decision making process was often translated to a bargaining practice, often unpredictable due to the discretion of the administrative system. In the transitional economy, there has been an increase in the number of non-

government developments. The involvement of private investment has added more conflicts of interest in urban development than the current system is able to settle.

9.2.1.5 The lack of Openness in Planning and Development Control

The research has revealed that there was inadequate public participation in the plan-making and control processes. Broadly speaking, much of this exclusion can be blamed on the lack of democracy in public affairs in Chinese history and the authoritarian system. This has caused the politicians'/planners' passive attitudes towards public involvement in planning as well as the public's lack of confidence in the government authorities. This can also be related to design professionals' mentality that the public has poor taste and low level of design awareness. Although public participation was not explicitly prohibited, it had no real meaning within the planning system where negotiation mainly took place among government agencies.

This deficiency in openness was also argued as one of the main reasons for corruption and compromise on design issues. As the implementation of planning and design control was largely done within a 'black box', it relied greatly on the planning officials and their self-discipline. However, the political and economic pressures were sometimes too great for them to resist, thus compromises were often made through personal informal contacts. Moreover, there was a lack of appropriate channels to communicate with the public and prospective developers in informing them what the expectations of the planners were and what could be negotiated. Consequently, there were often complaints that planning authorities have a hidden agenda, when debates on design grounds occur.

9.2.1.6 Limited Success of Recent Initiatives

Gradually recognising the inefficiencies in the traditional planning system, the local planning authorities of Guangzhou have been experimenting with new

design control approaches. Examples were described in Chapter 7. They include urban design control for specific areas, design-led improvement projects for some major urban nodes and streets, and model community projects alongside the National Model Community Programme which aims to improve the quality of housing and the general living environment. These initiatives have achieved good results in some areas. More importantly, they have attracted public attention by demonstrating visible results on the ground. However, due to their area-specific or neighbourhood level focus, their achievements contribute to the overall city environment to a limited extent only. Thus, the important task is to integrate these projects into a wider urban design strategy so that their influence can be maximised.

The only attempt to develop a city wide design guide has picked up the public square and plaza as a starting point. However, it could be said that the guide is more useful in providing information than guiding the designation of public spaces. Meanwhile, from the researcher's point of view, the public square is not the most significant element in the Chinese urban context. They are established largely for political or memorial purposes. The most well known example is the Tiananmen Square in Beijing. Comparing to the public squares, small streets and open spaces adjoining them play a more active role in everyday civic life. Thus, this starting point itself is a highly questionable one.

To counter the defects in the current planning system, all the issues discussed above have to be addressed in a way that recognises urban design as a legitimate and necessary area of public policy. As can be seen from other cities' successful experience of adopting design related strategies to shape their physical environment, a more comprehensive urban design strategy framework, carefully tailored to China's urban circumstances, should significantly contribute to the urban quality. It should provide urban design guidance as well as mechanisms to control development. It will need to move away from an exclusive dependence on the traditional control indices to incorporate other forms of design performance criteria, which could evoke an enlightened

response from developers and their architects. It has to open more channels to embrace public opinions and reflect their best interests. It also has to attract a fair measure of political priority and raise the profile of design in China.

9.2.2 Learning from the British Experience

As described in Chapter 8, the research looked at British design experience in the expectation that some useful insights could be identified. There are some good lessons to be found, and some British cities are undoubtedly benefiting from the enlightened exercise of design control. Glasgow is one of these.

The successful features of design control identified include:

- the strong national interest in promoting design excellence
- the incorporation of urban design principles at all levels of planning,
- the adoption of a city-wide design framework,
- the incorporation of demonstration projects as a city-wide strategy,
- the emphasis on the quality of the public realm,
- the careful and detailed analysis of the local context as the basis for the development of design policy and guidance, and
- the appreciation of public participation and involvement.

But to what extent can these lessons be applied to China? As already noted at the outset of the study, the differences between China and Britain are significant. Perhaps the most important is the broad political and economic background. Chinese society is at a transitional stage as it moves from a socialist to a market-led economy. The free market economy is at a pre-mature stage. The administrative power can still interfere in almost any social matter. With the policy loopholes in the present planning system, the administration can overrule and bend the regulations. Whereas Britain enjoys a discretionary system backed up by better developed planning and design policies, Chinese

planners are struggling with having too much discretion, especially on design. This excessive flexibility produces uncertainty, city mayor's commands' and other enormous pressures to which the system finds it hard to resist. Moreover, discretionary planning in Britain also benefits from an appeals system, which does not exist in China. Most planning disagreements in China are dealt with informally between planning officers and developers. This again, reinforces the planning officer's discretionary power. Therefore, urban design should be given legitimate status to secure an active role in planning, and the design guidelines would need to be more mandatory to be properly implemented than in Britain.

From a social perspective, it could be said that British society enjoys far greater democracy and a better spirit of participating in civic events. China has a long history of being a feudal, half-feudal and half-colonial country, and has gone through numerous political turmoils in its recent history. Chinese people tend to be less aware of their 'master' role in the society, and the city governors and leaders do not act as 'public servants' in the same way as they do in Britain. In terms of planning and design control, the British system certainly enjoys more openness, more public willingness to participate and greater government consideration of the public interests. It will be much more difficult to achieve an equivalent openness and participatory style in the planning process in China in the short term.

Although the general urban design principles are applicable in either Britain or China, the specific urban problems facing these two countries are different. For instant, while the British planners are trying to increase population density and mixed uses in cities centres through urban regeneration, Chinese planners are worrying about the extremely high population density in the central areas which has caused the lack of public infrastructure, traffic congestion, overcrowded living conditions and so on.

Increasing the intensity of activities and people within an area is central to the

idea of creating sustainable neighbourhood in British cities. In decaying city centres and dispersed suburban developments - particularly the rebuilt areas of the 1960s and the car-based suburbs of the 1980s and 1990s - the problem is that densities are too low (UTF, 1999). Mixed uses are promoted to increase vitality and to reduce social problems.

Nevertheless, central areas in Chinese cities are still attractive to most people but suffer from its extremely high density and inappropriate mixed uses. In order to divert the population in the central area, there has been a recent trend of expanding the urban fringe and developing suburban areas. Because the land in these areas is cheaper, the total cost of housing development is consequently cheaper. Large-scaled housing developments were built to relocate residents from city centre. Ironically, there is a similarity between this phenomenon in today's China and the widely criticised post-war urban redevelopment in the UK.

Potential problems this might cause have already attracted attention. Mao (1999, p. 25) argues that 'uncontrolled urban sprawl would cause a sharp reduction of agricultural land, it could also cause severe threat to the ecological environment, intensify the traffic problems by an increasing car ownership, and lead to the decay of the city centre'. Furthermore, it would also intensify the antagonism among residents of different social classes and cause serious social segregation. Although this study did not specify the importance of the approaches used to promote urban density and mixed uses in Britain and argued that, currently, they might not need to be applied in the Chinese context, they should be carefully studied to prevent the problems which British cities are facing, emerging in China.

Despite the differences, the British experience is instructive in many ways. The lessons identified provide useful insights for people wishing to achieve better design control. These lessons will be reflected in the following recommendations for China.

9.3 Recommendations

The research raises a number of suggestions for improving the present Chinese planning system so that better control of design matters can be achieved. The main recommendations are:

1. Setting a new urban design agenda for China to promote commitment in design excellence
2. Establishing a higher legal status for urban design
3. Developing a more comprehensive coverage of urban design concerns in policy.
4. Incorporating urban design into existing statutory plans
5. Developing a city-wide urban design strategy and integrating experimental initiatives
6. Developing other forms of design guidance to deliver information and stimulate design thinking
7. Encouraging a thorough understanding of the local context through appraisal and public consultation
8. Improving the co-ordination of policy frameworks and agencies
9. Promoting public participation in planning processes
10. More openness in planning and development control
11. The importance of planning and design education

9.3.1 A New Urban Design Agenda - 'Time for Design'

The phrase 'Time for Design' was originally used as the title for a series of initiatives in six local authorities in England which aimed to improve the quality of design and to increase public awareness and appreciation of its importance (DoE, 1991). This phrase is adopted here because in today's China

it is indeed 'time' to promote good design in urban development.

The study has recognised that a commitment to quality and creativity in design is essential for the improvement of our environment. Urban design can be used to improve large-scaled urban construction that has resulted in insensitive highways, rigorous land-use zoning, and international style buildings. These contribute little to a local sense of place. It can also help achieve good results in urban regeneration. As can be seen from the British experience, the promotion of good urban design qualities has paid dividends. This is a result of a strong national interest in design which has combined the efforts of design professionals, researchers, developers, politicians, representatives from British central and local governments, and various other organisations (e.g. Royal Fine Art Commission, Urban Design Groups, English Partnerships, etc.).

China's urban problems have partly resulted from a long period of neglect of design in planning and from ineffective development control. Poorly controlled urban development has intensified these problems and generated new ones, such as unbalanced urban development, an over-crowded urban environment, a severe lack of open spaces, traffic problems, poor public realm quality, environmental problems, insufficient urban infrastructure, in-coherent urban form, and a general lack of urban character. Dramatic changes in political and economic climates have also challenged the traditional approach to planning and development. The opening up of China to the world has encouraged new planning and design concepts. Land and housing reforms have changed the traditional style of urban development. The decentralisation of administrative power has given local authorities more freedom to intervene in local development. These changes have provided opportunities for innovations in planning and design. Putting urban design higher up the policy agenda is one of them.

However, this study has argued that design has not yet been given enough weight. The investigation in Guangzhou revealed that although concerns for

design were rising, the existing design control approaches were not able to address these concerns effectively. In practice, design quality has often been compromised when time, human resources, and particularly budgets are constrained. Due to the severe lack of qualified design professionals and the huge amount of development, people without proper design skill conduct many projects and decisions are often hastily made. However, as many people have pointed out, these oversights will cause further problems for the city's future development. It has to be recognised that good design can contribute to the marketability of any scheme. It need not necessarily cost more, and might even cost less (English Partnerships, 1998). Quality design, and attention to public spaces, landscape, rich mixes of uses and architectural quality, will add value both to the development and the locality (Royal Society of the Arts, 1993).

Making time for design should be the first step towards achieving a high quality environment.

9.3.2 Establishing a Higher Legal Status for Urban Design

The first important suggestion for change is to establish the legitimate status of urban design in the planning system. Currently, despite a passing mention in the National Planning Act, urban design has not been properly defined with a clear legal status. As a result, local government and planning authorities are left to address this subject at their convenience. This problem has now been recognised in Guangzhou. Local planners and designers are campaigning for a higher legal status for urban design. Establishing the role of urban design is now perhaps the most urgent task for planning in China.

9.3.3 Developing a more Comprehensive Coverage of Urban Design Concerns in Policy

The lack of a thorough understanding of urban design theory has been one of the key problems faced by local planning authorities. Consequently, policies and guidance frequently fail to cover key areas and contain an inadequate range

of considerations to ensure appropriate design control.

One significant feature of local planning control dealing with design matters has been the domination of the concern for development intensity. Building density, plot ratio, floor area, and building distance are the main design criteria controlled by indices. Apart from these indices, design guidance displays a continuing bias towards architectural or external appearance at the expense of broader issues. What seems to be happening in Guangzhou is that quantitative planning measures are being used in an overly simplistic way to dictate design. It is argued that development intensity alone is not an indicator of urban quality. Local authorities and developers need clear guidance on the relationship between density and the quality of life if high quality settlements are to be achieved. Furthermore, density incentives could be employed by local authorities to reward developers who submit high quality designs compatible with a higher density solution, and who are also willing to contribute towards improving the public infrastructure to accommodate a higher density development.

Urban design guidance should highlight the kind of matters that need to be taken into account, such as accessibility, variety, safety, permeability, durability and legibility (Lynch, 1960; Bentley *et al.*, 1995; Tibbalds, 1992; *etc.*). A set of principles has been established in Chapter 3. In the light of this framework, local-planning authorities might be able to develop their own urban design framework within which could be accommodated the broader range of urban design considerations.

9.3.4 Incorporating Urban Design into Existing Statutory Plans

There is a need to develop a strategic urban design framework so that a full hierarchy of design guidance could be provided. To achieve this, revising the existing statutory plans to incorporate urban design issues is a must. Although there have been various efforts to strengthen the role of statutory plans in

design control, including the addition of some spatial principles in plan objectives and content, most local plans in Guangzhou have still been perceived as land use zoning plans, and lack real control of design. Nevertheless, due to their position in the planning system and the design content they have already covered, the current local statutory plans, namely the Urban Master Plan and the urban district plans, have the potential to form the basis of such a framework.

The study suggests that more design inputs should be embedded into existing local statutory plans. They can be the basis for development control in circumstances where no specific policy applies. They should stress the following issues:

- to control the relationship between buildings and public space to show how the street, squares and open spaces of a neighbourhood are to be connected;
- to define the height, massing and bulk of the buildings which will affect the scale, visual appropriateness of the public space, but not the architectural style or detailed design;
- to promote the network of movement patterns for people moving on foot, cycle, car or public transport;
- to provide an understanding of how a new development could be integrated with the surrounding urban context and urban life by defining the local characteristics and values in cultural and historical context; and
- to help the arrangement and designation of the street furniture, lighting and landscaping.

For some planners and designers, the city/district-wide policy and guidance encapsulated in the local statutory plans can never offer more than a 'general' framework for controlling design. They have demanded more area-based guidance. It seems that the Detailed Development Control Plan (DDCP) can be further developed to fulfil such a purpose. It is more detailed and is in a better

position to respond to a local context than the master plan and district plan. Indeed, the DDCP currently used in Guangzhou is seen as having this potential for design control. The study suggests that the DDCP should be regarded as a statutory plan and given this role.

9.3.5 The Need for a City-wide Urban Design Strategy

There is also a need for developing a citywide urban design strategy, which gets over the current fragmentation of statutory plans and policies. Such a strategy could be used to help a local authority with limited resources to identify key sites for which specific 'flagship' projects might be promoted. As discussed in Chapter 7, Guangzhou has launched a series of urban design initiatives. But they are mostly on a project or neighbourhood level. Without strategic level policies, such as integrating the street system with public transport and traffic and with parking control, and the discouraging of car uses in the city centre, the real problems can only be diverted or transferred elsewhere. It is necessary to incorporate these small-scaled projects through a broader strategy to achieve a wider influence on the city's environment. As revealed in Chapter 8 when discussing British urban design practice, a citywide design strategy is essential to co-ordinate district-wide policy and individual initiatives. The achievement of a design strategy in Glasgow proves this point.

A citywide urban design strategy should aim to provide a vision for the future development and enhancement of the city. It should identify the main objectives to realise this vision, define the city's context and opportunities, provide a framework for guiding and controlling development, and establish the design policies against which development proposals can be assessed. Moreover, this strategy should have a clear relationship with other local plans. It should be based on a combination of national standards and a careful interpretation of the local context.

9.3.6 The Need for other forms of Design Guidance

Apart from adjustments in local statutory plans and the development of a citywide urban design strategy, other types of design guidance could be developed on the basis of existing planning and design instruments.

Area-specific policies can be developed for areas that have significant meaning for the city in term of urban quality, or where guiding change is particularly important. The Urban Design Plans for specific districts currently being tried in Guangzhou could form the basis for this. So far, these plans have covered only a few of Guangzhou's 'special' areas, but they could be applied to other areas of particular character or use. These areas may include city centres, transport cores, conservation areas, regeneration areas and so on.

Site-specific design policy can be developed if the design issue is of fundamental importance to the site. For such projects, a design-led master planning approach is worth consideration. The Master Plan approach of the CSRP in Glasgow is one such successful example. In fact, the Detailed Plan employed by Chinese planners is virtually equivalent to this approach. However, the Detailed Plans frequently go into the details of the physical form of the development directly and often result in an invalid blueprint style plan for the site. To improve the efficiency of such plans, insights gained from the CSRP's master planning approach can be very helpful. They include:

- preference for written policies rather than demonstrating the form of the future development in detail;
- setting out a clear vision, objectives, design principles and specific urban design elements for the area to guide the next stage design rather than designing individual blocks;
- addressing broader urban design issues rather than concentrating on detailed design requirements;
- preventing unnecessary prescription but still being concise.

Also significant to the provision of design guidance at a site-specific level is the use of development briefs. The development brief should set out the vision for a development, and ground it firmly into the physical realities of the site and its economic, social, environmental and planning context (UTF, 1999). However, the study has found that many of the documents (e.g. Site-selection Notes, Planning and Design Main Points) produced by local planning authorities which fall into this category covered little more than the required density control indices and the confirmation of street lines. Other design considerations have to be dealt with through negotiation between developers and the planning officers. However, it is extremely difficult to convince developers and government departments that these considerations are legitimately based on local plans/policies. This, again, highlights the urgent need for consolidating the statutory status of urban design and the need for comprehensive urban design policies in planning and development control.

Design guides on specific topics could be developed when certain design issues need to be tackled at length. The Essex residential design guide, Birmingham's urban design studies, and Glasgow's city centre public realm strategy are all successful examples of the use of this type of guidance. At the core of urban quality, the public realm is one issue worth mentioning. In fact, there has already been an attempt at developing a 'Public Square System Plan' in Guangzhou. Despite its good intention, the study has argued that its starting point was questionable, as public squares were not the focus point of civic life. Instead, streets, parks, and less defined common areas comprise most of the public spaces. Thus, the quality of general public space, as well as public squares need to be taken into account.

Two further points are worth stressing for developing area/site and topic specific policy. Firstly, it has to be well integrated within the overall urban design framework of the city to avoid creating isolated areas. Secondly, it should be based on an analytical appraisal of the area/site's character as understood by professionals as well as local people. The importance of these

two points for successful design policies is evident in Glasgow's urban design experience.

In all of these cases the principles and issues identified in the policy should be highlighting the key design matters that any development proposal should acknowledge. They would then directly inform the development control process allowing developers, designers and development control officers a clearer understanding of the nature of development that would be acceptable.

9.3.7 Understanding the Local Context through Appraisal

Each country, each city, and each urban area is unique. General principles need to be carefully tailored into the local context. Design guidance needs to reflect local needs and opportunities. Therefore, an appraisal aimed at understanding the context of the planned area should form the basis of policy making.

While local plans and development proposals often stress the need for such an understanding, the urban character of Chinese cities has not always been appreciated in design control. The researcher argues that this is partly due to the lack of national confidence, which in turn leads to the pursuing of a superficial 'modernity' in urban development. In fact, Chinese cities have many of the qualities that are important for sustainable urban development. For instance, high density living within a mixed-use development contributes to urban vitality as well as social cohesion. Large populations also make the development of public transport more viable. The great coherence many Chinese cities have shown in their historical development must be celebrated instead of being dismissed. These characteristics need to be consolidated in design policies.

Two points can be made about the understanding of local character as a prelude to the development of design policies. The first is that area appraisal should assess how the area performs in terms of broad urban design criteria. The urban design framework set out in Chapter 3 can be used to order the considerations

relevant to appraisal.

An over-emphasis on building forms and styles can be seen in existing area appraisals. Consequently, these concerns are translated into policies, which demand replicating certain architecture style or traditional features. This approach treats the built environment as a snapshot in time rather than as a dynamic and changing entity. In fact, context has little to do with styles and building details. A successful appraisal analyses urban characteristics in a broad manner. It should aim to understand the process of the area's historical development, evaluate the existing characteristics of the urban environment - its pathways, streets and spaces - and analyse how these elements combine and work with or against one another relative to human use and satisfaction. It should also aim to analyse the opportunities and constraints of the planned area, and to design new development for it. Design guidance based on such appraisals should not preclude introducing a new urban form and layout where it takes account of matters such as the continuity of local culture, the quality of spaces and streets and pedestrian welfare. This in turn could be used as the starting point for a set of flexible, yet creative, principles aimed at guiding future development. In this way, urban design might become a catalyst for facilitating this elusive quality when it is absent or is in danger of being eroded. It would then be in a position of greater understanding of those factors that make it different to other cities/areas and have the basis for a finer appreciation of where it and its residents would like it to head in the future.

The second point is that the urban context is not only about the physical state of the environment. It is also about the processes and people that shape it. This means that it is necessary to take into consideration people's perceptions of their environment. It is necessary to use the local community to highlight how the structure and character of a locality might be maintained and enhanced. This would allow people to determine what issues or principles are most relevant to improving the environmental quality of their locality so that appropriate urban design strategies can be generated. Therefore, the people of a

place should be encouraged to contribute to the urban design process.

The study has revealed that few plans in Guangzhou were exposed to detailed public scrutiny during their preparation. Even fewer have systematically drawn upon local perceptions in a beneficial way. Meanwhile, meaningful public consultation seems more difficult to achieve where strategic or policy documents are concerned. Members of the public tend to be more interested in public decision making where there is a clear and tangible impact on their own circumstances, for example, individual planning applications. A possible response is to start encouraging more public participation in detailed decisions on design. This highlights the importance of engaging the public in fundamentals such as the uses, locations, and the forms of development rather than aesthetics. 'It is at its most meaningless where it deals with subjective issues such as choice of architectural style or the colour of details, about which there is rarely anything approaching consensus' (Chetwyn, 1999, p. 358).

Meanwhile, public consultation is only meaningful if it allows communities and individuals to express their needs and wants at an early enough stage. Simply informing the public of the final result of planning could well undermine the development of public interests in the planning process.

9.3.8 The Co-ordination of Policy Frameworks and Agencies

As previously discussed the lack of co-ordination and overlapping functions among government agencies was one issue impeding the progress of design quality.

It has to be recognised that innovations should be undertaken in the organisational framework for planning and development control. This research raised this point and also revealed that there have been such changes undergoing in Guangzhou. Changes such as the emergence of design related administrative organisations, the internal reorganisation of Guangzhou local planning authorities, etc. It is difficult to judge the extent that these have had

on planning control, largely because of the recency of these changes. It can be argued that these changes all highlighted the fact that the problem has been recognised and more attention has been paid to solve it.

With the retreat of the State and the increased importance of private market and localism in China, there should be an intensive reform in terms of planning administrative frameworks. This is to adjust the various conflicts of interest, and also to increase urban planning's role in regulating urban development in transitional economy.

9.3.9 The Need for Public Participation

The research argued that there was a deficiency in public participation in the plan-making and planning control process. Especially in the current circumstance in China, private developers are beginning to be influential - either through formal or informal means and disregarding whether the system is opened to them or not. It is important to have public participation in a formal and institutionalised way to avoid the dominance of the developer's interest over the community and to help form a clean government.

There is a need for more channels for public participation in the planning process. For instance, an Urban Planning Commission could be established comprising government officials and members of the public. The setting up of such an organisation can be accommodated in the existing system of the local People's Congress. Other forms of organisation could be set up to provide venues for exhibitions, community planning events and day-to-day advice on development issues. Functional committees could be established to be the decision takers regarding issues such as urban conservation and design review, and to monitor the process of urban study and public involvement. District level committees or neighbourhood boards are needed to reflect local opinions on planning issues. Current district offices and neighbourhood offices could expand their roles from acting solely as communicators to become a formal

forum for public participation.

9.3.10 More Openness in Planning and Design Control

With the decentralisation of administrative power, urban planning and development control is now a local-oriented regulatory device. This is in contrast with its previous role, which was characterised as subordinate to state economic planning. The conflicts between local government and local planning authorities, and among various government offices and departments have become serious threats to effective development control. Local government is often willing to sacrifice planning and design principles to satisfy local economic interests. Meanwhile, under the decentralised urban governance, development interests can exert high pressure on planning authorities and find large room for manoeuvre.

The excessive administrative discretion on planning and design decision making makes the system not open and can lead to corruption and unfairness. It has also exposed planners to pressures from all directions. Therefore, the difficulties in achieving effective design control cannot simply be explained by technical reasons. It is a symptom of a transitional economy within which public vs. private and administrative vs. market forces are interwoven.

In the past, public interests were traditionally represented by the work-units to which the residents were affiliated. With the retreat of state work-units in urban construction and the new land leasing system, the control of urban space has been transferred from work-units to local government and then to external developers. With the increasing interaction between government and developers, local residents are left behind. This does not mean that local government deliberately excludes the community. The research uncovered a general positive view of public participation among the respondents. Rather, the exclusion stems from a lack of local resources, representative mechanisms, and a lack of real enthusiasm from the public itself. Also, public participation

has had no real meaning in a context where decision making effectively takes place among government agencies and developers. It is gradually being recognised that it is critical to decide policy priorities more openly. Otherwise the balance of interests in reaching a decision will be obscured. To safeguard the public interest, as well as to dissipate the pressure on planners, transparent procedures for mediating conflicting interests should be introduced.

9.3.11 The Importance of Planning and Design Education

Regardless of how sophisticated and flawless the planning system is, design quality cannot be ensured if there are no skilled professionals to make plans and policies, to implement them, to assess the qualities of design proposals and to negotiate for design improvements.

The research revealed that the shortage of skilled professionals was one of the reasons for low design standard. Although, the Guangzhou local planning authorities are mostly staffed by professional planners and architects, the interview responses revealed that they were constantly struggling to cope with the huge workload. They also pointed out that there were many proposals that were designed by people with little or no formal training.

Furthermore, the low design awareness of politicians and developers was also revealed in the interviews as discussed in Chapter 6. The local political desire for promoting economic growth, attracting outside investments and developments has always been a factor in the pursuit of high design quality. This reflected a generally accepted view that economic prosperity must come first and that this is best achieved by a relaxed planning regime. Developers thus tended to benefit from this view during negotiation and use the existing policy loopholes to achieve more financial profit.

There is an urgent need to improve urban planning education in terms of both the quality and quantity of trained professionals. This point has also been raised by other authors (e.g. Wu, 1998) who suggested that education should

move away from its past emphasis on urban engineering and architecture to a more multi-disciplinary approach in order to deal with the new urban planning environment. There are also benefits to be gained from providing politicians with some education in design to let them be aware that 'tighter control with an emphasis on broad environmental quality is seen as the key to economic prosperity, not a barrier' (Punter & Carmona, 1997, p.363). This point was also evident in the OECD research *Revitalising Urban Economies* (OECD, 1992), in which the research revealed that the two most important initiatives that cities can take to stimulate economic activity are to invest in infrastructure and to improve environmental quality.

9.4 Suggestions for Further Research

This study has discussed some of the improvements that are needed in the present urban planning system so that better urban qualities can be delivered. It suggests that strategic urban design thinking should be integrated. Efforts should be made to promote the importance of urban design among all participants in the urban development process, strengthen the statutory status of urban design, develop a comprehensive urban design framework and promote public involvement in the planning process.

During the research process, some questions have been raised that could not be answered by this study. What follows are some possible avenues for further research.

One area for further research is the field of design appraisal. The importance of appraisal has been raised by the study. It is argued that the reason for the lack of appropriate appraisal lies mainly in the absence of a comprehensive methodology and the right skills among planners. Thus, further research is needed to develop such methodologies which are 'theoretically sound, easily replicable, and comprehensible, and are able to develop design principles that will have applications in practice' (DoE, 1996, p. 142).

The public's role in appraisal has been emphasised by the study, and some suggestions have been made for the planning system to better address public interests. However, there is still a need for a more rigorous approach to enable communities to participate on a more equal basis with politicians and professionals. Wider approaches for public participation still need to be explored. For instance, as suggest by Turok, there is a value in 'third-sector' organisations that provide an infrastructure to sustain participation, promote dialogue between different sectional interests, act as local champions and serve as a catalyst for change and development within their localities (Turok et al. 1999, p. 381).

The research attempted to measure the effectiveness of design control. The research adopted a limited conception which focused on the acceptance of design control polices, and the perceptions of process related factors among various participants in planning. The conclusions drawn were not an accurate assessment of the Chinese planning system's performance on design control, instead, they were more likely to answer why the system has not been regarded as effective on design control.

Punter and Carmona (1997) argued that ultimately, any assessment of the effectiveness of design control will have to be broader an initiative and it will have to assess a wide range of factors including:

- the quantity and quality of development refused planning permission;
- the 'value added' to development in terms of design quality through the control process;
- the extent to which design control subverts the best in design, including innovative and imaginative solutions.

They also suggested that these aspects should ideally be assessed by the variety of interests that the development control industry serves, and this could only be done with in-depth interviews focusing upon actual examples of control or

cumulative evidence compiled in a locality. However, this has not been feasible for this research to undertake. Although the research attempted to explore these aspects a little further in Chapter 7 through several case studies of housing developments in Guangzhou, they still did not represent the whole picture. A new study on this subject is clearly desirable.

The impact of China's transitional economy on planning and design is another area worthy of further research. The study has made the point that with the development of a new land leasing system and the housing reforms, the development method has also changed from a project-based development initiated by the state work-unit to comprehensive development led by private developers responding to market forces. The breaking down of old community structures, the emergence of high-class residential areas, and the deterioration of old residential districts have brought the problem of social segregation to light. This problem is fairly new to Chinese planners, as in the past there was no big difference between citizens in terms of their economic and social status. How to tackle this problem by design needs full attention as it can be foreseen that social tensions among different areas will become more apparent in future. Some concepts being employed in the UK such as 'mixed uses' and minimising the visual difference between private and public housing need to be further studied and tested in the Chinese context.

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APPENDIX 1: THE INTERVIEW SCHEDULE

PART ONE: Background Information

1. Please indicate which 'consumer' category you fall?
 - Planning officer
 - Developer or property interest
 - Architect and designer
 - Residents amenity group
2. Could you describe your current job and the area of your responsibility in your job?
3. What kind of design related training have you ever experienced?
4. How well do you feel that these training and experience has equipped you to do your current job?

PART TWO: The Focus for Design Control

5. Could you tell me your understanding of the concept of 'urban design'?
6. Could you outline where urban design fits into the work you do?
7. What role does it play in it?
8. As far as you know, what is the local planning authority's view towards good design quality, especially urban design?
9. What is your personal view towards it?
10. In your opinion, what priority has been given to good design in the planning and development control practice?
11. According to your knowledge, where are urban design issues being addressed in local plans and policies? (e.g. statutory plans, local planning regulations, planning procedure documents, etc.)
12. How familiar are you with the content of the local master plan, especially the design parts?
13. If you know it fairly well, what do you think about its role on design control?

- 14. Are you familiar with the content of local district plans?**
- 15. If not, why? (e.g. Is it because you think it is not necessary for you to know, or you never had a chance to know it, or the policies are too difficult to understand, etc.)**
- 16. If you know it fairly well, what do you think about the design policies in these plans?**
- Are they easy to be understood?
 - Are they too detailed or not detailed enough?
 - Do they require too much from the developers and households or not strict enough?
 - If they are too loose (strict), what do you think is needed to be tighten them up (relaxed)?
 - How helpful are they for planning applicants and designers?
 - In what aspects do they help? And in what aspects they do not?
 - How helpful are they for planning control officers in design decision making?
 - In what respects do they help? And in what aspects they do not?
 - Can those unhelpful features be removed or improved?
- 17. How familiar are you with the content of local planning and design ordinance and technical standards?**
- 18. If not, why?**
- 19. If you know it fairly well, what do you think about the design content in these policies?**
See sub-questions under question 16.
- 20. How familiar are you with the procedural documents issued in the planning application process? (e.g. site-selection notes, main design and construction points, etc.).**
- 21. What do you think about the design issues contained in these documents?**
See sub-questions under question 16.
- 22. How familiar are you with the content of detailed plans?**
- 23. If you know it fairly well, what do you think about their role in design control?**

24. How much do you know about the new generation of Development Control Plans?
25. What do you think about the design content in these plans?
26. What difference have they made compared to the traditional 'Master Plan-district plan-detailed plan' system in terms of design control?
27. How much do you know about the Urban Design Plans that have been used recently in Guangzhou?
28. What is your view about their value for design control?
29. Do you think they can help to improve the urban design quality of the city in a right way?
30. If yes, could you explain the reasons why you think so?
31. If no, please specify the reasons?
32. What do you see to be the main components of design policies in all forms?
33. In what specific aspects do you think they have achieved good result? (e.g. townscape, control of over-development, creating quality public spaces, etc.).
34. Could you specify where they have failed or have not done enough?
35. How might they be improved?

PART THREE: Design Control Process

36. How familiar are you with the local planning and design control system? What do you know about it?
37. What is your view about how well the control over design has worked in Guangzhou?
38. Were you ever directly involved in any plan preparation?

39. In your job, at what stage do you normally take design policies into consideration? e.g.

- before starting design,
- before making application,
- during negotiation,
- during public consultation
- when commenting in application,
- other

40. Could you describe the reasons?

41. What kinds of design policies are you most likely to take into consideration? e.g. those

- in the master plan
- in the district plans
- in the local ordinance and technical standards
- in the development briefs
- in the detailed plans
- in the development control plans
- in the urban design plans

42. Could you describe the reasons?

43. If some design concerns in certain plans/policies are not taken into consideration, could you specify the reasons?

44. What do you perceive to be the most significant pressures involved with design control?

45. What do you perceive to be the most controversial design issue associated with application for planning/design permission?

46. According to your experience, is there appraisal or survey work being implemented for the area before making the plan?

47. If yes, how helpful are they? And why are they helpful or vice versa?

48. If no, could you explain the reasons why it is missing?

49. Were you ever involved in the planning/design consultation process? e.g.
- Attending meeting/discussion groups for local or specific plan making,
 - Making any verbal or written comments on any local or specific plans, and
 - Any other kinds of involvement and participation.
 - other
50. Could you talk a little more about your experience of your participation?
51. For what reasons is an application most likely to be turned down on design grounds?
52. Has any of your planning application ever been turned down for design problems?
53. Could you give examples?

PART FOUR: General Effectiveness of Design Control

54. What would you say about the general performance of the current planning system in terms of design control?
55. Can you point to examples where design control has succeeded and where it has failed?
56. Could you describe why/ what do you think this reveals about the control process?
57. Do you think current design policies are effective enough to adjust the conflict of interest among the participants?
58. To what extent do they provide useful design criteria for judging planning applications?
59. To what extent do they provide useful guidance for good design?
60. Do you think the urban design plans could help to achieve better urban design quality in developments in the designed areas? And why?
61. Do you think urban design issues should be addressed separately by other means?

62. What do you consider the main barriers are for better design? e.g.

- the nature of development itself
- ineffective design control system
- lack of proper planning and design skills among professionals
- poor public tastes, etc.
- other

63. Do you think there are changes needed to be made to the planning system in terms of design control in order to achieve better urban design quality?

64. What and how could they be done, by whom could they be done?

65. What could be expected to happen if these changes were made?

APPENDIX 2: LIST OF INTERVIEWEES

Planning Control Officers

<u>Name</u>	<u>Position & Organisation</u>
1. Pan Ann	Senior urban planner Head of the Administration Department for City Planning Guangzhou Urban Planning Bureau
2. Lin Ying	Senior urban planner Guangzhou Urban Planning Bureau
3. Leng Rui Hua	Urban Planner Guangzhou Urban Planning Bureau
4. Duan Xian Feng	Senior urban planning Head of the Design Management Department Guangzhou Urban Planning Bureau
5. Zhao Jian Hua	Architect/Urban planner Guangzhou Urban Planning Bureau
6. Dai Feng	Urban planner Head of GUPB Guangzhou Urban Planning Bureau
7. Cheng Kai Zhi	Urban planner Guangzhou Urban Construction Commission
8. Zhu Zhen Zhong	Senior Urban Planner Guangzhou Urban Construction Commission
9. Liu Ri Zhi	Urban Planner The Land Administration and Housing Management Bureau of Guangzhou
10. Wang Xiao Long	Senior urban planner Head of the Shui De Planning Bureau Shui De Urban Planning Bureau
11. Li Chun Sheng	Urban Planner Head of the Urban Planning Department Shui De Urban Planning Bureau
12. Ma Sherman	Senior urban planner Director of the Guangdong City Development Research Centre Guangdong City Development Research Centre

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| 13. Wang Ying Chi | Urban Planner
Guangdong City Development Research Centre |
| 14. Zhao Jin Song | Urban Planner
Guangdong City Development Research Centre |
| 15. Ma Xiang Ming | Senior urban Planner
Guangdong City Development Research Centre |

Architects and Planners

<u>Name</u>	<u>Position & Organisation</u>
1. Li Ying	Senior urban planner Chief planner Guangzhou Urban Planning and Design Research Institute
2. Lin Jun	Architect/urban planner Director of the Urban Design Section Guangzhou Urban Planning and Design Research Institute
3. Li Zhi	Architect The Urban Design Section Guangzhou Urban Planning and Design Research Institute
4. Fang Hao	Architect The Urban Design Section Guangzhou Urban Planning and Design Research Institute
5. Zhao Honghong	Architect Professor of South China University Member of the Guangzhou Urban Environment & Art Committee
6. Wu Di	Architect Vice-present of the School of Architecture South China University
7. Yu Xing	Architect Guangzhou Architecture and Design Research Institute
8. Kong Zhong Xian	Architect Guangzhou Architecture and Design Research Institute
9. Wu Ming Chuna	Architect Guangzhou Architecture and Design Research Institute

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| 10. Zhan Zhen | Architect
Guangzhou Architecture and Design Research Institute |
| 11. Huo Wei Guo | Architect
Guangzhou University |
| 12. Li Zhi Yuan | Architect
Guangzhou University |

Developer & Development Team

<u>Name</u>	<u>Position & Project Associated</u>
1. He Wen Jun	Developer - De Bao Garden
2. Fu Xin	Project manager - De Bao Garden
3. Yu Jun	Project manager - Li Jiang Garden
4. Liu Zong Hui	Project manager - Jin Cheng Garden
5. Chen Jian Hua	Project manager - Jin Cheng Garden
6. Xie Bo	Project manager - Tianhe Garden
7. Xie Guang	Project manager - Hong Ling Garden
8. Wu Yu Hua	Project manager - Qiao Yi Yuan
9. Zhang Guo Guang	Project manager - Mingya Yuan
10. He Jun Wen	Sales manager - Mingya Yuan

Residents Amenity Member

<u>Name</u>	<u>Residential Area</u>
1. Yao Lin	Mingya Yuan Tianhe District, Guangzhou
2. Lin Dan Yao	Mingya Yuan Tianhe District, Guangzhou
3. Mao Fan	Mingya Yuan Tianhe District, Guangzhou
4. Lu Jun Chen	Mingya Yuan

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| | Tianhe District, Guangzhou |
| 5. Lui Ri | Dexing Redevelopment Project
Liwan District, Guangzhou |
| 6. Xia Zhi Guo | Dexing Redevelopment Project
Liwan District, Guangzhou |
| 7. Lin Ming Qing | Guan Yuan New Village
Bai Yun District, Guangzhou |
| 8. Xiong Bao Guang | Guan Yuan New Village
Bai Yun District, Guangzhou |
| 9. Yang Zhi Wei | Guan Yuan New Village
Bai Yun District, Guangzhou |
| 10. Qiao Ying | Guan Yuan New Village
Bai Yun District, Guangzhou |

Interviewees in Britain

<u>Name</u>	<u>Position & Organisation</u>
1. Tom MaCartney	Director of the CSRP Crown Street Regeneration Project Legal House 101 Gorbals Street Glasgow G5, 9DW
2. David Hogg	Project manager Turner & Townsend Project Management Mercahtile Chamber 53 Bothwell Street Glasgow
3. Fraser Stewart	Director of the New Gorbals Housing Association 17 Benthall Street Glasgow G2, 6HQ
4. Gerry Henaughen	Architect Hypostyle Architects 49 St. Vincent Crescent Glasgow G3, 8NG
5. Cherif Merrouche	Resident of CSRP Old Rutherglen Road Glasgow
6. Mary Gray	Resident of CSRP 167 Old Rutherglen Road Glasgow G5

7. Ron Smith

Planning officer
Planning Department
Glasgow City Council
City Chambers
Glasgow G2, 1DU