

Townscape Character Assessment and Interpretation for the Protection of Historic Urban Landscape Values for the Public:

Case Studies of Two Historic Areas in Xi'an, China

By

Xingyue Du

A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

The University of Sheffield

Faculty of Social Science

The School of Architecture (SOA)

September 2023

Look to Shenzhen for a 20-year-old China; look to Shanghai for a 100-year-old China; look to Beijing for a 1000-year-old China; and look to Xi'an for a 5000-year-old China.(Shi, 2016)

Abstract

The rapid urbanisation and globalisation processes in China over the last two decades have changed the historical environment of its urban heritage. In this context, the Chinese authorities have given priority to 'townscape character' (Chinese: Fengmao) management to preserve the tangible and intangible aspects of urban heritage sites. Townscape character in the Chinese context includes the comprehensive visual expression of historical and cultural values in urban and rural landscapes. Townscape character is usually assessed, identified and conserved by experts based on conservation plans at multiple scales. However, the study of townscape character and its values should be more diverse and inclusive, in order to grasp the plurality of the heritage site from the perspectives of the people who use it. Over the decades, effective public participation has always been a goal of urban planning in China. There is an urgent need to find appropriate ways to listen to the voices of the public beyond the experts. This research responds to the need for including public's opinions in urban heritage conservation, by examining the townscape character of two historic areas and the particular values they have for the public.

This thesis focuses on the study of two historic areas, namely the Small Wild Goose Pagoda (SWGP) area and the Giant Wild Goose Pagoda (GWGP) area, in Xi'an city, China. A qualitatively dominant mixed-methods study was designed to investigate how the townscape character of historic areas in Xi'an is perceived and valued by the public. This mixed-methods research consists of five datasets: the townscape character management related policy documents, interviews with policymakers, social media data on the research sites, a questionnaire survey and a focus group with the visitors. The data are analysed according to four themes: (1) an examination of urban heritage townscape character

management in China, including an analysis of how the authorised landscape values are

formed, and the theories underpin them; (2) an exploration to identify the valued Historic

Urban Landscape elements in the Chinese context; (3) a study of how people perceive and

experience townscape; and (4) a discussion of people's strategies for preserving townscape

character in historic areas.

The results of the four themes are presented from Chapter 4 to Chapter 7. The results of

this research (1) present the concepts, dilemmas and policymakers' needs for townscape

character management for urban heritage sites, (2) understand the Historic Urban

Landscape elements and their values to the visitors in context; (3) reveal the cultural

background and contextualise people's visual experiences in the space; and (4) provide

conservation suggestions based on people's narratives. Based on the overall research

findings, this research has led to an inclusive and dynamic understanding of the way people

perceive and value townscape character in historic areas in China. This research also has

provided recommendation for the communication between experts and the public on urban

heritage conservation.

Keywords: Townscape Character, Historic Areas, Public Participation

II

Foreword

I studied at universities in two historic cities, Xi'an and Nanjing. These two cities particularly aroused my interest in urban heritage conservation. I have visited historic villages and cities with outstanding natural and cultural landscapes as well as modern urban buildings. Identifying the unique townscape character and preserving historical and cultural values during the rapid urbanisation process has always been a major concern of urban development.

I believe that urban planners must have two qualities. Firstly, they must appreciate the role that both historical and future events have on the blueprint of a city. Secondly, they should be able to understand the opinions of different groups of people and reconcile the demands of different government departments (e.g., transportation, public utilities, water resources and cultural relic bureaus) by which urban development strategies are compiled. I still remember my first class at university, when a professor said that the most important responsibility of an urban planner is to represent the public; therefore, urban planners strive for equality instead of trying to satisfy the interests of powerful people. When I was about to graduate, another professor quoted Zhai Zai, the Song dynasty philosopher, to explain the duties of urban planners:

To ordain conscience for Heaven and Earth. To secure life and fortune for the people. To continue lost teaching for past sages. To establish peace for all future generations.

In other words, urban planners should have a Confucian's benevolent heart, to teach people (idea of Daoism) and ensure the quality of life of the public. Learning from historical knowledge, planners may create a spiritual home for the confused modern people. The great ideas in history may shed light for future development. The four sentences appear idealistic, but certainly rather touching, which gave me my interest in investigating historic values in heritage and understanding – as much in my heart as in my mind – what people think and feel.

In practice, I involved myself in some planning related to the conservation of historic cities as well as urban design projects. I conducted my postgraduate research related to the historical background and morphological evolution of historic cities in Southeast Asian, and their interactions in a huge region called the Great Mekong Basin. During these years, I found that the assessment and presentation of *Fengmao* (translated as townscape character) is a crucial concept in heritage conservation plans, but there is a lack of investigation of people's real experiences and perceptions. This made me more convinced to explore townscape character from the people's perspective – especially the way people value cultural history. Thus, I applied to my PhD at the University of Sheffield to study townscape character in historic areas. I imagined myself to be the 'go-between' for the public and urban planning policymakers.

I chose the two historic areas in Xi'an. I first visited the place in 2009 as a lay person without any professional knowledge related to architecture and urban planning. During my visit, I felt like I was walking into a Chinese history book. As a student in the southwest of China, which is far away from central Chinese culture, I suddenly remembered those difficult history lessons in high school. Over the past fifteen years, the two historic areas have changed and I have visited the places many times, as a lay person, a planner, a tourist or a resident – my identity to the city is also changing. I have a feeling that the place could present history, teach people morality and spirituality, and bring people's hearts together through history, just like Zhang Zai's ideal world in his four sentences. During the investigation for this research, I became more convinced of this. We view and understand the historic areas in a particular Chinese way based on our historical and cultural background, which is also reflected in the urban space. I hope that the understanding of the way people perceive and value townscape character in this study will help with the determination of future policy related to townscape character, and the compiling of innovative and characteristically Chinese planning projects.

Acknowledgement

During my PhD, I have received support from many people. First, I would like to thank my supervisors, Dr Krzystof Nawratek and Dr Isaiah Durosaiye, for their insightful supervision and encouragement throughout the writing of this thesis. I would also like to thank Dr Claudia L. Rojas Bernal and Dr Dong Wei for the guidance I received from them. In addition, I would like to acknowledge Dr Peter Keogh for helping me with academic writing in English. Thank you to Fiona Barnett for proofreading this thesis. Many thanks to my PhD colleagues Madihah, Sheng, Tongfei and Fangjie for all their kind help.

Finally, I would like to take this opportunity to express my gratitude to my parents, husband and friends. Thanks to Yan, Hong, Yulin, Fangfang, Yun, Yi and Seth for your support and company during the writing process.

Table of Contents

Abstract	I
Foreword	
Acknowledgement	V
Table of Contents	VI
List of Tables	XI
List of Figures	XII
Chapter 1: Introduction	1
1.1 Definition of Key Terms	1
1.1.1 Urban Heritage	1
1.1.2 Townscape Character	4
1.1.3 UNESCO's HUL Recommendations	8
1.2 Research Context and Statement of Problem	8
1.3 Significance of the Research	14
1.3.1 Theoretical Significance	14
1.3.2 Methodological Significance	15
1.4 Research Questions and Objectives	16
1.5 Structure of the Thesis	18
Chapter 2: Literature Review	21
2.1 Heritage Conservation Theories, Principles and Methods	21
2.1.1 Values and Significance	22
2.1.2 Authenticity/Integrity	23
2.1.3 Appropriate Use and Methods of Interpretation and Presentation	25
2.1.4 Historic Urban Landscape Approach	
2.1.5 Heritage Discourse Analysis	31

2.2 Themes in Townscape Character Assessment (TCA) Theory	32
2.2.1 Visual Experience and Local Culture	32
2.2.2 Factors of Visual Perception	37
2.2.3 Visual Character Framework	38
2.3 Summary	41
Chapter 3: Methodology	42
3.1 Case Selection and Background	42
3.1.1 The Historical Context of Xi'an City	42
3.1.2 The Two Research Sites	44
3.2 Research Paradigm	59
3.3 Research Design	61
3.3.1 Dataset A: Interviewing the Policymakers	64
3.3.2 Dataset B: Photos and Text from a Social Media Platform	65
3.3.3 Dataset C: The Questionnaire Survey	72
3.3.4 Dataset D: Focus Group	74
3.4 Framework Analysis and Interpretation of Material	76
Chapter 4: The Policymakers' Concerns	79
4.1 China's Townscape Protection Ordinance and Conservation Plans	80
4.1.1 Hierarchical Top-Down Protection Ordinance	80
4.1.2 Townscape Character Management in the Conservation Plans	84
4.1.3 Process and Content of Townscape Character Assessment (TCA)	99
4.2 Townscape Character Management and Assessment in Practice	102
4.2.1 Experts' Definitions of Townscape Character	102
4.2.2 Dealing with Visible Landmarks and Hidden Urban Patterns	104
4.2.3 Legible Presentation of Historical and Cultural Values	107
4.2.4 Pursuing Balance between Rigid and Elastic Requirements	109
4.3 Reflection on the Management of Townscape Character	111
4.3.1 Conflicts among the Government Ministries and the Structured Protection Paradigm	111
4.3.2 Identifying Cultural Values Rather Than Pursuing Artistic Beauty	113
4.3.3 Lack of Zoning Criteria	114
4.3.4 Paying Attention to Public Opinion	117

4.4 Summary: Policymakers' Future Needs	120
Chapter 5: Elements of the Historic Urban Landscape	123
5.1 General Description of Microblog and Questionnaire Data	123
5.1.1 Top Ten Hashtags of Each Month	123
5.1.2 Top 1,000 Microblogs of the Two Sites	130
5.1.3 The Questionnaire Survey	134
5.2 Perceived Tangible and HUL Elements	138
5.2.1 Natural Systems, Geomorphology, Hydrology, and Topography	138
5.2.2 Land Uses, Patterns, Clusters and Spatial Organisation	142
5.2.3 Visual Relationships of Regions	144
5.2.4 Different Types of Vegetation	147
5.2.5 Circulation and Transportation Routes	149
5.2.6 Mass, Scale, Form and Details of Buildings	152
5.2.7 Water Features, Bridges and Walls	157
5.2.8 Urban Art, Sculpture and Site Furnishings	159
5.3 Perceived Intangible Elements of the HUL	161
5.3.1 Festivals and Rituals	161
5.3.2 Traditional Music, Dance and Performance	163
5.3.3 Spiritual Worship	167
5.3.4 Iconic Shared Places, and Symbols that Embody the Shared Urban Image	172
5.3.5 Places of Memory and Commemoration of Past Events	174
5.3.6 Local Cuisine	175
5.3.7 Traditional Arts and Crafts and Workplaces	176
5.4 Summary: Perceived Elements of the HUL in the Chinese Context	177
Chapter 6: People's Perceptions of Townscape Values and Their Connotation	ıs179
6.1 Cultural Background Affecting People's Perception and Understanding of	Townscape
Values	179
6.1.1 Philosophical Background: Three Teachings	179
6.1.2 Great Literature and Art	
6.1.3 Key Concepts in the Cultural Background	189
6.2 On-Site and Virtual Experiences of Historic Areas	191
6.2.1 On-Site Activities and Experiences	
6.2.2 Virtual Experience: Online Games, Movies and Television Series	10/

6.3 Relationships between Historic Sense and Other Visual Characters	202
6.4 Comparisons among Different Cultural Groups	210
6.4.1 Comparison between Tourists and Residents	210
6.4.2 Comparisons between Experts and Lay People	212
Chapter 7: Narratives on Townscape Conservation based on the Past, Preser	าt and Future
	214
7.1 Heritage Views on History and Modernisation	214
7.1.1 The Meaning of Heritage	215
7.1.2 Attitudes to Old and New Construction	215
7.1.3 Comparisons of Conservation Ideologies	218
7.2 Reflections on the Current Situation	220
7.2.1 Townscape Character and the Internet Celebrity City	220
7.2.2 From Large-Scale Leapfrog to Small-Scale Incremental Regeneration	223
7.3 Suggested Ways of Inheriting Cultural Heritage Values	224
7.3.1 Disseminated and Actively Learnt Values	224
7.3.2 Preserving Local Elements	225
7.3.3 Cultural Industry and Cultural Creation	226
7.3.4 Stimuli and Novel Experiences	228
7.3.5 Educating the Next Generation	229
7.4 Summary: Resonating with Conservation Principles	229
Chapter 8: Discussion and Conclusion	23 3
8.1 Research Questions, Objectives and Findings	233
8.2 Recommendation on Townscape Character Management (TCM) of Historic	Areas237
8.3 Recommendations for the Communication between Experts and the Public	:239
8.3.1 Who Owns the Power	239
8.3.2 What Can Be Provided?	240
8.3.3 Recommendations: How to Communicate	241
8.4 Contribution of the Research	243
8.5 Limitation of the Research and Future Research Areas	245

	8.5.1 Interview Data	245
	8.5.2 Focus Group Data	
	8.5.3 Social Media Data	
	8.5.4 The Mixed-methods Research	
8.0	6 Summary	249
Refe	rences	251
Арре	endix A: List of Abbreviations	264
Арр	endix B: Top Ten Hashtags Per Month in the SWGP Area	265
Appe	endix C: Top Ten Hashtags Per Month in the GWGP Area	266
Appe	endix D: Glossary of Terms	267
Appe	endix E: Interview Questions with Policymakers (English Version)	272
Appe	endix F: The Questionnaire (English Version)	275
Appe	endix G: Focus Groups Questions (English Version)	284
Appe	endix H: Results of T-test Analysis	288

List of Tables

Table 2.1 The HUL Elements Checklist (O'Donnell and Turner, 2012)	. 27
Γable 3-1 Relationships of datasets	. 63
Γable 3-2 Data-collecting techniques	. 63
Γable 3-3 Matrix of interviewees	. 65
Γable 3-4 Analytic framework of the questionnaire survey	. 73
Table 3-5 The demographic information of focus group participants	. 75
Гable 4.1 Legislative system of heritage conservation in Xi'an	. 83
Table 5.1 Perceived elements and qualities in the SWGP area	131
Table 5.2 Perceived elements and qualities in the GWGP area	132

List of Figures

Figure 1-1 Photos of Beijing, Guangzhou, Shanghai and Shenzhen
Figure 1-2 Research structure
Figure 2-1 Clustering the appearance time of keywords
Figure 3-1 Changing locations of the ancient capitals in Xi'an city (Source: the author) 42
Figure 3-2 Location of Xi'an in China (Source: the author)
Figure 3-3 Master Plan of Xi'an, 2004–2020
Figure 3-4 The Small Wild Goose Pagoda and Giant Wild Goose Pagoda (Source: the author)
Figure 3-5 Location of the two research sites (Source: the author)
Figure 3-6 Building age map of SWGP area (Source: the author)
Figure 3-7 Building age map of GWGP area (Source: the author)
Figure 3-8 Building height model (number of floors) of the two pagoda areas (Source: the author)
Figure 3-9 Demolishing buildings for the regeneration
Figure 3-10 Master Plan of urban regeneration (Source: Implementation Plan of the reconstruction project of SWGP Historic Area)
Figure 3-11 Land use and photos of SWGP area (Source: the author)

Figure 3-12 Land use and photos of GWGP area (Source: the author)
Figure 3-13 Visibility area of the key viewpoints in the traditional axis of the SWGP 55
Figure 3-14 Visibility area of the key viewpoints in the traditional axis of the GWGP 56
Figure 3-15 Where the pagoda can be viewed in the SWGP area
Figure 3-16 Where the pagoda can be viewed in the GWGP area
Figure 3-17 Data collection methods
Figure 3-18 Microblog from Xi'an Municipal Museum's official microblog 69
Figure 3-19 Each Research objective corresponding to the data-sets
Figure 4-1 Townscape character management in China
Figure 4-2 Laws and regulation system in China
Figure 4-3 China's urban conservation plan system
Figure 4-4 Urban heritage conservation pattern of Xi'an city
Figure 4-5 Planning structure of Xi'an city characteristic public spaces
Figure 4-6 Planning structure of Xi'an city cultural belts and areas
Figure 4-7 Planning structure of Xi'an City functional areas
Figure 4-8 Planning structure of Xi'an City open spaces
Figure 4-9 Height control of Small Wild Goose Pagoda (SWGP) area

Figure 4-10 Height control of Giant Wild Goose Pagoda (GWGP) area
Figure 4-11 Colour control of roofs (left) and walls (right) in the two research areas 97
Figure 4-12 Architectural designs based on Tang dynasty context
Figure 4-13 Flow chart of the conservation process (ICOMOS, 2015)
Figure 4-14 Pictures depicting Lingering Charm (Source: Baidu Photos)
Figure 4-15 Walls and main axis during the Tang dynasty (Source: the author) 106
Figure 4-16 Landmarks in the axes (Chen, 2011)
Figure 4-17 Yards of the SWGP (Source: Wensi's microblog)
Figure 5-1 Tag cloud of the SWGP area
Figure 5-2 Tag cloud of the GWGP area
Figure 5-3 Data of number of pictures with each HUL element in people's photos on social media
Figure 5-4 Data of number of pictures including people and HUL elements on social media
Figure 5-5 Visitors information at the research sites
Figure 5-6 People's satisfaction with the research sites
Figure 5-7 Mean HUL element Likert scores
Figure 5-8 Mean visual characters Likert scores

Figure 5-9 Territory map of Xi'an (Source: Chronicle of Chang'an city (Song, 1076). 139
Figure 5-10 Qinling Mountain and sky in the background (Source: R11)
Figure 5-11 Modern constructions and the pagoda (Source: R11)
Figure 5-12 Photos related to natural elements (Source: Official microblog of Xi'an Museum, Steed's microblog, and R11)
Figure 5-13 Presentation of Chang'an city map and model in Xi'an Museum (Source: author)
Figure 5-14 North and south views on the pagoda (Source: Gezi's mircroblog) 146
Figure 5-15 Photos of vegetation and animals (Source: Official microblog of Xi'an Museum, the official microblog of Qvjiang Cultural Tourism, and the author)
Figure 5-16 Design of Nanshao Gate Metro Station (Source: the author)
Figure 5-17 Microblog describing how to build GWGP (Source: Official microblog of iArc.)
Figure 5-18 Three pagodas and Yingxian Wooden Pagoda (Source: Zhahaozhe Alliance's microblog)
Figure 5-19 Presentation of Xi'an Museum (Source: author)
Figure 5-20 Views on the roof of the mall (Source: R12 and the author)
Figure 5-21 Main water features of the two research sites (Source: Official microblog of Xi'an Museum and Chinese Business View)
Figure 5-22 Site furnishings (Source: author)

Figure 5-23 Photos related to the festival and ritual (Source: Official microblog of Xi'an
Museum and R12)
Figure 5-24 Performances in the street (Source: author)
Figure 5-25 Performances (Source: Official microblog of Shaanxi Tourism and the author)
Figure 5-26 Portrait of Xuanzang with Ji (Source: Looking the Future form the Past's microblog account)
Figure 5-27 Sculpture of the monkey Sun (Source: author)
Figure 5-28 Typical photos of GWGP (first row) and SWGP (Source: People's microblogs)
Figure 5-29 Symbols presented (Source: Tu's microblog and T3)
Figure 5-30 Sanqi Set Menu (Source: R12)
Figure 5-31 Calligraphy and Han costume (Source: T2 and R1)
Figure 6-1 Street Light with Poems (Source: author)
Figure 6-2 Eight views of Guanzhong carved in Beilin Museum (Source: Jiang, 2020) 185
Figure 6-3 Picture of Huayi Hotel (Source: Official website of the hotel)
Figure 6-4 Interior design of Pizza Hut (Source: the official microblog of Pizza Hut) 187
Figure 6-5 Picture of Mountain Qinling (Source: R4)
Figure 6-6 The fashion week (Source: Official microblog of GRAZIA)

Figure 6-7 Symphony orchestra and marathon held in place (Source: Official microblog of
Xi'an Music Hall and Chinese Business View)
Figure 6-8 Educational activities in the GWGP (Source: R1)
Figure 6-9 Little Dragon Man Project (Source: Xi'an Longhu's Microblog)
Figure 6-10 The player uses red colour to mark the important space in the game in an ancient Chang'an city map (Source: Space Explore 612's microblog)
Figure 6-11 The longest day of Chang'an (Source: R1)
Figure 6-12 People's travel plans (Source: Lizhi's microblog)
Figure 6-13 Travel map of Xi'an city in social media (left) and the word frequency mentioning these attractions in microblogs (right)
Figure 6-14 Popular travel route of SWGP (Drawn by the author according to people's interests)
Figure 6-15 Popular travel route of GWGP (Drawn by the author according to people's interests)
Figure 6-16 Plants in the Small Wild Goose Pagoda (Source: author)
Figure 6-17 The light rail (Source: author)
Figure 7-1 Ink rubbing (Source: T5 and the author)

Chapter 1: Introduction

This thesis explores how the townscape character of two historic areas in Xi'an city are perceived and valued by the public. In this chapter, the key terms are first defined to familiarise readers with them. Then, the research context is presented, including the major need of townscape character management (TCM) to include public participation. Based on this context, the research significance, research questions and objectives are identified. Finally, at the end of this chapter, the research structure is outlined.

1.1 Definition of Key Terms

1.1.1 Urban Heritage

Definitions of concepts relating to urban heritage have changed and evolved over time. There are two main aspects to urban heritage: the tangible and intangible (Ahmad, 2006). A widely accepted (if perhaps a little old-fashioned) 'tangible' definition of urban heritage only includes monuments (material aspects) such as ancient buildings, palaces, ancient gates and walls, as well as historic residential areas and historic city centres. Tweed and Sutherland (2007) argue that the present conservation of historic buildings and historic areas ignores the less tangible structures in cities, which give the city a unique character and give people a sense of belonging. Through analysing the concepts of cultural heritage in Western Europe, Vecco (2010) identifies heritage as the objects which contain values instead of the nomination of physical material, and acknowledges the previously ignored immaterial and oral perspectives of heritage. A large body of literature has connected both self-identity and group-identity with a tangible environment. So it seems that while cultural identity is profoundly spatial, intangible heritage should nevertheless be emphasised (Stephenson, 2008). For example, criteria such as the representation of certain ethical rules, connections to famous people, or relationships with historic events are weighted and used to determine the significance of historic areas. The definition of heritage has been expanded by adding to it intangible heritage, such as customs and beliefs, which represents the other part of urban heritage (Steinberg, 1996).

Urban heritage areas have become some of the most characteristic places in contemporary cities. For example, Zhou et al. (2014) noticed the power-law distributed image from websites on city maps and the image is mostly distributed in the regions with historical, social events and attractive tour sites. The ancient buildings and urban form seem like an interface between generations. The living environment, as one repository of symbolic cultural meanings that bind cultural groups through the generations (Tweed and Sutherland, 2007). Urban heritage, therefore, including both tangible and intangible aspects (ICOMOS, 2015), shows the evolution of society, enhances the liveability of a city, provides cultural meanings, and links people together.

Urban heritage conservation should deal with long durations of time. Compared with the existence of urban heritage (over thousands of years), the human lifespan (an average of seventy to eighty years) is very short, let alone the proposed period of a conservation plan (generally twenty years in China). We should have both a contemporary and long-term perspective when talking about heritage, humans and conservation plans. The relatively short-term plans should consider the past, present and future development.

This coincides with the principle of sustainable development. There are inward-looking (past-oriented) and outward-looking (future-oriented) perspectives, which focus on historical preservation and present development (Jerp & and Tveit, 2014). Previous research indicates the need to understand local preferences for urban heritage and reconcile old and new construction. The historic protection and future development of heritage sites have become important issues of urban planning. In *What Time is This Place?*, Lynch (1972) suggests that planners should teach citizens to see and convey the value of a place to subsequent generations. He argues that planners should explore what inhabitants remember and wish to remember, because 'choosing a past helps to construct a future' (Lynch, 1972, p.64). It is very important to understand the public's preferences when new

construction is produced within a historical context. With a better understanding of old versus new, relations between heritage and people, imaginative solutions can be undertaken that combine the benefits of built heritage with those of new development (Tweed and Sutherland, 2007).

In this process, it must be realised that, for the public, cultural heritage is changing and become more diverse in a different time period. As Mehrotra (2007) states, most conservation discussions regard a change as a loss of something, which is opposed to new possibilities. However, in contemporary urban space, the issue is how researchers can simultaneously identify new typologies and work with them. The role of a conservation professional is transformed from one who opposes change to one who embraces and facilitates change (Mehrotra, 2007). Ginzarly et al. (2019) recognise urban heritage as a social construct that changes over time and space in response to different social, economic, and political processes. Logan (2002) argues that the definition of heritage should be diversified and inclusive in order to embrace the various segments of society. He goes on to describe cultural heritage as a living and meaningful entity, rather than simply monuments and tourist parks.

To understand the plurality and diversity of heritage sites, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Recommendation on the Historic Urban Landscape (HUL) defines heritage as, 'an historic layering of values that have been produced by successive and existing cultures and an accumulation of traditions and experiences, recognised as such in their diversity' (UNESCO, 2011).

Cultural diversity is reflected in the various methods of expression, creation, production dissemination and consumption through different means and technologies (Zhang, 2017). Therefore, cultural diversity and meaning of heritage relies mainly on the interactions of users with the heritage site. In this regard, scholars agree that Modern design themes can work in the same way as the built heritage to generate place identity, including 'permitting divergent interpretations by individuals... synchronizing different ethnic/cultural/social

groups... [and] by becoming landmarks and promoting tourism/economic development, may generate new social solidarities among inhabitants' (Gospodini, 2007). Since urban heritage is reimagined over time and given diverse meanings by its users, understanding this cultural diversity, or the layering of values, is essential for urban heritage conservation. Scholars should help people identify the significant features of their heritage and change in the prevailing ideology of the political elite (Logan, 2002, Stephenson, 2008). In the same vein, according to the International Council on Monuments and Sites (ICOMOS), the conservation of urban heritage means preserving the significance (i.e., values) of a place. This cultural significance is constantly interpreted and reimagined, and the views of historic areas convey messages to local people about the identities of cities.

1.1.2 Townscape Character

The Chinese word *fengmao* represents originally Chinese aesthetic culture in terms of the urban landscape. It is widely used in conservation documents in China for evaluating, maintaining and preserving heritage (Yan et al., 2021) for the conservation of historic cities, areas, buildings and industries (Yang and Cai, 2005). Officials in China use the terms, 'the ancient capital's townscape character' (Chinese: Gudu Fengmao) and 'traditional or unique townscape character' (Chinese: Chuantong Huo Dute Fengmao), to define the historic characteristics of cities. This thesis translates fengmao as 'townscape character'; it is also translated in Chinese literature as 'cityscape character', 'visual character', 'urban landscape', 'urban style' 'architectural styles and features', 'characteristic appearance' or 'city image'. Some researchers focusing on urban heritage conservation choose to translate it as 'historical features' (Zhang and Zhen, 2017). However, these translations fails to present the notion in a comprehensive way, and the term fengmao is relatively unfamiliar to English researchers (Yan et al., 2021). Thus, for the readability of the article, this research uses 'townscape character' to represent the meaning of fengmao in Chinese

context, and it is still important to recognise that this term holds particular meanings in the Chinese context.

In some English literature, 'townscape character' is defined as the visual expression of the spatial elements, structure, and pattern in the landscape (Ode et al., 2008). A visual landscape, related to its spatial configuration, is the spatial representation of any visual property, a measure of townscape characteristics located in the sample space (Llobera, 2003). The most influential English book for Chinese research is Lynch's *The Image of the* City, and he wrote, 'the urban landscape, among its many roles, is also something to be seen, to be remembered, and to delight in'. Apart from the appearance of urban space, Chinese scholars aim to explore the invisible connotations of visual landscape. Townscape, the translation of the Chinese fengmao, not only includes the visible spatial landscape, such as the architectural style, urban pattern and green space, but also contains invisible aspects of the urban landscape, for example the civic spirit and customs (Lv, 2016). Chinese scholars illustrate the meaning of *fengmao* within the Chinese context. Duan and Sun (2010) note that *feng* represents the urban spirit and *mao* describes the appearance of the urban space. They argue that the two aspects together guide the orientation of the values and developing goals of a city. Similarly, Wang (2020) argues that fengmao is the morphological representation of a city in terms of human perception. He further proposes that the word holds two layers of meanings. The character feng refers to a kind of aura and atmosphere composed of humanity, history and customs – that is, the land, scenery and customs. Mao is the explicit scene of a city, which represents the legibility of the visual environment. The combination of the two layers shows an explicit hierarchy, presenting a comprehensive expression of the geographical environment, cultural inheritance and historical customs in urban spaces. This research will go on to redefine townscape character and explain the way in which it has been assessed as a structure system by the researcher in Chapter 4.

Globally, the study of townscape character has evolved alongside urban design and has become increasingly diverse (Aitchison, 2012, Guise, 2015, Jin, 2023). Aitchison (2012)

reviews the *Architecture Review* magazine on townscape, including the concepts of editors – Hasting, Pevsner and Cullen. With reference to Guise (2015), Jin (2023) summarises the research on visual experiences of townscape into three periods, and explains how townscape character has evolved from being auxiliary to urban design, to becoming an interdisciplinary design method.

(1) Pre-1940s: Auxiliary Concepts in Urban Design

Most early cities were shaped by the perception of power: prominent landmarks and homogeneous streets reflected imperial wealth and divine right. Architects and planners were responsible for the human emotions and experiences in cities until the nineteenth century. The City Beautiful Movement influenced the restoration of urban spaces in Europe and the United States, and townscape became a visual philosophy rather than result of site planning. During this period, Camilo Sitte (1965) argued that during the Industrial Revolution, urban design addressed only technical issues, and did not see the city as a work of art in itself. Sitte presented a set of artistic principles for cities based on people's experiences. Similarly, Raymond Unwin (1913) proposed the Picturesque Approach, from a more rational and imaginary perspective (Guise, 2015).

(2) 1940s–1980s: Design Methods in Urban Design

Between the 1940s and 1980s, visual perception was used as a design method, and a lot of theories were generated around it. The development of photography and transportation provided more ways to record and view townscape. Nikolaus Pevsner (2010) saw cities as a paradigm landscape and suggested to guide the urban planning by visual perception. Ivor de Wolfe (1949) used photographs to define nine types of landscape system according to the regional morphological characteristics. He suggested that both historical and contemporary elements positively affect the richness a townscape. Gordon Cullen (1961) introduced the concepts of serial vision to the movement, to show the visual perceptions that give people enjoyment. At the same time as Cullen, Kevin Lynch published *The Image*

of the City (1960), and proposed five types of element – paths, edges, districts, nodes and landmarks – that influence the legibility of a city. Edmund Bacon (1967) investigated the 'simultaneous movement systems', which expanded townscape research to include people's experiences of pedestrian and vehicular traffic, and public and private transportation.

(3) Post-1980s: Refined Research on Interdisciplinary Method in Urban Design

Townscape visual perception research has been improved by advanced technology, and now include the two categories of Dynamic Visual Quality Assessment and Dynamic Visual Impact Assessment. E. H. Zube et al. (1982) classified Visual Quality Assessment into the expert, psychophysical, cognitive and experiential paradigms. Multidisciplinary and multidimensional studies have emerged. However, most existing research on townscape character has focused on visual spatial planning, social culture, economic development and ecology, with insufficient consideration of dynamic continuing visual experience, which has restricted the development of humanistic urban design (Jin, 2023). In the future research, Jin suggests exploring the visual perceptions of townscape at multiscales and in different scenarios, as well as townscape optimisation.

In approximately the last two decades of research on townscape character in China, many researchers have documented, categorised and assessed the townscapes by categories and time periods (Yang and Cai, 2005, Yang and Cai, 2006, Zhang, 2007, Duan and Sun, 2010, Yu et al., 2020). In addition, the researchers are interested in the relationships among the elements, and the dynamic and complex values attached to them. Both Jane Jacobs (2016) and Robert Venturi (1977) suggest inheriting built environment and valuing its context. The study of heritage values has also been emphasised by scholars all over the world. For instance, Shamsuddin et al. (2012) use written documents and site observation to reveal the relationships between landscape elements and their values in the townscape character.

1.1.3 UNESCO's HUL Recommendations

The Historic Urban Landscape (HUL) provides a holistic, socially inclusive approach to achieve an integrity heritage conservation, as recommended by UNESCO (2011). As an approach for increasing the sustainability and liveability of urban space (Liu et al., 2019), the HUL approach aims to deal with the complexity of contemporary cities and to maintain their cultural significance. The HUL approach comprises three stages: 'identification of objects and attributes; assessment of meanings or significance; and the judgement of the integrity and the authenticity of the attributes objects' (Zancheti and Loretto, 2015, p.83). The past and present cultural significance, including historic, artistic, scientific and other types of values, may be expressed and interpreted after the processes.

Therefore, the HUL is understood as historic layers of cultural and natural values and attributes. As a comprehensive and effective piece of guidance, the HUL defines a complexity and wider context of the historic area, including tangible elements and intangible dimensions. This approach and the public participation of the HUL will be further discussed in Section 2.1.4 and 2.1.5.

1.2 Research Context and Statement of Problem

This research focuses on the perception of townscape character and its significance in historic areas. I first outline the context of urban heritage townscape character management in China. Second, I explain the dilemma of the lack of consideration of public opinions in the planning process, and suggest a feasible townscape character assessment by the public.

The views of heritage sites, which are treasured by both residents and visitors, have symbolic importance, and they give people visual clues about urban form. The city image that people appreciate, based on its increasing and inherent cultural value, should be protected. However, there are tensions between economics, tourism development and

urban heritage conservation. The rapid and large-scale development of urban space over the last two decades has rapidly invaded the original natural and historic landscape around historic areas, which has threatened the expression and identity of urban heritage in China. Urban regeneration projects, inappropriate plan targets, excessive commercial utilisation, overloaded tourism and the proliferation of fake heritage (e.g., copying of historic buildings and faux heritage sites) may transform the landscape's context, identity, and legibility (Steinberg, 1996, Jerp & and Tveit, 2014). Meanwhile, Logan (2002) describes that the 'Asian-ness' of Asian cities is disappearing rapidly because of the urban explosion. Asian cities increasingly look more and more similar to Western cities, losing their distinctive elements, especially in the central business districts (Logan, 2002, Jiang and Zhang, 2009). For example, Figure 1-1 shows the similar appearances of the central business districts (CBDs) of China's four Tier-1 cities. Scholars describe this loss of townscape character as, 'a thousand cities sharing one appearance' (Xiao et al., 2012, Lv, 2016, Yu et al., 2020). The huge constructions of European-style buildings have also been subjected to considerable criticism. The physical sameness and blandness may violate the authenticity and integrity of urban heritage and, subsequently, lead to a loss of aesthetic values and community memories associated with the city's image. This kind of development loses the connection to humans, ignores the supplementing of public infrastructure and pursues high floor area ratio (Lv, 2016), which can be extremely harmful for the townscape character of historic areas.



Figure 1-1 Photos of Beijing (top left), Guangzhou (top right), Shanghai (bottom left) and Shenzhen (bottom right)

Source: Hujie (2018). Available at: http://www.thccid.com/list/38/234.htm

In the context of China's rapid urbanisation and regeneration, the preservation of townscape (or *fengmao*) has always been a key aspect of urban heritage conservation over the decades. The first *Law of Urban Planning in the People's Republic of China* highlighted the importance of townscape character management, and stated: '[W]hen compiling a plan, planners should protect historical and cultural heritage, traditional townscape, local characteristics and natural landscapes' (NPC, 1989). China's official definition of townscape is the integrated appearance and landscape of natural and artificial environments that reflects the historical and cultural characteristics of cities (MOHURD, 2019). In the context of Chinese urban conservation, townscape includes not only the visible appearance and character but also its historical and cultural connotations (Duan and

Sun, 2010, Lv, 2016, Wang, 2020). Townscape character management aims to ensure that the city image embodies the connotations of Chinese traditional and modern culture (Duan and Sun, 2010, MOHURD, 2019). To promote the city image, China places a high priority on the townscape character management of historic areas in historic cities (the conservation plans in Xi'an will be developed in Section 4.1.2). The Master Plan, Historic City Conservation Plan and other urban character guidance documents were compiled to preserve townscape. As the fundamental process of townscape character management, the townscape character assessment (TCA) aims to identify the resources of townscape character and the values of its historic areas. The result of the TCA underpins the orientation of the values and urban development strategy of townscape character management policy.

Given their cultural and historical significance, the current process of evaluating and managing visual character of heritage sites merits review. The key problem is that there is a discrepancy between the perceptions of the experts who compile and approve the conservation plans and those of the public who use the historic area during the TCA process. The TCA is the investigation and evaluation process in order to justify the townscape character for the formulation of townscape character management planning of historic areas. Currently, from the experts' perspective, the TCA is used to decide how the city will develop in China. The experts' survey work emphasises the validity of continuous historical narratives and fails to interpret or reinvent the historic and contemporary relevance to the built environment (Mehrotra, 2007). A range of studies argue that how space is planned by experts and how it is perceived by the public are two different things (Coeterier, 2002, Swensen et al., 2013, Schofield, 2015). The focus of townscape character management and assessment for regulations should shift from the zones controlled by the planning guidance, to the viewing points to be perceived by the public, and from the physical material to the values people perceived. Meanwhile, public perceptions of the tangible environment embody significant values, since the users of the historic area know best about the local context. Consequently, examining the users' perceptions is a

prerequisite to understanding the significance of heritage sites for residents and tourists. The perceived landscape character identifies the people-centred heritage (Ginzarly et al., 2019).

These criticisms of the formulation and implementation processes are due to the inadequacy of the previous step in assessing the significance of values. As the TCA process is usually undertaken by planners before the formulation and implementation of heritage conservation plans, it does not effectively utilise the experience of the public. In 2011, UNESCO's HUL Recommendations defined the layering of values and attributes of urban heritage for the public. The HUL approach provides insights on heritage management and public participation.

Some researchers have examined urban regeneration and the dilemma of TCM in China. Urban heritage has been used as a catalyst for urban regeneration (Pendlebury and Porfyriou, 2017) and is regarded as a key element in enhancing the liveability of urban areas, economic development, and social cohesion (Taylor, 2016). Pendlebury and Porfyriou (2017) show that China has made significant use of heritage to promote economic development, particularly tourism and real estate. They consider the role of government in the process of urban regeneration which may encourage or supress development. Jiang et al. (2022) analyse historical maps from a morphological perspective and the evaluation of urban space over history, especially focusing on key landscape elements over history and dramatic changes due to modern development. The results show that strict zoning division in conservation plans causes a separation between the ancient and the new in urban development areas. The areas surrounding ancient city developments are more economic-focused, and the ancient city areas themselves are regarded as 'foreign bodies'. There is a lack of a planning strategy to coordinate the ancient city with the surrounding buildings that have been built in the past few decades. A dichotomy between old and new has thus appeared. A similar situation can be observed in many historic areas in China, and the negative outcomes of the TCM are described in Chapter 4 of this thesis. Jiang et al. (2022) suggest that urban landscape elements need to be understood from the perspective of the HUL, which includes a view of the development process.

Some studies have used the HUL to engage the public in heritage research (see also Chapter 2.1.5). The HUL approach cares about the associative landscape or landscape of imagination, in addition to the designed and evolved landscape (Taylor, 2016). The researchers use questionnaires and social media to explore the public's perceptions of historic areas. However, some research data and basic criteria are derived from experts' opinions and architectural principles from the literature. Additionally, the existing research does not fully reflect the different experiences of the visitors in the historic areas. In this research, the visual perceptions of the public will be used to assess the visual landscape. Xi'an has a long and glorious history; its townscape character has significant value for all Chinese people and is protected by much guidance. This research aims to explore how the townscape character of historic areas in Xi'an is aesthetically perceived and culturally valued by the public. In other words, the research will examine how the visual expression of historic sites affects peoples' perceptions, and how the historical and cultural significance is reflected through the ways people see them. The HUL elements checklists (O'Donnell and Turner, 2012) are chosen to capture the elements people value in historic areas. Emerging from the HUL approach, combined with the Chinese heritage townscape character management policies, this research is concerned with the urban heritage values that policymakers hope the public will perceive. At the same time, the project will focus more on the people-centred heritage discourse (Schofield, 2015) than 'authorised heritage discourse (Smith, 2006).

1.3 Significance of the Research

1.3.1 Theoretical Significance

Following the above discussion, the majority of current TCA conducted in order to compile conservation plans in China neglect to involve the public. The current Chinese research and practice on the public perception of urban heritage townscape character is insufficient. Since the heritage study of values should be more diverse and inclusive from the public's experiences, this study responds to that need by evaluating historic areas from the perspective of the public rather than the traditional experts' paradigm. The methods and internal logic of public perceptions of townscape character in historic areas are explored. The public's TCA of the urban heritage related to townscape character management policy in China is presented, which open up the discourse about urban heritage to the general public.

This thesis explores the cultural experiences and interpretations of HUL in Xi'an city; townscape character is assessed from inclusive and evolving narratives from residents and tourists. These findings provide a reference for identifying the townscape character of historic areas of China and then support the compilation of a 'Townscape Character Assessment System' in historic areas. In the framework of the HUL approach, a set of urban heritage elements within the Chinese context is understood to supplement the HUL element checklist. The research will enrich the dimensions of utilisation, interpretation, and presentation of HUL elements that make up the city image in China from the perspective of the public. It is also hoped that the research will provide recommendations for the future heritage management in China. Greater understanding of the experience of the culture and history, and people's interpretations of them in the space, would provide references for place-making policy and shed light on the design project. The recorded and documented cultural values and experiences of the public can be integrated in to urban and architectural design.

Additionally, this study builds two kinds of communication. First, the research establish a dialogue with mainstream international heritage charters. This research has significant benefits in terms of the study of domestic townscape character and communication with foreign theories. International heritage charters and Chinese policies are connected. Secondly, it provides insights into the current state of communication between experts and the public, and enables recommendations to be made facilitate communication. Following from this, communication has the potential to improve understanding not only among international researchers, but also between experts and laypeople.

1.3.2 Methodological Significance

The study uses urban heritage and visual perception theories, and explores the historic areas' townscape characters with public participation in international principles, planning guidelines, interviewing experts, social media and people's discourses.

The research is expanded by the inclusion of the public as a part of its theoretical conceptualisation. This is because the data are collected and analysed at two levels. One is textual (i.e., what people say) and the other is visual (i.e., what people photograph). Therefore, the data are based on not only what people are telling the researcher (interviews and questionnaires), but also what people are really looking at (data from social media). On one hand, the social media data are not biased by the researcher, because this kind of data is what people post and show to their friends, family and other people rather than what participants answer for the research questions to a researcher. People do not need to guess what kinds of answer the researcher wants. On the other hand, the focus group provide opportunities to learn about the townscape and its values that are of interest to people from different backgrounds. The focus groups were divided into those with the public only and those containing both the public and experts, thus observing their communication and discourse in the different groups. Overall, this mixed-method research provides a holistic

method and features vivid pictures and discourses to get a comprehensive understanding of urban heritage values. It contains evolving perceptions, including reviewing new information, which is in line with the HUL recommendations.

1.4 Research Questions and Objectives

The main question of the research is: How are the townscape character of historic areas aesthetically perceived and culturally valued by the public in the context of China?

Sub-Research Questions

(1) How have researchers explored the townscape character of urban heritage from the perspective of the public in the existing literature?

Objective 1: To review the literature on heritage conservation ideologies and TCA involving public participation (Chapter 2).

(2) How do policymakers protect the townscape character of urban heritage when compiling conservation plans?

Objective 2: To understand and examine the urban heritage conservation related to the townscape in Xi'an city (Chapter 4).

(3) Which Historic Urban Landscape (HUL) elements do the public value in the views of the historic area, and why?

Objective 3: To identify the valued tangible and intangible HUL elements in the views (Chapter 5).

(4) How do people appraise and synthesise the value of historic areas from visual landscapes?

Objective 4: To supplement the HUL checklist for the TCA system, and illustrate the HUL values that are held by different cultural groups through people's interpretations (Chapter 6).

(5) How do people understand the old and new constructions with regard to future development?

Objective 5: To explore how the utilisation, interpretation and presentation of historic areas are assessed for protecting the townscape character of historic areas (Chapter 7).

(6) How does the research contribute to knowledge of TCM?

Objective 6: To provide recommendations on TCM and on communication between experts and the public, based on the findings of this research (Chapter 8).

1.5 Structure of the Thesis

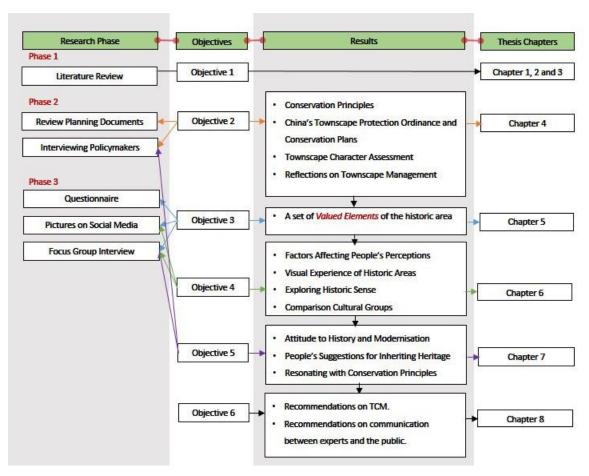


Figure 1-2 Research structure

The thesis is divided into seven chapters. **Chapter 1** is the introductory chapter. It introduces the background of the study and outlines the scope of the research; based on the significance of the study, the research questions and the structure are proposed. **Chapter 2** answers the first sub-research question, and reviews the interwoven literature of visual landscape and urban heritage conservation. **Chapter 3** is the methodology chapter, and it starts by introducing the two research sites: the Small Wild Goose Pagoda (SWGP) and the Giant Wild Goose Pagoda (GWGP) areas. It then details the qualitative and quantitative

methods, including interviews, questionnaire focus group and photographic documents from social media. The framework analysis is also explained.

The following five chapters describe the results, findings and conclusion of the research, and each chapter answers one sub-research question (see Figure 1-2).

Chapter 4 reveals the experts' concerns about the townscape character management for heritage conservation in Xi'an. This chapter first reviews the common interests of international and domestic conservation theories and principles (Section 4.1.1). Second, the current laws and guidelines in China are introduced to illustrate the three-level conservation system and the concerns of urban heritage townscape character management in China, especially in Xi'an city (Section 4.1.2). The basic policies, processes and principles of townscape character management are understood. Then, Section 4.2 focuses on the results of the interviews, and elaborates on the Chinese practice of townscape character. Townscape character is redefined according to the policies and the interviews with policymakers. The townscape character management process of Xi'an city is critically analysed; different interests among policymakers and the policymakers' future needs are explored to scrutinise the townscape character management of historic areas in Xi'an. Finally, a critical analysis of the townscape character management is provided to demonstrate the importance of the research topic.

Chapter 5 identifies the HUL elements and people's sense of place bonded with them. First, a description is presented of three kinds of social media data, and the key themes and trends are identified. Then, the tangible and intangible HUL elements and the senses of them are explored in the context of a characteristically Chinese understanding of townscape character, which enlarges the HUL checklist in the literature within the Chinese context at present. The hypothesis is that HUL elements are combined in a network to meet new needs and produce new meanings in contemporary urban life. The HUL elements checklist for preservation townscape can be built.

Chapter 6 goes on to illustrate the interpretations of townscape character from policymakers, social media, residents and tourists. The way people appraise and synthesise the significance of townscape character is first explored. In other words, the chapter explores how people culturally absorb or assimilate the value of historic areas (Section 6.1). Then, factors affecting people's perceptions of the HUL are explained (Section 6.2). The chapter is mainly concerned with Eastern concepts of townscape character from the perspectives of both experts and the public. Next, the research goes back to analysing the interaction of townscape character with the conservation principles (Section 6.3). Finally, the similarities and differences between the perspectives of policymakers, lay people, local residents and tourists are explored (Section 6.4).

Chapter 7 describes the attitudes and strategies associated with old and new construction in the historic areas. It explores the consensuses among the participants about which certain types of new constructions are compatible with the HUL. Experts' planning strategies and lay people's attitudes to history and modernisation are first demonstrated (Section 7.1). Then, based on the current situations, the people's perceptions and reflections of modern development in the research sites are analysed (Section 7.3). Finally, combined with some conservation practices mentioned during interviews, participants' suggestions for old and new construction are analysed to illustrate their preferences for developing historic areas (Section 7.3 and 7.4).

Finally, **Chapter 8** discusses the research findings in relation to research objectives, and makes recommendations. It then discussed the research contributions, limitations and strengths, and areas for future research.

Chapter 2: Literature Review

This chapter first reviews the ideologies related to urban heritage conservation in China, which have been influenced hugely by global conservation ideologies. Then, townscape character is explored within a heritage context, as well as the importance of its representing values. On the basis of this, the theoretical framework of townscape character of historic areas is placed.

2.1 Heritage Conservation Theories, Principles and Methods

Section 1.1 reviewed the evolution of urban heritage definitions, and propose the challenge of grasping diversity values of both tangible and intangible urban heritage. This chapter discusses the global ideologies which deeply influence the discourse on Chinese conservation principles.

With explicit reference to the Western cultural sphere, Chinese planners compared China to the West and developed architectural and urbanistic visions of change (Abramson, 2007). Reviewing the scope of heritage in charters all over the world, Ahmad (2006) finds that the mindset of two international organisations, namely the United Nations Educational, Social and Cultural Organisation (UNESCO) and the International Council on Monuments and Sites (ICOMOS), have influenced the heritage discourse globally. For example, the Venice Charter, 1964 has been used as 'a reference point' (Ahmad, 2006:293) for developing various conservation documents internationally. The principles of UNESCO and ICOMOS are widely used among Chinese researchers, and have dominated the Chinese discourse. Extensively influenced by the international charters, the main principles of China heritage management are: (1) to extract the values or significance of historic areas; (2) to achieve authenticity, integrity and sustainability; and (3) to explore appropriate ways to interpret and present urban heritage.

2.1.1 Values and Significance

Identifying the values of urban heritage is the fundamental concern of conserving heritage. After World War II, the concept of significance had its foundation in conservation theories, especially the theory of heritage interpretation (Zeayter and Mansour, 2018). The statement of significance, or interpretation of value, is used as an instrument to select a set of values of the significance for managing conservation practice.

People extract the dimensions of values from heritage sites. The angles through which values are extracted in China have been widened through the revision of the Principles for the Conservation of Heritage Sites in China (ICOMOS, 2015). While previous laws and guidelines emphasised the historic, artistic and scientific value of heritage sites, in 2015 the revised Principles also added cultural and social values. The heritage site values are:

(1) the witness of history (historic value); (2) the witness of artistic creation, aesthetic taste and typical styles of a particular period (artistic value); (3) the witness of human creativity, scientific and technological achievements to the creation process (scientific value); (4) the recorder and transmitter of knowledge, the inheritor of cultural spirit and the generator of social coherence, relating to memory, emotion and education (social value); and (5) the generator of cultural diversity, including ethnic/regional/religious culture, the cultural attributes of the environmental elements and intangible heritage (cultural value). (ICOMOS, 2015)

The dimension of the values help researchers to understand and comb for significance from different perspectives. However, it is not easy to separate and classify these values. Mendes Zancheti and Tone Ferreira Hidaka (2012) argue that heritage values are the product of many subject-object interactions, they go on to explain that they are the outcome of many inter-subjective evaluations related to historical periods and collective memories. Then they go on to explain that the concept of 'significance' embraces a set of interconnected values.

Using a 'complex system' proposed by Geyer (2003), Zancheti and Loretto (2015) characterise the significance of complex urban heritage sites as follows:

(1) orderly and chaotic: it may show an orderly structure, but may also show emergences and losses of meanings; (2) non-reducible to elements: it means more the a summation meanings of singular objects; (3) partially modeled: it cannot be totally captured; (4) boundaries and uncertainty: although it tied to an urban area, the boundaries cannot be clearly identified; (5) adaption and emergence: it is adapting and open to new meanings; (6) and conscious agents: it is an outcome of the social process of conscious agents. (Zancheti and Loretto, 2015)

Therefore, the narrative of the significance needs to be reviewed and revised periodically by adding values from different areas and exploring their relationships.

2.1.2 Authenticity/Integrity

Authenticity and integrity are the core concepts of the modern heritage conservation field globally, including in China. Zeayter and Mansour (2018) sum up the five aspects of authenticity/integrity:

- Ensure the truthfulness of the internal unity of conserved objects, which guards the structural quality of the restoration;
- Credibility of the information's source and documentary evidence;
- Establishing functional integrity to avoid museumisation;
- Avoiding replication to enhance the visual quality of the conserved urban artifact; and
- Social context and living tradition.

The principle of integrity has been an important theme of China's conservation plans. The concept of integrity aims to protect fragmented cultural relics, on a larger scale which includes both their original context and the connections between the elements. The concept emphasises protecting the significant elements of heritage sites as a whole, as well as the temporal and spatial relationships between them. Liang (the father of modern Chinese

architecture) proposed the principle of 'renovating old as old', which means that old architecture should be renovated in its original style (Chen, 2016). The elements of a historic environment – such as ancient city walls, gates, buildings, and the surrounding mountains and rivers – are protected in the city. To preserve the entire old city, Liang sketched the city of Beijing high in the air, as a whole entity. Between 1920 and 1960, Wu Liangyong praised the orderliness, composition, clarity and symmetry of Beijing's urban design (Abramson, 2007). Similarly, Shan (2007) suggests that heritage, regarded as a resource from both a material and spiritual angle, should be integrally conserved by being connected with the surrounding environment. To promote the protection of whole cities among local governments (Abramson, 2007), the 'Historic City' conservation plans stipulated how to preserve the elements of the historic landscape. Certain protection and buffer zones were drawn in the vicinity of preservation sites to ensure that the environmental character of the monuments is not damaged. Zancheti and Loretto (2015) propose the term 'Dynamic Integrity' (DI) to emphasise the importance of examining the changes in place context, showing that the concept of integrity has failed to deal with the complexity of place, especially in the context of fast urbanisation.

Authenticity is a way to understand culture diversity (Liu et al., 2019), and identifying culture diversity is a key aspect for urban heritage management (see Section 1.1.1). However, there is gap between authenticity and public perception, and the public can hardly perceive the authenticity of the place (Liu et al., 2019, Wu and Wang, 2012). Wu and Wang (2012) point out the 'interpretation and communication' are two key points for heritage authenticity. The researchers also pointed out the improvement of 'interpretation and communication' would enhance publics authentic perceptions (Lei and Zhou, 2022, Liu et al., 2019, Wu and Wang, 2012). Liu et al (2019) explains:

Interpretation is about how the authenticity of heritage conveys the changes and evolutions of it superimposed in history; and 'communication is about how to improve visitors' perceptions of authenticity through their experience, how the residents retain their sense

of local identity, and how the merchants, managers and conservation professionals deal with authenticity.

Wang (1999) categorised the authenticity as objective authenticity, constructive or symbolic authenticity, and existential authenticity. Exploring the emotional and cognitive process of evaluating the authenticity of a place is a crucial aspect (Liu et al., 2019). However, the consideration of the authentic identity of Historic Urban Landscape (HUL) is lack in the Chinese heritage preservation and interpretation process (Lei and Zhou, 2022).

2.1.3 Appropriate Use and Methods of Interpretation and Presentation

The importance of appropriate use and ways to interpret and present heritage sites have been stressed by these documents. Appropriate use of heritage sites deal with the utilisation of urban heritage. It involves considering the site's values, characteristics, state of conservation and environmental conditions, which contribute to public benefits and sustainability. At the same time, a variety of methods for interpretation and presentation are encouraged (ICOMOS, 2015). An understanding of the site's value and characteristics is a prerequisite. The diverse methods of interpretation and presentation should be explored onsite. This research argues that the two concept are interrelated, while appropriate use is a type of method to interpret and present heritage.

2.1.4 Historic Urban Landscape Approach

As explained in Section 1.1.3, the Historic Urban Landscape (HUL) can be understood as 'a historic layering of cultural and natural values and attributes' (UNESCO, 2011). Cultural landscape is a basic philosophical foundation of HUL, where landscape is regarded as a culture construct reflecting human values (Taylor, 2016). The HUL approach sees and interprets the environment in a dynamic and constantly changing way, and it is applied to manage change (or maintain continuity) in a sustainable way, improve people's

living conditions and create a virtuous cycle for urban heritage conservation (Van Oers and Pereira Roders, 2013). In other words, this approach connects the past to the present daily life and calls for sustainable development (Zhou et al., 2023).

The HUL approach provides four toolkits for managing heritage: 'civic engagement tools; knowledge and planning tools; regulatory systems and financial tools' (Bandarin and Oers, 2012, Bandarin and Oers, 2015). As a methodology, the HUL also provides six critical steps (UNESCO, 2011, UNESCO, 2016), including

(1) To undertake comprehensive surveys and mapping of the city's natural, cultural and human resources; (2) To reach consensus using participatory planning and stakeholder consultations on what values to protect for transmission to future generations and to determine the attributes that carry these values; (3) To assess vulnerability of these attributes to socio-economic stresses and impacts of climate change; 4. To integrate urban heritage values and their vulnerability status into a wider framework of city development, which shall provide indications of areas of heritage sensitivity that require careful attention to planning, design and implementation of development projects; (5) To prioritize actions for conservation and development; and (6) To establish the appropriate partnerships and local management frameworks for each of the identified projects for conservation and development, as well as to develop mechanisms for the coordination of the various activities between different actors, both public and private.

From the perspective of the political regulation system, the HUL is a paradigm rather than a method which made it possible to be adjusted in different regions (Liu et al., 2019). Van Oers and Pereira Roders (2013) suggest embedding local architectural projects in the HUL, and using a systematic approach that integrates Chinese philosophies, the concept of the HUL, and political guidelines in China. Wang and Gu (2020) continue to emphasise the need to integrate the HUL strategy into the whole planning system, from national to municipal levels. They also point out ambiguities about its theoretical and practical base in China.

2.1.4.1 The HUL Element Checklist

Form the perspectives of assessing the urban landscape and grasping value, the HUL approach calls for integration of innovative and interdisciplinary tools, public participation to grasp the 'complex social value' (Angrisano et al., 2016). Fusco Girard (2013) reveal that the HUL approach could guarantee the transition toward smart and sustainable city need not only technological innovations but also culture-led, and there is an urgent need for the evaluation tools. The elements checklist provides a framework to classify the meaningful elements and explore the cultural value of historic areas. According to HUL recommendation, a comprehensive landscape character checklist (O'Donnell and Turner, 2012) is suggested to capture the tangible and intangible elements as follows (Table 2-1):

Table 2.1 The HUL Elements Checklist (O'Donnell and Turner, 2012)

Tangible Heritage	Natural systems, geomorphology, hydrology, topography		
	Land uses, patterns, clusters, spatial organisation		
	• Visual relationships		
	• Vegetation		
	Circulation and transportation systems		
	• Water features, natural & constructed		
	• Buildings: mass, scale, form, details		
	• Structures: bridges, walls, tunnels		
	• Vocabulary of urban art, sculpture, site furnishings, objects		
Intangible Heritage	Festivals, rituals		
	Traditional music, dance, performance		
	• Spiritual worship, pilgrimage		

- Iconic shared places, symbols that embody the shared urban image
- Places of memory, marking events, joy & suffering, commemoration of past events
- Traditional practices
- Urban and ex-urban farming, food plants
- Local cuisine, harvesting places
- Traditional arts and crafts, gathering place for materials, workplaces for production

HUL approach is beneficial for integrating cultural elements with local urban design, proposing strategies for urban tourism, and understanding the place identities (Lei and Zhou, 2022). The elements listed can be widely used to category the tangible and intangible elements, and can be studied from different perspectives. Referencing 'straddling the material and immaterial worlds' from Lees (2002), Taylor (2016) argues that the HUL approach collects dynamic meanings of landscape related to the people's experience in the urban space. This indicate: (1) the tangible and intangible elements are closely related and should be analysed in a whole system, (2) the elements and its meaning can be explored and added to layer by layer over time, (3) the HUL approach emphasises public participation.

2.1.4.2 HUL for Public Participation and Perception

The Washington Charter (ICOMOS, 1987, Article 3) states that,

the participation and the involvement of the residents are essential for the success of the conservation program and should be encouraged. The conservation of historic towns and urban areas concerns their residents first of all.

The Burra Charter (ICOMOS, 1999, Article 12) emphasises the role of the public in conserving, interpreting and managing heritage. The Conservation Principles of English Heritage in 2018 also emphasise that heritage is a shared resource. Each generation should shape and sustain it according to the public's choice, without compromising the ability of future generations to do the same (Principle 1.3).

Schofield (2015) compares thinkers' and feelers' stances and language around heritage. Thinkers are concerned with logic and consistency (judging), while feelers (perceiving) are concerned with values. Feeling language, usually used by the public, shows genuine enthusiasm for heritage. Heritage conservation should be people-centred, a principle which requires recognition and incorporation. Tuan (1990) argues that, 'without self-understanding, we cannot hope for enduring solutions to environmental problems, which is a fundamentally human problem' (p.1). Additionally, Tuan (1980) explains that the act of creating and recreating a place through cooperative efforts gives the place a special aura. Towards the end of the twentieth century, the research focus shifted from 'what is seen' to 'the way that a landscape is seen' and 'how people interpret the material features' (Scott et al., 2009). Swensen et al. (2013) argue that there is a gap between personal and official understandings to tangible and intangible heritage and their values, and suggest developing methods to record the context of heritage and encourage users' participation. The local perception of visual materials is at the heart of our understanding of heritage.

The public participation is a crucial aspect of the HUL approach (UNESCO, 2011, Buckley et al., 2015, Taylor, 2016). Buckley et al. (2015) argue that the concept of heritage have been distorted as a kind of control and limit to prevent the demolition of urban fabric, so the HUL approach, including public participation, may reconceptualise heritage to become more inclusive, diverse and people-centred. This HUL paradigm changes the orthodoxy in urban conservation that focuses on built heritage, and explores the heritage's value for people that embraces multitude of layered experiences (Taylor, 2016). Experiences cannot mapped by simple measurement and observations, but instead must be mapped in different ways including separating out different cultural groups (Smith, 2014). Zhou et al. (2023)

consider that using the HUL approach with social participation could achieve a selfdiscovery and active conservation, which would help people comprehend the cultural significance of heritage, the reasons why it is preserved, and subsequently foster a sense of place identity and pride.

Whilst there has been little public participate in conservation practice (Liu et al., 2019), some public participation research using HUL approach is appearing. To identify high-priority actions for planners, Lei and Zhou (2022) collected the characteristics (attributes) of the HUL expert focus group. They categorised the characteristics into basic, excitement, and performance factors based on questionnaire surveys from residents applying the Asymmetric Impact-Performance Analysis (AIPA) technique. Their work indicates that Landscape Pattern, Residents' Behaviour, Heritage Maintenance, Historic Meaning, Historic Centre, Accessibility, and Cultural Uniqueness are the primary attributes that significantly influenced residents' satisfaction with the HUL in Datong city. However, the characteristics examined in their research were originally derived from the experts' interests rather than those of the public.

Some researchers have explored public perceptions using social media data (Farahani et al., 2018, Motamed and Farahani, 2018, Ginzarly et al., 2019, Van der Hoeven, 2019). On the one hand, the photos on social media were categorised and analysed to show people's preferred views. On the other hand, the textual material was analysed to present people's narratives of the space. Liu et al. (2019) collected data from Dazhongdianping network, and argued that the existential authenticity encompasses a wide range of activities, embracing various tourist experiences. However, the various experiences in the historic sites presented are insufficient. Both textual and photographic material should be analysed to gain a deep understanding of the public's perceptions. To grasp the diversity among perceptions of townscape, other methods and theories related to people's experiences of visual landscape will be discussed in Chapter 2.2.

2.1.5 Heritage Discourse Analysis

Discourse... is viewed as a form of social practice that shapes our knowledge, ideology and identity, and manipulates the way we act in the world as well as interact with people. Discourse, at the same time, refers to systematic ways of talking about and understanding the world... These two senses of discourse are finally realised and concretised in text, specific written or oral (or, more inclusively, visual) forms of communication, which is the third dimension of discourse. (Wu and Hou, 2015, p.39)

Wu and Hou (2015) define discourse in three dimensions: shaping people, talking about the world and communication. Researchers analyse how social, cultural and historical contexts influence language use, which, in turn, contributes to the transformation of social, cultural and historical realities. Heritage is seen as constituted and constructed (Wu and Hou, 2015). Lowenthal (1985), quoting a novel by L. P. Hartley from 1950, describes the past as a foreign country which was totally different from the present, and that the contemporary environment is shaped according to today's predilections: 'Interaction with a heritage alters its context, whether by choice or by chance' (p.263). He argues that how we are aware of the past and local culture and how we respond to the way that the environment changes are central issues. This view is supported by Pellitero (2011), who writes that the physical environment is formed by culture, and that culture is likewise the consequence of the existential expression shaped by the environment. In other words, heritage becomes a discursive practice: 'It is one of the ways in which the nation slowly constructs for itself a sort of collective social memory' (Hall, 1999, p.23).

The concept of 'authorised heritage discourse' (AHD) introduced by Smith (2006) reflects the artist's view of contemporary Western society. This concept is important when comparing the public and the expert views through discourse analysis. Using discourse analysis, Smith (2006) critically analyses heritage texts from ICOMOS and UNESCO, which both represent AHD. Smith argues that these worldwide influential texts issued by ICOMOS and UNESCO provide 'self-referential authority of conservation and management philosophy of practice' (p.94). The experts represent official value, local and

community value is discounted (Waterton et al., 2006, Waterton, 2009, Jeremy and Lucas, 2016). When the international charters, based on Western practice, are applied in Eastern cultures, a limitation is encountered: for example, there is little room for new uses and subjective interpretations (Mehrotra, 2007).

Heritage discourse analysis provides a way for communication between experts and local people. Waterton et al. (2006) argue that expertise and community interests can be revealed by heritage discourse. For example, in discussions on how to handle tangible and intangible heritage, Smith (2006) explains that tangible heritage is the instrumental, material or structures, while intangible heritage reflects its cultural values. Additionally, Swensen et al. (2013) argue that expert knowledge is usually associated with material objects or tangible heritage; local values or insider-ness are synonymous with intangible aspects and personal or individual values. The perceptions and values of heritage held by expert and the public can be compared.

2.2 Themes in Townscape Character Assessment (TCA) Theory

2.2.1 Visual Experience and Local Culture

Abramson (2007) has reviewed the history of visual research, and argues that visual space has shifted from the governmental to the public realm by referencing (Baird, 1995). Humans are visually oriented creatures. People's perceptions of the urban structure and its surrounding environment are influenced by the visible form of the built environment. Rose (2016) cites Metz's (1975) term 'scopic regime' to refer to 'what is seen and how it is seen are culturally constructed' (Rose, 2016, p.3), and explains that the visual part is important to convey culture, especially in contemporary life.

The visual landscape of heritage sites plays a significant role, carrying and shaping collaborative memories between generations and among citizens. As a vivid expression of

the real experienced space, the visible urban space is an important aspect to understand urban space and evoke public feelings (Lynch, 1960, Tuan, 1990, Nijhuis and Lammeren, 2011). The views of heritages make a significant contribution to the image of a city. In *The Image of the City*, Lynch (1960, p.9) defines '*legibility*' or '*visibility*' as the qualities of physical space (shape, colour or arrangement) that evoke strong mental images of the environment. Lynch (1960, p.46) argues that citizens hold a series of public images, and the content of these images can be traced from physical urban elements. In Lynch's study, imageability relates to the public's ability to evaluate their visual impression of an urban space, and requires a clear structure of physical elements and meanings for the public. In this process, public knowledge and experience are crucial to imageability (Jerp &en and Tveit, 2014). '*Environment provides the sensory stimuli, which as perceived images, shape our joys and ideals*' (Tuan, 1990, p.113). From these pioneering discussions, the study of perception from physical environmental elements has been established. These studies illustrate the interaction between visible urban heritage and urban characteristics where the visual culture can be reflected.

Visible Form and Symbolic Form in Historic Areas

The physical space is shaped by architectonic compositions. Architects and planners commonly identify urban design elements addressing the townscape character of a city, including the natural, cultural, urban and architectonic landscape. The term 'architectonic compositions' in heritage sites refers to the remnants of ancient urban design elements and reconstructions at previous locations of key elements. For the historic city, historical architectonic compositions have two important parts. One is the remnant historic urban design and landscape elements (the monuments, ancient walls, ancient rivers and surrounding landscape). The other is traditional style reconstructions in original locations (historic palace, gardens and markets), which can bring people a visual perception of the

past. These historic architectonic compositions in contemporary cities show the historic character to citizens.

Visible Form

Frankl (1986) identifies four aspects of architectonic form: basic form, corporeal form, visible form and purposive intention. He emphasises that the experience of movement through visible form is critical to perceiving space. The difference between corporeal and visible form is between 'the systemised space of coordinates and perceptual space', as explained by Nijhuis (2017) from the insight of neurologist Straus (1956/1963). The coordinates of space are the general layout and floor plan based on accurate coordinates, while perceptual space changes according to what we can see from different viewing points.

Previous studies related to architectonic composition have mainly focused on basic form and corporal form. Researchers use the 'figure-ground diagram' introduced by Rowe and Kotter's book, Collage City (1984), to compare the historical evolution of urban morphology. The images of the ancient city can be traced from ancient archives and historical design elements in contemporary urban space. Researchers trace the historical urban information from different perspectives. From the conceptual angle, ancient philosophy is used as a tool to explore urban construction concepts. Based on a review of the concepts of governing and the establishment of political power in the Chinese classic Zhou Li (a classic Confucian book which recorded the social politics, economy, culture, customs, rites and laws of the pre-Qin period), Sun (2012) interprets the fundamental framework of the planning system in ancient China. He examines ancient planning systems by exploring the division of responsibilities across governmental departments, such as choosing the locations of capitals and planning. His results show that offices from different departments were responsible for the management of land, deciding on land use, and seeking the opinion of citizens. Following the goal of social governance, planning work was assigned to different departments, and became represented in urban morphology over time. Likewise, a collation of ancient maps and text materials can be drawn and

incorporated into the space system, connecting history with its corresponding space to analyse the logic of urban evolution (Li and Dong, 2008). Planners and architects explore urban space by mapping and analysing urban heritage in different ways.

However, the composition of visible space can be analysed based on a user's experience and can thus be more closely aligned to the public's perception. How a design interfaces the conceptual (physical) with the perceptual (visual) order is an important question. Visual perception, including the organisation of visual logic, space-making, composing views and the control of movement, is incorporated. Nijhuis and Lammeren (2011) introduce the visible form related to movement in landscape architecture as the visual manifestation in outdoor space, which is 'expressed by its structural organisation (e.g., balance, tension, rhythm, proportion, scale) and ordering principles (e.g., axis, symmetry, hierarchy, datum, transformation)' (p.109). Paths (traditional axes) offer a logical sequence of views for architectural landscape analysis, so it is critical to understand the subject-related perceptual order of landscape architectonic compositions based on the object-related order of typological design information. Nijhuis and Lammeren present an example of analysing relationships and articulation of spaces at Piazza San Marco (Venice, Italy). The sequence of viewing points describing the perceptual order is mapped, and the degrees of shifting scenery with and without the campanile are compared. Their second example analyses the sequence of viewing points on a route in a Stourhead landscape garden, in Wiltshire (UK), with a focus on the axial views and the garden's formal content from designated viewing points over time. The two examples demonstrate how to map the perceptual order as a movement. Luque-Mart nez et al. (2007) build on this to argue that measuring the image of a city includes effective elements and associative networks.

Referring to Henri Lefebvre's book *The Production of the Space* (1991), the produced social space is concerned with: Perceived Space, Conceived Space and Lived Space. The Perceived Space can be seen, smelled and touched in the space, the Conceived Space is the space designed by the experts, and the Lived Space is the everyday practice in the space. The three dimensions of the space in historic areas can be examined, especially the cultural

and social meanings in the Perceived Space and Lived Space. The visual landscape analysis of historic areas mainly evaluates the visible architectonic compositions and conceived space in the research domain in China. This does not fully represent a public view of the heritage, which needs to be explored more in the future.

Symbolic Form

Besides the spatial form, the symbolic form and programmatic form can be explored by defining morphological conditions (elements of the viewing points, space sequence of the route) to evoke certain meanings, by explaining cognitive actions and comparing functionality and the aesthetic motivations of the route (Nijhuis, 2017). In Nijhuis and Lammeren (2011)'s view, the symbolic form is an interface between designer and users, which evokes feelings, stories and ideas. Rose (2016) explores the theory of affect in urban form discussion, a non-representational way to understand the shared physical existence from the materials.

Wang (2000) analyses how the ancient Chinese view of water shaped different cities and regions, and also summarises the typical relationship between water and ancient urban design in China. Water is endowed with different characteristics in construction. The water in royal palaces symbolises cleanliness from heaven. Free water shapes, usually in gardens, represent wisdom or mirrors. Regular water shapes, which can be seen in temples and palaces, symbolise virtue. Religious displays of water represent the soul or spirit, and are generally found in temples and tombs as a demarcation between humans and nature. Regional rivers are considered grand and powerful. Such meanings of water in the city are partly perceived by groups of citizens. From the above discussion, it seems that the visible form, as an important part to perceive space, is both rarely explored in heritage sites and also related to the corporeal form and symbolic form.

2.2.2 Factors of Visual Perception

Different theories exist (Bourassa, 1990, Nijhuis and Lammeren, 2011) about how factors of visual perception – including biological, cultural and individual factors – impact the way people perceive landscapes. These include evolutionary theories, the prospect-refuge theory, information processing theory and the topophilia hypothesis.

Research into biological factors has a long history. Evolutionary theories explain that biological factors denote that innate dispositions are evolutionarily determined. Our genetic make-up cannot match the pace by which we created the artificial environment, so the preferences for the landscape of our ancestors in ancient times are still with us. The prospect-refuge theory (Appleton, 1975) elaborates that people, as both predator and prey, innately prefer half-open land-shapes with vegetation and water, where humans can see without being seen (Tveit et al., 2006, Jacobs, 2011).

Compared with the biological factor, cultural and individual factors also contribute to human perception and experience. Jacobs (2011) argues that local people might have a specific way to assess the local space, and therefore, cultural factors are multi-layered. Learning plays a role in psychological responses to the landscape at both the cultural and individual levels. Kaplan and Kaplan's information processing theory (Kaplan and Kaplan, 1989) develops the preference matrix within the context of the natural environment rather than the urban space. From a motivational perspective, the informational character of landscape generates individual preferences, and they argue that coherence, legibility, complexity and mystery are four factors in how people gain knowledge, easily understand a place and make it interesting. This preference about the environment becomes an intuitive guide for behaviour.

Tuan's topophilia hypothesis discusses the three factors above. Tuan (1990, pp.30–44) argues that ethnocentrism (collective egocentrism) is a basic characteristic of humans. From the egocentric centre, social groups built their cosmographies, developed space, and

gave them symbolic meaning. Culture, in Tuan's view, 'can influence perception to the degree people will see things that do not exist' (p.246). Awareness of the past plays an important role in familiarity and attachment.

Interests in visual perceptions of the built environment come from many disciplines beyond architecture, as these theories show. These factors in visual perception provide explanations for people's preferences about the environment, but in the context of this research I intend to focus especially on the research related to perceptions of the historical and cultural value of urban space.

2.2.3 Visual Character Framework

To describe the aesthetic qualities of the landscape, Tveit et al. (2006) and Ode et al. (2008) build a framework rooted in theories of landscape aesthetic and environmental psychology. This approach links the visual indicators to concepts that contribute to the visual character (Table 2-2). A holistic experience is shown through nine concepts: stewardship, coherence, disturbance, visual scale, historicity, imageability, naturalness, complexity and ephemera. Stewardship is defined as the sense of order and care; coherence (harmony, holistic or landuse suitability) reflects the unity of a sense; disturbance means a lack of contextual fit and coherence; historicity is defined as historical continuity and richness; the visual scale reflects the experience of landscape rooms, visibility and openness; imageability or legibility means that elements in the landscape create a strong visual image for observers; complexity represents a diversity and variation of landscape elements; naturalness is defined as closeness to a preconceived natural state; and ephemera is the changing landscape with weather, sunlight, colour, and seasons. The visual concepts are interrelated.

Some concepts are closely related, and others can be contradictory. For example, the concepts of historicity and imageability overlap, as historical elements create strong

imageability; disturbance may also decrease the sense of imageability and historicity. There is a need to explore the interactions between the visual characters in future research.

Table 2.2 Concepts describing landscape character (Ode, Tveit and Fry, 2008)

Concept	Theory	References
Complexity	Biophilia	Kellert & Wilson (1993)
Coherence	Information Processing Theory	Kaplan & Kaplan (1982, 1989)
Disturbance	Biophilia	Kellert & Wilson (1993)
Stewardship	Aesthetic of care	Nassauer (1995)
Imageability	Spirit of place/genius loci/vividness	Lynch (1960); Litton (1972); Bell (1999)
	Topophilia	Tuan (1974)
Visual scale	Prospect-refuge theory	Appleton (1975)
	Information Processing Theory	Kaplan & Kaplan (1982, 1989)
Naturalness	Restorative landscapes	Kaplan & Kaplan (1989); Ulrich (1979, 1984)
	Biophilia hypothesis	Kellert & Wilson (1993)
Historicity	Topophilia	Tuan (1974)
	Landscape heritage/ historic landscapes	Lowenthal (1979, 1985); Fairclough <i>et al.</i> (1999)
Ephemera	Restorative landscapes	Kaplan & Kaplan (1989); Ulrich (1979, 1984)

This research adopts this framework for analysing visual landscape character (Tveit et al., 2006, Ode et al., 2008) in external fields. In order to prove that the visual character framework can be applied in the heritage context in urban areas, 235 articles in Web of Science citing the key article, 'Key concepts in a framework for analysing visual landscape character' (Tveit et al., 2006) were analysed and clustered in Citespace. The result includes six clusters of keywords (Figure 2-1), which shows that the visual concepts are comprehensive and applicable to multidisciplinary research. The concepts were initially applied to heritage conservation (Jerp & and Tveit, 2014), but the research area is mainly in urban fringe or rural landscapes.

Based on the visual characters, Sevenant and Antrop (2010) use latent class, which represents sociocultural characteristics and environmental behaviours, to analyse their influence on aesthetic preference. Dramstad et al. (2006) build a diversity index and correlate it with visual landscape preference to explore whether the configuration of a landscape could be used to predict the visual landscape's quality. They find that visual character can not only be applied in GIS for mapping and calculated in a quantitative way, but can also be linked to qualitative analysis of the public's experience and perceptions.

The visual character concepts and theories above can be used in a holistic way to support the current efforts to bridge the gap, by constructing a framework to explore the visual landscape. According to Stephenson (2008), policymakers need to understand the dynamic values in context, and new elements need to be designed to support the values. He argues that the static model of significance, such as a map of aesthetic, historic and/or ecological values, fails to capture the cultural dynamics. The genius loci or spirit of the place is understood as the character of the place that give people a sense of identity and belonging (Relph, 1976, Norberg-Schulz, 1980). Heath et al. (2013) argues the maintenance of genius loci is the main concerns in historic areas. These visual character concepts and theories related to the cultural attributes are crucial for urban heritage studies.

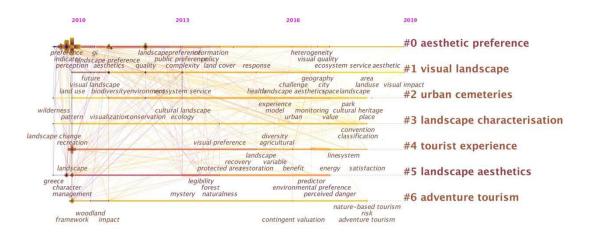


Figure 2-1 Clustering the appearance time of keywords

2.3 Summary

The literature review has revealed new perspectives on the urban heritage conservation and management, TCA and cultural significance. It highlighted that the urban heritage values held by different generations are always developing over time. This significance and the logic of how they are generated should be understood by urban researchers. It has also discussed the key principles that influenced the urban heritage conservation globally, including authenticity, integrity, appropriate use and methods of interpretation and presentation. The HUL approach and heritage discourse for grasping the cultural diversity from the public are discussed.

In addition, the theoretical concepts related to TCA, which include the visual culture, factors influence the visual perception and a visual character framework to capture visual character. The theories provide a basis for explaining people's perceptions of townscape. However, previous studies on architectural composition have mainly focused on the basic and physical forms, and there has been limited research on visible space, symbolic forms and related social networks.

To sum up, it is an important issue and academic problem for the government and scholars to grasp the diversity of HUL elements and townscape values in the public's perceptions. There is a lack of public participation and holistic TCA process within the context of Chinese heritage conservation. The next chapter examines the methodology and the mixed-methods of this research.

Chapter 3: Methodology

This chapter first introduces the background of Xi'an city, China's famous ancient capital, and the two research sites which are related to the history of the Tang Dynasty. Next, the research paradigm is presented, to show the philosophical assumptions of the author. The chapter then presents the mixed-methods research design, and explains how the research data sets were collected and amalgamated. Finally, the chapter demonstrates how the framework analysis was utilised to interpret the research results.

3.1 Case Selection and Background

3.1.1 The Historical Context of Xi'an City

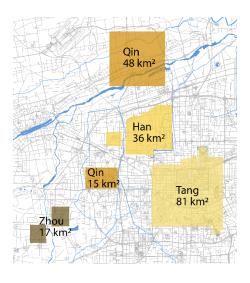


Figure 3-1 Changing locations of the ancient capitals in Xi'an city (Source: the author)

Xi'an (the city's name in Chinese), along with Athens, Rome and Cairo, is one of the Four Greatest Ancient Capitals in the world (Wang et al., 2022). Xi'an is also an important city for industry, education and history in the southwest of China. With a construction history

of around 3,000 years, thirteen dynasties establi shed their capitals in Xi'an. For example, the Zhou (BCE 1046–BCE 256), Qin (BCE 221–BCE 207), Han (BCE 202–CE 220) and Tang (CE 618–CE 907) dynasties represent important stages in the urban history of Xi'an (Figure 3-1). Xi'an has been designated as the origin and centre of China (Figure 3-2) since the Han dynasty. During the Tang dynasty, Chang'an (an ancient city name in Chinese, which today is known as Xi'an) became an inclusive city with diverse religions which was home to a million people. Chang'an was the biggest city in the world at that time, with a total area of eighty-one square kilometres. The Tang dynasty is regarded as the most powerful empire in history.

Today, Xi'an city is the central city in the northwest of China, with an administrative area of 10,097 square kilometres. The residents are very proud of the city's long history and urban heritage, which also make the city a magnet for visitors.



Figure 3-2 Location of Xi'an in China (Source: the author)

3.1.2 The Two Research Sites

The research is conducted utilising the case study approach of two heritage sites in Xi'an city, namely the Small Wild Goose Pagoda (SWGP) and Giant Wild Goose Pagoda (GWGP). The paradigmatic case selection strategy was used. Flyvbjerg (2006) notes that the paradigmatic cases strategy organises research based on specific cultural paradigms (or exemplars), and focuses on 'more general characteristics of the societies'. He continues to explain that researchers can select cases based on experience and intuition in a paradigmatic context where the selection can be accepted collectively in a research field. According to this strategy, the selected case study areas were chosen because they fulfilled two criteria: (1) the two places contain the richest historical information on the Tang dynasty and have distinct townscape character; and (2) they are situated in the main visual catchment (historical corridors highlighted in Figure 3-3) controlled by the Master Plan, and therefore, the townscape character of the two places is controlled by urban planning policy.

The case study sites share some common features. The two research sites are related to the history of the Tang dynasty. Both pagodas were built for the translation of Buddhist scriptures and tourism during the Tang dynasty, and both pagoda areas were listed as part of the UNESCO World Heritage of 'Silk Roads: The Routes Network of Chang'an-Tianshan Corridor' in 2014. Both pagoda areas are currently urban leisure spaces and the focus of tourism connected to the Tang dynasty period. In recent years, many people have come to the two research sites to take photos and record their experience and memories. With the participation of more and more people, a huge dataset on social media platform is provided.

However, the context surrounding the two areas' construction is totally different. The SWGP area (Figure 3-4) includes the city museum, sports centre, urban villages, primary schools, offices, hotels and other residential areas. The surrounding modern construction is relatively older than that at the other site, the GWGP area (Figure 3-4). The core zone of

the SWGP area is a relatively small-scale place, which has preserved a number of older buildings and local communities that have existed over the last seventy years (Figures 3-7, 3-8, 3-11). However, the construction of the GWGP area has been a large-scale urban regeneration in the twenty-first century, including the construction of the North and South Squares of the Pagoda, heritage parks, museums, luxury hotels, communities, entertainment and a Commercial Street. In the process of urbanisation, most of the older buildings in the visual catchment have been demolished and replaced with 'traditional style buildings' – modern constructed buildings using traditional style – which, since the year 2000, have adopted a construction style from the Tang dynasty period (Figure 3-7, 3-8, 3-12). The area's traditional north—south axis continues with the expansion of the new urban district. The two methods of modern development represent two typical development approaches to heritage sites. Therefore, the study combines rich historical context and present needs in the two case studies chosen as the research objects, to investigate townscape character and public preferences.

The SWGP was undergoing regeneration when the research was being conducting (Figures 3-9, 3-10), which gave rise to discussions among local residents. The surrounding urban villages were being demolished, and the plan was to construct a new block to present culture and commercial activities. The concept of the plan was to revive the urban patterns of the Tang dynasty.

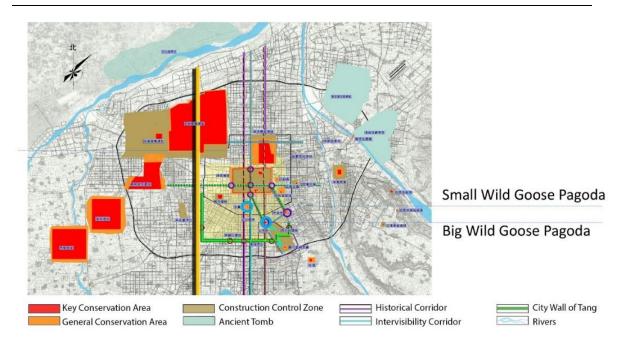


Figure 3-3 Master Plan of Xi'an, 2004–2020

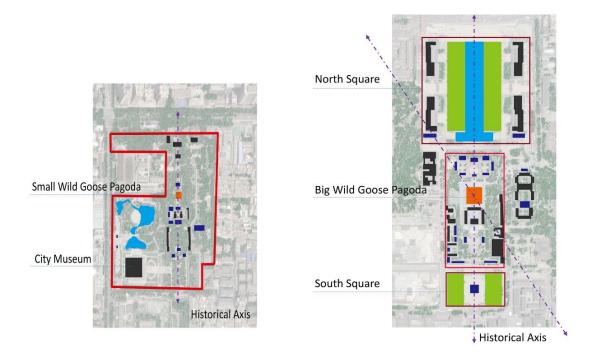


Figure 3-4 The Small Wild Goose Pagoda and Giant Wild Goose Pagoda (Source: the author)

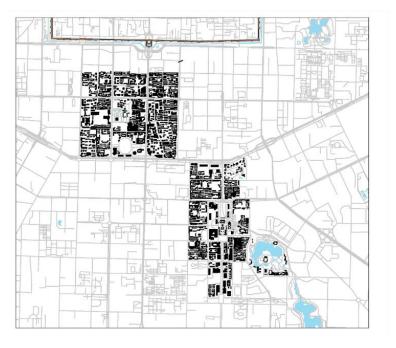


Figure 3-5 Location of the two research sites (Source: the author)



Figure 3-6 Building age map of SWGP area (Source: the author)



Figure 3-7 Building age map of GWGP area (Source: the author)

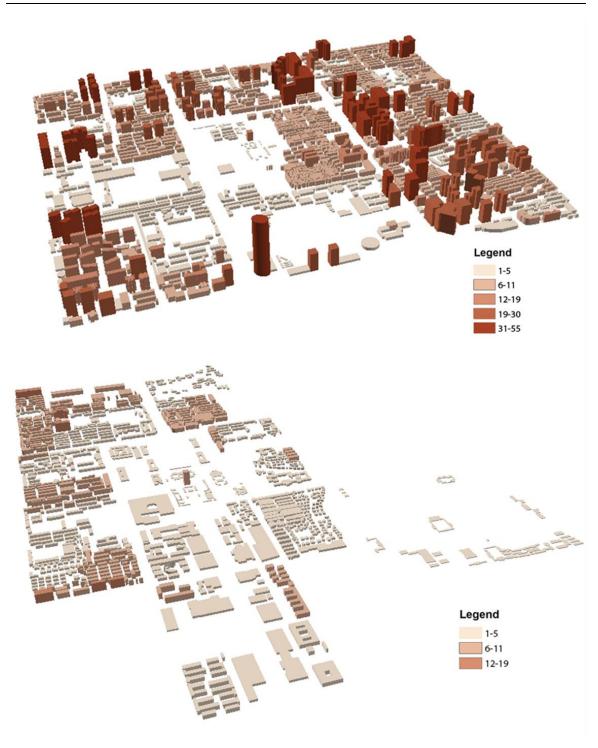


Figure 3-8 Building height model (number of floors) of the two pagoda areas (Source: the author)

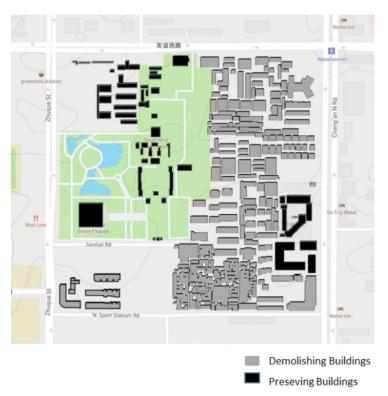


Figure 3-9 Demolishing buildings for the regeneration



Figure 3-10 Master Plan of urban regeneration (Source: Implementation Plan of the reconstruction project of SWGP Historic Area)

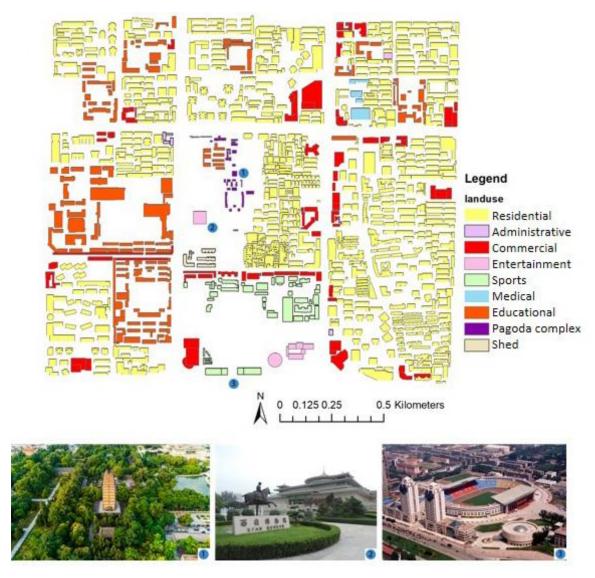


Figure 3-11 Land use and photos of SWGP area (Source: the author)

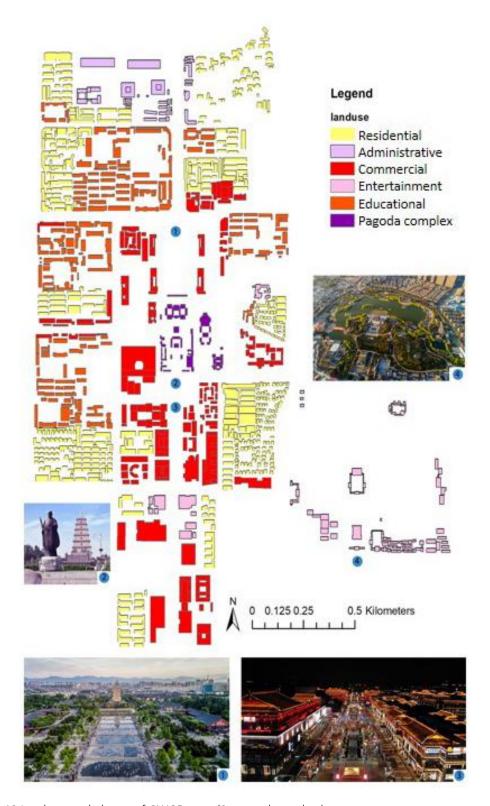


Figure 3-12 Land use and photos of GWGP area (Source: the author)

To achieve deep understanding of people's visual experiences in the research sites before the field investigation, the author applied the Viewsheds in GIS at important viewing points – including the movement of observers, and the visible space of the pagodas in the historic areas within the built environments. The presented visual space by this method is close to the spatial experiences of the observers.

Trend of Visual Analysis based on GIS

The rapid development in the application of GIS has led to new aspects of visual landscape representation. Nijhuis (2017) argues that GIS is used as a new x-ray technology to explore the under surface of visual space configuration. He further explain that the GIS-based research design helps to synthesise the knowledge of previous designs and transform them into the new invention of landscape architectural compositions, and the process continues as a cycle of knowledge formation.

Isovists or viewshed convey the spatial arrangement from an observer's perspective (Tandy and Murray, 1967), and refers to a visible area at one point. Llobera (2003) extends Benedik's definition of isovist and defines visual landscape as a concept to show the structure of human visual space by different parameters. The distinction between isovists and viewshed is that the raster-based viewshed represent parts of space that are visible, taking into account the vertical viewing angle and elevation, while vector-based isovists consider visible space in the horizontal plane (Nijhuis, 2011). The viewshed can be calculated in GIS: the composition of the visible space based on a user's experience is more closely aligned with how the public perceive the space on the ground.

Viewshed Analysis in the Research Sites

Inspired by the analytical logic proposed by Steffen Nijhuis (2011 and 2017), the method of viewshed analysis in GIS was adopted to map the research sites' visible form (see Chapter 2.2). A CAD of the building layout of the research sites was drawn based on Google satellite maps and field study. After importing into the GIS and setting the building

heights, the viewshed analysis was carried out, which includes (1) the visibility area of the important viewpoints in the traditional axis; (2) the areas in the historic area where the pagodas can be seen.

As shown in the figures below, the green area represents the visible space and the red area represents the invisible space. Most of the tour routes in the historic areas are based on their main axes, and Figures 4-13 and 3-14 show the range of visible space for observers based on the viewpoints of axes. The route through the GWGP shows off the traditional axial space with a regular rhythm; and the square on the axis, as an important open space, is shown to the viewer repeatedly on the route. The visible space in the SWGP creates a large change of direction, which increases the interest in the tour path, and important nodes such as the Xi'an Municipal Museum are shown better shown on the route.

Figures 3-15 and 3-16 show the areas where the two pagodas are visible in the research sites. As shown in the figures, both pagodas have high visibility within the historic area under the control of relevant urban policies. The pagoda bodies can also be seen from a distance in important urban open spaces, such as the Shaanxi Provincial Stadium area in the south of the SWGP area and the Qujiang Ruins area in the southeast of the GWGP area. The impact of the different heights and shapes of neighbouring buildings on the visibility of the pagodas can also be clearly seen, providing a visual reference for monitoring the influence of surrounding buildings.

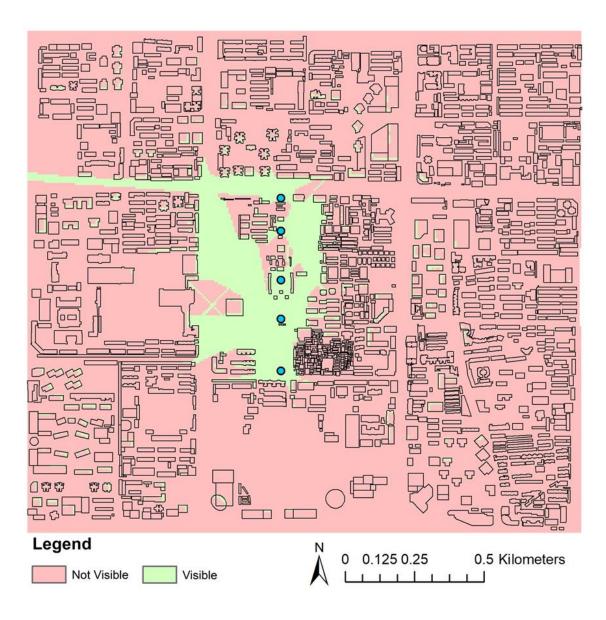


Figure 3-13 Visibility area of the key viewpoints in the traditional axis of the SWGP

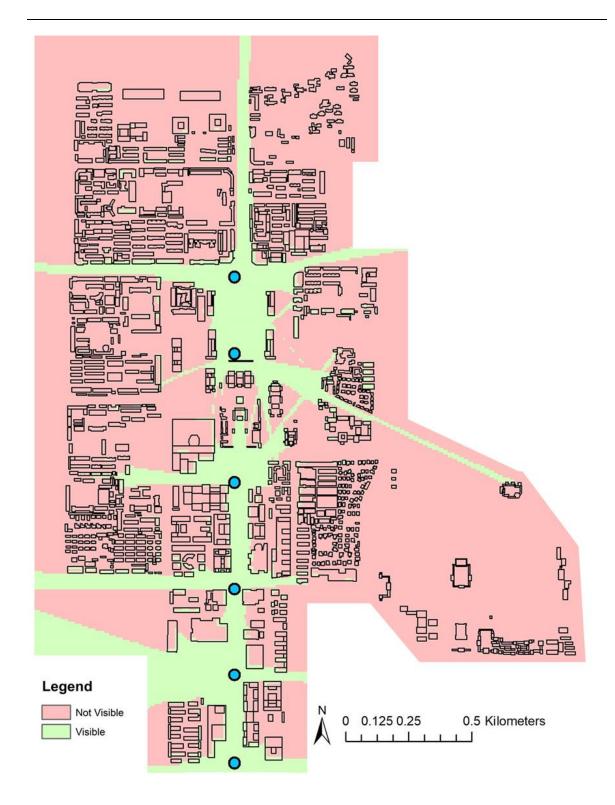


Figure 3-14 Visibility area of the key viewpoints in the traditional axis of the GWGP

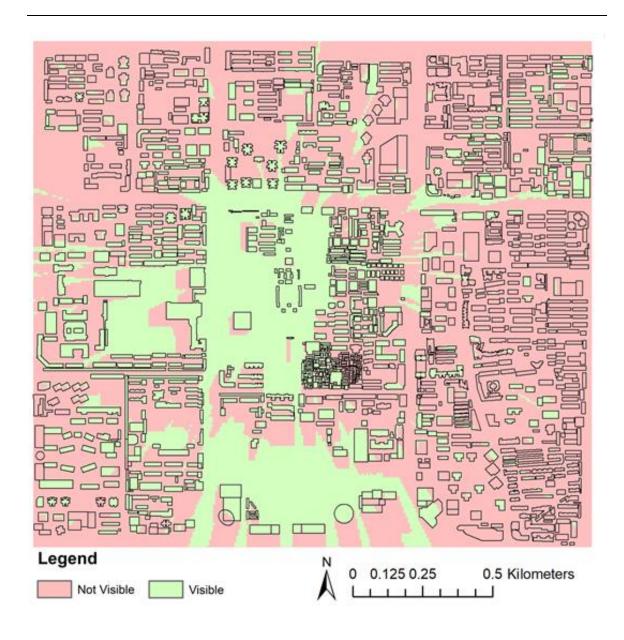


Figure 3-15 Where the pagoda can be viewed in the SWGP area

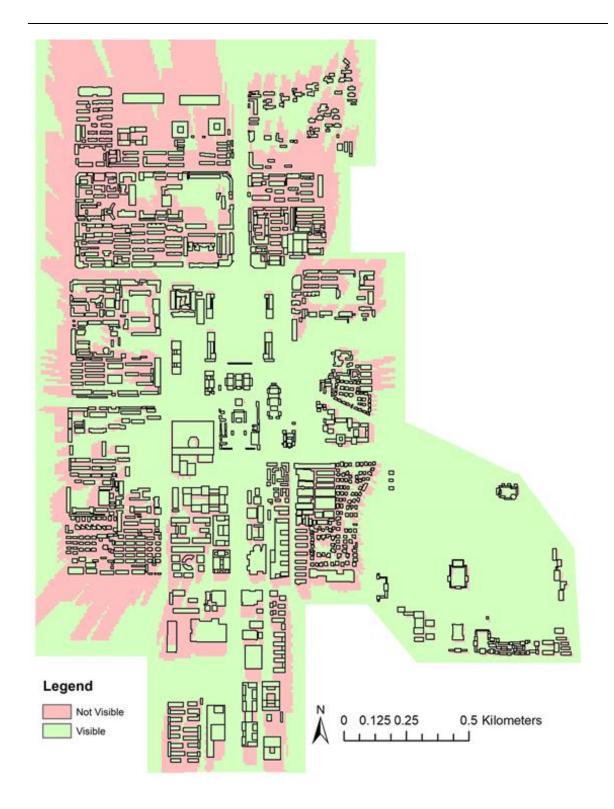


Figure 3-16 Where the pagoda can be viewed in the GWGP area

3.2 Research Paradigm

The research paradigm (also called the philosophical perspective) is crucial not only to the research process, but also to the interpretation of its findings. This is because it is related to the principles of theoretical thinking, the method of cognition and perspective, and to self-awareness when people gain knowledge (Moon and Blackman, 2014). Thomas et al. (1987) note that a research paradigm will affect what, why and how to study. Ontology deals with what is out there to know about; epistemology deals with what and how we can know about it (Grix, 2002). As the starting point, ontology concerns what constructs social reality. From the ontological perspective, realists believe that one reality exists, while relativists believe that no one true reality exists, but that across groups different realities exist. Epistemology follows ontology. On the epistemological level, objectivism holds that meaning exists within the objective; on the contrary, subjectivism holds that subject gives an object meaning (Moon and Blackman, 2014).

According to Goodman, worlds are made into different versions. These world versions may be conflicting but true in different worlds. Many actual world versions exist as 'the products of human agency' (Cox, 2003). From Goodman's perspective, rightness versions of world are produced by different kinds of people, such as scientists, philosophers and artists. World-making does not have to be through languages: symbol systems, such as architecture or photographs, help create worlds. These arts are of epistemologically significant to our understanding. However, the human mind does not make but constitutes the world. The researcher of this research holds the paradigm of bounded relativist ontology, as well as constructionist epistemology.

A bounded relativist holds the ontology that 'one shared reality exists within a bounded group' (Moon and Blackman, 2014). The bounded cultural group in this research could be Xi'an residents, tourists or urban planners who are interpreting the perceptions of the urban landscape. The reason for classifying people in this way is that people in one cultural group use their own way and their own different purpose to assess the urban space. The residents,

tourists or urban planners hold specific cultural background knowledge which they have gained from their own cultural realm in their cultural group. However, a person belongs to multiple cultural groups. For instance, I am a Chinese person, a Xi'an resident and an urban planner: so then, at least, I belong to three cultural groups. In this vein, the sub-groups, for example Chinese tourists and residents, may share common understandings because they are all Chinese people. There are also differences between groups, which Goodman regard as versions of the world. This research aims to identify the common versions, as well as to build a dialogue among different versions.

The constructionist epistemology in this research focuses on how the interaction between people (subject) and visual appearance of landscape (object) produce meaning and knowledge in a modern Chinese context. This kind of constructionist research will increase the possibility of the government's success in giving contextual responses to specific problems, because it explores how people construct reality based on their own context in a specific time and space (Moon and Blackman, 2014). This researcher have participated many types of conservation planning projects, and does not work for government at present. It is presumed that, as an outsider in pursuit of intellectual knowledge of townscape character assessment (TCA) system, the researcher can provide theoretical knowledge of urban planning to underpin this study.

From a philosophical perspective, an interpretivist approach is used in this research to explore the shared meanings among cultural groups. Interpretation is a critical way of conserving historic areas (Farmer and Knapp, 2008). 'Interpretations are considered contextually depended on history and culture that influence how an individual interprets and makes meaning of the world' (Moon and Blackman, 2014). This research focuses on how people perceive and interpret townscape character and values using the HUL elements. Additionally, both expert and public narratives are presented to create a new dialogue about the value of urban heritage.

3.3 Research Design

With a particular focus on the methodology of the research, I will specify the research questions and overall design strategy. I will then discuss the approach to data generation and the tiers of data analysis.

The primary question of this research is proposed in Section 1.4. Specifically, how is historical knowledge and attachment (thoughts, feelings, memories and interpretative bonds between place and people) reflected in terms of the HUL elements that the users of place perceive? How might the townscape character of a historic area affect people's interpretations among different cultural groups? Following the research questions, the following discussion points will also be explored: According to the townscape character management policy made by the policymakers (developed in Chapter 4), what are the views on historic areas that are expected to be perceived? What does this research suggest for townscape character management policy in historic areas in the future? What are the elements and qualities of the views people value, and why?

A qualitative dominant mixed-methods study was designed to depict the valued views of the historic areas. A number of researchers have provided convincing arguments for the merits of mixed-methods research. According to Greene et al. (1989), the mixed-method design has five purposes:

(1) TRIANGULATION seeks the convergence, corroboration, correspondence of results from different methods; (2) COMPLEMENTARITY seeks elaboration, enhancement, illustration of the results clarification of the results from one method with the results from the other method; (3) DEVELOPMENT seeks to use the results from one method to help develop or inform the other method, where development is broadly construed to include sampling and implementation, as well as measurement decisions; (4) INITIATION seeks the discovery of paradox and contradition, new perspectives of frameworks, the recasting of questions or results from one method with questions or results from the other method; (5) EXPANSION seeks to extend the breadth and range of inquiry by using different methods for different inquiry components.

The advantages of mixed-method research are also stated by many other researchers. The utilisation of qualitative and quantitative data offset the limitations of one dataset and allow for comprehensive understanding (Farmer and Knapp, 2008); while quantitative data can 'enhance and extend the logic of qualitative explanation' (Mason et al., 2018).

Five datasets were generated (Tables 3-1, 3-2). First, to add the context of townscape character management, policy documents were traced and policymakers were interviewed (n=4). Then, two datasets, comprising people's blogs from social media (n=2000) and the onsite questionnaire (n=219), are used to map the valued elements in the Chinese context and to depict the qualities of the valued views. Finally, focus group interviews of residents, tourists and designers (n=20) are used to interpret how the views are perceived and why the views are valued. The datasets were cross-examined to increase the credibility and validity of the results.



Figure 3-17 Data collection methods

Table 3-1 Relationships of datasets

Dataset A: Interviewing Policymakers	Dataset B: Pictures on Social Media	Dataset C: Questionnaire	Dataset D: Focus Group
What are the views expected to be perceived according to townscape character management? What does this research suggest for townscape character management in the future?	Get the context from Dat Mixed method case studi Explore the elements and perceive. Suggestions for future un townscape character man	es. I values of the view ban heritage conse	

Table 3-2 Data-collecting techniques

Data Collection Technique	Sources of Information	Number o Informant		Total Number of Informants	Nature of the Data
Political Documents	Planning Guidance	1		1	Qualitative
Interview Policymakers	Policymakers	4		4	Qualitative
Social Media Platform	Microblog Users	SWGP GWGP	1000 1000	2000	Qualitative & Quantitative
On-site Questionnaire Survey	Architects or Planners Others	SWGP GWGP SWGP	34 31 66 88	219	Quantitative
Focus Group	Architects or Planners	5		20	Qualitative
	Others	15			

3.3.1 Dataset A: Interviewing the Policymakers

First, policymakers were interviewed, to understand the contemporary plan practices and the theories related to townscape character management (TCM) in Xi'an. The master plan, conservation plan, sectoral plan of Xi'an and detailed plans of historic areas apply strategies to protect the townscapes of historic areas. The local government has assigned two qualified professional institutes to formulate the master and conservation-related plans of Xi'an. One institution is the Historic Cities Branch (HCB) of Xi'an Urban Planning and Design Institute, based in the municipal urban planning bureau, and the other is Shaanxi Provincial Engineering Technology Research Centre for the Protection and Utilisation of Historic Sites (RCPUHS), based in Xi'an University of Architecture and Technology. The HCB mainly formulates the protection of the whole historic city of Xi'an, including historic city conservation planning as well as the lower-level conservation of historic towns and villages, historic areas, historic conservation areas, historic buildings and so on. The RCPUHS also undertakes important parts of historic city conservation plans from the 1990s, as well as some important heritage site conservation planning and museum designs within the historical context. The two institutions, representing local government and the university, also work together on urban heritage-related planning practice. Thus, the planners and researchers are considered 'policymakers'.

I went to two institutions, where four policymakers closely involved in the conservation planning of Xi'an city were interviewed (Table 3-3). As designers, the planners and researchers have rich experience not only of the urban planning and architectural design projects of the historic area, but also of important research related to heritage conservation. The interviewees compile plans for the government, but they do not have governmental roles. In addition to the planning documents, their knowledge relating to specific practices can reveal how townscape character management is applied, and how they interpret the historical information in urban planning. The interviews elaborate on the content, process,

outcome and future needs of current townscape character management in the historic areas. The concepts describe by policymakers helped the researcher of this study to understand the background of TCM in China. The policy objectives of policy have expected outcome for public perception: for instance, the experts expect the public to be able to experience the history and culture in heritage townscapes. Thus, it is necessary to first understand the experts' expectations related to public perceptions, as discovered through the interviews with the policymakers.

Table 3-3 Matrix of interviewees

ID	Gender	Age	Occupation	Employer	Major Projects
E1	Male	30	Urban Planner	Xi'an Urban Planning and Design Institute	Urban planner of Conservation Plan of Xi'an (2020–2035)
E2	Female	30	Urban Planner	Xi'an Urban Planning and Design Institute	Urban planner of Conservation Plan of Xi'an (2020–2035)
Е3	Male	40	Teacher, Architect, Urban Planner	Xi'an University of Architecture and Technology	Urban planner of Conservation Plan of Xi'an (2004–2020)
E4	Male	60	Teacher, Architect, Urban Planner	Xi'an University of Architecture and Technology	Urban planner of Conservation Plan of Xi'an (2004–2020) Project Architects for the Datang West Market Museum and Hanyang Mausoleum Museum

3.3.2 Dataset B: Photos and Text from a Social Media Platform

As more and more people are using social media platforms, pictures and text on social media have become a form of cultural expression and dissemination (Farahani et al., 2018,

Motamed and Farahani, 2018, Ginzarly et al., 2019, Van der Hoeven, 2019). Based on the interpretation theories, Farahani et al. (2018) argue that people look at a place from different angles and interpret it using photos, which represent diverse understandings of the place. Motamed and Farahani (2018) go on to argue that people use photos to preserve and show to others the particular aspects of the place that they want to keep as memories in future. Therefore, they argue, social media is a kind of 'large-scale participatory sensing', which functions as a kind of data bank of all the urban activities at different scales and social interactions that define the cityscapes. They add that the urban spaces in pictures may be a partial and particular representation, which does not offer a complete and general sense of the real city. However, these embellished photos represent the urban space they approve of. By understanding these evaluative and representative published images, urban planners can help the preferred objectives in photos become a reality. I argue that the process through which people operate city image is similar to beautifying a selfie. When people take selfies, they usually try to find the most beautiful angle in their mind, then embellish or ignore the areas they are not satisfied with.

Even though the authors using photos on social media identify the locations and elements in their research, the text data related to the photos are not analysed. What is more important is the fact that the visual quality and values in the data are not explored enough.

Warner (2002) compares 'the public' and 'a public' to demonstrate that the former term is a general representation of the social totality, while the latter is a particular group of audiences, such as users of social media who share their knowledge of one place they attended together. He argues that a public is self-organised and 'exists by virtue of being addressed'. The 'strangers' who browse the same topic on social media are connected. He continues to argue that people can choose what to create on social media by themselves. People create 'reflexive circulation of discourses' and share their knowledge as the owners of the city via the social media platform. Furthermore, public discourse circulates from past to present and is connected. As a 'poetic world-making' process, people shape their own

knowledge by themselves. The information of heritage sites and public opinions related to urban heritage policies can be grasped from social media platforms (Monteiro et al., 2015).

Related to this research, the data that people produce from social media are not for the purposes of the research; people produce the data for different purposes. The significance of historic sites can be reflected from the data on social media. Analysing the photos on social media provides an opportunity to understand the users' interests and perceptions of the historic areas. The public's perceptions and values are investigated as a people-centred way to get insights on the historic urban landscape (Deghati Najd et al., 2015).

3.3.2.1 Data Collection

Changes and Persistence from 2011 to 2018

Before reaching the two years' worth of data I collected, a general browse on Microblog, starting from 2011, was conducted to improve the integrity of the data and to see 'the circulation between past and present' (Warner, 2002). Since it was proposed in May 2019, Microblog has developed as one of the biggest social media platforms in China, with 511 million monthly active users as of September 2020. The early data of the two research sites are relatively small compared to those from recent years. The information from 2011 to 2018 were also browsed, which gave me some insights into the places, although the photos from years ago were blurry. Combined with the recent two years' worth of data collected in this research, there were many microblogs referring to memories and things that happened in past years, which filled the gap where no data was collected prior to 2018.

The last two-years social media data

The two-years social media data were collected from Sina Weibo (translated as microblog). Microblogging can be understood as a kind of blogging with brief text and photos. It is one

of the most popular social media platforms in China. Microblog had 530 million monthly and 230 million daily active users according to the Microblog Financial results for the first quarter of 2021. Nearly 80% of the users are aged from sixteen to thirty, indicating an obvious preponderance of younger users. People compare it to Twitter because it is a microblogging platform. The slogan of Microblog is, 'Discover new things anytime, anywhere'. It encourages users to 'post' interesting things around them by posting microblogs, which contain up to nine photos and 140 words (without special settings). They can also 'share', 'comment' and click 'like'. There are also 'hashtags' that people can add to categorise the microblog into a topic realm, to create better communication with and gain more attention from others.

About two years' worth of data, from March 1, 2019 to March 10, 2021 were collected to ensure data integrity and saturation. Taking seasonal change into account, the original plan was to collect one year's worth of data. Considering the impact of the coronavirus (COVID-19) pandemic and the renovation of Small Wild Goose Pagoda Park (closed from March 25, 2020 to April 30, 2021), I expanded the data to two years' worth. At the beginning of March, a criticism of the reconstruction of SWGP attracted some online discussion, so I also collected the related data until March 10, 2021. Consequently, ten days' more data were collected than exactly two years. In order to access a representative and significant sample, two kinds of data were collected:

- (1) Hashtags Calculation: The top ten hashtags of every month for each place were filtered from 9,553 and 63,958 microblogs in two years, related to the GWGP and SWGP case study sites.
- (2) *Top 1000 Calculation*: The data would be too much if I analysed the 9,553 and 63,958 microblogs. The photos alone would be 400GB. Therefore, I ranked the microblogs by summing the 'share', 'comments' and 'likes'. After the calculation, the top 1000 microblogs were filtered for each of the two study areas separately. The data include author,

time, content, hashtags, URL, embedded images, and times of share, comment and like. The following is an example of a microblog with text, hashtags and photos.



Figure 3-18 Microblog from Xi'an Municipal Museum's official microblog

The data on social media were collected by web crawler from the target website Sina Weibo (https://weibo.com). Using a the Java programme, this involved four steps: (1) Crawling Weibo time: through the advanced search page of Sina Weibo (https://s.weibo.com/weibo?q=%s&typeall=1&suball=1×cope=custom:%s:%s&Ref er=g&page=%d), the start and end times were set to collect Weibo data by time. (2) Hashtag calculation: the hashtags and posting time were extracted, and the top 10 hashtags of every month were calculated and exported to Excel. (3) Top 1000 microblog calculation: calculations were made on the data according to the sum of shares, comments and likes. Then the top 2000 data from the GWGP and SWGP areas were extracted. (4) Image download: image URLs were taken out of the collected database, and a multi-threaded loop was used to download the images. The embedded images were named by date and time, such as 2021030423. It is easy to connect the image with the text data. Finally, the data were saved in two Excel files and a folder of 9,874 photos.

The sum of shares, comments and likes was chosen to select data, because it presents the most popular microblogs that people were interested in. Due to the large dataset, random samples were not selected because they accounted for too small a proportion of the total data. However, at the same time, the current data selection may also result in some omission of detailed information. Over the course of the nearly five-year study, the researchers also regularly searched for information related to the study area to gain an in-depth and nuanced understanding of what is available on social media.

3.3.2.2 Data Filtering and Category

After generation, the photos and their contents were filtered, categorised and coded. Some microblogs may contain key words (GWGP or SWGP), but have content which has nothing to do with the place. For example, some fans post microblogs to support the songs or films of celebrities or show the influence of stars – this kind of '*irrational support*' related to a '*star power list*' was taken offline in August 2021. There were also some unrelated commercial advertisements that appear anywhere because money is spent on marketing. Many unrelated hot words are added – for example, the place name, a piece of social news that happened in another place or a movie star's scandal – to increase the possibility that the microblogs will be viewed. The message may just be produced by a machine. To eliminate invalid data, fifty-eight microblogs on the GWGP and twenty-one microblogs on the SWGP were filtered out at the first step. Similarly, the generic hashtags which are not related to the particularity of the place were deleted.

Additionally, many people went to different places in and out of Xi'an city but put the photos in one microblog. Consequently, some photos' data were not taken in the research sites. These photos which were taken anywhere else were classified as 'Other'. Photos in the 'Other' category were not analysed as InSite information; however, some information in this category is analysed in Chapter 5.

Finally, the filtered pictures were categorised into different folders based on the key themes, including the HUL elements checklist (O'Donnell and Turner, 2012), people's activities and tourism strategies, which were analysed one by one. The principles of categorising are: (1) refer to the text message to understand what they want to show; (2) the area of the elements (a picture may contain more than one key element, so to categorise these pictures, I made a new folder – for example, architecture and vegetation); (3) to increase the validity of this process, an architect, a lay person and the researcher tried to categorise the pictures separately; based on the principles, the results were almost indistinguishable.

3.3.2.3 Data Analysis

Then, the data were analysed following content analysis procedures, which are based on counting and analysing 'the frequency of certain visual elements in a clearly defined sample of images' (Rose, 2001, p.56). The text data and the photos are interdependent, and show a mutually interpreted generative relation; therefore, to keep the relations of the two kinds of material, text and photos were analysed simultaneously by their locations, visual elements and visual qualities. The describing text provided understanding of the photos. Sometimes, I found that I missed the purpose of the people taking the image when I only looked at the photos before reading the text.

The locations of some typical viewing points were identified. The location of photographing from the map indicates where people like to take pictures and view the environment. The most photographed 'best views' were identified by counting the frequency of view scenes. The content of the photos was analysed to identify the visual elements and qualities in the field of vision and, at the same time, any missing or neglected elements. People ignore some of the elements they do not like and just shoot the elements they are interested in. Also, the visual quality represents the feeling or townscape character

perceived in the place. The technologies that are used when people produce photos provide an insight into peoples' preferences regarding the qualities of the views.

3.3.3 Dataset C: The Questionnaire Survey

3.3.3.1 Topics of the Questionnaire

The objective of the questionnaire was to present how the residents and tourists perceive the visual appearance of the historic areas. Questions were divided into two parts to investigate users' background information and perceptions of the research sites (Appendix F).

Part A: Background Information/Demographics

The first part categorises participants' socioeconomic characteristics by age, gender, education, employment, occupation, income and identity. More detailed questions were asked to local residents, which related to how they are familiar with place. Additionally, the purpose of visit and the familiarity to the research areas were also asked to the participants. The respondents also indicated if they had any memories/stories/imaginations related to the place. These memories/stories/imaginations were written by some respondents.

Part B: Townscape Perception

The second part deals with the visual perceptions of the historic area. The participants were asked using five-point Likert scales on the perceptions of the valued tangible and intangible elements, the townscape character of the historic areas, and the general satisfaction with the historic areas.

3.3.3.2 Sampling

A questionnaire with a sample size of 219 users was conducted at the two case study sites. The sample group were randomly selected in each research site. The questionnaire was conducted online after the consent of participants. The participants filled in the questionnaire though an online link.

3.3.3.3 Analytic Framework of Statistical Analysis

Table 3-4 Analytic framework of the questionnaire survey

Purpo	se of the analysis	Examples	Analysis methods
1.	Sample background and characteristic analysis	Proportion of individual background by age, gender, education, identity, etc. The characteristic of the respondents and the qualitative analysis of their memory of the space	Frequency, qualitative
2.	Reliability statistics	A scale should consistently reflect the construct it is measuring	Reliability analysis
3.	Validity analysis	Whether the sample answers are accurate and reliable	Validity analysis
4.	Study variable description analysis	The overall perceptions and attitude towards the study variables	Descriptive, T-test

First, to get a general understanding of the participants, the background information of visitors was explored by age, gender, education, identity, as well as their reason for visiting and how they are familiar with the historic context of the historic area (see Figure 5-5). Then, in a designated blank space on the questionnaire, some of the participants also described their memories, stories and imaginations relating to the historic, these data will be analysed qualitatively. Next, the reliability and validity of the data were checked. After that, descriptive analysis was taken on some data – for example, to identify people's satisfaction with the two research sites (Figure 5-6). Finally, to compare people's perceptions of the HUL elements and visual characters of the two historic areas, the five-point Likert scales were tested. The approximately normal distribution confirmed, and the independent t-test was chosen. The perceived HUL elements and visual character with significant differences in the two historic areas were identified (see Figures 5-7 and 5-8). The results of the questionnaire survey will be presented in Section 5.1.3.

3.3.4 Dataset D: Focus Group

To generate data on perceptions of townscape character, fourteen residents who live or work in the surrounding area and thirteen tourists who travel to the two research sites were recruited for the focus group. The residents and tourists who participated in the questionnaire were invited to the focus groups, and participants in the focus group were selected after I received the contact list: a certain number of consents from potential participants more than the required number of focus group participants. To provide a wide range of cultural values, the people to be interviewed were consciously chosen from the contact list to cover different genders, ages, professions and geographic locations, as a way of purposive sampling. Participants who were selected were contacted and a suitable time for the interviews and focus groups were determined. Any respondent who was not interviewed was thanked via email or telephone for their interest. The interviewees were divided into five groups of four to six people each. Each focus group took between one and

two hours, and was conducted in conference rooms or online using Wechat (the most influential messaging and calling application in China). The focus group sessions were audio-recorded and transcribed for subsequent analysis.

Photos of the two research sites taking by participants and downloaded from social media were used as material for the focus groups. 'These interviews-with-photographs provided a self-reflexive verbal articulation of how a range of different kinds of feelings collaborate to constitute' a place (Rose et al., 2010). The participants were asked to describe which elements they valued and to indicate what the positive or negative images of the urban space were. Using the HUL approach and framework of visual character (Tveit et al., 2006, Ode et al., 2008), the interviews aimed to make explicit the townscape character-shaping dynamics of interpretations. Questions related to the mediation between old and new were asked, to provide suggestions regarding potential future heritage.

Table 3-5 The demographic information of focus group participants

Participant	Age	Gender	Field of work or study	Length of residence (years)	Group no.
A) Residents					
R1	30–39	Female	Architecture	36	1
R2	30–39	Male	Other	17	1
R3	30–39	Female	Other	17	1
R4	18–29	Male	Other	29	1
R5	30–39	Male	Other	30	2
R6	40–49	Female	Other	30	3
R7	30–39	Female	Other	33	3
R8	50–59	Female	Other	23	3
R9	18–29	Female	Other	8	3
R10	18–29	Female	Other	3	3
R11	30–39	Male	Other	12	4

	R12	18–29	Male	Architecture	6	4
	R13	30–39	Female	Urban Planning	7	4
	R14	30–39	Male	Architecture	8	4
B) To	urists					
	T1	18–29	Female	Other	0	2
	T2	50–59	Male	Other	0	2
	T3	30–39	Female	Architecture	0	2
	T4	30–39	Male	Other	4	2
	T5	18–29	Female	Other	0	4
	T6	30–39	Male	Urban Planning	5	4
	T7	30–39	Female	Urban Planning	0	4
	T8	30–39	Female	Urban Planning	5	5
	T9	40–49	Female	Other	0	5
	T10	30–39	Female	Other	0	5
	T11	30–39	Male	Other	0	5
	T12	18–29	Female	Other	4	5
	T13	30–39	Female	Other	0	5

3.4 Framework Analysis and Interpretation of Material

All sets of data were coded in a framework and interpreted based on the research questions. To match the data collection to the research questions, four categories were developed for data generation: (1) policymakers' concerns about townscape character management in China (Chapter 4); (2) valued elements, which deal with aspects related to which elements are valued and why (Chapter 5); (3) 'perceptions of the view', which deal with aspects of the visual experiences in historic areas (Chapter 6); (4) narratives on townscape character management for future heritage based on history and the present (Chapter 7).

After generating the mixed databases with these methods, the data analysis is conducted in three steps. First, the data from the five datasets were analysed separately. The qualitative data were coded in Nvivo, while the questionnaire were analysed by SPSS. There are 4 texts files in the Nvivo, including: interviews with policymakers, microblogs from the SWGP, and microblogs from the GWGP, and transcriptions of interviews with focus groups. All the texts were coded according to the research questions by three levels. For instance, the text related to each tangible and intangible HUL element was coded. Many codes were related to multiple data-sets. Second, the framework analysis was adapted to hyperlink cells to code documents, as 'convergence coding' (Mason et al., 2018) at the synthesis level. A coding frame was constructed, encompassing different themes related to the research questions, which also brings the authors back to the data again. Third, the findings of the qualitative and quantitative research were combined, examining the degree of accordance and offering complementary information at the interpretation stage.

As this was a mixed-methods study, the data-sets were triangulated to answer the research questions, described at the beginning of the previous Section 3.3. First, the policymakers' interviews were analysed to understand the policymakers' concerns around TCA. The political background and their perspectives on public perception and participation were understood (Objective 2). Then, the questionnaire, social media and focus group data were combined to identify the valued elements of the historic areas (Objective 3). Next, the social media and focus group data were analysed to illustrate the values of the HUL elements through people's interpretations (Objective 4). Finally, data from the focus groups were supplemented by the policymakers' interview to explore ways to evaluate the utilisation, interpretation and presentation of historic areas to preserve the townscape

character of historic areas (Objective 5). The diagrams below illustrates how the data sets contribute to the objectives (Figure 3-15).

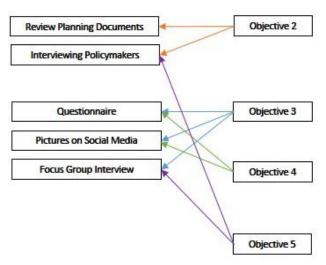


Figure 3-19 Each Research objective corresponding to the data-sets

Chapter 4: The Policymakers' Concerns

This chapter aims to explore townscape character management from the perspectives of conservation principles, regulations, urban plans and experts' narratives. These main contexts of townscape character management demonstrate the experts' concerns and current issues, and indicate the need to improve the townscape character management system. Guided by the conservation principles originating from Western discourse which are outlined in the first part of the literature review, the top-down regulation and planning systems are examined in detail. Then, a more narrow focus on the townscape character management practice is demonstrated. Finally, the key concepts and reflections of townscape character management are presented.

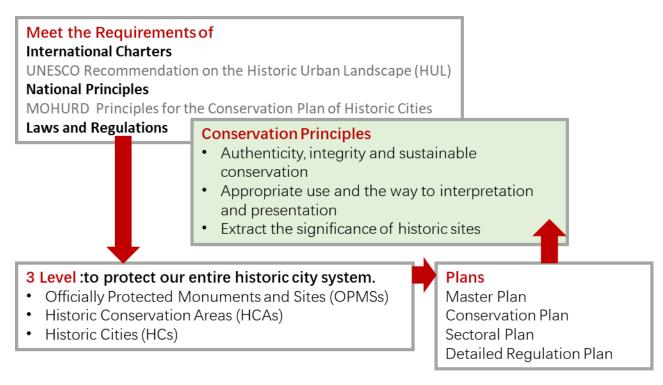


Figure 4-1 Townscape character management in China

4.1 China's Townscape Protection Ordinance and Conservation Plans

4.1.1 Hierarchical Top-Down Protection Ordinance

Urban heritage conservation in China must comply with all the guidelines of the legislative system at three levels (Figure 4-2). In China, the National People's Congress (NPC), the highest organ of state power, enacts laws. Both the state administration and local government can enact regulations. Under the NPC, state administration has the same powers as the provincial government, and under this level, the provincial administration has the same powers as the municipal government. Thus, requirements of the national, provincial and municipal governments are shaped according to a top-down principle. This chapter reviews the laws and regulatory system in China. The terms related to the 'three-level management' system are explained, to characterise the planning system at different levels.

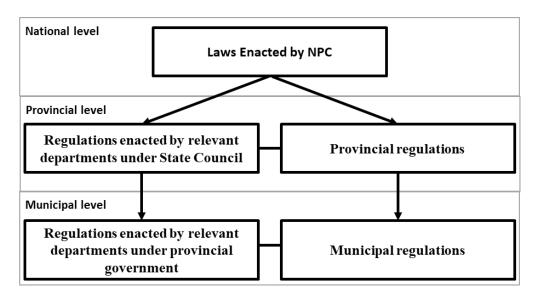


Figure 4-2 Laws and regulation system in China

In order to better understand current townscape character management from the experts' perspectives, the planning documents are reviewed, combined with explanations from the interviews with policymakers, and these results are presented. The most fundamental part of the legal system are the national laws made by the NPC, including the laws for the protection of cultural relics, urban and rural planning and intangible heritage (NPC, 2017, NPC, 2019, NPC, 2011). In 1982, the first Law on the Protection of Cultural Relics of China (LPCR) was passed. As the dominant law in this area, the LPCR remained virtually unchanged for two decades. In 2002, 2007, 2013, 2015 and 2017, five amendments were made, over which time China was transforming rapidly and the government was paying considerable attention to the protection of cultural relics (Newell, 2008). With the enactment of the original LPCR in 1982, a total of twenty-four cities were designated Historic Cities (Chinese: Lishi Wenhua Mingcheng, HCs), including Xi'an, Beijing, Hangzhou and Nanjing. These cities, reflecting the history of the development and evolution of human settlement and evolution of human settlement, have been protected by the law. The State Council has listed 140 cities as HCs as of 2022. In addition, some areas in HCs have been designated Historic Areas (Chinese: Lishi Diduan, HAs) and Historic Conservation Areas (Chinese: Lishi Wenhua Jieqv, HCAs) for protection. HAs are those areas that reflect the characteristics of a specific historical period, while HCAs are HAs that are particularly rich in preserved cultural relics and historic buildings. Next, Officially Protected Sites and Entities (Chinese: Wenwu Baohu Danwei, OPSEs), representing important immoveable heritage sites or buildings and their associated components, have been designated and protected.

Thus, a hierarchical protection system of three levels has been constructed, with the protection of OPSEs, HCAs, and HCs (Chen et al., 2021). The sequence of planning represents a hierarchical top-down system, from the macro, to the meso, to the micro level. In other words, the conservation system starts from whole historic cities (or villages), then to the areas and finally to the buildings. Policymakers see this as an integrated system: 'the aim is to protect the entire historic city system from top to bottom' (Interview E1). In this

system, historical context is considered at different levels of urban planning and architectural design processes, especially in HCs. The State Council issued the Implementation Rules of the Protection of Cultural Relics (2017) and the Regulations on the Protection of Historic Cities, Towns and Villages (2019) to implement the protection laws and regulate the HC system.

At the next level, the Ministry of Housing and Urban-Rural Development of the People's Republic of China (MOHURD) has produced some documents to guide the procedures and formats of conservation plans (Chen et al., 2021) – the Guidelines for Formulating and Approving Conservation Plans for Historic Cities, Towns, Villages and Conservation Areas in 2014; the Regulations on the Protection of Historic Cities, Towns and Villages in 2017 and the Standards for the Protection of Historic Cities (GB/T50357-2018) in 2018 are important policies currently in effect. Alongside the State Administration of Cultural Heritage (SACH), International Council on Monuments and Sites (ICOMOS) China published the Principles for the Conservation of Heritage Sites in China in 2000, which were subsequently revised in 2015, to ensure the quality of conservation practices.

Townscape character management plays an increasingly important role at present. During the processes of globalisation and localisation, Chinese city authorities assigned new urgency to the problems of identifying and maintaining local cultural diversity based on the built environment. Official planning in China pays significant attention to townscape character management to this day. On April 29, 2020, the MOHURD and the National Development and Reform Commission (NDRC) jointly issued the Notice on Further Strengthening the Townscape character management, clarifying that local governments should strengthen management and improve their regulatory tools, especially in HAs.

Guided by the nationally used laws and regulations, provinces and important HCs (such as Xi'an) issued their own pieces of province-scale and city-scale guidance. These regulations and rules were issued to protect the heritage from cultural heritage and urban planning administrations. There are independent regulations related to the ecological environment

of Qin Mountain, ancient trees, and intangible heritage at both provincial and municipal levels. Furthermore, the Regulations on the Protection of Historic Cities in Xi'an also designated the important heritage sites and the details manage requirements of each sites; a main chapter of this thesis is related to the protection of the historical and cultural townscape, and its two research sites have been designated as important areas for townscape protection. (The management strategies will be explored in Section 4.1.2.)

Table 4.1 Legislative system of heritage conservation in Xi'an

Legislative body	Type of legislation	Heritage conservation policy
National People's Congress (NPC) standing committee	Law	• Law on the Protection of Cultural Relics in the People's Republic of China (PRC) (enacted in 1982, amended in 1991, 2002, 2007, 2013, 2015 and 2017)
		• Law of Urban and Rural Planning in the PRC (enacted in 2007, amended in 2015 and 2019)
		• Law of Intangible Cultural Heritage in the PRC (2011)
State Council	Administrative rules and regulations	• Implementation Rules of the Protection of Cultural Relics (enacted in 2003, amended in 2013, 2016 and 2017)
		• Regulations on the Protection of Historic Cities, Towns and Villages (enacted in 2008, amended in 2017 and 2019)
Relevant departments under State Council	Documents of statutory regulation	• Measures for Administration of City Purple Lines (enacted in 2003, amended in 2011)
	and rules	• Guidelines for Formulating and Approving Conservation Planes of Historic Cities, Towns, Villages and Areas (2014)
	•	• Standards for the Protection of Historic Cities (2019)
		• Notice on Further Strengthening the Townscape character management (2020)

Provincial government and standing committee	Provincial rules and regulations	• Regulations on the Protection of Cultural Relics in Shaanxi Province (enacted in 1988, amended in 1995, 2004, 2006 and 2012)
		• Regulations on the Protection of Intangible Heritage in Shaanxi Province (2006)
		• Regulations on Urban and Rural Planning in Shaanxi Province (2009)
		• Regulations on the Protection of Ancient Trees in Shaanxi Province (2010)
		• Regulations on the Qin Mountain Ecological Environment Protection of Cultural Relics in Shaanxi Province (2019)
Municipal NPC and standing committee	Municipal rules and regulations	• Regulations on Protection of Historic Cities in Xi'an (enacted in 2002, amended in 2010 and 2017)
		• Regulations on the Protection of Immovable Cultural Relics in Xi'an (2006)
		• Measures for Excellent Modern Building Protection and Management (2016)
		• Regulations on the Qin Mountain Ecological Environment Protection of Cultural Relics in Xi'an (2017)
		• Regulations on the Protection of Ancient Trees in Xi'an (2017)
		• Regulations on the Protection of City Wall in Xi'an (enacted in 2009, amended in 2017)

4.1.2 Townscape Character Management in the Conservation Plans

According to the three-level protection ordinance system, the urban heritage conservation plan is compiled from city scale down to the individual districts, areas and buildings. These

statutory plans are protected by law, including master plans, conservation plans, sectoral plans and detailed regulation plans (Figure 4-3). The conservation planning system starts with a general master plan, as an overarching strategy for the specific conservation plan for a Historic City. Then, the sectoral plans, such as urban design guidelines, a city colour plan and a buffer zone height plan, are compiled by relevant professional organisations to supplement the guidance from their specific perspectives. Next, a detailed regulation plan defines the conditions for the detailed construction plan on the land use—based zone. The urban heritage conservation plan system, which makes wide use of the townscape character management concept, is reviewed in this section, to explore the influence of townscape character management across the whole system.

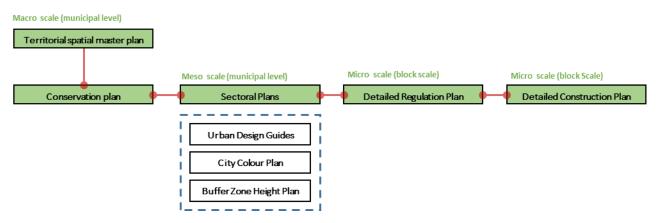


Figure 4-3 China's urban conservation plan system

4.1.2.1 The Territorial Spatial Master Plan and the Conservation Plan

The Territorial Spatial Master Plan (or Urban Master Plan) of Xi'an, and the subordinate Conservation Plan for the Historic City of Xi'an, are two fundamental laws on which conservation practices are based. The master and conservations plan for a city are linked by common goals, and are legally binding on local government plans after they come into effect. Each HC must compile a conservation plan to complement its master plan. An

important aspect of both types of city-scale plans is guidance on how to protect the townscape in the HC.

The Master Plan of Xi'an (2004–2020) defines the designated position of Xi'an as 'a city combining ancient and modern civilisations', where 'modern development should respect the historical context'. The draft of the Territorial Spatial Master Planning (2021–2035), which was put forward for public consultation in November and December 2022, designated the city as 'an identification place for Chinese civilisation inheritance'. In other words, Xi'an is designated to become an exhibition window for Chinese culture and civilisation by

(1) enriching the connotation of the national historic city, (2) presenting the importance of Xi'an in Chinese civilisation, (3) building a 'Historical and Cultural Protection and Inheritance System (HCPIS)' for urban and rural development, and (4) inheriting and continuing Chinese civilisation and historical context through creative transformation and innovative development.

In this context, 'civilisation' means the unique and advanced culture of a stable group, for example the civilisation of the Tang dynasty or other dynasties in history. Thus, a country has different forms of civilisation over time. Higher civilisation, or a higher level of development in society, is a common aspiration among Chinese people. The designated position of the city directly reflects the city's most basic characteristics and the general direction of development. The Master Plan and Conservation Plan of Xi'an (2004–2020) sets out the aim that the modern districts should continue the ancient urban form in harmony with the urban heritage.

In 2035, a charming HC will be achieved. According to its master plan, Xi'an will become a symbolic city representing Chinese culture, and a centre of global cultural exchange with Chinese character. The system (the Historical and Cultural Protection and Inheritance System, or HCPIS) is constructed around the natural mountain and river environment, large-scale archaeological sites, one historic urban area, three HCAs, historic villages and

towns, OPSEs, historic buildings, HAs, key axes, cultural routes and intangible heritage (Figure 4-4).

This new system, planned in 2022, appears to add some new elements of protection to the three levels of conservation. Firstly, the natural environment – including rivers, mountains, tablelands, fields, forests, hills and ponds – and its relationship with the city, has always been a crucial component for protection. Experts examined both the external and internal environment of the city: 'This system includes the core historic areas and the natural landscape system outside it, which reflect the authenticity and integrity conservation principles' (Interview E1 and E3). The larger-scale natural surroundings and environment are emphasised because they reveal the intention of the original design of the HCs (ICOMOS, 2015). The values in the natural environment will be explored further in Chapter 5. Secondly, the large-scale archaeological sites, or great ruins, reflect historical and cultural information on military, science, technology, industry, agriculture, construction, transportation, water conservancy and other fields in a historical period. The urban pattern of the Tang Chang'an city is a large-scale archaeological site which is given protection in the plan. Thirdly, different kinds of cultural routes are protected, to become a network in the city. The notion of the cultural route originates in the Santiago de Compostela Declaration in 1987, and in 1993 the Santiago pilgrimage routes were listed in the Word Heritage List (Zhang et al., 2022). The cultural route is defined by ICOMOS (2008) as a route of communication 'which is physically delimited and characterised by having its own specific dynamic and historic functionality', with an emphasis on flow and exchange between large regions over a long time. The Silk Road is one of the most important cultural route of Xi'an, which has connected China with many international cities throughout history.

In the draft of the Territorial Spatial Master Plan (2021–2035), the townscape of Xi'an is embodied with two key concepts: ecology and culture. Four kinds of townscape area are designated: traditional townscape areas, townscape coordinating areas, modern townscape areas and natural townscape areas. The traditional townscape areas are the archaeological

sites and the surrounding areas. In these areas, the historical fabric should be continued: historical and cultural information is transmitted to people using the historical and cultural symbols, and the unique townscape is presented. The coordinating areas are six places where the modern Xi'an city overlaps with the archaeological sites, including the ancient Tang Chang'an city (the location of the two research sites), and they should embrace the modern and historical townscape. The modern townscape areas are modern symbolic places: these places require green and low-carbon development to form characteristic urban spaces. The natural townscape environment is the surrounding mountains and rivers, in which the natural characteristics and species diversity should be protected. The villages in these areas should have good visual connections to the mountains and rivers.

Furthermore, urban public spaces are regarded as a platform for the communication of the history and the present. The structure of the characteristic public space (Figure 4-5) is designated as 'one core, one axis, one pulse, three corridors, three rings and multiple points'. In Xi'an, one core is the ancient Sui-Tang Chang'an city; the east-west Silk Road Development Axis and the north-south centre axis of the Sui-Tang Chang'an city are respectively one axis and one pulse, crossed at the centre of Chang'an city. The three corridors are the visual catchments, including the axes of the Han, Tang Chang'an city and the corridor between the Daming Palace and the Giant Wild Goose Pagoda (GWGP). The three rings are ecological green spaces: the Huancheng Park, the Tang City Wall Ruins and the regional rivers-mountain ring. Multiple points are other key public spaces of the city. The townscape, and especially the skylines, of the important HAs, landmark buildings, transportation hub and giant open spaces, should be controlled. Seeing the city up close, viewing the mountains and rivers from afar, and perceiving history are the principles for the plan of the City's Viewing System (CVS). The viewing corridors of the system are the axes of the ancient capitals' archaeological sites. In the Territorial Spatial Plan of Xi'an city, the heritage sites were categorised as townscape zones according to the current situation which mainly related to the state of modern development. The large-scale archaeological sites are protected with special strategies integrally, and connected by the large scale archaeological cultural belt (Figure 4-6). At the same time, the HCPIS integrates with urban functions and raises the levels of urban heritage presentation and utilisation, which means that protection is improved by utilisation, and a high quality of urban development and life is promoted by cultural prosperity. The concepts of cultural and ecological development are considered, and the urban heritage is designed to combine with important urban leisure and recreation spaces (Figure 4-7), and green and open spaces (Figure 4-8). People can participate in recreation in green spaces and experience the value of urban heritage.

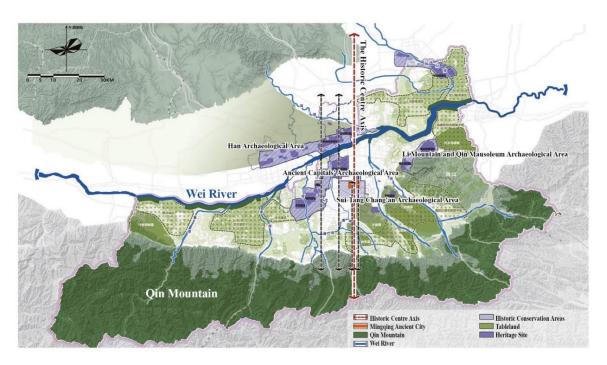


Figure 4-4 Urban heritage conservation pattern of Xi'an city Source: Draft of the Territorial Spatial Master Planning (2021–2035)

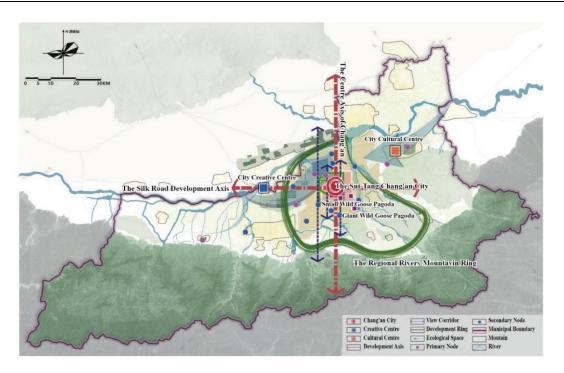


Figure 4-5 Planning structure of Xi'an city characteristic public spaces Source: Draft of the Territorial Spatial Master Planning (2021–2035)

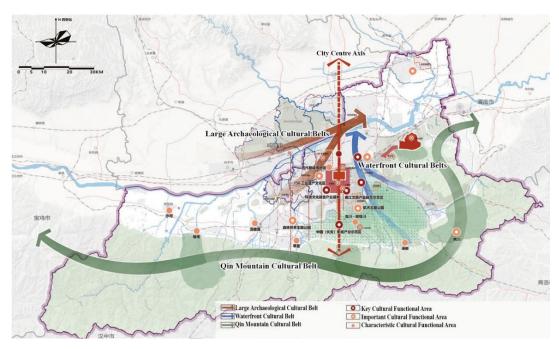


Figure 4-6 Planning structure of Xi'an city cultural belts and areas Source: Draft of the Territorial Spatial Master Planning (2021–2035)

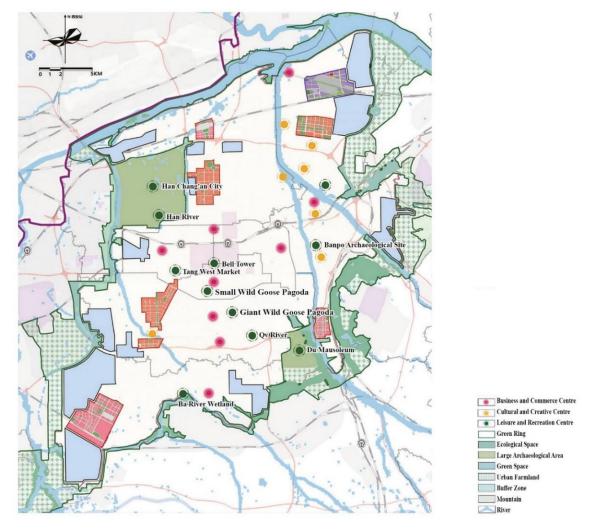


Figure 4-7 Planning structure of Xi'an City functional areas Source: Draft of the Territorial Spatial Master Planning (2021–2035)

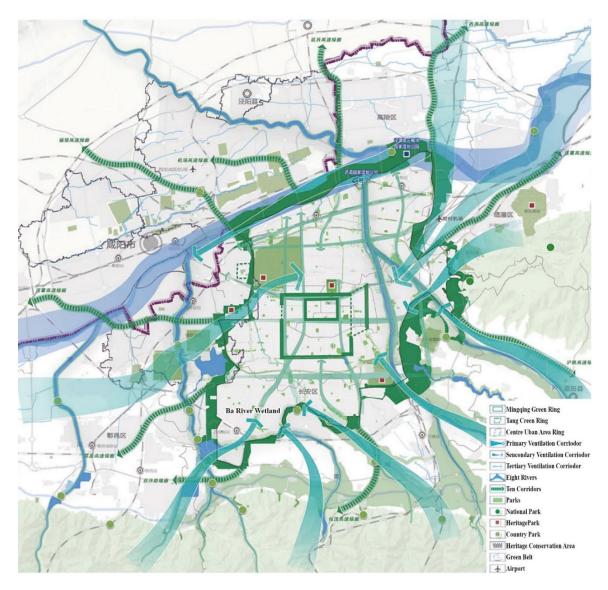


Figure 4-8 Planning structure of Xi'an City open spaces Source: Draft of the Territorial Spatial Master Planning (2021–2035)

Guided by the Master Plan, the contents of the Conservation Plan include: (1) the principles, contents and scope of protection; (2) protection measures, development intensity and construction control requirements; (3) requirements for the protection of traditional patterns and historic townscape characters; (4) the core protection areas and buffer zones; and (5) a phased implementation plan for protection planning (MOHURD, 2019). In

general, the conservation plan clarify the urban heritage values, and propose requirements for how to appropriately use, interpret and present the historic sites to exhibit traditional culture (MOHURD, 2014).

The upper-level Master Plan defines the key issues, and the Conservation Plan supplements the details for heritage protection. The Conservation Plan of Xi'an (2004–2020) aims to protect the natural landscape system, traditional urban patterns, urban heritage sites, intangible heritage and ancient trees. It also defines the preservation of visual catchments of Xi'an, including the traditional axes, city walls, rivers and the inherent relationships between important historic buildings. The landscape surrounding the visual catchment is controlled to improve the visibility of historical buildings and revive the historic environment. Visual, landscape, industrial, building, green space and transport controls are implemented as discussed below (Table 4-2).

Table 4-2 Control of historical visual catchments in policy

Aim	Content
Visual control	Control the visibility of the sightlines.
Industrial control	Remove the industries in conflict with the historical context.
Landscape control	Enable the landscape of visual catchment to coincide with the historical context.
Building control	Enable the size, height and style of buildings to coincide with the historical context.
Green space control	Use green space to show the previous form of HCs. Improve the environment of visual catchment.
Transport control	Organise travel lines to experience urban history.

In 2021, the new Conservation Plan of Xi'an (2020–2035) entered into effect. The main principles of the plans are regional coordination and protection, integrated protection, authenticity, appropriate use and sustainable development, all of which were discussed in the literature review. The plan aims to protect historical and cultural resources, exhibit traditional culture by digging into and utilising the cultural resources, integrate history and culture into modern life, improve the living environment, present the characteristics of the city, and show the charm of the ancient capital. The details of the HCPIS in the Territorial Spatial Master Plan is explained based on municipal scale and area scale. The protection of the whole city focuses on its natural mountain-river patterns, historic villages, cultural routes and ancient trees, whereas the focus of protection in urban areas is on the capital's archaeological sites, historic urban areas, HAs, historic buildings and intangible heritage. The contents for protection in the HCPIS are listed in the plan. Furthermore, the last chapters of the plan add information on the efforts related to the 'presentation and utilisation of heritage' and 'establishing mechanisms for public participation'.

4.1.2.2 Sectoral Plans

The sectoral plans provide more detailed guidance in addition to the two statutory plans mentioned above. The Urban Design Guidelines for Xi'an City, the Xi'an City Colour Plan and other guidelines for urban character strictly control the modern environment from specific perspectives – for instance, building height, size, colour and architectural style – to ensure that the goals stated in the upper plans are achieved.

According to Policymaker E1, the Urban Design Guidelines for Xi'an City are the most important reference for townscape character management. These guidelines apply an approach of identification, analysis and problem resolution. The problems of, and strategies for, the protection of townscape character are proposed as follows: (1) the whole townscape character of the city should be preserved by establishing clear zoning boundaries; (2) for a

better understanding of historical cultural values, a culture chain should be built to connect the HAs; (3) some architectural designs do not take into account the combination of buildings, so the composition of building groups should be carefully considered; (4) for public spaces, the problem is the lack of systemic structure, and it has been proposed to construct a spiritual space; (5) for site furniture, cultural inheritance and aesthetic consideration should be included in the design concepts.

After the assessment and strategies proposed, the guidelines at macro, meso and micro scales are compiled. The macro-level guidelines aim to define the main zoning, important corridors and key areas of townscape character. At the meso level, four townscape character zones are defined: the historical and cultural townscape zone, the buffer zone, the modern townscape character zone and the natural and ecological zone. The historical and cultural townscape zone represents the heritage sites with little modern construction; the buffer zone represents the heritage sites which are overlapped with modern construction; the modern townscape character zone and the natural and ecological zone represent other places with modern construction and natural elements. Ancient Sui-Tang Chang'an archaeological sites belong in the buffer zone. The layout of building groups, building retreat distance, building height, continuous width and public spaces are controlled in each zone. At the micro level, urban skyline, building group, building roofs, architectural colour, door plaques, sculpture systems, urban furniture, sign systems, outdoor advertising systems, transportation and municipal facilities are all controlled. The richness and continuity of the urban landscape are then maintained based on the guidelines.

The City Colour Plan and Buffer Zone Height Plan guide the colour and height of architecture in HAs. To preserve the townscape character of HAs, the height, landscape and colour control policies are applied, including (1) height control zones (Figure 4-9 and Figure 4-10) to 'improve the visibility of the pagoda in the urban landscape'; (2) landscape control to preserve ancient road patterns, preserve the important historical axes, preserve the ancient topography, coincide with the regional natural landscape system (referred to as the 'mountains and rivers pattern' by Chinese) and ensure that new constructions respect

the historical context; (3) and colour control (Figure 4-11), to ensure that, for buildings in the Tang Dynasty Style Zone, the colour interweaves from cold grey to warm grey (the colour of the ancient city wall), priority is given to glass curtain walls and stone or metal planks, and that complementary natural stone lacquer is used on building facades.

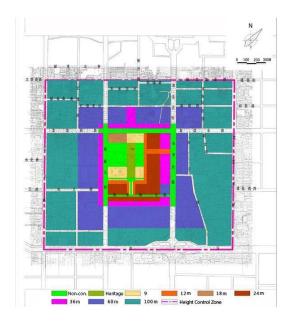


Figure 4-9 Height control of Small Wild Goose Pagoda (SWGP) area

Source: http://www.silkroads.org.cn

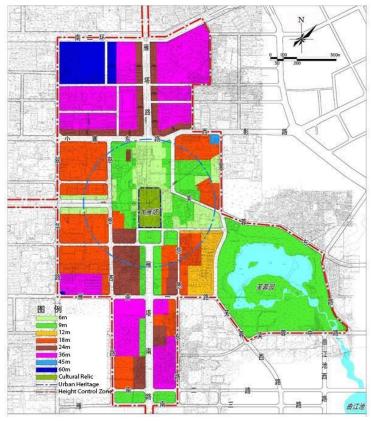


Figure 4-10 Height control of Giant Wild Goose Pagoda (GWGP) area Source: http://www.silkroads.org.cn





Figure 4-11 Colour control of roofs (left) and walls (right) in the two research areas Source: Xi'an City Colour Plan (2017)

4.1.2.3 Detailed Regulation Plans and Detailed Construction Plan

For HAs, a Detailed Regulation Plan based on the Master Plan has been compiled to control the land boundary lines, land use, floor area ratio, building height, building density, green space ratio, public service facilities, transportation and townscape character. Based on a Detailed Regulation Plan, the Detailed Construction Plan guides the design and construction of buildings and engineering facilities.

Since the two kinds of detailed plans connect urban planning with architecture design, Policymaker E3 suggested that 'writing (policy) and reading (interpretation) wisdom' is needed in relation to the detailed regulation and construction plans. At the Detailed Regulation Plan level, policymakers need writing wisdom to manage the townscape while providing opportunities for future development. They must keep a door open. On the Detailed Construction Plan level, 'the architects can use their way to deal with the policy and show the architectural context of the historic areas' (Interview E3). Architects need to handle the basic controls properly; then, they can select the mode of construction. When

two different architects face the same subject, they may have different attitudes and reactions to it. There are many kinds of strategies to 'keep harmony with the historic style and colour'. The most important thing is that their design gives people the feeling of a historic environment. As shown in Figure 4-12, in the two research sites, Xi'an Municipal Museum (left), Joey City Mall (centre) and Westin Hotel and Museum (right) were designed within the Tang dynasty context. Policymakers and designers may refer to the traditional elements, materials or styles of historic buildings to achieve a harmonious existence with the surrounding environment near the pagodas. In this way, the architects are creating a kind of new heritage in our generation based on our history and culture. Architectures are inspired by culture and history, and become the reason why the culture and history resonate with people. But the architectural forms and design methods can be various.







Figure 4-12 Architectural designs based on Tang dynasty context

4.1.3 Process and Content of Townscape Character Assessment (TCA)

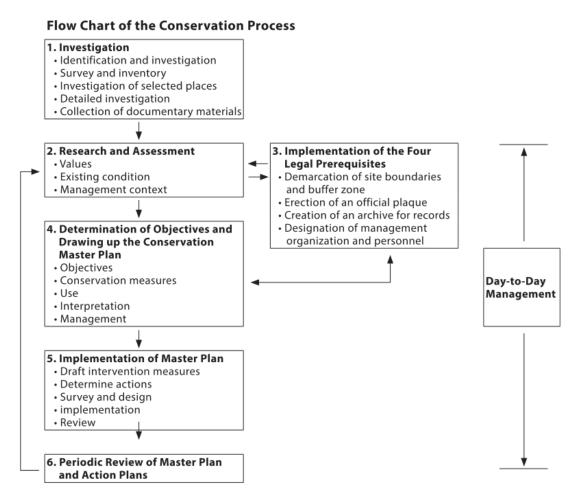


Figure 4-13 Flow chart of the conservation process (ICOMOS, 2015)

The planning process places greater demands on the Townscape Character Assessment (TCA), as the objectives of the plans first require investigation and assessment of the status quo of a site. According to the Principles for the Conservation of Heritage Sites in China (ICOMOS, 2015), the conservation process on a municipal scale has six steps: identification and investigation; assessment; formal proclamation as an officially protected site and its level of protection; preparation; the implementation of a conservation plan; and

periodic review. The second step, research and assessment, is the basic approach for determining objectives, compiling a conservation plan and enacting legal requirements. The basic assessment includes assessments of value, existing condition and management context.

Thus, TCA should investigate the physical environment in relation to the values associated with it. Value assessment is the assessment of historical, artistic, scientific, social and cultural value. The assessment of existing condition includes assessing current levels of protection, utilisation and display condition. It consists of: (1) determining the main value of the site; (2) adequate understanding and research of the site; (3) exploring threats to the site; (4) evaluating the effectiveness of current conservation and management measures; (5) assessing whether heritage values can be sufficiently understood and recognised by the public through the current method of interpretation or presentation; and (6) assessing whether the existing utilisation methods could maximise social benefits (Article 18). The conservation principles of 'interpretation and presentation' and 'appropriate use' are reflected in this process. The content of the assessment is deeply relevant to the values, understandings and benefits of the public of the site.

In practice, experts first identify the historical and cultural background of the city. Then, they usually investigate elements of the urban structure and built form, such as axes, building height, building age, colour and skyline, which are inherited from the upper-level plan. Simultaneously, they assess if the place is people-friendly – for example, if the place is physical comfortable for people walking or enjoying the view. Additionally, the functional, ecological and social effects, as well as the aesthetic value, are assessed (Interview E1).

When the experts assess the townscape character,

the first thing is to evaluate the existing condition – if the relic is safe. The second thing is to evaluate whether its historical information (the historic structure of the ancient space) is integrally presented, including the elements that enclose and

organise the space. The more integrity the historical information is, the urban pattern in history would be more easily to understand. It is important to see whether the new constructions have affected its historical information and caused a misunderstanding. The third thing is how it serves the contemporary world better. For contemporary service, function and aesthetic values are important. This is to provide a high quality living and viewing environment. (Interview E3)

Up to now, several studies have attempted to build a framework for TCA. Yang (2014) shows that Chinese research begins from the visual landscape, then moves toward users' perceptions, and ends with the cultural characteristics. Basically, researchers understand the townscape as a structure system. Zhang uses 'circle, layer, type, scale and utilisation' (Zhang, 2000a, Zhang, 2000b) to categorise and compare townscapes, the categorisations contain cultural background (circle), developing status (layer), urban form (type), city size (scale) and urban functions (utilisation). Yang and Cai (2006) use systemic theory to define three levels of townscape areas according to their historicity and modernity, and suggest that these shape the characteristic urban spaces in the city. Some researchers have built relatively detail frameworks for TCA. Zhang et al. (2000) built an information system to assess the visible and invisible factors that related to townscapes. In their system, the visible factors include geographical, ecological and artificial landscapes, whereas the invisible aspects consider the economic, legislative and social factors. The documents needed in the system are presented, but they fail to describe how to analyse the documents in detail. Duan and Sun (2010) explore the natural environment, urban culture and urban spirit to construct the spatial and spiritual space, which may be a relative comprehensive framework incorporating the values people hold in the place, but lacking a statement of how to grasp the urban spirit and construct a spiritual space. There remains an urgent need to improve the TCA framework in the context of rapid urbanisation. Researchers argue that the TCA should consider the interaction between people and environment in a dynamic way(Tang and Zhao, 2018), and using innovative methods (Pang, 2016).

4.2 Townscape Character Management and Assessment in Practice

In this section, the experts' definitions of townscape character is firstly explored. The key concepts are described, and reflections on townscape character management are made. Then, the practices related to the process and content of TCA are examined.

4.2.1 Experts' Definitions of Townscape Character

The concept of protecting a townscape's character was first proposed in the first LPCR in 1982. In most cases, the townscape's character is proposed by the urban planning administration rather than cultural heritage administration, since the conceptions of the two administrations are quite different from each other. In fact, the different conceptions of townscape character have rich but rather confusing connotations. However, the concept still has not been defined accurately. 'It seems like a basket with everything being inside, but it should be adjusted or changed in this transitional period' (Interview E4). Thus, experts have now highlighted the need to redefine townscape character in the context of contemporary townscape character management approaches.

The concept of townscape character has its merits since 'fengmao' is a specific description in Chinese. It seems the way people perceive townscape character in China is different from how it is understood in some western countries: it is a context peculiar to the eastern world (Ashihara, 1983). It is an Eastern epistemology with a broader kind of vagueness to capture a certain or essential quality of an object in a perceptive way. In an interview with E4, he gave an example:

When we see a person and say what this person's personality is, it is a very general concept. When we say a girl is sweet, or something is lingering charm [Chinese: Yunwei], what do I mean? It is very hard to define, but everybody knows it. Because the first impression that the girl gives you is a certain or essential quality which needs to be captured in a sharing way among a social group.

Figure 4-14 presents some pictures depicting the Chinese idea of lingering charm. Yu (2008) refer to the Chinese 'Word-ocean Dictionary' (1936) which explained townscape character as 'charm and appearance'. Chinese people also use the term 'lingering charm' to describe the introverted cultural and aesthetic feeling of traditional crafts, Chinese painting and traditional towns. Similarly, the impression that HAs give Chinese people is an Eastern notion shared by specific social groups. 'Townscape character is like the personality of a person, you would understand him or her when you are sharing some cultural background' (Interview E4, emphasis original). Jiang and Zhai (1997) also use personality to describe townscape character, which means that the townscape represents its own sense of cultural interests. 'The townscape characters present individualities' (Interview E1). The individuality reflects local characteristics, which is the key to distinguishing one HA from others. Similarly, (Zhang, 2000a) argues that the individual exists when commonality exists. Research should identify the individuality among different categorisation of urban spaces. To preserve their individualities, experts should propose the conservation requirements of townscape character when compiling conservation plans and guidelines.



Figure 4-14 Pictures depicting Lingering Charm (Source: Baidu Photos)

Understanding townscape character is central to the social and cultural construction, and a particular way to aesthetically view urban heritage in China. Expert E2 regards the townscape character as the 'bottom' (internal) cultural characteristic, which is the 'baseline' to developing cultural industry and which can be 'amplified' to attract people. The cultural value of townscape should be identified, including the traditional and community culture (Interview E2). Cultural value is closely related to the urban culture and life of a special historical period appreciated and remembered by people living in the present, which still has influences on people's modern lives. Based on the experts' consideration, this research defines townscape character as the most identifiable aspects of HAs, including both the visual appearance and connotation of values, reflecting the historical context and Chinese aesthetic view, and which also has cultural, social and economic impacts on the city.

4.2.2 Dealing with Visible Landmarks and Hidden Urban Patterns

To achieve a legible presentation of HAs, landmarks and urban patterns are two vital components. Landmarks are generally visible, but the urban pattern is hidden. For the public, landmarks are the most important and accessible objects of perception. A landmark is not only a spatial and figurative mark of a city, but also a mark in people's hearts. Historic landmarks relay our historical culture and identity. The public can perceive specific elements related to the Tang dynasty Chang'an city in the modern Xi'an city, such as the Daming Palace, the GWGP, the Small Wild Goose Pagoda (SWGP), the East Market and the West Market (museum).

However, the public may not fully understand the urban pattern. It is difficult for them because the urban pattern is too abstract. Van Assche et al. (2012) argue that historical references, such as surrounding cityscapes and traditional materials, are rarely understood by the public. In Xi'an city, understanding the urban patterns in history may be more

difficult than usual for the public. Most of the cultural relics in Xi'an from the Sui (518–618) and Tang (618–907) dynasties have been destroyed and are now underground. Although some place names and stories are very famous in Chinese history and culture, there are only heritage ruins left in Xi'an city. This special situation is different from many other HCs across the world. Experts have debated whether places should be designated HAs and how they could be conserved, when the existing modern buildings in them cannot show the historical townscape.

In this situation, presenting the urban pattern is the priority for experts, especially in the large-scale archaeological sites which overlap with high-density urban development, such as the ancient Tang Chang'an city. How experts present the layout of the ancient city is the most important question. Although Lynch (1960) conducted basic research on urban image, the urban pattern he represents is relatively small in the Chinese context (Interview E3). Experts believe that Chinese people prefer to perceive place on a larger regional scale: they try to show the public how big the Chang'an city was during the Sui and Tang dynasties, and where its axis was in history. The key features of the Chang'an city are its huge area of seventy-eight square kilometres, the key axis known as Zhuque Street, and the inner, rectangular-shaped 108 Lifang. Usually, Chinese people are familiar with the names of the streets, royal parks, palaces and markets. Most tourists and residents may recognise the city from history classes, documentaries and television dramas. Based on this, experts want people to experience the vastness, orderliness and relationships between the landmarks of the city.

These spaced-out HAs can be perceived in a specific historical context and connected in people's mind. A key strategy for showing the urban pattern is to link the HAs though the axis and viewing corridors (Interview E2). For the visible landmark, as a relic on the ground, experts protect it and its surroundings. The purpose of this is to keep the relic safe and improve the quality of the environment. For the invisible urban pattern, experts must raise it up from underground — in other words, they must make the invisible underground heritage visible using design wisdom. In fact, the Xi'an government has made a lot of

attempts to do this. The government continues to construct Tang dynasty city wall relic parks at a historical location (the purple square in Figure 4-15 below), showing people the grand urban area of the Tang dynasty. The landmarks in the axes, as references of the ancient Chang'an city, are also under protection (Figure 4-16).

Beyond building a green belt, experts face a lot of complicated situations. All the layers of history should be respected. Questions should be considered, such as how to present the changes in the townscape through history; how to show the things or stories that happened in history; and how to present the location of pagodas in Tang Chang'an city. Urban planners and architects should present elements from different historical sections appropriately in the city. Interviewee E3 provided a counterexample. Many of the walls of yards in Jian'fu Temple in the SWGP area were demolished, which destroyed the integrity of ancient urban patterns. The yards system (see Figure 4-17) is the most attractive aspect of the temple system. When the yards have gone, only the buildings are left behind. Thus, the integrity of historic information should be a rigid requirement.

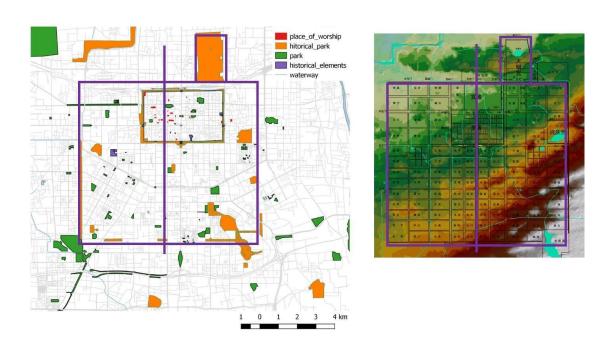


Figure 4-15 Walls and main axis during the Tang dynasty (Source: the author)

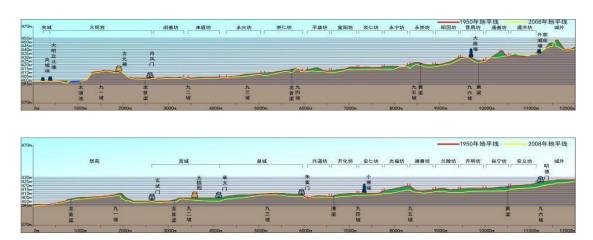


Figure 4-16 Landmarks in the axes (Chen, 2011)



Figure 4-17 Yards of the SWGP (Source: Wensi's microblog)

4.2.3 Legible Presentation of Historical and Cultural Values

Jerp & and Tveit (2014) argue that legibility is a prerequisite for the public interest and identity which are related to the willingness to protect heritage. Expert knowledge lies beneath the visible surface with reference to similar sites; such knowledge may be

transferred to the public in order to increase their understanding of the heritage. If an expert interprets the historic environment before modern development and conveys it to the public, the public's experience may encompass both expert knowledge and their own appreciation: 'Cultural heritage does not exist per se and hold value independent of a beholder and an interpreter' (Jerp &sen and Tveit, 2014, p.436). How the visual materials are understood depends on the viewers; therefore, legibility and place identity are issues of growing importance.

A townscape that shows a unique and legible theme related to its historical and cultural background is regarded as the key achievement of a townscape character management policy. This legible theme from the experts' perspective could be understood as the design concept of a plan, which is highly related to the town's historical background, including its historical images, events and people. The 'twilight drum morning bell' is a key theme in the SWGP area. The theme is the fundamental issue considered by experts, and it must be in accordance with the townscape character of the place since the townscape character sets the place's tone (Interview E1 and E2). All the constructions should be in harmony with the tone. At the municipal scale, the theme's differentiation among HAs is the primary concern. The historical period to which dynasty the place is related is an important factor in defining its theme. Experts try to designate HAs to include every dynasty. On a block scale, experts aim to preserve the theme, as well as to improve the environmental and aesthetic quality of the block. To achieve a legible theme, experts try to unify the design techniques and the format of detail elements, and to respect the historic buildings (landmarks). For example, the pagoda, as a landmark, sits on the viewing corridor: the style, colour and height of the surrounding buildings will not disturb the view of it. The viewing points which invite people to linger, for example urban furniture and landscape sculpture design, are designed to reflect the local culture and history.

From the experts' view, the public are expected to perceive the historic information, elements and functions that are protected. The experts wish for people to be able to perceive the urban pattern integrally and authentically, as well as the cultural, historic, social, artistic

and scientific values of the area. Townscape character management helps people perceive diverse and different elements of the historic urban landscape, and get a sense of local community and traditional activities. Folk culture, religious culture and market culture can be perceived in Xi'an city. The public can perceive tangible heritage, such as historic buildings and street texture.

The first way to protect cultural features is by protecting the tangible heritage. Relying on the tangible heritage, the intangible heritage will also be preserved and developed. While townscape character management should also protect urban vitality, the intangible parts are crucial — as a kind of soft indicator, it can increase the sense of community and atmosphere of vitality. One example of this is the vegetable fruit market located near the city wall, at Jianguo Gate. It preserves the lively market space and incorporates a modern artist exhibition space on the second floor. The city wall, industry building and community life together create a harmonious image. Another example is the cultural activities and industry which give people a sense of cultural values in history (further developed in Sections 5.3 and 7.3). The cultural activities and industry behind them support the development of historic areas (Interview E2).

To sum up, three important requirements are presented for achieving the legible presentation of historical and cultural values: that people can see it; that they can participate; and that the place's culture can be explained in different ways by different people, such as through performance. Successful management involves controlling the townscape's character without losing its vitality and its historical and cultural context.

4.2.4 Pursuing Balance between Rigid and Elastic Requirements

The guidance is mainly made up of both rigid and elastic requirements. These requirements aim to increase flexibility to achieve the coherence and diversity of future development (Xu and Zhang, 2013). The requirements were set out by the Standards for the Protection

of Historic Cities (GB/T50357-2018). The two kinds of requirements are distinguished linguistically: words like 'must', 'forbidden' and 'should (or should not)' are used for rigid requirements, while 'be (or not be) suitable' is used for elastic requirements. For example, height control is a rigid requirement: construction cannot not exceed the prescribed height. Meanwhile, style control is a relatively elastic one, and designers can choose their own ways to present the style.

Based on the two requirements, Interviewee E1 described a practical way to compile the plans. The first step is to fulfil the rigid requirements, and the second step is to add elastic requirements based on the site's characteristics. Such a fluently formatted process can be applied to many different types of projects when the experts in the design institution have a very intense workload and often have to conduct more than one project at once. The streamlined workflows often lead to similar plans in multiple scales and different places, which might lead to similar development modes and lack of considering the differences of the places. This problem is magnified when the plan is concerned with large-scale areas, which makes it difficult to find innovations in plans.

Some problems may occur during the implementation of the plan. One rigid requirement is that construction except for necessary infrastructure is prohibited in HCAs, which may conflict with improving residents' quality of life (Interview E1). Some limitations are too strict to operate and develop: too much rigorous control will restrict dynamic development and improvement of quality of life. Under the control of elastic requirements, many ugly buildings with a mix of styles may emerge. Some modern architects are at a loss as to how to achieve a historical style, and believe that many style constraints limit their designs. For example, when designing high-rise housing, the regulation plan requires the use of a historic sloping roof, which poses some problems for the architect. Planners need to reflect on how best to regulate, and architects need to find ways to present local culture using their designs (this is referred to in the next chapter).

4.3 Reflection on the Management of Townscape Character

4.3.1 Conflicts among the Government Ministries and the Structured Protection Paradigm

It can be seen that different departments and institutions are undertaking heritage conservation efforts in China: the SACH mainly focuses on the preservation of cultural relics and heritage sites, whereas the MOHURD focuses on the conservation and design of architecture and urban spaces. The ideologies of 'preservation' and 'conservation' are different: preservation is the protection of the current condition without changes, which is opposed to development and may 'becom[ing] a fossilised simulacrum' (Ashworth, 2011); conservation embraces appropriate use in contemporary time. Ashworth (2011) points out that the difference between the two approaches is related to the different methods, attitudes and goals of people with different academic backgrounds. When departments are conducting urban heritage management, it seems that each one emphasises its own discipline, including history, archaeology, architecture and urban planning. There are overlapping and conflicting mong and inside the disciplines; there are also vacant, which may lead to an inefficient result. Through the Ministry of Natural Resources, formed in 2018, the Chinese government aims to integrate the developments – for instance, land use, urban planning and other authorities – to achieve a 'one map' territorial spatial master plan for supervision the implementation of the plan. This system includes information related to the urban townscape, architecture and transportation, as well as analytical information related to controlled zones, heritage conservation, ecological protection and fifteen-minute pedestrian-scale neighbourhoods, which is reflected in the One Map. The Territorial Spatial Master Plan has replaced the original Urban Master Plan; however, the ideological conflicts still exist.

China's heritage protection laws, regulations and plans are parts of a structured system. Top-down regulations have been enacted on the national, provincial and municipal levels, while plans are compiled at the city, area and building levels. The aim of top-down

protection is to achieve urban heritage conservation in an integrated way: the main goal of a plan is to achieve the goals of the upper plans (as noted in Section 4.1). According to the Territorial Spatial Master Plan, the national, provincial, municipal, county, and township levels are designated as five 'levels', where an upper level has the power to guide a lower level. Cities in China have been compiling their own territorial spatial master plans in recent years. When the master plan is made, some mandatory requirements will be included in the statutory laws and regulations. These requirements will be implemented in the small area plans and design projects following the previous goals, at which point the top-down implementation may be considered successful.

One problem is that the laws, regulations and plans at the national, provincial and municipal levels are similar in structure and content, and there are few differences between different cities and areas (Cheng, 2015, p.54). The plans are compiled in accordance with a particular paradigm. It appears to me that almost all the townscape character management in China has adopted a structural approach, focusing on how to control the landscape's structure and how to shape its characteristic skeleton. For example, Interviewee E1 described four important elements protected by the plans: HAs, linear street texture, dotted historic buildings, and intangible heritage. In the planners' maps and plans, the buffer zones, streets and buildings look like areas, lines and dots. The area-line-dot model is also itself a structured paradigm. Experts emphasise the hidden urban pattern, so the policy emphasises the control of points, lines and polygons to show the hidden historical urban appearance to the public, which bring us to the next chapter: the cultural values should be identifying rather than pursuing artistic beauty.

4.3.2 Identifying Cultural Values Rather Than Pursuing Artistic Beauty

In the TCA process, the pursuit of the form of artistic beauty leads to the neglect of cultural value under the material form (Xiao et al., 2012). The planners have engaged with the aesthetic education of urban and architectural design systems, representing an artist's view:

From the designer's point of view, an artistic relationship with the past is a normal option, since the designer of places (the landscape architect or urban designer) is partly trained as an artist, and their way of communicating is steeped in artistic traditions. (Van Assche et al., 2012, p.243)

In this context, visual criteria are associated with the material objects from an artist's point of view. This criterion is used by experts to decide how the city will develop. The Conservation Plan of Xi'an (2004–2020) was designed by the Xi'an Cultural Heritage Administration, the architecture department of Xi'an University of Architecture and Technology, and the Xi'an Urban Planning and Design Institute. During the TCA process, scholars (Wang, 2010) in Xi'an surveyed the heritage sites and described the factors affecting the townscape character in heritage sites as follows: (1) the modern high-rise buildings drastically altered the skyline, (2) the urban villages reduced the environmental quality, and (3) the architectonic form of surrounding recreational and sport facilities broke the continuity of the historical urban fabric. The high-rise modern buildings and urban villages were considered eyesores by most experts. As a result, this kind of assessment would lead to large-scale demolition of unsightly buildings in experts' eyes, and strict control of new buildings through strict planning rules.

'Dirty, messy, and bad' and 'old, broken, and narrow' are phrases describing the dilapidated images of some old districts, which are widely used in TCA reports. Conversely, Mehrotra (2015) shows an appreciation of the intertwined existence of modern buildings and urban villages through a photograph. He argues that the field of architectural education avoids dealing with the pluralism of the environment, which includes permanent materials (concrete, steel and brick) and recycled materials (plastic sheets, scrap metal, canvas and

waste wood). He explains that this is because the present field of conservation education emphasises the predominance of continuous historical narratives, while discontinuities or inconsistencies are seen as aberrations in an ideal built environment. The purpose of the experts' survey work is to ensure continued survival rather than to interpret or reinvent temporary relevance. Based on this purpose, the experts' plan restricts buildings' features and styles, which may not be enough to protect the identity of the built environment (Abramson, 2007).

The experts' conservation plan seems to focus on historic and artistic value rather than the other values defined previously (especially social and cultural values). The Urban Design Plan for Xi'an acknowledges the problem of inadequate use of cultural values, and suggested constructing place of spirit (Norberg-Schulz, 1980). However, place of spirit is not constructed in the map by planners; it is constructed by social interactions. We should identify the values associated with HAs before we utilise them. Planners should put more effort to 'digging deeper' into the key values. The interviewed policymakers in this research also realised that, 'There is not beautiful or ugly history; there is only authentic history.' (Interview E3) In his projects, Interviewee E4 tried to keep of areas such as urban villages and small wholesale markets at their small scale. Such places may be among those where people live when they are young. They are not beautiful, but people love the places and fondly remember them. These collaborative memories need to be protected.

4.3.3 Lack of Zoning Criteria

The Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas (ICOMOS) emphasises the following:

Planning instruments should include provisions to effectively control the impact of incremental or rapid change on settings. Significant skylines, sight lines and adequate distance between any new public or private development and heritage

structures, sites and areas are key aspects to assess in the prevention of inappropriate visual and spatial encroachments or land use in significant settings. (ICOMOS, 2005, Article 7)

From this discourse, it seems that there is a need to prevent encroachments and to keep a distance from new buildings. This resonates with the experts' purpose to ensure continued survival of heritage (Mehrotra, 2007).

In the plan system, the key regulatory tool is demarcating protection zones and buffer zones in HAs. A protection zone is the core area to preserve the existing condition of archaeological sites, in which construction is prohibited. The buffer zone surrounds the protection zone, and is an area where 'the scale, height, colour, and setting of approved construction are controlled'. The areas outside the buffer zone are not under control. Different levels of management from the core area to the outside show the concept of 'transition' from the experts' perspective. However, the shapes of the protection zone and buffer zone are offset by the shape of the historic buildings at a distance (Interview E3). The approach seems too mechanical and classical. Many HAs have been protected successfully by political control; there are also many beautiful townscapes without any political control (Interview E4). The result of the restrictions has been dubbed the 'potted landscape' (penjing) because the historic architecture or urban area is shaped like a bowl, surrounded by higher buildings outside of the Height Buffer Zones (Abramson, 2007). This is because there is no conservation regulation out of the buffer zone, and most new buildings have been built at the maximum allowed height for maximum land use. In this situation, some planners (Xie and Zhou, 2014) argue that the height limitation in Xi'an may cause abrupt height changes in buildings, which may affect the visual environment around the heritage sites.

Axis is undoubtedly a dominative feature of many Chinese HCs, especially Xi'an. The places with unique townscape character should be pointed out and protected by the laws and regulations of urban planning. These locations are called 'viewing points'. During the interview, E1 explained that, 'Viewing points [would] exist only if there was an axis';

however, pleasant experiences do not only exist on an axis. The method of deciding the locations of viewing points may lose out on the diversity of these views. Abramson (2007) argues that integration conservation should focus on living experience and citizens' space. Thus, planners should focus on the fundamental points to be experienced rather than focusing on the space structure from an expert's perspective. For example, in 1894 the London Building Act limited the heights of new buildings in the capital to less than eighty feet (24.4 m), but these restrictions were removed in 1956. Nowadays, the London View Management Framework emphasises the visual integrity of the World Heritage Sites: it designates, protects and manages twenty-seven views of London and some of its major landmarks. The assessment process includes scoping, a description of the view, and a description of the proposal and its impact on the view. The description of the view considers elements that contribute and detract from the skyline, and what is distinctive and characteristically, aesthetically or culturally important to the view. Furthermore, the description of the proposal and its impact on the view include appearance and materials (texture, colour, scale and reflectivity). Compared to the London policy which controls the image by focusing on points, the Chinese policy focuses on clusters. In London the policy is descriptive, while in China index management is applied. This is mainly causes by differences in the planning systems. As a discretionary system, the English planning system is pragmatic and based on case law, while the Chinese system is regulatory, focusing the whole area in advance of new development (Chen et al., 2020).

Based on axis and viewing points, experts demarcate the protection zone and buffer zone. Interviewee E1 said that a practical way to do this is to demarcate boundaries according to the walls of courtyards or streets, and refer to the suggested scale and distance from the guidance. Experts can choose the size of the area within the specified interval. This method is used to choose a value on which to base the scale of the protection and buffer zone in a piece of guidance, which may reflect a lack of consideration of experience to guide zoning practice. Interviewee E1 acknowledged the immaturity of zoning practice, and then suggested that how to demarcate the protection zone and buffer zone is a topic for future

research. Similarly, Liu (2018) questions the effectiveness of the strict guidance for urban character in the process of formulating and implementing the conservation plan. For example, the Height Limitation and Colour Plan of Xi'an City regulates the height or roof and wall colour for each cluster, but since perceptions in different directions and distances from the heritage are different, it is not rational to apply the same policy in more than one zone enclosed within the same street. Although there are rigid and elastic requirements (see Section 4.2.4), strict control over implementation exists, which would restrict the development of a townscape and cause it to become similar to others. Currently, urban planning in China focuses on the macro and meso scales, but lacks control and guidance for landscape elements at the micro scale (Xiao et al., 2012). A pragmatic method of TCA and zoning should be developed.

4.3.4 Paying Attention to Public Opinion

4.3.4.1 The Way to Participate

According to the Principles for the Conservation of Heritage Sites in China (ICOMOS, 2015), a conservation plan should be formulated by organisations and professionals (Article 20), and each step of the process must be reviewed by experts (Article 4). It is proposed that the public can participate in conservation practice by looking at the experts' research documents (Article 6) or by inquiring from the Administration of Cultural Heritage if they may supervise the implementation of the conservation plans.

Public participation is achieved in two time periods. First, when the experts are compiling conservation plans, the public can propose HAs. Second, there is a publicity period after the conservation plan is completed, where the public can give their suggestions. Interviewee E1 suggested that people can get information from newspapers, and write letters to make suggestions. It seems ironic that it is difficult for the public to find the whole policy document in newspapers or websites – the document on the political website is a

very abbreviated version. Normally, these planning documents are confidential. With a very abstract version of the plan documents, it is almost impossible for lay people to understand the conservation plans and the associated research documents in academic journals. As a result, people can only passively participate in this way.

At present, there are some strategies appearing to promote public participation. A recent experimental model of participation is called Planners in Communities. This model encourages urban planners to live in the community and participate in the whole process from compilation to implementation of the plan. Thus, they can collect more information from the residents and try to fulfil their needs. The Xi'an government are trying to construct an online information website to share the history, culture and message of the plan.

From experts' experience, only three types of people respond to them. The first type is community residents, especially the owners of historical buildings. When their buildings are listed as historical buildings, the owners may receive substantial government investment for maintenance and may also be restricted in the reconstruction and utilisation of their buildings. Thus, they either give the planning department feedback if they do not agree with the listing, or they do not say anything if they agree with it. This means that owners will provide information when the plan does not match their expectations. Residents also care about urban facilities related to their daily lives, such as transportation and public space plans. The second type is scholars or citizens who have memories of the place: they tend to provide their information. The third type is government leaders who get messages from other meetings: they may provide opinions according to their understanding of the future development. Information may be different for each person from a different background. However, only a small number of people have been involved in the planning participation. This illustrates the lack of communication between the public and experts.

The discrepancy between the perceptions of experts and the public is a notable gap (Deghati Najd et al., 2015). Influenced by some early Western theories, architecture design has been understood according to its functions, technology and forms, which assume that the needs

of users can be predicted by designers (Xiao et al., 2012). Also, Interviewee E2 acknowledged that policies and plans in China reflect the government's top-down needs. The planners usually consider the needs of the whole country and the city, ignoring the public's needs. This is related to China's development background and spirit of collectivism, which prioritise community development over individual preference. The Chinese government has tried to change the situation since 'a people-centred approach for development' was proposed in 2015. As a common asset of the public, the public-led townscape character should be maintained, and multiple subjects should participate in the protection of townscape character (Lv, 2016). The views of future heritage should not depend too much on experts, because the experts' preferences might excessively influence the style of the whole city. Top-down conservation practice privileges expert knowledge over the perspectives of the majority of people who live in heritage sites (Wells and Lixinski, 2016). The expert-based approach makes judgments based on established standards rather than on social-culture values and personal reactions, although social culture and personal feelings are of most importance to local people. This expert-based planning lacks practical operability (Xiao et al., 2012). Therefore, the townscape character study of HAs in China not only fails to reflect the locals who live in the city, but also ignores the relations between different dimensions of value held by the public. Policy in China focuses on the townscape character management of historic areas; however, virtually no systematic studies exist exploring visual landscapes in the public's view. We cannot wait for the public's own suggestions; we need to understand public perception and the values held by the public.

On the other hand, the public's awareness of protection still needs to be improved. For instance, Interviewee E1 said that the questionnaires they collected contained little useful information because people usually don't think and fill it in carefully. However, feedback and information collected from the whole of society contains the knowledge experts need. For example, the more people participate in writing in the tourism strategy for a place, the more comprehensive the strategy can be. When people have this consciousness, even if

they just look at a point on their way, and they always have a channel to send and share their ideas, more information can be shared with everyone. Then, the protection will be more comprehensive. In this situation, the advantage of this research is that it can gain meaning from the public's production and interpretations in a comprehensive way. This top-down mechanism could be changed by adding the assessment from the public's perspective.

4.4 Summary: Policymakers' Future Needs

Through townscape character management, the experts wish to satisfy the aesthetic, cultural, ecological, social and even economic needs of different groups of people. They want to bring cultural and economic benefits for governmental officers, to improve the living environment and spiritual space for residents, and to present the values to attract tourists. In practice, experts believe that the policy and plan are important: people should know what the lowest standard is and where the red line is that cannot be broken in future development (Interview E3). Urban and architectural designers want to find an appropriate way to make heritage alive through each design. The townscape should show its authenticity, integrity and values from multiple layers. Although policies are crucial to preserve the historical and cultural character of a townscape in the process of urban development, the following emerging issues which have been proposed by policymakers should be addressed.

China's conservation principles are inherited from mainstream Western theories (recall Section 2.1), but Chinese experts have produced management methods with national characteristics. Since the conservation theories and principles are heavily influenced by Western discourse, there is a need to redefine townscape character and explore its values

within the Chinese context. The concept of townscape character has rich connotations as an Eastern epistemology, and they need to be defined. It is urgent to clarify the meaning of townscape character in China, since it is widely used in Chinese urban heritage conservation policy.

Experts explore how to present underground heritage in a modern city. From the perspective of existing condition, wooden historic buildings cannot naturally be preserved for very long: thus, most of the historic buildings from before the Ming and Qing dynasties have been destroyed and the heritage sites are underground. In this context, how to present underground heritage is a problem, especially for large-scale archaeological areas – the heritage ruins of ancient capitals. Experts want to present the ancient urban pattern to enable the historical townscape to be perceived by the public.

In terms of practice, the following reflection was made in Section 4.3. The experts state that there is a lack of detailed guidance, standards and technique frameworks to guide the complementing of policies and plans – for example, how to preserve and control townscape character. During the TCA process, researchers (Zhu, 2001) have criticised the lack of holistic and credible surveys, democratic feedback and appropriate tools for management. Experts also state that cross-discipline research is needed – for instance, archaeology to provide historic research. The method of control should be based on the context of urban heritage, and there is no need to find a correct answer.

Experts have also faced economic problems during the regeneration processes in Xi'an city. From an economic perspective, Xi'an city has developed more slowly than other cities, such as Beijing. The economic developments in some cities have demolished many pieces of urban heritage. Compared to the fast-developing areas, the development of Xi'an is slower but more robust. Conversely, there is a lack of money invested in conservation. The government and stakeholders may risk the protection of urban heritage for economic development.

The awareness of heritage conservation is relatively low among the government and architects. The implementation of conservation principles is difficult in China. Interviewee E3 argues that even some architects and governmental officers do not know the basic conservation principles in China. He suggests that heritage conservation should be 'a compulsory course' for everyone. This way, the conflicts related to modern construction will decrease.

For townscape research, people's interpretation has more value than the evaluation (Interview E4). People cannot evaluate which element of the environment is most important. Urban planners believe they should build a platform to embrace the communication of various opinions. The experts actually do not decide how the heritage would be protected. But the problem is it is difficult to make decisions: if decisions were made by vote – the minority subordinates the majority, the rights minority will be trampled by the majority. It is ridiculous to design according to a vote. 'Could we agree the scene is beautiful if 100 people say it is beautiful?' (Interview E4).

Interviewee E3 questions whose opinion we should listen to and how we can deal with the changing views. People have different opinions and their opinions change directly, quickly and easily, especially with the persuasion of the experts. 'The factor that if the lay people have not been to other historic cities such as Rome may influence their preference' (Interview E3). Thus, investigations that give visual materials and photos for the public to choose are relatively effective for experts. Visualisation can help people perceive the historic environment (Interview E3). After understanding similar projects, the public may have a deeper understanding of the experts' ideas, and have a clearer reflection about what they want the place to be in the future. Since people's opinions are diverse and changing, planners should provide them with a variety of choices, and keep understanding how different groups perceive the historic areas at different times. The place should be inclusive, such that people can do what they want to do in different places in a harmonious way (Interview E4).

Chapter 5: Elements of the Historic Urban Landscape

This chapter identifies the tangible and intangible elements of the historic urban landscape (HUL) based on the element checklist developed by O'Donnell and Turner (2012). The chapter presents the elements on microblog data (Dataset B), and supplemented by questionnaires (Dataset C) and focus group data (Dataset D). The chapter will first describe the two kinds of data collected on social media, to give a general description of the elements. The data show the elements appreciated by people according to the logic of a two-year chronological order. Then, the history and culture of these elements will be explained. A dialogue between history and the present is reflected in the tangible and intangible elements of the HUL, such as the decoration of the urban space and some celebration activities. The data actually covers a time period of more a thousand years, with many microblogs telling stories and describing memories using narratives and pictures of the past.

5.1 General Description of Microblog and Questionnaire Data

5.1.1 Top Ten Hashtags of Each Month

To get a general understanding of the social media data collected from March 1, 2019 to March 10, 2021, the top ten hashtags of each month are analysed (Figures 5-1, 5-2, Appendix B and Appendix C). A variety of key themes and changes over time are identified and categorised below.

(1) Daily life and news (e.g., #Xi'an news, #Xi'an life, #Things around Xi'an)

Life and news—related hashtags show people's interests in their daily lives, and news about things happening around the residents appears most frequently. Unfolding stories happening in places close to people attract their attention. For example, the hashtag #A primary school student spends 800 yuan to buy moisturiser and send it to frontier soldiers

is the fifth highest hashtag overall, appearing seventy-nine times in the social media data, and refers to a touching news that happened to a student at Small Wild Goose Pagoda (SWGP) Primary School. The behaviour of the primary student is an example of caring about soldiers who safeguard our country.

(2) City name and province name (e.g., #Xi'an, #Shaanxi, #Cultural Shaanxi)

The city name #Xi'an and province name #Shaanxi also appear frequently, perhaps because the research sites are representative parts or symbolic places in Xi'an city and Shaanxi province, and are closely related to the culture. When people think of those places, they may first think of these two areas.

(3) **Travel** (e.g., #Travel, #Xi'an travel, #Xi'an Tourism Strategy, #Travel with Weibo, #Yan turns into a tour guide in Xi'an, #Time to visit ancient town, #Fall in love with a city, #Miss the local voice)

The top hashtags related to travel demonstrate that the two places are the most recommended tourist attractions of the city. The popularity of the Giant Wild Goose Pagoda (GWGP) area can be traced from the hashtags (e.g., #Top ten congested scenic spots in Mid-Autumn National Day holiday, #Xi'an is full of tourists). Some hashtags (e.g., #My scenic spot, my endorsement, #What are the scenic spots where you strongly recommend it, #Where in Xi'an is worth going, #Tang never sleeps city) build a space of discussion and recommendation for particular spots. Through this kind of mass communication (and circulation of information among people), the communication between residents and tourists is promoted. Local residents proudly introduce places, and tourists get more understanding of the local culture.

(4) Culture and historical interest (e.g., #Nestle Tang Niu's trip to China, #Trace of Sanqin, #Silk Road, #The light of the golden age, #National treasure notes, #Dream on the way, #China Toponymic Congress, # World Heritage double tower linkage, #Historical image)

(5) HUL elements

- 1) **Natural systems** (e.g., # Love Qinling mountain, #Natural scenery)
- 2) **Vegetation** (e.g., #Red leaves are gorgeous)
- 3) **Buildings and landscape** (e.g., #My favourite Chinese architecture, #The landscape of a city is the most beautiful here)
- 4) **Festivals and rituals** (e.g., #Winter solstice, #Memories of Chongyang, #Xi'an in the new year of China, #Accompany you for the new year, #The folk customs of Xi'an, #Memory of the martyrs of Qingming Festival, #Dragon Boat Festival holiday is coming, #My top priority in the new decade, #There are only nine days left in 2019, #There are only six days left in 2019, #Xi'an in the new year of China, #I spent my new year in Xi'an)
- 5) Traditional music, dance and performance (e.g., #Tumbler performance cancelled, #The Longest Day in Chang'an show)
- 6) **Television series and videos** (e.g., #The longest day of Chang'an, #Wonderful night in 100 cities, #Summer nightlife, #Amazing places of interest, #Thank Kwai, I want to be popular, #Internet celebrity scenic spot)
- 7) **Local cuisine** (e.g., #How many kinds of noodles are there in Xi'an)
- 8) **Traditional arts and crafts** (e.g., #The old man used three years to carve a picture of Qingming River, #Written by children a thousand years ago)
- (6) Urban activities and events (e.g., #Wechat tourism Photography Competition, #Microblog Photo Contest, #City Night Photography Competition, #2019 Xi'an International Fashion Week, #When film meets grassland (film festival), #Bookstores punch in and enjoy books, #World Book Day, #We are serious about reading, #Fan Deng studies, #2019 Xi'an International Marathon, #Travel Museum, #Dating with Museum, #Little dragon man project)

The Tang dynasty is a golden age in Chinese history: a period with a powerful country with advanced culture. People are very enthusiastic and proud of many elements of this historical period, including Chang'an city, Silk Road culture, Tang-style clothing and woodblock printing. #A thousand-year-old capital Chang'an has become the marketing slogan and brand of Xi'an city. People are interested in the cultural and historical background (e.g., #Silk Road, #The light of the golden age, #National treasure notes) when they talk about a historic area. The historical image and place names (e.g., #China Toponymic Congress) attract attention. In December 2019, some #historical images from 100 years ago were noticed by people.

People perceive the elements of a rich HUL in these two places. They favour the natural systems, vegetation and buildings. They also describe some intangible elements, such as festivals, rituals, relevant television series and colourful activities, which add a sense of liveliness to the tangible landscape. Traditional activities present a combination of ancient and modern, as well as national and international features. In the SWGP area, most of the activities are rituals inherited from the past. The traditional temple name, #Jianfu temple in Xi'an, carries the meaning of 'blessing'. Traditional New Year's activities are held on every first lunar month (usually in February) in Jianfu temple. People pray for the new year in the temple for half a month. With the municipal museum situated in the area, many activities related to the museum are held every year. #Little dragon man project, for example, comprises educational activities for children to learn about cultural relics in the museum. The activities are usually held on Museum Day and Book Day (international festivals). (The activities at the research sites will be further described in Section 6.2.)

Traditional performance, such as the Tilting Doll performance, is the most attractive feature of the place. There are also many modern activities such as International Fashion Week, a film festival, a marathon and cycling. Activities during festivals and alongside solar terms give people a sense of the time of year.

With so many HUL elements, Xi'an city has become China's #Internet Celebrity City. 'Internet Celebrity City' is a new term, which means that the city has become well-known on the internet by taking advantage of social media platforms. A very large and diverse group of people send microblogs with pictures to share their lives and feelings with others. The historic and Tang style architecture (e.g., #My favourite Chinese architecture) brings a sense of the prosperity of China. By holding photo and video competitions, pictures on the internet further deepen the Internet Celebrity effect. The effects of Internet Celebrity City will be further discuss in Section 7.2.1.

(7) Government affairs

- 1) Pandemic (e.g., #Prevention and control of new pneumonia in Shaanxi province, #Fight against new pneumonia, #Showing my return to work posture, #Epidemic prevention and control, #Books on the road to anti epidemic, #Some scenic spots are crowded without masks, #Celebrate the new year on the current spot, #Xi'an returns to work and production)
- 2) National Games (e.g., #Dress up the homeland to welcome the National Games, #The theme lantern of the 14th National Games, #The first mascot shop of the 14th National Games opens, #Meet Xi'an for the 14th National Games)
- 3) **Propaganda of patriotism** (e.g., #30 days to express love to our motherland, #Sing a song of the motherland, #My country and I, #The 70th birthday of new China, #Celebrating the 70th anniversary of the founding of new China)
- 4) **Propaganda of civilisation** (e.g., #New style of civilisation, #I am a civilised tourist, #Civilisation around us, #Recalling heroes and advocating civilisation, #Civilisation and health)
- 5) **Propaganda of thrift** being thrifty means saving and cherishing resources. It is a crucial traditional value which is passed down

- through the generations in China. It can be used as a method of sustainable development in urban spaces (e.g., #Fortune comes from thrift, #Thrifty new year)
- 6) **Local policy and regulation** (e.g., #Regulations in the heart, #The Pagoda will be reopened with a daily flow restriction of 5000 people, #Tripod shooting in Dayan Pagoda scenic spot needs to be reported)
- 7) **Urban planning** (e.g., #Xi'an SWGP area closed, #2021 Xi'an key project construction schedule, #Xi'an Metro Line 5 runs through the main urban area, connecting Xi'an and Xian'yang, #Reconstruction of 1316 old residential areas in Xi'an, #Xi'an real estate, #The Xiaoyanta ruins park will be completed and opened in April)

It is interesting to note that the microblogs are closely related to government affairs. Many popular hashtags are created by the authorised media, as authorised heritage discourse (AHD) for propaganda purposes. The new pneumonia prevention policies and 14th National Games to be held in Xi'an were two important issues in Xi'an in this period. Pandemic policies influenced the way people could use the place. Some activities were forbidden. Before the COVID-19 pandemic, a lot of people gathered in the research sites, especially in GWGP area, so the research sites were the focus of pandemic control.

People care about the policies, regulations and urban construction related to the area, as well as to their lives. People question some local policies (e.g., #Tripod shooting in Dayan Pagoda scenic spot needs to be reported), and those policies that are questioned tend to receive more attention. Through this supervision from the public, which attracts a lot of attention, unreasonable regulations may be changed. Construction projects in local communities – such as the renovation of the ruins park, the reconstruction of the residential areas and the Metro line running through the area – can be traced from many of the top hashtags. People often comment on social media that the popular online discussion will trigger a quick and fair response from the government.

Official microblogs are also used as a vehicle for propaganda of patriotism, civilisation and thrift. 'Civilisation' here is used to describe a form of ethical code of personal behaviour. The so-called 'civilised man' behaves politely and holds the correct values that contribute to the development of civilised modern society (explained in the analysis of the master plan). 'Thrift', as one of the ethical codes, means saving and cherishing resources. It is a crucial traditional value which is passed down through the generations in China. It can be used as a method of sustainable development in urban spaces. As the most popular places in Xi'an, the historic areas may remind people of highly civilised time points in history, which will stimulate people's feelings of patriotism and encourage them to display the good etiquette from the past.

Hot travel (4) Happy new year 2020 (4) Xi'an Metro Line 5 (6) Xining headlines (5) Warm heart in Shaanxi (5) Travel Museum (5) Travel in 2020 (5) Time to visit ancient town (5) There are only six days left in 2019 (5) The folk customs of Xi'an (5) The 70th birthday of new China (5) It 2020 is a movie (5) Go on a trip at any time (5) Free travel strategy (5) Meet the beautiful (6) Historical image (6) Celebrating the 70th anniversary of the founding of new China (6) Xi'an Tourism (28) Brother GUI (20) A glimpse of Quijang (20) Things around Xi'an (224) My top priority in the new decade (167) Xi'an (142) Travel (90) A primary school student spend 800 yuan to buy moisturizer and send it to frontier soldiers (87) the Silk Road (79) Jianflu temple in Xi'an (79) The light of the golden age (70) National treasure notes (68) Xi'an life (62) Xi'an in the new year of China (62) Xi'an news (50) Silk Road culture (43) I spent my new year in Xi'an (39) Xi'an travel (37) Meet Xi'an for the 14th National Games (35) We are serious about reading (34) Memory of the marrys of Qingming Festival (32) World Book Day (31) Travel with Weibo (29) World Heritage double tower linkage (18) Dream on the way (18) Silk road travel bar (17) A thousand year old capital Chang'an (16) This is Xi'an (12) The xiaoyanta ruins park will be completed and opened in April (11) Natural scenery (10) Little dragon man project (10) Wonderful right in 100 cities (9) One good day (9) Meet Xi'an City (9) III wait for you in Xi'an (9) Dating with Museum (9) The longest day in Chang'an (8) Xi'an Tourism Strategy (8) Xi'an returns to work and production (8) Where is Xi'an worth going (8) There are only nine days left in 2019 (8) Live broadcast in Chang'an (8) Epidemic prevention and control (8) Amazing places of interest (8) Web celebrity scenic spot (7) Summer nightlife (7) Sheam Wei (7) Fan Deng studies (7) Fall in love with a city (7) Cultural Shaanxi (7) Xi'an small wild goose pagoda scenic area closed (6) What are the scenic spots where you strongly recomme

Figure 5-1 Tag cloud of the SWGP area

Top ten congested scenic spots in mid autumn National Day holiday (122) Xi'an Tourism (121) Travel with Weibo (120) Thrifty new year (118) Tumbler performance cancelled (114) Winter scenery (114) Dress up the homeland to welcome the National Games (101) Young man carrying his sister to take photos (98) Xi'an life (96) Travel (89) Books on the road to anti epidemic (88) Some scenic spots are crowded without masks (87) Showing my return to work posture (79) New style of civilization (64) How many kinds of noodles are there in Xi'an (61) Xi'an (284) The old man used three years to carve a picture of Qingming River (249) Celebrate the new year on the currnt spot (224) Xi'an Tourism Strategy (207) Xi'an travel (192) People follow the crowd (151) This year (148) thank you (148) The warmth of winter (144) Things around Xi'an (140) Strange knowledge (138) Epidemic prevention and control (129) Xi'an news (129) Winter solstice (127) Fortune comes from thrift (122) Memories of Chongyang (58) N reasons for falling in love with Shaanxi (56) Home country in my heart (56) Travel around China (55) Civilization and health (55) Travel recommendation (53) The scenic spot of Xi'an is open to medical and health care workers all over the country free of charge (51) My country and 1 (49) Cycling the ancient city wall (49) Bookstores punch in and enjoy books (47) 30 days to express love to our motherland (46) Yan Ni turns into a tour guide in Xi'an (45) Sing a song of the motherland (44) Civilization around us (44) Xi'an in action (43) Take you home on a trip (42) When film meets grassland (41) The longest day of Chang'an (41) Let's travel far away (39) Regulations in the heart (38) My favorite Chinese Architecture (38) Recalling heroes and advocating civilization (36) I'll will for you in Xi'an (35) Travel close of Chinese Architecture (38) Recalling heroes and advocating civilization (36) I'll will for you in Xi'an (35) Travel close of a civil propertied (32) My summer vacation is different (28) I an a civilized tourist (28) Xi'an i

Figure 5-2 Tag cloud of the GWGP area

5.1.2 Top 1,000 Microblogs of the Two Sites

The microblogs complement and reflect the context of the research sites and people's perceptions of the environment. The most frequently used words to describe the perceptual elements and quality are shown in Tables 5-1 and 5-2. The frequency of the words is not discussed; rather, the hashtags are analysed in Section 5.1.1. In this part, my analysis just compares the words people use. The words are sorted alphabetically for sake of comparison, and the words that appear in both sites are highlighted in bold to show the similarities of the perceptions of the two places. The historical background, especially the history and culture of the Tang dynasty, affects the description of the historic areas deeply. 'Tang dynasty (Great Tang)' and 'Chang'an city' occur most frequently, respectively 541 and 288 times in the content of people's microblogs. During the Tang dynasty, Chang'an city was the most powerful and civilised city in China, which is an irreplaceable element of the urban history. 'A thousand-year-old Chang'an' has become the marketing slogan and brand of Xi'an city. According to the Xi'an City Development Plan (2017–2021), the city is conceived as, 'a world cultural capital where traditional Chinese culture and modern civilisation complement each other'. The policymakers attached great importance to historical and cultural values (see Chapter 4).

Modern people are very proud of that history. One sentence is often posted and shared on the site Microblog:

Look to Shenzhen for a 20-year-old China; look to Beijing for a 1000-year-old China; and look to Xi'an for a 5000-year-old China.

The phrases, 'ancient capital' 'ancient city' and 'architecture', show an interest in the city its and architecture. People imagine they are 'moving through time' thousands of years ago (millennia) and feel like they 'dream back to the Tang dynasty in one moment'. When they leave, some people say, 'We need to say goodbye to the Tang dynasty'. People regard the historic areas in Xi'an as uniquely representative of the 'flourishing age'. The rest of the

words which signpost the perceptions of places, elements and quality will be explored further in the next few sections.

Table 5.1 Perceived elements and qualities in the SWGP area

Aerial Photography	Eight Scenic Spots	Morning Bell	The Bell
Ancient Capital	Environment	Museum	The Silk Road
Ancient City	Han Costume	National Day	Top Priority
Architecture	Heritage	Paomo	Tower Body
Area	History	Park	Traffic
Beilin District	Honeysuckle	Protect	Twelve O'Clock
Block	Hotel	Punch the Clock	Wish
Construction	Industry	Pupil	Wonderful Night
Chang'an	International	Reform	World
Characteristic	Jianfu Temple	Road	Xi'an People
Consumption	Line	Ruins	
Culture	Metro	Story	
Demolition	Millennium	Tang Dynasty	

Table 5.2 Perceived elements and qualities in the GWGP area

Ancient Capital	Flourishing Age	Motherland	Show
Ancient City	Fountain	Moving Through Time	Square
Architecture	Ginkgo	Music	Story
Art	Han Costume	Mutton	Tang Dynasty
Art Gallery	Нарру	National Day	Tang Rhyme
Beautiful Scenery	History	New District	Taste
Bustling	International	Night Scene	The Silk Road
Chang'an	Joy City	Outdoors	Traffic
Characteristic	Juvenile	Paomo	Tilting Doll Perform
Charm	League Match	Periphery	Vacation
Ci'en Temple	Light and Shadow	Photograph	World
Cold Rice Noodles	Live Broadcast	Qinling Mountains	Xi'an Film Studios
Culture	Metro	Restaurant	Xi'an People
Delicious	Mid Year	Ruins	Xuan Zang
Design	Mid-Autumn Festival	Scenery	Yummy
Fashion	Millennium	Shot	

The photos on the social media platform are categorised according to the checklist of elements (O'Donnell and Turner, 2012). In terms of elements of the HUL, the buildings, vegetation, urban art, sculpture and site furnishings appear most often in people's photography on social media. The festivals and ritual in the SWGP, and performance in the GWGP catch people's interest (Figure 5-3). If we look at photographs with people as the main subject, people also like to use the walls as backgrounds for themselves, and take photos wearing Han costume, in addition to the top three elements (Figure 5-4). Prior interviews with policymakers (see Chapter 4) suggest that landmarks are accessible objects

of perception (Interview E2). The results show that vegetation, urban arts, sculpture and site furnishings also spark people's interest. However, the small number of photos with an element does not mean that the element is unimportant: for example, photos including elements related to urban patterns are objectively difficult to take, but the importance of this element is shown in people's text. In this chapter, People show and relate the elements of the HUL through their pictures. It needs to be said that these tangible and intangible elements are to be enjoyed in combination.

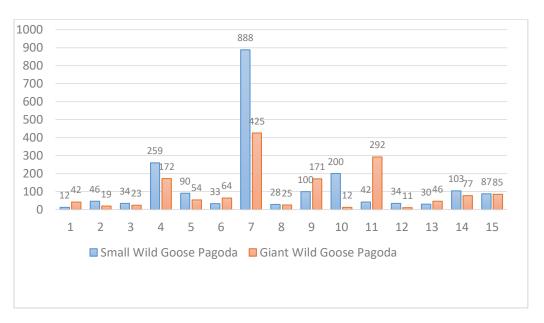


Figure 5-3 Data of number of pictures with each HUL element in people's photos on social media

1	Surrounding natural environment
2	Different functional regions of urban space
3	Visual relationships of regions
4	Vegetation of different types
5	Transportation routes
6	Natural and constructed water Features
7	Mass, scale, form, details of buildings
8	Bridges and walls
9	Urban art, sculpture, site furnishings
10	Festivals, rituals
11	Traditional music, dance, performance
12	Spiritual worship
13	Places of memory, commemoration of past events
14	Local cuisine
15	Traditional arts and crafts and work places

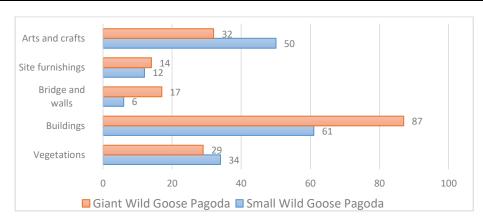


Figure 5-4 Data of number of pictures including people and HUL elements on social media

5.1.3 The Questionnaire Survey

The questionnaire survey was conducted to get a general understanding about the information of the visitors and their perceptions of historic areas. A total of 219 visitors participated in the survey: the SWGP area (n=100) and the GWGP area (n=119). Over 80% of the participants in each research site were among 20-39 years old. In both sites, the percentage of male visitors was higher than female, and 90% of the participants enrolled or received bachelor's degrees or higher. 48% and 31% of the respondents in the SWGP were local residents and tourists; 71% and 13% of the respondents in the GWGP were local residents and tourists. 21% and 15% of the respondents in the SWGP and the GWGP area selected their identity as others. Most of these respondents worked and lived in Xi'an city, however, they were willing to say that the place where they were born and raised was their hometown, thus, they consider themselves neither as local residents nor as tourists. It can be seen that people's past, especially at a young age, is crucial for people's identity. 80% and 96% of the respondents felt they were at least moderately familiar with the SWGP area and the GWGP area. The Respondents were visiting the SWGP for tourism, leisure or just passing by, while they were visiting the GWGP area for leisure, tourism and shopping in the GWGP areas. In general, 76% and 83% of the respondents in the SWGP area and the GWGP area were either satisfied or very satisfied with the two areas (See figure 5-6).



Figure 5-5 Visitors information at the research sites

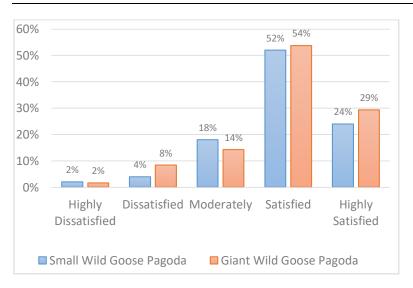


Figure 5-6 People's satisfaction with the research sites

The mean scores in the perception of HUL elements and townscape characters of the two historic areas were compared. The two historic areas were two independent variables; the dependent variables were tested by people visiting the two historic areas on a five-point Likert scale. The normality of the data were first tested. The values for skew and kurtosis were all between –2 and +2, so it can accepted that the data match an approximately normal distribution (if the values for skew were between –3 and +3, and kurtosis were between – 10 and +10). Q-Q plots were also checked, and the data appeared as a straight line, which confirm approximately normal distribution of the data. Thus, a parametric method – independent t-test – was applied. If p>0.05, equal variance was assumed; if p<0.05, equal variance was not assumed. The result (see Figure 5-7 and Appendix H) shows that there were significant differences for the perceptions of six HUL elements in the two research sites: transportation routes; water features; buildings; urban arts, sculpture, site furnishing; festivals, rituals; and traditional music, dance, performance. People's perceptions of naturalness, complexity and openness were considered to have statistically significant differences between the two historic areas (see Figure 5-8 and Appendix H). The

differences in the two research sites will be explored in detail with the contextualised qualitative analysis in the next sections.

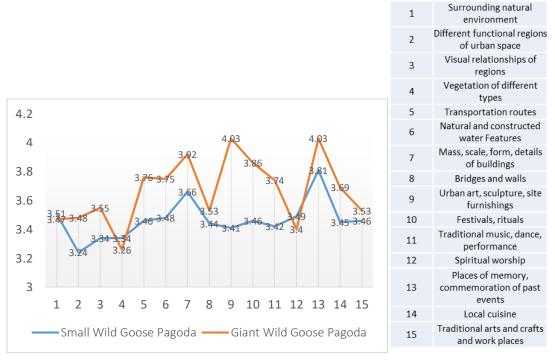


Figure 5-7 Mean HUL element Likert scores

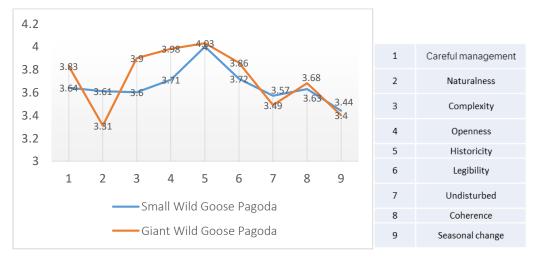


Figure 5-8 Mean visual characters Likert scores

5.2 Perceived Tangible and HUL Elements

5.2.1 Natural Systems, Geomorphology, Hydrology, and Topography

Mountains, rivers, weather and celestial bodies in the natural system are the key elements that people taken into consideration. According to previous research on city construction history, elements of the natural environment have been the most important consideration in the construction of a city since ancient times (Wang, 2000; Wen et al., 2015). This reflects the pursuit of the rational use of resources under living conditions in ancient times, as well as the pursuit of natural aesthetics.

In accordance with Chinese philosophy, respect for surrounding mountains and rivers (*Shanshui*) is an integral part of city plans. Daoists believe that man is a part of nature and a product of nature, and that people must live in harmony with nature or follow nature. Daoists observe nature and draw conclusions involving astronomical geography, astral motion, cloud and rain meteorology and other nature-related views. Such scientific methodology related to astronomy and mathematics is also applied in ancient urban planning. ('Science' usually refers to what is happening in the contemporary West. However, Chinese people believe that ancient people had their own science, which was probably more advanced than modern science, especially in the areas of agriculture, medicine, mathematics and astronomy. These are known as the four great natural sciences of ancient China.) In the Qin dynasty, planners used the constellations to locate cities and palaces.

In addition to the elements in the sky, natural elements on the earth are taken into consideration. The territory map of Xi'an (Figure 5-9) presents a detailed description of its surrounding mountains and rivers. Xi'an is situated in the 800 li (400 kilometres) of hinterland of Qin Mountain, adjacent to nine mountains and eight rivers, which ensure the city's urban defence and agriculture needs. Sima Xiangru describes the eight rivers running in different directions in Chang'an city. The river with clean water and aquatic plants

becomes scenery in Chang'an. Xi'an, as a northwestern city, has a comparative lack of water compared with the southern cities. People's love for water has never changed. Although some of the rivers have disappeared or lack of water at present, the government plans to recover them. Nowadays, the line gardens beside the rivers are always full of people. The ways in which people pursue the natural elements can also be traced from data on social media. Qinling Mountains (formerly known as the Nanshan, South Mountain) to the south of the city, and Wei River to the north, appear a lot in the content of textual material.

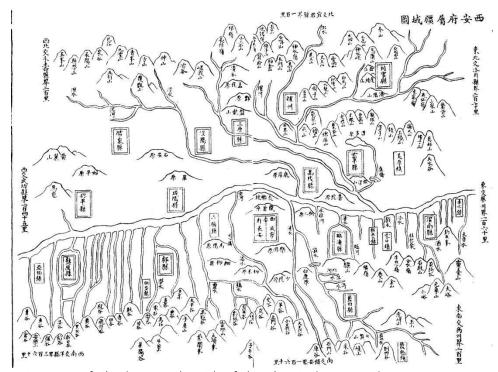


Figure 5-9 Territory map of Xi'an (Source: Chronicle of Chang'an city (Song, 1076)

Smog and air pollution have become more and more serious, and disturb people's views. In this situation, people are more eager to have a visual connection with the surrounding mountains. This has also become an indicator for people to measure the weather: for instance, 'In good weather you can see Qinling Mountains' (R6). In Figure 5-10, the

photographer R6 emphasises the colourful layers of the background mountain and sky to shape a good view in his mind. With the help of the camera, we can see the mountains clearly from such a long distance at nightfall. Comparing the middle and the right-hand photos (Figure 5-11), the photographer 'hides' some of the tall buildings in darkness, so the viewer can focus on the pagoda, axis and the traditional style buildings.



Figure 5-10 Qinling Mountain and sky in the background (Source: R11)



Figure 5-11 Modern constructions and the pagoda (Source: R11)

The weather and celestial bodies are also closely related to the natural system. People say, 'Xi'an returns us to the heyday of Tang dynasty Chang'an when it snows' (R6) to describe the view after snow. The snow views are described as 'fairyland', and 'a thousand years of Chang'an customs hidden under the snow'. 'The snow in Chang'an brings a dream to people' means that the snow gives people a feeling of being asleep

after becoming drunk and a beautiful dream related to the ancient city. The sun, moon and stars give a sense of time. These celestial bodies have been in the sky and witness the stories of thousands years. People imagine they can communicate with the sky and celestial bodies, to listen to the historical stories. According to people's narratives, the pagoda still stands among such ancient stars, which draws closer the ancient and modern time and space, as if people place themselves in the Chang'an of the Tang dynasty.

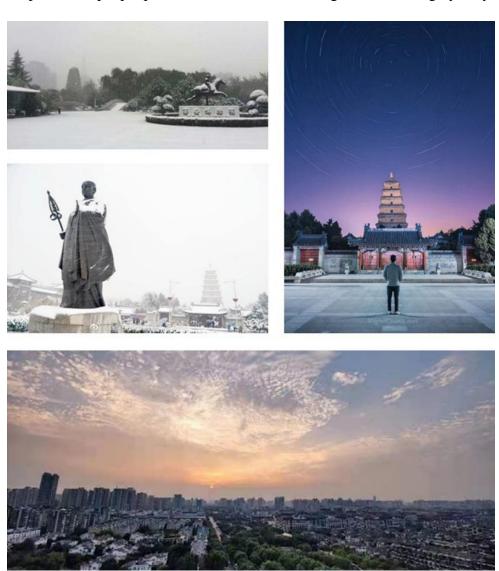


Figure 5-12 Photos related to natural elements (Source: Official microblog of Xi'an Museum, Steed's microblog, and R11)

The natural elements, buildings and people in the pictures reflect the philosophy of harmony between nature and man. The rainy day gives the SWGP a special charm. People compare the misty drizzle to a veil over the photo, the view of which makes the photographer feel the pleasure of fully enjoying nature.

5.2.2 Land Uses, Patterns, Clusters and Spatial Organisation

The history of the two pagoda areas can be traced from the Tang dynasty. The two pagoda temples were built by imperial decree of the Tang dynasty. The Ci'en, Jianfu and Daxingshan temples are the three biggest places for the preservation and translation of Buddhist literature. The GWGP is in the Ci'en Temple, which was the most famous and magnificent Buddhist temple of Chang'an city. Ci'en temple was the birthplace of 'Weishizong', one of the eight schools of Buddhism in China. In the past, the temple covered 270,000 square metres, with more than 1,800 rooms; this was as large as half a block of Lifang (the ancient residential block). However, it is only one eighth of its former size at present. During the Tang dynasty, the SWGP's yard was opposite the Jianfu temple yard. The original Jianfu temple was destroyed due to the war in the late Tang dynasty, while the pagoda survived. In the Song dynasty, the Jianfu temple was moved from Kaihua Fang to Anren Fang; the pagoda has been in the temple since that time.

As stated previously in Section 4.2.2, Chinese planners attach great importance to the study of historical urban patterns. 'It would be a real achievement if our experts can get people to understand that urban pattern' (see Section 4.3.3, Interview E3). The planners hope to guide people to understand the city's historical urban patterns as a structure when they assert that people are paying attention to landmarks rather than urban pattern. The discourse from social media rejects the policymakers' assertion. The public are attracted by the landmarks, while they also trace urban patterns. For example:

- 1) The municipal city museum shows people the evolution of the urban space of Xi'an city in an independent exhibition hall. The form of ancient Chang'an city is painted on the floor the city model is presented (Figure 5-13). People walk in the space or bring a map to perceive the ancient urban pattern. There is also a big model of the Chang'an city in the centre of the minus one floor. From the model, people can imagine the magnificence, prosperity and strength of Tang capital as an influential city on the world. This kind of urban pattern influenced many other cities, for example, the Pingcheng and Pingan capitals of Japan.
- 2) Some residents and tourists have a sense of the ancient street system. They know where the main street is in the ancient city, and how they can walk to related historic areas (Section 5.2.5). The streets divide the city into 108 rectangular areas called *Lifang*, the ancient residential units during the Tang dynasty. Although Lifang is not a common concept nowadays, some participants and users of social media have clearly pointed out that, historically, the GWGP is in Jingchang Lifang and the SWGP is in Anren Lifang.
- 3) People also explore the traditional forms of buildings from the Tang dynasty (Section 5.2.6) when they stand at a high location or look at the urban space based on the axis and clusters in the way experts perceive them.

Like the experts, the public also perceive the land use at a larger scale. Recently, the word *periphery* has been used by a lot of people in the social media text material. This shows people's liking for functional regions in the surrounding city. People are interested in the peripheral attractions, transportation and restaurants with leisure or travel purposes, where they can look, play, eat and feel. The findings show that, first, both landmarks and urban patterns are perceived. Second, people look at places with different purposes – for instance, finding a restaurant or the way to attractions.





Figure 5-13 Presentation of Chang'an city map and model in Xi'an Museum (Source: author)

5.2.3 Visual Relationships of Regions

As explored in the previous paragraphs, I argue that the visual relationships that people trace are highly related to the previously mentioned elements: the natural system and urban patterns. Finding a visual relationship to the surrounding natural system embraces the

Chinese philosophy of, and people's love for, nature. The urban pattern (axis, streets and clusters) provides a clear clue for tracing visual relationships. People write that on social media, 'Landing on the highest floor of the pagoda, looking north, Chang'an city is at your feet.' The figure 5-14 below shows the use of text to mark different land use on the photos people take. Climbing high at a pagoda or mountain to look at the whole city is a historically preferred way of viewing among Chinese people. The idiom, 'Deng Gao Wang Yuan' (climb high and look far), describes this kind of behaviour. Celebrities in history climbed the pagoda and left many famous poems. Du Fu wrote, '[the pagoda] highly stands across the sky, the strong wind never stops'; Cen Shen wrote, 'Climb out of the world'. People resonate with these imaginings of the magnificent pagoda when they climb the pagoda and look at the city.

On the other hand, some microblogs express a desire to see the tower from a distance. The pagodas had a huge influence on the skyline of the ancient city. When they see the pagodas, people imagine the feelings of their ancestors after a difficult long journey. Therefore, the pagoda is not only a place for looking but also a landmark for being looked at. The control of visual catchment and buffer zones in planning guidance is crucial.



Figure 5-14 North and south views on the pagoda (Source: Gezi's mircroblog)

5.2.4 Different Types of Vegetation

The plants grown in historic areas have unique cultural significance. The beautiful autumn and spring scenery is highly praised. The microblogs express people's feelings of freshness in spring and their celebration of the autumn harvest. 'Golden ginkgo', 'red plum', 'cherry', 'peony', 'Chinese rose', 'pomegranate tree' and 'ancient locust tree with a history of one thousand years' are terms which appear frequently in the microblogs. The colours of the leaves and blooms of flowers represent seasonal changes and the arrival of festivals. People recommend places on social media to view the flowers and leaves of different seasons. The photos and text of the microblogs show that the ancient buildings surrounded with trees and flowers in the Buddhist 'pure land' (further developed in Section 5.3.3) give people a feeling that the scenery is historic. The scent of flowers, bird sounds and human-friendly cats create a fresh environmental experience, including not only seeing but also smelling, hearing and touching (the cats). Many people take selfies with the flowers, and use ancient poems or write poems themselves to show their love of the plants and their spirits. There are also microblogs describing the Chinese medical functions of the plants.

The vegetation reflects seasonal changes and the Chinese historical 'way of seeing', which looks at the 'spirits' of an element from its 'shape'. The poem, '*Plum Blossom*', written by Chairman Mao, describes the plum and also references when people spot the flowers. Mao wrote,

Sweet and fair, she craves not Spring for herself alone. To be the announcer of spring she is content.

The poem depicts the indomitable image of the plum to encourage people to be positive and humble. People also use the poem, 'After Diploma', written by Tang dynasty poet Meng, to describe the spring scene of flowers in full bloom in ancient Chang'an city. Similarly, Tang dynasty poet Han wrote, 'The most beautiful spring comes when the willows are full of the emperor city', to show his love of the spring scenery. The end of the long winter and the growth of plants in spring give people hope. In summer, the plants in

the rainy season bring a specific aura, which gives the photographer a sense of nature. In autumn, the persimmon and pomegranate fruits and the ginkgo leave brightly colour the historic areas. The ginkgo leaves fall on the rooves of historic buildings and yards, which paints the place with golden colour and gives people a feeling of purity. In winter, the honeysuckle and wintersweet bloom. Flowers in cold weather encourage people to confront the difficulties in their lives. Some flowers and trees can be viewed all year. Poet Su from the Song dynasty wrote:

Flowers bloom and withered, and spring comes and goes.

Peonies are treasured and flouring but only bloom in late Spring and early summer. Only Chinese roses do not tire of blooming the four seasons of a year.

This also shows a spirit of dedication because the flowers bloom eternally. In the SWGP area, the ancient locust trees with a thousand years of history are 'touching the sky' (metaphor in Li Bai's poem 'Shudao Nan') and showing their connection with ancient times. These ways to learn the 'spirits' of plants are inherited from historical Chinese literature (especially the poems), which are taught from a young age and have become a common part of the cultural background of Chinese people.



Figure 5-15 Photos of vegetation and animals (Source: Official microblog of Xi'an Museum, the official microblog of Qvjiang Cultural Tourism, and the author)

5.2.5 Circulation and Transportation Routes

Generally, the transportation routes which appear in the social media and interview data can be categorised into regional, city and block scales. Similar to the urban pattern, people first perceive the transportation routes on a large, regional scale. At the city scale, the routes people mainly perceive are part of the ancient road system of Chang'an city. At the block

scale, the ancient axis continues. People find internal ways through historic areas as according to the preserved main axis.

At the large scale, the Silk Road, which is the longest trade route with a rich natural and cultural heritage, is the most influential route related to the two historic areas. The 5,000-metre-long Chang'an–Tianshan Corridor, starting from Chang'an city and containing the SWGP and GWGP areas, was added to the World Heritage List in 2014. The route has been used for millennia for exchanging goods and culture among central Asia. The related pagodas and temples show the transportation of Buddhist culture (further developed in Section 5.3.3).

At the city and block scale, the square-grid street network, running north—south and east—west, is likened to a chessboard and farmland in historic Chang'an city. This clear structure of the ancient urban form has been preserved during new development in contemporary Xi'an. The criss-crossing main streets start from the perimeter at the ancient gates and connect urban heritage as axes. Today, the streets continuously bring a strong sense of north—south and east—west direction to citizens, mainly because the continuity of street layouts and north—south architectural orientation are still coincident with contemporary urban streets and buildings.

Zhuque Street is the main axis dating back to the Tang dynasty, and is near the SWGP area. Tang dynasty poet Han wrote, 'The moist and crispy light rain drops in the heaven street, the colour of the grass seems light. The brightest spring comes, when the willows are full of the emperor city', to show the historical spring scenery of Zhuque Street. The zhuque (vermillion bird) is one of the four Chinese mythical beasts, connecting to the south direction and fire in the Daoist five-element system. The street starts from the ancient Gate in the south of the city. People use the street for wayfinding and to show the location of their destination. For example, the SWGP is located in the east side of Zhuque Street. The street is shared by residents and tourists. T5, a PhD candidate majoring in music, said that when she came to Xi'an, the first thing she did was to go to Zhuque Street and listen to the

song named 'Zhuque Street'. Then she posted a blog on a social media platform with the location tag and the lyric of the song, 'Return Chang'an city with hazy moon (late at night)'. The lyric and participant's use of it come back to showing her sense of belonging. Although Xi'an is not the hometown of tourists to it, Chang'an in the Tang dynasty is the original home in Chinese people's heart.

Travel tips help tourists get information about transportation. The external ways around the whole city are connected by their destinations. As a convenient and fast means of transportation, the metro is frequently mentioned on social media, where the opening of the new metro line grabbed people's attention. The Nanshao Gate metro station is designed to fit the context of the SWGP (Figure 5-16). The columns of the station apply the pagoda's style, called 'multi-eaves form'; the repeated style is also applied on its ceiling. The walls are painted with the Chinese Brush Painting of the SWGP and municipal museum.

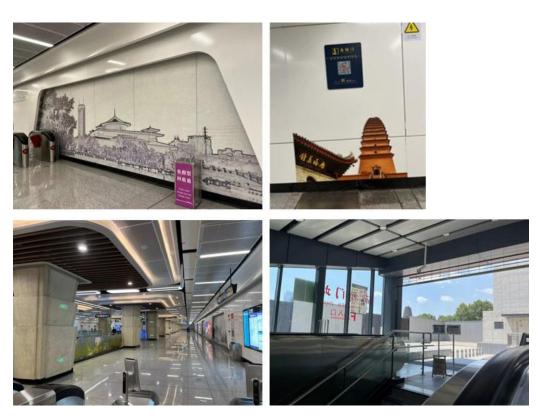


Figure 5-16 Design of Nanshao Gate Metro Station (Source: the author)

The 'old style' buses have three different lines that take people to the tourist spots; the GWGP and SWGP areas and many other historic areas are thus connected. The style of the car emphasises the historicity of its townscape character.

Congested traffic is a common concern. China Central Television reported that the GWGP was ranked among the top ten congested scenic spots during mid-autumn and national holidays in 2020, which sparked a lot of discussion on social media. Because of the huge amount of real estate surrounding the GWGP, roads are congested in morning and afternoon rush hours for the residents. During the peak travel period, the historic area is full of people. The queue at the metro station entrance of the GWGP is hundreds of metres long on the labour and national holidays.

5.2.6 Mass, Scale, Form and Details of Buildings

5.2.6.1 Architectural Forms of the Pagodas

The pagodas have witnessed more than a thousand years of Chinese history. The brick and stone materials have kept the pagodas standing until now, while many wooden buildings have fallen into ruins over time. Built in 623, the GWGP is the earliest and largest Tang dynasty four-square pavilion-style brick pagoda; built in 684, the SWGP was a multi-eaves brick pagoda. Both pagodas combine the India Buddhist architectural form with the Chinese architectural style.

The architectural forms and details seem to impress people: they tend to describe the material, shape, height and colour of the pagodas and the surrounding buildings. In 1116, a man calling himself 'old man in the valley' repaired the pagoda with white clay, and the white clay can be observed by visitors to the pagoda in the present day. Some hot microblogs about 'How to build a GWGP' or 'Details of the SWGP' illustrate the structure of the pagoda with diagrams or text, which arose a lot of people's attentions.

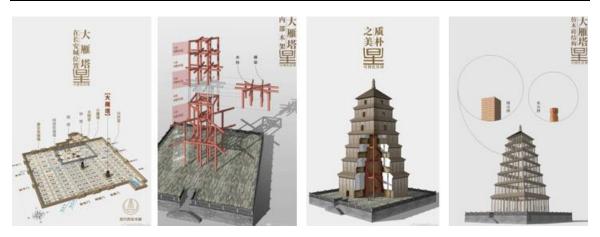


Figure 5-17 Microblog describing how to build GWGP (Source: Official microblog of iArc.)

There are also many microblogs introducing multi-eaves and pavilion styles of the pagodas all over China. They compare the pagodas with similar architectural features, we might classify them as follows: SWGP, Songyue Pagoda in Henan province and Three pagodas in Yunnan province are multi-eaves style (Figure 5-18 on left); while GWGP and Yingxian Wooden pagoda in Shanxi province are pavilion style (Figure 5-18 on right). The window, roof styles of other temple's buildings also arouse people's curiosity.





Figure 5-18 Three pagodas and Yingxian Wooden Pagoda (Source: Zhahaozhe Alliance's microblog)

The architectural structure of SWGP is related to a story of 'Miracle Close' (雁塔神合). During the Ming and Qing dynasties, large-scale earthquakes broke out more than seventy times. It was recorded that the pagoda cracked from its centre and then closed three times, in 1563, 1691 and 1721. People have interpreted this as a 'miracle close'. Some people also call the pagoda a 'wobbly man'. Researchers explain that this miracle may be related to its foundation and structure. One reason is that the pagoda's basement is made of a semi-circle of rammed earth.

After the destruction caused by the earthquakes, preserving the pagoda is crucial. Although the two highest floors were destroyed in the earthquakes, the thirteen remaining floors left the pagoda with a height of 43.4 metres. In 1965, the reinforcement and renovation of the pagoda bridged cracks, reinforced the eaves, repaired the stairs and retained the top floors' earthquake damage, based on the principle of 'renovating old as old' (discussed in Section 4.1.2, this will be developed further in Chapter 7). The minimal intervention in the incomplete pagoda shows another kind of beauty, which is regarded as a model of ancient pagoda restoration in China.

5.2.6.2 Presentation in the Municipal Museum

The municipal museum is located next to the SWGP. The pagoda itself is the biggest cultural relic of the museum, the logo of which is the shadow of the pagoda. People seem to like the cohesive building styles of the temple and museum. The museum presents the urban evolution and the social life of the thousand years of urban history. The painting, calligraphy, and jade, bronze and terracotta figurines that are presented in the museum grab people's attention. Visitors of Xi'an city always say, 'Xi'an is full of cultural relics'. The presentation of the cultural relics is highly praised, especially the light and colour in the exhibition hall. People love the museums of Xi'an, and summarise 'the museums you should visit' on social media.

People look carefully at the details of cultural relics, such as the bas-relief on the lotus pedestal and the line engraving on the 'Xumi seat'. One influential microblog thought the carvings were elegant and skilful, and related them to the stonework techniques from the oldest extant Chinese technical manual on architecture and craftsmanship, 'State Building Standard', which was written by Lijie in 1100.

The museum has different kinds of great exhibitions every year. During the pandemic, the museum has also provided presentations online. In the spring of 2020, about 280 pieces of cultural relics were classified under different sub-themes to show the lives of people who lived in Chang'an city. Ancient poems were used as the names of the sub-themes, including 'Chessboard city with thousands of families', 'The moon shining on Chang'an households', 'Multi-embroidered clothes', 'Endless stream of business vehicles' and 'Delicious food in city'. The people, clothes, travel, food and entertainment of Chang'an were presented to visitors. The 'never-fading charms' of history and culture in Chang'an city were explained. Different modern technology has been used, for example, a new robot used as a tour guide. The presentation brought people from the imperial palace to ordinary houses and showed the different layers of urban life. The presentation told people the stories that close to daily life, which provided an accessible way to understand the historical culture. People love cultural relics because, 'Time, like a river, washes away the decorations but preserves the essence' (inspired by Yang Shen's poem 'Immortal at the River'). The interpretation of the tour guide is always highly praised.

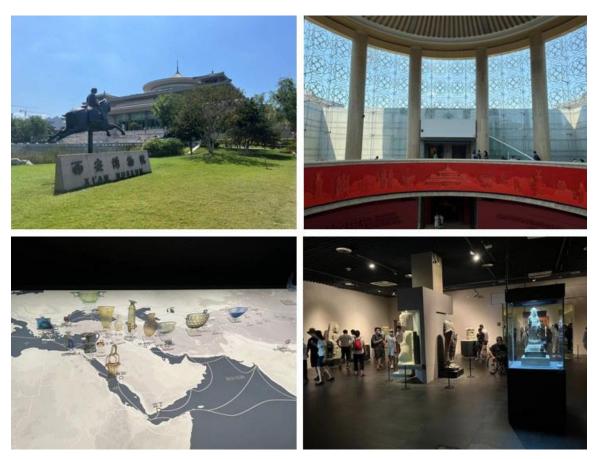


Figure 5-19 Presentation of Xi'an Museum (Source: author)

5.2.6.3 Architectural Design in Ever-Bright City

The Ever-Bright City, a Tang-style commercial block, is also appreciated by people. The block starts from the GWGP and continues along its axis. It is 2,100 metres long and 500 metres wide, with a total construction area of 650,000 square metres. There are museums, theatres, luxury hotels and malls, all using the Tang style. The architectural and interior designs get inspiration from the design concepts of the Tang dynasty.

A popular kind of microblog on the surrounding buildings is related to the best viewing points for photography. Taking photos from the top of the pagoda and the roof of Joy City

(a mall near the pagoda) is very popular on social media. People can enjoy fine dishes on the roof of the mall, and view the GWGP from a relatively high location. In this location (Figure 5-20), the pagoda seems bigger and closer to the viewer, which provides an excellent platform for watching and photographing the pagoda. Joy City also provides some modern themed spaces for photography, such as 'the Wizard of Oz' and 'Romantic Town'. The historical and modern scenes together give people a special and impressive experience.

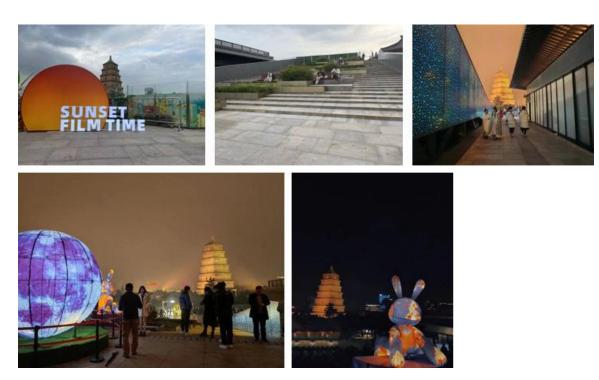


Figure 5-20 Views on the roof of the mall (Source: R12 and the author)

5.2.7 Water Features, Bridges and Walls

The large musical fountain in the north of the GWGP has gone viral on social media. There is a light and fountain show every day at the north square of the pagoda. The themes of the show are 'Return to GWGP' or 'Return to Chang'an for Spring Festival'. Using the pagoda as a background, the height and shape of the fountain changes rhythmically. The

transformation of the light also helps to attract people's attention. Huge crowds of people stand about the square when the show starts. There are also special fountain shows. On the National Day of 2019, a show called 'My Country and I' was held to show people's love of the country. Performers held up national flags: the largest flag was about fifty metres wide and 33 metres high, and weighed more than 100 kilograms, taking more than 100 people to raise it. The audience cheered when the flags were raised and the pagoda was coloured red. There was also a foundation show after the lockdown related to the pandemic. Using the songs, 'The Most Beautiful Warmth' and 'The Direction of the Flag' as background music, the water reflected the characters, 'Heroes of Chang'an', to show respect to the doctors and staff working on the 'front line'.

A 1,500-metre long pedestrian street is furnished with statues of poets and constructed water channels. The water channels emphasise the main axis and lead people to walk to the south wall of the Tang dynasty city. The original, historic south wall of the Tang dynasty city was at the end of the GWGP area axis. Few people remember it because the city wall is now underground, underneath a green belt park. The Qv River and Tang Paradise Garden, historical water places near the GWGP, are more famous than the city wall. The river and garden have been reconstructed in their original places. It has been mentioned often among microblogs that boating on the lake or walking on the bridge helps people feel relaxed.



Figure 5-21 Main water features of the two research sites (Source: Official microblog of Xi'an Museum and Chinese Business View)

5.2.8 Urban Art, Sculpture and Site Furnishings

Sites are furnished in accordance with Tang style. Master monk Xuanzang's sculpture on the south square has the GWGP in the background. The master had been translating the Buddhist literature in the pagoda. People walk under the pagoda and look at Xuanzang's statue and the pagoda, which 'protect and watch over each other like brothers' – people wrote on microblog. People follow the gaze of the sculpture and imagine they are experiencing the life of the monk. The scene reminds them that Xuanzang overcame eighty-one hurdles and returned to Chang'an to achieve 'universal salvation', which is well-known among Chinese people based on the novel 'Journey to the West'. There is also a giant sculpture of the Monkey Sun in Joy City. The story of the two sculptures is described in Section 6.3.

The night view of Ever-Bright City is greatly appreciated and memorialised on social media. The sculptures on the water channels tell people stories of the historical people of the Tang dynasty. The lanterns on trees, dazzling lights of road lamp posts and beautiful shadows of the Tang-style buildings bring people to a dream world of the past like time travellers. People feel that they walk in the ancient Shangyuan festival, also called the lantern festival, which is related to the worship of fire. They use a sentence from a Tang poem, 'Fire Tree and Silver Flower', to describe the lanterns in the palace. The lanterns create the impression that the tree is on fire.

In the SWGP area, the most famous site furniture is the bell. The place's 'Morning Bell' is recorded in the 'Eight Views of Guanzhong', which describes the most beautiful views of the place. It heavily influences people's perceptions of the bell as an especially significant cultural object. The monks ring the bell every morning, and the bell can be heard ten miles away. People who live in this city are used to hearing bells when they wake up every morning. The model of the most giant ancient Hanyuan Temple in Daming place, the floor tiles in the style of ancient coins and the stone carvings of the SWGP also catch people's eyes and educating people (see Section 7.3.5), which allows people to experience history

and culture in a real urban space. The urban art, sculptures and furnishing are closely related to the historical stories, people and memories of the place, which embody the intangible elements of the HUL.

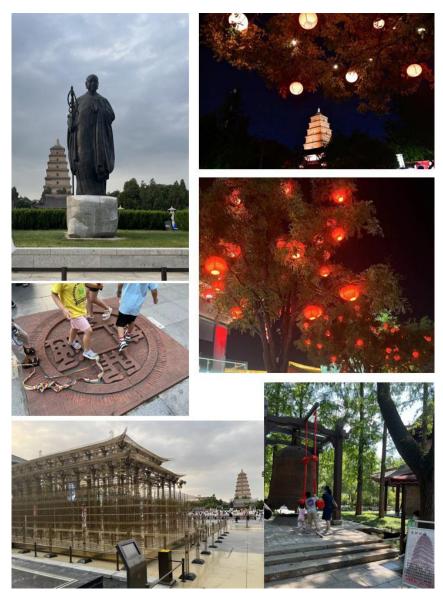


Figure 5-22 Site furnishings (Source: author)

5.3 Perceived Intangible Elements of the HUL

5.3.1 Festivals and Rituals

'New Year', 'Spring Festival', 'National Day' and 'Mid-Autumn Festival' are frequently mentioned terms on social media. Chinese New Year (the first day of the Chinese lunisolar calendar), Qingming (or Ancestors' Day, the fifteenth day after the Spring Equinox, either April 4, 5 or 6 in a year), Dragon Boat (the fifth day of the fifth month of the Chinese lunisolar calendar) and Mid-Autumn (the fifteenth day of the eighth month of the Chinese lunisolar calendar) are the traditional Chinese festivals, when people like go out to enjoy the beautiful scenery in the different seasons. People also celebrate the twenty-four solar terms, which are based on the sun's location and which guide farming activities. People use the solar terms, such as Lixia (the start of summer), Lidong (the start of winter) and Bailu (white dew), to talk about the special views in each festival.

The historic areas are usually full of people. Firstly, the historic city could bring them a sense of ancient festivals, as discussed in the section on site furniture. The places are decorated with lanterns and lights for festivals. People like to celebrate the ancient festivals in the historic city, which takes them back to the past. In addition, the number of tourists rises when the holidays begin.

In the Mid-Autumn Festival, also called the Moon Festival, the round moon means being together with family. All family members view the same full moon and eat moon cakes at night. It is a festival that shows people's attachment to their families and hometowns, especially for people who are not in the hometown. More than a thousand years ago, Du Fu wrote 'Tonight starts the season of White Dew, and the moon in my hometown is the brightest' in his poem, 'Thinking of My Brothers on a Moonlit Night', which is usually cited in people's microblogs to express their feelings in the Mid-Autumn Festival.

People reflect on the past and plan for the future at the New Year and Spring Festivals. People celebrate the new year in Jian'fu temple, make wishes for the city and for themselves, put small lanterns on the river, and ring the bell at the time the new year comes. Celebrating the new year at the pagoda is a wish for some visitors. They feel that the pagoda has witnessed their wishes. Many performances (further developed in Section 5.3.2) are held during the Spring Festival every year. The 'Light up your New Year' activity and 'Wishes on Earth' exhibition were held at the end of 2019. To celebrate the new year in Xi'an, the capital of emperors, is to walk through a thousand years. The hashtag, #Chinese Spring Festival, Look at Xi'an, was very popular on social media. The Xi'an government also held cultural activities for the Spring Festival in Shanghai, Chengdu, Chongqing and many other cities, to show the festival culture and city image of Xi'an.



Figure 5-23 Photos related to the festival and ritual (Source: Official microblog of Xi'an Museum and R12)

5.3.2 Traditional Music, Dance and Performance

5.3.2.1 Performance

As explored in the previous section, there are many performances all day in the SWGP area during the Spring Festival, including acrobatics, vaudeville, Shaanxi Opera, folk art, cross talk, stage plays, dance and music. 'Drum Beating for Lucky', 'Dragon-Lion Dance', 'Stilts Walk' and Chinese shadow puppetry are all on show.

Supported by the municipal museum, a stage play, 'Emissary's Story', was based on the painted gilded bas-relief on the stone coffin of an emissary's tomb in the Xi'an Municipal Museum. The play shows a foreign emissary's life in Chang'an city over sixty years. The scenes when he was marrying, having children, hunting and serving as an officer during the sixty years he lived in China are shown. People comment that this play makes the relics 'come alive'. People can listen to performances of music with Tang instruments. People describe the music as 'a millennia heritage'. The moving performance caused Liu to write three poems for it to show his excited mood. Some people also feel that 'Chinese instruments fit the Chinese song'. There are also pictures on the internet with cartoon characters playing traditional instruments under the pagoda.

Tilting doll performance has become a symbol of 'Internet Celebrity City', due to a picture and video which went viral all over China and brought many people to the GWGP area. The picture showed a beautiful dancer, with the makeup and clothing of the Tang dynasty, with fan in hand, swaying in the wind. People describes the dancer as a 'goddess' come to life, and were so excited when the dancer give tourists her hand just for a second. The local government noticed the popularity of the performance, then held a series of performances on the pedestrian street of Ever-Bright City to show the city's history and culture. People can walk and watch the shows at night. The performances can be categorised into 'Tang's Deduction', 'Fountain Show', 'Performance Art' and 'Museum Stage'. The cuisine, poems, cultural relics, traditional songs and daily lives of people in

history are all shown on the stage. Besides these, there are also performances of popular music. Chang'an is an inclusive city in history, and today's Xi'an still embraces different kinds of performance. Performances of different musical styles are welcome: there are performances of traditional opera as well as rock and roll. This kind of performances move the stage to street, closer to the audience.

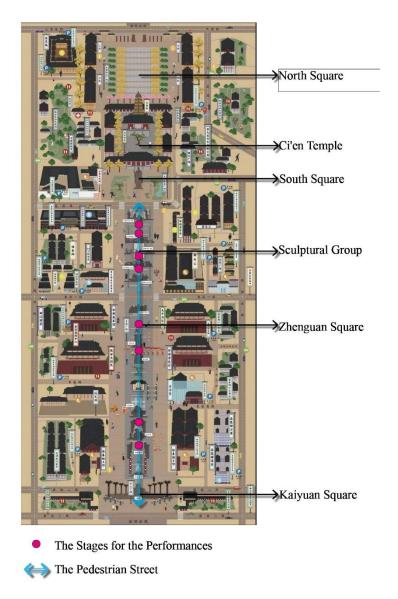


Figure 5-24 Performances in the street (Source: author)







Figure 5-25 Performances (Source: Official microblog of Shaanxi Tourism and the author)

5.3.2.2 Lyrics

Chang'an city was a place full of romance and endless beauty. There are many songs describing the aesthetic of the city. One interviewee, T5 (who was studying music), said that she listened to two songs while traveling in Xi'an city. She used the lyrics of 'Street Zhuque' and 'Silk Road' to express her feelings about the city. The lyric, 'Qiangdi flute and Huxuan dance company with me', refers to the music and dance among countries on the amazing Silk Road. In 2018, the popular song 'Zhuque Street' was written by Song Bingyang. The song is very popular and shows the imagination of the past and attachment to the place.

The wind rises and coldness follows
Peering at the fading scene
Who is standing in the longing atrium
Singing about twilight snow and fleeting time
Too much expectations
Bury the heart into dust

The wind rises and coldness follows
Such tender hands were reflected by oil lamp

Cross the narrow path
Through the big tree
There is a lost courtyard
How many stories had happened
Time flies, left its sneer
A home letter laid on beside
Listen to the music of Hujia Yin
Loneliness cannot be heard, only tears falling
Hooves and bells in the dream
Return Chang'an city with hazy moon (late at night)
Only found an empty city of broken dreams

This is a kind of public creation of the place. The lyrics reflect the author's imagination in the historic area. The melody and use of musical instruments are borrowed from traditional Chinese music.

Similarly, Weijie Zhang (2011) perceived the past and the future, writing that,

I look through the ages. Looking at the sky, illuminates the silence of the future. The future has you in the deep feeling of hope. My eyes gaze at the boundless starry sky.

The short but meaningful sentences show Zhang's view of history. He thought the future is full of hope, based on the glories of the past. Lifeng Zhong (2011) used the coming and going of wild geese as metaphor for the passage of time. He expresses the sadness of his leaving: 'But I know you'll leave at moon is still which Taibai [Li Bai, a poet in the Tang dynasty] looked at. Love is not the love Yishan [Li Shangyin, a poet in the Tang dynasty] chanted'. He refers to the moon and the relevant creations of famous ancient poets from the Tang dynasty (the Greatest Age of Chinese Poetry), which is an important part of the historical background of this place.

5.3.3 Spiritual Worship

It is believed by many people that Buddhist places bring people luck, happiness and good fortune. The character 'Fu' from the Jianfu temple's name means fortune and hope in Chinese. People think the pagoda areas are auspicious places, and feel that their hearts are close to the places. People perceive the place as the carrier of people's belief, emotions. People can write down their wishes and hang them on some of the walls and trees in the temple. The religious meaning encourages people. For example, the strength of the pagoda that has survived for more than one thousand years gave people power to confront COVID-19. Furthermore, it is represented as a place of spiritual worship. Interviewee R1 perceived spiritual support from the pagoda when she was running the marathon. The SWGP is at the end of the marathon, and she stated that the scale of the architecture was pleasant when she was running by the pagoda. Interviewee R3 also pointed out that many older people like to go to the SWGP to pray for blessings.

5.3.3.1 Master Monk Xuanzang

Monk Xuanzang's story is shared by every visitor. Historically, Buddhism prevailed during the Tang dynasty. Xuanzang noticed the differences in translations and understandings of Buddhist literature among schools, so he went to India and sought out Buddhist literature. His application to leave the country was refused at that time, but he did not give up and was smuggled out. When he finally returned to Chang'an, the emperor of Tang went out to meet him and allowed him to build the GWGP in the imperial temple.



Figure 5-26 Portrait of Xuanzang with Ji (Source: Looking the Future form the Past's microblog account)

The 'Portrait of Xuanzang with Ji (bamboo frame)' depicts the image of monk Xuanzang coming back to China from India after an arduous journey (Figure 5-26). The bamboo frame on his back is called Ji. It contains five layers: the upper three layers are designed for carrying Buddhist literature and the lower two are designed for carrying clothes and other daily necessities. It has a flat bottom and round top, which are designed to protect the Buddhist literature from rain and sun. An oil lamp is in front of the cover, for lighting up on the dark night. The oil lamp is often used in Buddhism, and indicates that the Buddhist light shines on the road. The spirit of Xuanzang encourages people today during the hard process of exploring knowledge and completing other work.

When the prime minister of India visited China in 2015, his first stop was Xi'an. The city represents the long-lasting friendship of the two countries which can be traced from monk Xuanzang's story. Other than Xuanzang, Monk Yijing translated Buddhist literature in the SWGP. Many master monks worked in Xi'an. The pagodas are evidence that Buddhism entered and prevailed in China.

5.3.3.2 The Origin of the Pagodas' Name

The origin of the name 'Wild Goose' is recorded in the book 'Great Tang Records on the Western Regions' (646), which is depicting monk Xuanzang's nineteen-year journey to the West. It is said that there is a temple in ancient India, where the monks were allowed to eat 'pure meat'. The meat that the animal is not killed because people want to eat it, called pure meat. One day a bhiksu saw a flock of wild geese flying pass the sky. He joked, 'There is not enough meat today. The Mahāsattva should know we are hungry.' As he spoke, a wild goose dropped dead in front of him. The bhiksu told the public about the sacrifice of the wild goose. The monks believed that the Buddha taught them using this story, so they built a pagoda and buried the wild goose under it. 'Wild goose pagoda' became a general term for pagodas since then. Xuanzang visited the wild goose pagoda when he visited India, and built the GWGP using its name and style.

5.3.3.3 Two Stories from the Focus Group Interview

People believe that the pagodas scare evil spirits away. Stories related to this kind of belief were widespread and aroused interest among the participants. To the west, a gate of a local university faces the SWGP, and there are nine stone pillars headed by open-mouthed stone lions on the left and right sides, to exorcise the evil spirit which was cast out from the pagoda. People are afraid to open and walk through this fine gate, and have decorated the

academic building with seven stone lions which are similar to the gate. Students saw many cats in the surrounding area, and claimed that it is a place with evil spirits, because the appearance of cats is associated with evil spirits in China.

Another story relates to one of the Four Great Classic Novels of Chinese Literature, Journey to the West by Cheng'en Wu (also known as Monkey, and translated by Arthur Waly). People use the story to explain the increasing footfall of a large mall near the pagoda. In the novel, Xuanzang travelled to India to get a sacred text, with three disciples to protect him on the journey, namely Sun Wukong (the monkey), Zhu Bajie and Sha Wujing. The sculpture of Xuanzang was built in the centre of South Square in 2000. A big shopping mall was opened adjacent to the square in 2012. Although the mall was located in an ideal location, few people came to it and it quickly 'withered' over the next five years. Big brands fled, leaving only a handful of shops and restaurants. The mall was nearly empty and had no business. People who believed in feng shui conjectured that the sculpture of Monk Xuanzang suppressed business in the surrounding area. With the investment of another developer, the mall reopened and, in 2017, introduced a number of high-end brands. Strangely, when a sculpture of the monkey Sun (Xuanzang's eldest disciple) – with hands folded, saluting Xuanzang – was set up in the atrium (Figure 5-27), the business recovered and the mall came back to life. The Monkey Sun's appearance is different from the traditional depiction as 'a nimble monkey' or 'king of wars'. The statue has a humble posture in the busy shopping centre, which conveys a profound oriental power. Perhaps the crowds now come to the mall to see the new sculpture (or else the improvement may relate to supernatural sources). This kind of superstition is recognised as a critical part of the character of Chinese religious life (Yang, 1994). The sculptures promote the connection of inside and outside between the mall and the square, which has led to the high popularity in the mall. The legend easily raises interest among modern people. It may not be that feng shui saved the mall, but the famous novel and the construction of two sculptures certainly attracted people back to it.



Figure 5-27 Sculpture of the monkey Sun (Source: author)

5.3.3.4 Buddhist Pure Land

Interviewee T4 thought the numbers of people in the GWGP area should be limited to decrease the restless feeling. It seems that the SWGP is the quiet place participants pursue. Interviewee T2 described it as small but that it embodied a lot of things, and the quiet environment made him stay. (There are also similar statements from social media data.) The statues usually have very peaceful faces, representing their pity for all creatures and salvation for people in difficulties. The most impressive photo for many participants was the figure of Buddha with snow on his hands; they perceive the holy spirit of the Buddha compared with the bustling street. Tourists living in the south of China do not usually see snow in their cities; snow excites them. The pure white of snow also gives people a sense of peace and quiet, similar to Buddhist culture.

It seems that modern people, in accordance with this information, have a deep longing for quiet. People live in a highly competitive world, which makes them feel overloaded at work. People have access to too much information both at work and at home. A quiet space which is far away from secular life is needed.

5.3.4 Iconic Shared Places, and Symbols that Embody the Shared Urban Image

When I mentioned the two historic sites during the focus groups, I asked participants to describe anything they knew about the perceptions and understanding of the places. The places are first and foremost characterised as cultural landmarks of the city. Participants described the pagodas as, 'city name cards,' 'facades' and symbols of Xi'an city. Referring to the popular places people mentioned most frequently, except for the pagodas, 'Art Gallery', 'Ci'en Temple', 'Joy City', 'Music Fountain', 'Restaurant', 'Square', 'Tang Never Sleep City' and 'Xi'an Film Studios' in the GWGP area were mentioned in their microblogs, while the 'Block', 'Hotel', 'Jianfu Temple', 'Museum', 'Bell' and 'Tower Body' attracted attention in the SWGP area. This represents two ways for people to enjoy the scenery, in the large-scale diversified GWGP area and the relatively small-scale but coherent SWGP area. People are attracted by the variety and abundance of scattered scenic spots in the GWGP area. When people are attracted by the 'night scene' and 'Tang Rhyme' in the place, they use the words 'art', 'bustling', 'charm', 'fashion' and 'international' to depict the GWGP area, and use 'happy' and 'beautiful' to express their inner world.

If the GWGP area is fashionable and international, connecting both the 'motherland' and the 'world', maybe it can be said that it is global and commercial, whereas the SWGP is more life oriented. In the SWGP area, people care about the structure and details of buildings more, such as the blocks and the tower body. The GWGP is famous for its night view and SWGP for its morning bell.



Figure 5-28 Typical photos of GWGP (first row) and SWGP (Source: People's microblogs)

In addition, the symbols include the historical peoples and stores, Poet Wu Guijun wrote:

I can see Master Xuan Zang sweeping the snow with a broom at the south gate of the Giant Goose Pagoda; Yang Yuhuan has just finished her makeup and is throwing snowballs at Li Longji in the courtyard of the Huaqing Palace; Li Bai looked up at the snow scene and chanted seven words.

The monk, emperor, his consort and the most famous poet are all reflected in people's interpretations. Li Longji was the emperor Xuanzong who reigned longest during the Tang dynasty and achieve the country's flourishing Kaiyuan ear. Yang Yuhuan was the imperial consort of Li Longji. A famous poem, 'Song of the Everlasting Sorrow (Bai Juyi)', describes their tragic love story. Li Bai was one of the most famous poets in the Tang dynasty.

Symbols are presented in different ways. The GWGP, as the key symbol of Xi'an city, is printed on the Xi'an city emblem and widely used on food, and customary Han clothes. Children's paintings of symbols of Xi'an show their love for the city. Joanne Lin used the symbol of the GWGP and the Taizong emperor to create poker cards related to history. Some foods use the shape of symbols of Xi'an, including the pagodas, emperors, queens and monks.



Figure 5-29 Symbols presented (Source: Tu's microblog and T3)

5.3.5 Places of Memory and Commemoration of Past Events

The historic areas arose people's 'collective memory', emotions and embody national memories and closely related to people's daily life (Rossi, 1984, Nora, 1989, Boyer, 1996, Halbwachs, 2020). This chapter has already explored some memories of the places in Xi'an, including the stories of the pagoda's name, the miracle close of the SWGP, master monks translating Buddhist literature and poets climbing the pagoda.

The 'Inscription on Wild Goose Pagodas' (Yanta Timing) ritual began during the Tang dynasty. The 'introduction of Shaanxi rural examination' was carved: 'The name inscription on wild goose pagoda are the first-class people doing the first-class things between heaven and earth'. The successful candidates in the highest imperial examinations on cultural knowledge (Jinshi) and military knowledge (Wu juren) inscribe their names on the Giant and Small Wild Goose Pagodas respectively. Bai, a poet of the Tang dynasty, wrote, 'I am the youngest of the seventeen people inscribed under the Pagoda' when he passed the examination. Meng's poem, 'After Diploma' (see Section 5.3.4), is also a

description of the feeling of contentment associated with passing the examination. The poet, riding on his horse, expresses his pride after passing the imperial examination using the sentence, 'The spring breeze is triumphant with horseshoes, and I can see Chang'an flowers in one day.' This tradition had continued until Ming and Qing Dynasty. Today, some students who attend exams go to the SWGP and pray for good luck.

However, not all poets were in good moods. Poet, Du Fu, climbed the GWGP with his friends and wrote, 'A person with an open mind would feel sadness after climbing the pagoda.' This sentence shows his worries about the fate of the country. His worries came true: the war began after three years. People also remember that Zhou Enlai visited the GWGP and proposed to build a museum near the pagoda, after which the Shaanxi Province History Museum was built. People also flash back to some moments when they visited these places, and record their memories on social media platforms.

5.3.6 Local Cuisine

Xi'an is located in the centre of China, and its food there is enriched by the cuisine of surrounding provinces. Food from surrounding cities gathered in Xi'an, such as hot rise from Hanzhong. People describe the city as 'a food paradise' on social media. Almost every tourism strategy on social media includes Xi'an cuisine recommendations. A large number of tourists have written something and/or attached photos relating to the tasty food. Eating is one main reason tourists come to the city, and the residents also like to eat in the historic areas. The representative dishes called the 'Sanqin Set Menu' includes spicy cold steamed noodles, Roujiamo (meat and buns) and Bingfeng (a local brand of soda drink). There are a lot of ways to make noodles, for example, belt noodles, buckwheat noodles and Biangbiang noodles.



Figure 5-30 Sangi Set Menu (Source: R12)

The diversity and innovation in food attract people's attention. When they come to Ever-Bright City's pedestrian street, they can get many different kinds of local and exotic cuisine conveniently. Some forms of cuisine are inherited from traditional ones and innovate on them. In addition, the place where they have the cuisine can influence the experience of eating. For example, places where people can see the pagoda are the most popular.

5.3.7 Traditional Arts and Crafts and Workplaces

Calligraphy, Han costume, Chinese shadow puppetry, paper cutting and lanterns on the streets can be found in the historic areas. People feel excited when they meet craftsmen making 'kites' in the Spring Festival. Images of the pagodas are used widely in crafts. The craftsman, Wang, created a 'Chinese shadow puppetry' with the GWGP in the background for Burberry.

The calligrapher, Chu Suiliang, handwrote 'The Preface to the Holy Religion of Tang Sangzang' (written by the Taizong emperor). From the stone inscriptions of the GWGP, people can see the spirit of Kai-style calligraphy, which is thin but strong. Similarly, the Tang dynasty calligraphy carved on the SWGP monument is attractive among visitors.

Some visitors choose to look at the calligraphy written by ancient calligraphers which were carved on stone.

People wearing costumes become part of the beautiful scenery of the historic areas. People appreciate the fastidiousness in the beautiful Han costume. Understanding the meaning behind wearing a Han costume is to learn and inherit traditional etiquette. Han costume clubs hold many activities during the festivals. People praise Han costumes as the 'most beautiful dress for Chinese women' (T3).

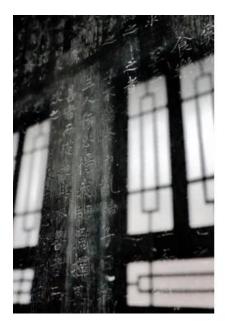




Figure 5-31 Calligraphy and Han costume (Source: T2 and R1)

5.4 Summary: Perceived Elements of the HUL in the Chinese Context

'Tang style' and 'Chang'an city' are the most important pieces of context for the historic areas. The tangible and intangible elements are set together to give people the sense of moving through time and travelling back to the Tang dynasty. The presentation of all the elements constructs a vivid picture which reflects the significance of the Tang dynasty. For

example, according to Interviewee E2's interpretation, a good view of the historic area includes natural (tress, moon and night) and artificial (red wall, lighting and music fountain) landscape elements. When people take their friends to the historic areas, they find there are many viewing points worth going to. The HUL elements continuously present the Chinese way of constructing landscape, city and architecture, which bring people the enjoyment of beauty and keep people aware of history and culture.

People also use their imaginations to connect with the history and urban heritage sites. There are various kinds of representation and recreation of urban heritage in the places. The views of historic townscape is experienced bring people closer to historical space and time. The public usually use the traditional cultural aesthetic view shaped by the Chinese philosophies and education to look at the scenery – for example, poems are widely used when people describe their feelings. History and culture are the main factors affecting how people resonate with the architectural environment. In the next chapter, this research will focus in detail on how people perceive and experience the value of townscape character, especially the historical and cultural aspects of the historic areas.

Chapter 6: People's Perceptions of Townscape Values and Their Connotations

This chapter explore how people perceive the townscape, understand the townscape values, and construct the culture of the historic areas over time. It will be identified and explored how the cultural background influences the perceptions of townscape values, and how philosophy, great literature and arts influence and present on the architectural environment. Based on the cultural background, the onsite and virtual experiences of place and their interactions will be illustrated. Further, since the desired urban designs of historic areas emphasise the historic sense-of-place (Oc et al., 2010, Heath et al., 2013), the relationships between perceptions of historicity and other visual characters (Tveit et al., 2006, Ode et al., 2008) will be discussed. Finally, comparisons will be made between perceptions among different cultural groups.

6.1 Cultural Background Affecting People's Perception and Understanding of Townscape Values

6.1.1 Philosophical Background: Three Teachings

Confucianism, Buddhism and Daoism (Chinese: *Rushidao*) are the 'three teachings' in China, which have deeply influenced the Chinese way of constructing and perceiving townscapes. Before the seventh century, the three teachings existed independently. During the Sui and Tang dynasties (581–907), the combination of the teachings was encouraged. During the Song and Ming dynasties (1363–1644), the teachings continued to interact, and became the main philosophies of China. Over time, there have developed both characteristic and shared concepts in the philosophies, which coherently form the Chinese aesthetic views of landscape.

6.1.1.1 Rational Confucianism and Daoism

Rational Confucianism and romantic Daoism are two philosophies born in ancient China. Ritual (Chinese: *Li*) is the main principle of Confucianism; the importance of morality and rules (Chinese: *Guiju*) is emphasised. '*The doctrine of the mean*' (Chinese: *Zhongyong*) – which means staying in the middle class, having not too much or too little – also influences architecture and urban space (Tan, 2014). Architecture is a place for ritual; thus, the order of the architectural environment and the doctrine of the mean are the main concerns. According to these requirements, the architectural environment elements should stay in harmony not only with each other but also with the larger environment. The square layout represents the order of the place, with buildings facing south. The centre of the space is regarded as the core, around which the symmetrical layout of the architecture and the axes of urban space are designed. Architecture should not lean to any side. The hierarchy of buildings can be observed from their scales, height, locations and interior decoration, all of which reflect the social status of the owner. Imperial buildings use the privileged style. The interior, private space and exterior, public space of the architecture are strictly separated.

Daoists focus on the world and the universe from the angle of 'Yinyang', 'Tiandi' and 'Tianren Heyi' (Han, 2017). The concept of 'Yinyang balance' is essential in Daoism; the Chinese cosmological term 'Taiji', translated as 'Supreme Ultimate', can be used to explain it. The Taiji is divided into two parts, light (Yang) and dark (Yin), which represent the duality of everything. The concept of Yinyang is also applied to the old and new, or the past and future. The two elements are mutually contradictory and interdependent; the old and new are harmoniously arranged to achieve a balance, which is a continuous process in time and exist anywhere in space from the Daoist time and space view.

Daoism encourages small government and non-interference. The beauty of nature is highly valued in Daoism. *Tiandi* represents heaven and earth – nature. *Tian Ren He Yi* means that people live in harmony with heaven, and thus, the layout of space should respect the natural landscape. The natural landscape and communication with the heavens (constellations) is

valued. The buildings as a system reflect the Daoist view of the universe. Based on the understanding of geography, weather, seasons, buildings and city, the idea of *Fengshui* proposed an ecological living mode for people (Zhang, 2003).

Besides this, Daoism values the emptiness and stillness (Chinese: *Xujing*) of the environment, where everything grows naturally and quietly (Shan, 2017). Invisible connotations are valued more than decorative appearance; the original natural environment is preserved rather than an artificial one. The ideal Daoist place is something like a fairyland with mountains and rivers.

6.1.1.2 When Confucianism and Daoism Meet Buddhism

Religious meaning is a crucial dimension of a place's context. Many scholars argue that China is a country without religions (Hu, 1934), and tend to represent the Chinese people as entirely secular (Chien, 1950). However, Yang (1994) provides an interesting counterargument, stating that these statements undervalue religion's role in Chinese society. He describes the huge number of sites of worship in China, the social functions of temples and the importance of religions in Chinese social life. He argues that religions are diffused into secular institutions and social order, which play a role in people's social lives. His explanation helps to understand how diffused religions influence perception of places within a Buddhist context, in a way that may be less easy to perceive but still quite important. I believe this is why so many people go to temples to pray for good luck. From my perspective, the diffused phenomenon can also be applied to Confucianism and Daoism. There is rarely someone who says that they believe in Confucianism or Daoism, but they still act according to the religions' ideas.

The chosen research sites for this thesis are particularly related to Buddhism: people seem to perceive the two places through this spiritual lens. Since the Tang dynasty was one that embraced different cultures, the conditions were right for Buddhism in China at that time.

It is said that nine out of ten families worshipped the Buddha in the ancient capital Chang'an city. Buddhist culture influenced Chang'an city. As explored in the previous chapter, people pray in the temple and believe Buddha brings good luck for them.

The two imperial temples have been influenced not only by Buddhism but also by mainstream Chinese political philosophy: Confucianism and Daoism. The three philosophies have been more and more unified over time. There is a saying that, 'red flowers, white lotus, green lotus leaves, the three religions were originally one'. The three teachings are combined and diffused in people's lives. These beliefs have influenced the methods of architectural environment organisation and the Eastern aesthetic view. Buddhism is China is inclusive: the axial orders of Confucianism and love for the natural view from Daoism can be observed in the historic temples. Buddhism pursues the 'Pure land' and the quiet in heart since this is the place for monk's lives, studying and teaching the public. Quietness in both space and the human mind are respected in Daoism and Buddhism. Otherwise, Buddhism also emphasises the spiritual world rather than the material one.

6.1.2 Great Literature and Art

Traditional literature and art are crucial parts of the Chinese education system. The poems, music, dance, painting, calligraphy and buildings related to Tang culture appear in China's high school entrance, university entrance and civil service examinations. The ways people appraise and synthesise townscapes value are influenced by the cultural background. It is embodied not only in education but also as an entertainment in people's daily lives. Interviewee T5 related the historic areas to books, songs and poems before her trip. The educational and entertainment background encourages people to use poetic and pictorial ways to imagine and appreciate the scenery. The textual and visual landscapes in poems and paintings influence people's environmental perceptions.

6.1.2.1 People's Creation of Poems

As the golden age of Chinese poetry, poems from the Tang dynasty dominate most of the education materials from primary to high school. Students need to recite famous poems, and understand the way poets perceived places and the feelings they expressed. This kind of education naturally leads to a poetic way of thinking. The scenery and feelings in poems resonate with people when they visit historic areas. In this way, poetry links ancient and modern times.

For many in China, poems are the most popular vehicle for expressing feelings. Many people use ancient poems to describe their feelings, while some write poems by themselves. Nostalgia, *Shanshui* pastoral themes, and people and things are main themes of Chinese poems. Poets show their homesickness, love, joy, sadness and respect. Nostalgic poems usually express love of the past or dissatisfaction about the present. *Shanshui* pastoral poems usually express joy in the natural environment. Poems about people and things relate to personal morality (Confucianism): the people or things being written about must contain some spirit people admire. For example, the flowers that grow in winter are not afraid of cold, so people need to be positive in difficult times. Spirits based on the environmental elements are closely related to the choice of elements during the design process.

People show their perception of the length of history using poems or lyrics. The poems and lyrics people have written in historic areas usually contain historical people, including their achievements and stories. Nostalgic poems appears a lot. People have positive or negative feelings. Some people are proud of their history. Visitors wrote:

Wild goose flying passing by, the pagoda still stands.

Modern life is quiet and beautiful.

Uuse a day to learn things about Chang'an, Use ten years to think of the hundreds of years' story.

Bright moonlight send out a song from ancient times with a thousand years of attachment... Shining on GWGP.

Otherwise, some people are sad about the past because they miss the Golden Ages.

The bell rings, and clouds pass the SWGP... Nobody answers the bird's voice... The end of prosperity is an empty stage, who is dancing in dreams? (Translated into English from Bingyang Song)

This is a popular song that was appreciated very much by some of my focus group participants (the ones who follow social media and microblogs). Both type of poems or lyrics express the love of history even if it is far away. The writings 'recontextualise' (Bernstein, 1996) the place when visitors make the comments: the language moves from the classic poems to the present visits. The street light with poems remind people of Tang poems born in the ancient Chang'an city (Figure 6-1). The intangible heritage is presented in a tangible way.





Figure 6-1 Street Light with Poems (Source: author)

6.1.2.2 Landscape Paintings

Chinese landscape paintings and other arts have also developed the way people value place. Hasting and Pevsner's 'picturesque' townscape (Aitchison, 2012) proposed a method of design that would be easily understood by the public and would embrace the diversity of visual material. The idea of *Shanshui* is presented as an image to people by the great paintings. Ancient painting is usually combined with poems to describe the ideal scenery of a place. The structure of this, combined with visual functions, seems like the microblogs sent on social media.

In the research sites, the 'Morning Bell of Small Wild Goose Pagoda' and 'Qvjiang rotated City' in the Qing dynasty (AD 1680) were listed as two of eight views of Guanzhong. They were carved in steel in the form of poems and paintings, and have been preserved in the Xi'an Forest of Steel Museum (Figure 6-2). Many Chinese cities, such as Beijing and Guangzhou, proposed their own eight scenic spots in history, representing the most famous natural and cultural spots as agreed by citizens. The spots represent the traditional aesthetic view of Chinese ancestors.



Figure 6-2 Eight views of Guanzhong carved in Beilin Museum (Source: Jiang, 2020)

The techniques of Chinese ancient paintings are recorded by poems. The paintings and techniques were applied in the architecture design in historic areas. The Huayi Hotel (Figure 6-3) was designed by master architect Zhang Jinqiu, who designed many famous Tang-style buildings in Xi'an, including the Municipal Museum and Tang Paradise Garden. The design concept of the Huayi Hotel started with the Tang dynasty poet Wangwei (701-761)'s theory of 'Landscape Painting Techniques' (Shanshui Jue). This technique emphasises not only the relations of mountains, rivers, buildings and trees but, also creating depth using background and foreground (techniques of perspective). According to the scenery in picture, the yard, following water and stone bridge of the hotel were designed to achieve 'unique tranquillity'. For the interior design, Japanese muralist Tamura painted the mural, 'Flower Feast in Two Tang Capitals', around the lobby dome, including pictures of the four seasons to show the lives of people in history.



Figure 6-3 Picture of Huayi Hotel (Source: Official website of the hotel)

Pizza Hut, KFC and the International Hotel all display eye-catching interior designs. Pizza Hut is the first shop which cooperated with the provincial museum (Figure 6-4). The interior of the restaurant the elements of 'Flower Dance and Great Tang Spring' from the Hejia village ruins, and the totem pattern of the Tang dynasty. Ten replicas of national culture relics are also displayed and introduced by the waiters. The pagoda can be viewed

from a distance. People on social media all agree that, 'The space not only echoes the architectural form but also presents the modern artistic beauty' (Xi'an Life's microblog).





Figure 6-4 Interior design of Pizza Hut (Source: the official microblog of Pizza Hut)

The interior of the International Hotel is three steps higher than the exterior, to increase the sense of privacy. This design idea can be traced back to the 'Chinese High-Platform Architecture', showing the emperor's authority. In the lobby, an eight-metre-high, three-dimensional 'picture of Mountain Qingling' is made with overlaid wooden boards (Figure 6-5). People can see the reflection of the GWGP and the bell tower in this artwork. The interior spaces use light yellow, beige and metal colours to show the historicity of the place. The connotations of such colours are discussed in the next chapter.



Figure 6-5 Picture of Mountain Qinling (Source: R4)

6.1.2.3 Symbols and Metaphor

'The narrative arrangement, context extension and emotional resonance' (Wang et al., 2021) of poems and 'the model formulation, the device of symbolism and the way of experience' (Liu, 2018) in pictures have been explored in previous research. Understanding the meaning and the experience of space seems to be more important than imitating scenery in poems and paintings. Thus, the symbols and metaphors in literature and art are explored.

The colours in poetic and pictorial scenery have their own connotations. Participants in my research thought that colour is crucial to the aura of a place: 'Below the yellow pagoda, there are red walls, blue bricks and green plants' (R6). The pagoda's yellow earth colour shows the thickness of history on a higher level. Chinese people give meanings to some colours in historic areas. The earth yellow colour represents the fields with growing plants, which feed and give birth to yellow-skinned people. The Yellow River is thought of as the 'Mother River' and 'cradle of Chinese civilisation'. People are identified as the descendants of the mythological Yellow Emperor. Blue bricks and red walls are key elements in traditional Chinese architecture, and appear a lot in poetry and paintings, giving people a poetic and picturesque sense.

Natural elements often appear in ancient Chinese poems and paintings. Similarly, some plants (Chinese parasol, willows, lotus, peony, grass, pine, plum, bamboo and chrysanthemum), animals (wild goose, swallow, partridge, winter cicada and crow), weather (wind, frost, rain, snow and cloud), mountains, water places and other images (musical instruments, wine, heroes, historical sites, heaven and earth) are common in ancient Chinese poetry. These elements are used to express feelings, and to lead readers to perceive them. By this process, modern people also obtain a sense of history. Therefore, the natural elements are crucial to understanding the perceptions and values of a place.

6.1.3 Key Concepts in the Cultural Background

6.1.3.1 The Idea of Shanshui

The idea of *Shanshui* is rooted in Chinese planning ideology (Chen, 2010 2015). Literally, *Shanshui* means the mountains and waters. The concept considers the combination of the natural and artificial environment of a city. Confucianism relates *Shanshui* to people's personalities and morality. The Analects of Confucius recorded:

The knowledgeable love waters, the benevolent love mountains; the former are active, the latter are tranquil; the former enjoy a happy life, the latter enjoy a long life.

Daoism further explores the origin of nature and the regulations in nature. Buddhism in China also pursues *Shanshui* to detach from the noisy social world. The idea of *Shanshui* has been developed in poems, painting and architectural landscape.

Experts describe a good view: 'The constructions coordinate with each other and the natural environment, which reflects China's natural view' (Hu, 2015). People aesthetically appreciate nature through empathy – they project their feelings onto nature and unite with it (Shan, 2017). Thus, natural elements are embedded through spirits in Chinese literature

and arts. Similarly, some research participants had a kind of spiritual experience and perception of the Tang dynasty when they looked at photos of a monk in the snow or in the rain. Naturalistic forces, such as the supremacy of heaven, are very important in the Chinese view of the world (Yang, 1994). Everything has a soul or spirit, and humans should be humble and respect nature. This idea contains concepts borrowed from the three teachings: the personality from Confucianism, nature worship from Daoism and Buddhism's protection of animals.

6.1.3.2 Shared Social Values

Social values have attracted considerable attention during the last forty years (D áz-Andreu, 2017). The significance of cultural background is the shared social values it brings. Confucianism focuses on the morality of people and shows the beauty of personality, but Daoism shows the beauty of nature, while Buddhism shows the beauty in heart (Wu, 2013). People's morality and personalities are strongly emphasised in historic areas. The government encourages the construction of spiritual civilisation rooted in these places.

After reflecting on the huge and fast urban development of the past decades, ecological, sustainable and spiritual concepts are now valued. The three teachings show the 'humanistic care' (Han, 2017) to protect the whole 'community of a shared future for all mankind' – as President Xi Jingping proposed at a United Nations summit in 2015. The concepts of harmony, worship of nature, and ecological methods of development provide context for design ideas for the development of historic areas. The next section will discuss people's experiences in places and in the virtual world, based on their cultural background.

6.2 On-Site and Virtual Experiences of Historic Areas

6.2.1 On-Site Activities and Experiences

Activities in historic areas create a lively image in the area and form a kind of dynamic townscape. People perceive and understand the place, deeply experiencing it by watching and participating in the activities. Visitors can see Chinese shadow puppetry, Chang'an ancient music performances, shops with local cuisine, and traditional handicrafts in the historic areas. At the same time, they listen to music, eat food and learn skills. Witnessing and participating in the activities give people an unforgettable visual experience. One tourist on social media felt that activities and experiences were 'tiring, but it was worth it'. Fashion and history are contrasted in an impressive way in the pictures of the historic areas. The marathon, music festival, music, stage plays, international fashion week and symphony orchestra can be seen against the background of the ancient pagoda (Figures 6-6, 6-7).



Figure 6-6 The fashion week (Source: Official microblog of GRAZIA)

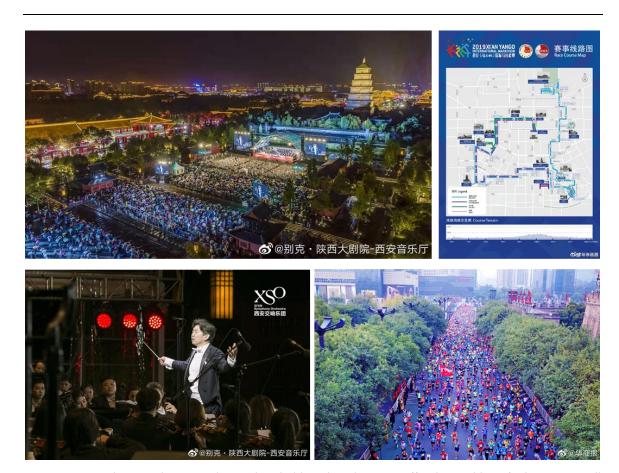


Figure 6-7 Symphony orchestra and marathon held in place (Source: Official microblog of Xi'an Music Hall and Chinese Business View)

Children's education and patriotic activities fit well with the history and culture of historic areas. The focus group research participants who are parents cared about the educational functions of the historical areas. They told the historical stories to their children when they saw the sculptures of historical people. The Municipal Museum has been designated by the tourists as one of the 'top three museums for parents and children' for its presentation of the historical architectural environment, various cultural relics and the activities it hosts. In the SWGP, the Municipal Museum offers museum-related lectures and traditional activities for children. For example, the Little Dragon Man Project (Figure 6-9) was organised for children to play traditional games in the SWGP. The museum staff also visit

the local primary school to teach the history and culture of the museum. Teachers make students read ancient poems and explore the history in the historic areas of Xi'an. Likewise, directors and actors visit the places to perceive a thousand-years of history before they start to cast films about history.



Figure 6-8 Educational activities in the GWGP (Source: R1)

When people experience a place intensely by immersing themselves in the view of it, they perceive not only the place's superficial materials but also its spirit. This is related to the cultural background explored in Section 6.1, as a Chinese way of thinking that gives connotations to many tangible objects – flowers, stones lowers, stones, and celestial bodies in poetry are romantically imbued with spiritual connotations. People do not just look at physical beauty, they crave a deeper experience. For example, ladies put on makeup, do their hair in a traditional way and then wear Han costumes in the ancient areas. The process can take hours, but it connects people's feelings with the place deeply (Interviewee R1) – and wearing traditional costumes makes people feel like they are travelling to the past and being immersed in the historical environment. Interviewee T3 argued that having so many

people wearing Han costumes makes a positive contribution to cultural transmission and tourism, although it may be relatively superficial. This means that such experience do affirmation people's sense of cultural experience, but at the same time a deeper experience of culture is needed.



Figure 6-9 Little Dragon Man Project (Source: Xi'an Longhu's Microblog)

The experience in historic areas differs from other ordinary places. Research participants found the pace of life in historic areas to be quite slow compared to other places in the city. They described that, on weekdays, they took drinks from the ground floor coffee shop in high-rise office buildings, preferring to stay in the historic areas and have a cup of tea or coffee. This is because the historic areas have an exceptional feel. They feel like they are no longer in a modern city: they live in history and culture.

6.2.2 Virtual Experience: Online Games, Movies and Television Series

In a similar way to how ancient arts and culture affect people's perceptions of space, virtual experiences also have an effect. During the last three years, epidemic prevention policy has restricted people's visits to public areas, so online entertainment has become more popular. People are currently spending more and more time in the virtual world, where they may take the initiative to look at historical information. An interesting finding is that some people who enjoy playing online games spontaneously explore historical maps to better

understand the city, when they are immersed in games (microblog post, see Figure 6-10). For example, to win the game, they might need to trace the map and find something hidden in the game. Consequently, they become familiar with the route of the online game, which may be based on true ancient urban patterns. The positions where game characters often appear may be pointed out by players and shared on the internet. The Wild Goose Pagodas exist in online games as symbols and way-finding landmarks for the players. The online games that involve exploring places at a city scale are impressive, since the players immerse themselves in the games, and this immersion makes the ancient city real again. The familiarity with the historic urban patterns, which experts wish the public to perceive, is achieved by the game's players.

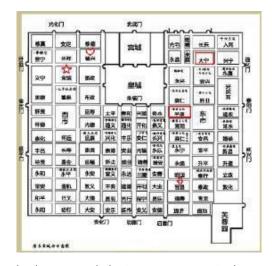


Figure 6-10 The player uses red colour to mark the important space in the game in an ancient Chang'an city map (Source: Space Explore 612's microblog)

People also watch live broadcasts to connect with the place and society. The live broadcasts help people to understand the historic areas, even if they are sitting at home and watching the broadcast on social media. Culture bloggers are receiving more and more fans on social media. They continuously show the beauty of culture and history (especially intangible heritage) in a vivid way. Their explanations and videos help people experience the everyday landscape virtually. Influenced by television series, the government has hosted

live broadcasts and invited historians to explore the city's historic areas, which improves the academic level and credibility of the information in the virtual world.

Xi'an Film Studio, which is located near the GWGP, was mentioned often on social media. One of the most influential studios, it ranks first in China for number of international film awards. The films presented in the studio are familiar to most people, and contain themes related to historic and local stories. The scenes presented in the films help people feel the culture and history of the past.

From the social media data, this research finds that people also gain cultural background of the pagodas from many other television series. Images of the pagodas and temples appear on popular television dramas. The television series, *Journey to the West*, is one of the most popular, especially among children. Its scenes have been engraved in people's memories since they were young. In the story, monk Xuanzang promises that he will sweep all the pagodas he has seen on his journey. The way he cleans the pagodas not only shows his respect for Buddhism, but also the behaviour of cleanliness in his mind. The scenes relating to 'Xuanzang Sweeping Pagoda' were mentioned both on social media and in focus group data. Interviewee R5 also described his experience of climbing the pagoda, and commented that the experience was the same as the scene he saw in the television series *Journey to the West*.

The plots of online games or television series are based on historic stories, so audiences are expected to have a deeper understanding of history after playing or watching. *The Longest Day of Chang'an* (ancient Xi'an) was one of the most famous historical web series in 2019. It won the Best Cinematography award in the 26th Shanghai Television Festival, and the 30th China Television Golden Eagle Award. The spectacular scenes in the play set of heated discussion, and the appearance of Chang'an city in the Tang dynasty was again held in high esteem by people. This web series has become a hot intellectual property about the Tang dynasty and Chang'an city: the scenes in it have been recreated in reality and have attracted a lot of people to visit and take pictures (Figure 6-11). The staff in the place

act as monk Xuanzang, the royal family, poets and other citizens within the plot. People are excited to look at the ancient people's lives in reality. This phenomenon illustrates the influence of the virtual world. More importantly, the transformation from the virtual world to reality takes advantage of the fame in virtual space, and achieves success shaping real scenes.

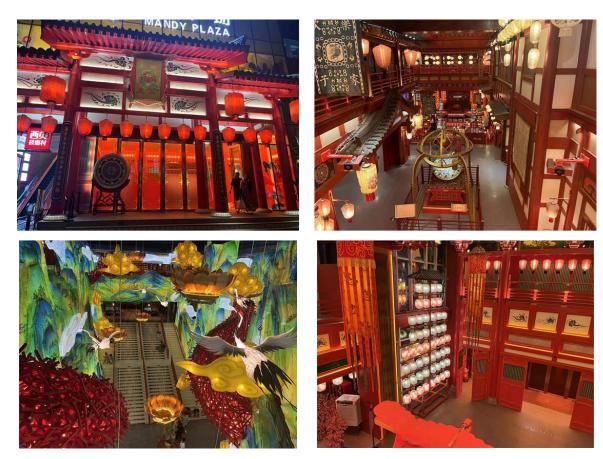


Figure 6-11 The longest day of Chang'an (Source: R1)

6.2.2.1 Visit Guide: A Virtual Visit as Preparation, and Onsite Reflection on Social Media

The public place and people's memory of the city were recorded on social media, forming a popular collaborative visit guide with contributions from the public. Thanks to its long history, diverse culture and internet celebrity effects, Xi'an is becoming more and more popular for tourism. Before they visit, people like to search for the place on microblogs to inform their travel plans; the travel plans can then be written during the visit (Figure 6-12). Circulation and communication of information on social media represent a kind of virtual preparation and onsite reflection. The most popular microblogs are tourism related, which at some point reflects the popularity of the city. The places worth visiting are presented on a city scale, including Emperor Qin's Terracotta Warriors, and the horses museum, bell tower, drum tower, Xiaozhai commercial area, Huaqing hot spring, Daming palace, Shaanxi history museum, Yongxing Fang, Muslim quarter, Xi'an art museum, mountain Hua and the Dahua Factory built in 1935. The destinations are categorised by historical chronology. The sections of the historic city of Xi'an from different periods are presented. Then, a travel map is drawn based on the tourist attractions in Xi'an city that were mentioned in high frequency in the microblogs. In Figure 6-13, the left side shows the location of the tourist attractions in the city (including the SWGP and the GWGP), and the right side shows the frequency of words used in microblogs mentioning these tourist attractions. The spatial relationship between the landmarks is presented clearly. The virtual messages help people understand the historic background, and gives them a macro and micro sense of the townscape. Again, this is in line with the planners' design to connect the landmarks in people's hearts. On the block scale, the essence of the place is summarised. The typical scene and photo-taking are were presented in the place (Figures 6-14, 6-15). The visitors are given a very pragmatic guide for their visit.

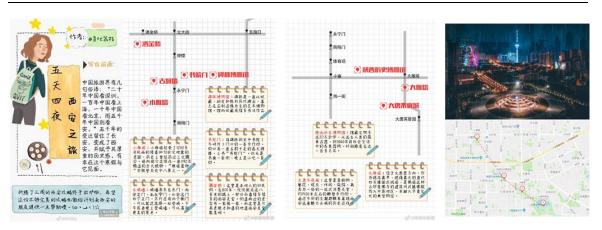


Figure 6-12 People's travel plans (Source: Lizhi's microblog)

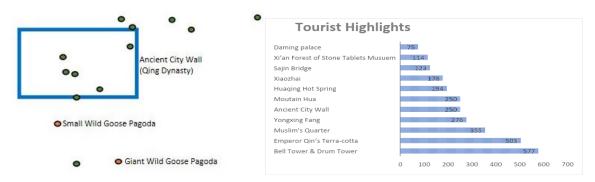


Figure 6-13 Travel map of Xi'an city in social media (left) and the word frequency mentioning these attractions in microblogs (right)

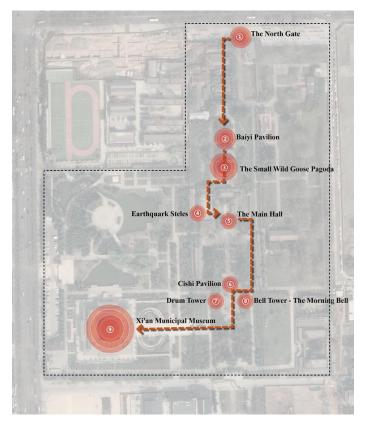


Figure 6-14 Popular travel route of SWGP (Drawn by the author according to people's interests)

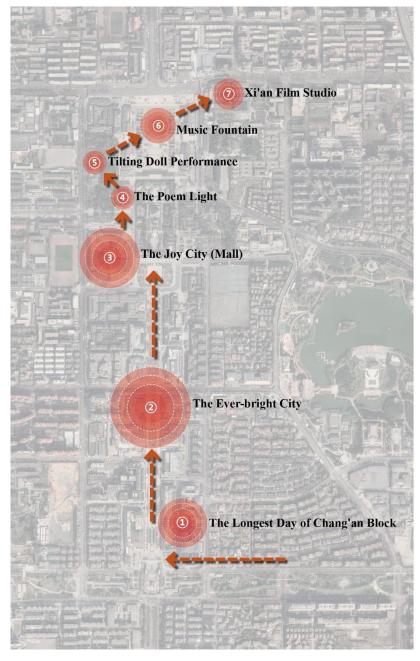


Figure 6-15 Popular travel route of GWGP (Drawn by the author according to people's interests)

6.2.2.2 Photo-Taking Guide

People create and share the photo-taking guide in historic areas to achieve a better presentation: using photos to show history, communicate with the elements of the HUL, and get more 'likes; on social media. The guide includes not only many landscape elements, but also some recommended photo-shooting points with different heights and distances form the pagoda. At the same time, some framing methods and applications of photographic technology are also mentioned. The photos and methods reflect the ideal environment that people want to express in the city.

Overall, the visual experience of scenes give people deep memories, and a different historical and cultural perspective of a place. Thus, films, television dramas and online games become a form of intangible heritage, which have a huge influence on the contemporary lives of real people. They can be produced, transmitted and perceived anywhere that people have a device in their hands. The virtual world's extension to reality shows the power of virtual experience in entertainment systems, and the interactions between the virtual and the real.

6.3 Relationships between Historic Sense and Other Visual Characters

Perception and understanding of historic areas are crucial for townscape character management, and the sense of historicity is emphasised by the design of historic areas (Oc et al., 2010, Heath et al., 2013). Section 2.2.3 reviewed the framework of visual concepts proposed by Ode et al. (2008), which includes theories from different disciplines. According to the literature review, there is a need to explore the interaction among visual characters. Therefore, this section explores how the perception of historicity in historic areas is influenced by other visual concepts: stewardship, coherence, disturbance, visual scale, historicity, imageability, naturalness, complexity, and ephemerality. In addition, in

a theoretical framework first developed for the countryside, some theories are closely related to the ecological perspective. The theoretical framework is now extended to different visual landscapes, such as heritage research and urban research. Research on the integration of visual character frameworks and historic urban landscape in China is missing (see Chapter 4). Therefore, visual characters are scrutinised in the context of the historic urban landscape, which helps add specificity and add theories to the framework that can be applied to explain the visual character of the historic urban landscape in China.

Imageability: People's Images of History

Legibility, or imageability, is closely related to the historic sense of place. People use their imaginations to understand the space in historic areas. The previous sections have presented many examples in which people imagine a place based on their cultural background and visual experiences. For instance, the history that exists in great literature relating to Xi'an is in people's brains and hearts. When people visit the place, they think about that typical history.

Xi'an, as the political centre of the thirteen dynasties of China, is thought of as the birthplace of Chinese culture, and has always been a place that most Chinese people wish to visit. The chronology of the dynasties is presented in people's narratives of the place: the layers of the dynasties can be perceived in the historic areas of the city. People connect the historic buildings according to their ages, and imagine that the ancient buildings are able to communicate like old men. Sen Miaomiao's microblog posted a joke that is popular among Xi'an residents:

If the historic buildings could speak, the bell tower [built in 1384] would say, 'I am 600 years old'; the drum tower [built in 1380] would say, 'I am 4 years older than you'; the city wall of Qing dynasty [built in 1307] would say, 'I witnessed your birth'; the wild pagodas [built in 652 and 707] would say, 'You are really young; the age of Qian Mausoleum [built in 684], Qin Emperor Mausoleum [built

in 247 BC] and the Yellow Emperor Mausoleum [the recorded earliest yellow emperor sacrifice began in 422 BC] would scare you'.

People can learn Chinese history and feel the combination of the past and present by visiting the city. 'The GWGP is an old man who showed a golden age more than 1300 years ago and walks to us' (R3). People perceive the communication with the historic buildings. The personification of buildings shows that people are becoming intimate with the buildings, and then with history. Furthermore, the pagodas are surrounded by tall buildings which makes people feel the flow of history. When people praise the history, they are simultaneously showing pride in the new development in the city, especially the technological and educational development. Their thoughts of the past and present are linked. Many microblogs describe Xi'an as 'a giant city museum'. In the city, a popular saying on social media is that, 'Culture is blowing in the wind and history is on the ground that people stand on'. The 'museum' shows the evolution of the built environment through the thirteen dynasties, reflecting the entire history of China. People connect and compare the ancient capitals in history. For example, they have imaginations of other historic cities, such as Nanjing. The historic stories that took place and the life experiences of famous historical people in such places are mentioned frequently on social media.

Patriotism has been strengthened in historic areas. Researchers have discussed the architectural environment would reflect national memories and promote national identities (Rossi, 1984, Nora, 1989). The Golden Age and advanced culture at that time give people national pride, confidence and spiritual encouragement. Tuan (1980) argues that 'an individual resorts to genealogy' when faced with an uncertain future. The length of genealogy and history confer prestige on individuals and the nation. Interviewee T5 described that, when she was young, she thought that 'China, as a developing country, was relatively less developed in the world. However, the long history and the glossary of the past give [her] some confidence'. Another example is that of people feeling motivated in historic areas when faced with the COVID-19 pandemic. People wrote 'the pagodas have stood for more than 1300 years. If we fight against the pandemic together, we can win the

war' on microblog. Chinese people integrate the family structure with the nation's structure; their loyalty and love for family and nation are both bound by blood (Chen, 2016). The country is regarded as an extension of family, and people's love for the family reflects their love of the country and its history.

Place is perceived in terms of the culture landmarks of the city. Interviewee R3 elaborated: 'I noticed that as residents of the Xi'an city, we had a sense of pride'. The 'temperature and belonging of the place' are also mentioned on social media. People also perceive spiritual support in historic areas.

Stewardship

Stewardship of the environment is demonstrated through active and careful management. Based on the importance of the historic areas, their physical environment is carefully managed by the government. People perceive this care through the pleasant environment, in accordance with the Confucianism idea of 'order of place'.

Public facilities in a clean and ordered environment demonstrate the place's importance and careful management. The ancient buildings are well-maintained in historic areas. From the angle of intangible elements, guidance and services can show careful management of a place. The participants in the focus groups felt that there was a lack of guidance and explanation services about the GWGP. Signs with historical information would help them to understand the place better. Some participants suggested adding more signs and narrators to explain the history, so they could have a deeper understanding of the place. They called this a kind of 'historic guidance and service'. People could feel humanistic care in the place.

This is also related to the legible understanding of history. For example, a Municipal Museum volunteer, in her seventies, impressed people when she explained the details of

Chang'an city. Her brilliant explanations helped people understand the space and human lives in history. Her love of learning and the contribution of her value to the city also had a deep impression on visitors. Overall, rich public facilities, a maintained environment, and guidance and services would improve people's perceptions of careful management.

Naturalness

The importance of naturalness has been discussed in terms of the natural elements, vegetation and cultural background of *Shanshui* in the city (Section 6.1) – love for the natural environment is embodied in Chinese people's hearts. People's affection for naturalness also come from the function of the place. Many research participants who were residents of the city used the two historic areas as parks, where elder people exercised and younger people played.

Vegetation in a place has a positive effective on the perception of disturbance. As an element defining a space, vegetation has the function of enclosing the space so that it is undisturbed by the outside world. Walking in the core areas, the high-rise buildings do not disturb the views from most viewpoints. The tall trees give people a feeling of being close to nature and quiet.



Figure 6-16 Plants in the Small Wild Goose Pagoda (Source: author)

Seasonal Change

Time is an inevitable topic in historic areas. As explained in the previous section, the vegetation, the weather of the four seasons and the festivals of a year give people a huge sense of seasonal change. People go to historic areas to view the plants with colourful leaves or flowers; they also go to the historic areas for festivals, such as the New Year, and people who are Buddhists go to the temples on typical days every month. People review the past and plan for the future when they perceive seasonal changes. Their perceptions of time are formed aaround four seasons. This sense of time flow extends to the sense of historicity in the place, which can be seen from the lyrics and poems (Section 5.3.2).

Openness

Architects and urban planners care about architectural scale based on their expertise. The openness of a space affects people's perception of the architectural environment. Some people criticise the large scale development on the axis of the GWGP. However, one characteristic of Tang style architecture is its size. The large squares, long pedestrian streets and huge buildings of the GWGP give people a sense of the grandeur of the Tang dynasty. The rhythm of the squares and streets keeps people experiencing changes in openness, which form an attractive space with Chinese character. Compared with the GWGP area, the relatively small scale of the SWGP area makes people feel quiet and intimate. As discussed in Section 5.3.3, quietness is a typical characteristic of Chinese temples.

Disturbance

Disturbance is usually considered a negative factor in the perception of views. For experts, the huge disturbance of high-rises might destroy the sense of historic buildings. A criterion to achieve good townscape for some experts is the lack of obstructions around the landmark. The viewing corridors are defined in management policies. In addition, some of the public

have a positive view of high-rise buildings. Interviewee T9 clearly stated that, as lay people, they felt that there was nothing wrong with the high-rise buildings surrounding the pagoda area. Rather, they felt a contrasting of history and modernity in the scene.

However, most people describe the sightseeing Light Rail network as a failure (Figure 6-17). The Light Rail, with an investment of 300 million RMB (about 36 million pounds), has not been used for eight years since construction finished. People question the waste of resources, and recognise that the Light Rail on the skyline is a disturbance which breaks the view of the pagoda. If people look through its frame to take photos, they feel 'awkwardness' that they cannot ignore the Light Rail in their photos. For many focus group participants and commenters on social media, it appeared to destroy the sacred aura of the place. Another disturbance witnessed in the area was the bustling crowds. The 'noisy tour groups' in the SWGP area influenced people's moods when viewing the place.





Figure 6-17 The light rail (Source: author)

Coherence

The buildings around the GWGP are harmonious in form and structure, and related to Tang style. The coherence of the historic style maintains the harmony of the space. The relaxed and comfortable ambience in the quiet morning or night makes people feel as if they belong, and they feel warmth that comes from a thousand-year-old capital. The sense of coherence could increase the perception of historicity, which shows the compatibility of the historical background. Interviewee T2 suggested an integrated development among areas related to the same period of history. For example, the SWGP and GWGP, both related to the Tang dynasty, would be considered together.

Coherence is also related to the weather and light of the place. People use Wangwei (Tang dynasty Poet)'s poem 'Shanju Qiuming' describe that, 'The rain washes the environment and makes it clear.' They say it seems like adding a filter to photos. Similarly, the night view with lights in the pedestrian streets seems to enhance the coherence of the place by providing unifying lighting.

Complexity

Complexity and coherence in the townscape are not opposed to each other. Cullen (1961) finds that, 'a long straight road has little impact because the initial view is soon digested and becomes monotonous.' To visit the research sites, people walk along the main axis, which is very long, especially in the GWGP area. The views change quickly but cohesively along the main axis, so that people can see diverse history-related environmental elements and not feel tired. This is because the research sites keep coherence through architecture style, but also contain various elements – such as architectural details, vegetation and activities— which show the complexity of the place. The diversity of values can be preserved based on the complexity of tangible and intangible elements (see Chapter 5).

Relationships among Visual Characters

When people are talking about one visual character, their discourse usually relates to other visual characters as well. In particular, this research has discussed humanistic management in relation to legibility; natural elements and seasonal change which both make people think about the running of time; coherence in relation to less disturbance, but also in relation to the complexity of a coherent style which can be achieved in historic areas.

Together, the visual characters contribute to the sense of history. The night view of the Grand Tang Dynasty Ever-Bright City takes people back to ancient Chang'an city. The golden lights give people a sense of coherence. The complexity of environmental details and the witnessed activities show the liveliness of history. A photographer on social media posted that, 'The dark in the night is like a veil on the pagoda.' People feel like they are in dreams and virtual worlds. The architectural environment builds a dream that goes into history for people.

6.4 Comparisons among Different Cultural Groups

6.4.1 Comparison between Tourists and Residents

Tourists usually have expectations of historic areas before they visit them. Interviewee T2 stated that,

My first thought was, there are ancient buildings in Xi'an since it was the ancient capital of thirteen dynasties. The two pagodas are iconic buildings representing the inclusive culture of the Tang dynasty. When I went to the Municipal Museum in the SWGP area, I was most interested in relics from different dynasties. I think it is a good idea to construct museums and historic parks based on historic buildings. (Interview T2)

In other words, he imagined a place before his visit. Tourists may have been told thousands of times about the history, the poems, the arts and the city of Tang Chang'an. In a way, they are searching for their roots in the city.

Besides this, tourists compare and evaluate the urban landscape of Xi'an city with the city they live in. Interview T2 said that there was also a picture showing the *Shanshui* (river and mountains) surrounding Da'li city. His original understanding of Da'li city was developed from that picture depicting the nineteen mountains and eighteen rivers of that place. This also underlines the previous concept of *Shanshui* in the cities of China.

Residents have been bound up with the city for many years, and they show their love and pride for the city. Long-term residents reminisce about the past. They compare the present and the past, and they are sensitive to historic photos. Their perceptions are more detailed, and relate to their memories and the changes in places over years. Residents also use places for multiple functions. They prefer to go shopping in the GWGP area. People who live nearby also come to the historic areas for leisure in the afternoon. The research sites are used as urban parks. Elderly people exercise in open spaces, while children play in the musical fountains. The research participants said that it is a wonderful place where they can eat, drink and play. Residents' multiple needs can be fulfilled in the place.

Since residents have living experience in the city, they emphasise the relationships between the two research sites and describe more about the historical background. As landmarks shared by Xi'an residents, they also view the pagodas from a distance. Residents do not need to go into the historic areas: they see the pagodas many times in their daily lives, when they are walking or driving nearby. Thus, residents care about the visual relationships – that is, whether the pagodas can be seen in the surrounding areas. Interviewee R4 asked if the pagoda could be seen in the nearby ancient royal park. The answer from Interviewee R3 was yes, the pagoda can be seen from the Qvjiang water. Interviewee R4 also noticed that the Grand Tang Dynasty Ever-Bright City extended the south square of the pagoda to the royal park.

Similar photos can be found on social media. This is a kind of conformity among tourists (Interviewee E4). However, residents may not look at such popular scenes. In addition, it seems that the residents are more likely to criticise the place. They complain about the resource-wasting construction, the traffic congestion and the excessive commercialisation. These impacts have reduced the residents' quality of life, leading some people to hold a negative attitude towards tourism development (Dai et al., 2017). Residents are more concerned with the problems of urban space, based on their life experiences.

6.4.2 Comparisons between Experts and Lay People

The details of the environment attract lay people. The details – a flower, a cat or the reflection of the pagoda on a raindrop – may impress people. The lay people care about the details of architectural forms. They talk about the age, layers, colour, height, styles, ancient functions and ancient names of the historic buildings. The experts consider instead the combination of building groups, and discuss the architectural scale and the hues of colour. Experts look at the complexity of the place. These findings are consistent with those of Dupont et al. (2015), who found that experts explore landscapes in a holistic fashion, whilst lay people pay more attention to specific elements, especially the buildings.

Experts argue that they are sensitive to the landscape. Many lay people think about the history and perceive the values of the place. Some lay people may not be interested in the historical or cultural background, but only use historic buildings as way-guiding landmarks. At least, the use of a landmark in daily life makes it a symbol of the place. People may emphasise their love of the place in terms of the landmark.

Many experts mentioned the contribution of townscape character management policy. Interviewee R1 (an architect) said,

When I was driving by the pagoda, I could clearly perceive the silhouettes of the pagoda. People do not need to climb it or come close, they can view the silhouette of the pagoda from the surrounding areas. (Interview R1)

Interviewee R1 thought that this was because of the height control in the surrounding areas. Experts believe that the townscape character management of historic areas helps the pagoda and temple stand out. New constructions that disturb the view can be sited in other areas. Lay people seem to be more open-minded when it comes to the surrounding modern buildings. They are more likely to care about the goods being sold and the services of the place.

Chapter 7: Narratives on Townscape Conservation based on the Past, Present and Future

Chapter 6 compared townscape perceptions among cultural groups. This chapter will go back to the fundamental discussions related to heritage view, the present situation and future development, and reflect on the communication between experts and lay people.

7.1 Heritage Views on History and Modernisation

People's views on townscape have changed over the decades. Some modern pieces of construction that were highly applauded a few decades ago now receive criticism. For example, people propose 'the ugliest buildings of the year', while 'copycat' and huge-scale buildings which were previously popular now 'come under fire'. The most popular design concept has changed from European style to Chinese style. Aesthetic views have changed due to social, economic and ecological development. People's views on the past, present and future are continuously evolving through time. Experts are careful with their choice of architecture design, and the public have higher standards to evaluate architecture.

Understanding people's present attitudes to urban heritage, and to modernity and history, is now an urgent need. How people look at history and modernisation basically affects how urban heritage is conserved. The evolution of people's historical consciousness has influenced conservation ideology in China (Chen and Zhang, 2016). Interviewee E4 demonstrated that the heritage conservation is essentially related to the way we look at heritage. Based on the understanding of heritage views, we can decide what we should preserve, and how we preserve the urban heritage townscape. The investigation of heritage views aims to discuss the meaning of urban heritage and people's attitudes to old and new pieces of construction.

7.1.1 The Meaning of Heritage

From Interviewee E4's perspective, there are two reasons for heritage conservation. Firstly, the heritage is life memory, which may be that of an individual, group or nation. Secondly, it is a scale of change or progress, which tells people where they came from and who they are. Through heritage, people can coordinate their space and time in the world. As a planner, Interviewee E3 explained his view on heritage as, 'working for the all social strata from every time period rather than for the history or government'. Interviewee E3 argued that development should be held responsible to the past, present and future: 'If experts only focus on history, the place would become a corpse.' To be responsible to history is to make heritage alive, and to be responsible to the present is to share the city's dividends with the public, for instance, through the popularity of Xi'an on the internet. People should be connected with their urban heritage. Furthermore, because of this connection, 'There is a long history to embrace people' is most Chinese people's first impression of Xi'an.

Most of the public share the same attitudes as the experts. However, there are also some people who do not care about heritage. Many urban and architectural designers believe that people should respect and understand the importance of urban heritage, especially the people who have more power to decide how the city will develop, including 'the governmental officers and architects' (Interview E3).

7.1.2 Attitudes to Old and New Construction

Harmony and balance are the experts' expectations for townscape. This spirit of balance and harmony has influenced China's governance and development since ancient times. In contemporary China, the theme is applied not only to domestic development but also to foreign policy. Chinese State Councillor and Foreign Minister Wang Yi said at China's 13th National People's Congress in 2021:

Facing the new problems and challenges in globalisation, the answer is not to retreat into protectionism, isolation or decoupling, but to work together to make globalisation more open, inclusive, balanced and beneficial for all.

The spirit of balance is not conservative, negative or escapist. It is a supportive and continuous way, rather than an opposite way, to look at the two sides of one thing.

Urban planners believe a city is a complex system, and they believe that they are balancing different governmental departments and stakeholders to achieve urban development. 'The architecture design and urban plan are not art but policy' (Interview E3). Experts need to balance a lot of things. They always care about balancing historicity and modernity. Compared to cities like Rome, Paris and Beijing, the current modern construction of Xi'an is out of control. Too many modern buildings have already been built surrounding the historic areas. Experts need to find new ways to control the townscape character. A good dialogue between old and new construction is needed. People must not feel that the ancient buildings 'bully' the new ones, or vice versa. The old and new are the sources of each other and belong to the same mother: the local style. The new design concepts ought to be inspired by history.

Balancing is a clich \(\xi\) but it is a tough problem. There are some older experts who think the historic areas should be kept as they are. They argue that the historic areas have appeared in the current way for years and have reached a balance point. At the same time, some experts are trying to commercialise the historic areas for economic benefit, urban development, and other reasons. People have different needs: the city needs to develop, and young people would like to walk around the complex.

In general, people hold a dynamic and iterative view on old and modern construction. Heritage is a relative term. The research participants believed that the present will become history in the future, and that our generation's construction will become heritage after thousands of years. Construction in different time periods is a symbol of history. The 'good things' presented to our culture (such as the two pagodas) from every time period need to

be preserved. Borrowing Charles Darwin's theory of evolution, participants thought that 'survival of the fittest' also appears in cities. The fact is that many pieces of construction were demolished when one dynasty was replaced by another in Chinese history.

The public's consciousness of urban heritage contributes to urban heritage conservation. However, some experts regard the question as one of personal choice. For example, E4 believed it was a personal choice, and that we cannot force people to love heritage. There was some debate as to whether or not conservation was more important than development: most people said yes. There are people who state that they do not care about urban heritage. Interviewee R5 thought that heritage conservation policies disturbed city development. He said, 'If we need to destroy something for development, then destroy it.' However, most people argued that conservation and development do not oppose each other, and we can balance them. People treasure urban heritage and think there are many examples of using urban heritage to gain better development. The demolition of buildings should be done very carefully, because heritage cannot be recreated once is has demolished. We definitely have many places to develop in the huge land of China.

Interviewee E3, on the other hand, argues that humans' maturing process is similar to the evolution of conservation concepts. People do not care about memories when they are young. When a person becomes a musician or an architect, they want to write a song or design for the place. The successful businessman can do more things. Heritage conservation becomes more important to people when they have accumulated wisdom and wealth as they have grown older. The methods of conservation are becoming mature. At the beginning, it was difficult to locate and record the layouts of historic buildings. Then, the experts' work focused on preventing buildings from falling down. Then, the third generation aimed to make money from heritage. Now, experts are starting to consider how to make the heritage better. Interviewee E3 compared the process to parenting. The older generation care about providing food and clothes to keep children alive, while the present generation want to give their children better education and entertainment.

The process of history is full of expectations. We have developing goals at each stage, and participants have a clear understanding of the times we live in. People face different problems and try to find suitable ways to deal with them. We had to develop our economy in past decades. Now, we are trying to develop culture. The research participants cared about, and highly agreed with, the government's guidance to create an ecological and liveable environment. Interviewee R2 quoted President Xi's idea that 'lucid waters and lush mountains are invaluable assets' to explain why more and more green spaces and other facilities have been provided in recent years. Nowadays, our lives are facilitated by the new four great inventions of high-speed rail, mobile payments, e-commerce and bike sharing. People's lifestyles have changed a lot, and urban spaces have also changed. The adaptive new uses of ancient areas have been highly praised.

People have positive attitudes towards, and expectations for, new buildings in run-down areas. New construction does not have to be perfect. After hundreds of years, new construction from our generation will be demolished or become ancient buildings. They imagine that we will have new ways to build and to see, such as floating buildings and new vehicles. Nowadays, they welcome new construction and 'redecoration'. For example, the recent reconstruction of the SWGP area and the 'redecoration' of the Bell Tower Historic Quarter appealed to the focus group participants. The residents approved of and expected new construction, because it was believed that, compared to the eastern cities in China, Xi'an's urban development is relatively slow. The public are very excited about new construction.

7.1.3 Comparisons of Conservation Ideologies

To embed the historic urban landscape in modern urban space, experts from the planning institutions tend to depend on practical conservation plans to regulate development, while experts from the university embrace flexibility and tend to use **writing and reseeding**

wisdoms when compiling and interpreting the plan, and to use **design wisdoms** when doing architectural design (Recall 4.1.2.3). It perhaps related to the top-bottom urban planning way compared to bottom-top architecture way of thinking. As explored in Section 4.2.2, the planning system aims to control the townscape, and preserve its tangible and intangible elements.

The core protection zone must be fully protected, and no demolition or construction be allowed. The buffer zone would be renovated according to the conservation plan. Therefore, a transition is shaping; this is one of its control methods. (Interview E1)

The planning institution's plans consider the economic, tourist and other issues, since they would be more likely to receive opinions from other governmental departments. The university teachers focus on many details and design ideas to 'make one square metre interesting' (Interview E4). They stand in the space to investigate and design it, and aim to utilise the historical remains appropriately, enabling the public to read it or to be able to recognise the history, with a warm, detailed, touching, and humane design. Architects (such as Interviewee T3) consider how a place can be designed better, focusing on elements such as people's accessibility and intimacy in the place, and they object to simple and crude development of the historic area.

Although they share concepts, the resulting townscapes may be different. For example, to achieve unity and harmony, experts in planning institutions suggest that some buildings, billboards, paving and other environmental facilities which are inharmonious should be changed to achieve unity in townscape character. Normally, the townscape may be improved by the 'deleting' of elements. In some historic areas, the result is that shops should change their billboards to the same colour (and, in some places, even the same font). It has been discussed that order is a crucial concept in Chinese philosophy. This kind of unifying of design details is criticised by many people, because it makes the street tedious.

Townscape conservation should 'preserve the history and present, and leave a channel for the future' (Interview E4). As an architect, Interviewee E4 compared his design to a knife

cut that presents the layers of historical periods through a section. He tried to keep a low profile, making few changes to the appearance of the place. The values of historic areas can be shown when they coincide with present needs. He wanted to make a square metre interesting, and tried to find interesting things. People with power impose their own aesthetics on others in China, which makes the place boring. It is similar to the photographers who want to take photos of messy and undeveloped areas rather than photographing 'people wearing same clothes'. Thus, Interviewee E4 questioned why shops should use unified signage. This is also related to the government investigating the place through blocks rather than points. The diversity in Chinese folk life is an important design resource.

Designers wish to present what they perceive about a place to the public, without restricting the public's imagination of history. Interviewee E4 wanted to show the elements reasonably and express emotions naturally, in a way such that people could use the elements rather than regard them as disturbances invading their life space. The design should be embedded with emotions, which relates to memories. The public provide their memories of the place, and interpret stories relating to their lives. For example, their grandparents' labour tools that were used in the place can be presented. Sections of history can be presented like pieces of amber from different times.

7.2 Reflections on the Current Situation

7.2.1 Townscape Character and the Internet Celebrity City

When the historic areas become famous (especially on the internet), the perceived townscape character is influenced. For example, after Xi'an's designation as Internet Celebrity City in 2017, positive and negative changes have influenced the historic areas. On one hand, the interest and investment in historic areas has increased:

The fame of a place would increase people's willingness to understand the place; without the fame, some National Officially Protected Monuments and Sites are even unknown by the local people. It plays a crucial role to raise people's awareness on urban heritage conservation. Besides, the place's attraction to a huge number of people would therefore bring a lot of investment and infrastructure. This would help the conservation and development of the historic areas. (Interview E1)

On the other hand, while experts and tourists see the benefits of fame, some residents are not impressed and regard the fame as a kind of disturbance. There are complaints about large-scale new development and change over time. Compared with the Qinglong temple in Xi'an, Interviewee R5 thought the GWGP was over-modernised. He commented that,

The temple was preserved when there was not too much development in that place for many years. People are visiting to see the trees and flowers and listen to the introduction of historical background from the tour guide. This is similar to the experience in the SWGP which makes people feel like they are coming to an ancient city. However, there are too many squares and fewer plants in the GWGP. In the past, there were not so many people in the GWGP area when I was in primary school [twenty years ago]. It was an open and tranquil place and made me feel calm and relaxed. (Interview R5)

Other participants had similar feelings related to the imagination of 'pure land' (discussed in Sections 5.3 and 6.1) in Buddhism. Many people preferred to walk in the temple and climb the pagoda at that time. However, people's purposes for visiting the giant pagoda have changed: now, they like to go to the Internet Celebrity street (the Grand Tang Dynasty Ever-Bright City) and take photos. People record their visits to an internet-famous site by taking a picture or sharing a location on social media platforms. This behaviour is known as 'Daka': literally, placing a record on a card. Many participants use the phrase, 'Daka destinations', to describe the tourist mode in which people take photos or videos and then post them on social media platforms to prove their visit to a place, rather than experiencing the place (see Section 6.2).

The designation of China's Internet Celebrity City reflects the phenomenon that internet culture has penetrated the urban space. Since the place has become famous on the internet,

more and more people have chosen to share their stories about it on internet. People usually look at the pictures and text introductions of popular destinations and then visit; after the visit, they post their microblogs to social media. This kind of communications forms an endless circle. On one hand, people have a better understanding of the place's background and produce links between the destinations. On the other hand, this kind of on-site visit is comparable to eating fast food in a rush. The trends may lead to ignorance of other, less popular scenes that may be well worth looking at, which restricts the finding of new scenes and the development of diversity. People's expectations of their visits are just to take a photo rather than viewing the place. The curiosity or imagination around the place decreases, because people have already seen many photos on social media. The mystery of the place disappears; some visitors may even feel disappointed when they find that photos have been taken with a filter to change the original appearance of a place.

After this kind of visit, many participants argued that it seemed like nothing was kept in people's minds (Interviews E2, R5, T3 and T12). The commercial area attracts people, then they ignore the ancient architecture and stop thinking about the place culturally (Interview T3). The distracting modern development seems to rob the place of the pagoda. Interviewee R5 complained that the pagoda was a place for translating Buddhist literature in ancient times; however, nowadays most young people go to the club under the pagoda.

However, the townscape is mainly supported by local culture, and the memory and experience of local culture lasts longer than superficial images (Interview E2). As explored in Chapter 5, the tangible and intangible elements presenting the culture and history of the place. For example, the site furniture and performances in the space continue to remind and educate people.

7.2.2 From Large-Scale Leapfrog to Small-Scale Incremental Regeneration

The regeneration of the GWGP probably impresses people more than any other project; residents and tourists have seen huge changes in the GWGP in the last two decades. It is worth mentioning that some communities were under regeneration in the SWGP when the data were collected. Thus, this research can offer an insight into how people look at the mode of regeneration in Xi'an. The historic areas in Xi'an attract attention from the government and the public, since the historic areas are recognised as the 'face' of the city. The government would 'wash the face [historic areas] before the back [other areas]', and residents tend to invest in real estate in these places.

The GWGP mode (also called the Qu'jiang Mode) is considered to be a success which improved tourism and real estate development. Tourism development is an important part of urban development in Xi'an. During the first three seasons of 2021, visitor arrivals and tourism revenue reached 213 million people and 213.794 billion RMB.

Inspired by the success of the GWGP, in 2022 the Taikoo Li Mode (tourist and retail centre with high-end brands), which has been constructed in Beijing and Chengdu, was confirmed as the development strategy for the SWGP area. The regeneration is expected to be completed in 2025. As a cultural, tourist and commercial complex, the Municipal Museum, Jian'fu temple, Xi'an hotel, commercial buildings and provincial sports centre will surround the pagoda in a few years' time. The 285.5 thousand square metres of regeneration include a traditional-style building complex, a Tang culture presentation area, an ecological heritage park and a commercial service area.

More than 1,700 houses in an area of about 337 thousand square metres have been or will have been expropriated. These are the households that choose to do so are moving to a residential area about ten kilometres away from the SWGP area. The demolition was nearly complete as of 2020. Some people have commented that the demolition makes the place clearer and it is easier to view the pagoda. The new development of the SWGP area has

also promoted the development of the surrounding area by attracting investment for commercial complexes. The urban regeneration projects will provide opportunities. Residents in the surrounding areas may have their quality of life improved and get some money from the government.

However, some experts and the public have stated that the large-scale demolition and construction may not fit the current situation. The design should not erase all the elements and create a new 'picture' (Interview E4). 'Acupuncture', as proposed by President Xi, is now widely used as a design concept for the development of historic areas (Interview E2). As a traditional Chinese remedy, acupuncture uses a hair-thin needle to penetrate the skin at the acupoint. The practice finds the important point underneath to release the pain of the whole body. Similarly, small-scale incremental regeneration involves finding the key problem and solving it with small-scale regeneration.

7.3 Suggested Ways of Inheriting Cultural Heritage Values

7.3.1 Disseminated and Actively Learnt Values

Cultural and historical values should not only be disseminated but also inherited. In other words, learning needs to be active as well as passive: conscious and unconscious, planned and unplanned. The two research sites have been disseminating culture, rather than just encouraging people to actively learn the culture. Whilst there are traditional performances at the research site, many research participants recognised that the transfer of knowledge and cultural and historical values was rather superficial: people need to have a deeper understanding of the urban heritage.

When customs and traditions are disseminated to visitors through performance, interpretations are very different between people. How much information people are able to receive is a question that designers need to consider. In other words, the key issues are

how to present values and how to motivate people to understand culture in the place. Nowadays, the places are cultural and commercial areas with high economic value. However, people will not be satisfied with this commercial mode in the future. They need identification and experiences in the places. Diversified themes of values must be presented from different organisations. On the basis of the participants' suggestions, perhaps we need to make the whole city a huge museum where people can learn.

7.3.2 Preserving Local Elements

Some residents said that they would not go to the GWGP these days, because of the crowds of people, retail price rises and new modern buildings. Interviewee R5 explained that, firstly, the GWGP has developed as a place that faces the whole nation (and world), and the surrounding modern buildings have risen up. At the same time, as a place for tourism, the prices of retail have also risen. Xi'an is always ready to welcome various cultures from all over the world, from ancient times to the modern day, and it has always been thought of as a city for international culture exchange (Interviews T2 and R5). However, Interviewee R5 felt that the non-native elements sometimes replaced the local elements. From this point of view, the local characteristics of the places should be saved, to avoid similarity to other places. Interviewee T2 also suggested that more local plants should be preserved, because exotic plants would pollute the urban environment by bringing insecttransmitted diseases and cause the loss of urban characteristics. On the other hand, the research participants described the splendour of thousand-year-old trees which may cause more historical feeling than the architecture does. Similarly, on social media, people were opposed to the construction of the Japanese rock garden in the SWGP, and regarded it as a kind of cultural invasion.

There is a worry that exotic elements might invade the Chinese townscape character. People care about the purity of the local environment at this time of globalisation. Photos that were taken years ago trigger residents' memories of the past, which gives them nostalgia. The preservation of construction from different ages, and the renovation of historic buildings are deeply moving (Interview E3). People are able to perceive many stories in the place.

7.3.3 Cultural Industry and Cultural Creation

The historic area would be an empty shell without the cultural industry inside it. The cultural industry, including things such as calligraphy and painting selling, also gives people a sense of local life. The street was bustling, especially on the Chinese New Year when people were shopping Spring Couplets (Chinese people write their wishes on red paper and stick them on the door. In Chinese, *Chunlian*). The problem is how sellers can survive when their rent increases. If the price of goods increases, people's demand decreases. A serious problem will appear (Interview E1).

Cultural and creative products recreate the history and culture, especially in the case of cultural relics. Related museum gift shop items also promote the city's popularity. The shop in the SWGP provides Chinese ink rubbing for people to record their arrivals. Ink rubbing has been used for preserving images on the surface of culture relics made from materials such as bone, stone, bronze and jade. Interviewee T5 sent a photo of an ink rubbing with the shape of a traditional roof tile and the legend, 'Changle Weiyang' (Figure 7-1 on the left side). She told me that people could choose the image on the roof tile from among the traditional styles. Her mother encouraged her to frame it, and hung it in her bedroom. She felt that this ink rubbing proved her visit, and represent her memory from the SWGP.

The researcher went to the shop and brought a long roll of ink rubbing, with the landmarks and most famous cultural relics from the Xi'an Municipal Museum (Figure 7-1 on the right side). When the images were stamped one by one, the experience of the visit was repeated,

and the memory of the values was recalled just after learning and understanding them. The images help remind people of what they perceived every time they look at them. These examples are evidence of Interviewee E2's argument that, 'Culture and creative products would support the development of historic areas and vice versa'. When tourists bring souvenirs to their friends and relatives, more people get some knowledge of the place and its culture.



Figure 7-1 Ink rubbing (Source: T5 and the author)

Cultural recreations are a way of inheriting culture. The creations on new social media are another kind of recreation, which not only preserves people's memories but also helps attract more attention online. For example, articles on Wechat, and videos online may awaken the memory of a place.

7.3.4 Stimuli and Novel Experiences

Experts believe that the most elements of diversity which instil emotions should be preserved. This is an explanation for why online influencers can receive so many followers – the influencers provide lots of stimulus to people (Interview E3). The information is updated more quickly in the world. People appreciate views that they have not seen before, and new things attract people's attention. For example, performances must update all time (Interview E1). Experts want to find the most easily identified parts of urban spaces and create new stimuli based on them, so that experiences in historic areas are enriched.

A perfect experience is with a lot of details. You see the toms from Han dynasty under the starry sky on the taxi when you are on the way to the city from the airport, then, you see the places from Tang Dynasty, the city wall from Ming Dynasty in the city centre. You stand under the Bell Tower, you eat the local food in the narrow street and you sleep in a small hotel. You feel very satisfied. In the next day, you see the best museums and the skyscrapers in the city. This is a tourism route a residents would recommend their friends who are traveling to Xi'an. (Interview E3)

Interviewee E3 mentioned that there was a flight from Germany to Xi'an, where the tourist only went to see the Terracotta Army and then directly left the city. This is just a superficial way of looking. 'Respect for a place is using the present way to connect history and future' (Interview E3). The present everyday landscape related to people's lives should be preserved. Nobody wanted to go to a beautiful place without local residents. Newly utilised functions and lifestyles could be embodied in historic areas.

The public also argue that the key values should be embedded in activities in daily life. More activities need to be explored because they can promote interest in understanding historic culture. These activities may be combined with festivals or roleplaying games, which could bring ancient times to life for people.

7.3.5 Educating the Next Generation

Education is a crucial function in historic areas. Many research participants mentioned that they would like to educate their children on historic areas. By telling the historical stories of the place, they are passing their value to the next generation. The children also show interest in it. The participants thought this was what they should do to pass on their culture: there is no point to heritage conservation if we do not educate the next generation. We should tell children why we are preserving heritage, and what should be preserved. Again, more activities should be held for parents and children. The residents believed their children would have impressive memories wherever they went when they grew up in the future. For themselves, they had deeper impressions of the Bell Tower Historic Quarter than their children did. When they were little children, one of their happy memories was to go to the Historic Quarter to buy new clothes and eat local food during the Spring Festival. They wanted to find something that could represent the place and that their children were interested in, or they would forget the place in the future.

7.4 Summary: Resonating with Conservation Principles

Lay people's interpretations are sometimes similar to the global conservation principles. In the focus groups, participants mentioned integrity, authenticity and other concepts which are fundamental terms of the UNESCO Charters.

Integrity

The context of a place is very important for its protection. The elements of the historical urban landscape are protected as a whole and are perceived as a whole. The complexity and coherence of the environment seem to be related closely to positive visual perceptions. The ambience of the whole environment contributes to the aesthetic quality of the place, and vice versa. Modern commerce, green vegetation and activities complement the historical architecture vividly (Interview R1). When Interviewee T2 suggested considering the landmarks with the same historical context as the city itself, the lay people also thought about to how develop the historic areas in a city with integrity. The concept also relates to the conservation of large-scale archaeological sites (recall Chapter 4).

Authenticity

People are very concerned about the authenticity of historical information. The existence of cultural relics enhances people's confidence about authenticity. People show interest in the historical background of the ancient buildings, especially the historical relics and traces of stories which are related to historical narratives. The research participants mentioned the Sarira (the relic of a monk) in the pagoda many times, as well as the appearance of the environment as evidence for historical stories and events. For example, there is a beautiful love story based in Hanyao Park. It is a well-known historical story about Wang Baochuan and Xue Pinggui. It is said that the wild vegetables were dug clean in Hanyao at that time. Poor Baochuan must have eaten them while she was waiting for her husband Xue at that place. Two residents believed that the story was, true and stated that there seemed to be no grass in the place now, which may confirm the authenticity of the story. Similarly, the pagodas and cultural relics of the museum gave Interviewee T5 a sense of authenticity.

Sometimes, the network of information is exaggerated, and authenticity is missing from heritage sites. This is because exaggerated information is likely to attract more attention.

With such huge influence, authenticity in social media is very important. The good news is that more and more bloggers with high academic level have settled in We-media recently, which has improved its authenticity and historicity.

Interviewee E3 argued that there are two ideologies of authenticity in the West and the East. The West proposed the main conservation principles, and believes that reconstructions are fake heritage. People cannot change the pillars of the Parthenon in Athens. The changes to new materials of historic buildings should be separated from the original ones. In Japan, the whole Ise-Jingu Shinto shrine has been completely torn down and rebuilt every twenty years. This ritual has continued for more than a thousand years and has attracted many tourists. The ritual is a kind of heritage, and the rebuilt shrine is authentic heritage even though the building is only a few years old. Archaeologists confirm that there are five entrance-ways on Danfeng Gate; while they assume the appearance of the Danfeng Tower. This speculation may yet be right or wrong, with new archaeological techniques being applied and more evidence found. A museum was built around this speculation, and we cannot question the authenticity of the museum at present. The key is that we should find a sustainable or reversible way to deal with the historic area, which means that we can restore the site to its original appearance when we find anything that is not authentic in the future. This is also a derivation from the tenet of sustainability in China's concept of conservation.

Appropriate Use and the Methods of Interpretation and Presentation

The topic of sustainable development is a crucial aspect of heritage utilisation and interpretation. Except for the ideology in the previous paragraph, the ecological environment is considered and improved when heritage sites are protected: the line parks, such as the city wall of the Qing dynasty, were constructed and then the smelly river became clean, for example.

According to Chapter 5, people are attracted to the place with functions, such as restaurants and attractions. The land uses Planners might strengthen the sense of urban pattern on these spots, or create new viewing spots in locations they want to emphasise. Based on this finding, a policy that combines the heritage sites with the functional areas (Section 4.1.2) would be very effective. Additionally, the focus group participants suggested 'putting new wine in old bottles': for example, museums presenting new art and films in Tang-style buildings, and museums and theatre in the Grand Tang Dynasty Ever-Bright City.

Education is an important function of museums (Shan, 2010, Shan, 2011). The presentations in Xi'an Municipal Museum respond the demand for learning and educating. An appropriate visual presentation of historical urban patterns and people's live experiences increase their perception of the urban pattern. The presentations in the museum (recall Figures 5-13, 5-19) present the historical environment and remains with different themes; the museum decorated (Figure 5-23) related to intangible culture, such as festivals; the tour guides and researchers were invited to explain the history and culture of the city; Culture and creative products in souvenirs allow people to recall their visiting; the official microblog of museum was well edited to present the cultural relics online. In such a diverse way, the museum is well presented.

Chapter 8: Discussion and Conclusion

This chapter begins with an overview of the research findings and their link to the research questions and objectives. Based on this, recommendations are made for the townscape character management (TCM) of historic areas, and for improving effective communication between experts and lay people. This is followed by a summary of the research contributions. Finally, it ends with discussion of the limitations of the research and future research areas.

8.1 Research Questions, Objectives and Findings

This research aims to explore the history and culture in the way people perceive the townscapes of historic areas in Xi'an city. The research adopted a mixed-methods approach to answer the research questions. Chapters 2, and 4 to 7 answered the first five sub-research questions. The following research objectives are achieved.

Objective 1: Based on the literature review, the heritage conservation ideologies and townscape character assessment (TCA) which involve public participation were examined. The research gap was identified – there is a lack of public participation and holistic TCA process within Chinese heritage conservation to grasp the cultural diversity of heritage sites. The theoretical concepts were understood (Chapter 2).

Objective 2: Chapter 4 examined the political background of townscape character management in Xi'an city. First, influenced by international theories, the Chinese experts proposed heritage management methods for the Chinese context (Section 4.1). Then, the research redefined the townscape character (Chinese: *Fengmao*) within the present context of China, and indicated that the connotations of townscape in China contain an Eastern way of viewing, accessing and valuing and has cultural, social and economic impacts on the city. From the experts' perspective, the townscape seems like the personality of a

people that needs to be understood through knowing the people's background and spending time with them (Section 4.2.1). Additionally, it found that the main concerns of the experts were as follows (Section 4.2):

- (1) Most HUL elements in the large scale archaeological site of Suitang Chang'sn City are overlapped by modern construction. The experts aims to make the invisible urban pattern visible.
- (2) The experts' ideal goal is to create an environment that encourages people to be able to understand and experience history and culture actively.
- (3) Practically, rigid and elastic requirements were proposed to achieve flexible management.

After that, the following reflections were made (Section 4.3):

- (1) There are conflicting conservation ideologies among different political departments;
- (2) the laws, regulations and plans are formulated in a structured way which includes the consideration of points, lines and areas from the top down;
- (3) the cultural value and people's memories in the place should be preserved in the context of rapid urbanisation;
- (4) practical methods of TCA and zoning are needed; and
- (5) the public should be involved, to contribute their knowledge to the townscape character management.

Finally, the policymakers' future needs and their consideration relate to public participation are identified (Section 4.4).

Objective 3: Chapter 5 explored how people present and perceive the tangible and intangible Historic Urban Landscape (HUL) elements, and how the townscape character as a whole is shaped by these elements. The meaning of the tangible and intangible elements in the place was explored according to the different types of elements. This kind of viewing can be summarised in two principles: the 'larger picture' from a higher location is viewed first; 'spirit' is viewed upon the 'shape'. First of all, the place is viewed in a regional area as a part of a district, a city and the world – people also care about the surrounding natural environment, functional areas and transportation. Secondly, people imagine that elements have spirits, and are inspired by them. The spirituality people perceive in a place can help planners to shape spiritual place in the city (as the policymakers proposed in the Urban Design Plan for Xi'an). Additionally, people knows a lot about China's famous history of the Tang dynasty: based on this, the details of elements complement and deepen their knowledge of the place. For example, the details of the buildings and sculptures remind people and give them historical information about the historic areas. In the process of analysis, the policymakers' concerns were considered in Chapter 4. The result shows that people do perceive the urban historical townscape and the values in it. The wisdom and effectiveness of the plans can be also evidenced based on people's viewing behaviours. For example, the concept of ecological development is needed, since deteriorating air quality affects people's viewing; view corridors and buffer zones ensure a visual relationship with the natural environment and landmarks.

Objective 4: Chapter 6 analysed how people perceive the townscape and interpret the values in it in detail, and supplemented the HUL checklist for the TCA system based on the research result. First, the cultural background affecting people's perceptions, cognition and recreation values was illustrated. The three main teachings in China were collectively diffused in people's lives, collectively influenced people's ways of viewing, and collectively shaped their social values.

Great art and literature, which were highly related to the educational and recreational activities, give meaning to the HUL elements: people experience and create meaning in these works. Based on the cultural background, a shared social value system is held among people. Second, the onsite and virtual experiences of the historic areas were presented. The experiences help people understand the place in context. The results shows that people perceive the place in an active way, catching plots and solving puzzles in the virtual videos and games. Popular virtual scenes in historic web series the Longest Day of Chang'an were constructed to reality world (recall Figure 6-11). Such successful examples show that popularity in the virtual world can be transferred to the real world. It shows that the invisible space, especially the virtual space online should be included in the framework of TCA. Third, the research found a strong link between historicity and other visual characters summarised by Ode et al. (2008). The valued visual qualities in historic areas were described. Finally, comparisons between different cultural groups were made. The result echoes what was mentioned in Chapter 4 about experts' current conservation plans neglecting elements of detail that ordinary people care about, which could be as simple as the weather in a place.

Objective 5: To preserve the townscape character of historic areas, Chapter 7 review how the utilisation, interpretation and presentation of historic areas are assessed by both the experts and publics (Chapter 7). It went back to demonstrate heritage views and the current situation in Xi'an, and then illustrated the suggested methods of townscape conservation of heritage sites, which resonate with the conservation principles. Firstly, people's views on heritage can decide how the place will develop. The shape of heritage-related views and ideologies is a process which may become mature. The architect's way of thinking from the bottom up should be added to the urban planner's way of thinking from the top down. Secondly, after reviewing the current situation, this research cautions against the fixed way of viewing (*Daka*), and proposes the need for more cultural support for

the future townscape under the influences of modern life, and the need to improve the townscape through small-scale incremental regeneration with minor change. Thirdly, the author found that the values in historic areas are usually disseminated to the public, and that designers should shape spaces where people can actively learn values, as a kind of positive protection. The suggested ways for inheriting urban heritage values were summarised. Finally, the researcher found that lay people's narratives have many similarities with the international conservation principals. This means not only that these conservation principles meet the needs of the public, but also that the language of the public can contribute to the development of heritage conservation principles.

Objective 6: Based on the above findings of this research, the following recommendations are proposed in Sections 8.2 and 8.3.

8.2 Recommendation on Townscape Character Management (TCM) of Historic Areas

Townscape character management is used to control and preserve townscape character, including the historic and cultural values that people perceive. According to the political concepts of China, townscape values should be presented authentically and integrally to the public. Based on the above findings in Section 8.1, the main recommendations on TCM are:

(1) Connect the visible historical landmarks integrally to show the hidden urban pattern and townscape in history. This deals with the dilemma faced by a large scale archaeological site, the Sui-Tang *Chang'an* capital, which overlapped with

modern constructions. The problem here involved making the underground heritage visible.

- (2) Propose practical TCA and zoning approaches, paying attention to the flexible requirements for heritage management on the basis of the existing situation to pay more attention to rigid requirements. This would avoid abrupt changes in and around some historic districts.
- (3) Construct multidisciplinary collaborative projects and research to facilitate the exchange of knowledge between people from different disciplinary academic backgrounds and political departments.
- (4) Focus on the landscape as perceived by people at different viewing points rather than as perceived by planners on maps. This is a way to seek innovation in entrenched and similar laws, regulations and plans that are formulated in a structured way.
- (5) Encourage people to see, participate and interpret the townscape and values in different ways to achieve a legible townscape for understanding the historicity of the place.
- (6) Local cultural values and people's memories are two key aspects to be understood and preserved in the context of rapid urbanisation and the concept of public participation in TCM.
- (7) Incorporate the cultural background (i.e., three main teachings, great art and literature) in planning and design to create cultural resonance for visitors.

(8) Enlarge the TCA framework to encompass the invisible parts of townscape, especially online virtual space, where is an important place for modern people to experience culture and history.

8.3 Recommendations for the Communication between Experts and the Public

8.3.1 Who Owns the Power

As discussed in Chapter 4, there is a hierarchy from national, to provincial, to municipal authorities. In the narrative of experts, governments and developers plan and construct urban spaces according to their interests. The process of balancing seems difficult. When experts aim to protect historic elements as much as possible, the municipal government and stakeholders may prefer a smaller scale of buffer zones, since more space without regulation may create more profit. The voices from the public are relatively fainter. At the same time, experts believe that we should see the two sides of power: Paris cannot become what it looks like at present without Haussmann's renovation. Power from the government can facilitate the implementation of the plan.

Online discussions at present are becoming violent and a channel for the release of power. The internet, especially social media platforms, provide a powerful way to make people's voices heard (see Section 5.1). Online discussions spread quickly and attract much attention; the government should investigate and deal with the issues and make statements in a more transparent way. Besides this, a preference for the new construction can be seen on internet. People comment when they are (or are not) satisfied with the buildings.

8.3.2 What Can Be Provided?

The experts regard themselves as mediators, balancing the interests among people, and trying to preserve heritage and achieve equality in the space. In terms of conceiving the planning, experts want to improve the quality of life of residents as much as possible and to make visitors more aware of the local culture, which can be clich éd. Some experts agree that public participation is urgently needed, but they have no active communication with the public. Experts plan and design to meet the imagined needs of users, and do not find out if people have other needs or suggestions. I believe the understanding of people's perceptions and suggestions in this research would be very useful for the compilation of the plan.

In fact, some experts are not sure how the public can get involved and contribute to their work. Others do not believe that the public would contribute professional information. Interviewee E3 questioned what experts' work could be done by the public, and asserted that the right experts should be selected to handle professional affairs: for example, as urban planners rather than electronic engineers, we cannot produce a mobile phone. Here, I argue that we use mobile phones almost every day, and we can tell the engineers where we want it to be improved for a better user experience. Likewise, Flyvbjerg (2006) noted that the general public are experts in everyday social activity or interpreting images of daily life such as images on television, however few people are experts in specialised skills such as flying a fighter jet. The public's interpretation of their environmental experience can be considered a 'passive contribution' (Deghati Najd et al., 2015), which bridges the gap between experts and the public. Everyone has his or her way to get information, and the plan needs information from different people (Interview E1).

There is an old Chinese saying that there must be one out of three who can be your teacher. Interviewee E3 argued that experts should bring in people more than they expect, because their needs will change over time. This is the ambition of experts. In the other direction,

the public provided more than the researcher imagined in the place. Experts should be more humble, and seek communication with the public when the plan is being compiled.

8.3.3 Recommendations: How to Communicate

Comparison between Experts and Lay People – Simplicity or Diversity?

Experts and the public are often diverge in their choices. Experts prefer the simple and elegant, while a diversity of urban furnishing is welcomed by the public. Experts believe that 'less is more', and that multiple functions can be achieved with a simple appearance. Interviewee E3 used the iPhone's home button as an example of something which contains many functions. Similarly, hints of historic elements could be combined with urban facilities. For example, experts would like to present a high platform of a giant historic building, which can be used as a stage for modern people and where a life scene can be created. This places high demands on the collaboration between planning, architects and environmental art designers. It is also important to understand people's viewing intentions and behavioural patterns, to understand whether people can feel the diversity that designers create out of simplicity, and whether people want to do the activities that experts expect in the designed space.

At the same time, we must admit that many mixes and matches create unexpected harmonies. The experts' obsession with the pursuit of simple sophistication should be reconsidered, since design is a creative art. Respect for the site and for the people will produce good spaces. I will use the experts' idea again here: townscape conservation should 'preserve the history and present, and leave a channel for the future'. Overall, the diverse opinions can exist together: academic research can be compared to 'a blind man touching an elephant', which means we can only see one surface or point of the world.

Cultural Background and photographic materials

The common cultural background illustrated in Section 6.1 – including Chinese philosophies, great literature and art – provides a vehicle for convincing the public of the appropriateness of the design. A good view is shaped according to Chinese philosophy, and the plans from ancient times to the present in China have been guided by the philosophy in those time periods. Interviewee T4 mentioned the ancient Chinese belief that, '*Heaven is round and Earth is square*'. Since Xi'an city is standardised and its planning regulated using that philosophy, he thought that the new development should inherit the ancient axis, and the symmetrical structure should be kept. Based on such a conceptual consensus, it is easier for people to understand the historic townscape and understand the planners. Similarly, the planners need to understand people's motivations and feelings, to establish two-way empathy. It is also worth mentioning that photographic materials play an important role in the process of communication.

The main recommendations for increasing communication between experts and public are:

- (1) Use web-based platforms to promote discussion among a wider audience and to attract government attention and action.
- (2) Value and proactively explore the information that public input can provide (for experts), which means experts should have a more modest and humble view of public participation. Experts should be less confused by what they see as a lack of information from the public, because the public can provide them with different perspectives on cultural information and ways of perceiving it. The following three recommendations shows how the public can be evolve and contribute to the experts' work:
- (3) Respond to people's viewing intentions and behavioural patterns in urban planning and architectural design (for experts). This is a way for designers to

communicate with users through their designs, which provides visitors with views of beauty that they understand.

- (4) **Use the shared cultural context and social values** to facilitate communication between experts and the public, and shape characteristic Chinese townscape.
- (5) Use the photographical material to improve the understanding of the space to facilitate the communication between experts. This is because visual materials give a more intuitive impression.
- (6) Use case studies and planning document that people are familiar with to improve the understanding of the space, and to facilitate the communication between experts. This is because people in the interviews often talked about heritage sites at home and abroad that they had travelled to, informing their understanding of what is "good". In addition, experts can elaborate on the design concepts of the case studies so that lay people can understand their ideas and thus reduce the cognitive gap. In the same vein, the government should advertise the plan rather than giving people a brief version.

In my view, planning is not a highly technical discipline, but something that all people can experience and about which they can suggest sensible arrangements and proposals. Increasing discussion can facilitate the formation of new ideas and rational solutions.

8.4 Contribution of the Research

After critically examining the theoretical background, working methods and results of the current TCM in China, this study incorporates public perceptions into the planner's TCA

process for heritage conservation plans. This study opens the discussion between the values held by policymakers and residents, and shed light on how visual images and symbolic landscapes are experienced by local people, and become a shared social value. The research findings have significance contributions to the TCA and public participation in China's urban heritage conservation, as below.

For the TCM in China, this study understands the dilemma of current townscape management – most of the historical environmental elements are underground, and the experts' main concern is to reveal the historic townscape in the modern city. Based on the examination of the current TCM and the exploration of public's experiences on townscape, the recommendations are made (see Section 8.2). The recommendations could be used in future urban planning and architectural design to meet people's expectations of people for the conservation, presentation and utilisation of urban heritage, using the aesthetic philosophy that people appreciate and culture that is collectively constructed by the public to guide design.

For the public participation, this study examines the current situation of public participation in heritage management in China, and the information that public participation in heritage management can provide. In addition, recommendations are made to improve communication between the public and experts (see Section 8.3). The study suggests that social media can engage the public and increase the impact of people's opinions. The recommendations suggest ways in which the common culture, as well as visual materials, can be used to increase consensus among experts and the public, thus facilitating communication.

8.5 Limitation of the Research and Future Research Areas

8.5.1 Interview Data

This study involved combing through policy documents before doing the interviews. The researcher has been involved in planning projects at different levels, and has a relatively good understanding of the work and concepts of the experts. There were some differences in thinking and expression in the interviews between the two main institutions involved. The two experts, who work in the Xi'an Urban Planning and Design Institute, tended to use practical ways to conduct conservation practices. Experts in the Design Institute may deal with many similar projects, and they are trying to work faster and fulfil the required legal content. Meanwhile, the other two experts, who work mainly in universities, tended to find more innovative design ideas. This may also be what they encourage students to do in their teaching. These different modes of work promote reflection on the ways of thinking about townscape conservation ideologies and on the patterned planning work: whether the patterned planning documents and the fast work schedule requirements of the Design Institute limit the designers' scope for more imagination.

Although the preparation of the plan is led by experts with an urban planning background, the design process requires collecting opinions from experts with different professional backgrounds. This research interviews the experts who study architectural design and urban planning, missing interviews with experts from archaeological and other disciplinary backgrounds. In future research, interviews could include the views of experts from other disciplinary backgrounds on townscape character management.

8.5.2 Focus Group Data

Krzyzanowski (2008) explains that focus groups are used not only for investigating people's opinions, but also for testing how grounded and stable these opinions are. In this research, the lay people usually agreed with what the experts said, and they sometimes continued to talk about the place, unconsciously following the experts' opinions. For example, most of the lay participants in the interviews agreed with the designer's view of the environment: when they discussed a dynamic and iterative view of development, the designers indicated that although the current situation was not the best, they were satisfied in the face of many difficult conditions. There was agreement and understanding of the designer's attitude. In focus group discussions, it seemed easy for experts to guide and change the opinions of lay people. In contrast, designers often gave very heavy criticism of some urban and architectural designs. In the research design, this study had groups with and without urban or architectural designers, which could be compared. In the focus group with designers present, the designers spoke at length and persuasively, as if this were a professional skill of the designers, while the members of the public spoke very little and there were times when they would first say that their comments might be unprofessional. In the groups without designers present, people seemed more willing to speak, and there was more dialogue between the group members.

In the focus groups, the participants were photographers, teachers, and many interesting people who love these places deeply and offered different perspectives. Again, when they referred to their own professions – the photographer's thoughts on photo composition, the language teacher relating the research sites to ancient poems, the geography teacher giving descriptions of the geographical environment – all showed confidence. The participants showed respect and support for other professionals, which was perhaps influenced by the Chinese philosophical thinking mentioned in Chapter 6. This kind of support was conducive to the recognition of the historic areas, but not to the presentation of different opinions. Heritage belongs to the public and urban planning should be user-driven. Questioning is what makes planning better and more comprehensive. Effective public

participation and communication should be explored in future studies of landscape management.

8.5.3 Social Media Data

Data from social media have some advantages and disadvantages in this research, as follows.

Strengths:

- (1) The data from social media contains several consecutive time periods and covers a relatively comprehensive range of content: in this study, the data includes the landscape before and after the COVID-19 pandemic. With a number of new installations and activities appearing in the research sites over the time span, the rich data present some short-term and long-term presence of the HUL elements, including people's perceptions and activities over time. The social media data captures details information related to the culture and history, which enables the researcher to immerse and understand the place context during the analysis.
- (2) The variety of perspectives in the data presentation can be interpreted: for example, the way some photographs were framed, and the use of filters on them. The photographic methods show people's preferences of their ideal space.
- (3) The data help to fully understand cultural diversity. For example, people use poems they wrote in the place to describe the townscape on social media. They may not use the poetry they wrote when they are being interviewed verbally. This is not how people speak, and the writing of poems needs more

time and thought. However, when they need to get it down in writing, they see poetry as a good way to describe how they feel. It is a deeply thought-out creation based on cultural context.

- (4) When people post and share something on social networks, they are more actively expressing their feelings. People pick the views they are most satisfied with while constructing their ideal environment when they share the visit with others. People are also more courageous in expressing their dissatisfaction and criticism, which makes up for the lack of presentation in focus groups with designers present.
- (5) Although no data were collected on social media prior to 2018, many of the microblogs collected were related to people's memories from decades ago or historical stories from thousands of years ago, extending the timeframe of the research.

Disadvantages:

- (1) Lots of useless information need to be filtered. With a large dataset, a lot of social media data mention the research sites, but the content has nothing to do with the place. As the names of the research sites are frequently searched for, many adverts use the place names to increase the viewing of their microblogs, which results in a lot of spam.
- (2) To decrease misunderstanding, some information needs to be interpreted carefully with an understanding of the specific context. The same words used with a different tone can produce different interpretations: for example, differences in punctuation and emojis can provide different interpretations. Many microblogs were posted with no words but emoji and pictures. The researcher should have a very good understanding of the place and revisit the place again and again to locate the place during the research.

(3) The authenticity of the microblogs should be examined. There is fake information made by bots, and the purpose of their posting should be identified. This is because the microblogs may be posted for different purposes, such as for approval, acceptance or disapproval, which can create biased representation. The microblogs might not show accurate information, or the comments that do not support the publisher's viewpoint might be deleted.

Faced with the large amount of data, researchers could explore advanced data analysis methods for social media data analysis in future researches, which would increase the speed of data processing. More data resources, such as Twitter and Facebook, could be used to involve people from different background (Dong and Lian, 2021). However, it is worth noting that this process must retain an understanding of the context in which the data were generated, to avoid cognitive bias.

8.5.4 The Mixed-methods Research

The study explored the HUL elements and its value in the historic areas. The data sets were complemented to solve the research questions. However, these elements of place are in a constant state of flux. Future research could continue the timespan and explore emerging HUL elements and their values as perceived by people.

8.6 Summary

The research demonstrates how the public perceive and value the townscape of historic areas, and how they can contribute to TCA in the context of TCM in China. The research findings achieved the main research objective and sub-objectives. This research contributes to providing recommendations for TCM of historic areas and public participation. The mixed-methods research combined the data sets to achieve a holistic understanding of the

public's ways of seeing and valuing townscapes. In future research, diverse forms of communication between experts and lay people need to be investigated. In addition, the spaces and cultures that continue to be produced in history need to be understood.

References

- ABRAMSON, D. B. 2007. The aesthetics of city-scale preservation policy in Beijing. *Plan Perspect*, 22, 129–166.
- AHMAD, Y. 2006. The scope and definitions of heritage: From tangible to intangible. *International Journal of Heritage Studies*, 12, 292–300.
- AITCHISON, M. 2012. Townscape: Scope, scale and extent. *Journal of Architecture*, 17, 621–642.
- ANGRISANO, M., BIANCAMANO, P. F., BOSONE, M., CARONE, P., DALDANISE, G., DE ROSA, F., FRANCIOSA, A., GRAVAGNUOLO, A., IODICE, S. & NOCCA, F. 2016. Towards operationalizing UNESCO Recommendations on "Historic Urban Landscape": a position paper. *Aestimum*, 165–210.
- APPLETON, J. 1975. The experience of landscape, Chichester: Wiley.
- ASHIHARA, Y. 1983. The aesthetic townscape, Cambridge: Mass.
- ASHWORTH, G. 2011. Preservation, conservation and heritage: Approaches to the past in the present through the built environment. *Asian Anthropology*, 10, 1–18.
- BACON, E. N. 1967. Design of cities. A superbly illustrated account of the development of urban form from ancient Athens to modern Brasilia, Penguin Books.
- BAIRD, G. 1995. The space of appearance, Cambridge: MIT Press.
- BANDARIN, F. & OERS, R. V. 2012. *The historic urban landscape : Managing heritage in an urban century*, Chichester : Wiley.
- BANDARIN, F. & OERS, R. V. 2015. Reconnecting the city: the historic urban landscape approach and the future of urban heritage, Chichester: Wiley
- BOURASSA, S. C. 1990. A paradigm for landscape aesthetics. *Environment and Behavior*, 22, 787–812.
- BOYER, M. C. 1996. The city of collective memory: Its historical imagery and architectural entertainments, MIT Press.

- BUCKLEY, K., COOKE, S. & FAYAD, S. 2015. Using the historic urban landscape to reimagine Ballarat: The local context. *Urban heritage, development and sustainability*. Routledge.
- CHEN, F., LUDWIG, C. & SYKES, O. 2021. Heritage conservation through planning: A comparison of policies and principles in England and China. *Planning, Practice & Research*, 36, 578–601.
- CHEN, M. 陈. 2011. Spatial translation of historical information and the application in urban planning: A case study of Chang'an City in the Tang dynasty 历史信息空间转译及其在城市规划中的应用一以唐长安城变迁研究为例. Mater's Thesis, Southeast University 东南大学.
- CHEN, X. 2016. Academic origins and characteristics of the Chinese stylistic restoration. *Frontiers of Architecture and Civil Engineering in China*, 5, 353–359.
- CHEN, Y. 2010. Shan-Shui city: A Chinese spatial planning tradition and its implications on urban sustainability, Proceeding Book.
- COETERIER, J. F. 2002. Lay people's evaluation of historic sites. *Landscape and urban planning*, 59, 111–123.
- COX, D. 2003. Goodman and Putnam on the making of worlds. Erkenntnis, 58, 33–46.
- CULLEN, G. 1961. *Concise townscape*, London: Architectural Press
- DAI, L., WANG, S., XU, J., WAN, L. & WU, B. 2017. Qualitative analysis of residents' perceptions of tourism impacts on historic districts: a case study of nanluoguxiang in Beijing, China. *Journal of Asian Architecture and Building Engineering*, 16, 107–114.
- DE WOLFE, I. 1949. Townscape: A plea for an English visual philosophy founded on the true rock of Sir Uvedale Price. *The Architectural Review*, 106, 354–62.
- DEGHATI NAJD, M., ISMAIL, N. A., MAULAN, S., MOHD YUNOS, M. Y. & DABBAGH NIYA, M. 2015. Visual preference dimensions of historic urban areas: The determinants for urban heritage conservation. *Habitat International*, 49, 115–125.
- D AZ-ANDREU, M. 2017. Heritage values and the public. Taylor & Francis.

- DONG, X. & LIAN, Y. 2021. A review of social media-based public opinion analyses: Challenges and recommendations. *Technology in Society*, 67, 101724.
- DRAMSTAD, W. E., TVEIT, M. S., FJELLSTAD, W. J. & FRY, G. L. A. 2006. Relationships between visual landscape preferences and map-based indicators of landscape structure. *Landscape and Urban Planning*, 78, 465–474.
- DUAN, D. 段. & SUN, X. 孙. 2010. City characteristics, city style concept and approach 城市特色、城市风貌概念辨析及实现途径. *Architecture and Culture 建筑与文化*, 79–81.
- FARAHANI, L. M., MOTAMED, B. & GHADIRINIA, M. 2018. Investigating heritage sites through the lens of social media. *Journal of Architecture and Urbanism*, 42, 199–211.
- FARMER, J. & KNAPP, D. 2008. Interpretation programs at a historic preservation site: A mixed methods study of long-term impact. *Journal of Mixed Methods Research*, 2, 340–361.
- FRANKL, P. 1986. Principles of architectural history, Cambridge, Mass., MIT Press.
- FUSCO GIRARD, L. 2013. Toward a smart sustainable development of port cities/areas: The role of the "Historic Urban Landscape" approach. *Sustainability*, 5, 4329–4348.
- GEYER, R. 2003. Europeanisation, complexity and the British welfare state. *Policy conference*. Sheffield.
- GINZARLY, M., PEREIRA RODERS, A. & TELLER, J. 2019. Mapping historic urban landscape values through social media. *Journal of Cultural Heritage*, 36, 1–11.
- GRIX, J. 2002. Introducing students to the generic terminology of social research. *Politics* (*Manchester, England*), 22, 175–186.
- GUISE, R. 2015. Community and streetscapes: the art of urban design revisited. *Proceedings of the Institution of Civil Engineers-Urban Design and Planning*, 168, 19–29.
- HALBWACHS, M. 2020. On collective memory, University of Chicago press.
- HALL, S. 1999. Un-settling 'the heritage', re-imagining the post-nation: Whose heritage? *Third text*, 13, 3–13.

- HAN, M. 韩. 2017. Exploring the cultural implications of confucianism, buddhism and taoism in art design and architectural environment 艺术设计、建筑环境的儒释 道文化意境钩沉. *Chongqing Social Sciences 重庆社会科学*, 122–127.
- HEATH, T., OC, T. & TIESDELL, S. 2013. Revitalising historic urban quarters, Routledge.
- HU, J. 胡. 2015. Shanshui City: exploring suatainable city development in China 山水城市•梦想人居——中国城市可持续发展探索. *Architecture Technique 建筑技艺*, 64–71.
- ICOMOS 1987. The Washington Charter: Charter on the Conservation of Historic Towns and Urban Areas.
- ICOMOS 1999. The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance.
- ICOMOS 2008. Charter on Cultural Routes.
- ICOMOS, C. 2015. Principles for the Conservations of Heritage Sites in China (Revised 2015). ICOMOS: Charenton-le-Pont, France.
- JACOBS, J. 2016. The death and life of great American cities, Vintage.
- JACOBS, M. 2011. Psychology of the visual landscape. *Research in Urbanism Series*, 2, 41–54.
- JEREMY, C. W. & LUCAS, L. 2016. Heritage values and legal rules. *Journal of Cultural Heritage Management and Sustainable Development*, 6, 345–364.
- JERP &SEN, G. B. & TVEIT, M. S. 2014. Safeguarding cultural heritage in the urban fringe: the role of legibility. *Landscape Research*, 39, 433–454.
- JIANG, C. 蒋. & ZHAI, B. 翟. 1997. Creation of urban characteristics and protection of historical culture 城市特色创造与历史文化保护. *Urban Development Studies 城市发展研究*, 42–45,+56,+64.
- JIANG, H. 江. & ZHANG, S. 张. 2009. Producing, duplication and characteristics extinction: an analysis on the crisis of characteristic with the theory of Production of Space 生产、复制与特色消亡——"空间生产"视角下的城市特色危机. *Urban Planning Forum 城市规划学刊*, 40–45.

- JIANG, J., ZHOU, T., HAN, Y. & IKEBE, K. 2022. Urban heritage conservation and modern urban development from the perspective of the historic urban landscape approach: A case study of Suzhou. *Land (Basel)*, 11, 1251.
- JIN, X. 2023. A review of cityscape research based on dynamic visual perception. *Land*, 12, 1229.
- KAPLAN, R. & KAPLAN, S. 1989. *The experience of nature : a psychological perspective*, Cambridge : Cambridge University Press.
- KRZYZANOWSKI, M. 2008. Analysing focus group discussions. *In:* RUTH WODAK, M. K. (ed.) *Qualitative Discourse Analysis in the Social Sciences*. Basingstoke: Palgrave Macmillan.
- LEES, L. 2002. Rematerializing geography: the 'new' urban geography. *Progress in Human Geography*, 26, 101–112.
- LEFEBVRE, H. 1991. The production of space, Cambridge: Mass.
- LEI, H. & ZHOU, Y. 2022. Conducting heritage tourism-led urban renewal in Chinese historical and cultural urban spaces: a case study of Datong. *Land*, 2122.
- LI, J. 李. & DONG, W. 董. 2008. An integrated research approach on city map decoding based on reshaping decoding of ancient map of Hangzhou City' 古代城市地图转译的历史空间整合方法——以杭州市古代城市地图为例. City Planning Forum 城市规划学刊, 93–98.
- LIU, L. 刘. 2018. A pictorial vision in architecture: A review of the use of paintings in modern architectural theories and practices 建筑如画——由绘画引申开来的关于现代建筑理论和实践的几点思考. *New Architecture 新建筑*, 22–27.
- LIU, T., BUTLER, R. J. & ZHANG, C. 2019. Evaluation of public perceptions of authenticity of urban heritage under the conservation paradigm of Historic Urban Landscape-a case study of the Five Avenues Historic District in Tianjin, China. *Journal of architectural conservation*, 25, 228–251.
- LLOBERA, M. 2003. Extending GIS-based visual analysis: the concept of visualscapes. *International journal of geographical information science*, 17, 25–48.
- LOGAN, W. S. 2002. The disappearing'Asian'city: protecting Asia's urban heritage in a globalizing world, Oxford University Press.

- LOWENTHAL, D. 1985. *The past is a foreign country*, Cambridge: Cambridge University Press.
- LUQUE-MART NEZ, T., BARRIO-GARC A, S. D., IB áñEZ-ZAPATA, J. Á. & MOLINA, M. Á. R. 2007. Modeling a city's image: The case of Granada. *Cities*, 24, 335–352.
- LV, B. 吕. 2016. The construction of Beautiful China calls for landscape management legislation 美丽中国呼唤景观风貌管理立法. City Planning Review 城市规划, 40, 70–71.
- LYNCH, K. 1960. The image of the city, London: MIT Press.
- LYNCH, K. 1972. What time is this place?, London: MIT Press.
- MASON, W. J., MIRZA, N. & WEBB, C. 2018. Using the framework method to analyze mixed-methods case studies. Sage Publications.
- MEHROTRA, R. 2007. Conservation and change: questions for conservation education in urban India. *Built Environment*, 33, 342–356.
- MENDES ZANCHETI, S. & TONE FERREIRA HIDAKA, L. 2012. Measuring urban heritage conservation: Indicator, weights and instruments (part 2). *Journal of cultural heritage management and sustainable development*, 2, 15–26.
- MOHURD 2014. Guidlines for Formulating and Approving Conservation Plans of Historic Cities, Towns, Villages and Areas.
- MOHURD 2019. Standards for the Protection of Historic Cities.
- MONTEIRO, V., PAINHO, M. & VAZ, E. 2015. Is the heritage really important? A theoretical framework for heritage reputation using citizen sensing. *Habitat International*, 45, 156–162.
- MOON, K. & BLACKMAN, D. 2014. Guide to Understanding Social Science Research for Natural Scientists. *Conservation Biology*, 28, 1167–1177.
- MOTAMED, B. & FARAHANI, L. M. 2018. The evaluative image of the city through the lens of social media: case study of Melbourne CBD. *Journal of Architecture and Urbanism*, 42, 24–33.
- NEWELL, P. 2008. The PRC's Law for the Protection of Cultural Relics. *Art Antiquity* Law volume, 1–58.

- NIJHUIS, S. 2017. GIS-based landscape design research: Stourhead landscape garden as a case study, Delft University of Technology.
- NIJHUIS, S. & LAMMEREN, R. V. 2011. Exploring the visual landscape: Advances in physiognomic landscape research in the Netherlands, The Netherlands: IOS Press, Delft University Press.
- NORA, P. 1989. Between memory and history: Les lieux de mémoire. *Representations*, 26, 7–24.
- NORBERG-SCHULZ, C. 1980. Genius loci: towards a phenomenology of architecture.
- NPC 1989. Law of urban planning in the People's Republic of China.
- NPC 2011. Law of Intangible Cultural Heritage in the People's Republic of China.
- NPC 2017. Law on the Protection of Cultural Relics in the People's Republic of China.
- NPC 2019. Law of Urban and Rural Planning in the People's Republic of China.
- O'DONNELL, P. M. & TURNER, M. 2012. The historic urban landscape recommendation: a new UNESCO tool for a sustainable future. Meeting of IFLA, Cape Tow.
- OC, T., HEATH, T. & TIESDELL, S. 2010. Design in historic urban quarters. *Rivista di Scienze del Turismo-Ambiente Cultura Diritto Economia*, 1, 51–74.
- ODE, Å., TVEIT, M. S. & FRY, G. 2008. Capturing Landscape Visual Character Using Indicators: Touching Base with Landscape Aesthetic Theory. *Landscape Research*, 33, 89–117.
- PANG, B. 庞. 2016. The role and development of cityscape planning 探索城市风貌规划的角色与方向. *Intelligent City 智能城市*, 2, 248.
- PELLITERO, A. M. 2011. The phenomenological experience of the visual landscape. *Research in Urbanism Series*, 2, 57–71.
- PENDLEBURY, J. & PORFYRIOU, H. 2017. Heritage, urban regeneration and place-making. *Journal of urban design*, 22, 429–432.
- PEVSNER, N. 2010. Visual planning and the picturesque, Los Angeles: Getty Research Institute.
- RELPH, E. 1976. *Place and placelessness*, Pion London.

- ROSE, G. 2016. Visual methodologies: an introduction to researching with visual materials, London: SAGE.
- ROSE, G., DEGEN, M. & BASDAS, B. 2010. More on 'big things': building events and feelings. *Transactions of the Institute of British Geographers*, 35, 334–349.
- ROSSI, A. 1984. The architecture of the city, MIT Press.
- ROWE, C. & KOETTER, F. 1984. Collage city, MIT Press.
- SCHOFIELD, J. 2015. Thinkers and feelers': A psychological perspective on heritage and society. *The Palgrave Handbook of Contemporary Heritage Research*. Springer.
- SCOTT, A., CARTER, C., BROWN, K. & WHITE, V. 2009. 'Seeing is Not Everything': Exploring the Landscape Experiences of Different Publics. *Landscape Research*, 34, 397–424.
- SEVENANT, M. & ANTROP, M. 2010. Transdisciplinary landscape planning: Does the public have aspirations? Experiences from a case study in Ghent (Flanders, Belgium). *Land Use Policy*, 27, 373–386.
- SHAMSUDDIN, S., SULAIMAN, A. B. & AMAT, R. C. 2012. Urban landscape factors that influenced the character of George Town, Penang UNESCO World Heritage Site. *Procedia-Social and Behavioral Sciences*, 50, 238–253.
- SHAN, G. 2017. Xujing (emptiness and stillness) in Daoism, aesthetic appreciation of nature, and environmental ethics. *Frontiers of Philosophy in China*, 12, 224–236.
- SHAN, J. 单. 2007. Urban heritage conservation and cultural city construction 城市文化 遗产保护与文化城市建设. *City Planning Review 城市规划*, 9–23.
- SHAN, J. 单. 2010. Social responsibility and social education of Museums 博物馆的社会 责任与社会教育. *Southeast Culture 东南文化*, 9–16.
- SHAN, J. 单. 2011. Social responsibility and social development of Museums 博物馆的 社会责任与社会发展. *Sichuan Cultural Relics 四川文物*, 3–18.
- SHI, L. 施. 2016. Giant Xi'an 大西安. Shaanxi Juxing Culture, Ltd.
- SITTE, C. 1965. City planning according to artistic principles, London: Phaidon.

- SMITH, J. 2014. Applying a cultural landscape approach to the urban context. *Conserving Cultural Landscapes*. Routledge, 182–197.
- SMITH, L. 2006. *Uses of heritage*, London: Routledge.
- STEINBERG, F. 1996. Conservation and rehabilitation of urban heritage in developing countries. *Habitat international*, 20, 463–475.
- STEPHENSON, J. 2008. The Cultural Values Model: An integrated approach to values in landscapes. *Landscape and Urban Planning*, 84, 127–139.
- SUN, S. 孙. 2012. Ancient city planning system of China in Zhouli 《周礼》中的中国古代城市规划制度. City Planning Review 城市规划, 36, 9–13+31.
- SWENSEN, G., JERP &SEN, G. B., S&TER, O. & TVEIT, M. S. 2013. Capturing the intangible and tangible aspects of heritage: Personal versus official perspectives in cultural heritage management. *Landscape research*, 38, 203–221.
- TAN, F. W. 2014. The mean thought of chinese traditional architecture. Applied mechanics and materials. Trans Tech Publication Ltd, 2261–2264.
- TANDY, C. & MURRAY, A. 1967. The isovist method of landscape survey. Methods of Landscape Analysis. *Landscape Research Group, London*, 9–10.
- TANG, Y. & ZHAO, H. 2018. A review of Chinese and western cityscape research 中西 方城市风貌研究的演进综述. *Planners 规划师*, 34, 77–85,+105.
- TAYLOR, K. 2016. The Historic Urban Landscape paradigm and cities as cultural landscapes. Challenging orthodoxy in urban conservation. *Landscape Research*, 41, 471–480.
- THOMAS, G. M., MEYER, J. W., RAMIREZ, F. O. & BOLI, J. 1987. *Institutional structure: Constituting state, society, and the individual*, Sage: Newbury Park, CA.
- TUAN, Y. 1980. Rootedness versus sense of place. Landscape, 24, 3–8.
- TUAN, Y. 1990. *Topophilia : a study of environmental perception, attitudes, and values,* New York: Columbia University Press.
- TVEIT, M., ODE, Å. & FRY, G. 2006. Key concepts in a framework for analysing visual landscape character. *Landscape Research*, 31, 229–255.

- TWEED, C. & SUTHERLAND, M. 2007. Built cultural heritage and sustainable urban development. *Landscape and Urban Planning*, 83, 62–69.
- UNESCO 2011. Recommendation on the Historic Urban Landscape.
- UNESCO 2016. The HUL guidebook. Managing Heritage in Dynamic and Constantly Changing Urban Environments. A Practical Guide to UNESCO's Recommendation on the Historic Urban Landscape. *UNESCO*.
- UNWIN, R. 1913. Town planning in practice: An introduction to the art of designing cities and suburbs, T. Fisher Unwin.
- VAN ASSCHE, K., DUINEVELD, M., DE JONG, H. & VAN ZOEST, A. 2012. What place is this time? Semiotics and the analysis of historical reference in landscape architecture. *Journal of Urban Design*, 17, 233–254.
- VAN DER HOEVEN, A. 2019. Historic urban landscapes on social media: The contributions of online narrative practices to urban heritage conservation. *City, Culture and Society,* 17, 61–68.
- VAN OERS, R. & PEREIRA RODERS, A. 2013. Road map for application of the HUL approach in China. *Journal of Cultural Heritage Management and Sustainable Development*, 3, 4–17.
- VECCO, M. 2010. A definition of cultural heritage: From the tangible to the intangible. *Journal of Cultural Heritage*, 11, 321–324.
- VENTURI, R. 1977. Complexity and contradiction in architecture. The Museum of Modern Art.
- WANG, D. 汪. 2000. Water and urban planning 试论水文化与城市规划的关系. *Urban Planning Forum 城市规划汇刊*, 29–36,+79.
- WANG, J. A., LIANG, S. & SHI, P. 2022. Tourism Geography. *The Geography of Contemporary China*. Springer.
- WANG, J. 王. 2020. "Same with little difference" and "harmony without uniformity" in urban and architectural visual landscape "大同小异"与"和而不同". *Housing 住宅与房地产*, 29.
- WANG, M. 王. 2010. The protection and development research of the total environment of Janfu temple and Small Wild Goose Ppagoda 荐福寺小雁塔整体环境的保护

- *与发展研究*. Master's Thesis, Xi'an University of Architecture and Technology 西安建筑科技大学.
- WANG, N. 1999. Rethinking authenticity in tourism experience. *Annals of tourism research*, 26, 349–370.
- WANG, S. & GU, K. 2020. Pingyao: The historic urban landscape and planning for heritage-led urban changes. *Cities*, 97, 102489.
- WARNER, M. 2002. Publics and counterpublics. *Public Cculture*, 14, 49–90.
- WATERTON, E. 2009. Sights of sites: picturing heritage, power and exclusion. *Journal of Heritage Tourism*, 4, 37–56.
- WATERTON, E., SMITH, L. & CAMPBELL, G. 2006. The utility of discourse analysis to heritage studies: The Burra Charter and social inclusion. *International Journal of Heritage Studies*, 12, 339–355.
- WU, C.-Z. & WANG, J. Modeling tourists perceived authenticity and the sustainable use of cultural heritage. *Urban Plan. Forum*, 98–104.
- WU, Q. 吴. 2013. Harmony of mean, heaven and heart The aesthetic shaping of chinese traditional architecture by Confucianism, Taoism and Zen 中和、天和与心和一儒道禅对中国传统建筑的审美塑造. *Journal of Honghe University 红河学院学报*, 11, 112–115.
- WU, Z. & HOU, S. 2015. Heritage and discourse. *The Palgrave handbook of contemporary heritage research*. Springer.
- XIAO, H. 肖., SONG, F. 宋., WANG, H. 王. & XU, X. 徐. 2012. Learning from Japanese landscape law for Chinese landscape management 日本《景观法》对我国城乡风貌与景观资源空间管治的启示. *Planners 规划师*, 28, 109–112.
- XU, Z. & ZHANG, Y. 2013. Exploring flexibility in urban planning formulation of China. *Architecture and Urban Planning*, 7, 80–83.
- YAN, Y., IOSSIFOVA, D. & REN, Y. 2021. More than 'urban character': an introduction to the concept of fengmao and fengmao-led planning and design in China. *Urban Design International (London, England)*, 26, 211–219.
- YANG, C. 杨. 2014. Historical perspective of urban townscape character research 城市风 貌研究的历史视野. *Urban Problems 城市问题*, 30–36+73.

- YANG, H. 杨. & CAI, X. 蔡. 2005. Protection of urban style and feature: references and revelations 城市风貌保护经验的借鉴与启示. *Urban Planning International 国外城市规划*, 62–64.
- YANG, H. 杨. & CAI, X. 蔡. 2006. Study on the analysis and planning of townscape based on systematic theory 城市风貌的系统构成与规划内容. *Urban Planning Forum 城市规划学刊*, 59–62.
- YU, B. 余. 2008. Interpretation of concept: landscape, townscape and characteristics 解读概念:景观•风貌•特色. *Planners 规划师*, 94–96.
- YU, W. 余., ZHOU, J. 周., CHEN, G. 陈., XU, Y. 徐., TIAN, N. 田. & LI, X. 李. 2020. View, form and feeling: Exploration and practice of cityscape planning 可辨、可塑、可感——城市景观风貌规划的创新探索与实践. *City Planning Review 城市规划*, 44, 91–99.
- ZANCHETI, S. M. & LORETTO, R. P. 2015. Dynamic integrity: A concept to historic urban landscape. *Journal of Cultural Heritage Management and Sustainable Development*, 5, 82–94.
- ZEAYTER, H. & MANSOUR, A. M. H. 2018. Heritage conservation ideologies analysis—Historic Urban Landscape approach for a Mediterranean historic city case study. *HBRC Journal*, 14, 345–356.
- ZHANG, J. 张. 2000a. My primary understanding in the philosophical analysis of identity of cities 对城市特色哲学分析的初步认识. *Planners 规划师*, 113–116.
- ZHANG, J. 张. 2000b. Probe into China cityscape in 21st century 二十一世纪中国城市风貌探. *Huazhong Architecture 华中建筑*, 81–85.
- ZHANG, J. 张. 2007. The Object, Structure, and Method of Urban Landscape Feature Research With a Discussion on Urban Feature 城市景观风貌的研究对象、体系结构与方法浅谈——兼谈城市风貌特色. *Planners 规划师*, 14–18.
- ZHANG, J. 张., ZHAO, G., WU, X. 吴., JIANG, Y. & CHEN, J. 陈. 2000. Theory analysis of city scene information system 城市风貌信息系统的理论分析. *Huazhong Architecture 华中建筑*, 38–41.

- ZHANG, K., DEL VALLE-BRENA, A. G., RIERA, I. R. & ZHAO, J. 2022. Ancient routes, new gateways: a systematic literature review of China's cultural route heritage. *Journal of Cultural Heritage Management and Sustainable Development*.
- ZHANG, S. 张. 2017. Sustainable Conservation for Urban Historic Environment 城市历史环境的可持续保护. *Urban Planning International 国际城市规划*, 32, 1–5.
- ZHANG, S. 张. & ZHEN, X. 镇. 2017. From historical features preservation to urban landscape management based on the historic urban landscape approach 从历史风貌保护到城市景观管理——基于城市历史景观(HUL)理念的思考. *Landscape Architecture 风景园林*, 14–21.
- ZHANG, Z. 张. 2003. The foundation of Chinese architecture culture The Confucian, Tao, Buddhism and Chinese architecture culture 中国建筑文化之根基—儒、道、佛(释)与中国建筑文化. *Huazhong Architecture 华中建筑*, 13–15.
- ZHOU, B., LIU, L., OLIVA, A. & TORRALBA, A. 2014. Recognizing city identity via attribute analysis of geo-tagged images. European conference on computer vision. Springer, 519–534.
- ZHOU, T., ZANG, T., JIANG, J., YANG, X. & IKEBE, K. 2023. Analysis of the influencing factors of social participation awareness on urban heritage conservation: The example of Suzhou, China. *Sustainability (Basel, Switzerland)*, 15, 2713.
- ZUBE, E. H., SELL, J. L. & TAYLOR, J. G. 1982. Landscape perception: research, application and theory. *Landscape planning*, 9, 1–33.

Appendix A: List of Abbreviations

AHD Authorised Heritage Landscape

CBDs Central Business Districts

CVS City's Viewing System

DI Dynamic Integrity

GWGP Giant Wild Goose Pagoda

HA Historic Area

HC Historic City

HCB Historic Cities Branch

HCPIS Historical and Cultural Protection and Inheritance System

HUL Historic Urban Landscape

ICOMOS International Council on Monuments and Sites

LPCR Law on the Protection of Cultural Relics of China

MOHURD Ministry of Housing and Urban–Rural Development

NPC National People's Congress

OPSEs Officially Protected Sites and Entities

PRC People's Republic of China

RCPUHS Shaanxi Provincial Engineering Technology Research Centre for

the Protection and Utilisation of Historic Sites

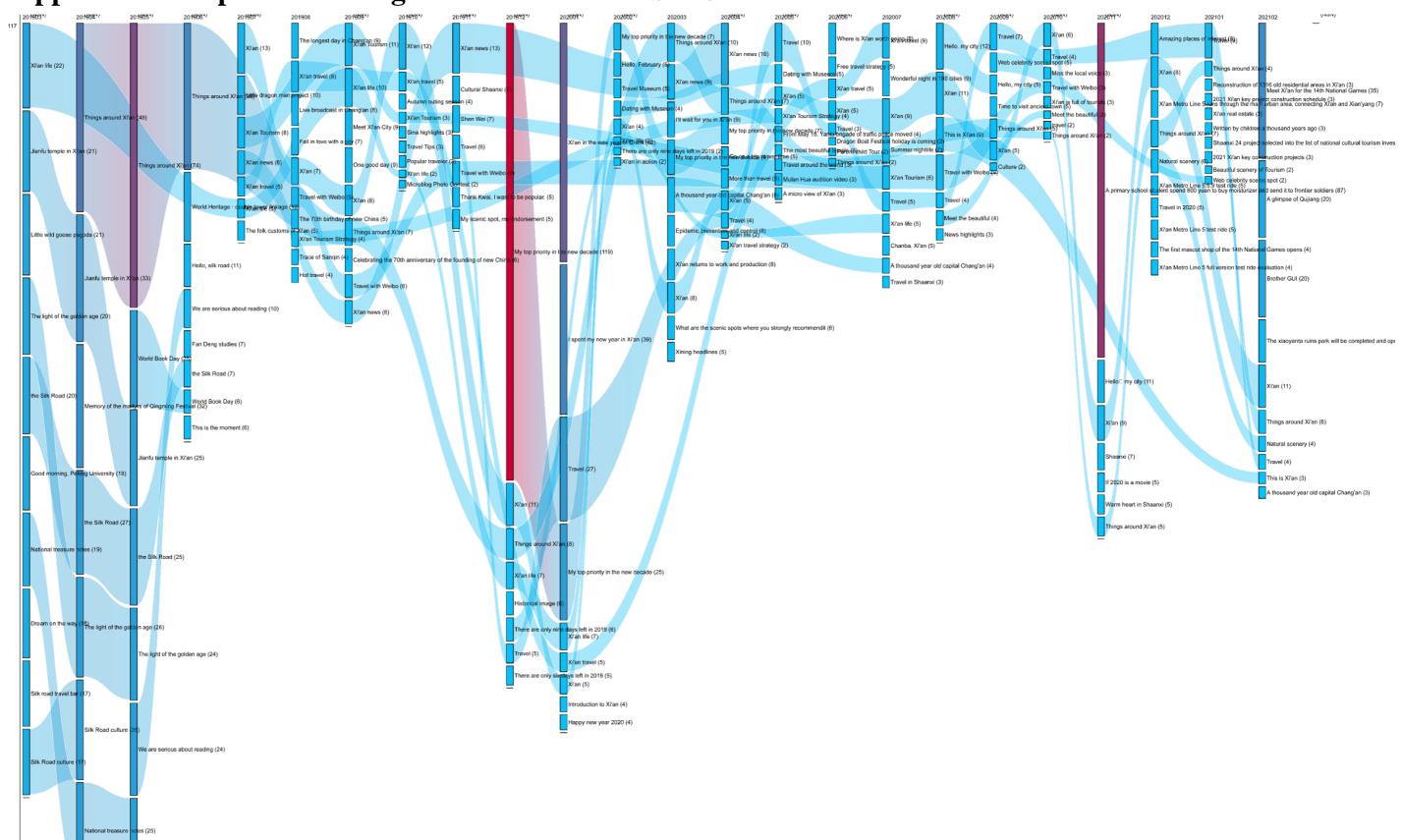
SACH State Administration of Cultural Heritage

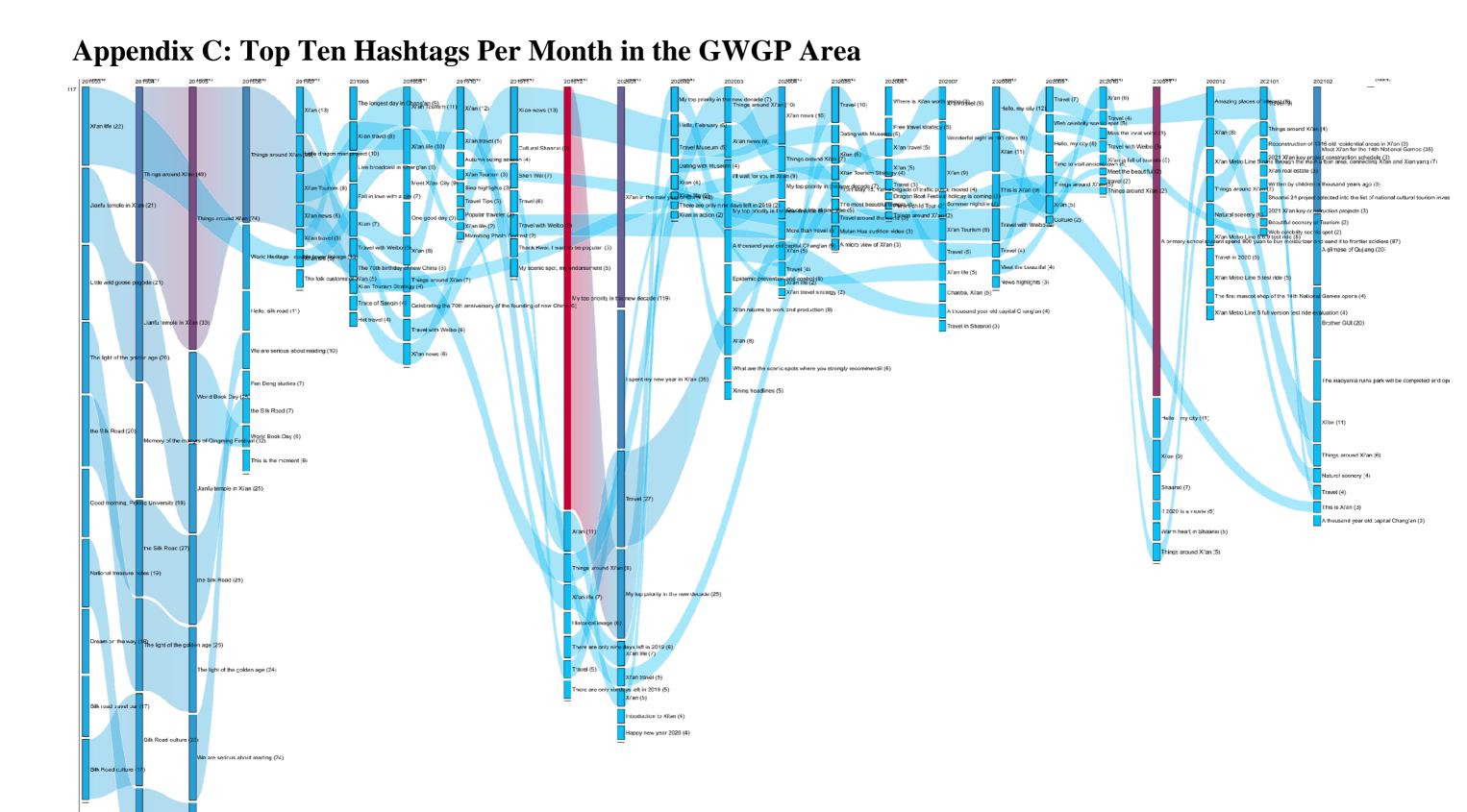
SWGP Small Wild Goose Pagoda

TCA Townscape Character Assessment

UNESCO United Nations Educational, Scientific and Culture Organisation

Appendix B: Top Ten Hashtags Per Month in the SWGP Area





Appendix D: Glossary of Terms

English	Chinese	Meaning
Appropriate Use	Heli liyong (合理利 用)	Heli liyong is a concept used in the Law of the People's Republic of China on the Protection of Cultural Relics (1982; revised 2017).
Buffer Zone/ Construction Control Belt	Jianshe kongzhi didai (建设控制地带)	Jianshe kongzhi didai refers to an area beyond the protection zone, within which the scale, height, colour and setting of approved construction are controlled.
Conservation/ Conservation Practice	Baohu (保护), Baohu Gongzuo (保护工作)	Baohu is a broad concept and conveys the meaning of protection, maintenance, technical intervention and management.
Conservation Plan	Baohu guihua (保护 规划)	Baohu guihua refers to the overall plan for a heritage site, including both conservation and management.
Conservation Process	Baohu chengxu (保护程序)	Baohu chengxu (or chengxu) refers to the step-by-step process outlined in Chapter 2 of the Principles for the Conservation of Heritage Sites in China (revised 2015). It carries the connotations of 'sequence' and 'procedure'.
Cultural Landscape	Wenhua jingguan (文化景观)	According to the 'Operational Guidelines for the Implementation of the World Heritage Convention', cultural landscapes are cultural properties that represent the 'combined works of nature and man' designated in Article I of the Convention. This concept was expressed as 'human landscape' and 'human environment'.

		See also: natural landscape and historic landscape.
Detailed Investigation	Zhongdian diaocha (重点调查)	This is the third stage in the investigatory process of heritage sites (<i>diaocha</i>). It takes place at the site level and involves detailed investigation and collection of information for conservation and research purposes before any intervention occurs. See also: identification and investigation; investigation of selected places.
Historic Area	Lishi diduan (历史地 段)	Refers to an area which truly reflects the traditional features or national and local characteristics of a certain historical period.
Historic Building	Lishi jianzhu (历史 建筑)	Refers to buildings that have certain value and reflect historic features and local characteristics. See also: traditional style building.
Historic Cities, Towns and Villages	Lishi wenhua mingcheng, mingzhen, mingcun (历史文化名城、名 镇、名村)	The State Council may declare an entire urban area to be 'a city of historic or cultural importance' (<i>lishi wenhua mingcheng</i>). Provincial-level governments may likewise designate towns or villages meeting the same criteria.
Historic Conservation Area	Lishi wenhua jieqv (历史文化街区)	Refers to a historic area with a certain scale that is specially rich in preserved cultural relics, with high concentration of historic buildings, and which can more completely and truly reflect the traditional pattern and historical features, approved and announced by the people's governments of provinces, autonomous regions and municipalities directly under the central government.

Historic Environment Element	Lishi huanjing yaosu (历史环境要素)	Refers to the walls, stone steps, pavements, revetments, trees and other elements that constitute the historic townscape surrounding historic monuments and historic buildings.
Historic Landscape	Lishi jingguan (历史 景观)	A historic landscape differs from a cultural landscape in relating specifically to the historic significance of the place, whereas a cultural landscape encompasses a broader meaning and context. See also: natural landscape, cultural landscape.
Historic Monuments and Sites/Heritage Site	Wenw (文物), Wenwu guji (文物古 迹)	Wenwu is an abbreviated form of wenwu guji, commonly translated as 'cultural relics' (for instance, in the official translations of the law from 1982 and 2017). In the Principles, it is translated as 'heritage site' or simply as 'site'. Wenwu is used for tangible heritage, whether moveable or immoveable. It refers mainly to immoveable heritage, that is, heritage sites and buildings, including their associated content and components.
Identification and Investigation	Diaocha (调查)	Diaocha is the basic process for identifying and investigating heritage sites and involves three levels of survey or investigation (pucha, fucha and zhongdian diaocha); wenwu, meaning 'of historic places or sites,' is implicit in the translation. See also: survey and inventory; investigation of selected places; and detailed investigation
Interpretation (Exhibition)	Zhanchen (展陈)	Zhanchen is a two-character abbreviation of the six-character phrase zhanshi chenlie (exhibit + display) and sometimes includes the broad concept implied in the English word 'interpretation'.

Interpretation of Values	Jiazhi chanshi (价值 阐释)	The values of a heritage site should be presented and interpreted in an authentic, integrated and accurate manner.
Investigation of Selected Places	Fucha (复查)	The second stage in the investigatory process of heritage places where a more in-depth investigation of selected sites is carried out. See also: identification and investigation; survey and inventory; detailed investigation.
Natural Landscape	Ziran jingguan (自然 景观)	The original landscape that exists before it is acted upon by human culture (Sauer, 1925). See also: cultural landscape; historic landscape.
Officially Protected Monuments and Sites	Wenwu baohu danwei (文物保护单 位)	Refers to the Historic Monuments and Sites to be protected as approved and announced by the people's government at or above the county level.
Survey and Inventory	Pucha (普查)	The first stage of a three-stage process of investigation into heritage places, <i>pucha</i> refers to general examination. It is a large-scale survey and inventory at the national level aimed at finding unrecorded heritage places. See also: identification and investigation; investigation of selected places; detailed investigation.
Traditional Architecture	Gu jianzhu (古建筑)	Gu jianzhu refers to the use of traditional Chinese building materials (e.g., wood, brick, stone and tiles), styles and techniques employed in both imperial and vernacular structures through the end of the Qing dynasty.

Traditional Style Building	Chuantong fengmao jianzhu (传统风貌建 筑)	Buildings and structures with a certain built- up history and with value and significance for the formation of the integrated features of Historic Areas, except Historic Buildings, Officially Protected Monuments and Sites.
Values (Significance)	Jiazhi (价值)	The three values named in Article 3 – historical, artistic and scientific – derive from the Law of the People's Republic of China on the Protection of Cultural Relics (1982; revised 2002). Social and cultural values are added according to the Principles for the Conservation of Heritage Sites in China (revised 2015).
Visual Catchments (View Corridors)	Shixian tonglang (视线通廊)	Visual catchments should be demarcated within the site's protected area based on analysis, discussion, debate and assessment. Restrictions on the height, colour and form of structures within the visual catchment should be clearly stipulated. The master plan and the local government's urban and rural development plans are the means through which a visual catchment may be protected.

Appendix E: Interview Questions with Policymakers (English Version)

Introduction question

- (1) In the practice of Xi'an, What kind of work do you and your organization do?
- (2) When you think of the townscape character of historic areas, what comes to your mind?

Purpose and Content

- (3) What is the purpose of townscape character management of historic areas?
- (4) What is the content of the elements to be protected?

Assessment and Management Process

- (5) How do you assess the views of the historic areas?
- (6) What are the positive or negative images of the historic areas?
- (7) What is distinctive, characteristic, aesthetically or culturally significant to the view?
- (8) How do you define a good view?
- (9) How do you demarcate the protection zone and buffer zone (including its distance, scale, and shape), axes and viewing points?
- (10) How do you manage the views in and out of the regulatory zones?
- (11) Are there any policies, theories and projects related to the local townscape character management policy?

Outcome

- (12) What do you describe as the benefits or achievements of this policy? What do you describe as the negatives or downsides of this policy?
- (13) How can we measure whether management has been 'successful'?
- (14) How would you describe the changes you have seen in historic areas? Can you give some examples of successful or unsuccessful townscape character management outcomes?

Strategies for Old and New Constructions

- (15) Which parts of the visual landscape of historic areas should be preserved, and which should be changed?
- (16) How should the historic urban landscape be embedded in modern urban space?

Public Perceptions

- (17) What is expected to be perceived by the public from the visual environment of historic areas?
- (18) For historic areas, how could the urban historical landscape be understood and appreciated? How can the public perceive it?
- (19) What do you believe are effective means of communicating information to the public? What are the signs of successful communication with the public?

Policymakers' Needs in the Future

(20) What are the threats or challenges that you are aware of during the planning process? How do you address these problems?

- (21) What are the existing constraints or opportunities to enhance the view and its setting in historic areas?
- (22) What kinds of resources and knowledge are needed to protect the visual landscape?

Concluding Remarks

(23) To summarise, today we have talked about: [list topics]. Would you like to add to what we have already discussed?

Appendix F: The Questionnaire (English Version)

PART A: Background Information/Demographics

1. What is your age?

A.	20s
B.	30s
C.	40s
D.	50s
E.	Over 60
2. Wł	nat is your gender?
A.	Female
B.	Male
3. WI	nat is the highest degree or level of school you have completed? If currently
enrol	led, the highest degree received.
A.	No schooling completed
B.	Nursery school to 6th grade
C.	Middle school graduate
D.	High school degree or equivalent
E.	Bachelor's degree
F.	Master's degree
G.	Doctorate
4. Wł	nat is your current employment status?
A.	Full-time employed (40+ hours a week)
B.	Part—time employed (less than 40 hours a week)

-	
C.	Self-employed
D.	Unemployed
E.	Student
F.	Retired
G.	Other
5. Wh	at is your occupation?
A.	Architecture or urban planner
B.	Work or study in a design-related field
C.	Other
6. Wh	ich of these describes your annual income?
A.	Under ¥10,000
B.	¥10,000 to ¥299,999
C.	¥300,000 to ¥599,999
D.	¥600,000 to ¥899,999
E.	¥900,000 and greater
F.	Prefer not to answer
7. You	are a of Xi 'an City.
A.	Local resident
B.	Tourist (skip to question 12, please)
C.	Others (please jump to question 12)
8. Hov	w many years have you lived here in Xi'an?

A.	Less than 5 years
B.	6 to 15 years
C.	16 to 30 years
D.	More than 30 years
9. This	s place is close to your
A.	Home
B.	Workplace
C.	School
D.	Other
10. Ho	w far is the distance between [your answer to Question 9] and this area?
A.	< 1 kilometre
B.	1 kilometre – 3 kilometres
C.	3 kilometres – 6 kilometres
D.	Further than 6 kilometres
11. Ho	w often do you visit this place?
A.	Nearly every day
B.	One or two times per week
C.	One or two times per month
D.	A few times a year
E.	Rarely

A.	Shopping
B.	Work
C.	Leisure
D.	Passing by
E.	Tourism
F.	Other reason
13. Ho	ow familiar are you with the historic context of this place?
A.	Not at all familiar
B.	Not very familiar
C.	Moderately familiar
D.	Familiar
E.	Very familiar
14. Do	you have any memories/stories/imaginations related to the historic areas?
A.	Yes
B.	No
PART	B: Visual Perceptions
15. You can perceive the following types of Tangible Elements during your visit to this area.	

12. What is the reason for you being here today?

Directions: Please rate how much of the element you perceived by circling one number from the scale.

1= Not at all, 2= A little, 3= Moderately, 4= Quite a bit, 5= Extremely

Surrounding natural environment	1,2,3,4,5
Different functional regions of urban space	1,2,3,4,5
Visual relationships of regions	1,2,3,4,5
Vegetation of different types	1,2,3,4,5
Transportation routes	1,2,3,4,5
The mass, scale, form, details of buildings	1,2,3,4,5
Natural and constructed water features	1,2,3,4,5
Bridges and walls	1,2,3,4,5
Urban art, sculpture, site furnishings	1,2,3,4,5

16. You can perceive the following types of Intangible Elements during your visit to this area.

Directions: Please rate how much of the element you perceived by circling one number from the scale.

1= Not at all, 2= A little, 3= Moderately, 4= Quite a bit, 5= Extremely

Festivals, rituals	1,2,3,4,5

Traditional music, dance, performance 1,2,3,4,5

Spiritual worship	1,2,3,4,5
Places of memory, commemoration of past events	1,2,3,4,5
Local cuisine	1,2,3,4,5
Traditional arts and crafts and workplaces	1,2,3,4,5

17. In your opinion, which tangible or intangible element of a historic area is the most important?

- A. Surrounding natural environment
- B. Different functional regions of urban space
- C. Visual relationships of regions
- D. Vegetation of different types
- E. Transportation routes
- F. The mass, scale, form, details of buildings
- G. Natural and constructed water features
- H. Bridges and walls
- I. Urban art, sculpture, site furnishings
- J. Festivals, rituals
- K. Traditional music, dance, performance
- L. Spiritual worship
- M. Places of memory, commemoration of past events
- N. Local cuisine
- O. Traditional arts and crafts and workplaces

18. How would you describe the visual environment?

Directions: 1= Not at all, 2= A little, 3= Moderately, 4= Quite a bit, 5= Extremely.

Careful management (a sense of order and care)	1,2,3,4,5
Naturalness (close to nature)	1,2,3,4,5
Complexity (diversity and richness of landscape elements)	1,2,3,4,5
Openness (the openness of viewshed)	1,2,3,4,5
Historicity (the visual presence of different time layers; diversity of cultural elements)	1,2,3,4,5
Legibility (presenting a distinguishable and memorable visual image)	1,2,3,4,5
Undisturbed (elements are not deviated from the landscape context)	1,2,3,4,5
Coherence (a unity of sense, repeating patterns of colour and texture)	1,2,3,4,5
Seasonal change (views changing with season and weather)	1,2,3,4,5

- 19. Please tick the most appealing and valued qualities listed above.
- A. Careful management (a sense of order and care)
- B. Naturalness (close to nature)

C.	Complexity (diversity and richness of landscape elements)		
D.	Openness (the openness of viewshed)		
E.	Historicity (the visual presence of different time layers; diversity of cultural		
elemei	nts)		
F.	Legibility (presenting a distinguishable and memorable visual image)		
G.	Undisturbed (elements are not deviated from the landscape context)		
H.	Coherence (a unity of sense, repeating patterns of colour and texture)		
I.	Seasonal change (views changing with season and weather)		
20. Is 1	this place linked to any values?		
	Historic Value Yes No Do not know		
	Artistic Value		
	Social Value		
	Cultural Value		
	Scientific Value		
21.	In general, are you satisfied with the quality of the view here?		
A.	Highly Dissatisfied		
B.	Dissatisfied		
C.	Moderately		
D.	Satisfied		

E.	Highly	Satisfied

22. Please give your name, we chat or telephone number if you would like to participate in a focus group for this research.

This is the end of the questionnaire.

Thank you very much for your cooperation.

Appendix G: Focus Groups Questions (English Version)

PART A: Background Information/Demographics

1. What is your age?

A.

B.

C.

Other

17 or under

18 to 29

C.	30 to 39
D.	40 to 49
E.	50 to 59
F.	60 to 69
G.	70 to 79
H.	80 or over
2. W	hat is your gender?
A.	Female
B.	Male
C.	Other
D.	Prefer not to answer
3. W	hat is your occupation?
A.	Architecture or urban planner
B.	Work or study in a design-related field

4. You	are a of Xi 'an City.
D.	Local resident
E.	Tourist
5. How	many years have you lived here in Xi'an?

PART B: Visual Perception of Historic Urban Areas

Now, I will show you some photos taken from the two historic urban areas: SWGP and SWGP area. Some photos were taken by yourselves, and some were collected on social media. We will conduct our focus group interview using these materials.

Theme One: General Perception and Awareness of Historic urban areas

- What comes to mind when I mention the two historic urban areas?
- Is there anything you know about the historical or cultural context of the two historic urban areas? If there is, can you describe it?

Theme Two: Attachment and Sense of Place

- Which elements (mark on the pictures) do you value? What do the elements mean to you?
- Are there any elements that remind you of urban history and culture? What elements in the historical sites can you use to tell the urban history and culture?
- Do you have any memories/stories/imaginations of the historic urban areas?

• What is distinctive, characteristic, aesthetically or culturally significant to the view of the two places?

Theme There: Perception of Views

- Where are the positive or negative images of urban space? (Mark on the pictures and explain why)
- In general, do you think the current views of this place are good?
- What are the townscape characteristics of the places?
- What are the townscape characteristics of a good view?
- What existing constraints or opportunities to enhance the view and its setting in historic urban areas?
- How will you explain the visual concepts you used? How has the historical urban landscape been understood and appreciated?

Theme Four: Attitude and Suggestions to the Old and Modern Construction

- What is your view on urban history and modernization? How important is the historical reference in modern urban space?
- What changes do you perceive in the urban landscape of this area over time?
- Do you think the historic urban landscape is easy to perceive in these places?
- How do you understand and appreciate the historical urban landscape?
- Which parts of the historic urban landscape should be preserved, and which should be changed over time?
- Which views are good or bad examples of harmony between old and new buildings?

• How should the historical urban landscape have embedded in modern urban space?

PART C: Concluding Remarks

To summarize, today we've talked about: [list topics]. Would anyone like to add to what we've already discussed?

I'd like to thank you all for taking the time to participate in this group discussion. Enjoy the rest of your day.

Appendix H: Results of T-test Analysis

SPSS output for t-test of perceived elements mean score in the two areas

		Levene's Test for								
		Variano		t-test for Equality of Means 95% Cor					Confidence Interval of the	
							Mean	Std. Error	Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
Surrounding natural environment	Equal variances assumed	0.251	0.617	0.332	217	0.741	0.039	0.119		0.274
	Equal variances not assumed			0.330	207.792	0.741	0.039	0.119	-0.196	0.275
Different functional regions of urban space	Equal variances assumed	0.016	0.899	-1.903	217	0.058	-0.239	0.126	-0.486	0.009
	Equal variances not assumed			-1.890	203.856	0.060	-0.239	0.126	-0.488	0.010
Visual relationships of regions	Equal variances assumed	0.010	0.922	-1.688	217	0.093	-0.206	0.122	-0.447	0.035
	Equal variances not assumed			-1.685	208.678	0.094	-0.206	0.122	-0.448	0.035
Vegetation of different types	Equal variances assumed	2.828	0.094	0.588	217	0.557	0.079	0.135	-0.187	0.346
	Equal variances not assumed			0.595	216.595	0.552	0.079	0.134	-0.184	0.343
Transportation routes	Equal variances assumed	3.420	0.066	-2.717	217	0.007	-0.305	0.112	-0.526	-0.084
	Equal variances not assumed			-2.695	202.161	0.008	-0.305	0.113	-0.528	-0.082
Natural and constructed water Features	Equal variances assumed	0.344	0.558	-2.184	217	0.030	-0.268	0.123	-0.510	-0.026
	Equal variances not assumed			-2.188	212.063	0.030	-0.268	0.122	-0.509	-0.027
The mass, scale, form, details of buildings	Equal variances assumed	1.782	0.183	-2.147	217	0.033	-0.264	0.123	-0.507	-0.022
Ü	Equal variances not assumed			-2.149	211.421	0.033	-0.264	0.123	-0.507	-0.022
Bridges and walls	Equal variances assumed	2.032	0.155	-0.621	217	0.535	-0.089	0.144	-0.373	0.194
	Equal variances not assumed			-0.627	216.009	0.531	-0.089	0.143	-0.370	0.192
Urban art, sculpture, site furnishings	Equal variances assumed	4.629	0.033	-5.353	217	0.000	-0.624	0.117	-0.853	-0.394
	Equal variances not assumed			-5.322	205.264	0.000	-0.624	0.117	-0.855	-0.393
Festivals, rituals	Equal variances assumed	4.455	0.036	-3.150	217	0.002	-0.397	0.126	-0.646	-0.149
	Equal variances not assumed			-3.117	199.741	0.002	-0.397	0.127	-0.648	-0.146
Traditional music, dance, performance	Equal variances assumed	1.171	0.280	-2.387	217	0.018	-0.319	0.134	-0.583	-0.056
	Equal variances not assumed			-2.371	204.262	0.019	-0.319	0.135	-0.585	-0.054
Spiritual worship	Equal variances assumed	0.056	0.813	0.663	217	0.508	0.087	0.131	-0.171	0.344
	Equal variances not assumed			0.665	213.673	0.506	0.087	0.130	-0.170	0.343
Places of memory, commemoration of past	Equal variances assumed	1.353	0.246	-1.731	217	0.085	-0.215	0.124	-0.460	0.030
events	Equal variances not assumed			-1.724	206.892	0.086	-0.215	0.125	-0.461	0.031
Local cuisine	Equal variances assumed	2.469	0.118	-1.765	217	0.079	-0.239	0.135	-0.506	0.028
	Equal variances not assumed			-1.751	202.539	0.081	-0.239	0.137	-0.508	0.030
Traditional arts and crafts and work places	Equal variances assumed	0.000	0.998	-0.520	217	0.604	-0.069	0.134	-0.333	0.194
	Equal variances not assumed			-0.520	211.342	0.604	-0.069	0.133	-0.333	0.194

SPSS output for t-test of perceived visual characters mean score in the two areas

		Levene's Test for Variance	t-test for Equality of Means							
			Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F							Lower	Upper
Careful management	Equal variances assumed	1.800	0.181	-1.639	217	0.103	-0.192	0.117	-0.423	0.039
	Equal variances not assumed			-1.640	211.180	0.102	-0.192	0.117	-0.423	0.039
Naturalness	Equal variances assumed	5.658	0.018	2.348	217	0.020	0.299	0.127	0.048	0.550
	Equal variances not assumed			2.400	215.530	0.017	0.299	0.125	0.054	0.545
Complexity	Equal variances assumed	1.061	0.304	-2.531	217	0.012	-0.299	0.118	-0.532	-0.066
	Equal variances not assumed			-2.545	214.352	0.012	-0.299	0.118	-0.531	-0.067
Openness	Equal variances assumed	5.537	0.020	-2.233	217	0.027	-0.273	0.122	-0.514	-0.032
	Equal variances not assumed			-2.219	204.912	0.028	-0.273	0.123	-0.516	-0.030
Historicity	Equal variances assumed	0.079	0.779	-0.285	217	0.776	-0.034	0.118	-0.266	0.199
	Equal variances not assumed			-0.285	209.427	0.776	-0.034	0.118	-0.266	0.199
Legibility	Equal variances assumed	0.690	0.407	-1.175	217	0.241	-0.137	0.117	-0.367	0.093
	Equal variances not assumed			-1.176	211.561	0.241	-0.137	0.117	-0.367	0.093
Undisturbed	Equal variances assumed	0.368	0.545	0.680	217	0.498	0.083	0.122	-0.157	0.322
	Equal variances not assumed			0.683	214.070	0.495	0.083	0.121	-0.156	0.321
Coherence	Equal variances assumed	0.283	0.595	-0.404	217	0.686	-0.051	0.125	-0.298	0.196
	Equal variances not assumed			-0.403	206.377	0.688	-0.051	0.126	-0.299	0.198
Seasonal change	Equal variances assumed	0.726	0.395	0.269	217	0.788	0.037	0.136	-0.232	0.305
	Equal variances not assumed			0.270	214.570	0.787	0.037	0.136	-0.231	0.304