

THE SHAPING OF PEOPLE'S SPACE

An Inquiry of Human Environmental Experiences and Planning Practice,
China

zur Erlangung des akademischen Grades

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Ort, Datum

Unterschrift

We cannot plan, only LIVE — intensively and fully!

Tom Bender, 1973

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DU Juan

Dortmund, Germany

April 2010

to my husband *Hendrik*

Kurzreferat

Problemstellung und Zielsetzung der Arbeit

Diese Forschungsarbeit hat erläuternden Charakter und konzentriert sich wissenssuchend und normativ auf ein aktuelles, reales Phänomen. Die zentrale Forschungsfrage lautet: „Wie wird menschliche Umwelterfahrung durch das Leben und kulturelle Handlungen geprägt?“

Die vorgeschlagene grundsätzliche Hypothese „Das Leben der Menschen und ihre soziale Interaktion haben einen festen Anteil am Entwurf und der Gestaltung ihrer Lebensumstände und ihres sozialen Raumes“ wird überprüft. Im chinesischen Kontext ist es entscheidend, die dort vorherrschenden politischen, ökonomischen, kulturellen und historischen Systeme und Institutionen zu berücksichtigen, da diese dort wesentlichen Einfluss auf städtisches Leben und Raum nehmen.

Das Forschungsproblem wird zu einer Reihe substantieller Fragen verdichtet, um die folgenden Forschungsziele zu erreichen:

- Öffentlichen Raum in China zu verstehen und begrifflich zu definieren;
- Handlungen von Menschen in Bezug auf den öffentlichen Raum in ausgewählten Siedlungen zu untersuchen; und
- entstehende Probleme darzustellen und entscheidende Aspekte, die in der Planungspraxis berücksichtigt werden sollten, zu betonen.

Stand der Wissenschaft

In der modernen chinesischen Stadtentwicklung gibt es nur wenige Forschungsarbeiten über menschliche und kulturelle Einflüsse auf den öffentlichen Raum. Der öffentliche Raum erscheint allgemein als wenig erforschtes Thema. Zudem lässt sich beobachten, dass dieser Begriff bei Entscheidungsträgern, Fachleuten und in der Öffentlichkeit einen jeweils unterschiedlichen Bedeutungsumfang hat. Darüber hinaus ist Städtebau in China weder legitimiert noch in die Stadtplanung integriert.

In den letzten zwei Jahrzehnten hat sich jedoch ein dringender Bedarf an weiterer Forschung auf diesem Gebiet entwickelt. Dieser Bedarf ist praxisbezogen und verflochten mit der sozio-räumlichen Restrukturierung im Rahmen des sozioökonomischen Wandels in China.

Die vorliegende Studie deckt hauptsächlich die folgenden Gebiete ab:

- Gesetze und sonstige Normen des Planungsrechts und Bodenmanagements, um die rechtlichen Rahmenbedingungen darzustellen;
- Planungsphilosophie und -methodologie sowie deren Geschichte und Entwicklung als Forschungshintergrund;
- städtebauliche Theorien zur Untersuchung der wesentlichen Aspekte von öffentlichem Raum und Landnutzung; und
- das Konzept des „human-responsive environment“, um die Bedeutung der Kultur und des sozialen Raumes aufzuzeigen.

Die eingesetzten Methoden

Diese Dissertation besteht aus zwei Teilen, in denen jeweils theoretische und normative Herangehensweisen verwendet werden: der theoretischen Erhebung und der empirischen Untersuchung.

Der theoretische Teil beginnt mit einer kritischen Bewertung der historischen Entwicklung der chinesischen Stadtplanung und der diesbezüglichen Gesetzgebung. Er untersucht die Bedeutung und Begriffsdefinition öffentlichen Raumes in den drei Zeitabschnitten kaiserliches China (vor 1919), sozialistisches China unter Mao (1949 bis 1976) und modernes China im ökonomischen Wandel (1978 bis heute).

Im Zusammenhang mit den im theoretischen Teil gewonnenen Erkenntnissen erscheint die Fallstudie als geeignetes Instrument zur Untersuchung, wie menschliche Bräuche zur Konzeptionalisierung von Räumen genutzt werden und welche intrinsische Räumlichkeit von einer bestimmten Gesellschaft erzeugt wird. Folglich konzentriert sich die empirische Untersuchung auf Aktivitäten von Menschen im öffentlichen Raum und auf die kulturellen Bräuche und Werte, die ihre gelebte Umwelt beeinflussen.

Aufgrund des durch den Forschungsansatz und den gewählten Schwerpunkt vorgegebenen Rahmens sowie der Art der untersuchten Daten wird „Space Syntax“ als Analysewerkzeug für die erste Stufe der Datenverarbeitung eingesetzt. Es werden hierbei nur Daten verwendet, die durch mehrere Quellen gestützt sind, um die Gültigkeit und Verlässlichkeit der Ergebnisse zu gewährleisten. In diesem Zusammenhang hat sich die systematische, zielgerichtete Beobachtung verbunden mit Interviews als leistungsfähige Methode erwiesen, um menschliches Verhalten im öffentlichen Raum zu untersuchen.

Wesentliche Ergebnisse

Die Ergebnisse bestätigen, dass sowohl die jeweiligen Regierungsbehörden als auch der Konfuzianismus die Entwicklung des öffentlichen Raumes deutlich beeinflusst haben. Öffentlicher Raum wurde im chinesischen Kontext begrifflich definiert, was eine der Voraussetzungen für die zukünftige Gestaltung des städtischen Raumes im Einklang mit kulturellen Werten und Bräuchen ist.

Die betrachtete Siedlung wurde bezüglich der Gliederung des öffentlichen Raumes hinsichtlich der Lebensbräuche der Bewohner untersucht. Für die Beziehung zwischen dem Raum und seinen Einwohnern wurde ein zuverlässiges, deduktives Modell aufgestellt. Die Ergebnisse bestätigen eine signifikante Synergie zwischen Raumstruktur und sozialer Kultur. Die aufgestellte Hypothese konnte somit verifiziert werden.

Auf der technischen Ebene wurde ein anwendbares Landnutzungsmuster bezüglich der Planung von öffentlichem Raum auf Stadtteilniveau ausgearbeitet. Dieses basiert auf der aktuellen nationalen Gesetzgebung, wurde aber um einen adaptiven Planungsansatz erweitert. Die Forschungsergebnisse bestätigen den dringenden Bedarf an einer zusätzlichen räumlichen Planungsstrategie zur Koordinierung von Menschen und ihrem sozialen Raum in China. Insbesondere wurden die vier wichtigsten Lücken zwischen der Planungsmethodologie und der realen Umsetzung identifiziert:

- Das Landnutzungssystem ist nicht in die Stadtplanung integriert. Es fehlt ein systematischer und ganzheitlicher Planungsansatz. Landnutzungsplanung regelt das Management und die Überwachung der Durchführung nicht rechtsverbindlich.
- Im gesamten Planungssystem Chinas fehlen aufgrund historischer und kultureller Aspekte städtebauliche Gesichtspunkte. Erschwerend kommen mangelnder Wettbewerb bei der Landnutzungsplanung, unzureichend qualifizierte lokale Fachplaner sowie mangelndes Problembewusstsein der Öffentlichkeit hinzu.
- Die standardisierte Planung verursacht einen Verlust des „human-responsive environment“.
- Die Bedeutung von Kulturdenkmälern für die Stadtentwicklung wird unterschätzt. Folglich sind Kulturdenkmäler keine Ziele aktueller Planungen.

Ansätze für weiterführende Arbeiten

Diese Arbeit erstellt ein in zukünftiger Forschung über Menschen und öffentlichen Raum anwendbares Modell. Multiplikatoreffekte sind Abhängig von der zukünftigen chinesischen Stadtplanung möglich. Zukünftige Anwendungen des Modells sollten einen par-

tizipativen Planungsansatz berücksichtigen. Insbesondere werden Ansätze für weitere Forschungsarbeiten zu folgenden Themen gegeben:

- Die in dieser Arbeit lediglich identifizierten Gestaltungsprobleme öffentlichen Raumes auf Siedlungsebene müssen weiter erforscht werden.
- Die wesentlichen räumlichen und kulturellen Zusammenhänge, die für die untersuchte Siedlung erkannt wurden, können zumindest teilweise auf zukünftige Stadtplanungsprojekte wie z.B. „Shunde new town“ übertragen werden.
- Die im Rahmen dieser Arbeit entwickelte Methode zur Erschließung der Möglichkeiten öffentlicher Aktivitätsräume sollte auf Anwendbarkeit auf der Nachbarschaftsplanungsebene überprüft werden.
- Die weitere Untersuchung der oben genannten vier wichtigsten Lücken zwischen Methodologie und realer Umsetzung ist besonders wichtig. In diese Arbeiten sollte die Öffentlichkeit maßgeblich einbezogen werden, damit sie auf politischer Ebene anerkannt werden. Dringliche Probleme wie das Erstellen von Städtebaurichtlinien und eines strategischen Stadtentwicklungsplans sollten hierbei Priorität erhalten.

Abstract

Keywords *Chinese urban planning, land use management, urban design, human-responsive lived environment and space syntax*

One of the main focuses of the recent Chinese urban development is the making and retrofitting of public spaces driven by the market force and demand. However, researches concerning human and cultural influences on shaping public spaces have been scanty. There still exist many undefined ambiguous planning aspects institutionally and legislatively.

This is an explanatory research to address interactions, incorporations and interrelationship between the lived environment and its peoples. It is knowledge-seeking and normative. Theoretically, public space in a Chinese context is conceptualized; empirically, an instrumental case is inquired. The research has unfolded a comparatively complete understanding of China's planning evolution and on-going practices. Data collection emphasizes the concept of 'people' and 'place'. First-hand data is derived from the intensive fieldwork and observatory and participatory documentations. The ample detailed authentic empirical data empowers space syntax as a strong analysis tool in decoding how human's activities influence the public space.

Findings fall into two categories but interdependent. Firstly, it discloses the studied settlement as an organic and incremental development model. Its growth and established environment is evolutionary, based on its intrinsic traditions, life values and available resources. As a self-sustaining settlement, it highlights certain vernacular traits of spatial development out of lifestyles and cultural practices. Its spatial articulation appears as a process parallel to socio-economic transitions. Secondly, crucial and acute planning aspects are theoretically summarized to address the existing gap between current planning methodology and practicalities. It pinpoints several most significant and particular issues, namely, disintegrated land use system and urban planning; missing of urban design in the planning system, loss of a human-responsive environment resulted from standardized planning and under-estimation of heritage in urban development. They are the existing gaps between the present planning methodology and problem *in situ*.

The research challenges present Chinese planning laws and regulations through urban public space study; and pinpoints to yield certain growth leverage for planning and development. Thus, planning is able to empower inhabitants to conceptualize and make decisions along the process of shaping and sustaining their space. Therefore, it discusses not only legislative issues, concerning land use planning, urban design and heritage conservation. It leads to a pivotal proposal, i.e., the integration of human and their social spaces in working out an optional spatial strategy. The research assures the necessity and urgency of such an integration. It expects to inform policymakers of underpinning social values and cultural practices in reconfiguring postmodern Chinese spatiality. It propounds that social context and human-related factors shall be integrated as a crucial tool in spatial strategy design, hence to strengthen spatial attributes and improve life quality.



Research case study area, southern Cantonese Settlement, Guangdong Province, China

[Source: Author's own acrylic painting (Size: 45 cm x 60 cm)]

Prologue

Toward a More Alien Environment

There are fundamental differences between those things created by man and those not, which we would be wise to consider before we commit ourselves and our future to a man-made and man-centred environment.

Before the development of our industrial culture we made things in a more natural way. A man in a non-industrial society found it both necessary and desirable to satisfy a myriad of conditions-internal and external; cultural, functional, and spiritual-before and during the making of something, considering both the thing and process and as well the contexts in which it existed and grew. We, on the contrary, have consistently divorced our actions from all but their most direct concerns. We have gained an 'efficiency' through this, but it is an efficiency we can ill afford. When we make something, we usually design for operation in a certain set of conditions, and produce something that will operate efficiently under those conditions, but which has no ability to deal with the inevitable changes that will occur in its situation. We have behaved as if change were not an inseparable part of living system, and have created things with very limited and singular potential. As a result, we find we must constantly intervene to maintain and restore the conditions for which we designed, or to create new things for the now changed conditions.

Efficiency is purchased only at a price - and that price is in part the simplification and instability of the many different relationships which are affected in achieving it. To focus energy flows more completely to our conscious purposes requires the redirection of energy that maintained other. Less obvious, yet vital relationships essential to the continued health of ourselves and our world, and our continued ability to take part in the dynamic, growing processes of that world. Efficiency is attainable only on a small scale, where the stability of the surrounding eco-system can balance the local instability it generates. Our actions, however, now affect our world on a scale which far exceeds this and which often exceeds the capacity of our natural environment to maintain either our health or its own. We must find a new base for our actions within the processes of our natural world, where the healthy maintenance of a complex web of collateral relationships and interactions is realized as essential to the attainment of any goal.

Natural systems are also very different from man-made systems in their capacity to respond to change. Everything that exists in a natural system has been a part of innumerable complex situations through its evolution and development, and retains within its internal ordering latent capabilities to respond to a great variety of situations.

If we accept that change is an inherent part of any process of which we are part, the things in our world for which we are responsible must maintain that inherent capacity to respond to change.

In any natural system complexity, redundancy, and inefficiency have significant purposes, which ought to be carefully understood before abandoning natural systems in favor of supposedly more effective and less important than the primary ones, as many processes in nature have become used as 'free lunch' means by which other processes attain their own goals. Greater certainty of success is gained through redundancy, but in addition many things are occurring in terms of the behavior and information exchanged between the system and its many contexts. Feedback, adaptation, experimentation, and the nurturing of relationships occur. As well, correlation of the organism's information and behavior with the entire spectrum of its conscious and non-conscious knowledge takes place. What also may be quite secondary effects at one level of organization might be the very things which bring into being higher levels of order quite unconsidered in the primary purpose.

These secondary roles are an inescapable and essential part of the nature of any organism. To maintain the integrity of our nature and existence, it is important that in any case where we are concerned, we direct information processing and other tool extensions of man THROUGH HIM, So that the whole of the little-known checks and balances and purposes our nature can be brought to bear upon our actions. Any tool divorced from man becomes a machine, and becomes separated from the purposes and destiny and nature of man, with the results of inevitable conflict.

The things which we make are lifeless, as they can only be an unchanging mirror to ourselves-unless we can learn to create in an open-ended way, releasing new combinations and rhythms, freeing them to live and interact with what they come in contact with without the heavy controlling hand of man. The full potentials of a thing cannot be known before its existence and entry into the changing rhythms of its external environment. Those rhythms in turn become further altered by the entry into a situation of the new elements. We can only remain alert to discover what new things are generated through the changes we introduce, and act wisely in that new situation.

We have sought through our whole history to create a more benign environment – surroundings which make safer, more sure, and more comfortable our existence. A benign environment is capable only of perpetuating the status quo around which it was designed, and has almost no ability to stimulate growth or change in its constituents. It can tell us only what an organism was called upon to do. A taxing environment, on the other hand,

reveals something of the internal structure of that organism, specifically about those aspects of the internal structure that were chiefly instrumental in limiting performance. So the uncontrolled aspect of an environment is an important means by which knowledge is revealed to us about ourselves and the many things, processes, and rhythms that permeate our surroundings.

by Tom Bender, 1973

Acronyms

GDP Gross Domestic Products

MoC The Ministry of Construction

PRC People's Republic of China

PRD Pearl River Delta Region

SAR Special Administration Regions

SLA The State Land Administration Bureau

SOE State-Owned Enterprises

SPC The State Planning Commission

TVEs Township and Village Enterprises

The translated proper names, classical Chinese terms, literature titles and relevant planning laws and regulations from Chinese to English could slightly differ their authentic meaning in Mandarin. They might be also subject to different translation versions of other authors.

Contents

1	Introduction	1
1.1	Chapter Development	1
1.2	Acute Planning Issues and Conflicts	9
1.2.1	Misunderstanding of Urban Design	10
1.2.2	Mismatch of Development Needs and Planning Approach	13
1.2.3	Insufficient Public Awareness	18
1.2.4	Misuse of Urban Design Competition	20
2	Conceptual Framework	23
2.1	Research Design	23
2.2	Research Problem and Hypothesis	25
2.2.1	Research Problem	25
2.2.2	Basic hypothesis	26
2.3	Research Questions	26
2.4	Research Objectives and Topics	26
2.4.1	Research Objectives	26
2.4.2	Research Topics	27
2.5	Research Challenges and Outcomes	27
2.5.1	Research Challenges	27
2.5.2	Research Outcomes	29
3	Methodology and Strategy	31
3.1	Research Strategy	31
3.2	Selection of the Study Area	33

3.2.1	The Pearl River Delta Region	33
3.2.2	The Study Site - Magang Island Settlement, Foshan City	34
3.3	Concept and Methods of Data Collection	37
3.3.1	Observation as data collection technique	39
3.3.2	Construct data validity and reliability	41
4	Conceptualization of Chinese Public Space	45
4.1	China's Dual Planning Systems	46
4.1.1	Concept of the Classical Chinese Imperial Planning	46
4.1.2	Administrative Unit and Planning Hierarchy of China	49
4.1.3	Evolution of Chinese Modern Urban Planning	52
4.2	The genesis and concept of China's public space	57
5	Empirical Study of Magang Island Settlement	65
5.1	General Characteristics of Magang's Settlement	65
5.1.1	Settlement typology	65
5.1.2	Temple-affiliated Space	66
5.2	Circulation System and Road Network of the Settlement	68
5.3	Selection of Surveyed Sites - Four Dwelling Clusters	71
5.3.1	Typology of Public Open Space of Magang Settlement	71
5.3.2	Spatial Articulation of Four Survey Sites	72
5.4	Syntactic Analysis of the Settlement - Spatial Integration	75
5.5	Syntactic Analysis of the Selected Four Dwelling Clusters	79
5.5.1	Integration of the dwelling cluster	79
5.5.2	Mean Depth of the Dwelling Cluster	80
5.5.3	Initial Analysis Results	81
5.6	Site Survey 1: Lu Wu Ling Temple-affiliated Public Space	83
5.6.1	General Impression	83
5.6.2	Place-performance Rapid Evaluation	84
5.6.3	Behaviour Mapping and Movement Pattern	87
5.7	Site Survey 2: Xian Dragon Hall-adjacent Public Space	90

5.7.1	General Impression	90
5.7.2	Place-performance Rapid Evaluation	91
5.7.3	Behaviour Mapping and Movement Pattern	95
5.8	Site Survey 3: Wen Wu Emperor Temple and Shi Zhou Temple-affiliated Public Space	98
5.8.1	General Impression	98
5.8.2	Place-performance Rapid Evaluation	100
5.8.3	Behaviour Mapping and Movement Pattern	103
5.9	Site Survey 4: Family Feng Ancestral Temple-affiliated Public Space	106
5.9.1	General Impression	106
5.9.2	Place-performance Rapid Evaluation	109
5.9.3	Behaviour Mapping and Movement Pattern	111
6	Research Findings and Conclusions	115
6.1	Key Spatial Elements of the Settlement's Public Open Space	115
6.2	Summaries and Lessons of Current Planning Practice of China	119
6.2.1	Disintegration of Land Use System and Urban Planning	120
6.2.2	Missing of Urban Design in the Entire Planning System	122
6.2.3	Loss of a Human-Responsive Environment Resulted From Stan- dardized Planning	124
6.2.4	Under-estimation of Heritage and Development	127

Chapter 1

Introduction

1.1 Chapter Development

Chapter 1 briefly reviews the latest planning tendency, project types and typical existing problems concerning the issues and topics of current urban public space in China. It aims at providing readers a general scenario on urban planning and urban design specific to a Chinese context. The emphasis of a Chinese context is quite pivotal. Ma L. and Wu F. (2005:13) sharply pointed out: ‘in scripting the contemporary Chinese city, a critical question is what are the major political, economic and culture/historical systems and institutions that are specific to China and that have affected the (re)configuration of urban space’. The general scenario unveils such as the past and recent research interests, project orientations, posed challenges, critical legal and technical difficulties, understanding of public space and citizens’ needs. China’s socio-economic transitional phase also plays a decisive role in the rise of public space. Therefore, readers are expected to understand the background why the urgent needs do exist in investigating Chinese urban design field particularly concerning the core issue public space. Above all, this part unveils certain existing planning gaps. The gaps have not been systematically summarized in the past to the context of China’s planning legislations and laws. Therefore, such a summary in this study attempts at detecting and diagnosing the problems, so as to pinpoint the critical and urgent planning issues. These identified issues are those that are encountering the on-going planning and design practice. However, this research does not target at providing all concrete solutions to the discussed problems. The efforts themselves on identifying the existing gaps and underlining the rudimentary causes are partial significant outcomes of this research. These efforts are the inputs from both theories and the selected empirical case. Via working out the inputs, the study prepares itself to expose another possible scenario. This scenario can integrate and empower planning as a strong tool in shaping peoples’ living environment. The in-

roduction part of this volume dissertation is quite straightforward and fact-based. The purpose is to unfold its readers a less time-consuming but concise, clear-cut and problem-targeting picture for an initial gist of understanding. This means that majority of the inquiries, detailed discussions and in-depth analysis are organised respectively in other five Chapters.

Chapter 2 *Conceptual Framework* provides an overview of the research structure and development of the entire study. It renders an in-depth theoretical discussion of the research background and related planning aspects. It investigates the genesis of Chinese urban planning and city design by exemplifying and examining the ancient city Xi'an. Thus, it provides a quite authentic and original imperial planning model to unveil the classical Chinese planning mentality and methodology. The exploration on Chinese classical planning methods is able to prepare the readers for a better comprehension of the current planning. It concerns particularly the discussion presented in Chapter 4 *Conceptualization of Chinese Public Space* in terms of the Chinese planning evolution and recent public space project practice. Chapter 2 also clearly defines the study scope, namely, it is not a research on the connotation of 'space' *per se*. It is a research on 'spatiality' and 'certain society and peoples bound with the spatiality'. As an emphasis, this study is not a focus on the space as a fixed entity itself, but a study on what certain human activities, cultural practices and values determine the way peoples articulate their living spaces. Using David Harvey's words (1973), the question is not 'what space is?', but 'how is it that different human practices create and make use of distinctive conceptualizations of space?'; and 'what is the intrinsic spatiality created by a certain society?' Consequently, this research expects profound discussions and diagnosis on human activities, cultural practices and values injecting into the space. In order to fulfill the above mentioned tasks, Chapter 2 works out concrete research questions with the due research objectives. With these specific and substantive research questions, the final task of addressing interactions and incorporations between lived environment and the people is positioned at an operational level. This operational level or interface is namely the study of public space. The selected approach is the exploration of theories and an empirical settlement case. Ultimately, Chapter 2 is able to justify the vision of this research, i.e., to decode how the lived environment is constituted and configured by certain social values and cultural practices of the peoples.

Chapter 3 *Methodology and Strategy* presents the selected methodology for this 'how'-type research. As a research on a contemporary phenomenon within a real-life context, this Chapter argues why and how the settlement case situated in the Pearl River Delta (PRD) Region is selected. However, this is an 'instrumental case', but not an 'intrinsic case'. Therefore, the very purpose of using this case is to render

certain 'insight into an issue or refinement of theory' (Stake in Denzin and Lincoln, 1998). The examination of the settlement case itself is an empirical inquiry. The case study settlement is a typical Cantonese settlement. It has been experiencing China's urban development since the adoption of Open-door Policy in 1978. It is an old settlement, but not a static conservation or historical area. In reality, it is a living community with an even demographic structure and a stable economic source. The settlement has been witnessing and participating in the Chinese socio-economic transition and urban construction, while still maintaining its vernacular living environment and adhering to certain life values. Therefore, it is expected that this settlement is able to transfer certain knowledge by studying its peoples, life and cultural practices and certain prototype living environment in PRD Region to the research context.

Chapter 3 highlights the research data collection concept, namely 'people' and 'place'. The ultimate purpose is to investigate cultural and human characteristics of the physical space. Chapter 3 debates why such an observation is of great help in systematically collecting convincing data. It argues why the systematic and purposive observation, as one of the powerful techniques, is suitable for the nature of this research. As Adler P.A. and Adler P. (1998: 80) pointed out, 'observation generates not only visual data; it consists of gathering impressions of the surrounding world through all relevant human faculties'. To this research, it supplements greatly the low access and validity of data obtained from the municipal government. Given the study scope and set objectives, the use of observation as the data collection technique is not an easy option. It demands the capacity of original thinking and the ability to detect significant causal events. The decision of using observation is attributed to the researcher's professional training and skills in doing urban planning studies, above all in a human related context. On the other hand, the author has five-year living and working experiences in Canton. This is expected to generate impartial understanding and relatively objective appraisal of Cantonese people and culture.

Chapter 3 also justifies the use of Space Syntax, which is expected to empower partial analysis of this explanatory research. Several distinct and intrinsic reasons determine the use of Space Syntax in facilitating the initial analysis. This includes the research nature, the analysis unit, the study focus and the data characters. Firstly, the research nature of dealing with people, cultural practices and public space determines the application of Space Syntax. Hillier and Hanson argue that a lack of understanding of the precise nature of the relation between spatial organisation and social life is the chief obstacle to a better design. They (1984: x) inquired 'how spatial organisation is in some sense a product of social structure.' To Hillier and Hanson, how the space is organised appears as a part of culture. And they

emphasized the ‘generic principles’ attached to the space. Specifically to this study context, it pursues equally a deep insight of space configuration within a social context endemic to a certain group of people and society. As before mentioned, this study is not working on the space *per se*. If leaving the social context behind, the research will lose its very sense and values. This explanatory study gives efforts on inquiring the spatial articulation logic of the studied settlement by examining its inhabitants, culture and real-time life happenings. To this point, Space Syntax has the greatest potentials to enable this research analysis.

Secondly, the analysis units of this study can be synchronized through Space Syntax. It means that the settlement is analysed as 1) an entire physical structure at the settlement level, but without losing the sight on 2) its cluster structure at the dwelling level. The positioning of these two units can be, however, easily coordinated by Space Syntax. So we read the same pattern of analysis language. Such an analysis, according to Hillier and Hanson (1984: 48), is associated with ‘ethnic domain’. It means each society arranges the space in line with certain principles. Particular to this research, the space is studied from its natural and mathematic aspects. Such an arrangement is generated from certain syntactic principles, therefore, it is retrievable. Naturally, the site’s physiological environmental setting is summarized as a phenomenon; however, the principles go beyond the phenomenon or the phenotype. The hidden principles in decoding the space arrangement are sought out. This is partially via mathematical approach empowered by Space Syntax. Specifically, ‘integration’ as a measurement unit is worked out, so as to test the accessibility level of the settlement and dwelling clusters. Indeed, a certain logic and philosophy concerning the space organisation reveals through gauging the ‘integration’ level.

Thirdly, the study focus of this research determines the use of Space Syntax. Hillier and Hanson (1984: 90) argue that the central problem of the syntactic analysis of settlement is that of the continuous open space. That means a system of syntactic relations concerning the spatial organisation need be worked out. To this study context, this system mentioned by Hillier and Hanson is identified as the continuous public space affiliated with the temples and open activity spaces. Such a continuous public space is very essential and prominent to the studied settlement and quite unique to the inhabitants’ life context. Its existence is by no means haphazardly arranged. Therefore, the entire research can be concretely oriented, with the focus on investigating the public space of the settlement. This is exactly the operational level as before discussed, through which the research is viable. Such an examination of the unique existence of a continuous public space system must be associated with its inhabitants and life and cultural practices.

Fourthly, in terms of a complementation of data, Space Syntax is to this research

very crucial. As mentioned above, the syntactic analysis can produce ample quantitative data such as via the 'integration' and 'mean depth' calculation. This is, however, a static mathematic process based on the two-dimensional detailed base plans and maps. This is also the very weak point of Space Syntax. However, this research renders very detailed and first-hand qualitative and quantitative data through a systematic and purposive site survey and observation. It continues or significantly supplements the process of retrieving the hidden principles, manipulated by the studied 'ethnic' or 'people'. At this phase, the outcomes are rich and, above all, quite authentic.

Chapter 4 *Conceptualization of Chinese Public Space* is a theoretical part with two important roles. Firstly, it aims at formulating a solid and common theoretical ground to discuss the empirical case. This is approached through a temporal and spatial discussion on the Chinese planning evolution from the imperial time to the postmodern era. Thus it builds up a comprehensive understanding on the country's planning system particular to its socio-economic extent. Consequently as a second step, the theoretical inquiry expects to conceptualize public space, but in a Chinese context. This part argues that the origin and growth of Chinese city is determined by its administration structure and Confucius culture. Therefore, it has to seek the genesis of Chinese urban public space in the context of its culture and history. Three critical elements are identified to understand China's public space. They are Chinese imperial planning, city administrative structure and post-socialist urban planning. From this sense, the research targets at analysing China's planning system and structure according to a spatial and temporal line. Three historical phases are confirmed to guide this analysis, namely, ancient imperial China under feudal dynasties (before 1919)¹, socialist China under Mao's regime (1949-76) and post-socialist China under economic transition (1978 till now). Therefore, the analysis covers the period from the ancient time dominated by Confucianism to the modern era influenced by the Cultural Revolution in 1960s; from the hasty urban construction in 1980s to the recent call for human focused harmonious urban development. As a nutshell, besides the case as a knowledge-seeking part, the conceptualization of China's public space is the normative outcome of the research. The consequently generated findings are summarized in the final Chapter 6. Shortly, Chapter 4 anal-

¹From 1919-49, China has been in new democratic revolution. This was under the influence of the October Revolution in Russia, China's May 4th Movement arose. During this anti-imperialist, anti-feudal revolutionary movement led by patriotic students, the Chinese proletariat for the first time mounted the political stage. In 1921, Mao Zedong together with other youth, representing the communist groups in different places throughout the nation, held the First National Congress in Shanghai, founding the Communist Party of China (CPC). In this period, China was bearing the blunt of western democracy and cultural ideology, albeit it was a failure at the later stage.

yses and underlines why public space is an ambiguous concept in Chinese planning. The identified core reason is that urban design does not gain a legislative status to guarantee the planning and design products. It does not amount to a strategic level, so as to inform development as a public policy. The essence of urban design is not widely acknowledged and agreed among policymakers, academicians and practitioners. This has led to a less reliable planning process with unsatisfied planning deliveries.

Chapter 5 Empirical Study of Magang Island Settlement transfers this study to a contemporary real-time public space research within an information-rich socio-economic context. This phase of research is tangible for readers to explore the public space to an authentic Chinese content. It attempts at consolidating the discussion on planning theories, debated in Chapter 4. Chapter 5 embarks on the settlement typology analysis. The entire settlement is typologically categorized as two distinct spatial forms: 1) one linear spatial pattern linking dwelling clusters of houses as a continuum; and 2) one concentric spatial pattern mixed with old and new development. The buffer zone between these two spatial patterns is an existing market place and public transport service stops. The temple-affiliated spaces chained by a continuity of public open space are identified. Such a spatial character applies to the entire settlement. However, this research concludes that temple-affiliated spaces function as physical nodes, regarding the spatial organisation of the settlement. Temple-affiliated spaces appear only as the phenotype. This short conclusion can clearly direct the study to investigate several key issues or substantive questions. This includes: how the locals conceptualize their own living environment; how and why such a public system is likewise articulated, relevant to its peoples' daily life and cultural practices; what is the existing relationship between the spatial elements including temples, ancestral halls, community paths, lotus ponds, opera stages, plazas and streets; and what are the roles of these spatial elements in presenting public space. In order to answer these questions, the circulation system and road network of the settlement is initially investigated. To certain logic, the art of circulation system is closely interlinked with people's movement pattern and public behaviour, land use choices, land use intensity, settlement centre and sub-centre selection and public space location. Hence, the diagnosis starting from the road and street network provides a solid platform to study inhabitants' activities accommodated in these recognized public spaces.

Consequently, the know-how on a general spatial organisation of the settlement is obtained. In order to enable the analysis on peoples' activities and the spatial articulation, four dwelling clusters are examined. They are along the hill contour, consisting of the linear settlement. Specifically, they are explored at two levels: 1)

the articulation relationship regarding the entire settlement, and 2) the status of being single dwelling as an individual spatial cluster. As above-argued in the justification of Space Syntax, the syntactic analysis is rendered in order to generate a same pattern of analysis language. The analysis inquires such as the place accessibility, accommodated users and their public activities and interests and land use intensity, etc.

At this tangible empirical phase, observation in collecting human behaviour related data in public space is employed. To this study context, it is a systematic and purposive observation, aiming at detecting mutual influences among the spatial articulation, peoples' movement pattern, public space use, preferences and intensity, users' and activity types and land use distribution. Specifically, it observes such as how people use the places and analyses the logic of place patterns, users and their activities. The collected data via field observation falls into two levels, namely physiological natural environment and socio-economic living environment. Observation in this research appears quite convenient and solid for data cross-checking, comparison and summary concerning the four dwelling clusters' study. Qualitative data produced from the purposive observation is processed parallel with the quantitative data, which is mainly based on the syntactic analysis. Certain principles are maintained for the purpose of constructing the data validity and reliability. For instance, a team of trained observers participated in the fieldwork to yield the benefit of diversity by using observation technique. The collected data is triangulated. Such a multiple-investigator approach is significant and viable as well to this research. Particularly, observation outcomes are systematically categorized to fulfill the pre-designed research objectives in Chapter 2. Four schemes focus on human activities and public space are developed. They are Resource Mapping, Place Performance Rapid Evaluation, Movement Pattern and Behaviour Mapping. Hence, the case is established with a protocol and data is sorted out while working out with the four schemes. This is also the process of preparing for the further analysis. And the outcomes are ready to test the hypothesis and address the research questions.

Consequently, with both first- and second-hand data processing, Chapter 5 is able to provide very rich and informative outcomes of this Cantonese settlement as a generic but a critical representative of the PRD Region. The settlement is a testament of its particular living environment endemic to the Cantonese culture, daily life on-goings and China's socio-economic transition. Up to Chapter 5, the study completes both the theoretical and empirical inquiry. With this cross-checking approach of both theoretical and empirical aspects, it guarantees convincing conclusions to address the research question.

Chapter 6 renders two-fold research findings. Firstly, 12 intrinsic spatial design char-

acters genetic to the settlement are summarized. This includes the properties of cluster, modularity, hierarchy, compactness, edge and waterfront use, multifunction, connectivity and continuity, strong identity, high accessibility and human scale. The findings argue the contribution of the inhabitants' life and cultural practices in conceptualizing and configuring their living environment. *Vice versa*, how the extant environment sustain their art of life and cultural values in the process of space evolution. It renders a hard fact that those who are involved in their events and on-goings have the ability equal to us as planners to understand the situation and act rightly in where they inhabit.

The research does not intend to render design solutions to the settlement, albeit certain design aspects concerning its public space are commented to be modified. However, this research can be a very update and authentic reference for the further design problem identification and solution seeking. It is because this study builds a very solid spatial and social conceptualization of the settlement living environment. Above all, the spatial inquiry takes inhabitants' conceptualization and their daily life influences into consideration. Nevertheless, the study is well aware that the settlement as an instrumental case is only able to represent one certain design situation within a purposively selected context. This is mostly because there is no ubiquitous planning model to be exemplified and copied. However, this research invents the method on creating the extra public activity space. Through the theoretical and empirical work, this study is able to offer an option on unlocking potentials of the extra public activity space. The method is based on the current National Code of Urban Residential Areas Planning and Design. Therefore, it is highly transferable and applicable regarding public space creation or retro-fitting design at the similar level. However, the purpose of this study goes beyond the case itself. This research intends to unveil a reality of extant built environment, which is associated with certain group of people and their society bound to this unique environment; and how people as major stakeholder to manage their lived environment. Hence, a certain deductive model is established between the studied space and its inhabitants. To this study, this model or confirmed relationship between people and the space is of great values for the further research inquiry or design solutions. Equally important, the Hypothesis posed in Chapter 2 'Life and social practices play a determined role in producing and configuring the lived environment and social space' is till this phase verified. Chapter 6 ultimately summarizes the findings at the theoretical level. In addition to the empirical case itself, these findings are the very contribution of this explanatory research. The findings are also for the policy reference. They are the:

1. disintegration of land use system and urban planning;
2. missing of urban design in the planning system;

3. loss of a human-responsive environment resulted from standardized planning;
and
4. under-estimation of heritage and development.

1.2 Acute Planning Issues and Conflicts

Bender (1975:150) said that ‘planning is the mortgaging of our future to the inadequacy of our present dreams. It is placing limitations and controls on things beyond what we can directly affect by our actions.’ Therefore, we are well aware that planning is not of omnipotence. What we shall try is to learn the past undertakings, to be open to the future inevitabilities and changes and sensitive to the present choices and solutions with a positive attitude. Thanks to the efforts on the theoretical conceptualization of public space and the empirical study of a real-time public space of the selected settlement, the research is able to challenge certain crucial aspects of China’s current planning system and methods.

Consequently, the relevant gaps are identified and evaluated as an acute and critical checklist to reflect China’s current planning methodology in practice. This section identifies and argues the existing gaps within this study scope. It aims at providing readers profound and crucial knowledge on the background, time line, significance, urgency and potential contributions of this research. Hence, with this know-how preparation, it is able to consolidate readers’ understanding on the research problem:

How human’s experienced environment is constituted out of their life and cultural practices?

Given the scope and objectives of this study, the recent relevant planning gaps have been observed as the:

1. misunderstanding of urban design;
2. mismatch of development needs and planning approach;
3. insufficient public awareness; and
4. misuse of urban design competition.

These four generalizations or phenomenon observations build a very concrete research background. It renders this research also a temporal line. With this particular background, the specific research hypothesis, research questions, aims and objectives can be orchestrated within the Research Design Framework in Chapter 2. The underlined causes, issues and core problems, which result in the four gaps are in-depth analysed and argued in the later chapters.

1.2.1 Misunderstanding of Urban Design

Modern town planning and design theories embrace squares and streets as the most important physical presence of public spaces. Their existence is part of the civic symbols and language of the society itself. Therefore, their significance surpasses their physical stance. Urban design is a process of decision-making and public policy-making. However, China's planning genesis can hardly echo this idea, the reality either, although particular needs of public space as part of important urban life have been pragmatically posed in the last two decades. This is especially true given the very moment that Chinese cities are experiencing an overall spatial, social and economic restructuring. Ma L. and Wu F. (2005) summarized that the production of space right now in China is simultaneously affected by several 'global processes' and its own 'multiple transformations' as well. In terms of the 'multiple transformations', it means mainly the 'institutional shift'². Friedmann J. (2005) argued that 'China's social forces from within are even more powerful than that of the global'. The multiplier effects from the 'institutional shift' are observed in reshaping the social, economic and spatial structure of the Chinese city. China executes urban planning and urban design as an essential interventional tool in this process. However, a great gap exists between the present planning legislation and institutional organisation, and the expected planning manners and products. The planning system is not strong to counter against the unpredicted incomings and conflicts parallel to this transitional process. The fact is the social transformation is permeating every sphere of peoples' daily life. In Broudehoux's words (2004: 8), Chinese people are encountering 'shock of the new' since the last two decades. It is inevitably that the current urbanism is development-driven, characterized with a hasty and *ad hoc* uncertainty and dichotomy of the global or the local.

In term of the relevant researches on China's urban planning and urban design, prominent interests initially arose after China's Urban Planning Act was enacted in 1991³. For example, in Town Planning Methodology, urban design is adopted as an approach to improve urban life qualities, optimize the spatial structure and urban landscape⁴. Zhou

²According to Ma L. and Wu F (2005:4), there are eight major aspects of institutional shifts. They are shift from 1) a state redistributive economy to a market coordination; 2) state control of economic production to state regulation; 3) centralized decision-making and top-down allocation to fiscal decentralization and greater local economic autonomy; 4) extensive state industrialization to mandatory production; 5) industrial production to manufacturing of consumer goods; 6) resource-constrained manufacturing to a demand-driven balanced production; 7) state and collective ownership of land to paid land use rights with negotiated land use price; and 8) virtually free provision of largely work-unit housing to commodified housing production.

³This Act has been replaced by China's Urban and Rural Planning Act, which has been effective since January 1st, 2008.

⁴Town Planning Methodology was enacted by Ministry of Construction on September 2, 1991 and the new Town Planning Methodology was on December 31, 2005 and implemented since April 1, 2006.

(2005: 31) summarized that 'China's urban design is mainly conducted at two levels. One has been at the technical level, specifically focusing on spatial design/physical design; the second been at the policy level, that is, urban management. The current research accomplishments are mainly technical based, while urban management is still quite lacking'. A weak planning institutional arrangement and urban management deficits exist. As a cross-cutting field, China's public space practice displays certain confuse both legislatively and technically. The lack of legitimated urban design status has resulted in undefined codes and regulations. Concerning urban design implementation, quite often, it has to refer to other planning laws and rules. This includes such as those applying in planning of residential, commercial, public utilities and infrastructural sector. The references have no relevant guidance. However, the core problem is the status of urban design as an overarching framework and guideline to orchestrate urban development lacks. Urban design's crucial and determinant role on influencing city-level spatial design quality and people's life quality has been ignored.

What's more, there appear technical problems. Firstly, the method of calculating population and green space total areas is obviously weak in presenting a multi-diversifying socio-economic development context. Zhou (2005: 107) noted that 'the current technical quantity standards are not able to reflect the public space distribution at the city level'. Specifically, the physical standard, such as, the average open space per capita, is unable to reflect the distribution pattern of open and public spaces. The idea of available and usable public space is beyond a provision of a static quantity number. Therefore, the present applied standards are not time-bound to catch up the urban transformation and citizens' recent demands on public space. A cooperate manner of working on the city's spatial structure as an entire development package shall be taken into consideration. Secondly, due to the limited urban capacity of the inner city, many lately planned public open spaces are speculating the land at the city fringe or suburb. New public spaces tend to be grandeur with a quality design. If calculated only with the total area of open spaces, the sum number scores high, that of per capita use as well. However, their spatial distribution pattern does not address the most stringent situation encountering the inner city. This refers to, for example, the accessible and usable public spaces. Normally, most of Chinese old cities' inner areas are encountering very complex planning difficulties. The identified reasons include such as complicated land tenure, aged infrastructure, status of being heritage historical town, high land price and multi-stakeholders. As an aging society, Chinese cities are greatly being consumed by senior citizens. This brings about further considerations and challenges on public space creation or regeneration in the inner city. Therefore, it is often to see that most of present development would like to seek after the land out of the town. In the process of fighting for the affordable land and other available resources, old dwellings in the city kern have been gradually marginalized. Thirdly, great potentials of creating public spaces attached to residential areas are locked

in urban daily life. Majority of the recent development caters to the middle-class, who has a financial ability in purchasing new apartments and affording the upkeep of public spaces only in their own territory. Such up-scale real estate development normally takes place in the suburb. Consequently, the fourth problem arises. The existence of public space appears more spontaneous without a legitimized status in the planning procedures. In general, public space is not clearly defined or outlined in terms of its distribution, location and size, service groups and activities, spatial relationship with the adjacent surroundings. The legitimated decision-making from the public is missing as well. Therefore, the public's needs on public spaces are not authentically reflected or accommodated.

Fifthly, still at the technical level, Chinese cities' great geographical and demographical differences pose a serious challenge in applying a national quantitative and qualitative standard. This is particularly hard under a centralized planning system. The current situation is Chinese prominent and first-ranking cities including capital cities or commercial hub cities offer less land, but more market opportunities for revenue-generating development. However, the last decades' fanatic development has created an unhealthy model for other upcoming second- and third-tier Chinese cities. Right now, they are being eagerly listed by municipalities or planning consultancy firms on the urban development agenda. However, as the most valuable, unique and untapped resources, these cities are often not smartly integrated into the new development. As observed, the general phenomenon is there lacks an adapted urban planning structure and an integrated urban design guideline for these upcoming cities. What being practiced are those planning models applied to the prominent star cities. Moreover, there lack also tailor-made urban design guidelines for cities within one regional boundary. Therefore, a regional link is not expectedly established and endogenous forces are not synchronized. The planning products of each city appear quite sporadic and loosely orchestrated within a regional context, which hampers a long term regional development. Hence, the utopian approach of hastily shaping cities up to the best model is sweeping up these upcoming cities' characters and differences. It leads to unpleasant and awkward city experiences. The latest urban construction treats our cities in a haphazard manner, which does not taking cities' genetic properties into consideration. More often, the urban landscape appears alien to the city and the public; namely, the lived environment is not conceptualized by its inhabitants with their familiar features of living environment.

Above all, the core problem is that urban design in China does not gain statutory status. It remains a loose integration with the present urban planning procedures and process. The basic function of urban design in guiding urban development is missing in Chinese planning system⁵. It still takes time among the decision-makers and professionals to reach

⁵The only exception is the city of Shenzhen, which legitimized urban design as a legal tool to guarantee

a common understanding on urban design, so as to ground a common working platform. The situation is attributed to certain profound historical⁶ reasons. China's first phase urban planning system in 1950s was completely subject to the National Plan, centred with construction and industry development. This was affected by that of the Former Soviet Union. During this period, urban planning has been suspended for ten years. It has adversely impacted the education of urban planning in the universities. Urban planning as a scientific discipline arose rather late in earlier 1980s in China. Therefore, there has been a great shortage of high-caliber urban planners in China. Chinese planners have not been trained and provided with clear-cut laws and regulation to orient their work. Most of professionals working in the planning sectors have been trained as civil engineers and architects. There is a lack of multidisciplinary understanding and combination in practicing planning. Many a time, with the technocratic approach, the implementation of urban design is segregated from a human-based built environment concept, but merely converges on building blocks. China's recent experience displays that urban design is endeavoured at the strategic level; however the implementation is disintegrated with planning system due to legal difficulties and the technical know-how. The knowledge on how to implement and practice design guidelines at the strategic level is not generated. Therefore, prior to the legitimization of urban design, a resonance of a common understanding on urban design among policy-makers and practitioners shall be reached. This can guarantee the planning deliveries.

There are in total three planning levels in current practice, namely, the Master Planning, Regulatory Detailed Planning and Site Planning. Consequently, it is an uphill task on how to intelligently embed design guidelines into different levels and establish feasible interfaces between the levels. The given situation is at each level of legislative planning, there lack viable methods and tools to integrate design guidelines and planning rules. Most of the time, the concept of urban design is generated from buildings at the architectural level, but the relationship between spaces cannot be interpreted according the plans. Namely, the current practices display urban design is understood as designing buildings with architectural details, but not a strategy or tool working with a socio-economic context.

1.2.2 Mismatch of Development Needs and Planning Approach

Wagner (in Vöckler, 2000: 464) commented 'the growing variety of lifestyles must likewise be reflected in new spatial strategies in future China'. This depicts the very situation of

the planning efforts. Shenzhen is one of the Special Economic Zones set up in 1978. It is also the first Chinese city with land use reform in 1987.

⁶For detail analysis, please see Chapter 4.

Chinese cities and urban life since 1978. Regarding the application of public space as part of urban development, it arrives late. In terms of urban design, public space is a very latest concept and topic in China. However, as a project type, it is currently being practiced and implemented in urban construction. Such a practice is both consciously and unconsciously in terms of the real sense of public space. The practice is prior to a conceptualization and common comprehension on public space, specifically to the context of Chinese urban planning. However, the market-responding needs put forward this practice in urban development. Several crucial reasons contribute to the needs of public spaces. Firstly, the unleashed rapid development in 1990s has been curbed with purposes. It calls attentions on planning so as to improve urban quality life. This call is gradually acknowledged in China as a crucial standard to gauge planning outcomes. Secondly, the shift from a society of production to consumption leads to the reduction of working hours and increase of the disposable income. This shift has generated the needs for public spaces as part of citizens' urban life rights and experiences. Thirdly, as one of important strategies of city marketing and urban management, public spaces are manipulated to reimage and advertise cities in the postmodern era. The significant role of urban public space in promoting and marketing city competence is highly recognized by policy-makers.

However, there still exists an obvious gap between planning mindset and the public needs. Since 1978, China has been marked as Dengism pragmatic era by adopting the Open-door Policy. Economic development has been the major objective of the central government and municipalities. This period of planning emphasized market operation system. It is as well a reorientation of the national and local governments' roles. This era has experienced significant reforms concerning planning. Land use reform in 1987 marked the end of free land use and the establishment of urban land markets in China. Housing reform in 1989 ruled out the provision of public housing and put the housing as commodities in the market. The second phase urban planning from late 1970s to 1990s prioritized the large scale modernization and up-market development. The population migration to cities and towns increased drastically. It was resulted from the inter-migration between the rural and urban areas and intra-migration between urban areas. Needs of public spaces were urgently listed on the planning agenda. Additionally, it must cater to new user groups. However, the practice of urban design as both a tool and solution to meet urban public needs has proved misleading. On the one hand, China's top-down and centralized national planning system is uncompetitive to enable citizens' active participation in the planning process; on the other hand, general citizens were not fully ready to live a brand-new urban life under the market economy. So the needs generated from the public were not thoroughly quested. And the feedback from the public took long time in transferring and modifying to the policy level. There was a general chaos in matching the market demands and the public needs. The situation was then aggravated by the lack of planning policy to guide and orient the development.

Taking the recently constructed urban neighbourhoods or gated compounds as an example, their uptake of the sizable urban area has significantly altered the urban fabric and cityscape. To certain degree, such alterations are in a traumatic way to the entire city. The urban identity is becoming quite confusing with a disintegrated spatial manner. The gated compounds among each other display no spatial dialogue and are in an ill proportion to the urban context. They are not inviting either. The new gated compounds cut down the full access of certain public space in the city. A loss of sense of fully accessible public spaces for the general public results in a loss of collective sense of the city. The existing status of the public space in turn influences people's attitudes towards use of public space. As Transik (1986: 10) concluded 'the modern city dweller is forced to create a social life on personal controllable territory instead of engaging in the communal existence centered around streets'. On the one hand, the current stance of the gated compounds weakens the function of mixed land use and does not achieve land efficiency. Specifically speaking, public spaces within the gated compounds' territory have a low accessibility and uneven distribution at the city level. Plazas and parks are located in the gated compounds⁷ on the agreement between developers and the planning agents and certain middle class who can afford such service provision. Additionally, other services and infrastructure prior to the construction of the compounds are required. For example, the public transit system shall be very well-established and accessible. Furthermore, it demands not only professional but also moral cooperation among the private developers, real estate agencies and the public sectors. More often, the open spaces bounded with the gated compounds are not subject to formal planning procedures after the user rights of the entire land parcel was sold to the developers. Public agencies might ignore or lose control on guiding further development of this land parcel. New land use pattern leads to the alteration of the city's entire spatial development goal. In another situation, if the sold land is a piece of unserviced land without development, the private sector consequently bears great responsibilities to provide public facilities and amenities, including participating and making decision in the municipality's planning procedure. However, the fact is there lack right now strong and efficient policies and guidelines to direct the private sectors. The planning management mechanism to sustain the development is not duly scheduled. This situation hampers all the stakeholders' decisions and the planning products.

⁷This is especially true that housing was privatized in China after state-subsidized housing system was ruled out. Before 1980s, urban housing in China followed the welfare approach, that is, 'construction by the government, allocation by the work unit and low rent'. Such an approach is said to have created an incurable sickness for both the state and work unites. Its two basic symptoms were the increasing housing construction burden on the state and unfair housing allocation. In addition, work units were burdened by an increasing need to subsidize workers through maintaining their housing (Sit, 1995: 226). Since 1990s, housing was commercialized as the promotion of socialism market economy. Gated community became the preference of Chinese middle class to distinguish themselves from the grassroots.

Therefore, there exists not only a lack of an overarching strategic plan or design guidelines. It experiences also urban management mechanism deficits as part of important planning components. Different design standards on how to develop the compounds are normally under private sectors' management; and the city as an entirety has to compromise developers' interest or technical difficulties. On this interface, there turn out no design rules to follow. As above discussed, professional morals and ethnics of private sectors matter significantly. The spaces left out of negotiation among private sectors and public sectors are often in a run-down situation without further consideration. Due to the lack of overarching urban design guidelines and strategic plans, visions and goals concerning the cities spatial structure appear static and passive in adapting to changes and accommodating up-coming development. For instance, the municipality reclaims the user rights of the sold land after several years' use by private sectors. The reason is that after a certain time of the city growth, the sold land premise turns out the premium land and desires for other emergent or efficient uses at the city level. The ownership transition of the land results in various development interests and strategic changes. More often, there has no smooth interface to synchronize the development goals and interests due to different land use rights' ownership. Therefore, an urgent need of a time-bound and updated strategic plan is observed at different planning levels.

Additionally, needs of public space catering to the general citizens' use in urban development and construction are not prioritized. For a long time, projects concerning public space have been regarded as the supplement to urban infrastructure by the government as political merits. Public space project at the city becomes recently a yardstick of politicians' achievements in urban management. Many a time, mayors' political wills put stake on public spaces with a grand scale and expensive construction materials to bring about a sensation leading to city marketing. For instance, plaza design inherited from the ideology of the formal Soviet Union of 1950s is somehow still being practiced, especially in those second- and third-tiered cities. This is given the situation that low-ranking cities offer certain leakage in terms of planning regulations and the available land at low price. The general delivery is the ubiquitous urban landscape with a central grandeur plaza boasting a single monument and symbolic building. Consequently, the latest development discloses that public space becomes the synonym of upscale wholesale of land parceling. Theoretically, this approach is not the essence of Chinese classical planning⁸. Using the example of ancient city Xi'an, Chinese classical design philosophy and ideology is reviewed in Section

⁸For example, according to Rui and Pu (in Sit, 1995: 247), old Beijing only has courtyards with a proper size to use. This is the *yang* type of design. The new Square is a western and a *yin* design. Sit further pointed that the 'Memorial of the People's Heroes in the form of an epitaph is also western, though the shape and design of the structure are Chinese in style. The new buildings of the Hall of People, Museum of History and Museum of Revolution are mixtures of western styles, particularly of Soviet style modified here and there by Chinese ways'.

4.1.1. *Concept of the Classical Chinese Imperial Planning.* Such a review is of a great necessity in inspecting Chinese planning system from its cultural, historical and political aspects as an evolution process.

For a short summary, studies and researches on the interaction of human behaviour related with public spaces are not widely conducted in China. The significance of human being associated with public space is underestimated among policy makers. Reversely, public spaces in many cases have to compromise, for example, the road construction, retail and office and real estate development. Normally, the land use percentage of roads appears high. This is even true in small cities; however, the constructed roads are not for human movement and circulation, but for motor vehicles. Generally, the understanding of public space is ambiguous at both conceptual and technical level. Taking street for instance, its functions and potentials as public space are less recognized or untapped. Designs regarding streets as vehicle roads are offered as solutions. Therefore, the current stance of public spaces is unconsciously encouraging the use of private cars as well. For quite a long time, Chinese citizens experience that people's movement generally has to give way to motor vehicles. China is not an exception to give priority to motorway particularly in 1980s even till 1990s. Many lately planned cities are based on highways but not public transit. It is estimated the number of privately-owned cars will amount to 20 million by the end of 2010 in China. The intensive use of car and unadjusted urban planning catering to this unhealthy use falls into a malicious circle. It is significantly changing the life quality and public space use. Streets in this sense have lost their social meaning and context in the urban life. Streets' as the safe, enjoyable, inviting and communicating social space do not exist. Secondly, taking the natural open space for example, it demands a smart spatial integration at the city scale. So far, technically, the open space as a physical entity exists, more often with sufficient land use parameters. They represent the latest smart design *per se* as an individual development. However, its existence is neither smart nor responsive to the reality and public needs. The location of these new public spaces is out of the city proper and difficult to access either on foot or with public transport. Therefore, their catchment area appears quite limited, resulting in an inefficient use and waste of land. Consequently, it is not attractive to the majority of citizens, who are expected to generate partial maintenance cost as well. These open spaces are often heavily used or intensively abused only at weekends and during national public holidays. It is quite common to experience all families travel afar to a park on Sundays. This has caused not only traffic jams to the same destination during the same time-span, but also the severe pollution. The place is annoying rather than relaxing. The travel appears exhausting out of astounding crowds, polluted air and traffic jams. The public spaces have not produced positive urban life experiences. Essentially these two brief examples of streets and open spaces try to argue that the most critical human-related factors are missing in the public space design practice.

Presently, a large number of projects are categorized as retro-fitting of public spaces. This represents the most challenging and demanding project type. Basically, it is a spatial make-up or moderation of last-term planning products. The last phase planning shall offer the leakage for retro-fitting. However, present retro-fitting projects have the underlined reasons, resulted from the incompetent planning system. The truth is that public space as part of planning delivery is not prioritized at the strategic planning level. Therefore, there exist no relevant policies and decision on its integration with the city-level spatial development strategy. Namely, its spatial and social strategic significances and influences are denied at the initial planning process. Specifically, this planning process skipped urban design between the Master Planning and Site Planning. Soon, needs on public space becomes an acute problem in the fully built-up area. Particular social influences are yearned from these retro-fitting projects. Therefore, the incurred extra social cost under this situation is quite high, including such as the change of settlement pattern and interference of community life. Such a retro-fitting design is sometimes difficult and even technically not viable after the entire plan has been ratified and the land has been built up.

Nevertheless, optimistic planning future is in the process of its evolution. Since the reform of China's urban planning in 2002, it has introduced certain new perspectives⁹. The recent Chinese planning practice is trying to be human-affiliating and ecological. Examples are seen in the promotion of efficient land use, green energy adoption, relief of migration control and upgrade of urban villages. The experiment of public dialogue planning process has been tried out, though not yet legitimated. The idea of emancipation, citizenship and custodianship is gradually gaining resonances among all levels of Chinese government. The liberation of planning is expected to inject new energy into chinese society.

1.2.3 Insufficient Public Awareness

The general observation is the built environment generated from social needs, people's various lifestyles, and cultural values are underestimated during the current planning process. Hence the potentials of creating and adapting public spaces in the context of the existed lived environment are not released. Chinese general public is often unaware of their roles in the planning decision-making process. This is because for a long time, the public has not been well informed of and educated on their rights and obligations, empowered in the form of participatory planning. The enactment of Urban Planning Act

⁹The Reform addressed four aspects: Correct understanding of planning functions; Establishment of planning concepts consistent with scientific development outlook; Establishment of a planning system at distinct levels and with clear functions; Improvement of plan formulation procedures in a democratic and standardized way.

in 1990 did not legitimize public participation¹⁰. Modified in 2003, Article 6 of the Act proposed: 'Urban planning should vindicate public interest, represent public will. The workout approval management should be open and transparent, listen to the public opinions and obey supervision of public'. By the year of 2006¹¹, urban planning has gained the attention as one of the most important public policy to ensure the public interest. The Act introduced certain regulations on participatory planning. For example, according to Article 16, the local government should consult the public opinions before the approval of Comprehensive Planning. In the process of drafting Detailed Planning, consultations and public presentations should be included. However, the implementation of public participation is not satisfactory, albeit its critical necessity is agreed among policymakers. The key reason is that there lacks a legitimized participation procedure to guarantee the process and outcomes. The current participation experiences disclose that the public is often in a passive status, rather than a proactive process. He, D. and Zhao, M. (1999: 31-34) summarized three arts of participation involved in China's present planning: 1) during the drafting period of relevant laws and regulations, the selected public is interviewed, mainly in the form of questionnaires. The selected groups are normally the representatives of communities or municipal districts; rather than individual citizens in an organised way; 2) during the appraisal period, the selected public are basically planning experts or government representatives; and 3) during the information and exhibition period, the results are open to the general public for information circulation. Nevertheless, the practice is still at the trial stage and proves more spontaneous, fragmented and often based on individuals' political will. The strong need is how to legitimise and institutionalise public participation as an important component of Urban Planning Act.

The case study of this research presents certain authentic situation of the public participation. The community warden¹² in this research case comments that the author's interview is the first one he is involved in, since the community land was expropriated by the municipality five years ago. No responsible planning officials justify the expropriation of the land, where the community was situated. As the community warden, he has no mandates of participating in the planning decision. Years ago, the community was developed in the form of a private-public partnership. Afterwards, there appear no revisits, interviews and other procedures, which are supposed to maintain this partnership. The community's participation at the very beginning was superficial without the concrete landing and outcomes.

¹⁰On the contrary, Article 34 states that any company and individual should obey the land use established by the government according to the urban planning. Before giving an administrative penalty, citizen has the right to ask for a hearing.

¹¹According to the Regulation of the Process of Urban Planning on April 1. 2006.

¹²This is based on the record of the interview with the Warden of Yun Lu community in the new town of Shunde District, Foshan city.

Secondly, Chinese public's views and attitudes on public spaces and open spaces as a common public utility are not properly shaped, either are their relevant behaviours. The public is less educated on how to treat and use public spaces in a sustainable way. Taking the natural open space for example, often it is not fully valued. The idea of environmental conservation appears quite vague among the Chinese citizens. For the maintenance and upkeep of public utilities, citizens perceive it as the government responsibilities. One of the important reasons is the tax system in China has not been really established. The municipality is often encountering financial stringency on the provision and maintenance of the public and open spaces. The incurred cost cannot be expectedly subsidized by the tax.

Laundry profoundly discussed the efficiency of 'learning through empowerment'. He (2000: 113) argued that 'allowing the individuals to communicate with each other, to be informed with the institutions, laws and policies, to generate discussions and problems can increase their responsibility and commitment for a creative environment'. The exchange and dissemination of knowledge is resource and catalyst to encourage work efficiently and adaptively. General practices in China need a more consultative and less technocratic approach to establish a comprehensible concept of planning related with day-to-day life. Planning without people has no future and is unreliable. The status of planning for control shall be as soon as possible corrected. Citizens' perceptions that planning is a task of the municipality and central government will be gradually changed as well. It shall be viewed that both the public and the government is each other's resource and neither shall be underestimated. Planning with deliberation requires a strong vision mutually agreed by both.

1.2.4 Misuse of Urban Design Competition

Urban design competition becomes a fashion right now in China. It shall be a platform for communication among different disciplines and walks of life. However, it is observed that design competitions fail to constitute such a platform to guarantee the deliveries. Developers try to make a big name of their enterprises via the competition, by involving renowned planning consultancy companies and government planning agencies. The competition process is highly manipulated. For most overseas consultants, the results often turn out very discouraging. It degrades the reputation of Chinese developers, or even sometimes the municipality. The government planning committee and board is sometimes bribed to make the competition 'public'. The entire competition process is purported to boosting the land price. The land can be afterwards resold by developers to speculate land market with a much higher price. In this situation, most of the land is at the city fringe between the urban and rural area. The geographical boundary concerning the very land flanked with both urban and rural area is subject to urban sprawl. It is ambiguous

to define the land as urban or rural for the approved construction. The present planning law is rather weak to regulate this situation and cannot follow up the rapid changes of the land territory. Therefore, the design competition speculated and aggravated this situation before the due policy was made.

Consequently, the design projects normally end nowhere. There exist in advance the predetermined outcomes. Most of the competition participants are impotent in influencing the competition results with their professional work and moral standards. The whole process turns out a promotion for sales of the land and brand of the developers. There is no transparent decision-making process and legitimized procedure to acknowledge the participants. As a public policy-making process, the potentials of design competitions in improving the planning delivery are misused. The role of urban design competition as an alternative to complement the legal planning process is unhealthily manipulated. The competition participants, higher percentage of foreign consultancy companies do get an ill impression on Chinese market competition.

Moreover, through worldwide urban design competitions, numerous iconic modern buildings have squeezed into historical towns. Urban design becomes a term for 'iconic' design. It is often to see that public spaces became the place for private firms to blow up their images with bazaar designs and bulky masses. They are encroaching on the premise where the public space should be. It renders a wrong ideology of urban design by representing abnormal building types. This brings about an inconsistent urban landscape and hampers the mentality of sustainable development. Additionally, there is no legislated time-bound Strategic Plan to monitor urban design competitions, which often have no commonly agreed visions and goals. Moreover, the misunderstanding of urban design is adversely influencing the young generation of Chinese professionals. They might lose the role in representing and disseminating authentic Chinese culture and urban daily life needs, while working with the foreign professionals. As Soule (2005) commented that 'some planners and officials alike confused modernity with aggressively unusual design. A wholesale revision of the planning curricula would be required to train Chinese students in real urban planning rather than how to set up and facilitate so-called design competitions'. For instance, Friedmann J. (2005: 113-115) put forward several considerations for Chinese planners. This includes 'planning the city-region as a whole, improving the quality of the environment and building livable cities, practicing participatory approach to planning and experimenting urban governance'. Desires to plan and control the future is factually powerless, if not to act and react with the future. At the moment, planners need free and exercise their intuitions. To the professionals, developing a more comprehensive thinking in lieu of planning itself might be more crucial to fully understand a situation and a life context. As Trancik (1986: 115) lamented 'there was too much planning, too much zoning, and not enough humane inquiry into the regional and social context.' He alerted

that our current cities must be ‘historically and physically fluid and mobile.’ Probably the greatest challenge facing policy makers and professionals are how to transfer our city as a more adaptable and tolerable platform. A stable social and community system is to be thereafter established for people to develop themselves, their lives and their culture in a long run with a sustainable manner.

Chapter 2

Conceptual Framework

2.1 Research Design

This Chapter provides an overview of the research structure and logic of the entire study. Based on the four gaps discussion in Chapter 1, it poses the research hypothesis and defines the research questions, aims and objectives, and research phases with a given research background. Additionally, research topics related with this study are checklisted to form a clear study scope. They are the focus of this study to guide the working steps and fulfill the research objectives, hence to address the main research problem. Ultimately, the above efforts aim at presenting the logic that links the data to be collected with initial questions of the study. Likewise, the future findings and conclusions are expected to be generated while investigating the research questions. The overall structure of this research is presented in Fig. 2.1. The Research Design elaborates the interrelationship between all above-mentioned research items.

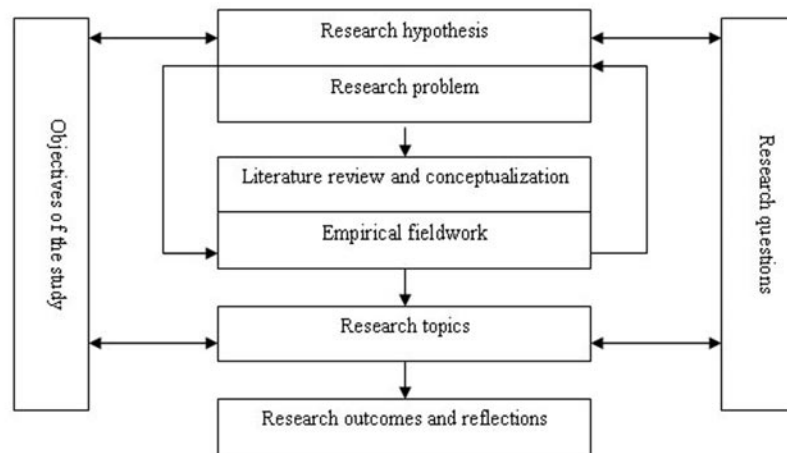


Figure 2.1: Research Design

This study attempts at interactions, incorporations and interrelationship between the

lived environment and its peoples. In order to address the research problem and answer the research questions, this study is purposely divided into two investigation phases. The first phase is at a theoretical level by putting accent on the connotation of public space in a China's context. Such conceptualization aims at establishing a sound ground to understand Chinese planning methods and applications. The ancient city of Xi'an is theoretically investigated to assist such conceptualization. At the second phase, the research uses a specific settlement case in Guangdong province for an empirical study to examine and answer certain research questions. The understanding of the settlement case provides lively reflections and challenges on Chinese planning laws and regulations. The research aims at presenting a different scenario, in which planning can be empowered as a strong tool in consolidating the relationship of certain peoples' life and their lived environment. The research's utmost aim is to decode how the lived environment is constituted and configured, based on the particular social values, cultural practices and daily minute activities of its inhabitants. Therefore, the purposefully selected case is expected to strategically address the research problem. Nevertheless, Chinese cities and towns intrinsically vary, regarding their geographically regional locations, socio-economic settings and the demanded planning and design models. Therefore, a comprehensive understanding of Chinese planning as a theoretical part is highly indispensable. Through the case, it can present the most direct feedback of an authentic living society endemic to a certain group of people. Reversely, the case can examine the current planning practices and applications.

It is expected that public space in a Chinese context is hence conceptualized through a chronological review of China's imperial classical planning and modern town planning. The theoretical part of this research enlightens the genesis of Chinese planning, its modern methods and general practices in socialist cities. This part of study is mainly based on the literature review and theoretical inspections. As the first ideally designed imperial capital city, Xi'an has been an urban model throughout the Chinese history and exemplifying a city of imperial power. Ancient Xi'an could be the most authentic example on seeking after China's planning philosophy and learning about Chinese cities' history. The post-1949 Xi'an (before 1978) urban development was regulated strictly by the national standards with a model of former Soviet Union. It provides a general and typical approach of China's modern urban planning methods, determined by its historical context. Despite the importance of Xi'an in the current planning, this research will not investigate the urban transformations of Xi'an, which is out of the scope of this study.

Magang settlement case of this research examines closely a 'how' type question, namely, how the lived environment is conceptualized and produced out of the community lifestyles and cultural practices as a dynamic process. The settlement is so far less directly influenced by the centralized planning in China, but mainly self-sustained by its own society

and peoples, while interacting with China's socio-economic transition. It means the built environment explains itself by its particular socio-cultural life values and people's perceptions on the living spaces. Magang settlement study is presented as a very authentic empirical case and an outcome of the considerably intensive and volume of fieldwork. This is accessed through the study of the settlement's public spaces, their representational and in-depth implications in the inhabitants' daily life. The method such as the time-span series observation of behaviour mapping in the public spaces is repeatedly employed. Author's event-participation applied as one of the data collection techniques provides a profound insight of the indispensable relationship between the inhabitants, their experienced environment and cultural values in their society. Fieldwork produces the very first-hand data on public spaces' characteristics, organization system and residents' public activities of the settlement. The findings are not only helpful to inform a certain settlement pattern and spatial organisation, but also to learn about this group of people, and their custodianship toward their living environment.

Therefore, the research is both theoretically and normatively approached, so as to get a comparatively complete understanding on Chinese urban planning. This includes such as the planning evolution and current practicalities. However, China's vast territory produces varieties of social and economic contexts, which demands different planning policies and planning methods. Therefore, it is immanently difficult and impossible for this research to present a full picture of China's planning realities, planning scopes and strategies.

2.2 Research Problem and Hypothesis

2.2.1 Research Problem

As the foremost step, the research problem is identified based on a brief fieldtrip to the studied settlement, Magang settlement in Guangdong province. Through literature reviews and debates on the topic of public space, the research problem is further confirmed as:

How human's experienced environment is constituted out of their life and cultural practices?

In the process of exploring the built environment, the study tries to inquiry the meanings conveyed from the space resided by a certain group of people (Cantonese to this research). Therefore, their living space is not only studied physiologically and physically, but also perceptually and symbolically to present the inhabitants' lifestyles and values to the existing social structure.

2.2.2 Basic hypothesis

The hypothesis is directly linked to specific objectives and topics of this study. As a proposition set forth, the hypothesis is an explanation for the research problem. It is expected to be put to a test through this research, that is, either to be verified or falsified at the end of the study. Based on the literature review and analysis on the context of public spaces and current planning, the following hypothesis is put forward:

Peoples' life and social practices play a determined role in conceptualizing and configuring their lived environment and social space.

2.3 Research Questions

The general research problem is further formulated as three substantive research questions for a close inspection. The research flow is consequently structured in the process of answering the research questions. They are:

1. how to conceptualize and comprehend public space in a Chinese context?
2. how is the public space of the studied settlement to its life context articulated? and
3. what critic evaluations and baseline recommendations concerning current planning practices can be rendered?

2.4 Research Objectives and Topics

2.4.1 Research Objectives

The research problem and questions determine that this study is descriptive and analytical, and knowledge-seeking and normative. It intends to explore the interactions and incorporations between space and people by taking public space at the operational level. Besides posing and describing the problems, the research attempts to make critical evaluations on current planning practices. Therefore, it turns out analytical as well. Nevertheless, the study embarks on discussions of the Chinese imperial planning so as to inform readers of a certain historicity. Specifically, the corresponding objectives are:

1. to review and conceptualize public space in a Chinese context;
2. to study the articulation art of the settlement public spaces; and

3. to unfold the emerging issues and pinpoint the most critical aspects which current planning practices shall react to.

In a nutshell, the research is expected to conceptualize public space in a Chinese context. This is given the fact that there is no unanimous definition of public space in terms of Chinese planning; secondly, the study shall reflect and acknowledge the mentality of China's present planning system and on-going practices. Therefore, the emerging issues are expected to be summarized as part of the research outcomes.

2.4.2 Research Topics

It is necessary to limit the study scope. When dealing with the topic of public spaces, there is a wide range of aspects to be inspected and challenged. An ample scope might mislead or extend the study to topics that are not directly related to its ultimate research objectives. Therefore, the scope of the study is limited in line with the research topics listed below. However, the empirical work is designed to be open for adaptations and integrations of new relevant topics and projects.

This study mainly covers the following planning related fields, in addition, to a Chinese context. They are:

1. the planning legislation, regulations, laws and land management to ground a legal framework;
2. the planning history, philosophy, methodology and evolution to form a research background;
3. the urban design theories to examine essence of public space and land uses; and
4. the human-responsive environment to highlight culture and social space.

The above mentioned research objectives and topics shall correspond to research questions and hypothesis. The Conceptual Framework illustrated in Fig. 2.2 provides an overview of the topics and their relations.

2.5 Research Challenges and Outcomes

2.5.1 Research Challenges

The research challenges are manifolds, but particularly in terms of how to embark on this topic and how to organise the study. Public space has no legal existence in Chinese

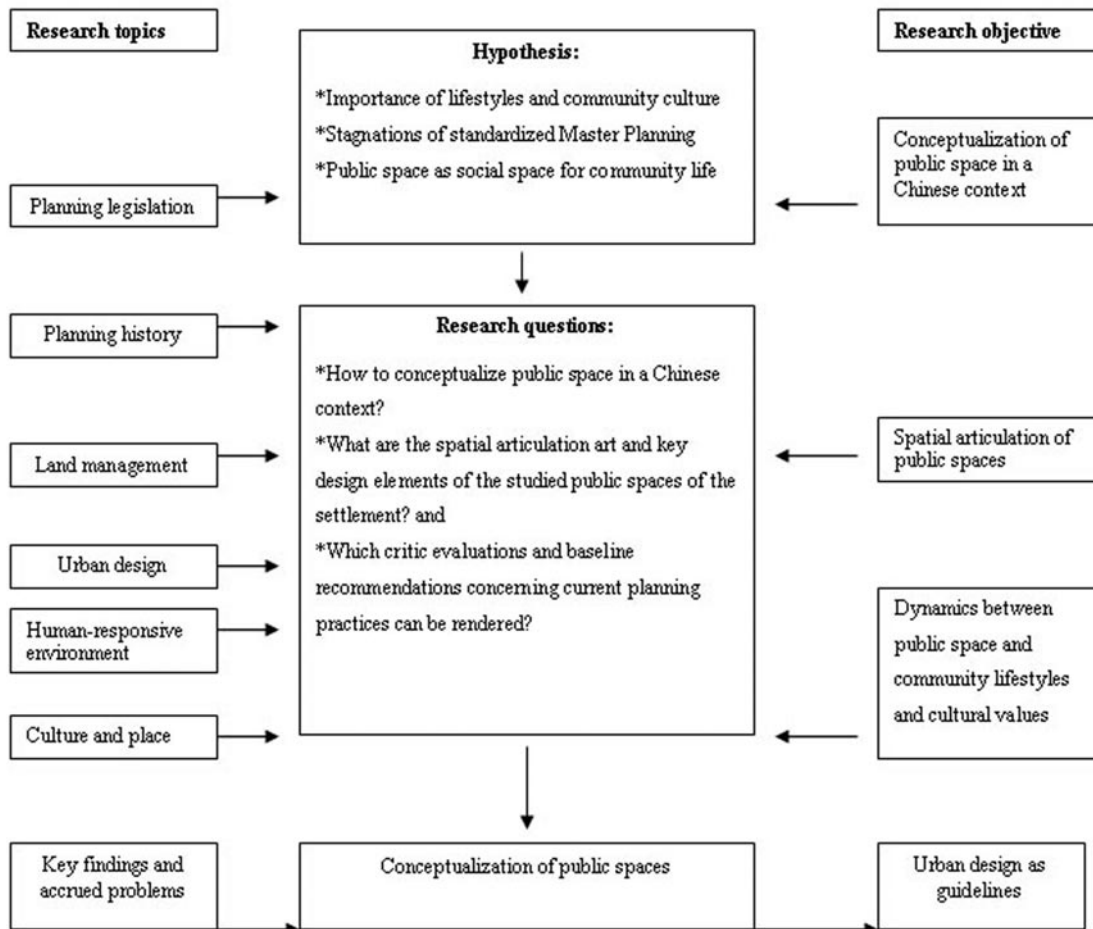


Figure 2.2: Conceptual Framework

society, which makes the concept tenuous and vague. This is particularly true given the fact that Chinese urbanism is not based on a civil society. Cuthbert (2006: 144) critically pinpointed ‘central to urban design knowledge is the concept of the right to the city, on which basis the concept of the public realm is established and how the custodianship of this realm is legitimated’. Public space and urban design with a legitimized status in China is a relatively new topic without an agreed understanding or connotation. The first China’s Urban Planning Act as law came rather late in 1990. There exist many undefined ambiguous aspects both institutionally and legislatively. And this Act of 1990 was replaced by the Urban and Rural Planning Act, which has been effective since January 1st, 2008. China’s current research accomplishments are mainly technical based, while researches contributing to policy-making are rather lacking. Therefore, the selection and research of this topic is also accompanied by the reform of Chinese planning laws.

Secondly, it is quite a challenge on the feasibility of this study. The author has initially a low access to the official census and data. The major reason lies in the insufficient data concerning this research topic in China. In addition, the municipality and official planning agencies have a quite low exposure to such kind of research-based project. For example,

the Municipal Planning Bureau of Xi'an shows fewer interests in facilitation during the author's fieldwork. However, the fieldwork in Magang settlement is well assisted by the local government and settlement inhabitants. The planning agency is greatly interested. For example, they raise the issue on the transferability of the spatial quality and life values of Magang settlement onto the new city's development in the Cantonese neighbourhood development. So the researcher gets the opportunity to interview one real estate company, which has been undertaking the development of several Cantonese neighbourhoods in the new town of the study area. Such kind of cooperation and facilitation makes this research more problem-targeting and goal-orienting. The researcher's experiences can certainly reflect existing disparities on the development, mentality and openness of China's different regions and the level of influences of the Open-door Policy implementation. This has significantly determined the selection of techniques in terms of data collection and the outcomes. However, as stated, Magang settlement is an unknown example and under-researched. The municipality is aware that this vernacular Cantonese settlement has great potentials on further planning and design applications to other lately neighbourhood development. However, there exists beforehand no detailed and authentic data on public space study of the similar settlements. Therefore, the research in Magang settlement is indeed largely dependent on the researcher's first-hand data sources, obtained from the intensive fieldwork. It is an experiment regarding the data collection techniques and analysis methods. For example, observation as one data collection technique is designed and employed in the fieldwork. It is based on the author's professional knowledge and Cantonese life experiences. The collected data are cross-checked among other colleagues with a multi-disciplinary perspective and understanding of Cantonese people and culture. Consequently, the research presents a sound analysis flow, based on observation and other data sources. Lastly, given the limited literature and ongoing research activities related with this topic, how to gauge the research findings could be a great challenge for the researcher. Therefore, this research is not only theoretical, but also aims at certain critical reflections on current planning system and practices. Comments on emerging planning issues are expected to be summarized. Such a summary is also part of the important research outcomes.

2.5.2 Research Outcomes

In line with the research objectives, assumed to answer the major research questions, the expected outcomes are:

1. the conceptualization of public space;
2. the summary of the public space articulation of the studied settlement; and

3. the conclusion of the most acute and pivotal planning related issues accrued from the research topics.

This research is interested in inquiring how the experienced human environment is constituted out of its intrinsic social values and cultural practices, germane to its peoples. In order to facilitate the understanding, the studied settlement is inspected not only from its physical existence of public spaces, but also from other underlined aspects. The endemic attributes and characteristics of public spaces are at length researched. This is pertinently determined by the selected settlement, concerning its availability of data in fulfilling the research objectives. The outcomes are supposed to acknowledge the spatial varieties and manifolds of the studied settlement through its historical context and peoples.

Nevertheless, the research goes beyond the case or the selected settlement itself. So is the ultimate objective of the study. In addition to addressing the gap between planning theories and practices, this volume work ultimately expects to disclose peoples' life values and cultural practices can significantly determine and transform their living environment. Therefore, it brings about not only discussions on the legislative issues regarding such as the land use planning, urban design and heritage conservation, but also a pivot proposal, that is, the integration of human being and their social space in formulating an optional spatial strategy. The research expects to inform policymakers of underpinning social values and cultural practices in reconfiguring postmodern Chinese spatiality. It propounds that human and social context shall be integrated as a crucial tool in spatial strategy design, hence to improve our life quality and strengthen spatial attributes.

Chapter 3

Methodology and Strategy

3.1 Research Strategy

This research is a ‘how’-type research. The nature of this research is explanatory and focuses on a contemporary phenomenon within a real-life context. It is a theoretical exploration in the process of seeking after enlightenment and feedback from a critical empirical case. As discussed in Section 2.1, the research design of this study falls into two major phases, namely, the theoretical inquiry and empirical investigation. Therefore, the twofold phases are the action plans of this research, but with the underlined logistics and sequence. The theoretical part is profound and embarks on a chronological review of the Chinese planning legislative system and urban planning evolution. It seeks to appraise the salient points of the literature review and expects to build a common theoretical ground to conceptualize Chinese public space. Such a review can not only initially detect the existing problem on public space and human’s lived environment to orient the research, but also confirm the research problem. Ultimately, the theoretical phase is expected to 1) present why public space appears an urgent issue to Chinese urban planning; 2) argue for a mutual understanding on public space among policy makers, practitioners and the public; and 3) identify the existing gap between public space and actual planning methods. Public space is the operational link to gain the knowledge and answer the research questions. Based on the first phase conceptualization of Chinese public space, this study scales down to examine a settlement case in south part of China, Guangdong province. Such a selection of research strategy is made to advance and build the solidity of our understanding on the researched issues. Nevertheless, it is not necessarily limited to solving the research problem and providing definite answers.

Stake (in Denzin and Lincoln 1998: 86) argued ‘case study is not a methodological choice, but a choice of object to be studied’. The ultimate purposes of selecting cases differ a lot. He further differentiated two major case types, that is, ‘intrinsic case study’ and

‘instrumental case study’. He commented that intrinsic case study is undertaken because of its significances and interests of being the particular case. Such a case study purpose is ‘not to come to understand some abstract construct or generic phenomenon’. However, instrumental case study is selected and investigated in order to render the ‘insight into an issue or refinement of theory’. Therefore, the role of the instrument case tends to be more supportive and facilitates our understanding. In his words, the instrument case is often ‘looked at in depth, its contexts scrutinized, its ordinary activities detailed, but because this helps us pursue the external interests’. To satisfy the objectives of this research, the selected case study plays a more instrumental role. Yin (1994: 13) summarized ‘a case study is an empirical inquiry’. He underlined that as a formal research strategy, case study suits particularly when ‘the boundaries between the contemporary phenomenon and real-life context are not clearly evident’. In explaining why case study is either a data collection tactic or a design feature alone, Stoecker (1991 in Yin 1994:13) justified that case study comprises an all-encompassing method — with the logic of design incorporating specific approaches to data collection and to data analysis. However, this research does not intend to be a merely qualitative research by using case study. The data collection sources, multiple evidence and the produced outcomes of this research is quite mixed with both qualitative and quantitative characters. In order to fulfill the research objectives, a set of substantive questions is designed, based on a series of actual inquiries and processes. Accompanied by a list of possible and potential sources of evidence, these questions are distributed in literature review, fieldwork interviews, group discussions, etc..

The research holds the principle of using multiple sources of evidence to guarantee the validity and reliability of the collected data. Methods of data collection aim at addressing research questions and emphasizing a multiple-evidence approach. The use of multiple-evidence shall support the analysis phase. Because of the multiple-evidence approach, a broad range of historical, attitudinal and behavioural issues are additionally addressed. This is one part of important contributions of the research and characterizes this study multifaceted and multidisciplinary. Thus, the findings or conclusions in this study are more likely convincing and accurate by emphasizing a multiple-evidence research methodology. The fieldwork in Magang settlement is deliberately divided into three phases with certain logistics. The first one is a reconnaissance survey, attempting at a rapid understanding of the study site and detection of the research problem. The contact with relevant local planning bureaus and agencies is established and the orientation of the study is acknowledged. In addition to the intensive second fieldwork, the third fieldwork is purported to bridging the data gap and collecting the missing data. This can in turn inform and amend the analysis after the second fieldwork. The necessity of the third fieldwork considers that the previous analysis might require an additional data input, which fails to be designed during the second fieldwork. It also helps to bridge the gap between the collected data and expected outcomes. Such field revisit can consolidate and validate

the data and guarantee the expected project outcomes.

3.2 Selection of the Study Area

3.2.1 The Pearl River Delta Region

The Pearl River Delta Region (PRD) is the earliest boomed regional economy in the post-Mao period. This is especially true since the adoption of the Open-door Policy in 1978. PRD is a fast growing region with a chain of competitive cities, including Guangzhou, Shenzhen, Dongguan, Huizhou, Foshan and Zhongshan. The urban interactions between Hong Kong and these cities have been very active in the past two decades. For instance, by the end of 1994, Hong Kong investors, often using family and ancestral-village connections, had established in the PRD region 10,000 joint ventures and 20,000 processing factories, in which about six million workers were working. China's regional economic situation varies largely. As one of the richest region in China, according to Keng (2006: 205), Guangdong Province is also the largest 'contributor' to China's overall regional disparity with a GDP per capita of RMB \$11,181 (US\$1,352) and a population of 86.42 million¹, or 7.77 percent to China's overall regional disparity.

The PRD region has been bearing the brunt of Chinese Open-door Policy and economic reforms. The region has also been experiencing rapid rural industrialization in the last decades. The development of towns and cities in this region tends to be decentralized to display their strong competition within the region. After two decades of development, numerous industrialized cities and towns have made the PRD region the most prosperous one in China. The PRD region adopts a spatial strategy of establishing a group of dynamic central towns, which upgrades the whole economic system. Guangdong Province is densely populated. However, the east and west 'wings', as well as mountainous areas, are lagging behind the development of the central core of the PRD region. Campanella (2008: 31) noted 'the earliest and most visible physical transformations did not occur in cities, but in the countryside around Shenzhen and Guangzhou and nearby towns throughout the Pearl River Delta-Dongguan, Jiangmen, Foshan, Nansha, Zhongshan, and others'. Given these circumstances, the current development strategy focuses more on the towns, rather than cities. Therefore, 'townization' is more suitable for the present development tactics of Guangdong Province.

The distinctive landscape feature of PRD region is characterized by small- to medium-

¹According to Keng (2006), the smallest contributor was Tibet with a GDP per capita of RMB\$4,483(US\$542) and a population of 2.62 million. Tibet contributed 0.1821% to China's overall regional disparity.

sized factories, developed along the traffic arteries or haphazardly constructed through the agricultural land encroachment. Land is predominantly owned by the village collectives, falling out of the former planning procedures and development management. Often, the situation is commented as cheap available land with lax laws. The keen competition within the region significantly promotes other cities and towns besides the capital city of Guangzhou. This includes Shenzhen, Dongguan and Foshan, which are growing into metropolises. For example, the population² of Shenzhen has reached to 14 million. Additionally, each of these small towns is economically very competitive by dominating one industry sector in the form of township and village enterprises (TVEs). Towns and villages in PRD region have been keeping development on par with the cities, although they are not necessarily administratively defined as urban area, or up to the city level. Many so-called villages *in situ* are located now in the urban area during the past decades development and in the process of experiencing urban sprawl. The general phenomenon tends to be the town-village blending, which is blurring the traditional administratively boundary.

PRD region has been maintaining their very strong and distinctive Cantonese culture including Cantonese as people's daily used language. The culture itself is closely associated with the region of Guangdong Province, Hongkong and Macao. It is also the major mass media language used in TV programmes and radio broadcasting in Guangdong Province, Hongkong, Macao and by those Cantonese people living abroad. Those Cantonese travel to mainland China, termed by Campanella (2008: 35) as the 'agents of modernization'. Along with the materials goods, came also new tastes, new values and new ideas. Despite the influx of such modernization, traditional Chinese customs and festivals are inherited and widely practiced among this group of Cantonese people. This includes such as annual Dragon-Boat Festival in May, Flower Festival during Chinese Spring Festival and Fishing Lantern Festival. The traditional Cantonese architecture and landscape is mainly featured with residential gardens, creeks, stone arch-bridges, banyan trees, lotus ponds and family temples.

3.2.2 The Study Site - Magang Island Settlement, Foshan City

Magang settlement is located in Shunde district³ of Foshan city, Guangdong Province (see Fig. 3.1). Foshan city has in total ten counties with a registered population of

²This includes both registered population and temporary population.

³Shunde firstly appeared in Ming Dynasty ca. year of 1452 as a county. In March 1992, it was promoted as a county-level city. Until December 8, 2002, it became a district of Foshan city at the prefecture-level. Shunde has direct jurisdiction over 4 sub-districts and six towns. The centre of Shunde is located in the southeast part. Transport access to other adjacent cities such as Guangzhou, Hongkong and Shenzhen is very convenient.

1,121,900. Additionally the temporary population reaches 669,500 during the research conducted period. One has to note is the population number of Shunde district living abroad including in Hongkong, Taiwan and Macao amounts to ca. 400,000. This group of population is one of the major cornerstones in Shunde district's urban investment. Many of these migrants, including those living abroad have been keeping strong ties to kith and kin in their hometowns. For this group of people, the kinship network both in hometowns and where they are currently living is very significant to maintain their Cantonese origin and identity. Most of these immigrants regularly visit their hometowns during Chinese traditional festivals, such as Lunar Spring Festival to get together with their families; and Qingming Festival to retrospect the ancestors by holding grand ceremonies in the family temples. Their frequent visits bring along with variety of ideas, experiences and influences from abroad on the urban development of their hometowns. The family temples have been regularly renovated and maintained with their donation.

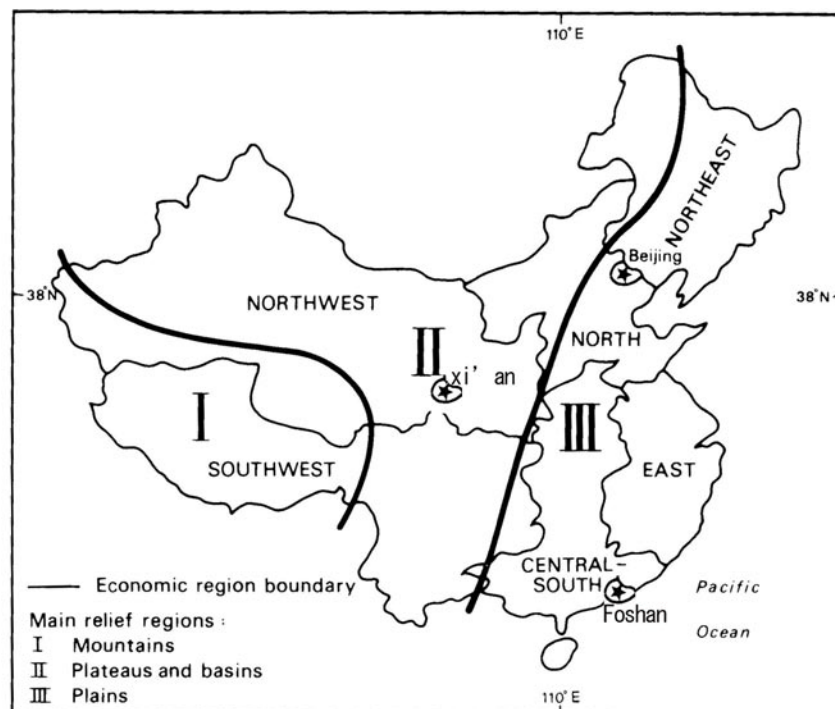


Figure 3.1: Geographical location of Xi'an and Foshan city [Source: Sit, 2005: 119]

Shunde district is located in the middle of PRD region (see Fig. 3.2), 38 kilometer south to Guangzhou and 78 kilometer north to Macao. The district has a total area of ca. 806.08 square kilometer, which amounts to 21 percent of the entire area of Foshan city. The sea level of Shunde is between 0.7-3 meter. Climatologically, the region is a subtropical oceanic monsoon type with a temperature range from 13.1 Celcius degree at the minimum to 28.7 Celcius degree at the maximum. The whole regional is mostly alluvial plain with affluent water sources. By the year of 2003, the urbanization rate of Shunde district has amounted

to 55.8 percent⁴ with an established build-up area of 67.6 square kilometres. The major economic activity of Shunde district is small-scale electronic firms up to 51 percent, which ranks the first in China. Majority of China's sanitary ceramics such as sinks, lavatories and toilet bowls are manufactured in Shunde. The economy is supplemented by dike-pond fishery, which is the largest and most prominent in China. The successful industrial development also becomes the brand and identity of this district.



Figure 3.2: City and town distribution in Pearl River Delta region [Source: Self-modified based on http://commons.wikimedia.org/wiki/File:Pearl_River_Delta_Area.png accessed in April, 2008]

Magang settlement is a well maintained Cantonese settlement dated back 400 years ago. The selection of this settlement is purposeful. On the one hand, it is a living neighbourhood with a relative stable and even demographic structure. The settlement has been experiencing the development of Cantonese economy and PRD region's overall booming in the last two decades. On the other hand, it is not a conservation area or a typically old settlement to a Chinese sense. The settlement keeps intact in terms of its living environment, but not unchanged. It is therefore more authentic and informative to reflect the past and present of the region's characteristics and transformation. From this sense, it can be a convincing representative of many typical Cantonese settlements, struggling and thriving through China's urban development since the Open-door Policy in 1978. Therefore, it can be also a representative at the regional level. The purpose of selecting this settlement shall be able to generalize a feedback on how this group of people and their lifestyles create certain social space, which accommodates and sustains their own values and needs. Therefore, such a purposeful selection gains great credits to generalize

⁴While the average urbanization rate of China in 2003 is about 42.6 percent.

the research findings.

Magang settlement is characterized with a strong Cantonese vernacular environment, particular to south China. The settlement develops itself along the natural hill contour and is three-side surrounded by a river with affluent water (see Fig. 3.3). With a total area of 12 square kilometres, its local registered population is up to 7,200 when the research is conducted. The first impression of the island settlement is its distinctive natural landscape with a large area of lush banana plantation and dike-ponds for fishery. It appears as a spatial network of ancestral temples, waterfront, lotus ponds, old landmark banyan trees, opera stages and small piers. The study of Magang settlement itself is unknown to the international level; either to the planning and design discipline in China. At the domestic level, Shunde district, which the settlement administratively belongs to, has been several times studied. They were undertaken by the local planning agency and university research institutes. Nevertheless, the above study focus is mainly in the newly built-up area concerning the retail development, city level public space and modern community development initiated by real estate developers. At Magang settlement level, the previous research efforts have been mostly on its biological landscaping, ecological system and quality of architectural buildings conducted by Beijing University. This includes such as *The Conceptual Plan and Design of Magang Settlement* (Beijing University, 2006) and *Rescuing a Village: the Approach of Landscape Security Patterns* (Yu, 2006). The University's research is on the endangered natural landscape of the settlement, which is caused by the process of urban sprawl and townization. It is quite urgent to save and reserve the settlement agricultural land for a sustainable development. Public space has been mentioned in those researches; however, none has integrated a human approach to study the built environment and peoples' interactions with public spaces. What's more, the expected outcomes of those researches and this study significantly vary. Previous researches mainly have fulfilled the objectives of identifying the critical landscape elements and encouraging tourism.

3.3 Concept and Methods of Data Collection

According to Yin (1994: 78), evidence for case studies may come from six sources: documents, archival records, interviews, direct observation, participant-observation and physical artifacts. In order to increase the substantial quality of a case study, he further emphasized the use of 1) multiple sources of evidence, that is, evidence from two or more sources, but converging on the same set of facts or findings; 2) a case study database, that is, a formal assembly of evidence distinct from the final case study report; and 3) a chain of evidence, that is, explicit links between the questions asked, the data collected and the conclusions drawn.

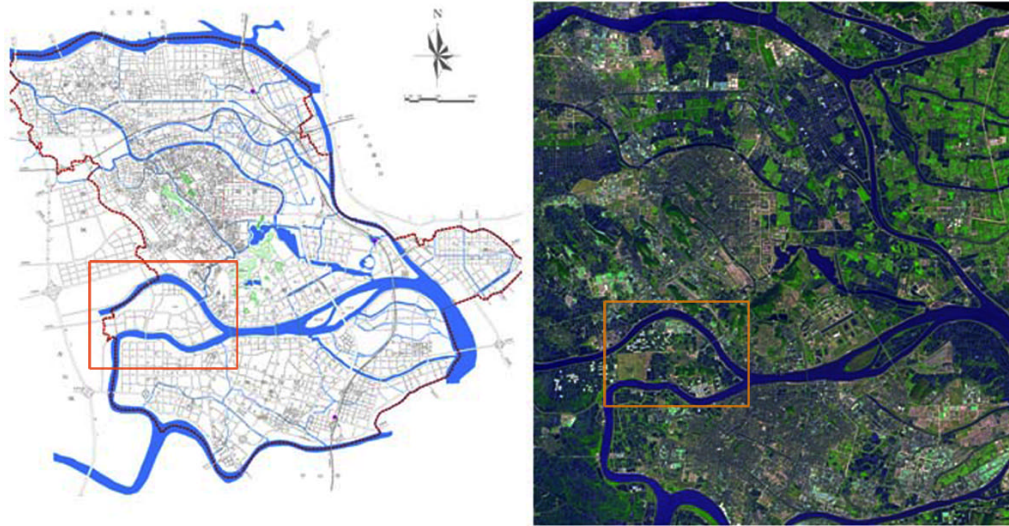


Figure 3.3: The geographical location and natural condition of Magang settlement [Source: The Urban Development Centre of Shunde District, Foshan city, 2006]

In terms of data collection concept, this research is closely attached to the intrinsic principle of urban design theory, namely place theory. Trancik (1986: 112) emphasized ‘the essence of place theory in spatial design lies in understanding the cultural and human characteristics of physical space’. He further argued the difference of ‘space’ and ‘place’, that is, ‘if in abstract, physical terms, space is a bounded or purposefully void with the potential of physically linking things, it only becomes place when it is given a contextual meaning derived from cultural or regional content.’ Frequently used data collection methods in this research include observation, participant-observation, interviews, focus group discussions, expert discussions, workshops and so on. Above all, the data collection of this research puts a great emphasis on the concept of ‘people’ and ‘place’ (see Fig. 3.4)⁵. Data collection and source of evidence mainly informs four key attributes of the lived environment, namely, Sociability, Uses and Activities, Access and Linkage, and Comfort and Image.

Data collection at the empirical level falls into two categories. The first category is mainly on the physical or phenotype aspects. It tries to disclose the above-mentioned four attributes of the settlement public space. Key spatial articulation elements endemic to the settlement expect to be summarized. However, this is not the end of this study. The second level inquires how the settlement life is being accommodated by such a built environment, particularly; cultural activities and pertinent life values are to be investigated. The purpose is to supplement the understanding of the physiological space from a socio-

⁵ Authored by Madden K. (2001), this is a concept practiced widely by Project for Public Spaces (PPS), a nonprofit organisation dedicated to creating and sustaining public places that build communities. It has been widely practiced for public space projects implementation at community level.

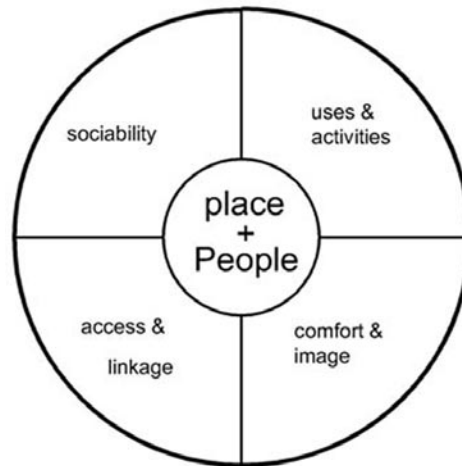


Figure 3.4: Data collection concept [Source: Self-modified according to Madden K., 2001]

logical perspective and to enrich the understanding of the above four aspects of the lived environment, hence to answer the research questions.

3.3.1 Observation as data collection technique

Observation as a data collection technique plays a determinant role to this research scope. As Adler P. A. & Adler P. (1998: 80) argued that what differentiates the observations of social scientists from those of everyday-life actors, is the former one's systematic and purposive nature. For this research, observation is one of the most powerful methods in generating data to study human's behaviour in public space. Using the term of Adler P. A. & Adler P. (1998: 79), it is named as the 'naturalistic observation' for the qualitative data collection. They (1998: 80) argued that observation is most likely to be used in conjunction with others, such as the participant observation, experimental design and interview. For public space study by using observation techniques, it has been rendered and succeeded in previous researches. For example, Lyn Lofland (in Adler P. A. & Adler P. 1998: 83) commented that most of her data have come from the situation in which she was out in public for non-research purposes.

However, obtaining evidence from observation requires considerable skills. As Nisbet (1977 in Judith 2005: 185) pointed that observation as data collection technique is a capacity for the original thinking and the ability to spot significant events. It is certainly not an easy option. Therefore, the decision of observation as data collection technique is highly demanding and challenging for researchers, in terms of their professional and communicative skills. The use of observation technique in this research is applied to both the physical and socio-economic survey. Prior to the fieldwork, the use and purpose of observation are carefully designed (see Table 3.1). Such a design is quite crucial to help in gaining the desired data, which is able to answer research questions within the

research scope. Observation outcomes in this study are not only qualitative and certain quantitative data has been also produced. In terms of the quantitative observation in this research, it is very carefully designed to ensure the standardization and data scope. Unlike observation applied to generate qualitative data, predetermined categories with strict standards are formulated to control the scope of observation. Hence a set of standards and framework are firstly established to highlight the research focus. This is suggested by Adler P. A. & Adler P. as a systematic and purposive observation.

Taking participant-observation as in Table 3.1 as an example, it generates a set of solid qualitative data for this research. In Gold's (1958 in Adler P. A. & Adler P. 1998: 84) classic typology of naturalistic research roles, he outlined four modes through which observers may gather data, namely, the complete participant, the participant-as-observer, the observer-as-participant, and the complete observer. In this research, the author orients herself the observer-as-participant. She participated one day in the traditional annual Dragon-boat Festival and Get-together Festival Banquet in May. Such experiences produce very rich first-hand data for an intimate observation of the inhabitants' understanding and perceptions of their lived environment. What we can never neglect, the inhabitants are the every-day life participants in solving their own uncertainties with certain logics behind. This is also a collective effort pertinent to this group of peoples' acknowledged life values and practices, while modifying their own lived environment.

The research aims at promoting observation technique in inquiring the interaction between the physical environment and human. It is based on the data collection concept of 'people' and 'place'. It is meanwhile an inquiry and quest process. Observation is also conducted by multiple investigators. The decision of using multiple investigators is intrinsically necessary for this research. This is mainly because:

1. the settlement fieldwork calls for intensive data collection;
2. the settlement is divided into four dwelling clusters to be investigated; and
3. the data collection is scheduled in these four dwelling clusters at the same time, and repeated many times at different time-spans. This expects convincing observation results.

In order to fulfill the above mentioned assignment of data collection, the investigators are well acknowledged and agree with the research problem, and the settlement as a case design. The settlement is convenient to be divided into different controllable sizes for the observation task. Specifically, four surveyed dwelling clusters are divided, each with an area of about 5,000 square meter. And every survey cluster is centred with a temple, which articulates a distinct boundary of the public activity space. All four clusters are along east of the hill contour (see Fig. 3.5), with a ca. 500-meter interval between each

other. It appears very handy to cross-check and compare the data generated from the four clusters.

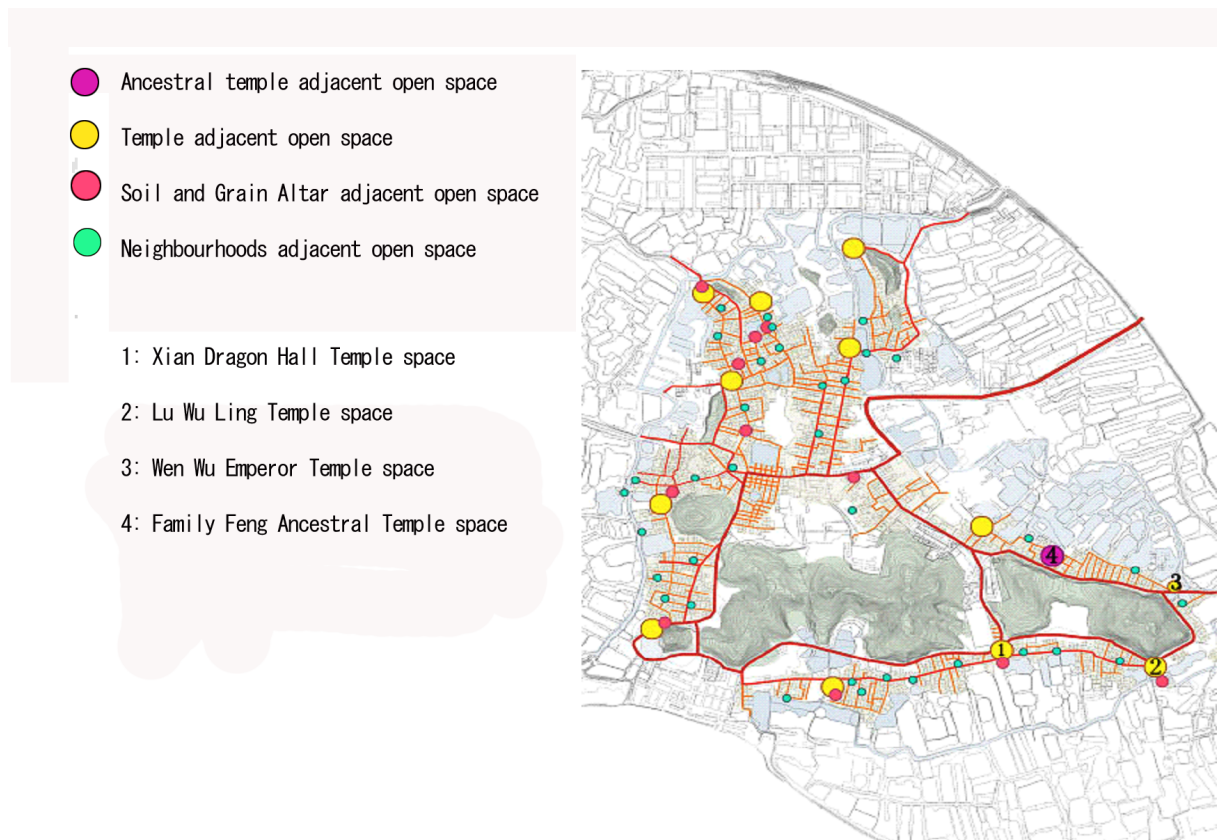


Figure 3.5: Public open space system and selection of the four survey sites [Source: Beijing University, 2006]

3.3.2 Construct data validity and reliability

Empirical research is often challenged concerning the validity and reliability of the data or the collected evidence. To this study scope and purposes, certain principles are taken in order to reduce as much as possible the likelihood of the author's individual perceptions and interpretations of the collected data.

Carmona (2003: 243) strongly recommended 'site specific appraisal' as a prerequisite for design and development. He pointed out 'site specific appraisal shall identify both those features worthy of protection, and the potential for improvement, and, as a result, to define principles and proposals that respect or ameliorate these qualities'. Roberts and Greed (2001: 69) agreed that site appraisal 'becomes more forceful as a design tool once the information is analysed and abstracted to another level'. Significantly, site appraisal provides an opportunity to 'rationalise and make explicit unconscious observation'. Essentially, this research develops extensive but efficient techniques in appraising the study site. It has several purposes. Firstly, the collected data is systematically categorized and

tabulated with a coordinated pattern, supplemented by photographs and mappings. Four schemes particular to the focus of this study have been designed. The idea follows suit of the data collection concept in Fig. 3.4. These four schemes complement each other and focus on human activities in public space. They are:

1. Resource Mapping;
2. Place Performance Rapid Evaluation;
3. Movement Pattern; and
4. Behaviour Mapping.

The fieldwork procedure as a protocol is recorded and certain database is established. It is a know-how transfer for other fieldwork workers to conduct the same assignment. So the same procedures to this case can be repeated again. The data for future interpretations has a hardcore available record. As Yin (1994: 37) lamented that ‘in the past, case study research procedures have been poorly documented, making external reviews suspicious of the reliability of the case study’.

Secondly, each of the steps in fulfilling the fieldwork assignment is made feasible and viable to proceed. This is to increase the reliability of data. The significant reason is the process is made tangible and accompanied by the outcomes. All the above preparations (categorizing, tabulating, matching, etc.) of the collected data and evidence are conducive to the analysis phase. The documented observation results are analysed so as to derive certain common knowledge in interpreting the dynamics between the studied public space and its users. It aims at addressing the research questions. Therefore, it is clear-cut to proceed with what shall be observed, what is the main area of interests and to which extent the obtained data can inform this study.

Thirdly, multiple evaluations of the data among the fieldwork investigators are pivotal. This is also given the fact that the settlement fieldwork is involved a team of investigators. It is actually the first sound condition to avoid the author’s biases in treating the collected data. According to Patton (1987 in Yin 1994: 92), it is termed as ‘investigator triangulation’. Such a triangulation process in this research is mainly through the art of expertise workshops and focus group discussions. The ultimate goal is to increase the data reliability to its foremost extent.

Observation methods	Main data type	How to use	What information to obtain
Resource mapping	Quantitative Qualitative	Bringing out the spatial dimension of change and detecting the existing and potential resources and development constraints.	Both physiological and socio-economic information, e.g. the land use pattern, public space distribution, housing types, road access, vegetation cover, waterbody, local features and identity, etc.
Place-performance Rapid Evaluation	Qualitative	By using four key attributes of the space, i.e. Comfort and Image, Sociability, Uses and Activities, and Access and Linkage.	A rapid evaluation of the place performances both physically and socio-economically.
Behaviour mapping	Qualitative	Elaborating how the public space is being used by employing the time-lapse mapping at a certain place.	Indicating people's activities (both in station and motion) in a specific area for a predetermined amount of time.
Counting	Quantitative	Determining such as vehicles' use of streets, the number of people who enter a place at a particular timing.	Quantitatively numerical data about people and vehicles in a specific location or passing a particular point.
Trace measures	Qualitative	Observing the physical evidence and erosion traces left by public space users.	How the spaces would like to be used qualitatively and quantitatively.
Observant Participation	Qualitative	Researcher participating the local event, a role of observer-as-participant.	Qualitative data on culturally personal empirical experiences and people's interaction with environment.

Table 3.1: Observation as data collection techniques [Source: Own concept development, 2007]

Chapter 4

Conceptualization of Chinese Public Space

Above all, China's planning system has been pertinently bound with its cultural, historical and political phases, accompanying with historical and social evolution in a highly centralized manner. Therefore, there exist three crucial elements for the comprehension of Chinese public space, namely, the classical Chinese imperial planning, city administrative structure and modern urban planning from 1949 onwards.

The understanding of European cities cannot apply to China. Sit (1995) summarized that there is no lack of western literature that says Chinese cities have been for many centuries dominated by the administrative function. He quoted Trewartha (1952 in Sit 1995: 19) that 'cities in China originated and developed as a result of the stimuli associated with administration, and that these administrative functions are still more prominent in Chinese cities than they are in those of the Occident¹'. Trewartha observed that since ancient times there appeared two primary forces in China stimulating the development and growth of cities: 1) the dynastic or administrative factor (administrative city), and 2) the economic factor (economic or natural city). To certain extent as a short summary, the origin and growth of Chinese city is above all associated with the administrative network and ritual-political system dominated by Confucius culture, albeit economic activities have also played a role in the course of urban development.

¹Max Weber (1921) argued in his book *the City* that the development of cities in European culture (Occidental cities) as an autonomous associations with its own municipal officials was influenced by: 1) religion of Christianity; 2) privileged legal position of the citizens (based on citizens obligation of military service) and 3) decline of religious sanctions of kinship solidarity that facilitated the creation of unified urban community.

4.1 China's Dual Planning Systems

4.1.1 Concept of the Classical Chinese Imperial Planning

Imperial planning exclusive to Chinese cities is a very strict concept, a practice as well. By using the terminology of 'imperial', it mainly refers to China's long and stable feudal society over 2,000 years dominated by Confucianism. 'Planning' has the connotation that Chinese ancient cities are strictly designed with hierarchies and symbols. Ancient China has been long time a stable and persistent feudal society and fell into a semi-feudal and semi-colonial situation after the first Opium War in 1848². Such a stability and persistency has been contributed by the country's economic, political and cultural combination and blending. Firstly, China was a predominated agrarian economy, which was the economic foundation of China's feudalism. Agricultural and rural population comprises a large percentage of China's population, even till the present. It has been for a long time following the model of a self-sufficiency economy. Consequently surplus demands and supplies for the industrial products were very limited. Besides, Chinese imperial dynasty rulers put accent on the agriculture rather than commerce and industry. Majority of the state policies were favourable to landlords, but not to merchants and industrial entrepreneurs. This has greatly discouraged and hampered the growth of capitalism. Secondly, though China has experienced many dynasties and regime changes and war times, but the ideology of governing the country has followed the suit. *Zhou Li*³ (or *the Rites of Zhou Dynasty*) has well legalized the idea of ruler as the Son of Heaven and the universe is peopled with divinities. This has been unchanged even when China was under the minority groups' governance, such as Mongolian Yuan Dynasty (1260 - 1368) and Manchu Qing Dynasty (1636 - 1911). The ideology has strengthened the stability of China's feudality. Thirdly, there was an existence of highly developed Chinese feudal culture and its influences are even world-wide all through the history. The major school of thinking has been dominated by Confucianism. It was promoted by all the feudal rulers,

²Till this time, Chinese society went through three stages: primitive society, slave society, and feudal society. During the Western Zhou (1066 - 771 BC) or Eastern Zhou Dynasty (770 - 256BC), Chinese society was in the feudal stage. This social system lasted more than 2,500 years until it was shaken by foreign cannons during the Opium War in 1848. The Opium War of 1840 marked a turning point in Chinese history. The corrupt and incompetent Qing government signed the Treaty of Nanjing with Britain. It is the first of the unequal treaties signed by China with a foreign power. The Treaty left several unsettled issues. In particular it did not resolve the status of the opium trade with China, which was profitable for the British and devastating to the Chinese. Thereafter, the opium trade flourished, and Hong Kong developed rapidly as an Anglo-Chinese enclave. China was reduced to a semi-colonial and semi-feudal country. After the Opium War, Britain, the United States, France, Russia and Japan forced the Qing government to sign various unequal treaties, seized 'concessions' and divided China into 'spheres of influence.'

³*Zhou Li* or *the Rites of Zhou* is the oldest and most authoritative document, which governed the layout of the Chinese capital design. It was developed in Zhou Dynasty and most of its rules had been followed till Qing Dynasty of early 20th century.

influencing China over 2,000 years till the present. Confucianism pursues an absolute obedience to rulers and sovereigns.

Chinese cities did not grow out of naturally developed human settlements. In contrast, the cities were sophisticatedly designed and population was shifted to the city afterwards. As Steinhardt (1990: 10) argued, 'one reason for the huge concentration of people in Chinese capitals was the common imperial practice of relocating masses of the population'. The population was located and arranged in the city, based on the social stratification. The city is accordingly planned to meet the strict social rank division. Joseph (2005: 8) agreed 'urban planning standards that emphasized rectangular subdivision to main social rank and function played an important in the ancient cities of China'. State servants, in Chinese long imperial era, have been always the upper class. Their working and living space was in the vicinity of the palace. The design of cities must embody the ruler's absolute authority of power. As a fact, the genesis of Chinese ancient capital cities can be traced as a ritual centre for the worship of the imperial ancestors and the God of the Heaven (see Fig. 4.1).

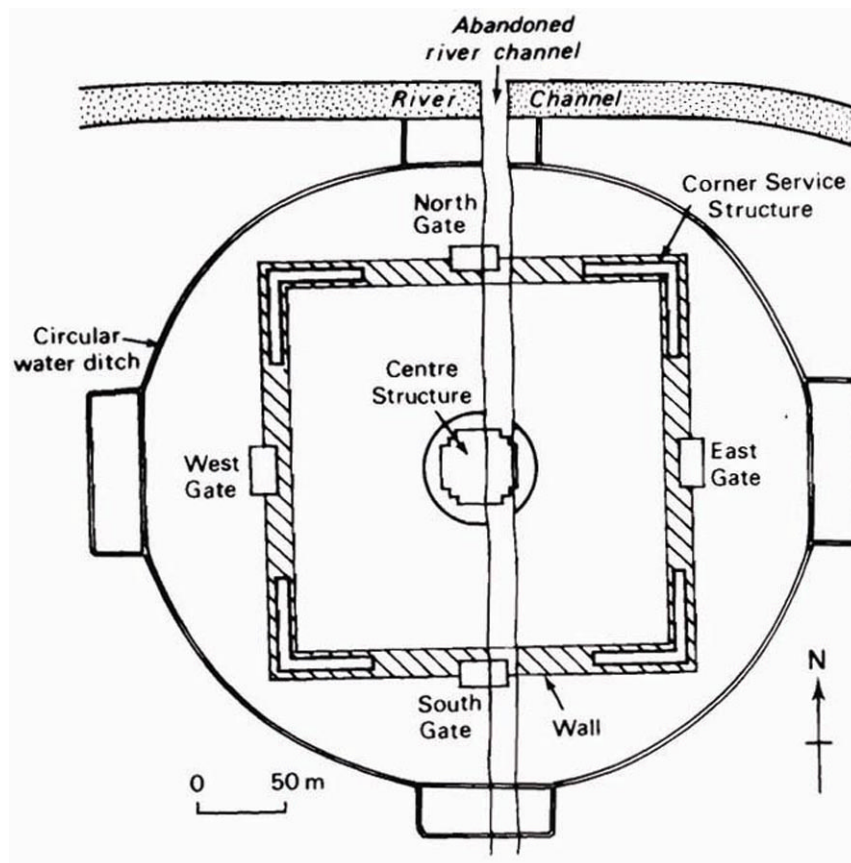


Figure 4.1: Plan of Ming Tang (or Bright Hall) of Han Dynasty excavated in Xi'an. [Source: Liu, 1980 in Sit, 1995: 15]

Joseph (2005: 9) indicated that 'Confucianism's emphasis on the imperial system of power and on the centrality of the emperor is reflected in the ways the place is placed in the

city's centre'. Confucius' ideas of centrality, order and hierarchic structure were imperatively imposed on the city planning. There are a group of defined spaces and architectural components to satisfy the imperial standards. Through the doctrine of Daoism⁴, universe was given the great importance in Chinese cities' philosophy⁵. Steinhardt (1990: 13) commented that 'in China the locations of imperial buildings were standard. In fact, the positions of imperial structures are more standardized than the city plans'. On the profound significance of Chinese city planning, Joseph (2005: 9) summarized that 'Chang'an had a great influence on subsequent urban planning. Other East Asian cities often modeled their capitals after this particular prototype, adopting the rectangular grid patterns for streets and city blocks and replicating the location of the palace and the various ward'. As an exemplar, Figure 4.2 of the ancient Xi'an (Chang'an) plan embodies the typical rules and general features of Chinese ancient cities:

1. The Soil and Grain Altars are located to the west side of the Sovereign's Palace;
2. The east side is the Ancestral Temple, expressing the idea of filial piety highly respected by Confucianism. The Sovereign's Palace, the Soil and Grain Altars and the Ancestral Temple are the most important three land uses in forming the city core;
3. The core is only at the service of emperors, because the design converges on the sovereign, or Son of the Heaven. The square layout replicates that of the earth, which is considered to be square. The universe as a square and the city as gridiron pattern embraces the emperors' power mandated by the Heaven;
4. Every Chinese imperial city is encased by four outer walls, meeting at the right angles to form a rectangular. Within the walls are at least one or more sets of walls that define smaller rectangular enclosures. The four-sided Chinese city is a physical manifestation of the traditional belief in a square-shaped universe, bounded by walls. The outer and inner walls are pierced by gates;
5. Gates in the city wall shall open toward the four directions. Reflecting the cosmic order, these gates function as focal points of the social order and orientation. Consequently, Chinese imperial cities appear to be inward-looking. Both city walls and

⁴Daoism doctrine, striving for harmony between heaven, earth and human being, was also equally distinctive as Confucianism's reflection in Chinese ancient city planning. Daoism refers to the two opposing and mutually interfacing 'vital forces'. They are the *yin* (negative and passive) and *yang* (positive and aggressive) principles. The *yin* and *yang* ceaselessly interact to generate the eternal round of cosmic phenomena, which within the year follows the cycle of the four seasons.

⁵An idealized description of the capital in *the Rites of Zhou Dynasty*: 'there, where Heaven and Earth are in perfect accord, where the four seasons come together, where the winds and the rains gather, where the forces of yin and yang are harmonized, one builds a royal capital'.

gates are not necessarily for the military defense purpose. It is more symbolic for the division between the higher rank and the grassroots or the public; and

6. More often, city roads and avenues ran from a northern to a corresponding southern gate, forming a north-south axis feature. South is the cardinal direction the emperor faces when seated in his Hall of Audience. Therefore, the location and position of imperial palaces over Chinese dynasties is highly standardized. Public open spaces such as pavilions, terraces, gardens and plazas are normally half-hidden and do not welcome the general public use. The use is quite exclusive.

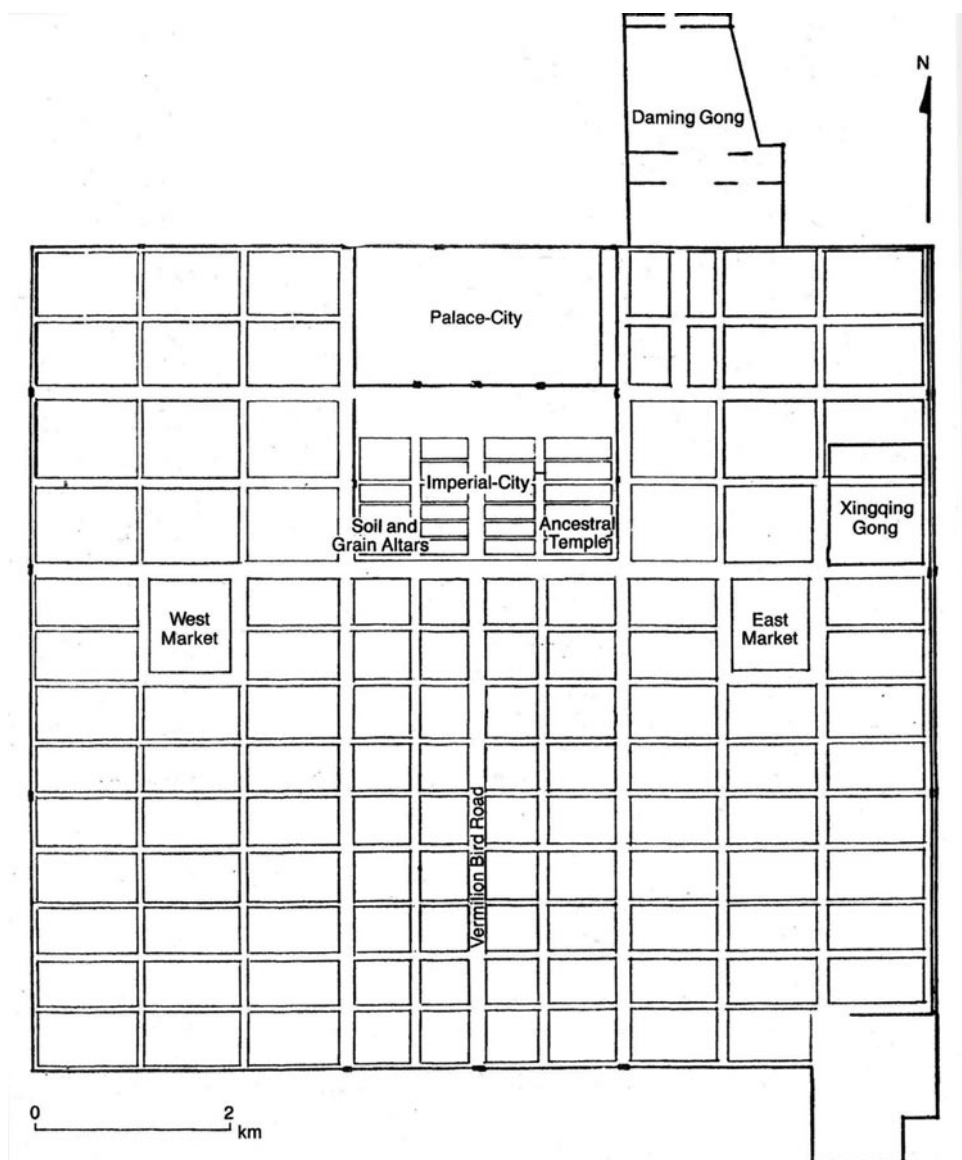
4.1.2 Administrative Unit and Planning Hierarchy of China

The first Law of the People's Republic of China on Urban Planning has been enforced since April 1st 1990. It came rather late if compared with China's urban development. It is the most important law for the land use planning, construction and development control in urban planning areas⁶. After the founding of the People's Republic of China in 1949, there have been adjustments for the definitions of administrative units. China comprises four municipalities⁷ directly under the Central Government, 23 provinces (including Taiwan), and five autonomous regions. The provinces, the autonomous regions and the municipalities directly under the Central Government are the three elements at the provincial level, which is the highest level of the local government. Under Article 30 and Article 31 of the 1982 Constitution, the types of administrative units subject to the provinces and autonomous regions are cities, autonomous prefectures, counties, and autonomous counties. Cities and autonomous counties are divided into townships, nationality townships⁸ and towns. Therefore, there are three hierarchies of cities in China. The first hierarchy includes the four municipalities directly under the Central Government. The administrative units subject to the four municipalities are urban districts, suburban districts and counties. The urban districts in the municipalities are referred as cities proper, which are historically the original core areas of the cities and characterized by non-agricultural

⁶The concept of 'urban planning area' was introduced in City Planning Regulations in 1984. It has been decided that all the development and construction within the urban planning areas should apply for planning permission and be within control of the urban planning system. Article 3 regulates that urban planning areas in a city where the Law must be observed include urban districts, inner suburban districts and those areas needed by urban development and construction within the city administration territory. 'suburban districts' are those which are geographically located between urban districts, i.e., the core of a city, and counties, i.e., the periphery areas of the city.

⁷They are Beijing, Shanghai, Tianjing and Chongqing. The People's Republic of China (PRC), at present, has two Special Administrative Regions (SAR), Hong Kong and Macau. SAR is an administrative division of the PRC. Each SAR has a Chief Executive as head of the region and head of government.

⁸They are townships inhabited by national minorities ('non-Han'/Chinese national minorities).



The ward division strictly follows the rule of hierarchy and functions. The city plan was articulated into functional zones: a central area, usually walled, that contained the palaces and important buildings used by the aristocracy; surrounding the central area is the second walled area that included industrial and artesian quarters, residences of the people, some farmland, commercial streets and markets; outside there is often a moat. The proximity to the emperor seated in the south suggests people's rank and social stratification.

Figure 4.2: Tang Dynasty Chang'an plan of the 7th century comprising 108 wards. [Source: Steinhardt, 1990: 11]

activities. The second hierarchy of city comprises those having the status of prefecture⁹

⁹A prefecture was an administrative unit below a provincial government or an autonomous region government and possessed the competence to administer several counties on behalf of a province or an autonomous government. Since 1983, prefectures have been abolished in the administrative structure of most provinces, except in those provinces which have autonomous areas, and placed prefectures administered counties under the jurisdiction of provincial administered cities.

and being directly under a provincial government or an autonomous regional government. In most provinces such cities have replaced prefectures. And these cities have subordinate counties. The number of counties under the second type cities varies a great deal due to the lack of a unified standard and a defined territory and administrative boundary. A city of the second hierarchy is divided into urban districts, which are under the direct jurisdiction of a city government, counties and cities. In fact, county-level cities constitute the third hierarchy of city, situating the lowest level hierarchy system of Chinese cities. Most lately development takes the advantage of the third type cities' untapped resources. Sit (1995: 117) described the pattern of the spatial growth of Chinese cities in Fig. 4.3.

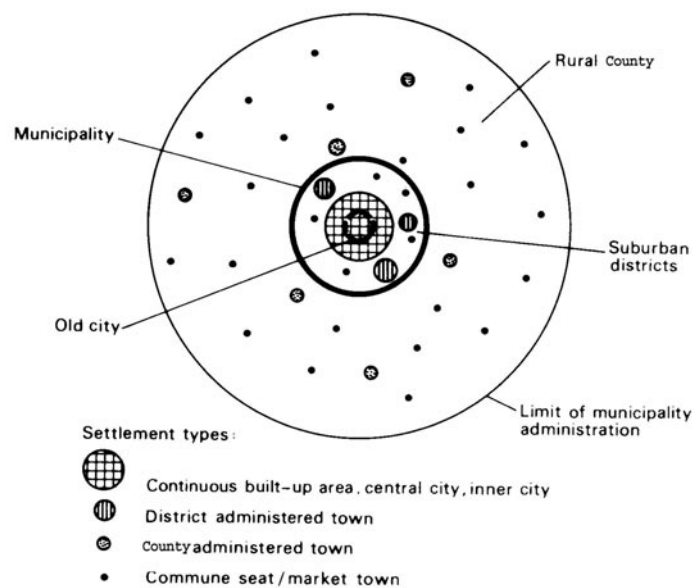


Figure 4.3: Spatial Organization of the Chinese City [Source: Sit, 1995: 117]

The categorization of cities is closely related with the urban planning system. China's highly centralized structure is basically featured with three hierarchical planning systems: Master Planning, District Planning and Detail Planning¹⁰. It is regulated that the Central Government and the governments at provincial level are responsible for the organisation of the urban hierarchical planning in the country and in provinces respectively. The Master Plan formulated by city government shall be submitted to the State Council for approval. The Master Plan consists of two parts: Urban System Planning¹¹ and Central

¹⁰In September 1991, the Ministry of Construction promulgated the Measures for Drawing up Urban Planning in which regulatory detail planning was formally introduced in the procedure of urban planning. Regulatory detail plans are also nominated as detail plans (A), while construction detail plans are nominated as detail Plans (B) which are used as coordinated implementation plans of various buildings and project facilities. Regulatory detail plans are intended 1) to control the construction density in cities so as to protect the quality of urban environment and 2) to guarantee the effective construction of infrastructure networks and 3) to provide a framework of land survey and land demand estimation in the initial stages of governments drawing up policies of land use (Xu, 1995: 9-10 in *Journal of China City Planning Review*).

¹¹The Urban System Planning shall consist of the followings: 1) to put forward the urban-rural devel-

City Planning.

4.1.3 Evolution of Chinese Modern Urban Planning

Post-1949 China has experienced three phases of urban planning. Before going to details of the relevant laws, regulations and codes, a review of Chinese modern urban planning system evolution is necessary to understand the mentality of the country's development in its different historic phases and the applied planning policies. Fig. 4.4 displays that Chinese modern urban planning has experienced three major phases:

1. the National Plan¹² commenced in the 1950s - a continuation of the Social and Economic Plan under Mao's communism;
2. the City-Level Plan after 1978 - the beginning of Deng's Open-door Reform under the economic transition; and
3. the Comprehensive Plan in the 1990s - the implementation of urban planning law under post-socialist market economy.

Consequently, there are three types of urban planning since the founding of People's Republic of China in 1949, namely, Economic Planning, Comprehensive Land Use Planning and Urban Planning. Economic Planning is generally referred to the Economic and Social Development Planning. It is in a form of the Five-Year-Plan. The State Planning Commission (SPC) takes the major responsibilities. SPC has little direct involvement in land use planning. The State Land Administration Bureau (SLA) is in charge of overall land use planning. It is supposed to administrate both urban and rural land and compile the country's Comprehensive Land Use Plan. The Ministry of Construction (MoC) has a wide range of responsibilities in administrating the construction work¹³ and urban land use. All of them are at the national level. However, each system appears only responsible

opment strategy, and 2) to determine the objectives and requirements of protection and use of ecological environment, land and water resources, energy, natural and historical cultural heritage and 3) to put forward the principles and measures of space control. There are altogether 37 regulations regarding planning field, including 7 Basic Regulations, 18 Comprehensive Regulations and 12 Special Regulations. Concerning heritage protect, Code for Preservation of Urban Historical Cultural Districts and Code for Scenic area Planning are under comprehensive regulations.

¹²The first National Plan for China in this phase was the First Five-Year Plan from 1953-57.

¹³This includes municipal engineering work, urban and rural construction, the national building industry, public utilities, the real estate industry and public landscaping and parks. The Urban Planning Department of the MoC is the urban planning authority of the State Council. Its main function includes formulation and enforcement of rules, standards and codes for urban development, provision of planning guidelines, supervision of urban plans implementation, planning and administering urban construction and land use, and participating in feasibility studies of large construction projects that will affect the city development.

for the planning and implementation of their own mandated plans, and loose coordination of plans occurs among the three planning systems. Current situation is SLA has generally lost its status and MoC takes the leading role of administrating urban construction and land use. At the national level, there lacks checks and balances in supervising and coordinating land use and relevant development issues.

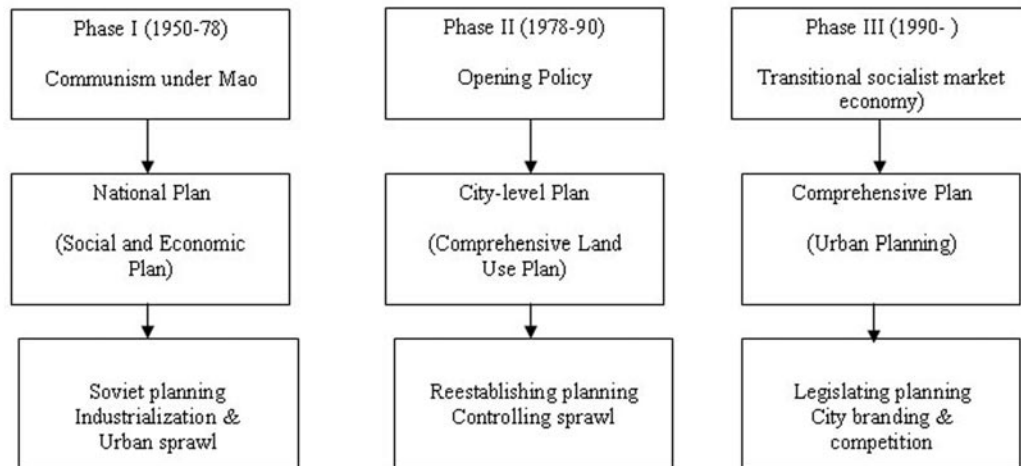


Figure 4.4: Evolution of China's urban planning

[Source: Own summary based on literature review, 2007]

The first phase is closely associated with the former Soviet Union. It is adversely influenced by Great Leap Forward¹⁴ and Cultural Revolution¹⁵. The core idea of this era's planning is urban planning is the continuation of the National Social and Economic Development Plan. Guided by the slogan 'Learning everything from the Soviet Union', the key objective is rapid industrialization with priority of heavy industries. It follows the model of Soviet construction methods with the accompanying administrative structure. Specifically, the important decision¹⁶ is the establishment of the hierarchical urban construction administrative authorities. Master Plans of cities have been prepared according to the guidelines of Urban Planning Preparation and Building Design Schedule of Peo-

¹⁴It was an Economic and Social Plan from 1958 - 60 which aimed to use China's vast population to rapidly transform mainland China from a primarily agrarian economy dominated by peasant farmers into a modern, industrialized communist society. It strived for ways to eliminate the three contradictions, i.e., town-country, manual labour-mental labour and industry-agriculture. The main ideas involved in the new institution, the People's Commune. Mao based this program on the Theory of Productive Forces. The Great Leap Forward is now widely seen, both within China and outside, as a major economic disaster.

¹⁵It was launched by the Communist Party of China's Chairman, Mao Zedong on May 16th, 1966, officially as a campaign to rid China of its 'liberal bourgeoisie' elements and to continue revolutionary class struggle. However, it was widely recognized as the struggle of communism power within Chinese Communist Party.

¹⁶In September 1952, The State Commission of Finance and Economy organized the first National Plenary of Urban Construction to make necessary preparation for the first Five-Year Economic Development Plan from 1953 - 57. It was proposed in the Plenary that the development and construction of new cities and towns, or renew of the old cities should followed the policies of National Long-term Plan.

ple's Republic of China (Draft). The Draft is made under the assistance of the Soviet experts. Secondly, 156 industrial development projects have been planned and prioritized to support the national economic construction. The construction of the cities should not be at odds with the 156 major projects. By 1957, more than 150 cities in China have completed their formulation of the City Master Plan. Over ten cities' Master Plans have been approved by the State Council. They are mainly designed to meet the urban expansion and a great amount of construction. However, the drastically ambitious Great Leap Forward Policy is proved a failure in enhancing productivity and stabilizing socialist construction. Additionally, China has suffered natural disasters and the withdrawal of Soviet aid during 1959 - 61¹⁷. Hereafter, it is commented the failure of achieving national economy development goal is due to adoption of urban planning. It was decided in November 1960 that urban planning should be stopped at least for three years. From 1966 - 76 during the Cultural Revolution, most of the urban planning organisation in China have been repealed. Urban planning is regarded as the major cause leading to the disparity of rural and urban areas and social stratification. It is viewed as a hindering factor of social development. As Sit (1995: 101) pointed out that 'many urban planners had been transferred to countryside and urban development was in the form of almost absolute autarchy of the central ministries and other department'. Although in 1963, it was proposed to commence urban planning, the unsettled development goals and planning mechanism deterred urban planning practice again. Urban planning has been suspended until the Open-door Reform in 1978 under Deng Xiaoping's guidance. In a nutshell, this phase displays China's understanding and implementation of modern urban planning in the policy-making process. This is the first time for post-1949 China to practice modern urban planning. The theories of urban planning stemmed from the former Soviet Unions have significantly influenced China's spatiality and Chinese peoples' choices of life. It has involved a strong central government intervention in a highly centralized manner. The main theory is urban planning is subject to the National Plan.

The second phase experienced the reestablishment of urban planning system in 1978. This reestablishment is after more than ten years since urban planning has been abandoned. It is decided by the State Council in the National Conference of City Development in March 1978 that all the cities and designated towns in China should prepare or revise the cities Master Plans and the Detailed Plans. It is decided that the major task of the mayor at the local government level is to plan, build and manage the city¹⁸. The Conference has raised three basic principles for this period urban development, namely to smartly control the sprawl of large-size cities, to rationally develop medium-size cities and to positively

¹⁷About 1,200 Soviet experts were called back by the former USSR without prior notice and many major industrial and construction projects came to a standstill.

¹⁸It was decided at the National Conference of City Planning in October 1980.

promote small-size cities. This policy has influenced China's urban development and construction since then. It is also decided¹⁹ that city Master Plans should strictly follow the examination and approval system. City Master Plans at this period mainly focus on guiding the urban development within the framework of the Open-door Policy. Because of the suspense of urban planning practice in the last phase and its adverse impacts on the education of urban planning in the universities, there was a great shortage of high caliber urban planners in China. The city Master Plans of this period have provided a basic framework for the city modernization and construction. The city planning endeavored as a tool to guide economic development rather than as a goal compared with the first phase.

The third phase till now is under the post-socialist market economy from a centralized planned model to a socialist market model. Broudehoux (2004: 8-9) described Chinese society in the 1990s was extremely 'unstable and volatile, confronted by the shock of the new; while remaining under the control of an absolutist socialist regime. 1990s China embodied many of the promises and contradictions that the reforms initiated in the late 1970s had engendered'. The new era emphasizes market operation system. It is as well a reorientation of the role of the national and local government. This era has been witnessing the most significant reforms concerning planning. The Land Use Reform in 1987 marked the end of free land use and the establishment of urban land markets in China. The Housing Reform in 1989 ruled out the provision of public housing and put the housing as commodities in the market. It triggered the progress of the Chinese real estate industry associated with outcomes of the Land Use Reform. Many state-owned enterprises (SOE) have been closed down to relieve the state from the financial burden. Meanwhile, market force alerts cities to intelligently position them in the global market and urban competition. Cities try to be both locally and globally competitive, striving for a distinctive status. Cities and regions and districts at different administrative levels are competing with each other. Development has been catering to competition instead of complementation. Ma L. and Wu F. (2005: 2) summarized that 'a significant number of books on the Chinese city now exist (Logan 2002; Tang and Parish 2000; Dutton 1998; Lin 1997; Davis et al. 1995, Chan 1994), but none is devoted to its changing spatiality and related socio-economic characteristic. There is little question that the spatial order of the Chinese city today is dramatically different from that of previous eras since the 1978 economic reforms'. It is now often observed that Chinese cities are planned in a standardized manner legitimized through the Master Planning. This is regardless of cities' genetic geographical and socio-economic profile, especially during the particular economic reform era. The general approaches and practices are to broaden streets, increase height and

¹⁹In the regulation of the Opinions in Strengthening the City Construction Management.

mass of skyscrapers and design huge city squares for extra size towns via demarcating land use zones and dismantling unwanted old quarters. Nevertheless, the postmodern approach attempts at exploring the openness and uncertainties of the urban future. China's current planning approach gradually accepts varieties and dynamics out of different socio-economic contexts and actors. One has to note that Chinese central state is in the process of handing mandates to the local governments in making planning decision. Shen (in Ma L. and Wu F. 2005: 41) pointed out 'the central-local relation has been rearticulated'. Such a rearticulation involves 'the four scales of concern', namely, 'the national scale, the urban scale, enterprises and individual'. Since the reform of China's urban planning in 2002, the reconceptualization of planning and its due functions has introduced new perspectives²⁰. The recent Chinese planning practice calls for a more human-affiliating and ecological approach. Examples are observed in the promotion of efficient land use, green energy adoption, relief of migration control and upgrade of urban villages. The experiment of public dialogue planning process has been tested, although it proves still a long process to be legitimated. However, at least the idea of emancipation, citizenship and custodianship starts to gain resonances among all levels of Chinese government.

Chinese cities are also experiencing a rapid socio-spatial transformation which is stimulated by liberation of planning and *vice versa*. The posed challenge is observed as how urban planning can adapt itself to China's transitional economy and rapidly growing cities open to the world. Planning efforts of this period have been giving priorities on establishing a statutory planning system. In 1984, The State Council promulgated Regulations of City Planning. In 1989, Law of Urban Planning was approved by the People's Congress and has been into force since April 1, 1990. Some relevant Acts were approved by the people's Congress as well. These include Land Administrative Act, Environmental Protection Act, Real Estate Management Act, Cultural Relics Protection Act and others. In September 1991, the National Urban Planning Conference was held in Beijing. The major task of the Conference was to implement the Law of Urban Planning. It was decided that all the designated cities and towns should formulate City Comprehensive Plan for the 21st Century cities. In March 1996, in the Fourth Session of the Eighth People's Congress, it was pointed out that China should transfer from the Central Planned Economy to the Socialist Market Economy. Additionally, sustainable development principles proposed in Rio Conference and the 21st Agenda have produced significant influences on China's urban planning.

²⁰The Reform addressed four aspects: Correct understanding of planning functions; Establishment of planning concepts consistent with scientific development outlook; Establishment of a planning system at distinct levels and with clear functions; Improvement of plan formulation procedures in a democratic and standardized way.

4.2 The genesis and concept of China's public space

As analysed in the last section, the origin and growth of Chinese cities is intimately associated with the country's administration structure and profound Confucius culture. Therefore, public space is by no means germane to the Chinese society if conceptualized in a conventional art of urban planning. In order to comprehend Chinese public space, two pertinent and persistent forces have to be quested: namely, Confucianism influences on feudal China under the imperial planning, and socialism influences on China under the modern urban planning.

Feudalism reached its zenith in the third century of Chinese Han Dynasty. Confucianism was at the same time officially promoted at a national level, both as philosophy and ruling doctrines. Regarding to planning, the stringently wall-bounded spaces of imperial power convey the idea of centrality and symbolism. The city proper is a stage for social elites to meet political experiences. Zhang L.L. and Zhang G.Z. (2004: 102) summarized the typologies of Chinese traditional public space according to their access level to the general public. As disclosed, only the last three typologies embrace the essence of public spaces. Additionally, they mirror the particular life styles and place identities exclusive to a Chinese context. They are:

1. the city centre - in the land use form of government institutions and official residents;
2. public sightseeing or landmarks - such as the Bell Tower, Drum Tower, Arrow Tower and city gates;
3. the classic academic institutions and buildings and guild buildings - but not completely open to the general public;
4. temples including Buddhist Temple, Fortune Temple and City God Temple - places with maximum tolerance for the public activities and functioning as spiritual anchor points for the public;
5. shops and shopping streets and markets inside the city wall and out of the imperial city - but with a strict limit of size and location. The Chinese expressions 'wide street' and 'narrow alleys' indicate the interface of the public and private space; and
6. the area around bridges, ponds, riversides, crop fields and shopfronts - the most popular public spaces in south of China because of the climatology and geographical location.

There are various arguments on the origin of Chinese cities (Steinhardt 1990, Sit 1995 and Schinz 1996, etc.). However, there observes a major common finding. Previous discussions

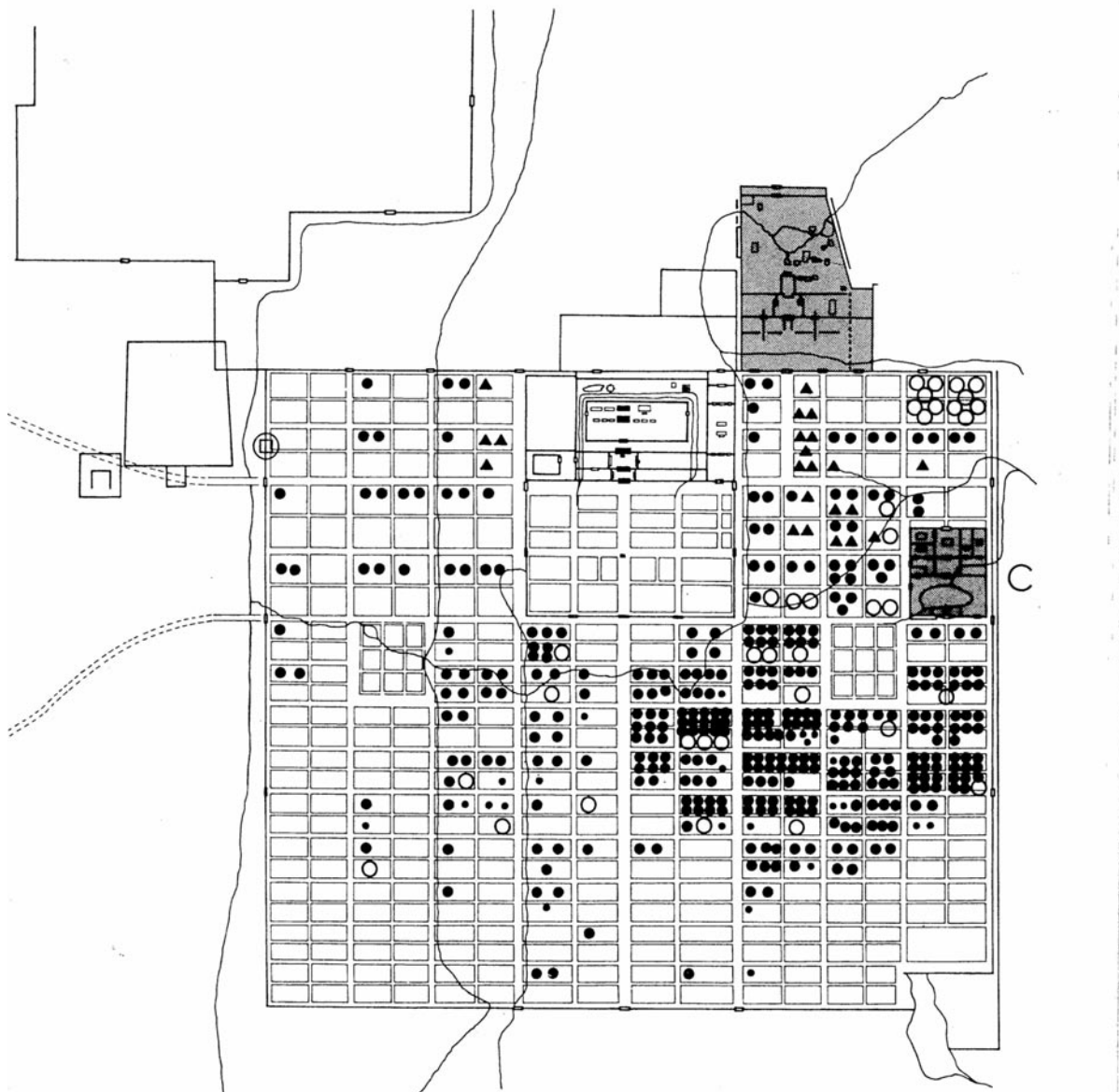
in Section 4.1.1 *Concept of the Classical Chinese Imperial Planning* also disclose that China's urbanism is identical with the government's network of administrative centers. It is supplemented by the ritual institutions. Sit's study (1995) contributes to a significant finding, that is, the Chinese city arose in history not because of the economic needs for trade and concentrated development for handicrafts, but as an auspicious site for man's communication with the universe and the centre for dissemination of such information. And it draws on itself forces of growth because of such a specialization. Taking ancient Xi'an as an example, the profound idea of how to reside the city is likewise designed. Fig. 4.2 illustrates that the western part of the city is the area for merchants, foreigners and commoners, while the southern part is left vacant or used for farmland, gardens, parks and pleasure premises. The Eastern Market has developed as the city center or downtown with financial agencies, business and entertainment districts. Eastern Market is the main area for information exchanges and news dissemination. Fig. 4.5 indicates that besides imperial families, the dominant inhabitants are official gentry and eunuchs.

Fig 4.6 displays the distribution of important urban institutions, especially ritual and ceremonial building complexes and religious institutions as assemble places for public activities. Schinz (1996: 408) further noted that in smaller towns and market centers that did not have any government office building, this location was occupied by temples.

Schinz (1996: 380) debated that 'in antiquity the ritual-political centre may have been the origin of China's urbanism, albeit it was soon supplemented by the economic elements of production and trade'. Agricultural markets could be the prototype of Chinese public spaces, given the fact that traditional China was highly agrarian. Agriculture and its productivities were the most important economic activity. The existence of ancient Chinese cities assumes superior responsibilities to ensure agricultural activities for the national prosperity. Therefore, Sit (1995: 22) stated that 'Chinese cities were designed not only to control and tax the country-side, but most importantly to serve it'. Trade and merchants flourished in these cities, but most commodities were of agricultural or rural origin. Steinhart also confirmed the importance of economic activities in shaping Chinese imperial cities. On the one hand, she (1990: 18) agreed that 'the primary purpose of the Chinese capital was administrative'; on the other hand she pointed out that 'often the imperial city was the location of some of the nation's most active commercial districts.'

For example, such an idea can be discerned from the West and East Market, planned for imperial ancient Xi'an (see Fig.4.2). They are located along the thoroughfare for convenience of communication. Street pattern is consequently designed to promote the easy access, exchange and distribution²¹. Economic activities coherently highlight the

²¹For example, as Heng described: located symmetrically along the main axis south of the Palaces, each market occupied an area of two wards, forming a square of about 600 paces on each side. A

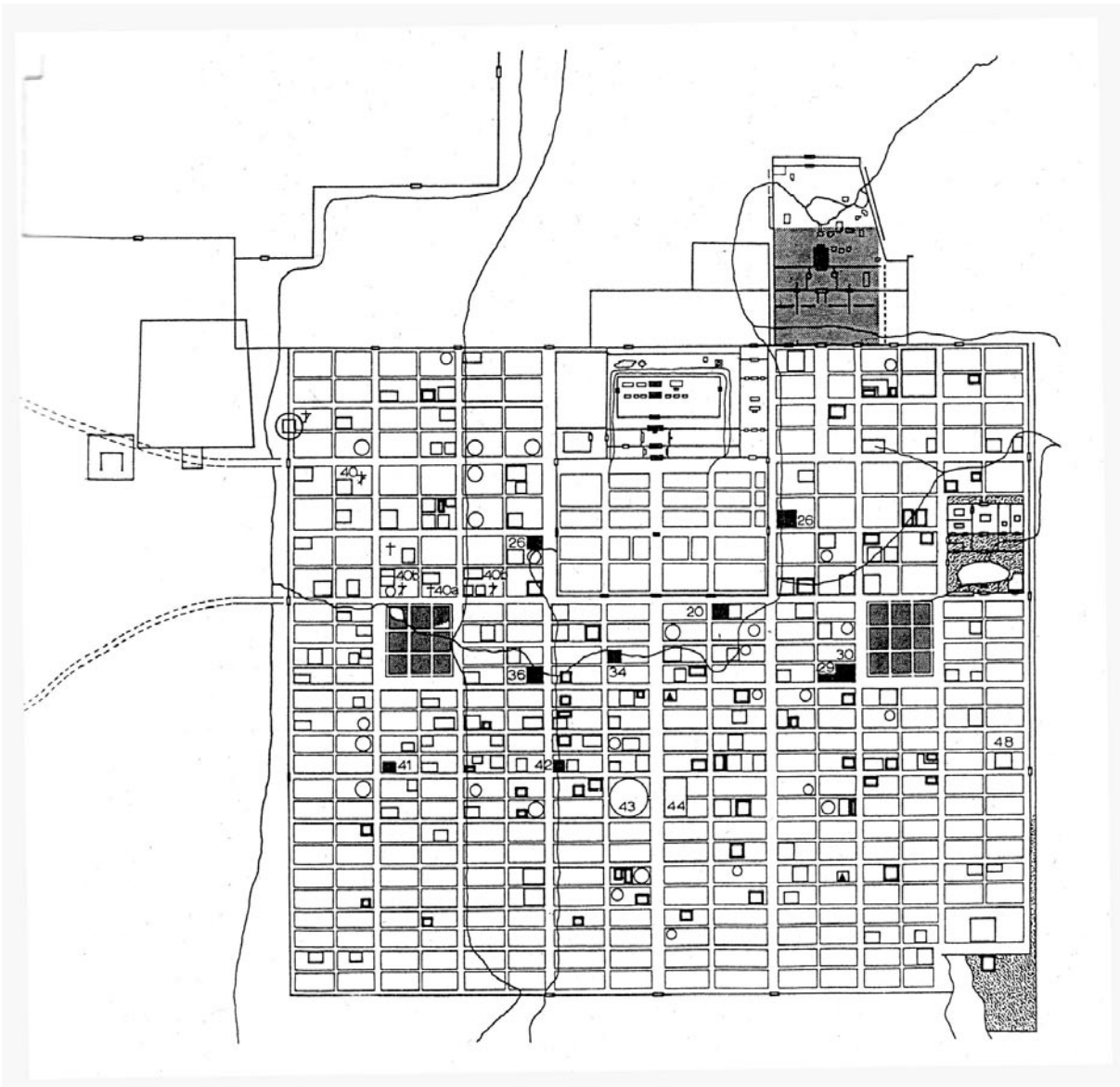


Circles indicate residences of princes and black dots residence of the official gentry and black triangles indicate residence of eunuchs. The two grey shadow parts were imperial palace: the northern one is Da Ming Palace and the eastern one is Xing Qing palace.

Figure 4.5: Distribution pattern of residences of ancient imperial city Xi'an [Source: Kaogu 1963 in Schinz (1996: 191)]

functional pattern of the city. Different articulation of street patterns and market sizes grow accordingly out of sectors of economic activities. This is the very reason it is surmised that the market related spaces could be the prototype of Chinese public space. Specifically,

120-metre-wide road encircled the outer perimeter of the market, allowing easy access to the gates by pedestrians and vehicles alike. Within these walls ran another narrower perimeter road of about 14 meter wide. Four roads each approximately 16-meter wide linked the gates, subdividing the market into nine approximately-square quarters. The quarters were further served within by a network of alleyways (Kaogu No. 11, 1963 in Heng 2006:40).



The distribution of religious institutions, Buddhist and Daoist and of ancestor halls in the eighth century in Tang Dynasty. Circles indicate Daoist temples, light squares Buddhist temples, dark squares ancestor halls and black squares public offices.

Figure 4.6: Distribution pattern of public spaces of ancient imperial city Xi'an [Kaogu 1963 in Schinz (1996: 192)]

broad streets at primary road level ease market traffic circulation; while market streets normally at the feeder road level and narrow lanes facilitate market streets' circulation. These spaces might be the fully accessed places accommodating public activities in the ancient time.

However, such market public spaces are controlled with strict opening hours and intervened by local magistrates. The consequently articulated space cannot amount to an independent level. Their existences are instable and impossible for a forum-oriented use.

Chinese socio-political system has not yielded the phase of Agora. The design layout and ideology as discussed before shows difficulties to accommodate a social mix. Influenced by the imperial ideology, Chinese city design has attached great importance to universe and natural forces²². Public space is strongly related with natural open wide spaces. Such spaces are more nature- and rural-associated and not necessarily in an urban context. Maurice Freedman (in Bender, 1975: 189) had a vivid comparison, speaking of the landscape meanings to Europeans and Chinese. The European's pleasure is generated more from aesthetic and objective aspect. To him, the landscape is out there and he enjoys the splendid vistas. To the Chinese, he enjoys being part of the landscape and the cosmos. Namely, he is in it and of it. For example, Chinese calligraphy and paintings endow great significance to the nature and emphasize the harmony between nature and human being. The presence of human figures in traditional Chinese paintings is small and vague or even only with a human silhouette. Daoism promotes the almighty of universe and natural elements.

As planned premises, China's public spaces are more politically associated, instead of socially functioned. Sit (1995: 85) argued that 'the main characters of socialist town planning (derived from Soviet town planning) are largely geometric and symmetric, with an emphasis on the city centre'. During Peter's time, the cityscape was usually dominated by a single central building. Equal provision of all items of consumption within the city was via land uses, that is, (Hamilton, 1979: 200 in Sit 1995: 86) irrespective of location, ethnicity, skills, or income, all people should have access to the same standards or norms in housing, transport, education, medical care, and cultural and recreational facilities. Being homogeneously standardized with socialism order and sovereign was viewed as the highest vision of cities'.

The idea of human and life based space did exist and sparkle in modern China, albeit it was soon overwhelmed by the Great Leap Forward Movement and Cultural Revolution. This includes such as Sun Fo's 'new technocratic order' in 1920s' China (in Friedmann 2005: 101) and Liang Sicheng's two proposals for post-1949 Beijing (in Sit 1995: 245). According to Sun, the first mayor of Guangzhou, the ultimate aim of urban planning is 'to transform the conditions in which people ordered their everyday lives by reaching into the realms of their daily practices, right down to the level of hygiene and patterns of entertainment'. In 1920s, Sun emphasized the significance of investigation and survey as essential tools for urban planning, which shall cover every aspect of society and the economy. Liang has detected certain problem of Chinese urban development at the cost

²²Known as Feng Shui or Chinese geomancy, it is a quasi-science on the siting of cities, houses and graves in traditional China developed out of the theories of yin-yang and the five elements and the overall Chinese concept of the overlapping and interaction of the worlds of man and nature. It is believed that there exists an environmental cycle due to the interaction of the yin and yang. It is argued that the influences of Feng Shui are beyond the siting itself.

of losing own identities. For example, in 1940, he (in Wu, 1993: 235-236) warned the urban development of Chinese historical cities:

The last 30-year development of Chinese modern architecture has observed a dramatic loss of historical characters. The west townscape and building style was very popular and could be frequently seen in the big port city (Shanghai). The affluent bourgeoisie, the business people, and medium-size entrepreneur love the new west architecture. They considered the traditional style as out-dated. Therefore, many beautiful traditional Chinese buildings were renovated with a so-called west style façade. In Shanghai, more than half of the traditional Chinese buildings experienced the 'new' style renovation. The unique and impressive traditional Chinese city design has been in this process destroyed. The essence of Chinese architecture remained only as a shadow redundantly.

The founding of People's Republic of China in 1949 has brought a benchmark for China's urbanity. Taking Beijing as an example, its centre has been reconfigured to usher a new urbanism under Mao's communism. So as to stage the power transfer, Beijing need physical modification to accommodate the socialism experiences in place of the feudalism. The last two dynasties Ming and Qing largely kept intact of Beijing's overall structure. The city retained its stringent order and the definitive distribution of spatial focal points. However, the transfer of power requested a public manner and updated spaces to stage the transformation. Liang has proposed two crucial strategies for post-1949 Beijing. The first one was to establish a new administrative centre in the outside of the historical centre. Thus the historical centre could be kept intact as an entirety. The second was to keep the city wall as a buffer zone between the new and old part of Beijing, thus to plan wall park with promenades and exhibition halls. However, both of the strategies were denied by the central government back then.

In 1958, the Tian'anmen Square was expanded to a size of 500 x 880 meter from an imperial palace plaza with that of 76 x 102 meter. As Tafuri (1980: ix in Pinder 2006: 37) commented that this was the state where architecture is reduced in function to that of 'sublime uselessness'. Vision of enlarging the Square was to create a new centre of power in time for the revolution's tenth anniversary. It aimed at staging the proletarian's rise, which articulated a new stance against the Forbidden City. As Wagner (2000: 459) argued that the entire city center was redesigned during the fifties to make room for such a huge plaza where the unity and revolutionary character of the entire country could be symbolically represented through monuments such as the Heroes' Memorial Stele and eventually Mao's Memorial Hall²³ along the old north-south axis. Embedded deeply

²³The Memorial Hall also owes its design to typical Chinese concepts of space and imperial signifi-

in history and charged with symbolic references, the Square established both physical and mental image of being the very centre of People's Republic of China. The national significance of the Square ranged from pilgrimages to Mao's Memorial Hall to the annual Party rituals and military parades on this site. This has been a long era of a worshipped model of Chinese public space. Figure 4.7 displays the changed ancient city pattern of Xi'an, which is redesigned by Soviet planners in 1950s. However, the socialist planning mentality still exists in postmodern Chinese cities, even though the Soviets had been absent since 1959. Egalitarian socialist society is still reflected in China's town planning for a macro-principle of equity.



The plan for Xi'an (1980-2000) emphasized the socialism national standard. The southern part of irregular forms was redesigned by the Soviet in 1950s.

Figure 4.7: Plan for Xi'an (1980-2000) [Source: Wu 1993: 283]

After the power transfer and physical reconstruction of the capital, the Great Leap Forward Movement was launched from 1958 - 60. As discussed in the last Section 4.1.3. The thrust idea of the Movement was to build up an egalitarian society. This was a period that the collective political consciousness was far more important than individual material incentive. How to realize utopia social benefits appeared as urgent. Post-1949 China's vision was to remodel all aspects of the Chinese life and people's mentality. People's Commune was established as the new institute to enable the Movement as an Economic and Social Plan. Collectivism was highlighted. People ate together in the canteen and worked together in factories. According to Thomas More (1516), inhabitants have 'to live in full view of all' to ensure hard work and respectability. As Hytholoday (in Pinder

cance. The building's interior decoration and ornamentation idolized Mao in his person and ideals. The black granite block bearing the sarcophagus originates from Mountain Tai and provides a link with past dynasties. Mountain Tai was regarded by one of the Five Holy Mountains in china. Traditionally, it was a place for emperors to search immortality.

2006: 21) stated: 'there is no chance to loaf or kill time, no pretext for evading work; there are no wine-bars, ale-houses, or brothels; no chances for corruption; no hiding places; no spots for secret meetings'. The National Plan or the Economic and Social Development Planning²⁴ took place of urban planning, which was a party-state-led industrialization process. The mentality was actually anti-urbanization and anti-consumerism²⁵. The plan was highly centralized and determined by individual politicians wills, tending to be a state-centric model of world order. By this era, the play with geometry and enlargement of public space echoed resolution of creating a proletarian egalitarian world. Such ideal city and ideal form produced a future model for the sake of security, because all the future potentialities and uncertainties were rebuffed and ruled out. In the meantime, it locked the city's diversity of social life within the pre-defined spatial context.

To certain extent, the research can conclude that China's urbanism under the communism regime appeared a utopian pursuit: 1) public place was germane to an ideal space or city. The importance of space, especially public space as a manifestation of power and control for utopian urbanism, was highly recognized by rulers. Geometry played significant role for regime manifestation. The regulation of space strongly displays an ideal state for socio-economic control; 2) the power of urban design as an instrument of the regime to determine social control and liberation conveyed by preconceived spaces. The second point has been profoundly discussed by Cuthbert (2006) and he proposed spatial political economy as a paradigm of urban design. Nevertheless, the different phases of Chinese planning philosophy have certain common grounds. That is:

1. the inheritance of Confucianism in city building and urban development. The new city has ubiquitously followed the idea of space for power and order and centrality out of Confucianism; and
2. the importance of designed space with predetermined purposes. More often, such spaces are politically associated with a heavy play of geometry, space size, demarcation, color and standard appearances. To certain extent, the existence of the space itself surpasses its socio-economic context.

²⁴It is in the form of the First Five-Year Plan, which was proposed by the former Soviet Union. The first National Plan for China in this phase was the First Five-Year Plan from 1953 - 57. Presently it is the 11th Five-Year Plan.

²⁵The key objective was rapid industrialization with priority of heavy industries, following the model of Soviet construction methods and the accompanying administrative structure.

Chapter 5

Empirical Study of Magang Island Settlement

5.1 General Characteristics of Magang's Settlement

5.1.1 Settlement typology

The entire island settlement represents a spatial concentration with its distinctive physiological and socio-economic existential features. It is enclosed all round by waterbody, which establishes a strong circulation link to the outside of the settlement (see Fig. 5.1). The settlement boasts a continuity of public open space system with its unique Cantonese characteristics. As reviewed in section 3.2.2, the settlement's natural condition is featured with an affluent water system and subtropical climate. This substantially determines certain properties of its public spaces. The subtropical weather is quite favour of outdoor activities, specifically forming an intimate connection with waterfront use and natural elements. This includes such as trees, bridges, lotus ponds and streets as unanimously agreed public open spaces. The informal use articulates a unique landscape endemic to Magang island settlement. It presents highly the characteristics of a living environment and image. Natural environmental elements of waterbody, hills, fish-farming ponds, banana fields and subtropical plantations are transformed and integrated into the daily life living environment as social spaces. Therefore, as a spatial entity, Magang settlement is extremely recognizable. The environment does not haphazardly develop to its existence.

The whole settlement turns out two distinct spatial patterns. Inter-connected by 35-meter secondary roads, the linear settlement pattern links cluster of houses forming a continuum along the hill contour. To the north of the settlement, there appears spatially a concentric pattern. It is observed that two distinct new dwelling clusters (see Fig. 5.2 in orange color) have lately developed. This is mainly decided by their strategic locations. One new



The settlement grows naturally along the hill contour and is surrounded by river.

Figure 5.1: Spatial structure of Magang settlement [Source: Beijing University 2006]

development is situated between the two distinctive dwellings and the other is adjacent to the primary road leading externally. The entire settlement is not a typical old one, but mixed with the old and new development.

The available bus system (see Fig. 5.3) shows that Magang Market Stop is between the linear and concentric pattern. Therefore, the buffer zone between these two patterns has the great potentials for business and communication with the outside of the world. And there is an existing public space, which can also accommodate great events.

5.1.2 Temple-affiliated Space

What must be taken into consideration is the settlement's spatial structure and landscape not only consists of natural elements. Its residents' lifestyles and cultural practices are given equal weight in this research. Such an approach renders a strong argument to support the initial physical analysis. Culturally, southern China has been maintaining a strong affiliation with Ancestral Temple, Fortune Temple and Soil and Grain Altar. It is also in accordance with the conclusion of Chinese traditional public space typology in Chapter 4. Above all, the residents are practicing these traditions as a routine in their daily life. This decides that the temples' existence is more than a physical stance. It functions as a spiritual anchor point and ties the community and builds up the kinship.

It is found that the temple as a phenotype articulates and interprets other spatial elements such as plazas, opera stages and open spaces for daily communication. Magang settlement plazas are not situated independently in the place. However, each plaza is connected with the temple, altar, pond or public activity spaces such as opera stage or basketball

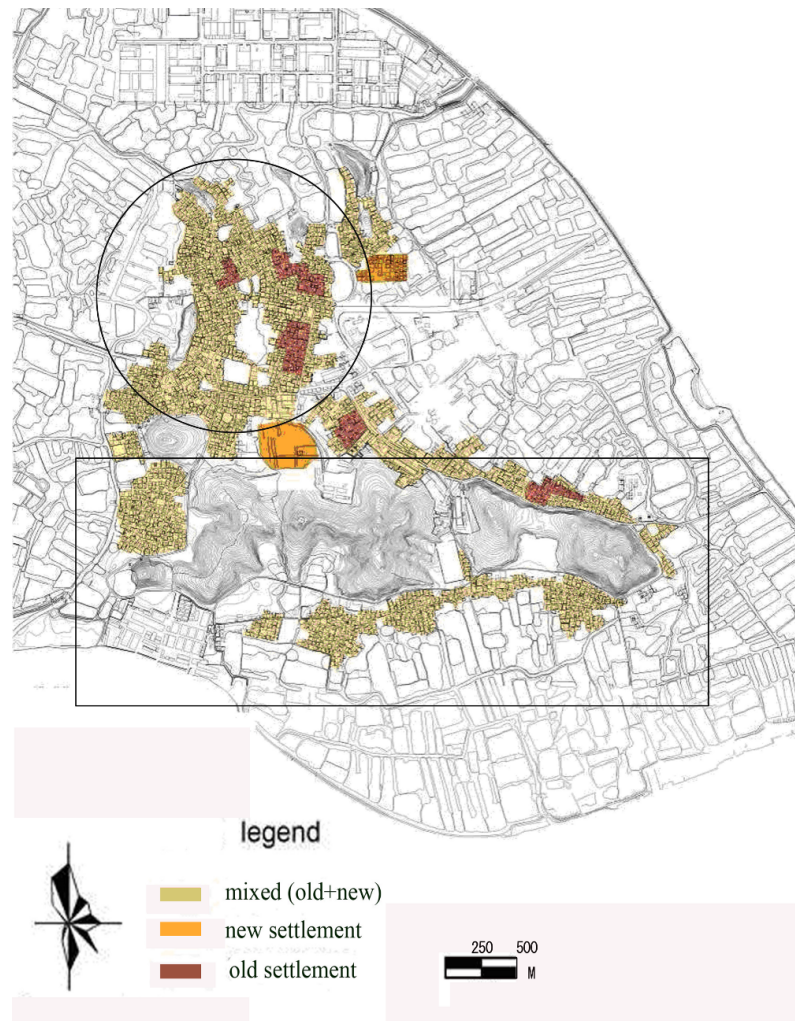


Figure 5.2: Magang settlement typology [Source: Self-modified based on Beijing University, 2006]



Figure 5.3: Partial bus system of Magang's linear settlement [Source: Beijing University, 2006]

playground. To Bender (1975: 194), these elements are 'the quality of spaces, which can connect us to the deeper realm of reality.' Therefore, the living space is visible and audible, with tangible symbols of the deepest experiences. On the other hand, in Lynch's

terminology (1960: 72), temple here is working as a ‘node’, ‘which is the strategic foci into which the observer can enter, typically either junctions of paths or concentrations of some characteristics’. However, it does not mean the temple *per se* is spatially dominated. Number and size of the temple does not account for the significance and function of its affiliated public space in the settlement. This study in the later phases proves that the public space’s location and its network with the rest of road circulation system highly determine the performance of temple-affiliated public space.

The existence of temples and alters represents certain values of Magang settlement lifestyles and its residents’ perceptions and conceptualizations of their living space. As the second phase fieldwork discloses, such an existence is very significant to trace certain social belongings pertaining to the residents’ social activities and cultural preferences. Therefore, temple from this sense is far from being a phenotype. It is also a genotype, which can accommodate residents’ profoundest experiences of their consciousness. The temple-space is perceived as a strong spiritual link among the residents. Many residents comment that without the temples they would not regularly hold the get-together feasts and communal activities. To them, the temple space represents certain quality and art of life, which can establish the inner relationship of their communal lives. The temples and other relevant facilities are maintained by the public voluntarily and most of the time in the form of donation. The amount of donation is arbitrary and based on the residents’ financial viability. Large amount of donation is normally from those overseas Cantonese who trace their originality back to this settlement. It is very intentional to keep the existence of temples to strengthen and seek the sense of belongings. Traditional Chinese and Cantonese festivals are the most common celebrations and activities, accounting for one crucial part of the settlement communal life. They are regularly held and sponsored by the public itself. As fieldwork discloses, the event is evenly distributed in each temple-affiliated public space with a controllable size of participants. It appears generally well-organized with a sound logistics and atmosphere. The distribution of event venue releases the possible heavy use of one public space. The participants are not only the inhabitants of the settlement, but also those who are travel from the adjacent cities. They claim their origin from the settlement.

5.2 Circulation System and Road Network of the Settlement

Lynch (1962: 37) argued that: ‘space is of no value, however vast or rich in resource. A city or a large site can in fact be looked upon primarily as a communications net made up of roads, paths, rails, pipes and wires. This system of flow is intimately related to the pattern of localized activities or land use. The economic and cultural level of life is

roughly in proportion to the capacity of the circulation system'. Nevertheless, this study is more interested in the associated meanings of the place and people. Therefore, it avoids the sheer focus on the key elements as Lynch (1960) suggested, namely, nodes, landmarks, edges, districts and paths.

The following first phase analysis uses Space Syntax¹ both as a tool and theory to produce secondary data. Currently most of researchers analyze the axial map², which is based on an urban setting evolution with different plans generated from different time phases. In this study, the author only uses the latest base plan of the settlement. That is to say, the analysis focuses on a contemporary situation. As a package of methods, coupled with spatial syntactic analysis is the technique of observing how people use space and analyze the interrelationship between patterns of spaces and their uses. The power of observation as data collection method is discussed in Section 3.3.1. Outcomes of axial map analysis and on-site observation conducted in this research prove they can significantly complement each other. The combination turns out a convincing method to verify or falsify the analysis results. The initial Space Syntax analysis starts with the street network identification of the settlement. This tends to inquiry the relationship of the space organisation and people's movement pattern. It highly influences land use choices, land uses intensity, centre and sub-centre selection and public space location and purpose of use.

Fig. 5.4 displays the settlement's circulation system as a network with different movement hierarchies:

1. One 60-meter-wide main road connects the settlement with regional prime cities, to the north is Guangzhou and to the south is Zhongshan. Both cities are economically developed in China and have a convenient access to Hongkong and abroad;
2. One 35-meter-wide primary road is along the hill contour. It was renovated at the end of 1970s. This road connects the cluster of houses, developing as a circulation. It forms also a strong characteristic alignment along the river banks. Parallel with the riverbody, the settlement appears as an enclosed spatial pattern with distinctive

¹Space Syntax has been developed with the purpose of investigating the socio-spatial relationship and solving the methodological limitation on analyzing space. Space syntax is a set of techniques for describing and analyzing spatial configurations of all kinds, in particular those found in buildings, town and cities. It involves four stages of thinking about space: 1) identifying spatial elements, 2) analyzing the configurational relations amongst the spatial elements, however we define them, 3) the genotype phase by identifying common patterns such as those often found in the vernacular/ urban pattern of different cultures and 4) the theory phase by analyzing spatial configuration and its relation to culture and social behaviour. On the methods of space syntax, please refer to Hillier & Hanson (1984), Hillier et al (1987) and (1993), Hillier (1996) and (1999).

²According to space syntax theory, the axial map is the workhorse of urban analysis. It represents the street network as longest and fewest straight lines so that the whole network and settlement pattern is covered. The importance of the axial map has been seen in influencing patterns of activity.

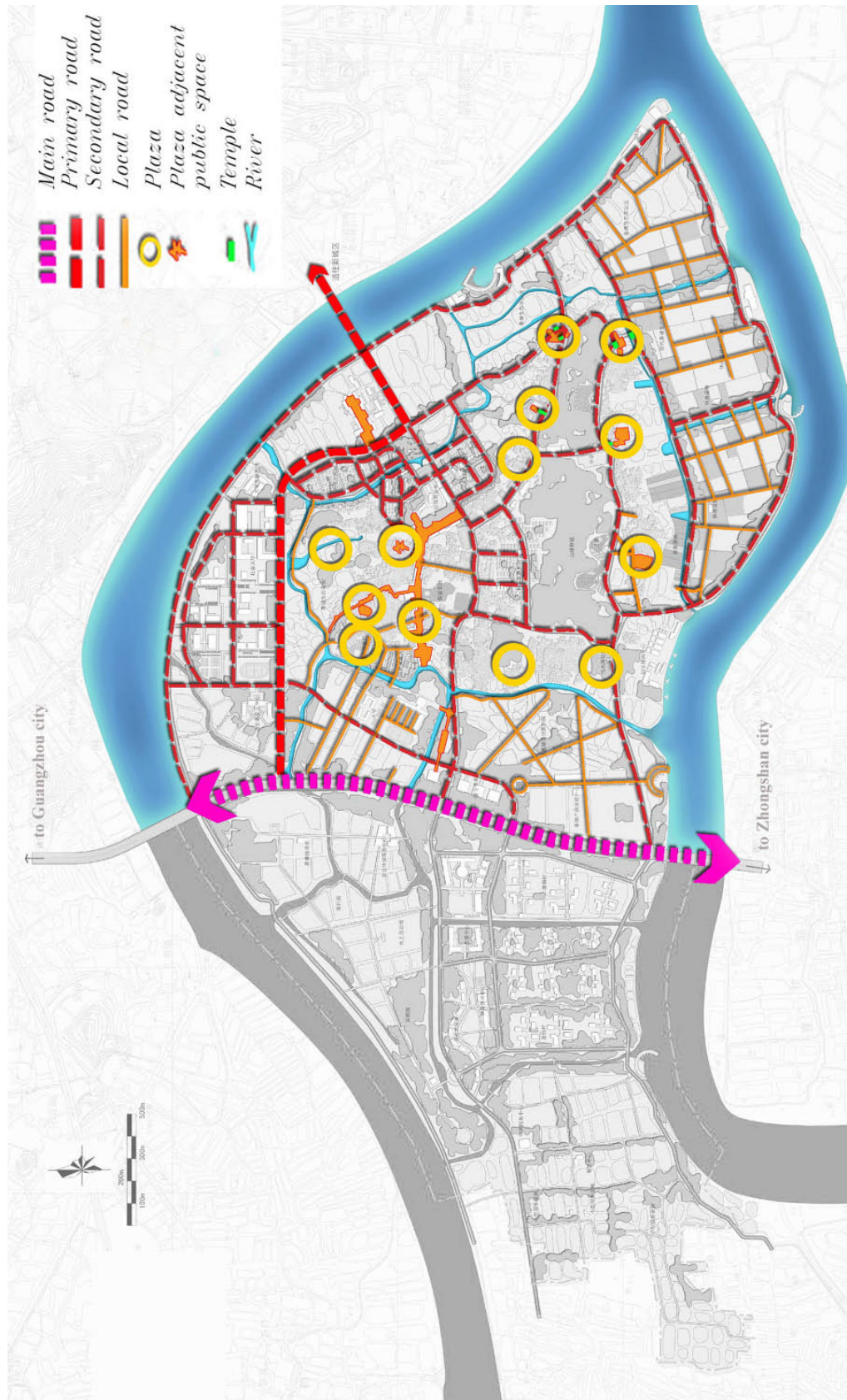


Figure 5.4: Public open space system of Magang settlement [Source: Own graphic based on the site survey and base plan of Magang settlement, 2008]

waterfront landscape. Primary roads turn out dominant road pattern of Magang settlement; and

3. 10- to 15-meter-wide local roads, mainly in the form of streets and alleys and community paths for residents' daily use. This includes pedestrian area and cycling path.

The road density is calculated with two categories:

1. excluding community paths, it is 5.4 km per km²; and
2. including community path, it is 7.3 km per km².

The circulation analysis initially shows that streets appear as certain crucial living space, indispensably integrated with the daily life of the settlement. According to China's National Code of Urban Residential Area Planning and Design (2002), the standard average road density of a Chinese medium sized city is six to eight kilometer per square kilometer. If gauged by this standard, the road density of Magang settlement with population of c.a. 15,000³ is close to a planned medium-size⁴ city. Length of pedestrian areas takes up almost 30 percent of that of the sum. The comparison is listed in Table 5.1.

5.3 Selection of Surveyed Sites - Four Dwelling Clusters

5.3.1 Typology of Public Open Space of Magang Settlement

In general, fieldwork shows that the study area displays a complete network of communication space in a comfortable human scale. This generates the endemic landscape of Magang settlement with certain particular spatial elements, namely, temples, alters, piers, lotus ponds, dike-ponds, hill, waterfront areas, streets and alleys and small plazas. These environmental elements are the language understood by its peoples. Most of these elements are in practical uses and accessible to the community. There are also under regular maintenances. The entire settlement has a very distinctive landscape. Before the selection of the detailed study dwelling clusters, this study categorizes the settlement' public space into two categories: the waterfront and non-waterfront. It is further illustrated and summarized in the following Table 5.2.

³The local population is about 7,100, among which ca. 1,000 is engaged in agricultural production. The immigrants from Guangdong province and other provinces mainly work in the local electronic and manufactory factories.

⁴The comparison here is in terms of the population size. A planned medium-size city shall have urban population between 200,000 and 500,000.

MaGang Settlement [km/km ²]		Shunde District Old City Kern [km/km ²]		National Urban Residential Area Planning and Design Code [km/km ²]
Excluding community paths.	Including community paths.	Excluding the pedestrian areas and cycling paths.	Including the pedestrian areas and cycling paths.	Excluding the pedestrian areas and cycling paths.
5.4	7.3	13	16	6 - 8

Justification

- *As a settlement, the road density of Magang settlement is close to a medium-level city;*
- *Pedestrian area of Magang settlement is up to 30% of the total road length;*
- *Street constitutes a significant living space in the daily life of Magang settlement.*

Table 5.1: Comparison of the road density of Magang settlement and the national standard [Source: Own calculation based on Ministry of Construction, P.R. China (2002) and the settlement base plan, 2008]

5.3.2 Spatial Articulation of Four Survey Sites

The selection of the survey sites (see Fig. 5.5) is converged on the south-east settlement along the hill contour. It is surmised that this area has the first built-up dwellings in the settlement. This is mainly justified by its easy access to the water and the available external transport link. Clusters of this part of settlement appear a linear form, defined and bounded by the hill contour and riverbody. At the settlement level, temples and halls are evident landmarks. They are evenly distributed with an interval of ca. 500 meter. The temple surrounding space turns out a public space being used by the residents. These spaces are quite accessible from the housing clusters.

The selected four sites are:

1. Lu Wu Ling Temple space;
2. Xian Dragon Hall space;
3. Wen Wu Emperor Temple and Shi Zhou Temple space; and
4. Family Feng⁵ Ancestral Temple space.

⁵Feng as family name accounts for the largest local population, namely, ca. 50%. Most of them reside in the middle and east of the settlement.



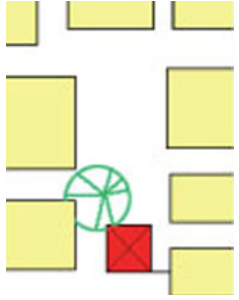
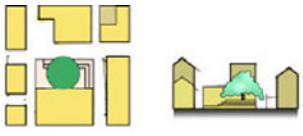
Typology		Key Feature	Spatial Presentation
Waterfront	Ancestral Temple adjacent space	In line with Chinese Fengshui idea; Between the lotus pond and Ancestral Temple; Existing as an independent communication space; A larger activity space normally integrated with basketball playing ground.	
	Temple adjacent space	Including space articulated with one or two temples; A creation of major activity space and sub-space.	
Non-waterfront	Soil and Grain Temple adjacent space	Relatively smaller space to meet the community's daily praying activity.	
	Streets and alleys	Streets under and including the hierarchy of secondary road serving as public activity space; Multifunctional streets and alleys.	
	Neighbour adjacent space	The typical space centred with landscape trees and enclosed by edges of houses; Other important spatial elements including the bridge, stone benches, etc.	

Table 5.2: Typology of public open space of Magang settlement [Source: Own graphic based on the settlement survey, 2008]

As Fig. 5.5 displays, each survey site is actually a temple-affiliated space. The selection of the survey sites and its surrounding area is ca. 6,000 square meter⁶ with an average

⁶The exact area size of the four sites are: Xian Dragon Hall Temple-affiliated space of 6,255 m², Lu Wu Ling Temple-affiliated space 5,502 m², Wen Wu Emperor Temple- and Shi Zhou Temple-affiliated space of 6,241 m² and Family Feng Ancestral Hall-affiliated space of 5,703 m².

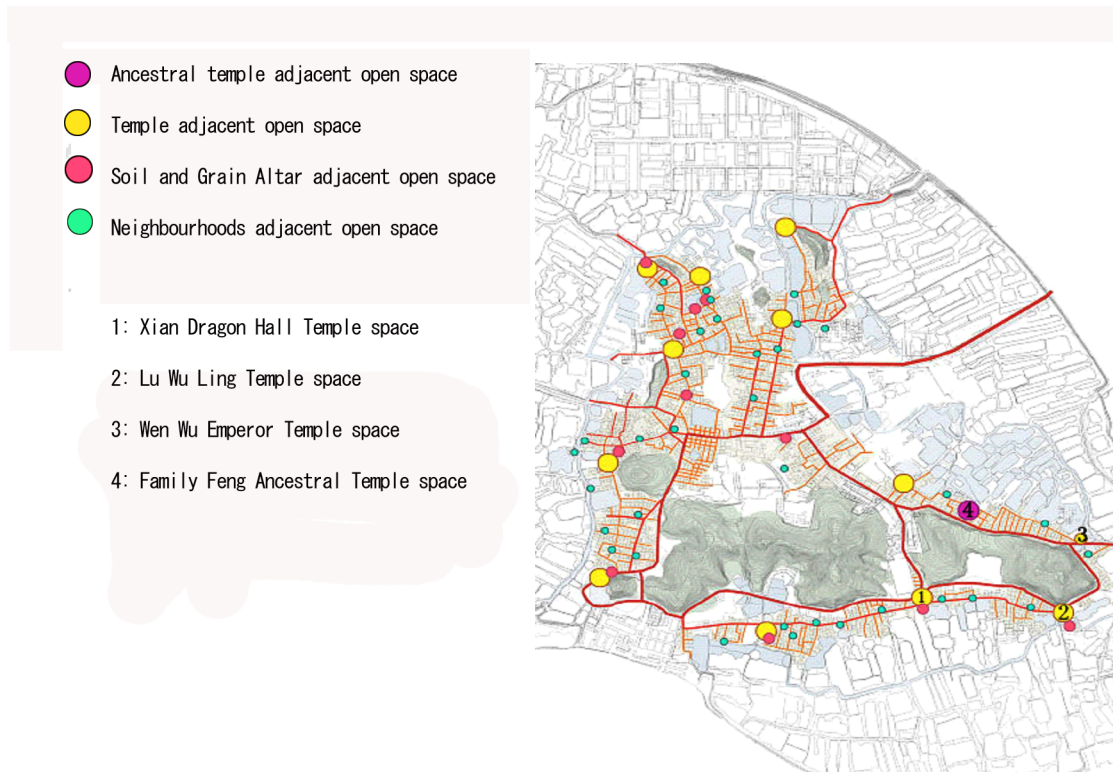


Figure 5.5: Spatial articulation of four survey sites with the road network [Source: Beijing University, 2006]

number of ca. 150 residents. If taken the temple as a geographic centre, the catchment service area of each cluster is about 150 meter. Fig. 5.6 checks further the positioning of the surveyed sites and their spatial articulation relationship and scale with physiological surroundings, namely the water system (river and pond) and the hill. All of the four survey sites fall into the category of waterfront as summarized in the Table 5.2. This articulates a typical communication space endemic to Magang settlement.

As discussed in Section 3.3.2, each step of the fieldwork tries to be tangible with a multi-evidence approach. The purpose is to increase the data's reliability. The survey of the four sites starts from a Resource Mapping of Physiological Setting, mainly inquiring the attributes of the nature conditions around the temple-space. People's activities in the temple-affiliated public space are regularly observed at certain time spans. The results are mapped in the scheme of Public Space Movement Pattern and tabulated in the scheme of Behaviour Mapping. Each site is concluded from the four aspects as designed in section 3.3, namely, Sociability, Uses and Activities, Access and Linkage and Comfort and Image. A ratio of public space land use is respectively calculated within the scope of temple-affiliated space. The purpose is to detect in what kind of spatial form public activities take place often and to what extent it reflects land use percentage distribution. Four sites' survey describes Magang's public space both in a qualitative and quantitative way. However, such description or generalization does not intend to find an ideal space model,

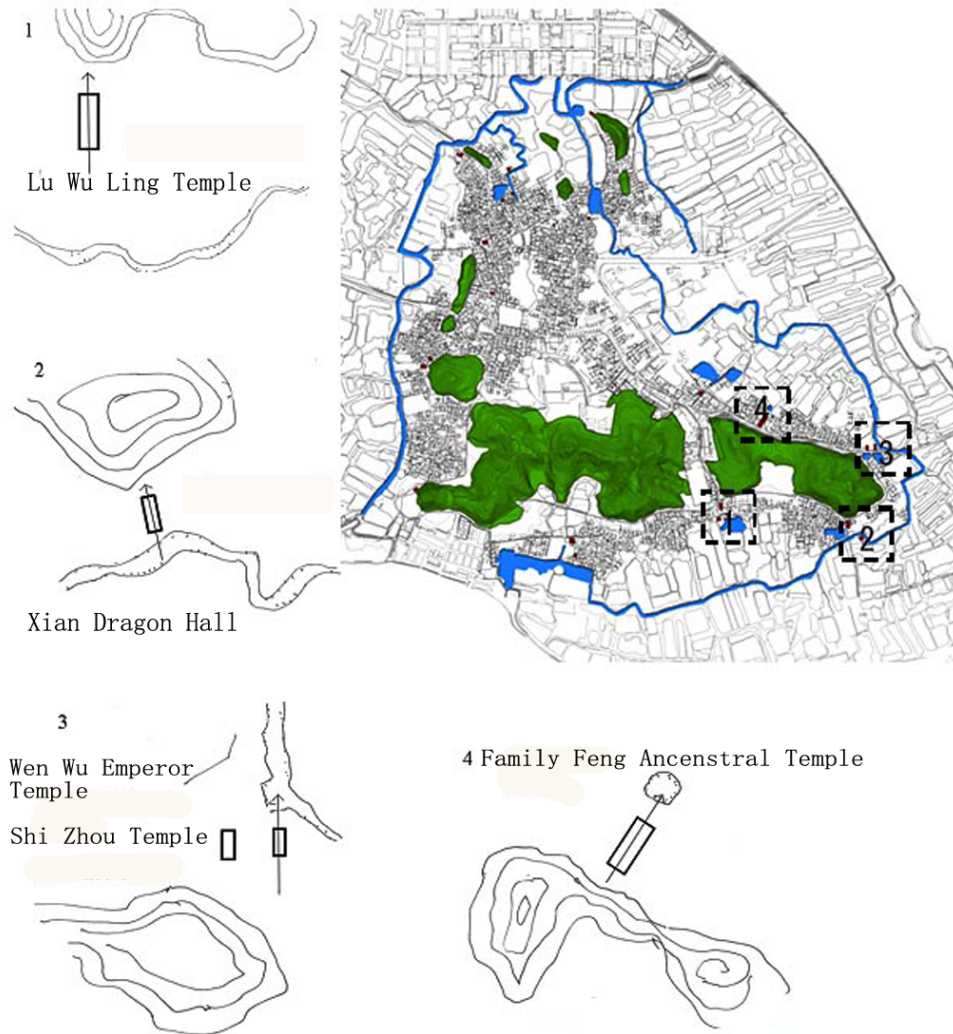


Figure 5.6: Spatial articulation of four survey sites with physiological surroundings [Source: Self-modified based on Beijing University, 2006]

but try to reflect and argue how social practices and human's living space interacts with each other.

5.4 Syntactic Analysis of the Settlement - Spatial Integration

The following syntactic analysis aims at testing and analyzing the accessibility and land use intensity of the four dwellings in terms of 1) their relationship with the entire settlement and 2) their internal spatial organisation as an individual cluster. Therefore, the

plan analysis falls into two categories: the global and local level⁷. The employed measurements in this study include ‘integration’⁸ and ‘mean depth’⁹. The purpose is to initially render quantitative properties of Magang settlement as a network of a space series. Related to this research, it is a means of investigating the mutual effects between Magang’s spatial articulation and people’s movement pattern, public space use and its intensity, users’ and activity types and land use distribution.

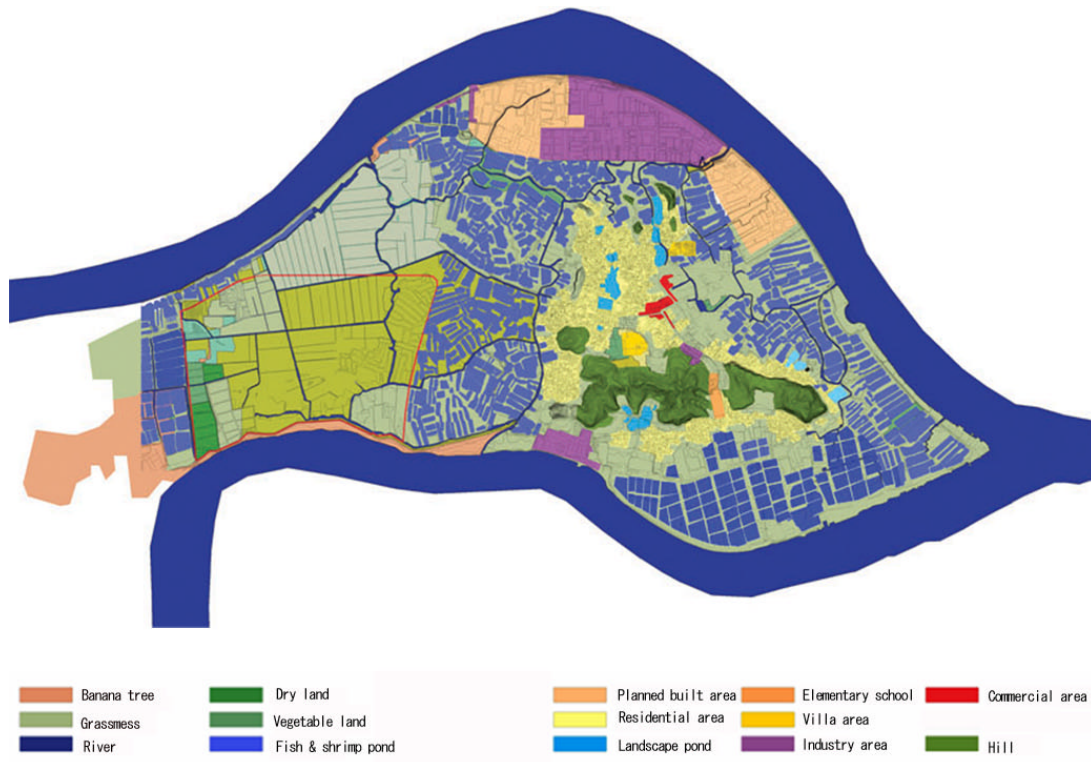


Figure 5.7: Major land use distribution of Magang settlement [Source: Beijing University, 2006]

As Fig. 5.7 the land use pattern displays, majority of land, ca. three-fourth of Magang settlement, is agricultural based, dominated by dike-pond fishery. The wetland and forest coverage takes up more than 70 percent of the settlement whole area. 8.3 out of 12 square kilometer area of the entire settlement is the planned area. The residential area mainly spreads along the hill and further up to the north, surrounded by dike ponds. At a macro

⁷This is termed as integration radius n/R_n (infinity), or global integration and integration rad. $3/R_3$ or local integration. Global shows the level of the selected four sites’ in terms of the entire settlement of Magang, while local level displays the localized importance of each selected site for access within the entire settlement as a network. The local measurement restricts the routes from any line to only those lines that are up to three lines away from it.

⁸Integration measures the degree to which each line in the map is present on the simplest (fewest changes of direction) routes to and from all other lines.

⁹Depth measures the number of changes of direction any line in a system is away from a selected line or lines.

level as Fig. 5.7 shows, the residential area lies between the waterbody and the hill. Land for industrial use is mostly located to the north of the settlement with an area of ca. 0.3 square kilometer. It has an easy access and good transport link to the capital city of Guangzhou. The south-north part of land with an area of ca. 1.2 square kilometer is reserved for the future university land use.

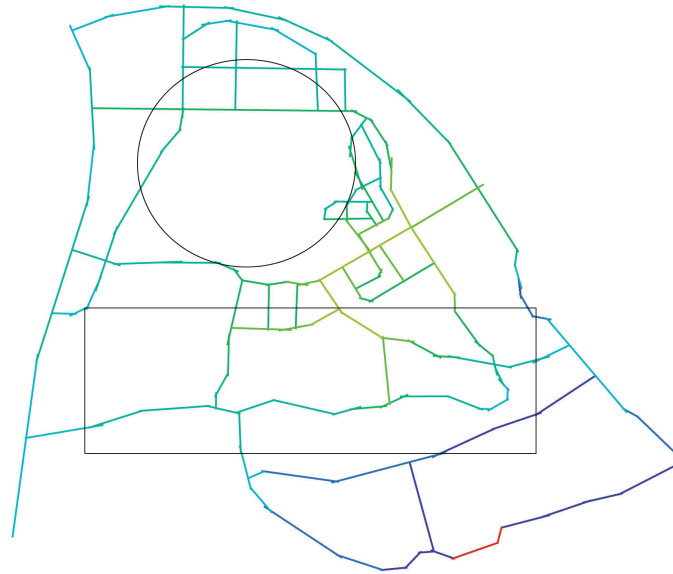


Figure 5.8: Magang settlement global Integration, radius= n [Source: Own graphic based on the axial map analysis of Magang settlement, 2009]

Globally as Fig. 5.8 shows, the road and water system surrounding the entire settlement generally turns out an even integration with the settlement. At the global level, the axial map analysis results are:

1. The concentric and linear settlement's patterns have a similar integration in terms of external communication capacity;
2. The great area of waterfront surrounding the east of entire settlement has a relatively low integration with the other part of Shunde district;
3. The middle part of the settlement turns out the most integrated part¹⁰ (in yellow and light green color). The dominated land use pattern is commercial and transport;
4. The northern part mainly in the form of industrial land use is of the secondly integrated¹¹ (in light blue color); and

¹⁰With an average value of ca.0.72.

¹¹With an average value of ca. 0.55.

5. The southern part with fishery land use is the least integrated¹² (in darker blue).
6. The southern part of the land with dike-pond fishery has been adversely influenced in the last decades due to the rapid urbanization. As the traditional agriculture and economic activity of south China, the dike-pond area has been gradually dwindling and encroached by the industrial development. Road network centred around the commercial area displays the highest value¹³ (in yellow color).



Figure 5.9: Magang settlement local integration, radius=3 [Source: Own graphic based on the axial map analysis of Magang settlement,2009]

At the local level, the analysis (see Fig. 5.9) shows that the middle and northern part of the settlement have a higher integration level. This is especially true that two major primary roads (in red color) connecting to commercial and industrial areas have the highest integrated value. The value of the road connecting to the commercial area and leading to the outside is higher¹⁴ than that of the northern horizontal road connecting to the industrial area. Such spatial distribution and road network influences consequently the integration of the different residential clusters. The analysis results of selected four dwellings in the later analysis turn out in a coordinated manner with that of settlement local integration. It shows that the entire linear secondary road, systematically connecting each dwelling cluster, has a very low integration level¹⁵ (in light blue color). At the local

¹²With an average value of ca. 0.30.

¹³With an average value of ca. 0.75.

¹⁴The primary road leading to outside has the value of ca. 2.27, and the northern horizontal one is of ca. 2.09.

¹⁵The integration value is of 0.99.

level, the waterfront surrounding the entire settlement is not well integrated and being underused. The author has participated in the Dragon Boat Festival. During the Festival, the waterfront area has been intensively used for three days. However, the axial map analysis further justifies that this is a special occasion as an exception.

5.5 Syntactic Analysis of the Selected Four Dwelling Clusters

5.5.1 Integration of the dwelling cluster

Globally, or to the entire settlement level, Site 4 is the most integrated. Fig. 5.10 reveals that only Site 4 has the red, orange and yellow lines. This means the value of integration of Site 4 is the greatest. The identified main reason is that Site 4 is located next to the primary road leading outside of the settlement. Site 2 and Site 1 have a similar level of global integration. And Site 3 turns out the least integrated, despite having two temples (Wen Wu Emperor Temple and Shi Zhou Temple).

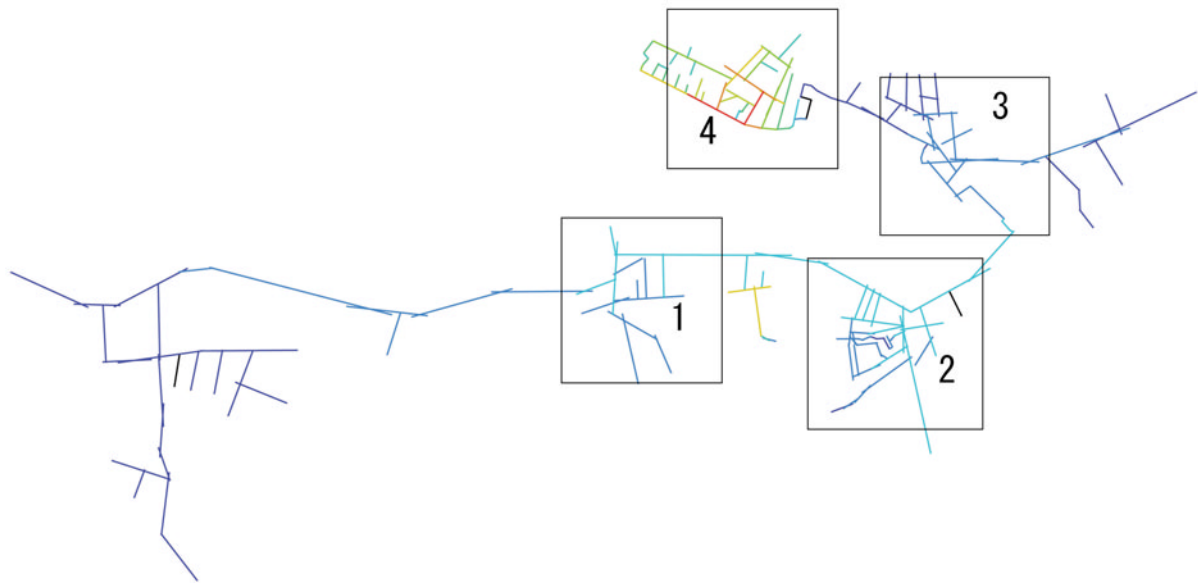


Figure 5.10: Global integration, radius= n [Source: Own graphic based on the axial map analysis of Magang settlement, 2009]

In terms of the local integration level, each dwelling appears rather even (see Fig. 5.11). Specifically, Site 2, 3 and 4 have a similar spatial distribution pattern of a ring form. Site 1 spatially has no rings, which means it has no enclosed spaces. At this local level, Site 2 appears the mostly integrated dwelling cluster. The higher number of road intersection

contributes to the movement ease within the Site. If checked closer, within Site 2 as Fig. 5.6 shows, there exist the Hall to the north and other small-size temples to the south. All of them are well connected by the road and bounded by the water system. Site 4 is the secondly well integrated dwelling at the local level. It has to be noted that at both global and local level, Site 3 is the least integrated.

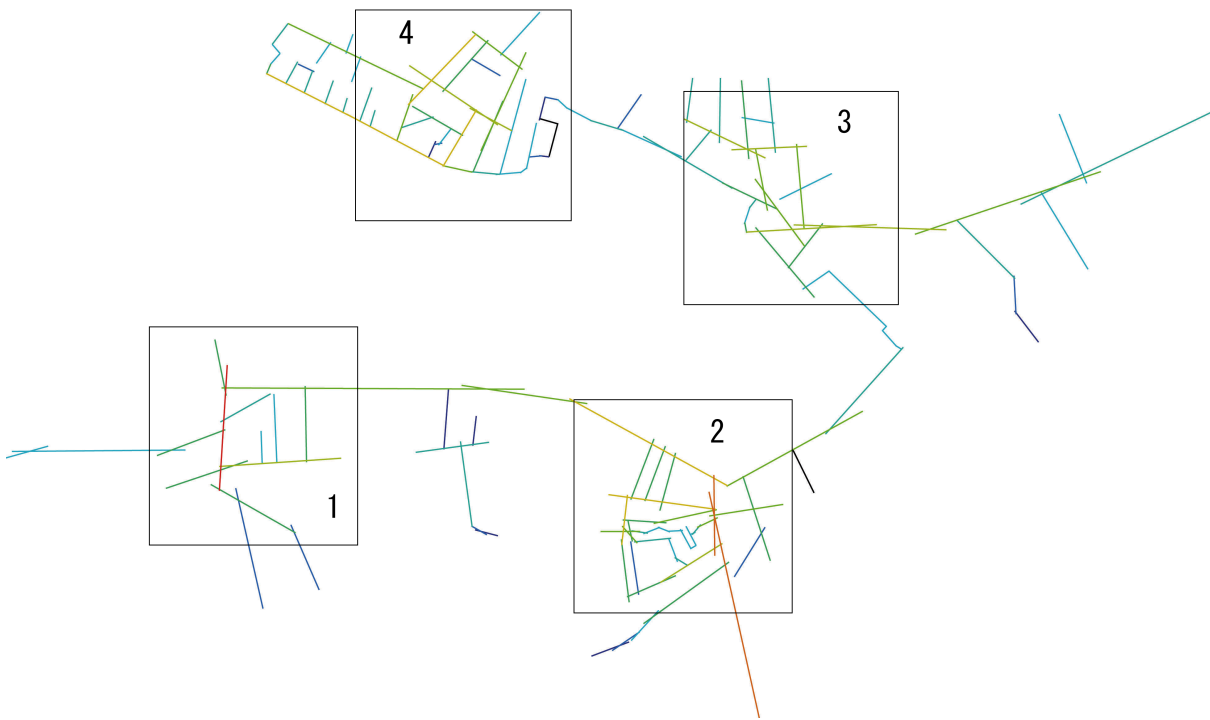


Figure 5.11: Local integration, radius=3 [Source: Own graphic based on the axial map analysis of Magang settlement, 2009]

5.5.2 Mean Depth of the Dwelling Cluster

Mean depth analysis discloses that at the global level (see Fig. 5.12), Site 4 advances other three sites as the most accessible one. Site 3 is the least accessible. Site 1 has slightly higher accessibility than Site 2. However, at the local level (see Fig. 5.13), all four sites show an average accessibility. This is mainly because each dwelling has evenly distributed and accessible public spaces within the dwelling. This is especially true to Site 4, which has the largest percentage of public utilities. For the special case such as festivals, the use of the each dwelling's public space and facilities is coordinated and agreed among the residents. Locally, all the four sites have a similar level of accessibility. This also coordinates their even distribution of each 500-meter interval.

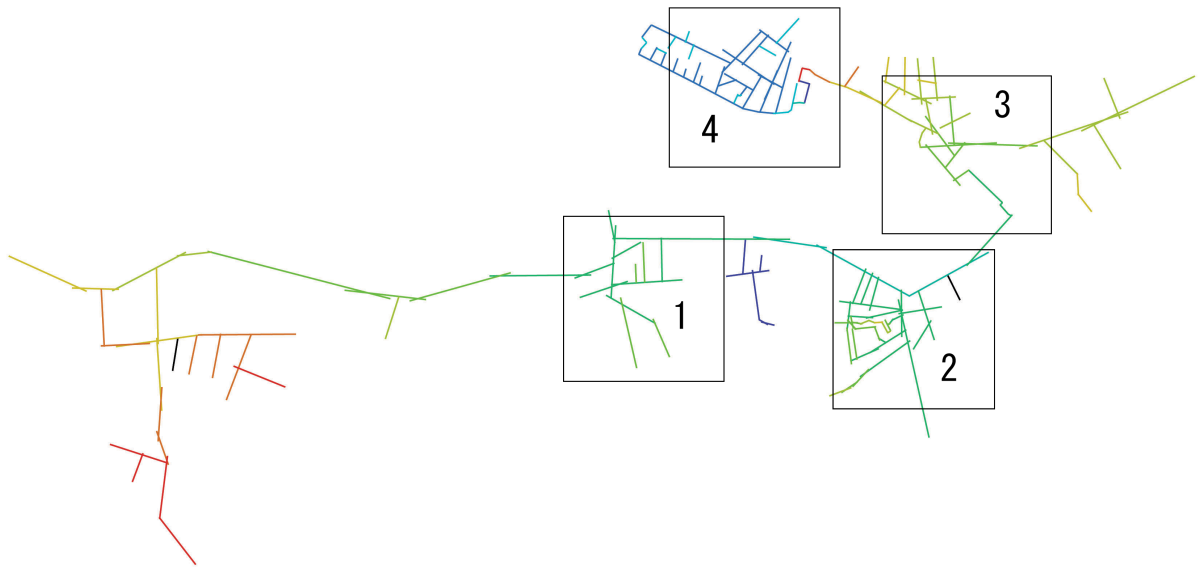


Figure 5.12: Global mean depth indicator, radius= n [Source: Own graphic based on axial map analysis of Magang settlement, 2009]

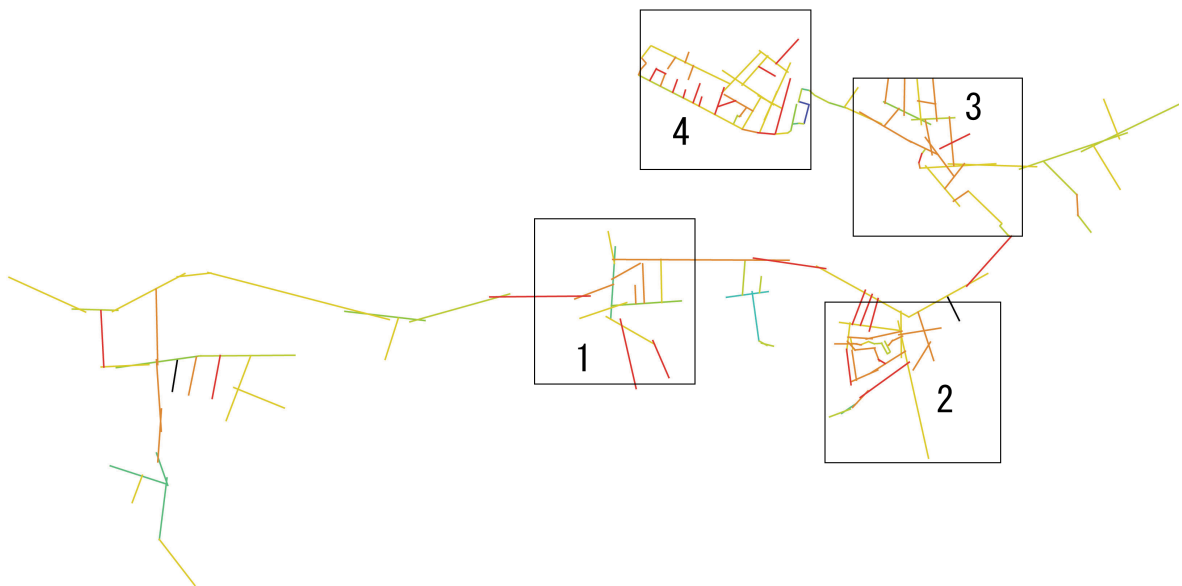


Figure 5.13: Local mean depth indicator, radius=3 [Source: Own graphic based on axial map analysis of Magang settlement, 2009]

5.5.3 Initial Analysis Results

Site 4 Family Feng Temple-affiliated public space turns out the mostly integrated. The result proves the integration level is regardless of the public space size, type and numbers of attached temples or halls. For example, Site 3 is the least integrated, in spite of having

two temples. Land use parameter analysis in Section 5.8 shows that among the four studied dwellings, Site 3 is the only public space without provision of green field. This study identifies and proves that the major determinant of the integration level is the connection of the road network and accessibility to other relevant public facilities and existing activities. As the previous spatial analysis shows, location of Site 4 is quite prominent. It is situated directly next to the commercial area, namely the only existing market area in the settlement. The primary road near Site 4 leads the settlement externally. It is also the major entrance to reach the settlement along the linear road. According to the syntactic analysis, roads surrounding and within Site 4 has the highest node number compared with the other three sites. This means each intersection of roads increases the accessibility and integration level of the dwelling. If compared with the spatial pattern of four studied dwellings, Fig. 5.13 shows that internal roads of Site 4 generate more rings, articulating enclosed spaces for public activities. Site 1 has basically no ring forms.

At both the global and local level as Fig. 5.8 and Fig. 5.9 reveal, the linear road is poorly integrated with the entire settlement. The linear road section along Site 1 has slightly higher integration level than that of Site 2. However, partial section of the linear road connecting with Site 4 is being often used in the settlement daily life. This part of the road and the connected public space within the boundary of Site 4 score the highest integration level at both the global and local level. As Fig. 5.3 previously shows, Site 4 is one-kilometer away from the bus stop Magang Market. This road section is comparatively better landscaped with a sound and usable condition for the residents.

Based on the above integration and mean depth level analysis, the research is able to summarize the outcomes and draw certain conclusions:

1. The location and distribution pattern of public spaces decide their use intensity and integration of the housing dwellings with the settlement. Therefore, the performances and functions of temples are subject to their locations and accessibility within and outside of the settlement. For example, the unfavourable location and road connection of Site 3 results in its least integration level with the settlement, despite its two temples for the public use; Site 4 has the highest integration level, although it has only one Family Temple for a limited use.
2. Though temple is initially viewed as the most distinctive spatial element of the settlement, however, it plays more a symbolic role and is a physical landmark. Its spiritual significance of creating sense of belongs is indispensable to the inhabitants. That means the size, names and purposes of temples do not greatly matter, but their locations, accessibility and connection with the settlement. The use of the temple is observed quite adaptable and flexible for other functions. However, the physical existence of temples *in situ* is highly crucial to convey the identity of the

settlement. The temple functions as a coercive force to tie up the locals and sustain their communal habitat. Fieldwork interviews in the second phase disclose that residents are quite flexible in adapting temples and altars' uses, but they insist that the existence of temples *per se* as a physical entity shall be remained in their daily life.

3. Smart design contributes the use of public spaces. The popularity of Site 4 as a public space depends not only on its high integration level with the settlement. Its landscaping and harmonious surroundings attract people's use of the place as well. In this case, the Temple does not play a dominant role.

5.6 Site Survey 1: Lu Wu Ling Temple-affiliated Public Space

5.6.1 General Impression

Lu Wu Ling Temple is located at the intersection of three streets, but not at a busy junction (see Fig. 5.14). The temple is enclosed by the settlement. It is mainly residential and rather quiet. The survey scope includes a resource mapping of the area's physiological and socio-economic environment (see Table 5.3). In addition, a rapid place performance evaluation is conducted, focusing on Sociability, Uses and Activities, Access and Linkage and Comfort and Image, as discussed in Section 3.3 *Concept and Methods of Data Collection*. The outcomes are summarized in Table 5.4.

Major spatial elements of the temple-affiliated public open space are narrow alleys and two plazas. It is supplemented by one basketball ground, one big pond with lush plantations of palms and banana trees and stone benches. There is one kindergarten. The entire setting presents a typical southern Chinese landscape responding to its subtropical weather and local life choices. The key feature of this dwelling is a major activity plaza integrated with the basketball ground, lawn and a sub-plaza place closely adjacent to the Temple (see Fig. 5.14). Table 5.4 briefly summarizes the percentage of land use concerning the use of this public space. It reveals that plaza integrated space is the major public activity space, supplemented by streets. The whole surveyed area has high percentage of usable green open space, in the form of lawn and small green pockets next to the pond and the basketball ground and landscape trees. Such a spatial distribution and layout can reflect certain main characteristics of living style of the settlement. This is expressed with more outdoor activities due to the warm weather and active communication among the inhabitants. In general, the surveyed area is of poor building quality without much maintenance. Most of the residential buildings are two- to three-storied self-constructed

Attribute	Lu Wu Ling Temple-affiliated Space
Physiological features	Flat.
Vegetation cover/ Plantation	Dense along the river; Varieties of plantation, e.g. palm trees, banana plantations, lichee trees, etc.
Road access/ Condition	Poor. Northern road as river embankment is non-tarmac.
Housing	Most are two-storied local housing style, built in 1980s; Some are run-down.
Public open space	Spacious with a lawn as the buffer zone between the basketball field and plaza in front of the temple; Enough benches and shade.
Livelihoods (Economic activities)	Fish farming, restaurants and food-vendor.
Water Body	Dike-ponds with affluent water.
Local Features/ Identity	Typical southern Cantonese landscape; Temples and altars; Subtropical lush plantations with waterfront areas and dike-ponds for fishery.

Table 5.3: Physiological environmental setting of Lu Wu Ling Temple-affiliated public open place [Source: Fieldwork results, 2008]

buildings by the residents in 1980s. The streets and alleys are aligned with shopfronts, restaurants and vendor stands. Above the shopfronts is for residential use. Alleys penetrating the dwelling are mostly c.a. ten-meter wide. The survey is conducted after rain. It is observed that alleys between houses are liable to waterlog.

5.6.2 Place-performance Rapid Evaluation

Comfort and Image

The surveyed dwelling area has strong neighbourhood features of southern China with good security and hygiene conditions. The major users of the public open space are the elderly and children. Most of the buildings are the style of 1980s without too much maintenance. There appear not so many new constructions and recent development.

Sociability

The main public communication space converges on the sphere of the temple, temple plaza, basketball ground, green buffer zone between the basketball ground and the temple, river bank area and restaurants. Users appear mostly in groups with similar ages.

Comfort & Image	Observation Results	Access & Linkages	Observation Results	Sociability	Observation Results	Uses & activities	Observation Results
First impression	Clean and pleasant.	Legibility	Hardly to locate the place.	A meeting place?	Yes.	Space being used or empty?	Underused.
More women?	Yes. More aged women.	Accessibility	Poor. One part of road is not tarmac.	People come in groups?	Normally in 2 or 3, not in big groups.	User group age range	Basically the aged and children.
Any children?	Yes.	Enough seats/shade?	Yes, ca. 20 seats with shade.	People talk to each other?	Yes.	People cluster in groups?	Yes.
Enough seats/shade?	Yes. Around 20 concrete benches.	Distinct function?	Yes, but underused.	Users know each other?	Yes.	Activities type	Walking, relaxing, talking.
Unpleasant petty traders	No petty traders.	Clear paths to follow?	Yes, but less legible.	People come with accompany?	Partially.	Part of space being used?	Main plaza, basketball field.
Hygiene/cleanness	Clean but no rubbish receptacles.	Community using the space?	Yes.	Eye contact among each other?	Yes. They talked with fieldworker as well.	Accessibility between spaces	Very good.
Maintenance situation	Poor with rundown houses.	Means of transport	Bicycle and motor-cycle.	Mix of ages?	The aged and children-dominated.	Auxiliary facilities convenient to use?	Yes.
Security presence	Very good.	A place for disabled people?	No extra special facility.	People tend to pick up litter?	Partially.	Choices of things to do?	Not obvious.
Are people taking photos	No.					Space design suits events?	No, basically for the daily use.

Table 5.4: Rapid place performance evaluation of Lu Wu Ling Temple-affiliated public space [Source: fieldwork results, 2008]



Figure 5.14: Public space distribution and typology around Lu Wu Ling Temple [Source: Fieldwork results and own photographs, 2008]

Land use	Area [m ²]	Percentage [%]
Public utility	224	4.1
Plaza	3,883	70.6
Green field	708	12.9
Water body	13	0.2
Roads	674	12.3
Total area	5,502	100

Table 5.5: Land use parameter of public open space around Lu Wu Ling Temple-affiliated public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]

Uses and Activities

The old temple is being used for daily praying and other religious and cultural activities. The basketball ground is large enough to accommodate other festivals and events. However, in general, the area is quiet because it is not situated in a prime location within the settlement. It has been relatively quiet even during the three-day Dragon Boat Festival. The residents comment that the basketball ground has been normally underused. At the northern end of the ground, the restaurant area is being used as a meeting place for the residents.

Access and Linkage

In general, this dwelling has a low accessibility because it is half hidden in the settlement. Therefore, users of the public space are mainly the residents within this dwelling cluster or those who are familiar with the settlement and seeking for a quiet meeting place. Additionally, the north-to-south direction has a poor road condition, especially in the rainy season. When the survey is conducted, there is very small number of pedestrians.

Site Summary

The service catchment area of Lu Wu Ling Temple-affiliated space is relatively small. It is of low publicity and accessibility. As Table 5.4 shows that major users are the neighbours, particularly the elderly and children after the kindergarten time. It has no obvious road signage. And it is not inviting for strangers' uses. However, the design of the entire place is reasonable and comfortable. It has a high vegetation cover percentage with varieties of plantations, especially in the buffer zone between the basketball ground and the temple plaza and around the pond area (see Fig. 5.14). There are enough stone benches for use. It is a favourable place for the senior and small children, because it is a relatively small pocket size place with a strong sense of enclosure. It is serene with good security and easy to observe what is going on. The strong sense of enclosure, high density of plantations and the serenity is quite inviting and attractive to the elderly and the children. Table 5.5 shows the distribution size of different public activity land use types. The high ration of land use for plaza ca. 70.6 percent is quite impressive, although Site 1 has the smallest size among the four surveyed sites. Equally evident, Site 1 has low access to the water for public use. The use of river is mainly for dike-pond fishery.

5.6.3 Behaviour Mapping and Movement Pattern

Observation technique is also applied to Behaviour Mapping (see Tab. 5.6). As discussed in 3.3 *Concept and Methods of Data Collection*, the research aims at decoding how people

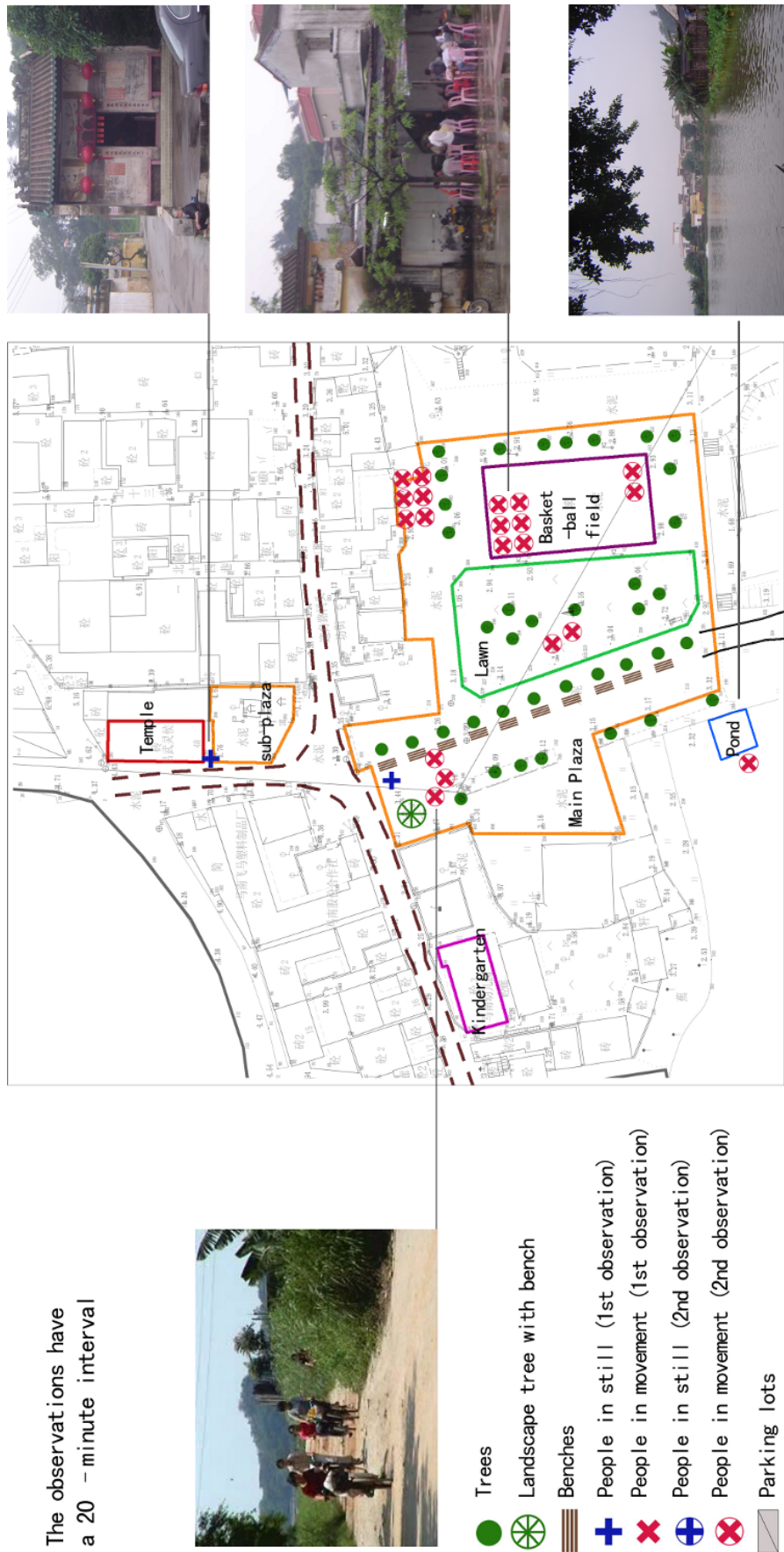


Figure 5.15: Movement pattern of Site 1 - Lu Wu Ling Temple-affiliated public space [Source: Fieldwork results and own photographs, 2008]

Gender		Age							Activities							Notes	
Male	Female	0 - 6	7 - 17	18 - 34	35 - 50	51 - 65	over 65	sitting/ relaxing	picnic/ eating	jogging/ bicycling	basketball	watching sports	socializing	playing	waiting	playing Majiang	
3	2	x											x	x			playing about 20 minutes
	2					x							x				actively talking with fieldworker and curious about the on-goings
	2						x	x					x				sitting and talking leisurely
2			x											x			high school student and college student. Actively talking with the fieldworker
	4						x						x				socializing ca. for 20 minutes
2																	passing by
	1													x			playing water and washing in the river
15	5																dining outdoor at the local food stall
	1							x									sitting on the steps in front of the temple and smoking

Table 5.6: Behavior mapping of Lu Wu Ling Temple-affiliated public space (Total Survey Area: 4,992 m²) [Source: Fieldwork results, 2008]

and their lived environment interact with each other. Movement Pattern (see Fig. 5.15) complemented by Behaviour Mapping is an example of two times observations. There is a 20-minute interval between the two observations. The observation is then repeated on weekdays and weekends at different hours. The key results acknowledge that this dwelling is often used by the elder residents and the children. The basketball ground is additionally used as children's playground and a meeting place for the local youth. The temple-plaza or the sub-plaza is often used for a short time such as greetings and sojourn or a small break. During the fieldwork periods, there are activities around the pond's area including washing and playing with the water.

5.7 Site Survey 2: Xian Dragon Hall-adjacent Public Space

5.7.1 General Impression

In terms of being a space affiliated with temple, the physical location of Site 1 and 2 is quite similar. Both are located between the river and the hill. However, Site 2 has more complicated spatial organisation. Table 5.7 summarizes the main features of Site 2. The overall surroundings are quite amiable and inviting. The public space appears with better design elements, such as seats, dense plantation, and easy access to water. The Hall is in a sound condition and decently decorated. It attracts people immediately. As Fig. 5.16 illustrates, the main plaza and the sub-plaza are separated by Road Yingzhou, which is in a north-south direction. The river perpendicularly flows crossing Road Yingzhou. There appear two types of temples. The first type or the dominant is to the north of the river, namely Xian Dragon Hall, overlooking the main plaza; while the second type situated south of the river, consisting three temples. The second type of temples forms a strong sense of enclosure and displays a close relationship with the water.

Site 2 has evidently higher percentage land for public utilities, if compared with Site 1. It is the only Site with parks, namely two parks. The water surrounding Site 2 is very affluent, including the river, pond and park lake. Additionally, some of the waterfront area is accessible through steps. Behaviour mapping (see Table 5.10) in the next section proves the waterfront area, especially the part attached to the pond, is beloved among the residents.

Attribute	Xian Dragon Hall-affiliated pubic space
Physiological features	Flat and no evident typographic changes; Very good access to the river.
Vegetation cover/ Plantation	Only flowerbeds and trees in plazas; Varieties of plantation in the park nearby.
Road access/ Condition	Easy to access; Moderate road condition.
Housing	Low density; Majority two-storied local housing in reasonably well maintained condition.
Public open space	Spacious and inviting with the characteristic Chinese architectural style; Human-scaled environment adjacent to the river; Great potentials for a better landscaping; Insufficient sitting facilities or equipments; Sufficient public toilets.
Livelihoods (Economic activities)	Fishing and farming.
Water Body	The river more adjacent to the temple if compared with Site 1; A larger area of lake inside the park.
Local Features/ Identity	Typical southern Cantonese landscape; Richly decorated Hall with dragon symbols and traditional Chinese paintings on the walls.

Table 5.7: Physiological environmental setting of Xian Dragon Hall-affiliated public space [Source: Fieldwork results, 2008]

5.7.2 Place-performance Rapid Evaluation

Comfort and Image

The entire dwelling renders a decent and peaceful first impression. The main plaza appears a meeting place for male users of different ages. There is a lack of seats and shades in the main plaza. The restaurant in this dwelling offers another option of getting people together with the provision of seats. The entire place seems in a reasonable condition in terms of its maintenance and hygiene. However it still needs certain renovation and improvement, such as the surrounding housing. No petty traders have been observed during the survey time. Although no security patrolling staff has been seen, interviewees comment that the place is regularly patrolled and they are very satisfied with the security situation.

Comfort & Image	Observation Results	Access & Linkages	Observation Results	Sociability	Observation Results	Uses & activities	Observation Results
First impression	Good. Quiet and peaceful.	Legibility	No.	A meeting place?	Yes.	Space being used or empty?	The main plaza is used but the sub-plaza is empty.
More women?	No. More men.	Accessibility	Good.	People come in groups?	Yes.	User group age range	Mixed age.
Any children?	No.	Enough seats/shade?	No.	People talk to each other?	Yes.	People cluster in groups?	Yes.
Enough seats/shade?	Not enough seats on main plaza.	Distinct function?	Restaurant, performance stage.	Users know each other?	Yes. Locals gathering.	Activities type	Walking, relaxing, talking.
Unpleasant petty traders	No petty traders.	Clear paths to follow?	Yes, but not legible enough.	People come with accompany?	No.	Part of space being used?	Main plaza, in front of the temple and restaurant.
Hygiene/cleanness	Clean but no rubbish receptacles.	Community using the space?	Yes.	Eye contact among each other?	Yes.	Accessibility between spaces	Very good.
Maintenance situation	In good condition.	Means of transport	Bicycle, motorcycle, bus.	Mix of ages?	Yes.	Auxiliary facilities convenient to use?	Yes.
Security presence	Normally with constant security control.	A place for disabled people?	Yes, ramps for the disabled.	People tend to pick up litter?	Yes, but they have a cleaner constantly.	Choices of things to do?	Yes.
Are people taking photos	No.					Space design suits events?	Yes.

Table 5.8: Place performance rapid evaluation of Xian Dragon Hall-affiliated public space [Source: Fieldwork results, 2008]

Sociability

It is noticed that the plaza, especially the main plaza is used by groups of people as a meeting place for socializing. The users are usually friends or family members of various ages. People often greet each other or make eye contact. It presents a strong sense of community and friendly ambience. Furthermore, during the Dragon Boat Festival, there has an exciting and hectic preparation for evening public meal. That is why more people groups are attracted to gather in front of the Hall and the performance stage to the east of the site (see Fig. 5.16 and Fig. 5.17). Dinner tables are also placed on the stage for more coming visitors. On this special occasion, the place is not truly quiet, clean and orderly. However, interviewees say that there is a cleaner on duty for this place.

Uses and Activities

The plaza is used, most of the time, by the dwelling's residents with different ages. The observed main activities are relaxing, eating and walking and passing by, resting and talking (see Table 5.10). People come here normally in groups. This public space is more suitable if there are events or festival activities. The area directly in front of the restaurant and the Hall is much more frequently used by the public. The small playground in the northeast of the dwelling seems quite empty without children. This is most probably because there is a new park and playground next to the small plaza. The new park playground provides good views and can easily overlook surroundings and on-goings. Therefore, the old small playground is relatively isolated from the entire public space layout. The small plaza next to the road is not really being used, although it provides seats.

Access and Linkages

The major plaza has a good accessibility to the public within the dwelling and is being used. However, the other pocket size public spaces are not legible enough to invite the public use. For instance, the place with three temples south of the river is quite underused, albeit it has good landscape. No signage is found in this dwelling to orient strangers. People come here with bicycles and motorcycles for goods transportation. The area in front of the restaurant and performance stage is the most active and functional activity space. They are both used for daily life meeting or event occasions. Additionally, this site is also designed for the disabled people.

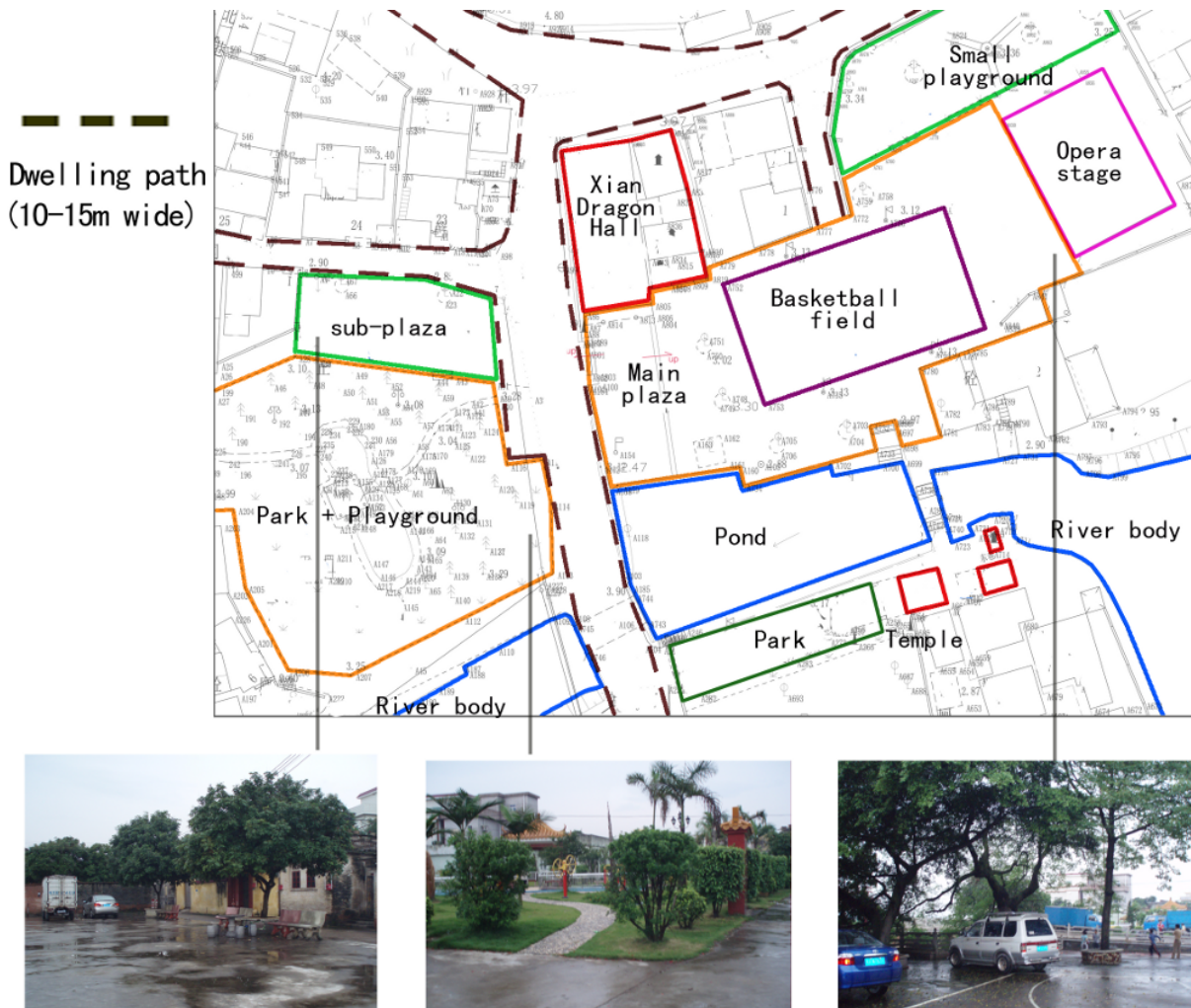


Figure 5.16: Public space distribution and typology around Xian Dragon Hall-adjacent public open place [Source: Fieldwork results and own photographs, 2008]

Land use	Area [m ²]	Percentage [%]
Public utility	711	11.4
Plaza	3,152	50.4
Green field	729	11.7
Water body	533	8.5
Roads	1,130	18.1
Total area	6,255	100

Table 5.9: Land use parameter of public open space around Xian Dragon Hall-affiliated public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]

Site Summary

Table 5.8 concludes that the place as an entirety is comfortable with vivid and strong images. It brings the information that this is a lively and dynamic living space. The place has also varieties of design elements and infrastructure for different purposes of uses. However, the divided pocket places are not legible enough to guide the public use. For instance, Table 5.9 displays the land use distribution of Site 2. In general, it has relatively even provision of public activity place options compared with other three sites. It has varieties of public space types as well including an opera stage. However, the high score of plaza percentage ca. 50.4 percent does not mean both the main plaza and sub-plaza are being fully used. The other three temples to the south of the river are in a dilapidated maintenance situation. There still exist certain design aspects to be improved. It includes such as the provision of sitting places and certain signage to orient the direction and use of the place. Nevertheless, it appears a favourable meeting place where the inhabitants would like to meet and socialize.

Among all surveyed sites, Site 2 is of the largest area and with the best infrastructure conditions. From the previous syntactic analysis, the integration level of Site 2 is only inferior to that of Site 4. It is also the only site with considerable size of parks¹⁶. As the syntactic analysis shows, the local integration level of Site 2 turns out the highest. This largely depends on its varieties of public utilities, such as the large park with lake, the small park next to the temple, parking lots, basketball field, playground and opera stage. It evidently provides more options for the residents within the dwelling cluster, although the linear road connecting Site 2 is not well integrated with the rest part of settlement. Though Site 2 has the Hall and temples, however, only the Hall area public space is favourable. The temple space to the south of the river is hidden and less known as a public space among residents.

5.7.3 Behaviour Mapping and Movement Pattern

Site 2 themed with Xian Dragon Hall presents a quite different picture compared with Site 1. The whole site is quite green with very pleasant landscaping and pavement. During the same period of observation time¹⁷, Site 2 has been quite busy with people. Fig. 5.17 and Table 5.10 documents and elaborates the observation results. Some conclusions on Site 2 are rendered as the following.

1. Those spots with steps leading to waterfront are normally attractive to users. This

¹⁶The two parks located in Site 2 take up an area of ca. 2,070 m².

¹⁷All four sites have been observed during the similar time span with agreed observation standards and techniques among the conductors.

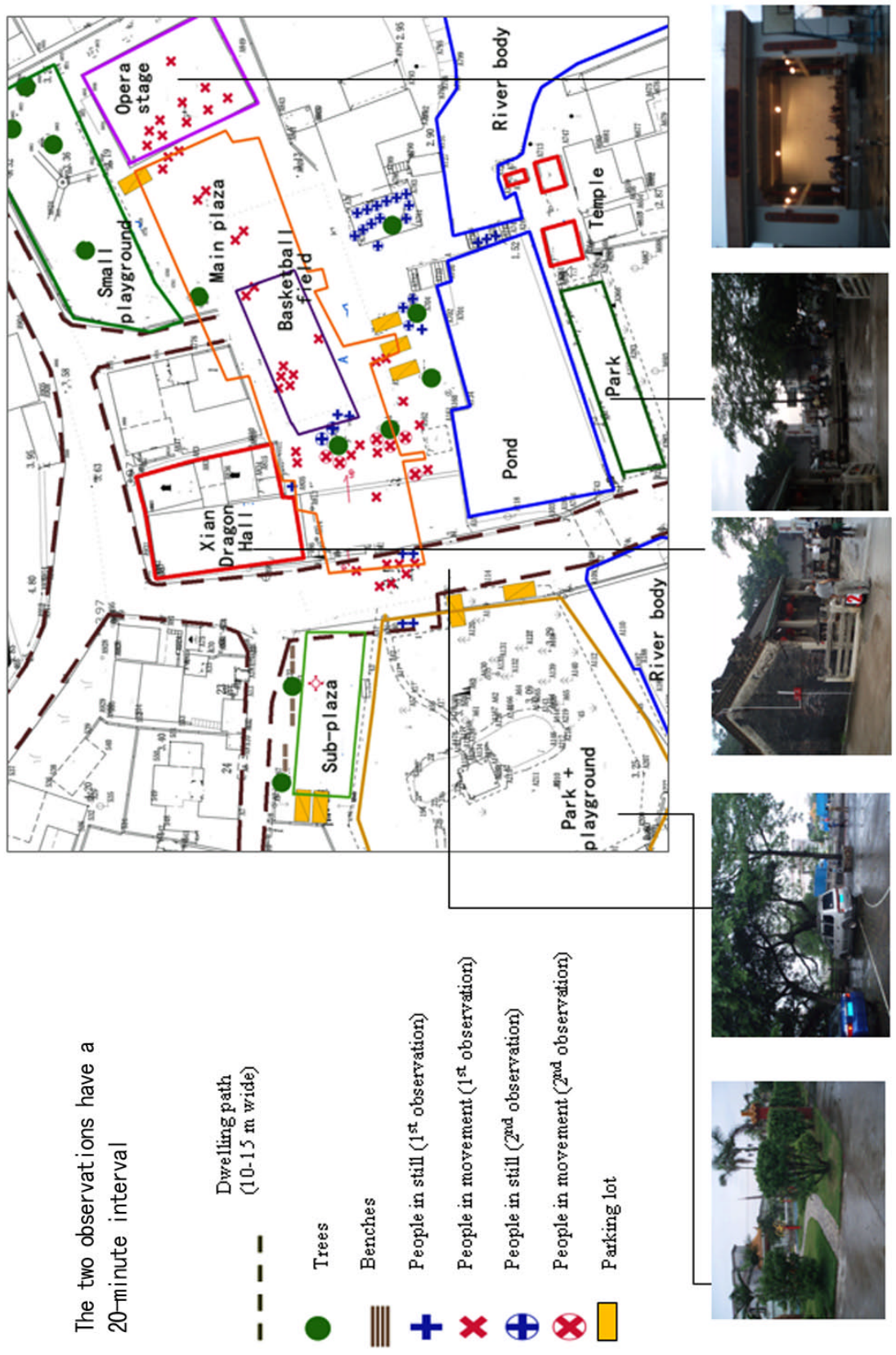


Figure 5.17: Movement pattern of Site 2 - Xian Dragon Hall-affiliated public place [Source: Fieldwork results and own photographs, 2008]

Gender		Age							Activities								Notes
		0 - 6	7 - 17	18 - 34	35 - 50	51 - 65	over 65	sitting/relaxing	picnic/eating	jogging/bicycling	basketball	watching sports	socializing	playing	waiting	playing Majiang	
Male	Female		x	x	x	x		x					x				sitting, socializing about 15 minutes in front of the restaurant
2	2				x	x							x		x		Actively talking with fieldworker and curious about what is going on
4			x		x										x		sitting on the edge of the flowerbed, smoking and talking leisurely
	3				x	x									x		standing and talking on the bridge and watching the river
2					x								x				standing and talking by the fence

Table 5.10: Behaviour mapping of Xian Dragon Hall-affiliated public place (Total Survey Area: 6,255 m²) [Source: Fieldwork results, 2008]

is especially true to the pond area with better landscaping and touchable water. The riverfront has high potentials to be improved for a pleasant and safe use.

2. Places with trees and benches under the trees can easily gather more people.
3. Alleys and paths are being used by the inhabitants as a communication space, given the fact that they are quiet and car free.
4. People prefer to meet at the fringe of the space for a better visibility of the other people and activities. This provides a quick understanding of the place where they are staying. The fringe and boundary of the site is also being used as parking lots.
5. The opera performance stage of Site 2 is obviously functioning as a meeting place and is quite inviting to the users.
6. The basketball field as in Site 1 is of an important meeting place for the locals.
7. In fact, the park and playground to the west of Road Yingzhou is being underused, despite its large size and more design elements. The inhabitants prefer to be among each other and be informed of the on-goings. The inhabitants are fond of the place with a high visibility. This is easier for them to learn the surroundings and on-goings. To this research context, it shows that smart pocket place design with good spatial link could be more popular to the public than isolated large size public spaces.
8. The main plaza lacks generally public furniture and is not inviting. Therefore, people incline to use spots around the trees, flowerbeds and the fringe of the basketball field. There are restaurants flanked with the main plaza, offering an option for people to stop, talk, rest and relax. Restaurants' area plays an important role to make people sojourn, socialize and exchange information. The sub-plaza next to the big park to the south is often empty, though it is equipped with benches and tables.

5.8 Site Survey 3: Wen Wu Emperor Temple and Shi Zhou Temple-affiliated Public Space

5.8.1 General Impression

Table 5.11 renders a quick understanding of Site 3 physically and socio-economically. It is located near the Dong Garden, situated in Road Madong. It has a main plaza aligned with two temples, namely Wen Wu Emperor Temple and Shi Zhou Temple. Site 3 has no sub-plaza. The entire place is very legible and clearly demarcated with different land use pattern. In terms of the Site itself, it has the most affluent water space among the four

Attribute	Wen Wu Emperor Temple and Shi Zhou Temple-affiliated Public Space
Physiological features	Flat.
Vegetation cover/ Plantation	Several distinctive old banyan trees surrounded by long stone benches; Varieties of dense and lush plantations along the river; Lotus flower in ponds in blossom.
Road access/ Condition	One-lane and two-way street is close to Road Madong; Partial street is bitumen surfaced and the rest is concrete.
Housing	Two-/ three-storied normal village style houses; Most were constructed in 1980s; Small part of newly-constructed housing is three-four storied.
Public open space	2 temples opposite each other fringed the main plaza; 2 ponds; 1 pavilion built above the pond; Porch at the street corner; The main plaza is aligned with the river and connected with steps to the river;
Livelihoods (Economic activities)	Small shops at the street corner, but simple and in poor condition.
Water Body	Affluent water resource with two ponds and accessible river banks; Usable small piers for the locals.
Local Features/ Identity	Traditional southern Cantonese housing style typified with temples, lotus pond, river banks and porch; People use the small piers for resting, transporting vegetables and boating in the river.

Table 5.11: Physiological Environmental Setting of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public space [Source: fieldwork results, 2008]

sites. Above all, the waterfront is accessible. To the east, it is bounded with the river; and to the south, it has two lotus ponds. The whole ambient of Site 3 is beautiful representing traditional Cantonese settlement landscape. Compared with other surveyed temples and halls, temples on Site 3 are not factually located within the dwelling. However, the existing houses are derelict and vacant. The entire dwelling has low housing density and a small size of inhabitants. What is evident to Site 3 is it has no usable green space. The entire site is rather empty and not encouraging for a long stay. For example, the accessible waterfront area is not being used. Previous syntactic analysis concludes Site 3 is the least integrated public space with the settlement. It has to be noted that quite close to the southeast of the site is the industrial area of the settlement. This is the very reason hampering Site 3 as a popular public space. However, as an individual space, Site 3 is well designed and the internal road connection is averagely good. Site 3 has also a ring

form similar to Site 2 and 4. This is supposed to increase its internal road connectivity and ease of movement.

5.8.2 Place-performance Rapid Evaluation

Comfort and Image

The field visit is conducted several times both on the normal days and the Dragon Festival Days. On the normal days, Site 3 appears very serene and clean with quite few visitors and users. The entire public space surroundings are quite beautifully landscaped. It is actually not directly adjacent to the housing area. Most of the houses were constructed in 1980s and quite a few have also been recently constructed. The old houses are in a rundown situation and need maintenance. The fieldwork shows that the residents of this dwelling have an even age structure.

Access and Linkages

The four-meter wide Road Madong is a vehicle road mixed with pedestrian, motor cyclists and cyclists. The road situation and connection is basically good. The existing public bus system in the settlement is not connected with Site 3. There is no planned public parking space within Site 3 area.

Sociability

Both of the ancient temples, the main plaza, the pavilion above the lotus pond, the area around banyan trees and the waterfront area are evidently being used by the residents here. However, it is confirmed further by the local residents that it is only a special case during Dragon Boat Festival. The use of plazas and temples for the feast gathering has been organized and evenly distributed among the dwellings of the settlement. Otherwise, according to the interviewees, Site 3 is factually not a favourable public space among the locals. This is mainly because it is quite close to the industrial area.

Uses and activities

Fieldwork shows that the southern pond area is normally quiet. People would like to gather themselves in the main plaza and basketball area for a better visibility, that is, along the fringe of the road. The five-foot-arch-way pocket space attached to general shops accommodates the majiang players or for a short sojourn. During the Dragon Boat Festival, the main plaza accommodates approximately 400 local residents to have the

Comfort & Image	Observation Results	Access & Linkages	Observation Results	Sociability	Observation Results	Uses & activities	Observation Results
First impression	Typical southern Cantonese village style	Legibility	Close to Rd Madong and easy to see surroundings.	A meeting place?	Yes.	Space being used or empty?	People are using it.
More women?	Yes. More aged women.	Accessibility	Yes.	People come in groups?	Yes. Normally in 3 or 4.	User group age range	The aged and several students.
Any children?	Yes.	Enough seats/shade?	Some concrete benches.	People talk to each other?	Yes.	People cluster in groups?	Yes.
Enough seats/shade?	Concrete benches, improperly located.	Distinct function?	Public space for meeting and events.	Users know each other?	Yes.	Activities type	Walking, talking, playing, and preparing the Dragon Boat Festival.
Unpleasant petty traders	No petty traders.	Clear paths to follow?	Roadway and canal.	People come with accompany?	Partially	Part of space being used?	Plaza in front of the temples.
Hygiene/cleanness	Clean but no rubbish receptacles.	Community using the space?	Yes.	Eye contact among each other?	Yes. It seems they know each other.	Accessibility between spaces	The corners of the courtyard.
Maintenance situation	Need maintenance	Means of transport	Car, motor, bicycle, but no public transport.	Mix of ages?	Yes.	Auxiliary facilities convenient to use?	Convenient.
Security presence	Good	A place for disabled people?	No.	People tend to pick up litter?	Not obvious	Choices of things to do?	Underused concrete benches
Are people taking photos	Yes					Space design suits events?	Yes

Table 5.12: Place performance rapid evaluation of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public space [Source: Fieldwork results, 2008]

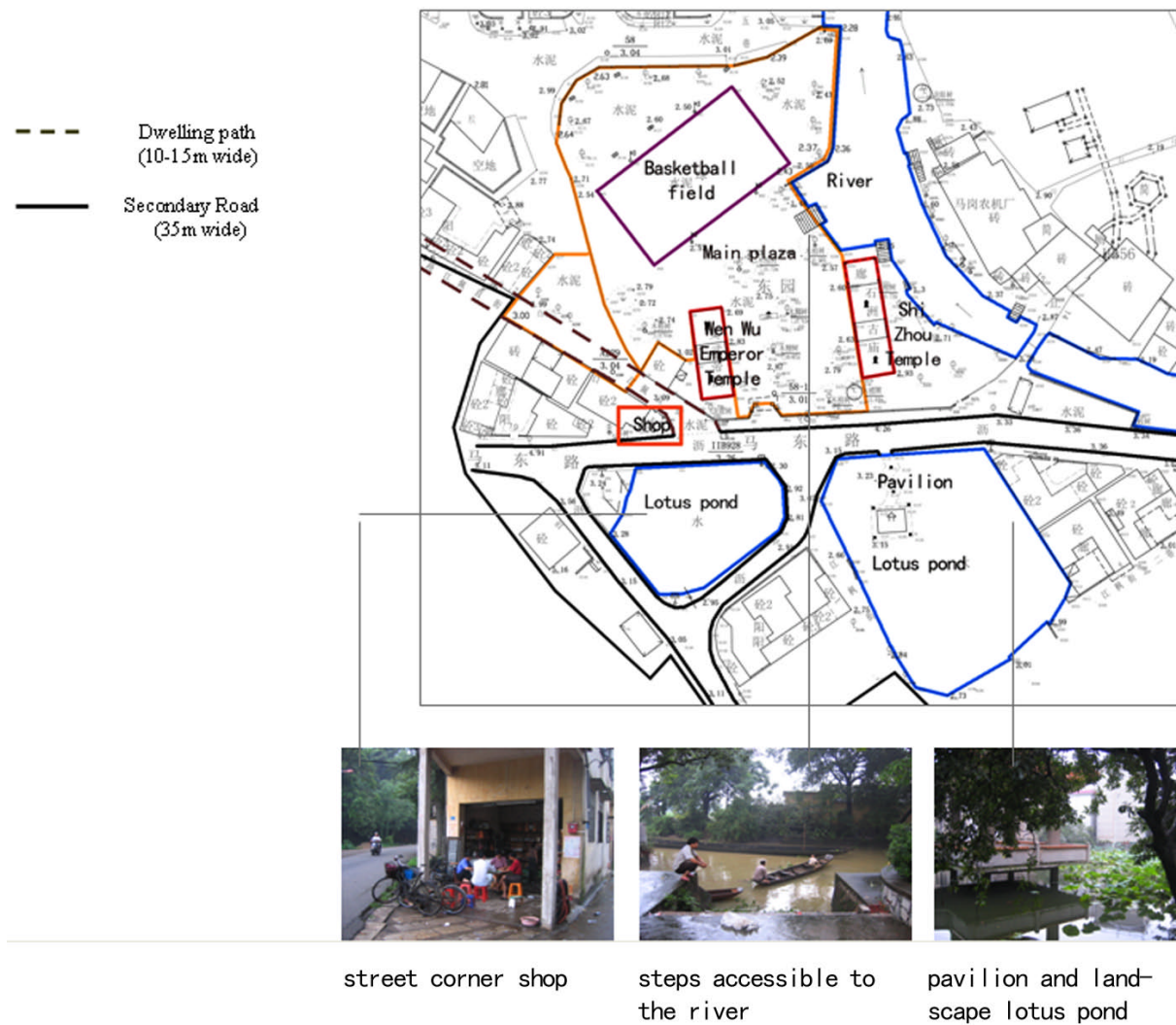


Figure 5.18: Public space distribution and typology of Wen Wu Emperor Temple and Shi Zhou Temple-centred public open place [Source: Fieldwork results and own photographs, 2008]

Land use	Area [m ²]	Percentage [%]
Public utility	371	5.9
Plaza	2,926	46.9
Green field	./.	./.
Water body	2,487	39.8
Roads	457	7.3
Total area	6,241	100

Table 5.13: Land use parameter of public open space of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]

Festival feast. The main plaza has a relevant big size of 2,380 square meter. However, the plaza itself lacks further spatial demarcation and sub-places to promote its efficient multi-uses. There lacks generally plantation around the major plaza as well. The plaza is being underused on normal days. However, it accommodates around 400 guests during Dragon Boat Festival.

Site Summary

Site 3 is quite busy and loud during the Festival time. Its entire spatial organization is quite suitable for holding festivals and great events. On the normal days, people come and gather often at the place between the two temples on Site 3. The other public place is also closely located next to the temples. Quite evidently, the water access on Site 3 is high, facilitated with steps leading to the riverfront. The lotus pond with pavilion is the obvious landmark of Site 3. In general, Site 3 renders a strong ambient of south China's landscape and scenery. It is quite mixed with varieties of private and public transport modes. The use of Site 3 is observed not limited to the locals. However, the main plaza itself lacks design elements for an efficient use. The entire Site 3 has no obvious green field. Table 5.13 renders the percentage of the public activity place distribution.

5.8.3 Behaviour Mapping and Movement Pattern

Fieldwork of this site shows most of residents would like to use the pocket places adjacent to the main plaza, including basketball field, waterfront area connected with steps. The pond area with pavilion is being underused. Namely, the southern part of Site 3 is not attractive to the people. One of the evident reasons is because the secondary road, separating the north and south of Site 3, appears quite chaotic. It observes a share use of the road with pedestrian, motor vehicles and bicycles. However, there are no clearly visible crossing lines and divisions for pedestrians and cyclist. Therefore, people would like to gather themselves in the north part, which is compact and safe with more varieties to use the space. Obviously, on this site the stone benches enclosing the landscape tree attract few users, because it is next to the traffic road. As a contrast, the pocket space of porch (see Fig. 5.18) in front of the general shop can easily gather people, because it provides the protection from the heat and rain. The pocket size of pier area is also attractive to residents to take a rest. Fig. 5.19 illustrates the movement pattern concerning this site. And Table 5.14 documents the main on-going activities on Site 3. The observation is conducted during the Dragon Boat Festival. Therefore, the site has a rather intensive use. This is because the main plaza of Site 3 can provide a generous space to accommodate more guests on the special occasion.

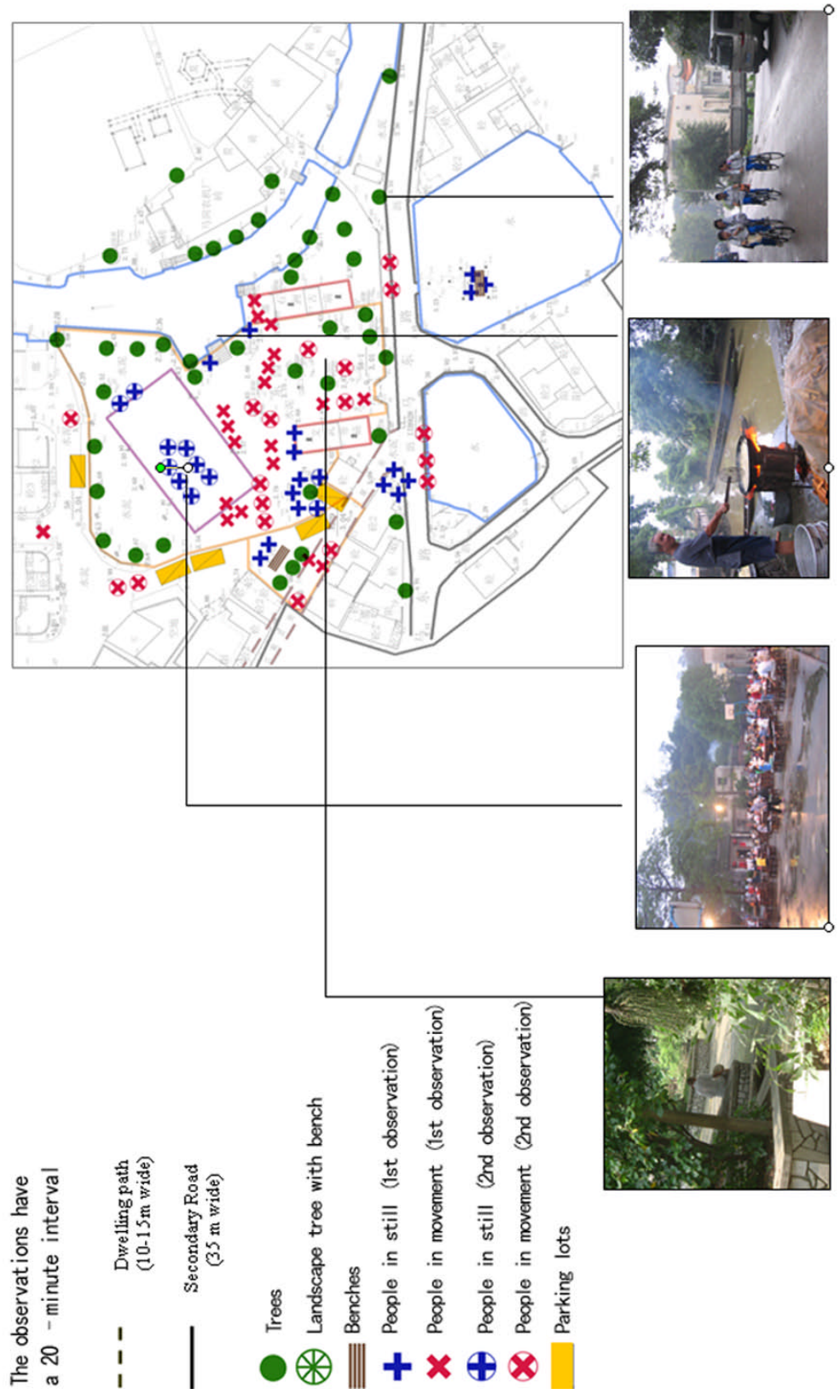


Figure 5.19: Movement pattern of Site 3 - Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public open place [Source: Fieldwork results and own photographs, 2008]

Gender		Age						Activities								Notes			
								sitting/relaxing	picnic/eating	jogging/bicycling	basketball	watching sports	socializing	playing	waiting		Playing Majiang		
Male	Female	0 - 6	7 - 17	18 - 34	35 - 50	51 - 65	over 65												
2	9		x		x	x				x									Cycling back home from school
6																			Preparing get together dinner in front of the temple and arranging tables for the Dragon-Boat Festival
4					x														Smoking and chatting while waiting for the Dragon-Boat Festival Dinner
3	2		x																Playing on the basketball field, while waiting for Dragon-Boat Festival
3	2				x														Playing majiang in front of the general shop
3																			Crossing the main plaza and going back home
2																			Taking a rest on the boat which is parking on the river
34	28																		Sitting at the table while waiting for Dragon-Boat Festival
2	2																		Taking a rest on the stone benches in the corner of the courtyard

Table 5.14: Behaviour mapping of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public open place (Total Survey Area: 6,142 m²) [Source: Fieldwork results, 2008]

5.9 Site Survey 4: Family Feng Ancestral Temple-affiliated Public Space

5.9.1 General Impression

Attribute	Family Feng Ancestral Temple-affiliated Space
Physiological features	Flat.
Vegetation cover/ Plantation	Varieties of plantation in the surrounding yard.
Road access/ Condition	Very good. Eastern Road Madong serving as a transitional platform.
Housing	Majority two-storied local housing built in 1980s; Some out of use.
Public open space	The medium-size plaza serves as a buffer zone between; Family Feng Temple and the lotus pond.
Livelihoods (Economic activities)	Farming and Vendor.
Water Body	Mainly in the form of ponds.
Local Features/ Identity	Typical southern Cantonese landscape; Temple as the local physical identity.

Table 5.15: Physiological environmental setting of Family Feng Temple-affiliated public space [Source: Fieldwork results, 2008]

Site 4 renders generally a serene impression, although it is quite adjacent to the market place and the main road connecting the settlement with the outside. It is quite clean. The direct impression of this site is associated with the Family Temple, small-size plaza, lotus pond, alleys, courtyard and old banyan trees. It is well equipped with public facilities. Despite its small size, Site 4 has a good permeability and quite visible from all directions. In addition, it is surrounded by varieties of lush plantation, making the entire environment highly inviting and comfortable with the subtropical climate. The Family Temple itself is well-maintained with an impressive building façade. The surrounding buildings appear in a harmony in terms of the building material (brick) and the color tone (dominantly in grey). The entire surveyed site renders a strong sense of place and ambient endemic to the settlement. The surrounding dwelling houses are centred with the Family Temple. However, not all the houses are in a satisfactory condition.

Comfort & Image	Observation Results	Access & Linkages	Observation Results	Sociability	Observation Results	Uses & activities	Observation Results
First impression	Good. Quiet and peaceful.	Legibility	Good.	A meeting place?	Yes.	Space being used or empty?	Underused.
More women?	No. More men.	Accessibility	Good with convenient transportation.	People come in groups?	Normally in 2 or 3, not in big groups.	User group age range	The aged.
Any children?	No	Enough seats/shade?	Yes, ca. 2 seats with shade.	People talk to each other?	Yes.	People cluster in groups?	Yes
Enough seats/shade?	2 plazas without seats. Shade only under the porch.	Distinct function?	Public space for meeting and events.	Users know each other?	Yes.	Activities type	Walking, relaxing, talking.
Unpleasant petty traders	No petty traders.	Clear paths to follow?	Yes, but less legible.	People come with accompany?	Partially.	Part of space being used?	Lanai in front of the temple.
Hygiene/cleaness	Clean but no rubbish receptacles.	Community using the space?	Not very often.	Eye contact among each other?	Yes. They talked with fieldworker as well.	Accessibility between spaces	Plaza in front of the family temple.
Maintenance situation	In good condition.	Means of transport	Bicycle and motor-cycle, walking.	Mix of ages?	The aged.	Auxiliary facilities convenient to use?	Very good.
Security presence	Normally with constant security observation.	A place for disabled people?	No special facility for disabled people.	People tend to pick up litter?	Partially.	Choices of things to do?	No.
Are people taking photos	No.					Space design suits events?	No.

Table 5.16: Place performance rapid evaluation of Family Feng Temple-affiliated public place [Source: Fieldwork results, 2008]



Figure 5.20: Public space distribution and typology around Family Feng Temple-affiliated public open place [Source: Fieldwork results and own photographs]

Land use	Area [m ²]	Percentage [%]
Public utility	915	16.0
Plaza	1,178	20.7
Green field	2,106	36.9
Water body	398	7.0
Roads	1,106	19.4
Total area	5,703	100

Table 5.17: Land use parameter of public open space around Family Feng Temple-centred public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]

5.9.2 Place-performance Rapid Evaluation

Comfort and Image

Site 4 has a strong sense of community with good security. It is quite clean and the whole surroundings are very amiable. Those who would like to linger longer time in Site 4 and use the facilities are mainly senior inhabitants. Majority of the houses around were constructed in 1980s with two stories. Some of the houses are vacant and obviously out of use. However, Site 4 is featured with very lush plantations and old landscaping banyan trees surrounded by long stone benches. The whole site is connected by small community paths leading to courtyards with many plantations. Comparatively, the plaza itself is less interesting and rather void. The Family Temple is well-maintained with impressive architectural style and sophisticated façade decoration. The building material is mainly grey-color brick dominated. The whole architectural style is very compatible to its physiological environment.

Access and Linkages

Site 4 has the most advantageous and strategic location among the surveyed sites. It connects the entire linear settlement and the primary road guiding the settlement outside. Therefore, it functions actually as a transit zone or an interface between the internal and external of the settlement. Particularly, Site 4 has the access to the settlement market and bus stop on foot. It is of a strong permeability at the settlement level, especially in terms of the north-south access. Small community lanes (10-15 meter wide) surrounding Site 4 are very smoothly surfaced and aligned with pot plantations. They appear very tidy and inviting even for the strangers. Consequently, Site 4 provides a window image of the entire settlement. When the survey has been conducted, Site 4 is relatively quiet. This is mainly because most of people are organized and spread among other larger size temple-affiliated sites for Dragon Boat Festival activities.

Sociability

Site 4 scores the highest chance to be the firstly encountered public space on entering the settlement. The entire environment is compact, albeit it has the smallest total area of plaza among all the four surveyed sites. As a matter of fact, the observation has detected that people do not intend to use the plaza too much. Most of them would like to gather themselves before the lanai. The plaza between the Family Temple and lotus pond appears bear and hot without shade during the survey time in May.

Uses and Activities

As stated before, despite a small size of the entire site and its plaza, adapted space uses within Site 4 are quite obvious as a natural and instinct selection. It is observed that people like to get together on the community paths and lanes, pocket spaces under old banyan trees, fringe area around the lotus pond and the pier, in front of the lanai or on the steps of the Family Temple. The plaza as the major public space design element is factually underused. The plaza provides no benches or shady trees. During the survey days, most of users are senior residents.

Site Summary

Table 5.16 conveys an impression that Site 4 is a relative well maintained public place. It has a small size and is mainly used by the senior people. The site is exactly located between the river and the hill. As a matter of fact, Site 4 (see Fig. 5.20) is a space centred with the Family Feng Temple, which accounts for the largest family in the settlement. This site is the only public space, integrated with a Family Temple in the settlement and accessible to the public. The spatial articulation of this site is relative simple, but clear and legible. Nevertheless, what quite important is the location of Site 4 is along the road leading to the market place and further up north to the central cluster of the settlement and outside of the settlement. According to the first phase syntactic analysis in Section 5.4, Site 4 has the highest integration level with the entire settlement. This is largely contributed by its road connection and its adjacent land use types including the market and bus stop. The market place and the bus stop can be reached from Site 4 on foot. For all visitors, Site 4 is visible as the first dwelling cluster and public space along the hill contour.

In terms of the site internal spatial structure, it appears outward with less enclosed rings formed by street connections. As analyzed in Section 5.5.1, enclosed rings can evidently increase road intersections among each other, which in turn can increase the space integration. The first impression of Site 4, however, does not render a quite integrated spatial picture. This is mainly because it is of small size and has less public facilities if compared with other sites. However, its strong spatial openness and high accessibility can be immediately sensed by visitors. Furthermore, the whole site turns out quite clean and green. This includes such as a better road condition and lush plantations. It renders also strong sense of security and cozy feelings.

5.9.3 Behaviour Mapping and Movement Pattern

The plaza of Site 4 has a small size (see Table 5.17). However, its strong spatial openness and high accessibility is impressive. Compared with the public use of the other three sites, the spatial articulation of Site 4 does not greatly cater for the children's use, although there exists a kindergarten on the site. Site 4 is more used as a passing-by stop and people do not actually intend to sit down or stay longer here (see Fig. 5.21 and Table 5.18). However, the entire clean and typical southern Cantonese environmental setting produces a quite good impression on the settlement, as Site 4 is the first encountering public space when people enter the settlement.

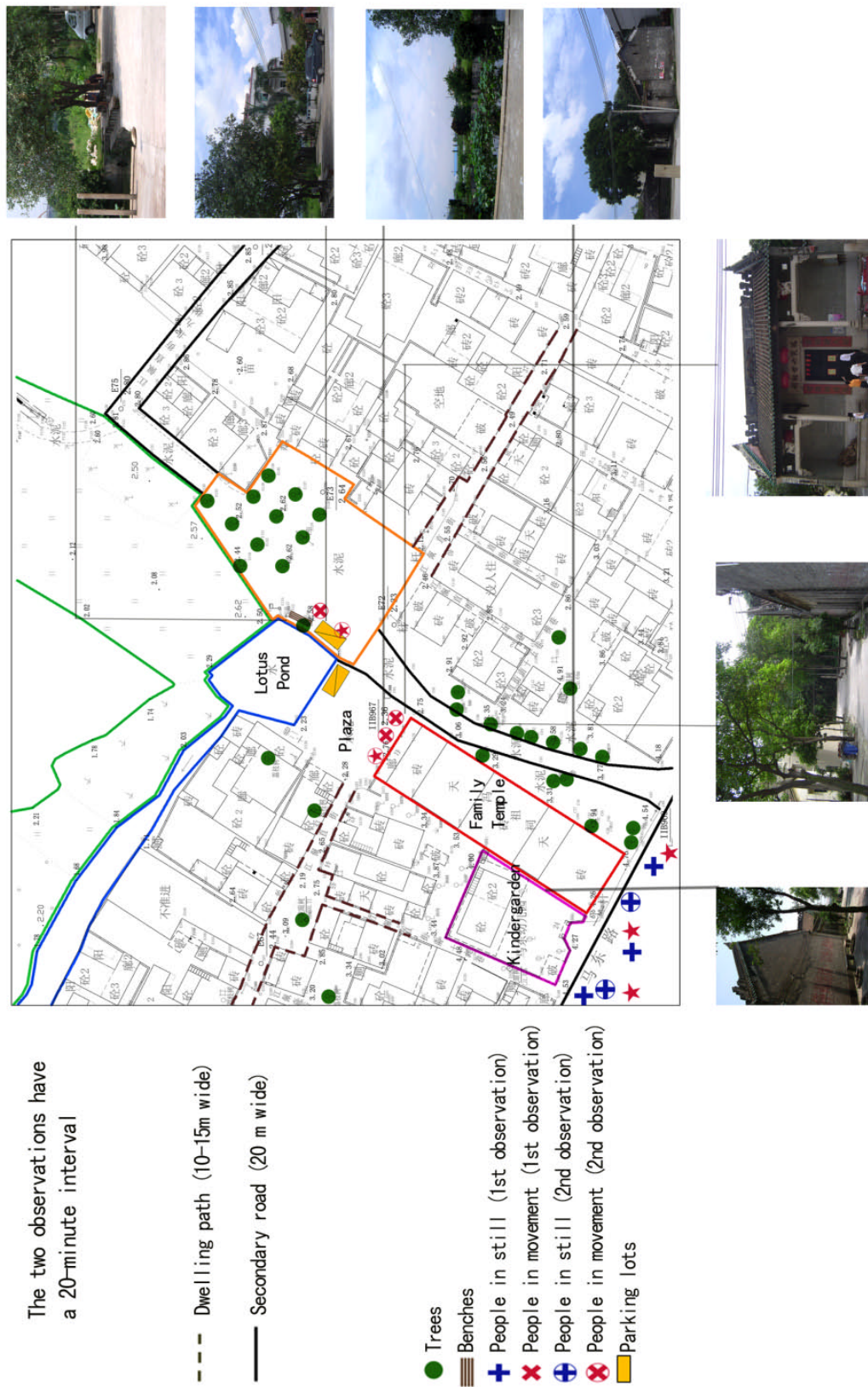


Figure 5.21: Movement pattern of Site 4 - Family Feng Temple-affiliated public open place [Source: Fieldwork results and own photographs, 2008]

Gender		Age							Activities									Notes
Male	Female	0 - 6	7 - 17	18 - 34	35 - 50	51 - 65	over 65	sitting/relaxing	picnic/eating	jogging/bicycling	basketball	watching sports	socializing	playing	waiting	playing Majiang		
3	1												x				sitting and talking leisurely	
3	1					x	x						x				sitting and talking leisurely	
3	1					x	x						x				sitting and talking leisurely	

Table 5.18: Behaviour mapping of Family Feng Temple-affiliated public open place (Total Survey Area: 5,703 m²) [Source: Fieldwork results, 2008]

Chapter 6

Research Findings and Conclusions

This research has attempted to address interactions, incorporations and interrelationship between the lived environment and its peoples. It is both knowledge-seeking and normative. It is an integration of the quest on both theoretical and empirical study at different levels. The study argues that the origin and growth of Chinese cities is intimately associated with the country's administration system and Confucius culture. The research methodology itself on investigating human and public space is highly recommendable for the similar scope of study. The methodology has been proved efficient and successful concerning the obtained data, which is able to answer the research questions.

The findings of this study fall into two categories and are interdependent. That means the findings are the combination of theoretical and empirical inspections. Firstly, this Chapter renders findings of the empirical study of the settlement, both quantitatively and qualitatively. The spatial design elements, land use parameters and attributes have been summarized respectively. Then the traits of the settlement as a design case is further concluded. Secondly, some questions inquired in Chapter 4 *Conceptualization of Chinese Public Space* are answered. In view of this gap, certain crucial planning aspects are set forth so as to address this gap. Specifically, it pinpoints a couple of the most significant and particular issues regarding current planning methodology and the actual on-goings. It has theoretically supplemented the empirical study of the settlement case. Furthermore, it is expected to generate a wider scope of thinking on the relevant research fields.

6.1 Key Spatial Elements of the Settlement's Public Open Space

In addition to conventional natural design and architectural design, Vidler (1976) suggested 'the third typology'. He (in Larice & Macdonald 2006: 253) highlighted 'we might

Key Features of Magang settlement		Qualitative	Quantitative
1	Clustered	Demarcated distinctively.	Evenly distributed with an interval 400 - 500 meter.
2	Modularity	Uniform spatial organisation for each cluster.	1 - 3 temples; Primary plaza and sub-plaza; Basketball field; Pond/ river.
3	Hierarchy	Each spatial element with certain/ defined function.	1 - 3 temple; 2 plazas.
4	Self-contained/ Balanced/ Compact	Each cluster with its own public space.	Catchments area 80 ha.
5	Use of Edge	Very limited choice of activities.	Few restaurants and shops.
6	Use of Waterfront Area	Few activities except transportation use.	1 - 2 ponds; 1 river.
7	Multifunctional	Religious, political, cultural, leisure, sports, entertainment, meeting point, event holding, parking, etc.	1 - 3 temples; 2 plazas; 1 - 2 ponds; 1 basketball field; 1 playground; 1 opera-stage.
8	Connectivity/ Continuity	Evenly distributed public space forming a spatial chain with high walkability.	400-500 meter interval.
9	Identity/ Sense of Place	Strong Cantonese ambient with temples, ancestral temples, bridges, piers, boats, river and tropical plantations.	16 temples within 12 km ² ; 1 ancient Banyan tree in each public space.
10	Walkability	High walkability.	400 - 500 meter.
11	Accessibility	Good accessibility-adjacent to the main road.	400 - 500 meter; 1 major linear settlement pattern; 1 centric settlement pattern.
12	Human Scale	Comfortable, easy to socialize, inviting, well-planted, equipped with sitting place, safe, clean.	1,000 - 2,000 m ² (plaza <i>per se</i>); Surrounding buildings less than 4.

Table 6.1: Summary of the key spatial elements of Magang settlement [Source: Fieldwork analysis results, 2009]

characterize the fundamental attribute of this third typology as an espousal, not of an abstract nature, nor of a technological utopia, but rather of the traditional city as the locus of its concern'. Larice and Macdonald (2006) noted that Vidle's third typology can be read as advocacy for empirically-based research in urban form and a contemporary urban design practice associated with the importance of public space and everyday urbanism.

The study approach of Magang settlement can fall into this third typology category. 12 characters of the settlement have been summarized in Table 6.1. It unveils the thumb rule of the settlement spatial organisation. This is the very spatial features unique to Magang settlement and responsive to Magang life. It cannot be reproduced elsewhere, because such an existence of space bears the attributes of Magang residents and their cultural values and social practices. The settlement is of a human scale, adaptive to changes of time and evolution of space and authentic Cantonese with a stable economy and demographic structure. It displays a great tolerance and selective assimilation into the modern society. Above all, the essential traits of its lived environment keep intact, but not unchanged. For a close check, the land use percentage of the four surveyed sites is summarized as a quantitative generalization. The calculation takes the average value of the four sites as a critical point. This intends to find out a rule of thumb concerning the public space articulation of the settlement quantitatively.

Public open space components	Area [m ²]	Proportion to the total area [%]	Average standard [%]
Public amenities (ancestral temples/ temples, opera stages, kindergarten, etc.)	113 - 574 (ancestral temples/ temples) 224 - 915 (all the other buildings)	4.1 - 16	10
Plaza (amenity integrated plazas)	1,178 - 3,883 (including basketball ground)	20.7 - 70.6	50
Green open space (Grassland and farm field)	708 - 2106	11.7 - 39.8	15
Water body (ponds and river)	13 - 2487	0.2 - 39.8	10
Roads (streets and alleys)	457 - 1,130	7.3 - 19.4	15
Total area	5,500 - 6,300	100	100

Table 6.2: Summary of public activity space land use parameters of the settlement [Source: Own calculation based on fieldwork results and analysis, 2009]

Firstly, four key spatial elements, endemic to the settlement, have been identified. It includes:

1. particular public amenities such as temples, altars, ancestral halls, opera stage, piers, basketball facilities indispensable for the inhabitants' daily life; They are the components of the settlement as the quality living environment to the residents. These elements are able to connect the residents to the past and the future as well.

2. temple-affiliated plazas as the spatial nodes, forming an continuous public open space system; This is the major public arena to stage the residents' life preferences and common experiences.
3. streets as a crucial living space for the inhabitants; and
4. the adaptation of usable informal open spaces in the settlement daily life.

Secondly, the use of public spaces in the settlement is pertinently imbedded into the residents' daily life. The calculation based on the four sites survey in Table 6.2 initially discloses that many plazas appear as the most important space to accommodate the residents' public activity needs. Nevertheless, it does not mean the sheer physical existence of plaza itself surpasses other spatial elements. For instance, Site 4 has the lowest percentage regarding land use of its plaza; however, it is the most integrated site with the entire settlement. The research concludes the most significant aspect is how the plaza-affiliated space is articulated and integrated with the entire public space system and other spatial elements. This is especially true to this settlement case, given the fact that plazas' existence is always spatially associated with temples or other spiritual and cultural facilities such as opera stages and basketball ground. The average high percentage (up to 50 percent) land use of plazas is quite atypical. This is mainly because the relevant China's planning and design regulations do not prioritize plaza as a dominant form of public space. Hence, the research outcomes are able to challenge the current planning regulations.

Thirdly, the adaptive use of streets and alleys in residents' daily life appears prominent. The connection and circulation art of street networks highly decides the accessibility and use of the entire public space. Taking Site 4 again as an example, the high percentage of streets and alleys for public space use complements its low percentage of plaza. The compatibility of spatial elements and its well connected road network makes it as a good example of compact design of a pocket place.

Fourthly, water associated activities are endemic to the inhabitants of the island settlement. It is attributed to the biologically and climatologically natural condition in south of China. As for Magang settlement case, there exist two levels of the waterfront use. The first level is the riverfront banked with the entire island settlement. It is proved that the major use only takes place during annual Dragon-Boat Festival. One significant reason is the continuous up-building of factories. It has been eating up the arable land and fishing ponds, leading to the ecological environment degradation. In addition, public facilities around the main river area are extremely lacking. The riverfront appears as an unserviced area. However, the road surrounding the waterfront is still in a quite good condition. The second level of waterfront refers to that of the dwelling cluster within the settlement. However, the potentials of this level waterfront use are not fully adapted. Generally, there is a lack of riverfront or pondfront design to invite water friendly use.

The major use caters to daily goods transportation. Furthermore, there lacks a system to organize the existing piers, hence to connect each other for the community use.

Generally, as a self-sustaining and organic human habitat, the settlement enlightens certain vernacular traits of spatial development endowed by its peoples' life choices and cultural practices. The settlement development appears as a dynamic process on par with the change of socio-economic life. It turns out a record of living history, which is able to elaborate the past and the present. It is very much beloved by its peoples. The extant spatial structure is an intuitive production of the inhabitants, which is based on their intrinsic traditions, beliefs and available resources. Therefore, the growth of the settlement and its established environment is evolutionary and incremental. This is a quite interesting lesson for planning as well. The research outcomes significantly acknowledge space structure and social culture is synergetic. The emanation of this synergy is essentially determined by the people. The hypothesis posed in Chapter 2

Peoples' life and social practices play a determined role in conceptualizing and configuring the lived environment and social space.

has been verified.

As for Magang settlement itself, the researcher is not intending to recommend further design solutions. As previously mentioned, there still exist certain aspects for further modification of the public space. This includes, for example, the riverfront and pondfront use, the organisation and connection of river tributary and piers, the refurbishment of the derelict surrounding vacant buildings for other adaptive uses, etc.. For further references, some have been illustrated and concluded in each survey site. As stated in Introduction Chapter, this study does not plan to render a design solution concerning the given situations of the settlement public space. It attaches more significance to call for attention on human's influences and determination on the built environment through this case.

6.2 Summaries and Lessons of Current Planning Practice of China

Given the fact that there is no ubiquitous planning model or case to be exemplified, the case itself cannot be referred to all the planning circumstances. Planning itself is a multifaceted phenomenon. Going beyond planning as a technical and static process has been a great challenge. This is exactly the pinpoint of this study itself, which emphasises to leave certain growth leverage for planning and development. It is able to empower people to participate, voice and make a decision for their own living preferences. This process of shaping the lived environment is expected to be sustainable. The following conclusion

is based on both the theoretical conceptualization of public space and empirical study of the public space of the settlement. It is a time-bound and critical diagnostic checklist regarding the current planning methodology and practice in China.

6.2.1 Disintegration of Land Use System and Urban Planning

Concerning land uses, two laws formulate the legal ground, namely Land Administration Law issued in 1986 and Urban Planning Act in 1990. The former theoretically applies to all territory and the latter to the urban planning area¹. The general rule is the Comprehensive Land Use Plan shall be compiled by the State Land Administration Bureau (SLA) in cooperation with other sector authorities concerned and shall be coordinated by the SPC². The Comprehensive Land Use Plan shall have the status of being an overall and strategic plan to cooperate land resources in the country, both the urban and non-urban planning area. This includes also the aspects of protection, utilization, development and conservation of land resources. However, the formulation of Comprehensive Land Use Plan is far from being efficient. The procedures on how to cooperate between different levels authorities were not addressed in Land Administrative Law. The content and the scope the Comprehensive Plan shall encompass was not regulated either. Therefore, the outcomes and efficiency and afterwards issues such as implementation, monitoring and evaluation were either ignored or not guaranteed. There existed confusion in application of comprehensive land use. When encountering urban sprawl beyond the urban planning area, Comprehensive Land Use is rather weak in handling sprawl. Therefore, it can hardly regulate the principles of changing land use types. Consequently, the relationship and application between Comprehensive Land Use Plan and other land related plans is very ambiguous and not clearly defined.

At the local levels, under the provision of the Urban Planning Act and Land Administration Law, local governments at and above county³ level have their competence of land use planning and decision-making on land use in their administrative areas. Although it was required that the local plans shall be submitted for higher level's examination and approval, Ju (1998: 71) concluded that the Chinese land use planning predominantly op-

¹The concept of Urban Planning Area was introduced in City Planning Regulations in 1984. It was decided that all the development and construction within the urban planning areas should apply for planning permission and be within control of the urban planning system. Article Three regulates that Urban Planning Areas in a city where the Law must be observed include urban districts, inner suburban districts and those areas needed by urban development and construction within the city administration territory. 'Suburban districts' are those which are geographically located between urban districts, i.e., the core of a city, and counties, i.e., the periphery areas of the city.

²This is stated in Article 12 of Chapter Three of the Regulations Concerning the Implementation of the Land Administration Law (the State Council, 1991).

³Under Article 30 and 31 of the 1982 Constitution, the types of administrative units below the provinces and autonomous regions are cities, autonomous prefectures, counties, and autonomous counties.

erates within the context of local governments at various levels. Therefore, there has been lacking the effective guidance and supervision to orchestrate development at various local levels. For instance, setting directives and coordinating functions of government departments involved in the construction and city development is posed by the mayor's office, together with the city's Construction Committee. Such decision could be easily influenced by politician's personal perceptions, educational background and regime changes. It was aggravated by the lack of detailed rules for the implementation of laws and details for interpreting the laws as well. The actual situation is many land use plans were based on the private and local short-term interests. Consequently, land use plans have weak legal effects on guiding and controlling development. Or land use plans appeared to be fragmented. This indicated the insufficient approach in taking the city's whole territory development into consideration. It resulted in a fragmented and instable urban form liable to changes.

From 1949 - 52, China practiced the system that users had to pay for the use of land. After 1953, large scale industrialization resulted in a lump-sum demand of land. The State Council promulgated that all land belonged to the state⁴. This implied that all land was free of charge for government use. Users had the right in land use, but no private land transfer was allowed (Yang, 1992: 55 in Ju, 1998: 25). Between 1953 - 54, rural land was expropriated for the urban and industrial development use. According to the Article 10 of the 1982 Constitution, the state may in the public interest to take over land for its use in accordance with the law. The endorsement of the State Council for the collection of land use fees from foreign-funded ventures in 1980 marked the end of the era of the free use of land and reinvention of a land market in China. Shenzhen is the first city experiencing land use reform in 1982. Cities and towns are able to collect land use taxes for the purpose of creating a source of revenue for urban infrastructure development and of promoting land use efficiency⁵. Started from the 1990s, governments at all levels were urged to make quick decisions on land uses and changes of land use to truly meet the rapid urban expansion. Several obvious problems arose. Firstly, this led to insufficient considerations in maintaining a sustainable land use approach. Priorities were allocated to short-term benefits. Meeting urbanization resulted in rampant sprawl with loss of high quality cultivated land. However, Comprehensive Land Use Plan is incapable of addressing sprawl. The environment is degrading. This was aggravated by

⁴In November 1953, the State Affairs Council (now the State Council) promulgated the 'State Affairs Council's Regulation on Appropriation of Land for State construction'. Since all the land is owned by the state, after 1953 private urban property rights ceased and land was nationalized by the end of 1956. Private land ownership was eliminated in 1957.

⁵This started from collecting urban land use fees and the practice was extended to other cities as well. In 1988, the State Council issued and implemented the 'Provisional Regulations on Land Use Tax Collection in Cities and Towns'. The collection involves all urban land users, except non-profit making institutions such as military utilization, parks and government administration buildings.

uncompetitive administrative personnel. They only concentrate on their own territory to seek advantages, while neglecting the negative consequences of their decisions on other sectors and regions. Secondly, this was worsened by the ambiguous law. As the expansion of urban area, definition of 'urban planning area' introduced by Urban Planning Act does not keep up with the current development, either does the Comprehensive Land Use Plan. It is common now in Chinese cities, the urban planning areas of the city are expanded time and time again as a result of urbanization. However, there is no agreement on how to decide the location and size of the future areas to accommodate urban development. While the rural land is encroached, there is no correspondent laws to regulate the land use of the boundary between rural and urban planning areas. This left the boundary problematic. Comprehensive Land Use Law in China can hardly influence the 'urban planning area', as the role of Ministry of Construction (MoC) is very strong. Therefore, there is no dialogue for the problematic zone. Thirdly, abuse of power in decision making has no respect to existing regulations and land management, which is worsened by corruption as well. There exist also insufficient considerations on land property and land use efficiency in development plans. Local and central authorities make their own separate decisions in such use without a coordinated manner. Many decisions especially concerning large scale land use parcel have no effective involvement of government planning authorities. Ju (1998: 26) commented that 'the handling of conflicting interests in land use was fundamentally subject to political policies which varied over time and administrative commands, and to the decision of individual politicians involved'. Decisions on land use and changes of land use are made carelessly. This contributes to the significant reason why built heritage environment and old urban form is liable to changes. The distinguishing of urban planning area and non-urban planning area has resulted in a lack of systematic and holistic planning approach in treating the whole city territory structure. The built environment of urban form and fabric is not approached as an entirety in terms of spatial organisation.

6.2.2 Missing of Urban Design in the Entire Planning System

As disclosed, there is till now no legitimised urban design policy in China. Both legal and cultural reasons have contributed to the missing. Approved by the State Council, City Master Plan has legal status and has to be incorporated in urban development. Both District Plans and Detail Plans have no legal status. Ju (1998: 57) argued that 'for the examination and approval of Detail Plans two cases shall be distinguished. One is that Detail Plans for cities for which no District Plans are prepared are examined and approved by the city government concerned. The other is that if both District Plans and Detail Plans are prepared for a city, then the Detail Plans are examined and approved by the corresponding authorities of the city governments, with the exception that the

important parts of the Detail Plans still have to be examined and approved by the city government'. Detail Plans shall be prepared in line with Master Plans, but need not be submitted for approval by higher government levels. In China, Detail Plans further fall into two categories: Regulatory Planning and Site Planning. Regulatory Planning is prepared to control land uses, urban capacity, and spatial environment, which are the gist of urban management and guide to Site Planning. Site Planning is prepared for immediate development sites to guide design and construction of each building and establishment. In the whole process, urban design as an overarching development guideline is missing.

What is urgently in demand is a holistic urban design approach with human-based and environment-responsive nature. However, the simplest sheer fact of urban design is not recognized. In Lang's (1994: 19) words: 'if urban design is concerned fundamentally with enhancing the quality of human lives, it must be concerned with the qualities of the human environment and, hence, with understanding that environment's nature as the basis for making decisions.' It points out that urban design is a decision making process at a public policy level. Additionally, the understanding of 'environment', according to Lang is manifold, including the terrestrial, animate, social and cultural. However, Chinese most updated urban planning is not yet in the place to manage such multi-faceted environment and city development under its economic transition. Urban design policy at a macro-level does not exist. It appears as a piece-meal, lacking a consistent integration at all levels of planning. The city as an entirety has no agreed policies in public space layout and distribution in advance to establish a systematic spatial structure in a sustainable manner. This was physically reflected by uncoordinated city-wide land uses without a prior planning of public space scopes, types and criteria. At the moment, Shenzhen is among the few cities in China, which starts to revise the city's development plans and guidelines. Reform of current planning system shall give the very attention on effective urban design policies. Besides emphasising legal urban planning zone,⁶ an integration of heritage environment with a competitive land use system need be formulated to preserve urban form as an entirety. Furthermore, there are insufficient qualified native planners. Surprisingly, the assignment of designing twenty-first-century-China is largely contracted to foreigners. Reeducating professionals concerning a multi-disciplinary planning approach and communication process is required. Certain mechanism along planning shall be established in maintaining planning efforts, educating the public and dialoguing stakeholders. There lacks public education on public environment and its significance among citizens. It observes public space is precariously treated. The Chinese need place confidence in its cultural and territorial particularities to sustain the urban future.

⁶It has been noted in the International Conference on China's Planning System Reform, 2004 by Ministry of Construction, China.

6.2.3 Loss of a Human-Responsive Environment Resulted From Standardized Planning

Schulz (1971: 37) stated: ‘architectural space maybe defined as a concretization of existential space. Existential space is a psychological concept, denoting the schemata man develops, interacting with the environment, in order to get along satisfactorily. Man’s relationship to architectural space therefore consists, on the one hand, in trying to integrate its structure into his personal schemata, and on the other in translating his schemata into concrete architectural structures’. He concluded that for a meaningful existential space, it must necessarily have a pronounced public character. On the basis of the psychological concept, he further argued ‘value’ was important in influencing human’s choices and structuring of their living environment. According to him (1971: 38), both the environmental needs and architectural forms are meaningful choices (conscious or unconscious). Magang settlement case has detected the strong influences out of people’s values, needs and perceptions on their environmental existence, which is also the extension of the inhabitants themselves.

As Jacobs J. (1961) debated, cities shall be able to provide something for everybody, only because, and only when, these cities are created by everybody. The void space without people is such an undesirable. However, it is sad to find many intentionally designed but untouched public spaces in Chinese cities. They are the perfect city images for advertisement, but not interesting. These places are definitely designed, but not created by people themselves. Therefore, the expected activities and synergy between the public spaces and the people are quite missing. On the other hand, the fact in China is the daily living environment has been encroached by motor vehicles, the retail and entertainment development and industrial parks. The daily life spaces have been gradually eaten up by the desired development and demands of land. On plans, all development seems grandeur and presents sophisticated drawings. Streets are busy with vehicle circulation; shops are crowded with seasonal tourists; and public spaces are booked with special festivals and events. In reality, our citizens have to make an extra journey to visit and use these special public spaces. Don’t they have familiar public spaces in their communities for a daily leisure time?

Technically, according to National Code of Urban Residential Areas Planning and Design⁷, there are no specific stipulations or articulated items on land use ratio for public space use. There exist only the general land use parameters of four categories including roads, green space, public amenity and the residential at the three levels of neighbourhood planning⁸.

⁷It was firstly enacted in 1994 and the latest revision which has been widely adopted is the version of 2002.

⁸In line with the National Code of Urban Residential Areas Planning and Design, Chinese standards of

This is above all because there is no scope of specifically defined public space. At the neighbourhood level, the National Code does not include plazas as one of the major public space components. By offering a general percentage distributed respectively via the above-mentioned four types of land use, there lack justifications of the practical application of these four land use parameters. That is to say great potentials of generating public spaces out of each type of land use have not been adapted. This includes such as the space of road setbacks, sidewalks, pedestrian areas and pocket size land plots attached to the residential area. Based on land use parameters of current National Code and insights from the case study, the following calculation attempts at a possible reference. The purpose is to unlock potentials of more accessible public spaces given the current land use distribution system.

Community land use category (National standard based)	Percentage range [%]	Average standard [%]	Potential of generated public activity space [%]
Road	9 - 17	13	$13 \times 25\%^* = 3.25$
Green space	5 - 15	10	$10 \times 100\% = 10$
Public amenity	12 - 22	18	$18 \times 65\%^{**} = 11.7$
Residential	55 - 65	60	$60 \times 65\% = 39$

* Percentage of 25% is considered as the sidewalks for potential public use.

** Percentage of 65% is considered as after the subtraction of 35% of building's footprint.

Table 6.3: An example of potentials of generating additional public open space at the neighbourhood level [Source: Own calculation based on Ministry of Construction, P.R.China (2002), 2009]

The outcomes in Table 6.3 display the potential public space surplus, only if the concept on public space can be subject to redefinition. It is exactly the critical point and one of the great necessities of undertaking this research. This is especially true to the residential land use, which decides communities' daily activities with their own art. Lessons from both the theoretical work of public space in Chapter 4 and empirical study of the settlement in Chapter 5 alert that conceptualization of what is the space for public use in everyday life appears significant. For example, the concept of streets shall be understood from a three-dimension aspect. Circulation system in Magang settlement shows that more than 30 percent of roads has been used as living street space in the community daily life. The articulation and existence art of the streets reflects peoples' needs in terms of communication flows and movement patterns. The force of changing streets pattern catering to motorised vehicle can severely destroy the ease and authenticity of community's life.

neighbourhood fall into three category according the number of households and residents: a) the Residential District with households' number between 10,000-16,000 and with residents between 30,000-50,000; b) the Neighbourhood with households' number between 3,000-5,000 and with residents between 10,000-15,000 and c) the Residential Cluster with households' number between 300-1,000 and with residents between 1,000-3,000.

For example, the experiment in Los Angeles has disclosed the strong influences of traffic and the community social interaction (1985 in Roger 1997). It concludes that social interaction and sense of community is inversely related with amount of traffic passing through; as traffic increases, casual visits to neighbours decline, leading to alienation of urban residents and community life quality is closely associated with public space such as plaza, parks, recreation place and mode of transport⁹.

Be whatever forms of streets, the essential point is with what purposes the circulation system has been designed. To render a simple and rapid understanding, people's movement and communication between spaces shall be given priority. Therefore, the concept of streets or any other forms purporting to facilitate people's movement shall be considered as an enclosed and safe space with an amiable human scale. Their existence shall be compatible with human's movement scale and familiar life practices. Streets for people's use shall be rehabilitated as one of the key urban design issues. Both Jane Jacobs and Allan Jacobs made simple but critical statements on what streets are. Jacobs J. (1995: 39) said 'streets and their sidewalks, the main public places of a city, are its most vital organs. Think of a city and what comes to mind? Its streets. If a city's streets look interesting, the city looks interesting; if they look dull, the city looks dull'. Jacobs A. (1995) summarized that streets have the ability to moderate the form, structure and comfort of urban communities.

This research is not intending to focus on streets forms, functions and design. However, it proposes above all the importance of adapting the streets' potentials as community daily living space. China's recent experience has pushed urban design on par with big-bang architecture. Human being and its particular cultures are nearly invisible. Many cities are facing inadequate and ill-distributed public spaces; while iconic bulks took up the land in historical core for private interests. Commercial entertainment development has occupied traditional spaces in the name of the 'public', but the fact is the Chinese public enjoys more sitting under trees in groups. Planners pursue the quantitative standards for roads, parks, setbacks and geometrically astonishing urban features. It is normal to see cities have been mechanically approached by Master Plan, Regulatory Plan and Site Plan as required. Or this approach has been repeated and revised several times. However, it is often questioned why residents cannot really celebrate their urban life in the city blocks which have been planned under the strict and precise approach? What else plans can professionals still offer to ease city life? The argument is these standards themselves are not competitive. Human being as a highly influential design element has not been addressed in the process of current planning. Urban design shall not seek novelty. It shall

⁹Specifically speaking, with the light traffic, each individual has the potential to make three friends and six acquaintances; with medium traffic, 1.3 friends and 4.1 acquaintances and with heavy traffic, 0.9 friends and 3.1 acquaintances.

be based on human's basic urban experiences subject to the authentic local situations. The purpose is to create an enabling environment for quality life. If thinking it twice, the principle is rather simple. The earliest urban design efforts started from environment enhancement. Power and telephone wires were placed under the ground for tidiness and a pleasant image of public spaces. It is a down-to-earth approach to solve the real problems. It should not be taken as a funky idea to deliberately produce differences. Differences derived out of the design depend on the city's essence and people's characters and choices. Human aspects shall be given high priority in spatial planning and design. What should not be forgot is how decisive human aspects to make or fail a city. Urban design shall respect the vernacular character of the place and their people. Otherwise, the place is rather than a void container. Planning shall be up to its maximum service for pleasant urban experiences of human being, but without compromising a sustainable urban future. By blindly pursuing national standard symbolism design, it means brutal rebuff of the vernacular cultural environment where people grow up. And often, such blunt standardization is more costly and liable to producing unease environment which does not suit the local typography, climate, demographic structure and social life. Practice of urban regeneration shall not be viewed as a fad for the sake of physical design. Real understanding of regeneration by the policy-makers and practitioners plays a key role in deciding the outcomes and the city's future. How to carefully select the 'best practice' and 'model project' in other countries and regions matters not only the Chinese city physical form, but also the way how the Chinese people live and love their urban life. The reciprocity between our living space and life shall be brought forward for a cheerful urban experience, hence to flourish. Without genuine prior analysis of the local socio-economic situation, no 'best practice' fits.

6.2.4 Under-estimation of Heritage and Development

Heritage is a very valuable yet poorly understood concept in the way it can inform new development. Heritage conservation and commercialization and marketing of history are always going to be in a certain amount of tension. Heritage is a cross-cutting issue as well informing development, transportation, housing and economics. It concerns policies in many aspects of different institutions and agencies. What could be named as heritage highly depends on the variety of stakeholders living in different historical periods. Therefore, heritage shall be politically intervened and guided yet allow for local breadth and depth in its application to planning. Du (in Eckardt, 2009: 568) concluded that heritage as a concept in China was closely influenced by Chinese feudalism and its inherited traditions and values. The understanding was far from recognising the built cultural

heritage¹⁰. She (in Eckardt, 2009: 570-577) further argued the benchmark periods concerning heritage and the modern China's historical development by summarizing three groups of counter forces. They are 1) between 1848 - 1949, Confucianism vs. functionalism; 2) 1950 - 76 Maoism vs. feudalism; and 3) 1978 and beyond, localism vs. globalism. Heritage shall be part of policy. The key point is how it could an objective of development or an instrument in furthering it. According to Ashworth (in Schröder-Esch und Ulbricht, 2006: 17-19), this means heritage can be the main or subsidiary goal of the development strategy itself through the creation of heritage places and heritage functions. Alternatively or additionally heritage can be used as an instrument, usually together with others within regional development strategies.

The last two decades have been seeing certain efforts¹¹, albeit the practice has often fallen short of expectations. There has been a strong need for the interpretation of these laws and regulations as they are applied in practice, as well as corresponding guidelines for heritage conservation. For example, this includes how to integrate cultural heritage conservation and land use plans, at what level urban design guidelines shall be formulated to guide the development concerning conservation and how to promote urban form as a conserving concept strongly guaranteed by law and integrated with different levels of plans. A comprehensive policy review must be done from time to time to adjust the real needs and time-bound goals. What accrues out of heritage and conservation is maybe the collective memory or a set of tangible objects agreed by the society. The future is open to a variety of choices. What planning and urban design actually involves is the management of the past for an enhanced capacity to adapt to the future development experiences. Additionally, the practice of heritage is exploration-oriented. It encompasses the development and redevelopment of sites as a value-added process. Heritage can be a business-like process and sites were developed with commercial and marketing considerations. This production process is a value-added component. Such process is also about the extent to which heritage can represent as a resource, but shall be renewable enough. Heritage can be reused, recreated, reproduced and replicated. This predominantly depends on political

¹⁰In the past, what could be categorized as heritage in China was normally associated with antique objects and artifacts such as porcelain, paintings, calligraphy, seals, classical books and scripts. They were normally movable, tangible and saleable and owned by social elites and imperial families. Therefore, heritage was a connotation closely related to private property and social stratification (Du in Eckardt, 2009:568).

¹¹In 1986, the concept of Historical and Cultural Protection Areas was legalized. From 1991, all the historical cities must formulate Code for Preservation of Urban Historical Cultural Districts or Cheng Shi Li Shi Wen Hua Qu Bao Hu Gui Fan in Chinese at the local level by referring to both Law on the Protection of Cultural Relics and Law of Urban Planning. In 1991 the municipal government of Shanghai issued Administrative Regulation for Preserving Excellent Modern Architecture in Shanghai. This was the first local legislative enactment of a law relating to the protection of architecture in China. In 1993 Ministry of Construction and the State Bureau of Cultural Relics jointly drafted Regulations of Historical Cultural Cities Protection or Li Shi Wen Hua Ming Cheng Bao Hu Tiao Li in Chinese.

decisions and purposes of the planning process. Therefore, there is a strong need for a strategic approach to intensify its integrity as part of national policy. Priority shall be how to articulate heritage in detail at a regional or local planning scale. Consequently, well integrated site plans shall achieve a cohesive presentation and interpretation of heritage to the public. The arising challenge facing practitioners is perhaps how to manage and design heritage as a renewable resource for a sustainable 'exploitation'. This concerns issues such as potential heritage identification, accessibility and marketing for demands stimulation. Additionally it is crucial to think about how planning can ensure heritage and development as complementarities rather than competitions. The fact is that cities represent the layers of culture and need to define the values that sustain the people and the place over time.

Du (in Eckardt 2009: 578) criticised, 'historical cities generally meet the political needs for retrofitting so as to articulate the exotic urban images exploiting their historicity and cultural landscape. The past ignorance of heritage values led to the deliberate destruction of heritage. The current conscious ignorance of modern technologies led to reproducing heritage.' Public spaces in Xi'an have been retrofitted for tourists in a superficial stance. The community living spaces gain less attention in this process of resource reidentification and exploration. Most neighbourhoods in historical towns are experiencing an overall insufficient maintenance to keep up their incremental development as the human habitat. This is quite traumatic in China's urban development. The examples of vanishing communities in urban core and urban fringe areas take place often in the recent time. Conservation as an entirety does matter. Conservation is also more than a superficial facelift work. Residential area of historical towns is a very important component of heritage values and forms the unique urban fabric and community texture. This part should be taken into development consideration rather than ignored in plans. Objectives, mechanism and strategies of plans should be scheduled and reviewed, so as to coordinate conservation and development. Sadly, often in China, the significance of communities and residents as part of the legacy and creative engine to improve the city's identity and competition is not highly notified. When the community structure and demography drastically change, certain society is endangered to lose its meanings and authenticity. The city which is organized by cells of communities is then not interesting and attractive for an incremental growth and a sustainable existence. Therefore, be it renovation, retrofitting, regeneration or rejuvenation, keen and due attentions shall be given to the community and residents' familiar living environment. The historical town can only survive by distinguishing itself with its own heritage values, unique urban fabric and community texture as a living town. Therefore, historical town is supposed to function and work as any other towns. Conservation of the entirety and harmony of the urban grain and stable human settlement contributes to the city's competition.

Nevertheless, conservation not only aims to protect the old, but also encourages the new. It is the management of the past for an enabling future. How to create new legacy derived from the old is equally important. This relieves historical towns from the unnecessary constraints of being historical towns and unlocks development potentials. Exploring local development options is crucial to historical towns' identity. Efforts of heritage conservation and planning should go beyond the physical sense reflected merely by old buildings. The entirety of the urban grain and stable human settlement shall be conserved and presented. Heritage management should be expressed also in the way of neighbourhoods' empowerment and capacity enhancement in keeping their stable livelihoods. The indigenous communities should not be a conflict with new communities. Historical towns shall encourage diversity and creativity, but without compromising basic heritage conservation standards.

It is strongly recommended that a Strategic Urban Development Plan shall be established. As both a dynamic planning tool and framework, urban development activities can be coordinated via information exchange, resources mobilization and purposeful partnership. Its strategic and participatory nature ensures that those critical issues which are identified by stakeholders are given priority. This can efficiently supplement the comprehensive Master Plans which view urban development in a long term perspective. Such a strategic approach encourages the public's interest in conserving their living environment. It is very crucial the historical town is also a living town under the management of its own custodian. Thus it is attractive from within, boasting with its own irreplaceable ambience, people's identity and consolidated citizenship.

Adopting urban design guidelines as a tool to integrate cultural values in development is vital. Tailor-made urban design guidelines must be formulated in the historical towns' conservation and management. It should be legitimated at least at the local level. It shall be reviewed both with top-down and bottom-up approach and well embedded with Master Plan and Regulatory Plan. It would be a useful guiding tool for conservation activities as well as for setting a required professional level. The guidelines should explicitly define goals, aims, methods, measures, prioritized actions and required staff concerning heritage management and reinterpretation. It should, at least, ensure the minimum framework with a participatory approach. Clear mandates and responsibilities via participation should be defined to ensure their effectiveness.

As a conclusion of this volume of dissertation, the author uses Bender's philosophy again to echo the Prologue. Speaking of the spiritualisation of our environment, he emphasised the existence of inner forces of human being. Our environment and the existing stance of us are mutually and deeply influencing each other. 'This is profoundly true in the realm of how we conceive and change our surroundings. As a new consciousness of the nature of our universe and our role in it emerges, we find new alignment and new meanings

becoming visible within what we already know, transforming it, and us, and showing us ways that the knowing and shaping of our surroundings must take if they are to reconnect us with the things that shape and give meaning and beauty to our lives.' (Bender, 1975: 192)

List of Figures

2.1	Research Design	23
2.2	Conceptual Framework	28
3.1	Geographical location of Xi'an and Foshan city [Source: Sit, 2005: 119] . .	35
3.2	City and town distribution in Pearl River Delta region [Source: Self-modified based on http://commons.wikimedia.org/wiki/File:Pearl_River_Delta_Area.png accessed in April, 2008]	36
3.3	The geographical location and natural condition of Magang settlement [Source: The Urban Development Centre of Shunde District, Foshan city, 2006]	38
3.4	Data collection concept [Source: Self-modified according to Madden K., 2001]	39
3.5	Public open space system and selection of the four survey sites [Source: Beijing University, 2006]	41
4.1	Plan of Ming Tang (or Bright Hall) of Han Dynasty excavated in Xi'an. [Source: Liu, 1980 in Sit, 1995: 15]	47
4.2	Tang Dynasty Chang'an plan of the 7th century comprising 108 wards. [Source: Steinhardt, 1990: 11]	50
4.3	Spatial Organization of the Chinese City [Source: Sit, 1995: 117]	51
4.4	Evolution of China's urban planning	53
4.5	Distribution pattern of residences of ancient imperial city Xi'an [Source: Kaogu 1963 in Schinz (1996: 191)]	59
4.6	Distribution pattern of public spaces of ancient imperial city Xi'an [Kaogu 1963 in Schinz (1996: 192)]	60
4.7	Plan for Xi'an (1980-2000) [Source: Wu 1993: 283]	63
5.1	Spatial structure of Magang settlement [Source: Beijing University 2006] .	66

5.2	Magang settlement typology [Source: Self-modified based on Beijing University, 2006]	67
5.3	Partial bus system of Magang's linear settlement [Source: Beijing University, 2006]	67
5.4	Public open space system of Magang settlement [Source: Own graphic based on the site survey and base plan of Magang settlement, 2008]	70
5.5	Spatial articulation of four survey sites with the road network [Source: Beijing University, 2006]	74
5.6	Spatial articulation of four survey sites with physiological surroundings [Source: Self-modified based on Beijing University, 2006]	75
5.7	Major land use distribution of Magang settlement [Source: Beijing University, 2006]	76
5.8	Magang settlement global Integration, radius=n [Source: Own graphic based on the axial map analysis of Magang settlement, 2009]	77
5.9	Magang settlement local integration, radius=3 [Source: Own graphic based on the axial map analysis of Magang settlement,2009]	78
5.10	Global integration, radius=n [Source: Own graphic based on the axial map analysis of Magang settlement, 2009]	79
5.11	Local integration, radius=3 [Source: Own graphic based on the axial map analysis of Magang settlement, 2009]	80
5.12	Global mean depth indicator, radius=n [Source: Own graphic based on axial map analysis of Magang settlement, 2009]	81
5.13	Local mean depth indicator, radius=3 [Source: Own graphic based on axial map analysis of Magang settlement, 2009]	81
5.14	Public space distribution and typology around Lu Wu Ling Temple [Source: Fieldwork results and own photographs, 2008]	86
5.15	Movement pattern of Site 1 - Lu Wu Ling Temple-affiliated public space [Source: Fieldwork results and own photographs, 2008]	88
5.16	Public space distribution and typology around Xian Dragon Hall-adjacent public open place [Source: Fieldwork results and own photographs, 2008]	94
5.17	Movement pattern of Site 2 - Xian Dragon Hall-affiliated public place [Source: Fieldwork results and own photographs, 2008]	96
5.18	Public space distribution and typology of Wen Wu Emperor Temple and Shi Zhou Temple-centred public open place [Source: Fieldwork results and own photographs, 2008]	102

5.19	Movement pattern of Site 3 - Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public open place [Source: Fieldwork results and own photographs, 2008]	104
5.20	Public space distribution and typology around Family Feng Temple-affiliated public open place [Source: Fieldwork results and own photographs]	108
5.21	Movement pattern of Site 4 - Family Feng Temple-affiliated public open place [Source: Fieldwork results and own photographs, 2008]	112

List of Tables

3.1	Observation as data collection techniques [Source: Own concept development, 2007]	43
5.1	Comparison of the road density of Magang settlement and the national standard [Source: Own calculation based on Ministry of Construction, P.R. China (2002) and the settlement base plan, 2008]	72
5.2	Typology of public open space of Magang settlement [Source: Own graphic based on the settlement survey, 2008]	73
5.3	Physiological environmental setting of Lu Wu Ling Temple-affiliated public open place [Source: Fieldwork results, 2008]	84
5.4	Rapid place performance evaluation of Lu Wu Ling Temple-affiliated public space [Source: fieldwork results, 2008]	85
5.5	Land use parameter of public open space around Lu Wu Ling Temple-affiliated public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]	86
5.6	Behavior mapping of Lu Wu Ling Temple-affiliated public space (Total Survey Area: 4,992 m ²) [Source: Fieldwork results, 2008]	89
5.7	Physiological environmental setting of Xian Dragon Hall-affiliated public space [Source: Fieldwork results, 2008]	91
5.8	Place performance rapid evaluation of Xian Dragon Hall-affiliated public space [Source: Fieldwork results, 2008]	92
5.9	Land use parameter of public open space around Xian Dragon Hall-affiliated public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]	94
5.10	Behaviour mapping of Xian Dragon Hall-affiliated public place (Total Survey Area: 6,255 m ²) [Source: Fieldwork results, 2008]	97
5.11	Physiological Environmental Setting of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public space [Source: fieldwork results, 2008]	99

5.12	Place performance rapid evaluation of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public space [Source: Fieldwork results, 2008]	101
5.13	Land use parameter of public open space of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]	102
5.14	Behaviour mapping of Wen Wu Emperor Temple and Shi Zhou Temple-affiliated public open place (Total Survey Area: 6,142 m ²) [Source: Fieldwork results, 2008]	105
5.15	Physiological environmental setting of Family Feng Temple-affiliated public space [Source: Fieldwork results, 2008]	106
5.16	Place performance rapid evaluation of Family Feng Temple-affiliated public place [Source: Fieldwork results, 2008]	107
5.17	Land use parameter of public open space around Family Feng Temple-centred public open place [Source: Own calculation based on site survey and base map of Magang settlement, 2008]	108
5.18	Behaviour mapping of Family Feng Temple-affiliated public open place (Total Survey Area: 5,703 m ²) [Source: Fieldwork results, 2008]	113
6.1	Summary of the key spatial elements of Magang settlement [Source: Fieldwork analysis results, 2009]	116
6.2	Summary of public activity space land use parameters of the settlement [Source: Own calculation based on fieldwork results and analysis, 2009]	117
6.3	An example of potentials of generating additional public open space at the neighbourhood level [Source: Own calculation based on Ministry of Construction, P.R.China (2002), 2009]	125

Bibliography

The following literature have been directly cited or referred in this dissertation:

- Adler, P. A. & Adler P. (1998)** *Observational Techniques* in Denzin N.K. und Lincoln Y.S. *Collecting and Interpreting Qualitative Materials*, SAGE Publication, London.
- Ashworth, G. (2006)** *Let's Use Our Pasts to Shape Our Future: Between Contradiction and Synergy* in Schröder-Esch und Ulbricht (ed.) *The Politics of Heritage and Regional Development Strategies*, Bauhaus-Universität, Weimar.
- Bender, T. (1976)** *Environmental Design Primer*, Shoken Books, New York.
- Broudehoux, A. (2004)** *The Making and Selling of Post-Mao Beijing* Routledge, New York.
- Campanella, T. (2008)** *The Concrete Dragon*, Princeton Architectural Press, New York.
- Carmona, M., Heath T. and Tiesdell S. (2003)** *Public Space, Urban Space*, Architectural Press, UK.
- Cuthbert, A.R. (2006)** *The Form of Cities: Political Economy and Urban Design*, Blackwell Publishing, Australia.
- Du, J. (2009)** *The lack of Heritage in Chinese Planning: A Perspective on Heritage and Chinese Urban Planning* in Eckardt F. and Nyström L. (ed.) *Culture and the City*, 555-584, BWV Berliner Wissenschafts-Verlag.
- Friedmann, J. (2005)** *China's Urban Transition*, University of Minnesota Press.
- Harvey, D. (1973)** *Social Justice and the City*, Arnold, London.
- He, D. and Zhao, M. (1999)** *On Political and Economic Base of Public Participation in Urban Planning and Its institutional Arrangement* (in Chinese) in Journal of Urban Planning Forum, 1999 (5) 31-34, Tongji University, Shanghai.

- Heng, C.K. (2006)** *A Digital Reconstruction Tang Chang'an*, Architectural and Industrial Publishing House, Beijing.
- Hillier, B. and Hanson, J. (1984)** *The social logic of space*, Cambridge University Press.
- Hillier, B. (2007)** *Space is the Machine: A Configurational Theory of Architecture Space Syntax*, London.
- Jacobs, A. (1995)** *Great Streets*, MIT Press.
- Jacobs, J. (1961)** *The Death and Life of Great American Cities*, Random House, New York.
- Joseph, B. (2005)** *The Code of the City: Standards and the Hidden Language of Place Making*, MIT Press.
- Ju, J.S. (1998)** *A Primary Integration Matrices Approach to Sustainability Orientated Land Use Planning In China*, Institut für Raumordnung und Entwicklungsplanung der Universität Stuttgart.
- Judith, B. (2005)** *Doing Your Research Project*, Open University Press, New York.
- Keng, C. W. (2006)** *China's Unbalanced Economic Growth* in *Journal of Contemporary China* (2006), 15(46), February, 183-214, Routledge.
- Lang, J. (1994)** *Urban Design: The American Experience*, A division of International Thomson Publishing Inc.
- Laundry, C. (2000)** *The Creative City: A Toolkit for Urban Innovators*, Earthscan/James & James, UK.
- Lynch, K. (1960)** *The Image of the City*, MIT Press.
- Lynch, K. (1962)** *Site Planning*, MIT Press.
- Ma, L. and Wu, F. (2005) (ed.)** *Restructuring the Chinese City: Changing Society, economy and Space* Routledge, Abingdon, Oxon.
- Madden, K. (2001)** *How to Turn a Place Around - A Handbook for Creating Successful Public Spaces*, Project for Public Spaces, Inc., New York.
- More, T. (1965)** *Utopia* (original version in 1516), Harmondsworth: Penguin.
- Pinder, D. (2006)** *Visions of the City*, Edinburgh University Press, Edinburgh.

- Roberts, M. (2001)** *Area analysis* in Roberts M. and Greed C. (2001) (ed.) *Approaching Urban Design*, 57-73, Pearson Education Limited, UK.
- Rogers, R. (1997)** *Cities on the Small Planet*, Faber & Faber Limited, London.
- Schinz, A. (1996)** *The Magic Square: Cities in Ancient China*, Edition Axel Menges, Stuttgart.
- Schulz, C.N. (1971)** *Existence, Space and Architecture*, Studio Vista, London.
- Shen, J. (2005)** *Space, Scale and the Sate: Reorganizing Urban Space in China* in Ma L. and Wu F. (ed.) *Restructuring the Chinese City: Changing Society, Economy and Space*, 39-57 Routledge, Abingdon, Oxon.
- Sit, V. (1995)** *Beijing - the Nature and Planning of a Chinese Capital City*, John Wiley & Sons, Chichester.
- Soule, J. (July 30, 2005)** *Beijing's Urban Form Should Reflect Its History* in *China Daily*, Beijing.
- Stake, R.E. (1998)** *Case Studies* in Denzin N.K. and Lincoln Y.S. *Strategies of Qualitative Inquiry*, 86-109, SAGE Publication, London.
- Steinhardt, S.N. (1990)** *Chinese Imperial City Planning*, University of Hawaii Press, Honolulu.
- The Graduate School of Landscape Architecture, Beijing University (2006)** *The Conceptual Plan and Design of Magang Settlement* (in Chinese), unpublished.
- The Urban Development Centre, Shunde District, Foshan City (2006)** *The Detailed Control Plan of Yunjin, Da Liang, Shunde District* (in Chinese), unpublished.
- Trancik, R. (1986)** *Finding the Lost Space: Theories of Urban Design*, Van Nostrand, Reinhold Company, US.
- Vidler, V. (1976)** in M. Larice & Macdonald E. (2006) (ed.) *The Urban Design Readers*, 251-255, Routledge.
- Wagner, G.R. (2000)** *The Moral Centre and The Engine of Change - A Tale of Two Chinese Cities* in Vöckler, K. und Luckow, D. *Peking Shanghai Shenzhen - Städte des 21 Jahrhunderts*, Campus Verlag, Frankfurt/ New York.
- Wu, W.J. (1993)** *Stadtgestalt und Stadtgestaltbedeutung - Ein Vergleich and Beispielen aus China und Westeuropa*, PhD dissertation of the Technical University München.
- Yin, R.K. (1994)** *Case Study Research*, SAGE publications, Inc., U.S.

Yu, K. (2006) *Rescuing a Village: The Approach of Landscape Security Patterns in China Urban Planning Forum*, 38-45, Volume 5.

Zhang, L.L. and Zhang, G.Z. (2004) *Struktur und Wandel des Öffentlichen Raums in Shanghai* in Hassenpflug. D. (ed.) *Die aufgeschlossene Stadt*, Tongji University, Shanghai.

Zhou, J. (2005) *Study on Planning Control and Guide upon Urban Public Space Development* (in Chinese), Architectural and Industrial Publishing House, Beijing.

The following publications are not directly cited in the dissertation. However, their contributions are equally significant to the development of this research.

Appleyard, D. (1982) *Livable Street*, University of California Press.

Barnett, J. (1974) *Urban Design as Public Policy*, Architectural Record, New York.

Broadbent, G. (1996) *Emerging Concepts in Urban Space Design*, E&FN Spon, London.

Chan, B. (2005) *New Architecture in China*, Merrell Publishers Limited, London/ New York.

Cullen, G. (1961) *Townscape*, Architectural Press, London.

Davis, D. (2000) (ed.) *The Consumer Revolution in Urban China*, University of California Press.

Dawson, L. (2005) *China's New Dawn : An Architectural Transformation*, Prestel, New York.

Eckardt, F. and Hassenpflug, D. (2003) (eds.) *Consumption and the Post-Industrial City*, Peter Lang Publishers, Frankfurt /New York.

Flyvbjerg, B. (2001) *Making Social Science Matter - Why Social Inquiry Fails and How It Can Succeed Again*, Cambridge University Press

Freestone, R. (2000) (ed.) *Urban Planning in A Changing World*, Routledge, New York.

Frey, H. (1999) *Designing the City: Towards a More Sustainable Urban Form*, E&F Spon, London.

Fyee, R.N. (1998) (ed.) *Images of the Street - Planning, Identity and Control in Public Space*, Routledge, London.

Gibberd, F. (1967) *Town Design*, Praeger Publishers, New York.

Heng, C.K. (2006) *A Digital Reconstruction Tang Chang'an*, Architectural and Industrial Publishing House, Beijing.

Jan, G. (1987) *Life Between Buildings: Using Public Space*, Van Nostrand, Reinhold.

Jiang, Z.Q., Ma, L. and Wu, J. (May 15, 2006) *Cities' New Efforts to Protect Historic Sites*, China Daily.

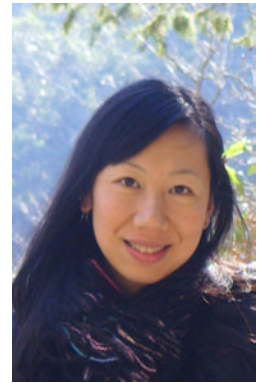
- Kuhn, T. S. (1996)** *The structure of Scientific Revolution* (3rd ed.), University of Chicago Press.
- Larkham, P.J. (1995)** *Heritage as Planned and Conserved* in Herbert, D.T (ed.). *Heritage, Tourism and Society*, Mansell Publishing Limited.
- Laundry, C. (2006)** *The Art of City Making*, Earthscan/ James & James, UK.
- Lefebvre, H. (1991)** *The Production of Space*, Blackwell Publishing.
- Lin, J. (1998)** *Reconstructing Chinatown: Ethnic Enclave, Global Change*, University of Minnesota Press.
- Logan, J. (2002) (ed.)** *The New Chinese Cities*, Blackwell Publishers Inc., Massachusetts.
- Lynch, K. (1972)** *What Time is This Place*, MIT Press.
- Moughtin, C. (1992)** *Urban Design: Street and Square*, Department of Architecture and Planning University Nottingham.
- Mumford, L. (1989)** *The City in History: Its Origin, Its Transformation and Its Prospects*, Harcourt Brace Jovanovich Publishers, New York.
- Nairn, I. (1955)** *Outrage*, Architectural Press, London.
- Rapoport, A. (1977)** *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design*, Pergamon Press, Oxford.
- Ren, Z.Y. (2000)** *Briefing the Historical Mission of Chinese Comprehensive Plans* (in Chinese) in *Planner*, No.4, p. 84-88.
- Schubert, D. (2000)** *The Neighbourhood Paradigm: From Garden Cities to Gated Communities* in Freestone R. (ed.) *Urban Planning in a Changing World*, Routledge, New York.
- Southworth, M. and Ben-Joseph, E. (1996)** *Streets and The Shaping of Towns and Cities*, McGraw-Hill Inc., U.S.
- Southworth, M. and Banerjee, T. (1991)** *City Sense and City Design: Writings and Projects of Kevin Lynch*, MIT Press.
- Stevens, T. (1995)** *Heritage as Design: A Practitioner's Perspective* in Herbert D.T (ed.) *Heritage, Tourism and Society*, Mansell Publishing Limited.
- Stevens, Q. and Franck, K. (2007) (ed.)** *Loose Space: Possibility and Diversity in Urban Life*, Routledge, London/ New York.

- Stevenson, D. (2003)** *Cities and Urban Culture*, Open University Press, U.K.
- The Bartlett School of Graduate Studies (1997-98)** *A Simple Guide to Space Syntax Analysis and Quick Reference Computer Manual for Students*, London.
- Tibbalds, F. (1992)** *Making People-friendly Towns: Improving the Public Environment in Towns and Cities*, London Longman Group Ltd.
- Weber, M. (1986)** *The City*, Free Press, 2nd Revised edition.
- Whyte, W. (1980)** *The Social Life of Small Urban Spaces*, The conservation Foundation, Washington D.C.
- Whyte, W. (1993)** *Street Corner Society: The Social Structure of An Italian Slum* (4th edition), University of Chicago Press.
- Xu, J.Z (1995)** *A Review of Urban Planning in China in the 1980s* in *Journal of China City Planning Review*, Volume 11, No. 2.

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Veröffentlichungen

2009 Du, J. *The History is not the Heritage – a Perspective of heritage and Chinese Urban Planning in Culture and the City*, F. Eckardt/ L. Nyström (ed.), Berliner Wissenschaftsverlag BWV, S. 555-584.

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2008 Du, J. & Prelovsek, E. *Great Streets and Quality Urban Life – Re-inventing Streets as Places in Turku, the European Capital for Culture 2011* Ilmavirta, T. (ed.) in *Regenerating Urban Core*, Helsinki University of Technology, Centre for Urban and Regional Studies, S. 131-135.

2008 Du, J. *Housing Stock Conservation for a Sustainable Urban Core – A Reflection of Zanzibar Stone Town's regeneration Case* Ilmavirta, T. (ed.) in *Regenerating Urban Core*, Helsinki University of Technology, Centre for Urban and Regional Studies, S. 58-73.

- 2008 Du, J. *China's Utopias in its Urban Development*, Verlag für moderne Kunst Nürnberg. (wird bald veröffentlicht)
- 2004 Cheng, G.Z. & Du, J. *The Prediction of Construction Control Plan of Deep Foundation Pit Excavation in Ausgewählte Beiträge zu aktuellen Themen der Ingenieurgeologie und Hydrogeologie*, Rheinisch-Westfälische Technische Hochschule (RWTH), Aachen, Deutschland, S. 81-94.

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