

# The University of Sheffield Department of Landscape Architecture

# Growing Up in Beijing: Children's outdoor play and related experiences across three generations

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#### Abstract

Aiming to document children's daily outdoor play experiences in a rapidly developing urban environment, this research is based on a case study involving children living in the central Shichahai area in Beijing to provide an understanding of the subject from the scarce Chinese perspective. This study investigates its subject in terms of four dimensions, space, people, activities and time (SPAT). The children's play is considered not only through their own experience, but also through that of their parents and grandparents' generations, so covering a lengthy span of urban development history from 1950s to 2010s. This study employs a qualitative triangulation approach to investigating childhood experience, using multiple qualitative data collection methods including interviews, observations, diaries and data drawn from various sources, people, environmental settings and texts. This data records the children's outdoor play experience as well as the changes in those experiences across generations, and its analysis addresses the lack of knowledge and understanding of childhood play experience in Chinese cities. The factors which have a profound influence on children's play experience in a developing urban context, are discussed and interpreted in terms of a range of factors which have influenced the transformation of the urban environment, including economic development, policy implications and cultural traditions. Based on the insights drawn from this evidence, this study offers key recommendations for policy and practice, highlighting methods which can help to develop a more child-friendly city, in which children's use of the urban environment is considered and the children's voices are heard.

ACKNOWLEDGEMENTS	I
ABSTRACT	
CHAPTER ONE INTRODUCTION	1
1.1 GROWING UP IN THE METROPOLIS OF BEIJING	1
1.2 Research Background	
1.3 TERMINOLOGY AND THEORETICAL BACKGROUND	5
1.4 Scope of the research	7
1.4.1 Shichahai as the case study area	7
1.4.2 Ages of Childhood	7
1.5 Research aim and objectives	9
1.6 RESEARCH QUESTIONS	
1.7 Thesis structure	
CHAPTER TWO LITERATURE REVIEW	
Introduction	
2.1 GROWING UP IN CITIES PROGRAMME WORLD-WIDE AND IN CHINA	
2.1.1 Growing Up in Cities (GUIC) programme	
2.1.2 Research into children's outdoor play environment in the Chin	ese context16
2.1.3 Research Gap	
2.2 SPACE FOR PLAY	
2.2.1 Territorial range	
2.2.3 Affordance	
2.2.4 Constructed and found space	
2.3 PEOPLE AND PARTNERS FOR PLAY	24
2.3.1 Free range and independent mobility	
2.3.2 Other children	
2.3.3 Parents	
2.3.4 Grandparents	
2.4 ACTIVITIES OF PLAY	
2.4.1 Definitions of play	
2.4.2 Typology of games	
2.4.3 Play interventions	
2.4.4 Natural interactions	
2.5 TIME FOR PLAY	
2.5.1 Daily routines	
2.5.2 Influential factors on time spent on outdoor play	
2.5.3 Health problems associated with less outdoor physical activity	
SUMMARY	
CHAPTER THREE RESEARCH DESIGN	
Introduction	

3.1 PHILOSOPHICAL APPROACH	
3.2 METHODOLOGICAL APPROACH	
3.3 PILOT STUDY	
3.3.1 Confirm case study site	
3.3.2 Revised data collection methods	
3.3.2.1 Interviews	
3.3.2.2 Observations	
3.3.2.3 Diary	
3.4 DATA COLLECTION AND TRIANGULATION FRAMEWORK	
3.4.1 Interviews	
3.4.1.1 Semi-structured interviews with children	
3.4.1.2 Photo-voice with children	
3.4.1.3 Interviews with adults	
3.4.2 Observations	
3.4.2.1 Participant observation	
3.4.2.2 Structured observation - Behaviour mapping	
3.4.3 Diary	
3.4.4 Archives	
3.4.5 The data triangulation framework	
3.5 DATA ANALYTIC STRATEGY	
3.5.1 Data of interviews	
3.5.2 Data of observations	
3.5.3 Data of Diaries	
3.6 RESEARCH ETHICS	
3.6.1 Invitation of child-participants	
3.6.2 Informed consent during the data collection	61
3.6.3 Data confidential measures	61
SUMMARY	
CHAPTER FOUR THE CASE STUDY AREA — SHICHAHAI	63
INTRODUCTION	
4.1 Case study area of Shichahai, Beijing	
4.2 HISTORICAL CONTEXT OF THE CASE STUDY AREA	
4.2.1 Urban development history of Beijing as a historical capital cit	y67
4.2.2 Conservation of historic constructions in the inner-city area	
4.3 Physical environment of Shichahai	
4.3.1 Decreasing outdoor spaces in hutong communities	
4.3.2 Public green spaces	
4.4 Social environment of Shichahai	
4.4.1 Political and cultural centre	
4.4.2 Neighbourhoods in hutong communities	
4.5 ECONOMIC DEVELOPMENT	

SUMMARY		81
CHAPTER FIVE	SPACE FOR PLAY	83
INTRODUCTION		
5.1 PLAY SPACES W	VITHIN HABITUAL RANGE	
5.1.1 Car parki	ng	
5.1.2 Pavement	.s	
5.1.3 Squares		
5.1.4 Greenspa	ces	
5.1.5 Playgrour	nds	91
5.2 PLAY SPACES W	WITHIN FREQUENTED RANGE	94
5.2.1 Urban par	·ks	94
5.2.2 Street par	ks	96
5.3 PLAY SPACES W	WITHIN OCCASIONAL RANGE	
5.3.1 Amuseme	ent parks	
5.3.1 Villages of	on outskirt districts of Beijing	
5.4 PLAY SPACES E	BEYOND THE TERRITORIAL RANGE	
5.4.1 Remote p	laces in the travel range	
5.4.2 Places in	the imaginary range	
5.5 TERRITORIAL F	RANGE OF PARENT AND GRANDPARENT GENERATIONS	
5.5.1 Territoria	l range of parents generation	
5.5.2 Territoria	l range of grandparents generation	
SUMMARY		
CHAPTER SIX	PEOPLE AND PARTNERS FOR PLAY	
INTRODUCTION		
6.1 NARROW SCOP	E OF CHILDREN'S FREE RANGE NOWADAYS	
6.1.1 Parentally	v permitted free range	
6.1.2 Everyday	travelling to schools	
6.1.3 Outdoor p	play beyond licences	
6.2 CARERS AND P	LAYMATES OF NOWADAYS OUTDOOR PLAYS	
6.2.1 Parents		
6.2.2 Grandpar	ents	
6.2.3 Other chi	ldren	
6.3 PARENTAL CON	NCERNS ABOUT POTENTIAL SAFETY PROBLEMS	
6.3.1 Worries a	bout traffic dangers	
6.3.2 Worries a	bout strangers	
6.4 PLAY FRIENDS	AND CARERS IN PREVIOUS CHILDHOODS	
6.4.1 Free rang	e in the older generations' childhoods	
6.4.2 Playing w	vith siblings	
6.4.3 Playing w	/ith other children	
SUMMARY		

CHAPTER SEVEN	ACTIVITIES OF PLAY	141
INTRODUCTION		141
7.1 PLAY RELATED	EXPERIENCES IN CHILDHOOD	142
7.1.1 Category s	system of childhood play experiences	142
	es of play related experiences	
7.2 CHILDHOOD GA	MES	146
7.2.1 Games in o	contemporary childhood	146
7.2.2 Games in t	the childhood of parents generation	
7.2.3 Games in t	the grandparents generation	151
7.3 EXPERIENCE OF	INTERACTION WITH NATURAL ELEMENTS	152
7.3.1 Raising an	imals and playing with insects in contemporary childhood	
7.3.2 Planting a	nd farming in contemporary and previous childhoods	154
7.3.2.1 Plantin	g and farming in contemporary childhood	154
7.3.2.2 Plantin	g and farming in previous childhoods	157
	the natural environment in contemporary and previous childhoods	
	g in the natural environment in contemporary childhood	
	g in the natural environment in past childhoods	
	vTIONS	
	ventions in contemporary childhood	
-	modes of play interventions nowadays	
•	d interventions in past childhoods	
CHAPTER EIGHT	TIME FOR PLAY	173
INTRODUCTION		173
8.1 CHILDREN'S DA	ILY ACTIVITIES	174
8.1.1 Six types of	of children's daily activities	174
8.1.2 The confli	ct between study and play	176
8.2 TIME SPENT ON	PLAYING	
8.2.1 Playing ou	tdoors or indoors	184
8.2.2 Time for o	butdoor play	
8.3 TIME SPENT ON	PLAYING IN PAST CHILDHOODS	
8.3.1 Plenty of t	ime spent on play	
8.3.2 Helping w	ith daily chores	195
SUMMARY		196
CHAPTER NINE	DISCUSSION	
INTRODUCTION		197
9.1 SIGNIFICANT PH	IENOMENA IN CHILDREN'S OUTDOOR PLAY AND RELATED EXPERIENCES	
9.1.1 Children's	territorial range	
9.1.2 Children's	free range	
9.1.3 Different p	blay friends and carers of children's outdoor play	

9.1.4 Dominant parenting style of over-supervision	
9.1.5 Changing play activities in the context of urbanization	
9.1.6 Decreasing time spent on outdoor play	
9.2 DOMINANT INFLUENCE FACTORS OF CHILDREN'S PLAY AND RELATED EXPERIENCES	211
9.3.1 Urban environment transformation	
9.3.2 Economic development	212
9.3.3 Policy implementation	213
9.3.4 Cultural traditions	214
SUMMARY	215
CHAPTER TEN CONCLUSION	217
10.1 REVIEW OF THE RESEARCH	217
10.2 Research contributions	218
10.2.1 Contributions to knowledge	
10.2.2 Contributions to theories	
10.3 RECOMMENDATION FOR POLICY AND PRACTICE	221
10.3.1 Recommendation for social policy	
10.3.2 Recommendation for urban planning	
10.3.3 Recommendation for landscape design	
10.4 LIMITATIONS OF RESEARCH METHODOLOGY AND OUTCOMES	
10.4.1 Limitations of methodology as single case study	
10.4.2 Limitations of data collections	
10.4.3 Limitations of data analysis	
10.5 Further research suggestions	
BIBLIOGRAPHY	229
APPENDIX	237
INTERVIEW QUESTIONS WITH CHILDREN	237
EXTENDED INTERVIEW QUESTIONS WITH CHILDREN	238
INTERVIEW QUESTIONS WITH ADULTS AS GUARDIANS	239
INTERVIEW QUESTIONS WITH ADULTS AS LOCAL RESIDENTS	240
GENERAL INTERVIEW QUESTIONS WITH TEACHERS	240
GENERAL INTERVIEW QUESTIONS WITH OFFICIALS	240
EXAMPLE OF BEHAVIOUR MAPPING RECORD	242
EXAMPLE OF DIARY FORM	246

# List of Figures

Figure 1.1 Land area of Shichahai	8
Figure 1.2 Thesis Structure	11
Figure 3.1 Methodological functions of interview	49
Figure 3.2 Methodological functions of observation	53
Figure 3.3 Methodological functions of diary	55
Figure 3.4 Methodological functions of data archive	56
Figure 3.5 Data triangulation framework	58
Figure 4.1 Data collection conduced in seven street committees	65
Figure 4.2 Bird-view of hutongs and courtyard-houses in Shichahai area	66
Figure 4.3 Hutongs in Shichahai area	66
Figure 4.4 Courtyard-houses in Shichahai area	66
Figure 4.5 District development history of Beijing	68
Figure 4.6 Historical protected areas	70
Figure 4.7 Three types of buildings with different construction history	72
Figure 4.8 Traffic in Hutongs	73
Figure 4.9 Changing of courtyard house outdoor spaces	74
Figure 4.10 Views in Beihai Park	75
Figure 4.11 People's activities in Beihai Park	75
Figure 4.12 Insect exhibition in Jingshan Park	76
Figure 4.13 Views from Jingshan Park facing towards the Forbidden City	76
Figure 4.14 Shichahai Children's Park	76
Figure 4.15 Green spaces in Shichahai area	77
Figure 4.16 Summary of urban development history of Beijing	82
Figure 5.1 Spaces for play in children's habitual range	84
Figure 5.2 Car parking	85
Figure 5.3 Car parking	85
Figure 5.4 Car parking	85
Figure 5.5 Vehicle access alleys	86
Figure 5.6 Vehicle access alleys	86
Figure 5.7 Vehicle access alleys	86
Figure 5.8 Pavement	87
Figure 5.9 Pavement	87

Figure 5.10 Pavement	87
Figure 5.11 Pavement	88
Figure 5.12 Pavement	88
Figure 5.13 Square	89
Figure 5.14 Square	89
Figure 5.15 Square	89
Figure 5.16 Greenspaces	90
Figure 5.17 Greenspaces	90
Figure 5.18 Greenspaces	90
Figure 5.19 Greenspaces	91
Figure 5.20 Greenspaces	91
Figure 5.21 Greenspaces	
Figure 5.22 Playground	
Figure 5.23 Playground	
Figure 5.24 Playground	
Figure 5.25 Playground	
Figure 5.26 Playground	
Figure 5.27 Playground	
Figure 5.28 Location of parks in the frequented range	
Figure 5.29 Entrance and pedestrian flow in Shichahai children's park	
Figure 5.30 Masterplan of Shichahai children's park	
Figure 5.31 Spatial distribution of children	99
Figure 5.32 Children pass through	101
Figure 5.33 Stationary- no movement	101
Figure 5.34 Stationary- with movement	101
Figure 5.35 Translocation- slow	101
Figure 5.36 Translocation- medium	102
Figure 5.37 Translocation- fast	102
Figure 5.38 Children age 0-2	103
Figure 5.39 Children age 3-5	103
Figure 5.40 Children age 6-8	103
Figure 5.41 Children age 9-11	103
Figure 5.42 Roller coaster in the Happy Valley	105
Figure 5.43 Children's playground in the Happy Valley	105

Figure 5.44 Traveling places in domestic	108
Figure 5.45 Traveling places in overseas	109
Figure 6.1 Frequency of going to schools alone	119
Figure 6.2 Age distributions of travelling to schools alone	119
Figure 6.3 Recorded out of licence independent play behaviour	122
Figure 6.4 Demographic of recorded care-givers during whole six days	123
Figure 6.5 Areas supervised by paternal carers	124
Figure 6.6 Areas supervised by maternal carers	124
Figure 6.7 Areas supervised by grandmothers	127
Figure 6.8 Areas supervised by grandfathers	127
Figure 7.1 Activity types in the contemporary and past childhood	145
Figure 7.2 Games in the urban park nowadays	146
Figure 7.3 Pot-planting in the classroom	155
Figure 7.4 Farmland one the vacant area within 2nd Ring Road	156
Figure 7.5 Operation mode of the play interventions	168
Figure 7.6 Interventional toy selling	169
Figure 7.7 Interventional street-food selling	169
Figure 7.8 Gambling games as play intervention	170
Figure 7.9 Street performances	170
Figure 7.10 Play interventions in traditional festivals	171
Figure 7.11 Seasonal interventions	171
Figure 8.1 Colour coded children's daily activities	177
Figure 8.2 Time spent on outdoor play and indoor play	183
Figure 8.3 Children's preferences of playing outdoors or indoors	184
Figure 8.4 Parent's attitudes towards children's outdoor play	186
Figure 8.5 Children's preference of time for outdoor play	190
Figure 8.6 Outdoor temperature and sunrise and sunset conditions	191

## List of Tables

Table 3.1 Interview Participant Profile	49
Table 3.2 Behaviour mapping conducting days	53
Table 6.1 Children-parents interaction patterns	126
Table 6.2 Children-grandparents interaction patterns	128
Table 7.1 Categories of childhood paly experiences	144
Table 7.2 Observed Play interventions	165
Table 8.1 Categories of children's daily activities	175

#### Chapter One Introduction

### 1.1 Growing up in the metropolis of Beijing

UNICEF (1989) says that every child has the right to grow up in an environment where they feel safe and secure, to have access to basic services and clean air and water where they can play, learn and grow and where their voice is heard and matters. In Beijing, the capital city of the People's Republic of China, according to the newest data of 2010 Population Census there are around 1.7 million children aged from 0 to 14 years. The study of children's daily experiences of growing up in this rapidly developing metropolis provides significant evidence of how economic development and changing urban environments influence their lives and informs our consideration of policy implications. By hearing their voices and learning from children themselves, this research aims to examine how children's daily lives and experience are impacted by this development; this understanding will be used to suggest public policies and design guidelines for Chinese urban planners, landscape designers and other specialists who want to build a better city with benefit to children as one of their main concerns.

Inspired by the Growing Up in the City (GUIC) projects (Lynch, 1977; Chawla, 2002), which have been conducted twice worldwide without including China, this research will provide new understandings from the perspective of the Chinese capital city. With a focus on their use of local environments and resources, children were given opportunities to share their feelings and understanding of their daily experiences of outdoor environments in the central urban area of Beijing. This study considers the experiences of those who are in their childhood now, and the experiences of earlier generations, their parents and other adults who have grown up in this central area, as well as using archive data. The aim is to fill the gap in knowledge about children's daily experiences in Chinese cities.

For children living in the central area of Beijing, the particular environmental, social, political and cultural contexts of the surrounding environments can make their childhood daily play experience distinct from experiences of growing-up in other cities, either in China or overseas. Generally this research focuses on the Shichahai area, located next to the Forbidden City, a district which is varied and dynamic, with over eight hundred years history as the central area of a capital city. Given the overwhelming trend of rapid urban

development in recent decades, this ancient inner city area seeks equilibrium in the conflict between development and conservation.

The population in the Shichahai area boomed after the 1970s, when a large number of domestic migrants moved into this central urban area, creating a great demand for living space. Later, in the early 1990s, a Historical District Preservation Plan was applied in the Shichahai area to protect the historic urban fabric of the ancient capital city, which strictly constrained new construction and the demolition of old buildings in the protected area. The conflict between strictly constrained construction and the increasing demand for space has makes Shichahai one of the most densely populated areas in Beijing. Another result of the boom in domestic migrants flowing into this historical area has been that the traditional atmosphere of trust and cooperation in its neighbourhoods has gradually changed. Within households, the 'One-child' policy in the late 1980s changed the structures of urban families. Although it changed into a 'Two-child' policy in 2016, it has had a profound influence on the growing up experience of a whole generation. In contrast with these various changes, the unchanged traditional Chinese cultures still ground Chinese society with influences on the family concept and social values. Especially, the local older residents, whose families have lived in the central area for generations, still carry on their traditional lifestyles as before.

All these particular characteristics make this central area traditional but dynamic and viable. Urban development leaves traces on residents' life experiences, and from the children's perspective, their daily lives depend on that environment, and are transformed by it. So this research into children's experience of outdoor environments in the central area of Shichahai in Beijing, contributes knowledge about not only the contemporary situations but also the transformation across generations. The improved understanding of the mechanisms by which this development influences children's daily experience will be used to provide suggestions for a better living environment for urban children.

#### **1.2 Research Background**

In 2015 (when this research was initially carried out), 54 per cent of the world's population, close to 4 billion people, lived in cities. The population is expected to rise by an additional 1 billion people by 2030 when cities will contain 60 per cent of the world's population (UNICEF, 2018). One-third of these urban dwellers are children under 18 years old (UNICEF, 2018). In the developing countries, an estimated, between 2000 and 2030, the urban population is forecast to double with the built-up area is predicted to triple in order to accommodate the dramatically increasing urban dwellers. This rapid urban expansion can fragment the built environment, limit centrality, cut down on public space and lead to less compactness in the urban form (UNICEF, 2018). This can directly result in higher expenditure costs for public infrastructure, less obvious civic engagement, increase per capita of carbon dioxide (CO2) emissions and hazardous pollution, and a weaker private investment climate for local economic development. For children, it means unhealthy and unsafe environments, limited options for walking and playing, limited connectivity (social networks and services), uncertainty in public investment for their needs, limited life-skills training and barriers to access local economies (UNICEF, 2018).

To protect and advocate children's rights and benefits in the overwhelming trend of urbanisation, the Child-Friendly Cities Initiative (CFCI) is launched by UNICEF and UN-Habitat in 1996, according to which, the Child-Friendly City (CFC) is defined as a city, town or community where the voices, needs, priorities and rights of children are an integral part of public policies, programmes and decisions. Then, in 2004 the original CFC Framework for Action is launched, outlining building blocks that makes up a child-friendly city or community: children's participation; a child-friendly legal framework; a city-wide children's rights strategy; a children's rights unit or coordinating mechanism; child impact assessment and evaluation; a children's budget; a regular state of the city's children report; making children's rights known; and independent advocacy for children (Woolley & Griffin, 2015).

Building on ideas about children's right of growing up in cities healthily, research about how cities can adapt to the needs and interests of children's healthy development are conducted through two dominant approaches (Chawla, 2002). One is to assemble knowledge about children's need for optimal development at different ages and propose child-friendly policies for urban planning based on this knowledge. Research following this approach is conducted mainly in the field of environment-behaviours and psychologies (Aaron & Winawer, 1965; Hart, 1979; Moore, 1986; Senda, 1992). Another approach is to learn from children themselves about their environmental experiences, and then, to bring children and adults together in decision-makings to improve urban environments (Daly & Cobb, 1994; Chawla & Driskell, 2006; Vliet & Karsten, 2015). Based on this approach, the GUIC projects, on which this research was based, were conducted to understand children's use, conceive of and feel about their surrounding environments by involving children in participatory programs (Lynch, 1977). The knowledge learned from children was applied to make a change in children's daily environments in participatory urban planning programs (Chawla, 2002).

Though, in the academic level, there is intensive research emphasising the importance of children's participation in adult-dominated diction-makings, and advocating children's civil right of sharing their voice in city planning. However, in practice, children are still largely excluded from, or at best only have limited opportunities of sharing their voice in urban decision-making (Hart, 2002; Blinkert, 2004; Rasmussen, 2004; Valentine, 2004; Karsten, 2015). The reasons that lead to this are various. From the perspective of social policies, this due to a lack of political and the failure of urban policies to consider children's opinions (Lynch 1977; Chawla 2002). From the perspective of social culture, due to the prevailing social understandings of childhood, which was emerging in the twentieth century, children are considered by adults as innocent, incompetent and vulnerable, which makes them need to dependent on adults and adult's decision-making (Valentine, 2004). Therefore, it can still be challenging to bring children into the whole procedure of decision-making in a real life scenario.

Based on these understandings, this research was designed following the approach which emphasises learning from children by hearing their voice and advocating children's right by involving them in the decision-making. Also with understandings of the difficulties and challenges of progressing understandings into actions, this research would pay more attention to the phase of understanding children's daily outdoor play experience in their surrounding environments from their perspectives, and propose political and practical suggestions based on the knowledge learned from them.

#### 1.3 Terminology and theoretical background

In order to systematically describe and explain children's daily experience of playing and living in the central Shichahai area of Beijing, this research draws in particular on theoretical research which has been carried out into children's environmental experiences. According to Moore and Young (1978), people's environmental experience can be described using a highly simplified model of three interdependent realms of experience:

The physiological-psychological environment of body/mind;

The sociological environment of interpersonal relations and cultural values; and

The physiographic landscape of spaces, objects, persons, and natural and built elements.

#### (Moore & Young, 1978, p.84)

According to this view, individual environmental experience is the result of mixing the three realms of physical space, social environment, and people's inner minds. This model is commonly used to support investigations into children's use and experience of the environment. Taking this as a starting point for understanding children's environmental experiences, on the basis of a consensus that 'play is the child's way of dealing with her/his social and physical surroundings' (Moore, 1986, p.14), research about 'children's environmental experience' gradually developed into research about 'children's play experience has developed a more concentrated focus on children's play behaviours. At the same time the other consensus, that 'children play everywhere and anywhere' (Woolley & Kinoshita, 2015; Lester & Russell, 2008; Matthews & Limb, 1999; Opie and Opie, 1969) expands the physical environments. So the phrase 'children's play experiences' describes the main way children interact with an urban environment which contains all the varieties of space children can access.

Using the term, 'children's play experiences', Mitsuru Senda (1992) suggested that the four fundamental elements to understand children's play experience are the place to play, time to play, friends to play with and the children's play activities (1992). On the basis of the work of Mitsuru Senda, Woolley and Kinoshita (2015) used a theoretical model, SPIT

(space, people, intervention and time), to record children's outdoor play experiences in areas of Japan which had been affected by disasters. It is proved to be a functional tool for understanding children's use and experience of surrounding environments.

In the SPIT model, the dimension of play interventions is describes the additional play opportunities which help children overcome adversity in the special context of areas recovering from disasters. In this research, in more favourable circumstances, there is a need to describe children's play from a more comprehensive perspective. So instead of focusing on manual interventions to encourage play, in this study, a broader range of activities of children's play will be explored and discussed.

In this research, for the sake of understanding children's use and experiences of their surrounding outdoor environments, the concept of 'children's outdoor play experience' is used to describe the interactions between children and their surrounding urban outdoor environments. However, not only 'children's outdoor play experiences', in this research, there are also other daily activities in children's everyday lives are explored to provided comparative interpretations for understanding phenomena relating to children's outdoor play experiences. Therefore, as a summary, the term 'children's outdoor play and related experience' was included in the title. Also, to describe and interpret children's outdoor play and related experience in the central Shichahai area of Beijing, the theoretical model of SPAT is applied with its dimensions: space for play, people for play, activity of play and time for play.

#### **1.4 Scope of the research**

#### 1.4.1 Shichahai as the case study area

Research was conducted in the Shichahai area of Beijing (shown in Figure 1.1). It lies to the northwest of the centre, outside the Forbidden City and close to the Zhongnanhai State Council. Shichahai is the most central area of Beijng. As a historical place, Shichahai refers to different areas in the folk narrations and in the official administrative division. It has a smaller land area in the folk narrations than in the official government administration area. Field research was conducted in the areas governed by seven street committees within the Shichahai sub-district in Xicheng District.

#### 1.4.2 Ages of Childhood

In this research, the target age group were children aged from 6 to 12 years. In the Chinese education system, this age range covers all primary school children. The justification for choosing these middle-aged children are two-fold. On the one hand, according to Piaget's theory of cognitive development (1955), children in this middle-age period become capable of logical thinking, reasoning, and problem-solving in a variety of tasks; whereas preschool children are inordinately tied to the concrete, readily perceptible characteristics of tasks, the thoughts of children ages 6-12 are more fully logical and more systematic (Piaget, 1955, 1962; Barrouillet, 2015). On the other hand, learning from experiences during the pilot study, the older children in the middle schools (over 13 years) spend minimal time on outdoor playing; and the cooperation was only established with primary schools but not middle schools.

Therefore, considering both the theoretical and practical issues, a dominant number of child-participants in this research were aged from 6 to 12, when doing interviews and diaries. While this age range was extended to 5 to 14 years when doing structured observations with estimating children's age based on their appearance. As for the older residents remembering their childhood, the age range can expand to 4 to 16 years. In Figure 4.10 (p.78), the period of childhood for the three generations is distributed continuously over the 60 years since the foundation of the Chinese People's Republic (CPR). Grandparents went to school between 1950 and 1965, parents from 1975 to 1990. The field research was conducted during the summers of 2016 and 2017, with children aged from 6 to 12 years.



Figure 1.1 Land area of Shichahai

### **1.5 Research aim and objectives**

In order to address the gap in our knowledge of children's play experience in Chinese cities, this research aims to provide insight into children's daily experiences in the capital city of Beijing. Their daily experiences of playing in their surrounding environments will be explored, now and across recent generations, and interpretations of influential factors will be developed. The research objectives are:

### • Objective One:

To record and understand contemporary children's daily play experiences in their surrounding outdoor environments.

### • Objective Two:

To trace the daily outdoor play experiences of the children's parents and grandparents and record the transformation of childhood play experiences across generations.

### • Objective Three:

To recognise the factors in the changing urban environments which influence children's daily outdoor play experiences.

### • Objective Four:

To propose suggestions for social policies, urban planning and landscape design for creating a more child-friendly urban environment.

### **1.6 Research Questions**

To collect data which can provide evidence for understanding of the childhood play experience over recent generations, research questions have developed from the four dimensions of the theoretical model, SPAT:

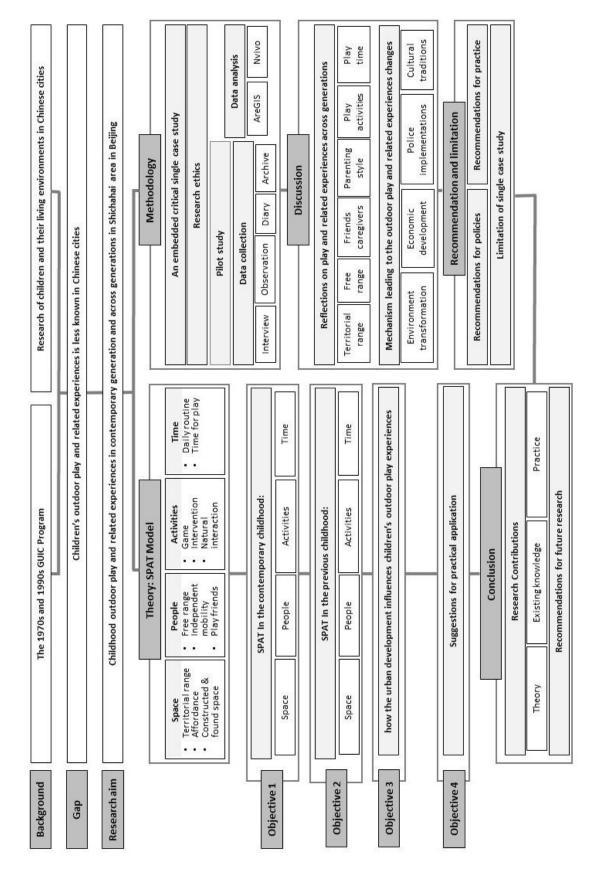
- Where are children playing, in now and in older generations' childhoods?
- Who are the people play with or accompany children's outdoor play, now and in older times?
- What are children playing, now and before?
- When do the children spend time playing outdoors, now and then?

To address the research objective about the indicators influencing children's daily outdoor play experiences, further research questions focus on the differences between childhood play experiences across generations and the reasons for these differences:

- What are the differences between outdoor play experiences across generations based on the theoretical models of SPAT?
- What influential factors have resulted in the changes of outdoor play experience across generations?

Based on these, for an improved urban environment which is more child-friendly:

• What can policy makers, urban planners and landscape designers do to improve children's childhood daily play experiences in urban environments?



### **1.7 Thesis structure**

Figure 1.2 Thesis Structure

### **Chapter Two** Literature Review

#### Introduction

After formulating research objectives and questions, this chapter pays attention on two main targets: identification of the research gap; the explanation of theoretical backgrounds which could help us understand the research gap.

Considering the origin of this research is initially inspired by the GUIC project, therefore, firstly, reports from the GUIC project and relevant articles were systematically reviewed. At the same time, in order to understand children's outdoor play experiences in different generations as comprehensive as possible, all relevant studies which focus on exploring 'childhood play experience\*' or 'children's outdoor play experience\*' are exhaustively included in the review. Based on these articles, the SPAT model is summarised and developed as the theoretical background of this research (as been introduced in 1.2 Terminology and theoretical background). Then, the more in-detail review focuses on the topics from the perspective of SPAT by using search terms of: 'children' and 'use of urban environment\*'; 'children's play friend\*' or 'parenting' or 'supervision of children's outdoor play'; 'children's play activity\*' or 'outdoor game\*'; and 'children's outdoor play' and 'time'. To ensure objectivity and avoid biases in determining the relevance of potential studies, the author works closely to her supervisor to make agreement and resolve disagreements. Learned from the most relevant studies under these topics, more themes and topics are determined to applied and further developed in this research.

The first section (2.1 Growing Up in Cities Programme worldwide and in China), sets out to describe the initial and revived Growing Up in Cities (GUIC) projects. There is a systematic review of the academic research conducted in mainland China and published in Chinese, which points to gaps in our knowledge of childhood growing up experiences in the Chinese context.

After identifying the research gap, the second part focuses on the theoretical background left by other research. Generally speaking, four factors are regarded as fundamental to our understanding of children's play experiences, spaces for play (2.2 Spaces for play), partners (2.3 People and partners for play), activities (2.4 Activities of play), and time

(2.5 Time for play). Giving a central role to play spaces, children's play experience can be described in terms of the integrated concepts of territorial range and free range, and the capacity of a space to provide play opportunities can be described using the theory of affordance. In examining the impact of the people who have influenced Chinese children's play experience, several phenomena have been identified and discussed, such as over-parenting, mothering and grandparents' parenting. The commonly used definition of play and typology of games are discussed, and children's time spent on playing is understood against the general background of families' daily time arrangements.

This chapter reviews our current knowledge of children's play experience; later chapters will explore current and past childhood play experience in Beijing to generate fresh understanding.

### 2.1 Growing Up in Cities Programme world-wide and in China

#### 2.1.1 Growing Up in Cities (GUIC) programme

The Growing Up in Cities (GUIC) programme has been an effective global example of the interaction between children and their surrounding environment (Chawla and David Driskell, 2006). Founded by UNESCO, the GUIC programme has been conducted twice worldwide, in the 1970s and 1990s. With the primary goal of recording 'how children use local environments and how they evaluate local resources and restrictions', the research sought to understand 'how the urban environment affects children's lives'; these understandings were applied 'to formulate indicators of enabling environments and create child-sensitive urban policies' (Chawla, 2002, p.23).

The initial GUIC programme originated from the 'Man and the Biosphere' programme which was a cooperation conducted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1968. The aim of this 10-year programme was to increase our understanding of potential people-centred solutions to environmental problems brought about by global urbanisation (Chawla, 2002). Based on the ideas of the 'Man and the Biosphere' programme, from the perspective of urban children and adolescents, The Growing Up in Cities (GUIC) programme was proposed by Kevin Lynch in the 1970s. He was an influential professor of urban planning and design (Chawla, 2001). The aim was

...to help document the human costs and benefits of economic development, by showing how the child's use and perception of the resulting micro-environment affects his life.

(Lynch, 1977, p.1).

In the 1970s, the initial GUIC programme was carried out in seven places within four nations: Salta in Argentina; Melbourne in Australia; Ecatepec and Toluca in Mexico; and Warsaw, Cracow and Bystra in Poland (Lynch, 1977). In this original research, most of the cases focused on the stable settlements of farmers, either working or lower middle class, where the children's experiences were considered to rely mostly on their local environment (Kevin Lynch, 1977). The results of the original GUIC research in these four nations provide understanding of:

...how children use local environments and how they evaluate local resources and restrictions, and then apply these insights to understand how the urban environments affect children's life and formulate indicators of enabling environments and create child-sensitive urban policies.

(Chawla 2002, p.23).

Louise Chawla criticised the project, saying, 'the original project never progressed beyond this research stage' (Chawla 2002, p.27). Even though the initial GUIC programme had suggested that young people should be involved in maintaining and improving their urban communities, children and youth were not involved in any participatory programme until the end of the initial project.

25 years later, a new vision of GUIC projects was conducted on a broader worldwide basis (Chawla, 2002). Based on the achievements and disappointments of the original programme, the new vision of GUIC projects aimed:

...to collect information about young people's contemporary urban experience; to develop models for participatory urban planning with children and youth; and to compare the project's present and past results.

(Chawla 2002, p.29)

With the new research aim, the 1990s GUIC project was conducted in eight cities in eight nations: Buenos Aries, Argentina (Cosco and Moore, 2002); Melbourne, Australia

(Malone and Hasluck, 2002); Northampton, United Kingdom (Percy-Smith, 2002); Bangalore, India (Bannerjee and Driskell, 2002); Trondheim, Norway (Wilhjelm, 2002); Warsaw, Poland (Zylicz, 2002); Johannesburg, South Africa (Swart-Kruger, 2002); and Oakland in the United States of America (Salvadori, 2002). The project sites in the 1990s project included working-class neighbourhoods, peripheral suburbs and self-built settlement and camps in both developed and developing countries (Chawla, 2002). As a result, the 1990s GUIC project explored and evaluated the issues that affect children's perceptions of their surroundings, promoted prioritising children's ideas for change, and supported making these changes happen (Driskell, 2002).

As a whole, the GUIC programme, both in the 1970s and 1990s, provides a learning model in the field of children and their living environment research. By involving children and young people in research which explored the mechanisms by which urban development influences children's daily lives, they have been given opportunities to express and evaluate the issues affecting their own lives. To some extent, the ideas from children and young people were used to promote the formulation of child-friendly policies. However, the GUIC programme did not extend into China, research into the interaction between children and their living environment is still limited.

#### 2.1.2 Research into children's outdoor play environment in the Chinese context

Systematic academic research into children's outdoor play environment and children's outdoor activities in Chinese cities started in the 1990s. Since then, there has been research which explores children's outdoor play and play environments. To have a general understanding of the content of this research, academic papers about children's outdoor plays were searched for in the largest Chinese online database, China Knowledge Resource Integrated Database (CNKI), which contains both peer-reviewed academic journal articles and open access academic dissertations. Keyword retrieval used the search terms 'children outdoor play (儿童户外游戏)' and 'play environment (游戏环境)' or 'outdoor environment (户外环境)', and more than 1000 pieces of publications in Chinese were found.

The topics of these publications can be generally classified into three fields: psychological research into children's outdoor play behaviours in different environmental settings; research about playground design methods; and case studies of playground design projects.

Psychological research into the relation between children's outdoor play behaviours and outdoor play environments is the main topic, and covers half of the reviewed research. It is largely based on theories borrowed from the fields of psychology, taking the idea that outdoor play can benefit children's development as a foundation, aiming to improve outdoor play environments to meet children's developmental needs (Tang, 2004; Bai, 2005; Ding, 2006; Chen, 2007; Yang, 2009; Yu, 20019; Zhou, 2011; Sun, 2013; Zhang, 2015). Some of the research focuses on the relationship between children's outdoor play behaviour and the spatial design of play environments. For example, based on psychological and behaviour theories, Tang (2004) summarises several basic elements which should be included in children's playgrounds, helping to promote more varied play activities. There is also research which pays more attention to the mechanisms by which outdoor environments influence children's over-all development. For example, based on children's psychology and behaviour theories, Yu (2009) suggests that to promote children's better social behaviour in residential areas, playground design should be integrated into general public spaces which can be used by all ages.

The second common research topic is about playground design methods, focused more on practical designs than theories. In order to give detailed suggestions for an optimised playground design, these pieces of research pay attention to playgrounds in a specific type of public space, for example, playgrounds in residential areas (Liu, 2005; Wang, 2008; Chen, 2009; Li, 2010; Wei, 2014), playgrounds in city parks or public green spaces (Ouyang, 2008; Yao, 2009), and playgrounds in kindergartens or schools (Lin, 1996; Gao, 2012).

There are several commonly advocated design concepts for playground design, of which the most widely-accepted is the child-oriented design: children are the primary users of the playground, so its design needs to take their needs as a priority (Zhou C. & Long Y., 2004). This concept was initially proposed in 2004, literally expressed as 'humanoriented 以人为本'. Later on, this concept was developed and combined with the concept of 'child-friendly playground design (儿童友好型游戏场地设计)' (Zhao, 2010), which also emphasises children's central place in playground design. Another prevalent playground design idea is 'close to nature (贴近自然)', which highly values the experience of interaction with nature (Zhang, 2006; Bao, 2013; Wei, 2014). The third and final type of research is case studies of playground design projects. Differing from case studies used as part of a qualitative research strategy in the field of social science, these case studies use design examples to demonstrate a specific design method. Based on the different types of case and study purpose, three approaches can be distinguished.

One is the study of some famous playground design projects in foreign counties, including Japan (Gao & Fan 2016), the USA (Wang & Zhao 2015), Denmark (Yang 2011; 2010), the UK (Zhang & Zhang 2010), and Germany (Wu 2007). These famous foreign children playgrounds are usually used as successful examples to inspire domestic playground design. For example, Yang summarises six types of playgrounds in Denmark, based on which he puts forward suggestions for playground design in China, which should include more natural elements (2010; 2011).

The second type of case study provides descriptions of the design procedure of a completed domestic playground design project (Kuai 2014; Li B. 2013; Yin 2013; Meng 2011). For this type, the playground design is studied as an example to demonstrate the design idea of the designer, who is also usually the author. For example, Kuai (2014) summarises design methods through a case study of several playground design projects, both domestic and overseas, and then applies these experiences to a playground design project of his own, where children are provided more diverse play opportunities.

Differing from the first two types of case study, the third type involves field research. For this type of study, the research is conducted in a particular place to understand social and environmental characteristics, as well as people's requirements. On the basis of the field research results, a playground design is developed to solve existing problems and develop a better relationship between user and their environment. For instance, Liu (2013) observed children's use of play facilities in parks in Changsha, Hunan province. By conducting interviews with children, he found that most of the play facilities did not fulfil children's play needs. He made several suggestions for a better selection of play facilities in children's playgrounds. Similarly, by doing a questionnaire survey, Chen S. (2014) identified the weakness of existing outdoor playground design in Zhuzhou, Guangdong province, and made several suggestions for improving children's park design.

Overall, research about children's outdoor play environments conducted in China and published in Chinese has a rather short research tradition, with a special focus on playground design methods; the justification of the proposed playground design methods is usually based on child-psychology theories or successfully designed playgrounds: a newly designed playground is usually used to demonstrate or test these proposed designed methods.

The research mentioned above can help provide landscape architects with direct guidance when encountering with playground design projects, but these practical instructions cannot help to understand children's daily use and perceptions of their environment in the context of the rapidly urbanising Chinese cities, nor do they consider children's voices and promote children participation in decision making.

#### 2.1.3 Research Gap

To conclude, there has not been a GUIC model research project conducted in any Chinese city, and that research which has been conducted in China has a rather short research tradition and shows a particular enthusiasm for children's playground design. This means that Chinese children's daily play experiences in urban environments have never been explored and understood.

In order to begin to fill this research gap, this research will address children's daily experiences of playing in the centre of Beijing. As described in Chapter One (1.2 Terminology and theoretical background), an adjusted theoretical model of SPAT has been employed to systematically describe childhood outdoor play experience and to make comparisons across generations.

### 2.2 Space for play

It is necessary at the outset to justify the use of the phrase 'space for play' to distinguish between space and places. Rather than borrowing an interpretation from other disciplines, as suggested by Thwaites (2007), in the field of landscape architecture research, spaces are abstract and value-free in containments, while a place is imbued with significance arising from human psychology and behaviour. Based on this clarification, the everyday life of children can be described as taking place in concrete physical space (Rasmussen, 2004).

This makes the use of physical environments one of the fundamental factors in understanding children's play experience. Taking the understanding that children can play everywhere and anywhere as a foundation (Woolley & Kinoshita, 2015; Lester & Russell, 2008; Matthews & Limb, 1999; Opie and Opie, 1969), various different spaces have been reported by children as their play spaces. Tracing back to the 1970s GUIC project, the children in Melbourne named their own room, home or friends' homes as the best places to play; the children in Salta mentioned outdoor spaces such as the plaza, the local street corners and the hills as the places to play; the Polish children liked playing at home, in parks and woods, streets and the homes of friends, and so did the children from Toluca (Lynch, 1977). Across these different cities of the world, these places frequently used by children constitute different types of spaces in their urban physical environment.

In the 1990s the GUIC project, based on the understanding of children's use of varied spaces in their surrounding physical environments, identified a series of indicators to evaluate physical environmental qualities, taking children's perceptions as the central consideration. Their research indicated that a lack of gathering places and varied activity settings, heavy traffic, dirty and messy environment, and geographic isolation in a multicultural area, have negative influences on environment qualities; while green space, a variety of activity settings, peer gathering places, freedom from physical dangers and freedom of movement can contribute greatly to children's positive experience of their physical environment (Chawla, 2002).

Changing the context from Western to Eastern, and from past days to recent days, one piece of research conducted in a hutong<sup>1</sup> community in Beijing in 2012, showed that children play in a variety of urban spaces (Wang *et al.*, 2012). According to this research, the children's most frequently used play spaces were home, courtyards, school playgrounds, city parks, stadiums, markets or restaurants, museums or libraries, as well as hutongs and streets (Wang *et al.*, 2012). Wang's research aims to logically and systematically describe these various spaces, categorising them according to three dimensions, from private to public, external to internal, and formal to informal.

Based on these research results, it can be concluded that children use a wide range of spaces in whole city environments. Although the definition of space emphasises that it is value-free, research about children's outdoor play spaces usually adds the other dimensions to describe specific features of the space. For instance, to describe the social and psychological constraints in children's outdoor play space and time, the term territorial range (Moore and Young, 1978) is widely accepted; to describe adults

accompany conditions when children playing outdoors, another concept, free range (Hart, 1979) is introduced; and to evaluate the quality of space, the concept of affordance (Kyttä, 2002) is applied.

### 2.2.1 Territorial range

Based on the initial definition suggested by Barker and Wright (1955), and similar research conducted by Anderson and Tindall (1972), as well as Hart (1979), the concept of territorial range was proposed by Moore and Young (1978). It describes the social and psychological constraints on children's outdoor play space and time:

Territorial range indicates the spatial extent and experiential variety of outdoor places inhabited.

(R. Moore & Young, 1978, p.91)

hutong<sup>1</sup>: Hutong are a type of narrow street or alley formed by lines of traditional courtyard residences.

In later research, Robin Moore (1986) suggests that children's territorial range consists of three different scales: habitual range, frequented range and occasional range:

Habitual Range: More or less contiguous space right around the children's home, highly accessible for daily use; bounded by temporal, rather than distance and age constraints.

**Frequented Range**: Less accessible extensions of habitual range; bounded by physical constrains and parental prohibitions; expands with age, use of bicycles, availability of traffic-free routes and the presence of older children to travel with.

**Occasional Range**: Highly variable extensions of frequented range by foot, bicycle and public transport; dependent on child's personality, the degree of freedom and training offered by parents, the availability of travelling companions and the presence of arresting destinations.

(R. C. Moore, 1986, p 17)

Since the concept of territorial range was proposed, it has been widely accepted, developed and used until recently, helping our understanding of children's use of their surrounding environments in various places in different contexts (Hand 2018; Larouche 2017; Woolley & Griffin 2014; Loo & Lam 2013; Matsushita 2010).

This concept not only explores children's use of space in various environmental contexts, but can also be used to record changes in children's daily use of spaces across generations in the same environmental context. Research conducted in Amsterdam, Netherlands, compares childhood now with childhood in the 1950s to 1960s, suggesting that children's use of space has become more diverse (Karsten, 2005). But research conducted in Sheffield, UK shows that across three generations, the type and variety of outdoor spaces used by children in their daily life has reduced dramatically (Woolley and Griffin, 2015). The reason for these changes across generations could be the transformation of physical environments, social environments and developments in technology (Woolley and Griffin, 2015), but at the same time, the increasing use of indoor spaces at home or in other indoor playground can also have an influence on children's use of their daily outdoor space (Karsten, 2005).

### 2.2.3 Affordance

After identifying children's territorial range and free range from the perspective of their use of their environment, we now consider the space itself to understand its capacity for sustaining a variety of play activities.

In the research field of ecological perceptual psychology, to understand the interaction between the individual and the environment, the theory of affordance is a central concept (Kyttä, 2002). Based on the definition offered by Gibson (1979), that affordances are physical opportunities and dangers which the organism perceives while acting in a specific setting, with the only focus on the positive affordance of the environments, Kyttä (2002) defined the affordance of children's environments as:

... the functionally significant properties of the environment that are perceived through the active detection of information

## (Kytta, 2002, P.109)

Affordance can also be regarded as a graded property, having different levels of potential, perceived, utilized and shaped in different ways (Greeno, 1994). Kyttä (2004) interpreted affordances to mean that the environment has to provide something that the individual can perceive as offering the potential for activity, though their perception is personal. That is to say, affordances include properties from both the environment and the acting individual. This means that it always varies, depending on the uniqueness of each individual.

So the concept of affordances is well suited for describing the psychologically essential qualities of children's environments (Kyttä, 2002). More recently there have been various pieces of research on children's environment, such as the affordances of the home-school journey (Yatiman, Noor Ain, 2012), internal floor space (Katsiada, Eleni, 2018), garden (Laaksoharju,2012), kindergarten outdoor environment (Bjørgen, Kathrine,2016), preschool outdoor environment (Sandseter 2009; Storli & Hagen 2010), and in the urban environment as a whole (Clark & Uzzell, 2002).

## 2.2.4 Constructed and found space

From this discussion, it can be seen that environments can provide different levels of affordance which children can perceive as offering potential opportunities for play. From this point of view, it is possible to describe the mechanism behind the consensus that children can play everywhere and anywhere as children utilising a perceived affordance provided by their surrounding environment.

The various spaces where children play can be divided into two representative types, based on the original intention of providing and building of that space. Woolley (2015) described these two types as constructed and found spaces.

**Constructed space**: open spaces are provided and built, or constructed, specifically for use by children and young people

**Found space**: spaces are not constructed or designated as children's playground or play spaces, but used by children and young people

(Woolley, 2015)

Woolley (2015) also pointed out that in the society of some countries, children and young people are expected only to use constructed open spaces such as playgrounds, because they are professionally designed spaces considered to be good for children and young people. However, these constructed open spaces, which are constructed as an expression of the adult's power of planning and managing the city, often do not meet the real needs of children and young people (Woolley, 2015). This encourages children and young people to use found places instead (Woolley, 2015).

## 2.3 People and partners for play

Moving on from the children's use of space, which is the fundamental element sustaining children's play activities, there are other influencing factors which also have a profound influence on children's play experience. Moore (1986) reminds us that interpersonal relations can either enrich or stifle childhood play experience: someone can validate, encourage, support and enhance the experience of another, or invalidate, discourage, undermine and constrict it (Moore, 1986). So just as important as any physical settings, the social ingredient plays a really crucial role in shaping childhood experience, which requires study of the children's contacts with everyone around them, including parents, siblings, relations, friends, neighbours, teachers and even strangers.

### 2.3.1 Free range and independent mobility

By contrast with the concept of children's territorial range, which is defined by joint consideration of the constraints on space and time of children's use of their outdoor environment, the concept of free-range pays more attention to the conditions relating to permission and accompaniment in regard to children's outdoor space use.

Hart (1979) pointed out that a carer's control can be an important influencing factor on a child's spatial range. Hart classified three levels of permitted free range: free-range, range with permission and range with other children. While, Moore and Young (1978) included a fourth permission condition, range with related adults. The different control levels of children's mobility permission are:

Free-range: places allowed to go alone, without asking permission

**Range with permissions**: places allowed to go alone, but saying where and asking permission first

Range with permission and other children: as above, but with other children

**Range with related adults**: accounting for range extensions made in the company of a family member of other adults (recreation leader, teacher and so on.)

(R. Moore & Young, 1978, p 99)

The concept of free range is used to describe different levels of parental control of children's independent outdoor play. Another perspective pays attentions only to children's independent play: independent mobility.

Defined by Hillman (1990):

**Independent mobility** is the children's freedom to move around in the public space without adult supervision.

Based on this definition, research conducted in Finland pointed out that children's independent mobility can operate on two levels: on the one hand, it is a set of mobility licenses given by parents; on the other hand, it is the actual mobility patterns of children's independent play (Hillman, Adams and Whitelegg, 1990; Kyttä *et al.*, 2015). In the research conduced by Kyttä and *et al.* (2015), the measures used to compare these two levels of children's independent mobility are described as:

**Mobility licenses**: whether the children are allowed across main roads alone; travel home from school alone; travel on buses alone; go to other places other than schools alone; go out alone after dark.

Actual mobility: the facts of children's school travelling methods; and independent weekend activities.

### (Kyttä et al., 2015, P.2)

The diverse levels of children's independent mobility draw attention to the differences between these levels of independence. The discontinuity between the permitted free range and the real free range can be understood as deriving from children's instinct to be curious about their surroundings and their desire to be independent of strict parental control.

According to research into children's independent mobility around the world, it is widely acknowledged that urban children's independent mobility has declined in many developed countries over recent generations (McMillan, 2007; Fyhri *et al.*, 2011; Foster *et al.*, 2014), in the UK (Woolley & Griffin, 2015), Finland (Kyttä *et al.*, 2015) and Australia (Foster *et al.*, 2014; Veitch *et al.*, 2014). The reasons for this phenomenon are largely heightened parental concerns about neighbourhood safety, both in terms of traffic (Platt, 2012; Woolley & Lowe, 2013; Westley *et al.*, 2014) and strangers (Kyttä, 2004; Fyhri *et al.*, 2011; Foster *et al.*, 2014; Kyttä *et al.*, 2015). It has been suggested by Foster and et al. (2014), that the factors which might influence parental perceptions about neighbourhood safety include neighbourhood settings, natural surveillance, social contrast, collective efficacy, informal social control and other concerns. Research into children's independent travel to school shows that the distance to schools and children's age are the most influential factors on children's independent mobility (Fyhri & Hjorthol, 2009). Seasonal differences can also influence children's school travelling mode (Fyhri *et al.*, 2011).

#### 2.3.2 Other children

Other children, especially friends and siblings, can be crucial as play partners. They can be cooperating protagonists and co-investigators in any child's life (Moore, 1986). Taking the important role of play partner, other children can enrich another child's play experience and expand the scope of their play. According to Hart's research (Hart, 1979), among the various restrictive play ranges, the range with permission and with other children is the largest extension a child can investigate. More than with other play partners, sometimes other children and especially older siblings can also take the responsibility of supervising younger siblings (Morrongiello, Schmidt, & Schell, 2010; Morrongiello, Schell, & Keleher, 2013).

## 2.3.3 Parents

Adults play a more crucial role in supporting or limiting children's play experiences. Taking the role of teachers and social referents throughout an individual's childhood and adolescence, parents are central in leading, organizing and participating in children's daily experience (Harten & Olds, 2004). Parents can positively promote children to take part in outdoor physical activities by taking the role of play supporters, enrolling children in sports, driving children to events or using their own behaviour to encourage children to be active (Davison, Cutting & Birch, 2003). But parental controls can also largely restrict children's play experiences, for example through fear of or paranoia about traffic dangers (Kyttä et al. 2015; Westley et al. 2014; Witten et al. 2013; Barton & Morrongiello 2011; Castonguay & Jutras 2010), social apprehension (Woolley & Griffin 2015; Foster et al. 2014; Spilsbury 2005; Shek 2005), or physical dangers (Woolley & Floyd 2002).

Some phenomena are widely discussed relating to parenting styles and parental supervision modes. The phenomena which influence children's use of outdoor environments or childhood experiences include over-parenting or over-supervision (Foster et al. 2014; Westley et al. 2014; Morrongiello, Zdzieborski, et al. 2013; Van den Berge 2013; Murray 2009), as well as intensive mothering (Morrongiello et al. 2019; Walls et al. 2016; Kim et al. 2013; Paat 2010; Hagan & Kuebli 2007; Davison et al. 2003).

Research conducted by sociologist Frank Füredi on over-parenting or over-supervision is trend-setting (Van den Berge, 2013). Füredi (2001) described a predominant parenting style in western society, 'paranoid parenting'. He concluded that this phenomenon is due to western parents' lack of parenting confidence, which he suggested was a cultural trend, not an individual choice. Füredi's theory provides a viewpoint from which to understand parenting styles in the dominant cultural context of western society. Berge (2013) criticized Füredi's theory, emphasizing and criticising a cultural mechanism which fails to treat parents as full human agents who can make a choice about what they value in

their culture. He is supported by Jenkins (2006) who argues that parents are not gripped by paranoia, but are wrestling with competing sets of social expectations, as well as their own rational and emotional judgements. Based on these studies, it can be concluded that parenting styles are largely influenced by the dominant cultural background of a society. Though their cultural background has a dominant influence on parenting styles, each parent can still make their choice about whether to follow or counter their culture.

Aside from over-parenting, the phenomenon of intensive mothering is also noticeable in the relation between some parents and children. It can play a significant role in the overall well-being of children. Mothers have been socially and culturally associated with the role of nurturing and caregiving (Paat, 2010). In western society, the ideology of intensive mothering is described by Hays (1996), a sociologist, as a set of beliefs about appropriate caregiving for children and corresponding maternal behaviour. According to this set of beliefs, children are innately good or innocent. A mother should be self-sacrificing and take the major responsibility of taking care and protecting her innocent children. The concept also requires the belief that being a mother is the most important role a woman can ever have (Hays, 1996; Paat, 2010). Inevitably, these intensive mothering beliefs (IMB) are criticised by feminists as an oppressive social structure that works to sustain inequities based on gender (Walls, Helms & Grzywacz, 2016).

In China, with a very different cultural and institutional context from western societies, the predominant traditional Confucian ideology also puts emphasis on maternal rearing and caring (Hanser & Li, 2017). Following this fundamental and influential cultural tradition, a Chinese woman also takes the primary role in taking care of and rearing children. Especially in recent years, with the task of raising a child who will be both successful in China's intensely competitive academic system as well as psychologically healthy, full of personality and happy, there is an increasing demand for intensive mothering (Hanser & Li 2017; Kuan 2015). A Chinese mother needs to carefully manage their own frame of mind to guide their children on the track to a successful life (Hanser & Li, 2017). Both over-parenting and intensive mothering are culturally related social phenomena. The emergence and development of these phenomena have been understood and discussed in a wide range of disciplines, which helps to provide a background against which to understand the current situation in Chinese society.

#### 2.3.4 Grandparents

In both western and Chinese society, grandparents parenting is not a rare phenomenon. In the USA during the early years of the twentieth century, the extended family members, especially grandparents, had authoritative roles in the family and contributed significantly to essential family functions, including shared child-rearing (Cherlin, 1986). More recent research in the USA (Burnette, Sun 7 Sun, 2013) and western Europe (Zhang, Emery & Dykstra, 2018), shows that the majority of grandparents follow a non-interference style in intergenerational relationships and do not assume a central role in caring for or rearing grandchildren.

In China, influenced by the family traditions, cultural values and public policies, there is a long tradition in Chinese society for grandparents participant in child-care (Burnette, Sun & Sun, 2013). This can be traced back to traditional Chinese society when it was common for a young couple to live with the husband's family after marriage; grandparents and other female relatives usually guided and helped the new mother raising the young children (Xiao, 2016). In the decades since the establishment of the People's Republic of China in 1949, Chinese society has remained traditional and familial although the social formation has changed (Margavio & Mann, 1989; Zhang, Emery & Dykstra, 2018). Drawn into extensive socialized production, both rural and urban women were exhausted by the demands of work and political activities outside the home. For these working mothers, there was little extra time to spend on childrearing, which resulted in grandparents taking a large share of child care (Hanser & Li, 2017). Later, in the 1980s with the application of birth control policies, the only child became the centre of urban families. In this situation, joint caregiving by parents and grandparents of the precious only child provided that child with the best resources the family could afford (Xiao, 2016). To raise the only child as perfectly as possible, the pattern of intergenerational parenting in contemporary urban families is optimised by young mothers who act as the authorized managers of the childrearing; grandparents provide help by spending time on accompanying children and daily chores, while fathers concentrate on earning the financial resources (Xiao, 2016). It can be seen from the literature that in contrast to western society, in contemporary Chinese society, joint caregiving by parents and grandparents is still a common phenomenon.

# 2.4 Activities of Play

## 2.4.1 Definitions of play

We can see children play everywhere and play with everything; we know what play feels like, but only with difficulty can we make a theoretical statement about what play is. Borrowing Sutton-Smith's words, the previous description shows the 'ambiguity of play' (Sutton-Smith 1997). In order to bring coherent clarity to the ambiguity of play in this research, the definition used by the National Play Field Association (2000) was applied.

Play is:

freely chosen, personally directed, and intrinsically motivated behaviour that actively engages the child

(NPFA, 2000)

Play can also be described as follows:

Play can be fun or serious. Through play children explore social, material and imaginary worlds and their relationship with them, elaborating all the while a flexible range of responses to the challenges they encounter. By playing, children learn and develop as individuals, and as members of the community.

(NPFA, 2000)

## 2.4.2 Typology of games

Compared with the ambiguity which makes it difficult to define play, defining the game can seem more straightforward. According to Roberts and Sutton-Smith, the game is:

recreational activities characterized by organized play, competition, two or more sides, criteria for determining the winner, and agreed-upon rules.

(Roberts and Sutton-Smith, 1962)

Using this definition, Roberts and Sutton-Smith classified games into three types, according to the different determinates of the competition results. These are games of

physical skill, strategy and chance. Under these three basic categories, there are six subcategories, combinations of two of the basic categories, which are games of physical skill and strategy, games of physical skill and chance and so on. At the same time, Roberts and Sutton-Smith point out that because of their lack of competition, some activities described as 'game' in ethnographic research are more like amusements (Roberts & Sutton-Smith, 1962). Latter on, Roberts and Sutton-Smith's definition and classification have been developed and added to the other indicators. In order to depict and analyse children's games, determining factor of children's memory and attention has been pointed out by Eifermann (1971) and added to the Roberts and Sutton-Smith game classification system he used to observe and record hundreds of children's free games in school playgrounds in the 1970s.

According to the definition given by Roberts and Sutton-Smith (1962), the game is closer to playful competition, and is not purely amusement. However, as children's games should be more playful and casual, other category systems was proposed with different emphasis. Different from distinguishing the determinations of games, Opies' system focused more on the 'basic motif of the game' (Opie & Opie, 1969). Based on observation of a large number of children's play activities in the UK from the 1950s to 1980s, various children's games are classified into twelve categories, including chasing, catching, seeking, hunting, racing, duelling, exerting, daring, guessing, acting and pretending games. Compared with Roberts and Sutton-Smith's classifications, the Opies' system is more practical in describing and recording children's play activities, but Opie's game categories are criticized by Bishop and Curtis as too detailed to use with a small amount of data (Bishop & Curtis, 2001).

In order to have a brief and practical category system which works well with a small number of data, Bishop and Curtis proposed another classification system based on the Opies' category, focusing on the broader content of children's play behaviour. They suggested a system in which children's various games are classified according to general and dominant game content, for example high verbal, imaginative or physical content. This classification provides an easy tool to describe children's behaviour which works well for recording children's play behaviour in the school playground (Woolley et al., 2005).

As this research will compare experiences of childhood play across generations, the focus will be more on the content of children's play rather than its basic motif or outcome attributes. So the verbal, imaginative and physical categories proposed by Bishop and Curtis are used and developed in this research.

## 2.4.3 Play interventions

Play is children's preferred medium of interaction with their surroundings (Fearn & Howard, 2012). In order to encourage children to express their inner emotions or perceive external supports, play can be used as an intervention to help children out of adversity. Woolley and Kinoshita (2014) describe using a play bus supported by play workers as an intervention to help children living in a temporary housing area recover from the triple disaster in north-east Japan in 2011. Fearn and Howard (2012) described different kinds of play used to help refugee children in Beirut, the abandoned children of Sighisoara and the street children of Rio and Cali to overcome bad times and develop a positive attitude towards their future life. Similarly, research conducted in the US by Schlembach (2016) demonstrates that play helps homeless children with healthy growth and development. In all these cases, the term 'play intervention' refers to any play activities which help children overcome adversity by positive interaction with their surroundings and expression of emotion.

## 2.4.4 Natural interactions

In research conducted by Kahn, animals, plants, and parks are described as the most important natural element for children living in urban areas (Kahn, 1999). This research shows that by interacting with nature and participating in environmentally helpful behaviour, urban children learn to be aware that pollutions can harm animals, water and landscape aesthetics, and that harm to these environmental constituents mattered to the children (Kahn, 1999). Not only the natural education can be meaningful to children; as an instinct, children also have a strong and deep-rooted sensitivity to the natural world (Play England, 2007). To explore children's relationship with the natural world, all the physical, social, cultural, economic and political contexts should be taken into consideration (Play England, 2007). In order to describe the complex interaction between human and nature, Kahn and other researchers (Kahn, Weiss and Thea Weiss, 2017) propose several interaction patterns, which can be simple but profound. Their illustrations of these interactions between children and natural environments include experiences of

falling on the ground, walking, digging, climbing a hill, calling birds, holding onto a branch to keep one's balance for a moment, swimming in ocean waves, identifying wild huckleberries to eat on a hot summer's day, gazing up at the summer's night sky and others (Kahn, Weiss & Thea Weiss, 2017). These natural interaction patterns can provide tools to understand how nature promotes mental health, psychological wellbeing and strong bodies.

A significant part in childhood play experience, natural interactions can help us to understand childhood play experience because they reflect children's use of the provided environments as well as children's perception of being a dynamically integrated element in the complex ecosystem themselves.

## 2.5 Time for play

#### **2.5.1 Daily routines**

Apart from spaces, people and activities, which have been discussed above, the time children spend on play is also an important factor in childhood play experience. In order to fully understand children's activities, detailed recording of their daily routine is required, with special attention to the time spent on play.

Children's everyday life usually includes play, reading, mealtimes and bedtime (Ferretti & Bub, 2014). In the 1970s GUIC research projects, the children in Melbourne were reported as having rigid routines, with school in the morning and afternoon then homework, then television on weekdays. When there was a little free time, it could be spent on the street, in their rooms, or at friends' houses (Lynch, 1977).

Research shows that having a regular daily routine can have a positive influence on children's life quality. By getting used to a regular routine, children can have a clear idea of what they are expected to do at a certain time of day; they are more inclined to cooperate and comply, which can help improve the quality of the parent-child relationship (Ren & Fan, 2018). By providing children with a sense of predictability, stability and a feeling of security, regular daily routines can promote children's well-being (Ferretti & Bub, 2014; Bater & Jordan, 2017; Ren & Fan, 2018).

### 2.5.2 Influential factors on time spent on outdoor play

According to the 1970s GUIC project, on weekdays the Melbourne children spent 40 to 45 per cent of their waking hours on school, homework, and other formal lessons and 25 to 35 per cent time on meals, washing-up, chores and other maintenance, leaving only 5 to 10 per cent as free time which could be spent on outdoor play or visiting friends. At weekends, this free time could rise to 30 to 35 per cent and during school holidays, the time spent on outdoor play could be 20 to 40 per cent. Lynch concluded that for the children living in Melbourne, homework usually took up the time that might have been spent playing or sleeping. This is universal for school-aged children, even without taking school grade differences into account (Lynch, 1977).

Lynch's report of the limited time school-aged children spend on play has been reinforced by other international research, and explained as the mixed outcome of various factors. In the US, a decrease in children's outdoor play time contrasts with a corresponding increase in screen time (Kimbro, Brooks-Gunn & McLanahan, 2011). Parental concern about neighbourhood safety, especially negative maternal perceptions, can prevent children from taking part in outdoor play (Kimbro et al. 2011; Kimbro & Ariela 2011). Research conducted in New Zealand shows that the increasing car ownership, working parents and easy access to technology together result in children spending more time playing at home than playing outdoors (Witten et al., 2013). In Amsterdam, changing social conditions and the decreasing number of children, parent's and children's concerns about safety and the prevailing middle-class culture related to the acquisition of cultural resources during childhood all contribute to the reduction of time spent outdoors (Karsten, 2005). In Asian countries, decreasing outdoor play time is related to increasing academic pressure. In research conducted in Japan after the 2011 disaster, there was a great emphasis on school education and children's academic achievement (Woolley & Kinoshita, 2015). The children usually needed to finish their homework before they could play outside. From the perspective of environmental behaviour, researchers in Finland and Belarus have suggested that the affordance of the outdoor environment also influences the length of time children spend on outdoor play (Kyttä, 2002; 2004).

## 2.5.3 Health problems associated with less outdoor physical activity

Less outdoor play time can have an influence on children's physical heath. With less time spent outdoors, children are involved in less physical activity and instead spending more time on sedentary activities indoors, which can be associated with childhood excess weight gain (Stone & Faulkner, 2014; Sijtsma *et al.*, 2015). In China, the Report on Childhood Obesity in China (2017) shows that childhood obesity emerged as a general health problem only after the 1990s (at the same time as Chinese economic development accelerated). In 2014, the obesity rate of Chinese children living in an urban environment, aged from 7 to 18, was around 28.2% and 16.4% for boys and girls, respectively. Changing of living environment, lifestyle and dietary structure, as well as a lack of physical activity were the explanation given for these problems (Ma, Mi & Ma, 2017).

For Chinese urban children, short-sightedness is also a prominent health problem. The rate of short-sightedness of Chinese primary school children (aged 6-12 years) is around 40%, which is the highest around the world (Xinhua New, 2017). Research about myopia among primary school children conducted in the Greater Beijing area suggests an association between childhood myopia and less outdoor activity, more indoor studying and screen time, and living in an urban area (Guo *et al.*, 2013).

To conclude, children's daily routines are a significant factor in understanding the time they spend on play. Research into children's daily activity shows that decreasing outdoor play time is a global trend, for various reasons. This lower level of outdoor physical activity threatens urban children's health, especially in respect of childhood obesity and myopia.

## Summary

In this chapter, comparing recent research into children's outdoor play environment, focused on the design of playgrounds, with the repeating cycle of the GUIC programme, which takes understanding children's use and perception of their surrounding environments as its main target, has helped to identify a gap in our knowledge. To address this gap in our understanding of children's outdoor play experiences in Chinese cities, the four dimensions of SPAT has been introduced as a theoretical model because it supports the understanding of play experience in childhood now and across the generations (For an explanation and justification of the theoretical model see Chapter One 1.1, Terminology and theoretical background).

In the dimension of space, the concepts of territorial range, place affordance and the constructed and found space are interpreted, providing tools for describing and understanding children's use of places. In the dimension of people, children's free range and independent mobility are interpreted together with the factors influencing it. The parenting styles of over-supervision, intensive mothering and co-parenting conducted by both parents and grandparent are reviewed to provide contextual information for the subsequent work. In the dimension of activity, a typology of children's game is provided, and interventions for additional play opportunities and the experience of interacting with natural elements are interpreted in detail for a more systematic understanding of children's various play experiences. In the dimension of time, children's daily routines and the decrease in outdoor playing time and the reasons for it are interpreted.

# Chapter Three Research Design

# Introduction

Having identified the research aim and objectives in the previous chapter, this chapter focuses on the methodological approach applied in this research. This chapter has six sections which address the philosophical foundation of the research, its methodological approach, data collection methods, data analysis strategy, pilot study and research ethics.

As a starting point, based on the research target, which aims to understand the interaction between childhood play experiences and urban environment transformation, the ontological perspective and epistemological position of this research are established (3.1 Philosophical approach). On the basis of this philosophical foundation, the methodological approach is described, an embedded critical single case study in the central area of Beijing, China (3.2 Methodological approach).

Using the initially designed research framework, the pilot study was carried out in a real world setting. The conduct of the pilot study improved the initial research design in two ways (3.3 Pilot study). The precise site of the case study was confirmed as the Shichahai area in Xicheng District in Beijing, and the initially proposed data collection methods were tested and revised.

In the later sections of the chapter, the data collection methods used for the main study are described in details (3.4 Data collection framework). With the mixed use of multiple data collection methods, including interviews, observations, diaries and archives, data triangulation and construction validity is achieved. The analytic strategies for these various data are explained, distinguishing between qualitatively analysed text data and visualized quantitative data (3.5 Data analytic strategy).

At the end of this chapter, the ethical considerations relating to the involvement of childparticipants in the data collection are discussed, together with the data confidentiality measurements (3.6 Research ethics).

## 3.1 Philosophical approach

It is important to be clear about the philosophical position from which social reality is understood and explained in this research. Across different social science research traditions, there are diverse preferences in philosophical position. These different philosophical positions not only shape the methodological approach applied in these different research traditions but at the same time, but are developed and spread by testing in the real world. The most widely-applied philosophical positions adopted in social science research are conventionally distinguished and labelled as the 'relativist', 'positivist', 'interpretive', 'post-structuralism' and others (Mason and Dale, 2011). From the position of an 'interpretivist', Mason distinguished and defined two basic categories for social sciences research, qualitative and quantitative research.

According to Mason (2002), qualitative research is

grounded in a philosophical position which is broadly interpretivist in the sense that is concerned with how the social world is interpreted, understood, experienced, produced or constituted (p.3).

and the characteristic of qualitative research data generation is

both flexible and sensitive to the social context in which the data are produced (p.3).

In contrast to Mason's interpretive viewpoint, Robson suggests using a 'realist approach' to explain the social science research conducted in the real world. According to Robson, the realist approach is the 'synthesis of attractive features of post-positivism and constructionism' (Robson, 2002, p. 16). With this realist approach, Robson divides real world research into two basic types, 'flexible design' and 'fixed design'. As indicated by their names, the way to distinguish these two types of research is whether there is a developed conceptual framework or theory applied before the research begins.

Though rooted in distinctive philosophical underpinnings and different in name, these two separate approaches can act in concert to underpin social science research. Robson (2002) explains that qualitative research is flexible and quantitative research is fixed. This research, with its interest in interpreting social phenomena in their real-world social context with a flexible designed framework from the outset, is qualitative research.

After identifying this study as flexibly designed qualitative research, there are two fundamental philosophical issues that need to be clarified: what is the nature of social reality? And how is knowledge or evidence of this social reality presented? The answer to these two questions points to an ontological perspective and the epistemological position of the research.

From an 'interpretive' viewpoint, the ontological perspective is a fundamental way to understand the very nature and essence of things in the social world. This social essence can be the individual, institutions, subjects, objects, minds, psyches, feeling, memory, consciousness, experiences, progress, actions, behaviours or interactions. These different ontological social essences can be combined to assist and complement each other, but sometimes the different essences are considerable logically competing rather than complementary. Some ontological essence is better matched with qualitative research methodologies than others (Mason, 2002).

As for the epistemological position, it is 'the theory of knowledge and concerns the principles and roles by which the social phenomenon can be known and knowledge can be demonstrated' (Mason, p.16). Based on an ontological perspective for understanding the nature of the real word, the epistemological position works out what counts as evidence or knowledge about the real world.

The interaction between an ontological perspective and the epistemological position is that a substantive understanding of the social world shapes the methods used to generate evidence, but the methods shape the things that are the substance of the inquiry.

Based on these philosophical understandings, for this research, the interaction between individual experiences and the surrounding environments is taken as the ontological centre; at the same time, the sources reflect the physical, social, cultural features of urban environments, and the data shows an individual's experiences and perceptions of their surrounding environments; all count as reliable evidence on the epistemological dimension. Existing data and data generated from field research are considered to be valid evidence from which to understand social realities.

# 3.2 Methodological approach

Having identified the philosophical approach, establishing the methodological strategy becomes fundamental. According to Robson (2002), each piece of social science research can have a special preference of a particular research style depending on its purpose, covering the theoretical background, research questions, data collection methods and sampling strategies. In the qualitative research tradition, there are three influential research styles, grounded theory studies, ethnographic studies and case studies.

These three methodological strategies differ: a case study is an in-depth study of a case or cases; an ethnographic study describes the cultural behaviours of a particular group; and a grounded theory research focuses on the theoretical model (Robson, 2002). So, comparing these different narrative styles, this research is a case study which studies the life experiences of a particular group of children together with their surrounding environment.

To define a case study approach beyond its narrative style, there are several criteria:

Investigates a contemporary phenomenon (the case) in depth and within its realworld context, especially when the boundaries between phenomenon and context may be evident;

Copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result;

Relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result;

Benefits from the prior development of theoretical propositions to guide data collection and analysis

(Yin, 2014, p.17)

Yin's definition emphasises the complementarity of the context and phenomenon, as well as the validity achieved by multiple sources of evidence. From a more comprehensive and broad perspective, Gerring proposes eight common characteristics to define a case study:

- (a) that the method is qualitative, small-N;
- (b) that the research is holistic, thick;
- (c) that it utilizes a particular type of evidence;
- (d) that its method of evidence gathering is naturalistic;
- (e) that the topic is diffuse;
- (f) that it employs triangulation;
- (g) that the researcher investigates the properties of a single observation, or

(h) that the research investigates the properties of a single phenomenon, instance, or example

(Gerring, 2007, p.17)

Taking the common, the case study as a methodological approach is characterized by an in-depth understanding of a real-world phenomenon within its real-world context, using multiple sources of evidence. In taking a methodological approach, the case study can be a single or multiple-case study. According to Yin (2014), the rationale for conducting a single case study is 'having a critical, unusual, common, revelatory or longitudinal case'. For a single case study, depending on whether or not it consists of several sub-units, we distinguish between a holistic case study and an embedded case study. The holistic case study examines only the global nature of a single case, while the embedded single case study involves analysis units at more than one level (Yin, 2014).

This research is a single case study which aims to understand children's outdoor play experiences in the central area of Beijing. It aims to help provide a critical Chinese perspective on children's outdoor play experience in the context of rapid urban development. Within the main topic of children's outdoor play experience, units of the play space, friends, activities and time are divided; and these sub-units are compared across three generations. So this research is an embedded critical single case study.

# 3.3 Pilot study

After identifying the initial methodological approach and data collection methods, a pilot study was undertaken to refine the original data collection plans. The pilot study inform the main study in two ways, one is to confirm the case study site; the other is to test the proposed data collection methods.

# 3.3.1 Confirm case study site

In order to understand the interactions between children's outdoor play experiences and the rapid transformation of the urban environment of Beijing, the choice of case study site pays attention to the development history and local culture of the potential sites. A suitable site needed to be typical and characteristic of urban Beijing. Three residential areas within central Beijing were considered as having the potential. Also, before conducting the pilot study in the field, there was an initial participant recruitment plan of meeting and chatting with children playing outdoors. However, when this initial plan was firstly undertaken and tested, some unexpected facts prevented the proposed data collection. One of the major problem is that there were seldom any children to be seen playing outdoors. This makes the proposed participant recruitment plan to be difficult to achieve. Then, solving this problem as the research progressed reshaped the process of finding an ethical access to local children.

In order to access children in the local communities, the researcher turned to the local government for help. To begin with, introduced by a familiar local government officer, the researcher had the opportunity of introducing the aim and field research procedures of the research project to other local government officers. After introducing the project to the fifteen sub-district committees (街道) within Xicheng District, Beijing, four sub-district committees agreed to participate in this research.

It seemed to be a breakthrough, but the extent of help provided by these four sub-district committees varied. Three of the four sub-district committees only helped by giving permission to interview staff working for them. There was only one sub-district committee which provided help by introducing the researcher to street committees ( $\stackrel{\star}{\not{\perp}}$ ), the lower level of government department within the sub-district committee and the lowest level of Chinese government in urban areas. Only with the help from the street committees, could the researcher step into courtyard houses in the local communities with

permission and protection. So the case study site was settled within the Shichahai Sub-District, where the street committees could provide help to access local children by visiting their homes, taking part in children-related community events and going to afterschool classes and summer schools within this sub-district.

The pilot study uncovered an ethical way to recruit local children to participate in data collection, through cooperation with local government, which is also providing the main reason for the confirmation of this site for the main study.

### 3.3.2 Revised data collection methods

Besides revising the case study site, the pilot study also played another significant role in testing the initially proposed data collection methods. During the pilot study, the data collection methods of dairy, interview and observation were applied to local children and the feedback was used to revise the data collection framework for the main study. The data collection procedure of interviews and diaries was refined, and additional data collection methods using photo-voice (Loebach and Gilliland, 2010; Wilson, Martin and Wang, 2007) were introduced. A site from which to conduct direct observation site was also confirmed.

#### 3.3.2.1 Interviews

Interviews are the dominant data collection method for this research design. In the 1970s GUIC project, interviews were conducted with children in various ways, including semistructured interviews, child-led tours and interviews based on children drawing maps of their surrounding environments (Lynch, 1977). In the 1990s GUIC project, additional interview methods were applied when children were given cameras to take photos of their surrounding environments (Cosco & Moore, 2002).

During the pilot study, all the methods applied in the GUIC projects were tested with the children living in central Beijing. Some did not work well with these children, but, others proved to be valid data collection methods. The child-led tours were difficult to conduct because these children lacked independent mobility in their surrounding environments. Also, because the map drawing process is time-consuming, most of the children were not interested in being participants. As a result, both the child-led tour and the map-drawing were rejected for the main study. On the contrary, the method using photo-voice was welcomed by the children and provided detailed information about their outdoor play environments; while, the semi-structured interviews were the most efficient way to

understand children's use and perceptions of their outdoor environments. Therefore, semi-structured interviews were chosen for the main study as one of the dominant data collection methods and photo-voice recordings were also carried out to provide more indetail information.

## 3.3.2.2 Observations

Observation is the other main data collection method employed for this research. Both participant observation and structured observation are proposed in the research design and were tested in the pilot study.

The participant observation was conducted by working as a volunteer teacher in the summer nursery school organised by the Shichahai sub-district committee. By spending time charting, playing and interacting with children, the researcher was well accepted by them. By spending time with the children, it became possible to connect with the children's parents and other caregivers. Also, during the field research, the researcher lived in a courtyard house in the case study area, which gave opportunities to observe and experience local people's daily lives. By living with these families, the local children's daily experiences and the factors influencing their experience could be understood in more detail. With the information gained through participant observation, data collection could step up to the next stage of direct observation.

Learning from participant observations and interviews with children, several green spaces within the Shichahai area were frequently mentioned as children's favourite outdoor play spaces. During the pilot study, three popular parks were visited: Shichahai Children's Park, Beihai park and Jingshan park. Two of these, Jingshan and Beihai parks are famous tourist attractions with a large area, where the local children and sightseeing tourists cannot easily be distinguished. Unlike these two parks, the Shichahai Children's Park is a small street park without famous tourist attractions, so it is more widely used by locals. With the main focus on the local children's play activities, direct observation was decided to be conducted in Shichahai Children's Park.

Once this choice of site had been confirmed several informal direct observations were conducted to record the number of children playing in the park at different periods of time in a day. Observation recordings shoed that in the summer time, there were seldom any children playing in the park in the morning or at midday; only in the afternoon and evening were there more children playing in the parks. For this reason, in the main study, direct observations were conducted in the late afternoon, from 5pm to 7pm.

## 3.3.2.3 Diary

During the pilot study, a diary method of data collection was tested with local children to understand their daily routines. With help from summer school teachers, predesigned diary forms were given to children. They could have a whole day to fill in this form, recording their activities in the previous 24 hours. These diary forms were then gathered on the next school day. But, it turned out that the recovery rate was extremely low. Also, because the diary forms were distributed in the summer schools, which strongly leads to the sampling bias, most of the reports showed that spending time in summer schools was the dominant daily activity.

To overcome the problem of the low response rate and the sampling bias, both the layout and the distribution methods of these diary forms was optimised. Instead of asking children to record their activity within the previous 24 hours, they were asked to recall what they did yesterday or on an ordinary summer holiday. The layout of the diary form was refined so that it could be fully filled in by children within 15 minutes. The simplified layout and shortened response time allowed these diary forms to be given to children in more various occasions. This largely helped to reduce the sampling bias.

To conclude, the pilot study tested the feasibility of all the proposed research methods: the children's interview was refined; the site for structured observation was confirmed; and the content and distribution of the diary forms was revised. These adjustments to these data collection methods made the data collection procedure more reliable.

## 3.4 Data collection and triangulation framework

Formal data collection was conducted twice in the summertime of both 2016 and 2017. Because of the research schedule, there was no data collection during the wintertime. As flexible qualitative research, the overall data collection strategy has been modified and refined throughout the process of data collection, especially during the pilot study. For the main study, the data collection strategy is a synthesis of interviews, observations, diaries and the use of data archives. The mixed use of these qualitative data collection methods has a twofold advantage. Data triangulation makes these data collection methods complement and support each other for validity of construction (Yin, 2014). And the data collected through different methods can generate an evidence chain (Yin, 2014), which is helpful for a more comprehensive understanding of an intricate social phenomenon.

# 3.4.1 Interviews

As the main target of this research is to develop an insight into children's daily outdoor play experiences and their perceptions of the outdoor environments, asking children directly about their use of them and their feelings is an obvious short cut in seeking answers to these research questions (Robson, 2002). Compared with the questionnaire, the semi-structured interviews, conducted face-to-face with each individual, facilitated following up interesting responses and investigating underlying motives. Interviews were the best way to clarify children's comprehension and elucidate vague answers.

So for this research, the interview was the dominant data collection method, as in the Growing Up in City projects conducted in both the 1970s and 1990s, where interviewing children was also the dominant method used (Lynch, 1977; Chawla, 2002). In this research, to cater for children's different comprehension levels and development characteristics, the interviews were carried out in several special ways, one-to-one interview, focus group and using photo-voice.

# 3.4.1.1 Semi-structured interviews with children

Conducting interviews with children has some special difficulties compared with interviews with adults. Interviews with children can be influenced by factors like the children's development levels, recent conversations they have had, the environment the interviews were conducted in and even the ways the researcher interprets the purpose and content of the interviews (Poole and Lamb, 1998).

To minimize these influencing factors, Poole and Lamb (1998) suggested using child interview protocols. These protocols offer guidance in designing interview questions and conducting interviews with children, and were adopted for this research. The interviews were designed with open-ended questions, together with specific probes to clarify details and raise additional topics (the interview questions are attached in the Appendix). The interviews were carried out within the children's familiar environment without parents present. And the interviewer remained neutral and avoided offering perceptions when conducting the interviews (more details will be provided in 3.6, research ethics). For the content of the semi-structured interviews, the 'interview schedule' (Robson, 2002) was applied, with several topics and a focus on children's daily use of outdoor environment, outdoor play with friends, games and play activities, and daily routines. The interviews were flexible in sequence of topics and in the time spent on each topic. Whether or not to talk in more detail about each topic depended on each child. Each of the interviews took around ten minutes, depending on the individual children's attention capacity.

Overall, with interview protocols and the interview schedule for the field research, the majority of interviews were conducted 'one to one'. Sometimes, when children want to be interviewed together with their friends or surrounding children were attracted by the interviews and wanted to share their opinions, 'focus group' interviews were undertaken.

### 3.4.1.2 Photo-voice with children

The methods of 'photo-voice' were applied as an additional data collection method. Widely used in behavioural and health research, photo-voice is an effective way of documenting and communicating an individual's unique experience of places (Loebach and Gilliland, 2010; Wilson, Martin and Wang, 2007). In the revived GUIC project, photographs taken by children were used as evidence to understand children's daily use of their surrounding environments (Cosco and Moore, 2002; Percy-Smith, 2002; Wilhjelm, 2002; Salvadori, 2002).

Following the guidance proposed by Sutton-Brown (2014), there are several steps to conducting photo-voice. The child participants were recruited in the summer schools. The children who wanted to take part in the photo-voice research were provided with digital cameras to take photos of their daily play environments. Then after school, in the afternoon and evening, they were asked to take pictures outdoors. During the next summer school day, they met the researcher at the school and discussed the photographs.

#### 3.4.1.3 Interviews with adults

Besides the interviews with children, interviews were also conducted with adults. These interviews with adults contributed to exploring the research targets in two ways by distinguishing their roles as local children's supervisors or local adult-residents. On the one hand, children's supervisors could provide more descriptive as well as interpretative details about their children's daily lives from the perspectives of an adult.

On the other hand, local adults in the parent and grandparent generations had grown up in the Shichahai area, and their own childhood play experiences constituted important evidence in their own right. Both these two perspectives are crucial important to understanding how children use and perceive their surrounding environments in the context of rapid urban development.

As well as adult-residents, teachers and the working committee officers were recruited to be interviewed. The interviews conducted with teachers aimed to explore children's school lives and learning activity, a necessary part of any child's daily life. The interviews with local government officers focused on environmental changes in the central urban area and the implemented policies which have influenced the social and physical environment in the case study area. The interviews conducted with both teachers and committee working staff were carried out in an informal and unstructured way, and mainly focused on things relating to children's daily lives.

To conclude, interviews were the main data collection method applied in this research, and were conducted with both children and related adults to understand both present and past childhood play experience. During the field research there were in all 131 children (68 boys and 63 girls), 15 parents (12 mothers and 3 fathers), 5 grandparents (3 grandmothers and 2 grandfathers), 8 committee officers and 4 summer school teachers who participated in interviews. The participant profile is showed in Table 3.1. Figure 3.1 and shows the data sources of interviews and the target questions answered.

### Interview Participant Profile (N=163)

Children,131 Adults, 32

Semi-structured interviews				Photo-voice				
Children					Children			
	Age	Boy	Girl	Total		Boy	Girl	Total
	6	6	5	11		0	0	0
	7	9	12	21		2	2	4
	8	13	11	24		1	1	2
	9	11	11	22		1	1	2
	10	10	9	19		1	1	2
	11	11	4	15		1	0	1
	12	0	3	3		0	0	0
	12	0	3	3		0	0	0
	13	2	3	5		0	0	0
Sum		62	58	120	Sum	6	5	11

Adults	Male	Female	Total
Parents			
	3	12	15
Grandparents			
	2	3	5
Teachers			
	0	4	4
Committee officers			
	5	3	8
sum			32

Table 3.1 Interview Participant Profile

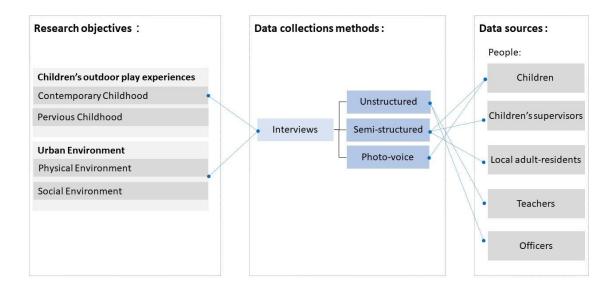


Figure 3.1Methodological functions of interview

### **3.4.2 Observations**

Interviews can have the drawback that there may be discrepancies between what people describe and what they actually do. So observation can be a more effective way to record, rather than hear about, activities in real-world settings (Robson, 2002). Observations can be conducted both formally or casually (Yin, 2014). Formal observation, recording with a coded schedule, is called structured observation, while casual observation, normally used for narrative accounts, is also called participant observation (Robson, 2002). The difference between these two types of observation is not only about the recording method, but also about the role the researcher takes when conducting observations. During structured observations, the researcher usually adopts the role of a pure observer who collects data from the observed objectives, while in participant observation, the researcher takes their own experiences as research data (Robson, 2002). Thus, the drawbacks of collecting data by observation can come from the different roles taken by the observer. When acting as a pure observer, the presence of the researcher might change the situation of the observed activities and influence their objects' behaviour. When participating in the observation, the objective narrative of the real situation can be a challenge (Robson, 2002).

Given this understanding of observation, it is an appropriate method to collect data about children's play activities in public open spaces. As in the GUIC project, observation of children's daily use of public spaces is also a basic data collection method (Chawla, 2002). In the revived GUIC projects, both participant observation (Cosco and Moore, 2002; Malone and Hasluck, 2002; Salvadori, 2002; Wilhjelm, 2002) and structured observation (Percy-Smith, 2002; Malone and Hasluck, 2002; Salvadori, 2002; Salvadori, 2002; Bannerjee and Driskell, 2002) were widely used. The structured observation tools applied in the GUIC project were designed to adapt to the condition of each case, using methods such as behaviour mapping and written descriptions. In this research, tested in the pilot study, both participant and structured observation were used in the main study.

## 3.4.2.1 Participant observation

Comparing to structured observation, participant observation is considered to be more descriptive (Robson, 2002). The main research method in the research tradition of ethnography, field notes are the central data collection tool for participant observation (Balsiger and Lambelet, 2014). With additional data collection tool of photographs, participant observation takes place throughout the whole procedure in field research.

The participant observations are conducted from a triple identity perspective. From the perspective of a pure observer, the researcher captures the environmental characteristics of the historical and protected inner city area of Beijing in photographs and written descriptions. Taking the role of a volunteer teacher in summer schools, the researcher takes part in a number of organized children activities, defined as interventions in Chapter Seven. By living in the inner city during the field research, the researcher could take the role of a local resident, so that daily lives of the local residents could be better understood.

### 3.4.2.2 Structured observation - Behaviour mapping

Structured observation is a suitable method for describing the general condition of children's outdoor play environments and quantifying children's behaviours in public open spaces (Robson, 2002). After visiting several parks in the pilot study, it was decided to conduct the structured observation in the Shichahai children's park (discussed in 3.3.2.2 Observation).

In previous research, the most commonly used observation tools for recording children's play activities are CARS (Children's Activity Rating Scale) and SOPLAY (System for Observing Play and Leisure Activities). CARS mainly focuses on the children's physical activity (DuRant *et al.*, 1993); SOPLAY assesses children's physical activity levels together with contextual factors (Saint-Maurice, 2009). Both of these two observation tools place an emphasis on children's physical activity, which results in and relates to children's physical health. In this research, although children's health is important, more attention is given to children's general outdoor play activities, which has a closer relationship to children's wellbeing. Echoing the GUIC projects, behaviour mapping is used as the data collection method instead of SOPLAY or CARS. In order to record children's various play activities, the category system of children's play proposed by Bishop and Curtis's is used (discussion of this category system in 2.2.4 Play Activity).

Behaviour mapping is conducted in a systematically organized way to assess children's behaviour linked to the physical characteristics of play environments. Therefore, the key information collected in this mapping process was fourfold: children's play activities, carers' activities, the spatial location of all these activities and the general environmental context. Taken from the research conducted by Cosco, Moore and Islam (2010), the procedure of behaviour mapping is divided into four steps.

Firstly, before conducting behaviour mapping, Shichahai children's park was mapped by field measurement. For convenience in immediately observing and recording children's activities, this park, which takes around 3000m<sup>2</sup> range, was divided into two observing areas. Secondly, when observing children's play on site, boys and girls were recorded with a different symbol on the map, and their apparent age, as well as a description of their activities, were recorded on the other form. Thirdly, not only the children but also their carers, who had an obvious supervisory relationship with the children, were recorded with their apparent generation and gender on the map close to the children. Lastly, the weather conditions and interventions on the site were also recorded to provide the context information.

The mapping procedure lasted for around 5 minutes in each area, which was just enough for recording all the immediate behaviours happening on the observing site, which made each activity could be only recorded once during the observation time. Mappings were alternately conducted on the two areas. Every time, it took a total of fifteen minutes to record all the children's and their carers' behaviours happing on the whole area. Therefore, from 5pm to 7pm (the reason for choosing this period of time in the afternoon was based on the findings of the pilot study, explained in 3.3.2.2 Observation) during the two hours' time, the children's various play activities on the site were recorded eight times.

In total, behaviour mapping was conducted in Shichahai children's park in six days in July of 2017. To make data collected from behaviour mappings can present more daily situations, within these six days, there were two school days, two working days in the school summer holidays and two weekends in the school summer holidays. Table 3.2 shows the profile of the behaviour mapping days and an example of the recording maps are attached in the appendix. Figure 3.2 shows the data sources of the two types of observations and the target questions answered by the observations.

#### Behaviour mapping conducting days (N=6)

Date	Outdoor temperature (°C)	School day	Weekend
10 July 2017	37-35	Yes	No
11 July 2017	35-34	Yes	No
15 July 2017	31	No	Yes
17 July 2017	33-32	No	No
21 July 2017	32-31	No	No
22 July 2017	31-30	No	Yes

Table 3.2Behaviour mapping conducting days

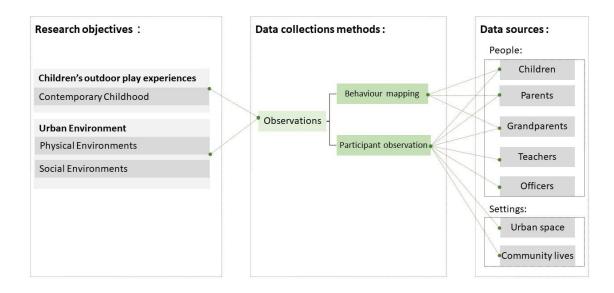


Figure 3.2Methodological functions of observation

## 3.4.3 Diary

With the aim of recording children's daily activity, the research method using a diary is borrowed from the research tradition of time budget studies, in which the main research objective is the way individuals allocate their time to different activities (Szalai, 1972; Plewis et al. 1990). In the research field of time budget studies, data can be collected both by direct observation or by self-completed diaries (Plewis, Creeser and Mooney, 1990). Comparing both data collection methods, direct observation does not rely on the respondent remembering or recording their activities, but at the risk of possibly influencing their behaviour; self-completed diaries can reduce observer influence and provide less biased data by getting recordings direct from the subjects, but subjects may not provide data with sufficient detail and there can be a low return rate (Plewis, Creeser and Mooney, 1990).

In this research, observation has been used to collect data about environmental information and children's play activities; the diaries have been used to provide time budget data. According to Robson (2002), the diary is a kind of self-administered questionnaire, sharing all the advantages and disadvantages of questionnaires. With the advantage of asking both focused and directed questions, the diary is organized in the format of daily activity logs, asking children to record their activities in each of the 24 hours on an ordinary summer holiday. To minimize the sampling bias and increase the return rate, the recording forms of diary were given to children in both summer schools and communities, and collected immediately in the field after the children finished filling in the forms.

Echoing the 1990s GUIC projects, the diary was also a main data collection method for research conducted in Warsaw (Zylicz, 2002), Bangalore (Bannerjee and Driskell, 2002) and Melbourne (Malone and Hasluck, 2002). In the research conducted in Beijing, the children were asked to record details of their activities, the place they did them, the people accompanying them and their happiness level when doing it (Example of the diary is attached in the Appendix). In total, seventy valid diary forms were completed and collected from the field research, with twenty-nine boys and forty-one girls responding (Table 3.3 shows the participant profile). Figure 3.3 shows the research objectives for doing a diary with children.

#### Participant Profile of Diaries (N=70)

Boys, 29 Girls, 41

Age	Boys	Girls	Total
5	1	0	1
6	1	1	2
7	2	3	5
8	6	9	15
9	7	10	17
10	5	7	12
11	5	3	8
12	1	4	5
13	1	2	3
14	0	2	2
sum	29	41	70

Table 3. 1 Participant profile of diaries

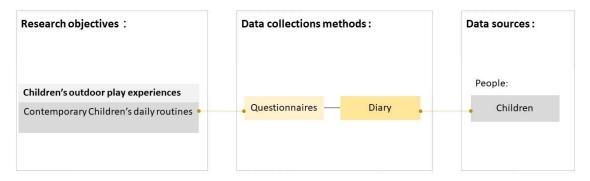


Figure 3.3 Methodological functions of diary

# 3.4.4 Archives

Use of data archives is required in order to understand the environmental background and the childhood experiences of different generations in the case study area. The method of documentation has the strength that it covers a long span of time with precise recordings (Yin, 2014). The environmental and social data about the central area were collected from museums, the National Census, National Library and Archives. The maps, census records and photographs, the history data and background data about the case study site were gathered from these reliable sources.

The data archives also provided access to the childhoods of the grown up adults. As one of the research objectives, the development of childhood experiences across generations can provide a more comprehensive understanding of childhood experience in Beijing. The evidence about this research objective was collected both from interviewing adults about their childhood memories and using data archives collected from the National Archives and local Archive centres and museums. Jones (2003) pointed out that memories used as a data collection method can involve more feelings and emotions than facts. So using the archive data about children's play in the past provided more reliable and objective data to support and adjust the evidence generated from interviews. The following graph (Figure 3.4) shows the functional relation between data archive and research objectives.

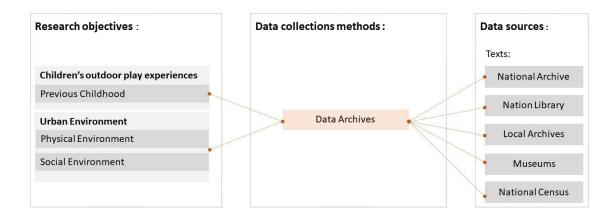


Figure 3.4Methodological functions of data archive

## 3.4.5 The data triangulation framework

In a flexibly designed case study, using multiple sources of evidence establishes the validity of its construction (Yin, 2014). To answer proposed research questions, evidence needs to be collected from various data sources by different methods. These include

interviews, observations, questionnaires and documentation, which are mixed and applied to supplement each other to provide reliable evidence.

As mentioned before, each of these data collection methods has its advantages and drawbacks. When applied together, these multiple sources of evidence collected through different methods can support each other to generate valid data. To understand childhood play experience, interviews were conducted with both adults and children. To gain further understanding of children's daily routines and time spent on play, diaries were undertaken with children. The main drawbacks of both interviews and questionnaire responses are the discrepancies between what people say and what they actually do. To overcome this problem, observations are a third method applied to directly record children's play activities in the urban parks and environmental settings. The archive data collected provided evidence about the past, previous experience of childhood play and urban environmental transformation.

Altogether, the data collection methods of interviews, diaries, observations and data archive have been applied to matching the target data sources to collect data about both childhood play experiences and urban environmental settings. The following graph (Figure 3.5) shows the relation between data collection methods, research objectives and data sour sources.

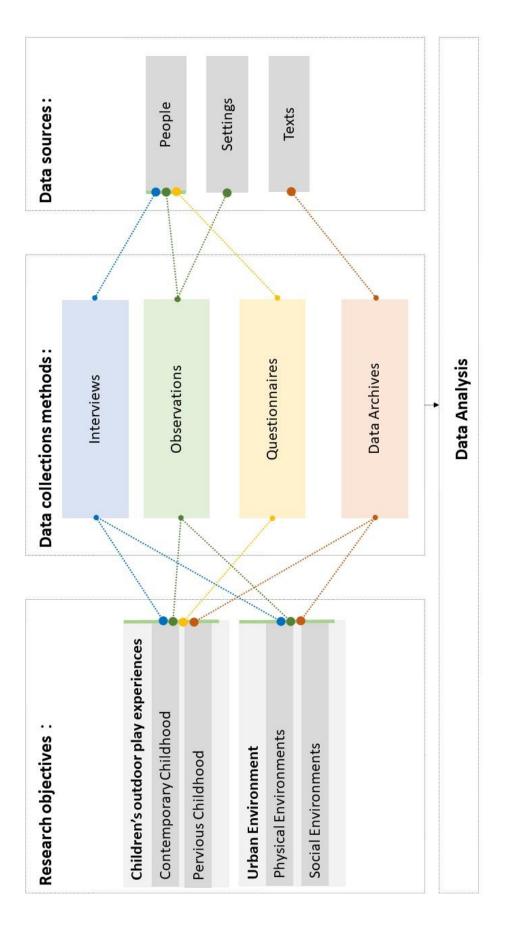


Figure 3.5Data triangulation framework

# **3.5 Data analytic strategy**

The data analytic strategy of this research can be divided into two stages. Descriptions of children's outdoor play experience in past and present were developed using the SPAT (Space, People, Activities and Time) framework. These findings were interpreted from 'ground up' (Yin, 2014) contextual data about the social, environmental, and cultural background so that these phenomena and the processes leading to them can contribute to our knowledge of childhood play experience in urban China.

# 3.5.1 Data of interviews

Interviews were conducted one-to-one, in focus groups and by photo-voice, with both children and adult participants. Most of the data collected from the interviews were in the format of audio recordings. After being transcribed, the interview data were analysed using the software package Nvivo (version 12) and sorted by topics and themes. As for the photos taken by children when doing photo-voice, they were collected and linked to the interviews with the child who took them. Then, the photos and children's interpretational notes of these photos were also put into Nvivo for further induction and reorganization during the data analysis procedure. These qualitative data collected by communicating with people were combined to generate the basic database for this research. Within this database, topics and themes developed to address the research questions.

# 3.5.2 Data of observations

Observations were conducted by both participant observation and behaviour mapping. In the participant observation, the data was collected in the form of written descriptions and photographs. Like the data collected by doing interviews, these qualitative data were analysed with coding into topics and themes in Nvivo (version 12).

Behaviour mapping recorded data on the maps. When doing behaviour mappings, each child and the accompanying adults are observed and recorded on the maps as a spot with different shapes. Referenced against the contextual data, the age, gender and activity pattern, these spatially-related data are manually input in ArcGIS and then visualized using this software.

# 3.5.3 Data of Diaries

Using diaries, data about children's daily activity were recorded as activity logs. For the qualitative data analysis, different types of children's daily activities were colour coded. Each child's activity in a single day was presented in a frame with twenty-four cells, standing for twenty-four hours, in Excel. The children's daily lives could be visualized by the different colours. Added to this, the over-all time spent on a particular type of activity could also be calculated, helping to provide a more detailed description of children's daily lifestyles.

To conclude, the data collected from field research through interviews, observations, diaries and data archives are in the format of texts, photographs, maps and colour coded tabulations. For the qualitative data including the text data (interview transcriptions, written descriptions and archives) and the image data (photographs taken by both researcher and children as well as historical maps) were analysed by coding into different themes in Nvivo to generate meaning and provide understanding. The special-related mapping data collected from behaviour mapping and the coded tabulations collected by diaries were visualized using ArcGIS and Excel.

# **3.6 Research ethics**

An ethical approach is required to any research, especially when it involves childparticipant. Considerations was given to the ways in which children were invited to be involved, and to protection of the children's rights to participate freely and to withdraw during data collection; and to the measures of data confidentiality required.

# **3.6.1 Invitation of child-participants**

Children (aged six to twelve) were the main participants in the field research. Except for the behaviour mapping directly conducted in public open spaces, recruiting these child-participants were conducted with the help from street committees, summer schools as well as the 'snow-ball sampling' (Biernacki and Waldorf, 1981). As described in the pilot study, firstly, the street committees were connected to provide help in working with children living in that area. Then, several summer schools running in the case study area also decided to provide help. With the help from both the street committees and summer schools, a large number of children was formally invited to the data collection. Furthermore, the 'snow-ball sampling' also played an important role in recruiting children in a more casual way. Especially when conducting interviews with a specific child in the public open spaces in the communities, attracted by the undergoing interviews, there were usually more surrounding children who took part and shared their answers.

### 3.6.2 Informed consent during the data collection

To ensure that the child-participants were fully informed and in order to get their consent before conducting data collection, the help from street committees and summer schools played a crucial role. When data collection was carried out in the neighbourhood communities or summer schools, firstly, street committee staffs or summer school teachers provided help with interpretation of basic information about the research project. Then the researcher explained the details of the data collections and children's right to drop out or to refuse to answer questions. Only after children fully understood what would go on and their rights, their oral consent would be asked for, saying that they would voluntarily participate in the data collection and that they gave the researcher permission to use their data.

To ensure that the children's expression would not be influenced by their adult caregivers during the data collection procedure, especially the interviews, children were interviewed without their caregivers being present. In addition to the oral information and consent, the information sheets and the consent form were also used for the photovoice and diary. These consent forms and the information sheets were given out together with the diary forms or cameras.

Both requirements, for information and consent, were conducted in the form of both oral and written consent. The written information sheets and consent forms were signed by children's guardians, while the oral explanation was provided to children, with recorded oral consent from child-participants.

### 3.6.3 Data confidential measures

During the interviews, questions related to sensitive personal data about adults, like their marital status, household incomes or occupations, was only asked for when it was obviously related to a specific condition. These sensitive personal data were recorded anonymously. The more general basic personal data, such as age, gender, remain confidential and are only used for data analysis. When doing analysis, quotations from the interview answers are only cited with the participant's age and gender. No children's or adults' identity can be traced. The image data including the photos taken by both the researcher in observation and children in the photo-voice, the maps recording the development history of the urban central area and the drawings conducted by children were all used anonymously in qualitative data analysis. Any photo content showing children's identifiable information will be blurred if used for publication.

#### Summary

This research is an explanatory investigation of the urban children's outdoor play experience within a dynamic urban environments. The interaction between individual experiences and the surrounding environment is taken as the ontological centre. To collect data, which provides evidence for understanding this comprehensive interaction, an embedded critical single case study was carried out in the central area of Beijing.

The evolution of the research design did not follow automatically from the identification of the philosophical and methodological approach. Sharing the characteristics of a piece of flexibly designed qualitative research, the data collection framework has been revised several times to keep the focus on the research target. During the flexible design process, the pilot study played a significant role in confirming the case study site and refining data collection methods. After the pilot study, the general research design was settled and the research methods of interviews, observations, diaries and data archives were confirmed.

The application of each data collection method was designed to cater to children's characteristics. These multiple data collection methods complemented each other to provide valid evidence. The data generated by these data collection methods come from interview transcriptions, description text, photography and maps. Most of these data are qualitatively analysed with the software package, Nvivo. The quantitative data recorded on the maps are visualized and analysed through ArcGIS software.

The ethical considerations for this research mainly focus on the appropriate ways to access children and the need for data confidentiality. With help from the local street committee and summer schools, children have been connected ethically, and the data measures have been conducted following ethical guidance.

# Chapter Four The case study area — Shichahai

### Introduction

In the previous chapter, the methodological approach applied to this research has been identified as a critical single case study, which means that the case's context is critical in explaining the phenomena studied. So in this chapter contextual information relating to the studied case will be described in detail, as seen from the perspective of the central area's history, the physical and social environment within local communities, and the broad economic development of the People's Republic of China.

The starting point for this chapter's discussion is the area covered by the case study, that of the seven street committee administrative area in Shichahai sub-district within Xicheng District in Beijing. The selection of this site and the reasons for doing so are explained in detail in Chapter 3.3, Pilot Study. The site's selection was largely an outcome of the practical issues of ethical access to child participants. A brief introduction to the urban development of Beijing as a capital city over 800 years follows, with a special focus on the political and ideological changes which have influenced its planning. The development of hutongs and courtyard houses are then traced and explored. The changing physical environment of the Shichahai area is analysed, with a focus on the private and semi-private outdoor spaces within the residential area and public green spaces around them. The social environment of the hutong communities is described and explained on the basis of both descriptions from the literature and first-hand field research data, mainly from the perspective of local residents. The long path of Chinese economic development is clarified to provide background information for an understanding of the improvement of urban living standards.

Overall this chapter presents contextual information about the case study area, the physical and social environments in Shichahai and the general economic development of the PRC, all of which have had an influence on people's daily experience.

## 4.1 Case study area of Shichahai, Beijing

The case study aims to provide a critical understanding of childhood play experience in Chinese cities. Beijing is the capital city of the PRC, and children's daily life in this rapidly developing metropolis is significant for a comprehensive knowledge of childhood play experience in urban China. Beijing covers an area of 17 thousand square kilometres and accommodates 21 million people. For the sake of practical data collection and an indepth interpretation of the whole case, a fixed but limited case study area was selected. At first three areas with a distinctive history of urban development were proposed for study (3.3.1 Confirm case study site), but the final selection emerged from practical issues relating to permissions and assistance from local government which made it possible to contact local adults and children and involve them in the data collection. Constrained by practical issues, the main study's data collection was mainly conducted over the summers of 2016 and 2017 in the Shichahai sub-district, where the local government provided help.

The Shichahai sub-district is located within the Xicheng District (shown in Figure 1.1), which containts fifteen sub-districts. Of these fifteen sub-districts, Shichahai is one of the most famous for its rich historic figures and cultural heritage. The Shichahai sub-district has twenty-nine street committees, the lowest level of government administration in the Chinese government system (Sit 1985, p. 64). Data collection for this research was conducted in the areas of seven street committees within the Shichahai sub-district, Xinhua, Huguosi, Jingshan, Liuyin, Qianhai Dongyan, Qianhai Xiyan and Boluocang (shown in Figure 4.1). Shown in Figure 4.2, the traditional low-rise courtyard-houses and hutongs are the dominant house type in this area. Figure 4.3 and Figure 4.4 show hutongs and courtyard-houses in the Shichahai area.

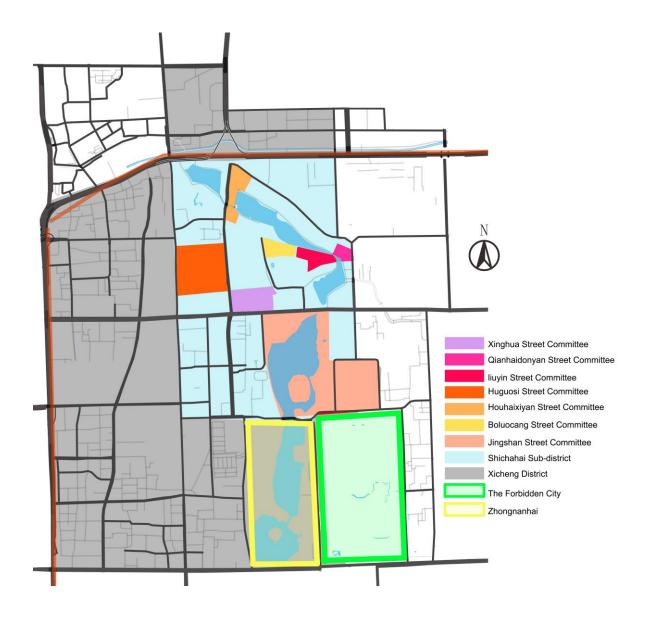


Figure 4.1 Data collection conduced in seven street committees within Shichahai Sub-district

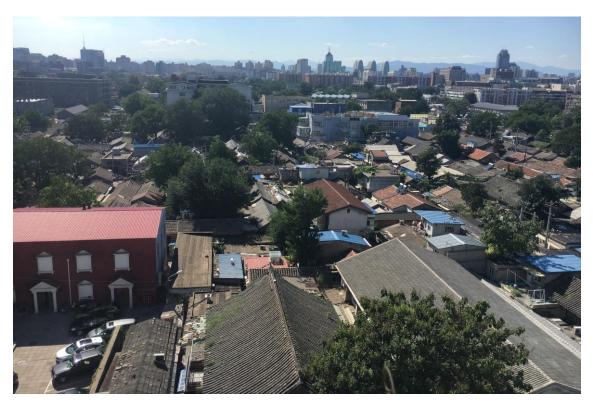


Figure 4.2 Bird-view of hutongs and courtyard-houses in Shichahai area



Figure 4.3 Hutongs in Shichahai area



Figure 4.4 Courtyard-houses in Shichahai area

## 4.2 Historical context of the case study area

The case study area is located in the central area of Beijing, which has a long urban development history as the capital city. Its history has influenced Beijing's planning and spatial arrangement, so this history and the transformation of the traditional residential blocks of courtyard houses and hutongs provide an important background to the understanding of children's daily experience here.

### 4.2.1 Urban development history of Beijing as a historical capital city

As the capital city of China for over eight hundred years, the development of Beijing city reflects the remarkable civil history of China. In the lengthy feudal age (before the 1910s), the layout of the old city embodied the ruling philosophy as well as the social and cultural norms of the nation (Dong, 1985; Sit, 1996). To emphasize the central authority of the feudal emperor, construction was arranged in relation to the imperial palace, located in the very centre. A fairly symmetrical central line runs from the north to south, around which the other streets were arranged, across or parallel to this dominant central line. This grid street pattern has been kept for centuries, since Kublai Khan established the Mongolled Yuan Dynasty capital city in Beijing, in 1279. After 1279, Beijing remained the feudal capital city through the Ming Dynasty (1421-1644) and the Manchu-led Qing Dynasty (1644-1912). Regardless of the change of dynasties, the dominant concept of the city's urban plan remained, with the city divided by the central line, vertically across streets and with narrow sub-divided alleyways called *hutongs* (Sit, 1995).

The feudal age ended with the collapse of the Qing Dynasty. Beijing remained the capital city of the Republic of China (1912-1928) and the People's Republic of China (1949-now). In the era of the People's Republic of China there has been large-scale urban expansion reflecting the country's cultural, political and economical development (Sit, 1996). Urban planning in socialist China (from 1949-1991) was largely influenced by Soviet ideology (Sit ,1996).

The development history of the People's Republic of China's urban construction could be described as having four dominant stages (showing in Figure 4.10), a phase of postwar reconstruction (1949-1957), the great leap (1958-1965), the cultural revolution (1966-1976) and a phase of liberalisation and enlightenment (1977-1992). In each of these stages, an urban development masterplan was proposed for the capital city, giving guidance to the nature of the city, its economic development, physical size and spatial structure.

At the beginning of the first phase, in the 1953 plan, the urban land area was about 500 square kilometres. This land area increased to 8,860 square kilometres in the 1957 plan, then to 17,200 square kilometres in the revised 1957 plan. Later, in the 1982 plan, it was reduced to 16800 square kilometres, and this has remained settled until now (Sit, 1996).

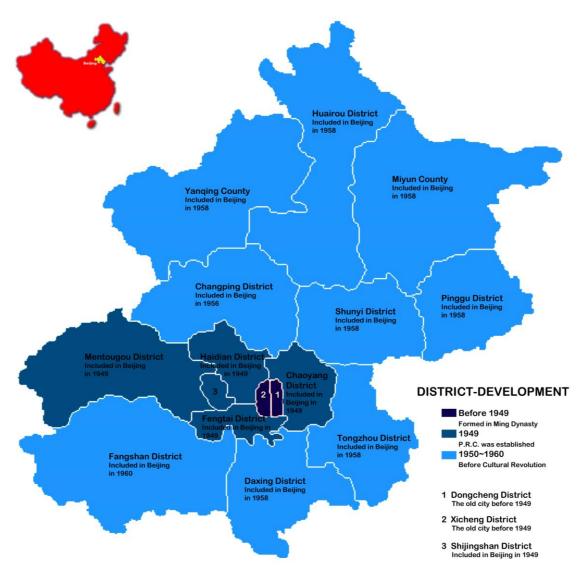


Figure 4.5 District development history of Beijing

(Source from: https://beijingconflict.wordpress.com/maps/)

This 16800 square kilometres' land area is divided into sixteen administrative districts. Shown in the graph (Figure 4.5), these sixteen administrative districts were incorporated into the administrative region of Beijing at different times. The districts of Dongcheng and Xicheng had developed as part of the capital city since the Ming Dynasty in 1400s. When the PRC was established in 1949, five more districts were added to the administrative region of Beijing, and when the 1953 Plan was introduced, nine more districts were incorporated.

### 4.2.2 Conservation of historic constructions in the inner-city area

In the inner-city area within the 2nd ring road, in Xicheng and Dongcheng districts, the history of urban planning can be traced back to the Ming Dynasty in the 1400s. Most of the hutongs and courtyard houses in this area which remain can be traced back to the early Qing Dynasty, in the mid-seventeenth century (Heath and Tang, 2010), though the turbulent history of regime change means that these historical constructions have also experienced repeated destruction and reconstruction.

Since the establishment of the PRC, several urban planning decisions applied at different development stages have had a significant influence on the physical appearance of the inner-city area (Health & Tang, 2010). Corresponding with Sit's summary of the four stages of the urban development from 1949 to 1991 (Figure 4.10), the first phase of the central area's physical transformation happened in the 1950s and 1960s. The new construction included a road-widening project and the building of monuments for the new regime. To make room for these new constructions, some of the ancient buildings were dismantled. For example, Tiananmen Square was enlarged to four times its original size by demolishing the Gate of China (Zhonghuamen).

During the time of the Cultural Revolution, from 1966 to 1976, the revolutionary target was to destroy old customs, culture, habits and ideas, and the privately-owned gardens, mansions and courtyard houses were considered to be a legacy of the old federal cultural and ideas, in contrast to the new socialist ideas. These traditional courtyard houses were taken over from being privately-owned to become collectively-owned. Used by a group of people who did not actually own them, this was a time when these ancient courtyard houses were least protect. Another result of the collective-ownership was that it became common for more than a dozen unrelated families to share rooms within a single courtyard house unit (Reuber, 1998).

After the Cultural Revolution, in 1980s, most of the properties were gradually returned to their previous owners. The courtyard houses, where the owner was difficult to trace or could not be contacted in any way, still remained as collective property. Another turning point in the protection of the inner city came in 1983, when the Beijing City Construction Master Plan (the 1983 Plan) was proposed. It emphasised the protection of historical buildings in inner city areas. Then, in 1990, on the basis of the 1983 Plan, the first Historical District Preservation Plan was developed to protect the inner old city physical environment and its ancient heritage. This initial plan selected twenty-five areas within the old city to be protected. In 2002 fifteen more areas were added to the protection list. In 2012, another three areas were added. The protected areas in the inner city can be seen in Figure 4.6, which shows that the case study area lies within the historical protected area.

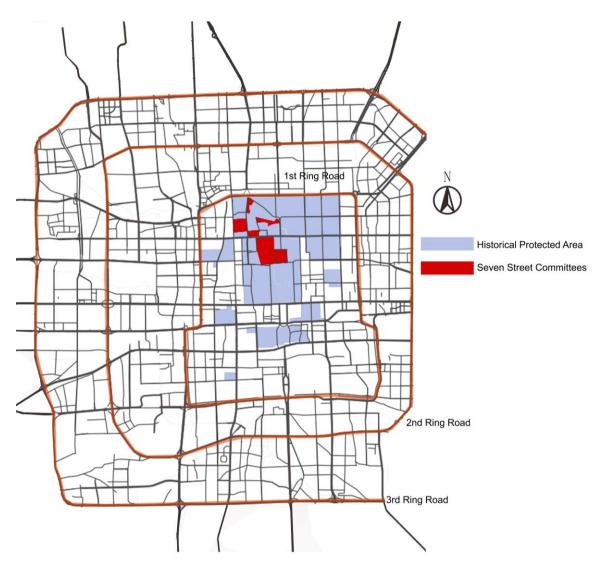


Figure 4.6 Historical protected areas

### 4.3 Physical environment of Shichahai

### 4.3.1 Decreasing outdoor spaces in hutong communities

As been explained in previous paragraphs, the ownership changes and the urban population increase after the 1960s resulted in more than a dozen unrelated families sharing rooms within a single courtyard house unit (Reuber, 1998). These congested living conditions led to a strong requirement to expand indoor rooms, and the construction of extended rooms within the courtyard houses became popular. The Historical District Preservation Plan was introduced in 1990. It places strict controls on the construction and dismantling of buildings in the protected area in order to maintain their appearance and spatial layout. Therefore, the private constructions in the historic areas can be divided between those built before the Historical District Preservation Plan applied, and the illegal private constructions built after the introduction of the plan.

The materials used differ, and both are different in materials and style from modern private construction. With differences in the buildings' ages and conditions, these buildings can easily be distinguished. Figure 4.7 shows the historically protected buildings built before the 1900s with traditional timber post and beam construction, with the 'Yingshan Ding 硬山顶' roof. Private constructions since the 1950s include the concrete steel building, with its traditional style of roof. The illegal private constructions since the 1990s usually use plastic steel or other cheap and light materials, which are easy to construct or remove.

By distinguishing the buildings built at different times, the process by which the inner city became more densely populated can be traced. In Figure 4.7, we can see the historical buildings which formed the foundational fabric of the area's spatial arrangement; the old private constructions, before1990s, take the largest land area and densify the historical protected area; the illegal private constructions, after 1990s, make use of every spare space in the already intensified hutongs and courtyard houses.

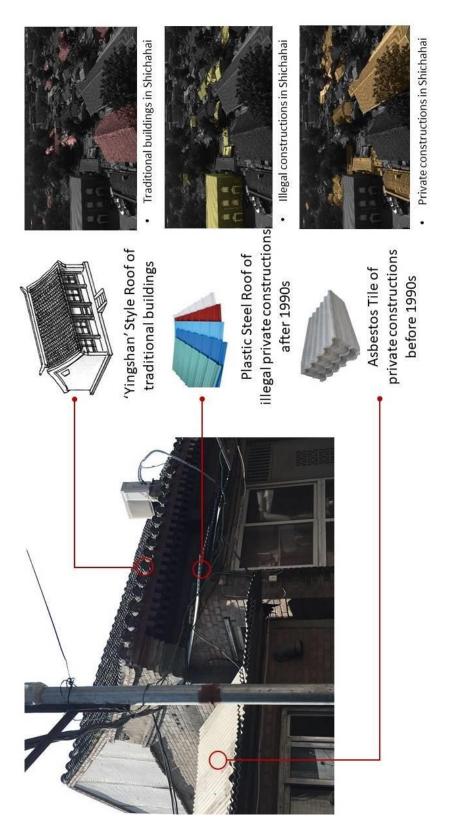
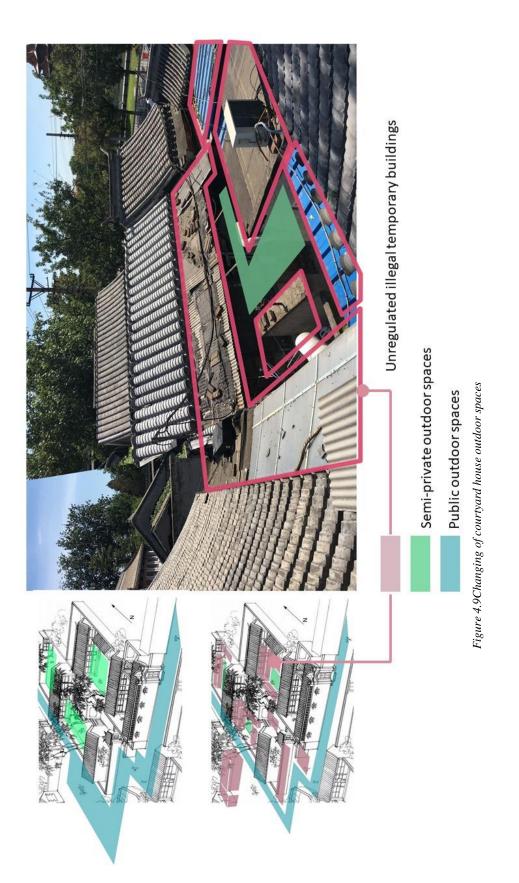


Figure 4.7Three types of buildings with different construction history

The main impact of this intensifying process is the dramatic decrease in the number of outdoor spaces. Figure 4.9 shows the current spatial arrangement of a traditional courtyard house. With its division into storage spaces and the extensions to indoor rooms, the featured central courtyard has shrunk in size. The courtyards which used to be the main type of private outdoor space owned by a single family in the past, seldom survive in contemporary Beijing's inner city. Together with the decrease in the number and size of private outdoor spaces, the hutongs which function as public outdoor spaces have also narrowed as the large number of private constructions have built up (shown in Figure 4.9). With the increase in ownership of private cars without space being made for parking, the hutongs are often used for car parking. The combined result of the increasing demand for larger indoor rooms and parking areas is that the space left for daily outdoor activity has decreased dramatically. Figure 4.8 shows the extremely crowed traffic in the hutongs.



Figure 4.8 Traffic in Hutongs



## **4.3.2** Public green spaces

The semi-public and public outdoor spaces within the hutong communities are limited, insufficient to sustain local residents' daily need for conducting outdoor activities. As a substitute, other kinds of public outdoor space such as parks, squares and sports grounds can play a more important role in sustaining local residents daily outdoor activities.

Because of the magnificent views, the two large-scale urban parks, Beihai (Figure 4.9 and 4.10) and Jingshan (Figure 4.11 and 4.12), within the Shichahai area, are famous landmarks in Beijing. These two parks attract millions of visiting tourists each year. They also provide local residents with precious public green space to conduct outdoor activities in the high-density inner-city area. In mixed used by both locals and visitors, the scenic spots are attractions for visitors, but the lawns, squares and enclosed spaces away from the tourist-crowded areas are the favourites of the local people. Besides these famous tourist attractions, there is also a small-scale street park in the Shichahai area, the Shichahai children's park (Figure 4.13). Compared with the large-scale city parks, the small-scale park is designed to provide local people with a public green place for daily outdoor activities. Without crowds of tourists, local people can use these public green spaces in a more regular and casual way.



Figure 4.10 Views in Beihai Park



Figure 4.11 People's activities in Beihai Park



Figure 4.12 Insect exhibition in Jingshan Park



Figure 4.13Views from Jingshan Park facing towards the Forbidden City



### Figure 4.14 Shichahai Children's Park

Besides its parks, this inner-city area is also rich in its human landscape and cultural heritage (Figure 4.14). Being the cultural and political centre for a long time, the capital contains a large number of former residences of historically famous people, including Song Qinglin (1893-1981), the Vice President of China (1949-1954; 1959-1975) who

devoted her whole life to promoting the welfare of women and children; Mei Lanfang (1894-1961), a notable Beijing Opera artist; Zhang Boju (1898-1982), a famous calligrapher, painter, poet and collector. There is a memorial to Guo Moruo (1892-1978) a patriotic poet, historian and archaeologist and private gardens inherited from the Qing Dynasty, like Prince Kung's Mansion and the former palace of Tao Beile, which are masterpieces of traditional private garden design. This central area has significance for its cultural integrity, which intensifies the cultural and local identity of local residents.

The city parks of Beihai and Shijingshan offer cheap annual tickets for local residents, and the Shichahai children's park is a free public open space. For local people there are several opportunities to visit the former residences without charge all year around. So all these are easily accessible public spaces or green spaces for local residents. Despite the lack of private or semi-private outdoor spaces, residents living in the crowded central area still have access to various green spaces, sharing a rich local cultural and national identity.

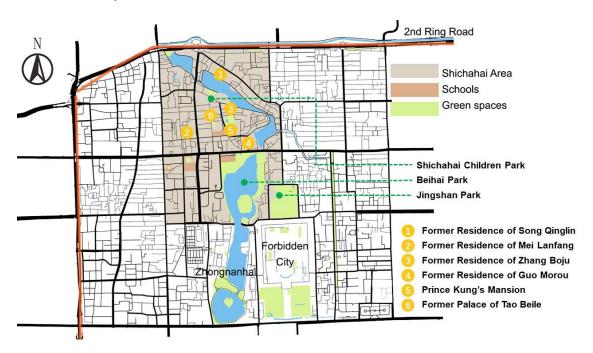


Figure 4.15 Green spaces in Shichahai area

# 4.4 Social environment of Shichahai

## 4.4.1 Political and cultural centre

As the capital's functional core area, the Xicheng District takes the role of the city's political and cultural centre, which represents the national image of modern China (Xicheng District Government, 2019).

In its role as the political centre of the whole nation, Zhongnanhai is the central government compound. It encloses a former imperial garden and is adjacent to the Forbidden City (Figure 4.9). Zhongnanhai serves as the central headquarters for the Communist Party of China and the central government of China, and houses the office of the General Secretary of the Communist Party of China (paramount leader) and Premier of the People's Republic of China (Xicheng District Government, 2019). Zhongnanhai is home to the Chinese Communist Party Central Committee, the National People's Congress, the State Council and the National Committee, which are all located in this central area. In total, Xicheng district has over 650 public institutions, 120 central government departments and 82 army units (Xicheng District Government, 2019). Together these make the Xicheng District the political center of China.

As the cultural centre of the whole nation, Xicheng's traditional buildings, gardens, costumes, foods and lifestyles are all symbols of traditional Chinese culture. Thirteen traditional skills which are preserved in Xicheng District are included in the National Intangible Cultural Heritage List (National Intangible Cultural Heritage, 2019). These include a wide range of traditional skills, drama, arts, and folk-customs, and attract millions of domestic and international visitors to experience traditional Chinese culture in its historical home. For the local residents, these representatives of China's traditional culture are more common in their daily lives, and are deeply rooted in their self-cognition of local identity.

The cultural richness of this inner city area is enhanced by its varied groups of people, as the district attracts diverse groups of people to come and live in the area. These groups include but are not limited to the local residents who are the vibrant creators of the diverse local culture; the high-ranking government officials who have influence over national decisions; and the tourists who view and experience the splendid culture and rich heritage of the unique human landscape. For those living in the central area, its mixed and rich social environment can be seen in different ways by the various groups of people, whose coexistence is a prominent feature of the social environment in the area, generating the fundamental atmosphere of daily life here.

### 4.4.2 Neighbourhoods in hutong communities

There are two types of residential status available to those living in the central area, for long-term residents and for the floating population. This is part of the prevailing Hukou System (the Residence Registration System). Long-term residents are registered within this area, while the floating population live in the area but are registered in other places. The difference in registration status has a direct influence on the basic public services or welfare available to the residents, including medical services and the school entrance requirements for children. Although they live in the same place, their different registration status means that people's daily lives can differ.

For the registered residents, considered the real local residents, the statistics show that the registered population is undergoing a dramatic decrease together with serious population ageing. According to the Beijing Regional Statistical Yearbook (2018), in the Xicheng District the registered newly-born population was 17,225 in 2017; the deaths in the population were 42,923; the natural population growth rate was -17.7%. The ageing population (aged over 65) constitutes 15.8% of the total population (Beijing Regional Statistical Yearbook, 2018). However, the data published in the Beijing Regional Statistic Yearbook only describes the characteristics of the registered population, and does not include the floating population. The complete population data, which contains more detailed information about both the registered and floating population, is non-public data which can only be partly accessed via the local government committee.

According to the data for the whole population collected from the Shichahai Sub-district committee, within its 5.8 km<sup>2</sup> sub-district administrative area there are 42,826 households with 105,131 inhabitants, including both registered and floating population. Nearly half of these residents are floating population. In comparison with the local residents, these floating migrants are generally younger, more of them come with extended families, but a lower education level than the local long-term residents (Wu and Logan, 2016).

There are two reasons for migrants to come to the district in larger family groups, where general living conditions in the crowded compound courtyard houses can be dilapidated and damp (Evans, 2014). Many local residents have moved out of the district to have

better living environments in modern residential buildings more convenient for urban life. They rent out their rooms to the floating people. And the central area, with its rich cultural heritage, excellent education and health service resources and varied working opportunities attracts a large number of young people. They come from other parts of China to take up careers in the hope of settling down to a stable life in Beijing. A large number of local residents move out and more floating migrants move into this area.

As a result the population changes in Shichahai, the social environment is also gradually changing. From the perspective of the long-term local residents these changes, brought by the migrants, can be alien. During the field work, I spoke to local residents who pride themselves as 'native Beijing-ers (老北京)', their superiority as a native Beijing-er being based on the differences between them and the migrants, who have different cultures and traditions. To build a neighbourhood with trusting relationships between people with different backgrounds takes time. However, with strangers flowing in and moving out frequently, it can be difficult for the local long-time residents to develop a trusting neighbourhood relationship with the floating migrants. In the local people's eyes, the migrant people flowing into the Hutongs and courtyard communities has made the atmosphere of the life-long stay neighbourhood unfamiliar and even hostile.

## 4.5 Economic development

Beijing, as the capital city with a significant role of administrative centre and culture centre, does not have a long history as an economic centre (Dong, 1985). In relating to the economic development which have influences on living standards of urban people, after the establishment of the PRC, several major events divided the long and winding process of Chinese economic development into different stages (showing in Figure 4.10). Among these major events, the most profound improvement of people's living standard was brought by the economic reform in the 1979.

Before the economic reform and after the PRC established in 1949, the first stage of economic development was post-war construction, from 1949 to 1952. The first Five-Year Plan (1953-1957) followed, and implemented a socialist planning system with loans, technology and advice supplied by the Soviet Union (Brandt, Ma & Rawski, 2014). From 1958, China distanced itself from Moscow's political leadership and economic strategy. With the aim of accelerating the pace of development, this stage was called the 'Great

Leap'. Unfortunately, this Great Leap movement failed quickly. The economy suffered further setbacks from the mid-1960s to the mid-1970s, when a political campaign known as the 'Cultural Revolution' sparked a new reversal in economic policies (Brandt, Ma & Rawski, 2014). These long-term failures of the economy influenced people's daily lives with extreme conditions, including a severe shortage of food.

The economic reform of the late 1970s gradually changed the isolated, backward, and impoverished condition of Chinese economy. With the reform of agricultural and the recognition of a private economy, people's living standards improved. This rapid national economic expansion was maintained for more than a decade until the 1990s. The successful result of the first stage of the economic reform led to the 1993 decision to adopt a long-term objective, to build a 'socialist market economy' (Brandt, Ma & Rawski, 2014), and this long-term objective have not changed since. Since the success of the economic reform, China has changed from an isolated and backward country with food shortages into an industrial manufacturing country with abundant material urban life.

### Summary

In this chapter, the studied case was described and social-environmental context information has been introduced.

With a long history at the centre of the capital city of China, both the physical and social environment in Xicheng are the production of urban development to deal with the changing prevailing political and cultural conditions. The Shichahai area is a dynamic area with diverse lifestyles. The traditional hutongs and courtyard houses accommodate a booming population in narrowed and crowded living spaces, but this doesn't hinder migrants from outside Beijing flowing into this area to pursue a better life. As a result the physical environment of Shichahai features congested personal living spaces which contrast with the impressive public urban parks. The main feature of the social environment of Shichahai is the coexistence of optimistic migrants from outside Beijing and the natives with their strong local identities.

This description of the social, environmental and historical character of Shichahai has provided a background to the childhood play experiences taking place there, and clues to the changes which have taken place in children's play experience across recent generations (showing in Figure 4.10).

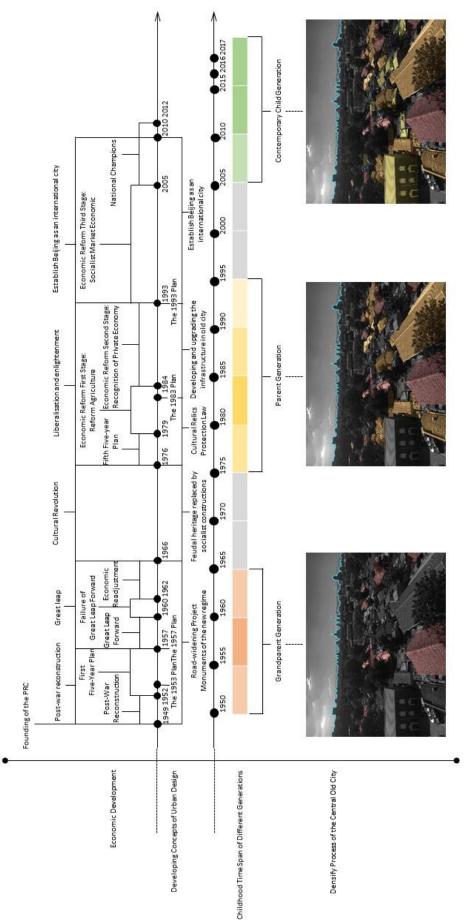


Figure 4.16 Summary of urban development history of Beijing

# Chapter Five Space for play

### Introduction

After providing a general understanding of the historical, physical and social background to the case studied area of Shichahai, in this chapter children's use of the surrounding urban physical environment are explained in detail. As discussed in the literature review (2.2 Space for play), 'territorial range' is used to describe urban children's geography, so that distinctions between their habitual range, frequented range and occasional range can be recognised (Moore, 1986). By collecting data using interviews, photo-voice and behaviour mapping, the outdoor play spaces and places used and claimed by children living in the central area of Beijing have been observed and recorded.

Modern children use a variety of spaces in their habitual range for play (5.1 Play spaces and places within habitual range). These are described using the concept of constructed space and found spaces. In children's frequented range, the most frequently used play spaces are parks, both large-scale urban parks and small-scale street parks (5.2 Play spaces within frequented range). In the outsider occasional range, spending weekends or holidays in amusement parks and villages on the outskirts are common experiences (5.3 Play spaces within occasional range). The farthest territorial range, travel to tourist attractions in other provinces and even foreign countries are also considered to play a significant part current childhood play experiences (5.4 Play spaces beyond the territorial range). More than these real playing and travelling experiences, there is an imaginary world in children's minds generated by their acquired knowledge and perceptions of the real world. The children's visions are also recorded playing in this imaginary world (5.4 Play spaces beyond the territorial range).

For the parents' and grandparents' generations, the places used in their childhood are substantially different from those of contemporary children (5.5 Territorial range of parent and grandparent generation). With fewer formal play spaces and limited travelling experience, the territorial range of their childhood daily lives were more broad and extended.

# 5.1 Play spaces within habitual range

The habitual range is the area immediately around children's homes, where they can conduct daily outdoor play. Data about children's use of places in their habitual range was mostly gathered through photo-voice in photographs taken by the children. The children living in the congested inner-city area of Beijing have very limited outdoor space for this purpose. As described in Chapter Four, the consequence of increasing demand for indoor living space has impacted on the semi-public open spaces in courtyard houses and hutongs, most of which are shrinking as a result of the expansion of indoor rooms. So children find various outdoor spaces close to home where they can play, spaces which can be identified as found spaces and constructed play spaces (Figure 5.1), according to their original function.

Vehicle accessible roa	d	Vehicle free road		Physical exercise facilit	ty Children play facility
Car Parking	Road	Square	Accessible green	space	Playground
Categories of different typ	es of play	spaces:			
Found spaces			Flexible spaces		Constructed spaces

Figure 5.1 Spaces for play in children's habitual range

## 5.1.1 Car parking

Figure 5.1 shows that among these various outdoor play spaces in children's habitual range, the most informal found spaces around the home are those intended for car parking. Vehicle accessible roads in residential areas are also frequently mentioned as found places where children can play. Figure 5.2 to Figure 5.7 are photos taken by children, showing the condition of the found spaces, car parking and vehicle access alleys, around their homes.

# Car parking as play spaces:



Figure 5.2 Car parking

This is a parking area. I always practice martial arts with the martial arts knife at this place.

(an 8 year old boy)



Figure 5.3 Car parking

This is the car parking next to my home. Sometimes I climb this tree with my friends here. Through this tree, we can reach the roof of this building.

(a 10 year old girl)



Figure 5.4 Car parking

After school, I usually play here and wait for my mom to come back from her work place.

(a 9 year old girl)

Vehicle access alleys as play spaces:



Figure 5.5 Vehicle access alleys



Figure 5.6 Vehicle access alleys



Figure 5.7 Vehicle access alleys

This is the road to my home. I always play scooter here with my friends.

(an 8 year old boy)

This is the car parking downstairs. Sometimes I play football with my friend at this place.

(a 7 year old boy)

This is the road in our community, I play my scooter or ride a bicycle at this place.

(a 9 year old girl)

The photos taken by children and their descriptions show that playing in the parking area and vehicle access alleys are common things for the children who live in the crowded hutong communities. This is because construction in the central historical protected area is under strict control (as explained in Chapter Four). Buildings and outdoor environments have preserved their historical appearances almost intact for hundreds of years, since they were planned and built in the early Qing Dynasty, in the mid-17th century. The boom in the urban population in recent years has led to an increase in demand for indoor rooms, so there is no spare outdoor space left for car parking. At the same time, the economic development in recent years has brought a popularization of private cars and increases the demand for parking spaces. Without the specially designed parking area, the cars could be parked anywhere. For some of the children living in the hutong communities, playing in the parking area and playing around the parked cars is a common part of daily life.

### 5.1.2 Pavements

Playing on the pavements, which are vehicle free, are also recorded by children as part of their daily play experience. Figure 5.8 to Figure 5.10 show a vehicle free road in the public green spaces within newly built residential neighbourhoods. From these photographs it can be seen that these pavements not only provide children with spaces to play but also green spaces in which they can interact with natural elements.



Figure 5.8 Pavement



Figure 5.9 Pavement

This is a road, I like playing here. I used to have a little duck, so I took my little duck to swim at the little pond through this road, after rain.

(a 9 year old boy)



Figure 5.10 Pavement

This is a road, I always ride my bicycle on this road.

(an 11 year old boy)

The pavement in the public green spaces is not the only one children use for their outdoor play. In the hutong communities, the pavements around the home also provide children with daily outdoor play space. Figure 5.11 and Figure 5.12 show pavements in the hutong communities.



Figure 5.11 Pavement

This is the open space in front of my home. I always practice rope skipping at this place. Because of the rough and uneven ground, my dad told me that the uneven and rough ground is good for practising ropeskipping skills.

(an 8-year-old boy)



Figure 5.12 Pavement

I always run and play football with my friends at this place.

(an 8-year-old boy)

## 5.1.3 Squares

Squares can be considered as an extension of the roads, providing people with open space for gathering and doing things together. For children, activities with a higher physical content can be conducted in the squares, like playing with scooters, ball games, chasing and running. However, in residential areas, these indispensable spaces are shared by all age groups, and with the different uses and purposes wanted by different groups of residents, there can be conflict between different age groups over time of use and activities. Figure 5.13 shows the elders dancing in a square in the evening, after 7.30 pm, which is also the time most of the children play outdoors. Figure 5.14 and 5.15 show the state of squares during the afternoon.



Figure 5.13 Square



Figure 5.14 Square



Figure 5.15 Square

This is a little square in our community. In the evening, there are some aunties and grannies doing exercise dancing in this square. When they are dancing here, I always play beside them.

(a 7 year old girl)

This is the square, where I always play football with the students in the university...during the daytime, there are some people football or doing other things at this square, but in the evening, there are a lot of people dancing here.

(an 11 year old boy)

This is a little square. Sometimes, I ride my bicycle there.

(a 7 year old boy)

These squares provide children with large spaces which are available for outdoor physical activities. These spaces are shared with other age groups, and without priority in using this shared space, most of the time the children are at a disadvantage in competing with their elders to use the squares.

# 5.1.4 Greenspaces

Accessible green spaces in the residential areas are also considered as play spaces by children. These green spaces provide urban children with precious experience of interacting with natural elements. Whether playing with leaves, flowers or even soil or sand, most of these natural play experiences are considered to be special and pleasant by the children:



Figure 5.16 Greenspaces



Figure 5.17 Greenspaces



Figure 5.18 Greenspaces

This is a tree with over 400 years' history (actually not). I always climb these three. Sometimes me and my friends, we have a tree climbing competition, I'm always the best one. I can climb this tree and I can climb until this branch (in the middle). I also like running on the road in front of this tree.

(a 7 year old boy)

This is a road I always take a walk. I think it's beautiful.

(a 9 year old boy)

This is the road on an island. If I can meet my friend, we would see the ants and some other insects here. Some days ago, when I still had my little duck, I always took it here to have a walk. At that time the grasses grow really high. Now, in the picture, the grasses have been cut down.

(a 9 year old boy)



Figure 5.19 Greenspaces



Figure 5.20 Greenspaces



Figure 5.21 Greenspaces

## Can you see there are new buds on this tree.

(a 9 year old boy)

This road is a good place to take a walk. It's really cool here in the evening.

(a 9 year old boy)

This is the lawn next to the car parking in our community. I always run around at this lawn.

(an 11 year old boy)

## **5.1.5 Playgrounds**

The formal constructed outdoor play spaces in the habitual range are playgrounds. These flat playgrounds are always equipped with physical exercise facilities or fixed play facilities. Depending on the type of equipment and target groups of people for whom they're designed, the playgrounds are distinguished as physical exercise playgrounds with exercise equipment or sport facilities; the children's playgrounds have fixed play equipment. Both these two types of playground provide formal play space designed to promote play behaviours. The playgrounds equipped with sports and exercise facilities are not designed for children or young people, and most of the facilities are designed for adults' physical exercises. This means that children's improper use of these facilities could potentially cause harm. But the spaces equipped with adult facilities still attract a large number of children. Figures 5.22 to 5.24 show a space equipped with exercise facilities and sports equipment, described by some children as a place they usually play.



Figure 5.22 Playground



Figure 5.23 Playground



Figure 5.24 Playground

These are the physical exercise facilities in our community. I don't like to play with any of them in this picture. The one I like to play with is not shown in the photos.

# (a 7 year old boy)

This is the physical exercise area in my community. It's free. I always play here. This facility is my favourite (the tallest one in the centre). I don't use the handle, I just jump up to catch the string and hang myself up. There are also a lot of very young children play here.

(an 11 year old boy)

This is a ping-pong table. Here used to be an indoor sports centre, but it has been torn down and changed into an outdoor sports area. I always play ping-pong with my dad here. Behind this table, there is also a badminton field and a tennis field.

(an 11 year old boy)



Figure 5.25 Playground



Figure 5.26 Playground



Figure 5.27 Playground

This is the playground near my home. This blue slide can be climbed. When I have time I always play here. My favourite facility is something spinning. The red slide is another slide. There are three slides here. I don't like this red slide, it's too short. I like this swing. The big one can be played by two people together and the small one can only be played by one people alone.

(a 7-year-old girl)

The data collected by photo-voice shows that children's daily use of spaces in their habitual range vary from informal play spaces amongst the car parking to the formal designed children's playgrounds. These various play spaces have different affordances, providing children with different play opportunities and facilities. It is obvious that some of these places provide affordances which are more suitable for playing, but others are poor and even have potential safety risks, but these places remain the most accessible outdoor spaces for children living in the central area.

# 5.2 Play spaces within frequented range

The frequented range is less accessible and bounded by physical constraints and parental prohibitions. Data on children's use of the frequented range was gathered through interviews and observation, especially the structured observation of behaviour mapping. Children living in the Shichahai area use both the large-scale urban parks and the small-scale street parks as play spaces in their frequented range.

# 5.2.1 Urban parks

Within Shichahai Sub-district, according to the interviews, there are several parks and public open spaces which are described by children as their most frequently visiting outdoor play spaces. In Figure 5.28, the parks more frequently used by children are shown in brighter colours, from which we can directly see that Beihai Park, Shichahai children's park and Jingshan Park are the most frequently visited parks.

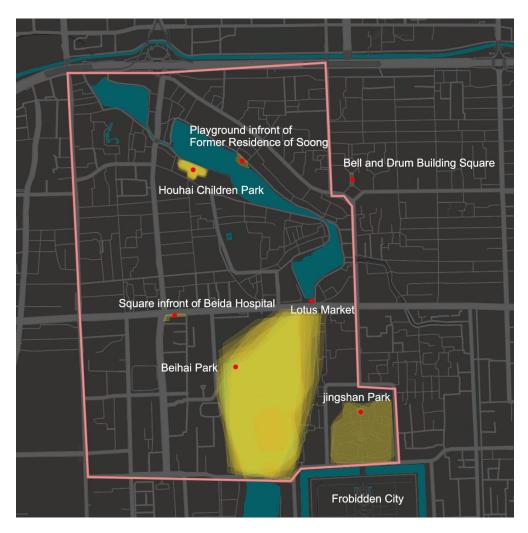


Figure 5.28 Location of parks in the frequented range

The landscape and social environment in these three parks are distinctive, different from each other. Both Beihai Park and Jingshan Park are famous tourist sightseeing places (Figure 5.28). Beihai Parks covers 700,000 m<sup>2</sup> and is famous as a masterpiece of the traditional royal garden, which can be traced back to the Liao Dynasty in 1000s. In the daytime, this park is occupied by sightseeing tourists. In the evening, the park returns to the local residents to conduct daily outdoor activities, such as walking or jogging. Children's activities in Beihai Park mostly consist of walking around the lake with their adult guardians. During these long walks, children can find their own ways of interacting with and enjoying the environment.

I don't play outdoors. I just take a walk with my parents in Beihai Park...

(an 8-year-old boy)

I like riding a bicycle, but bicycles are not allowed in Beihai Park. So I always take a walk at Beihai Park. My grandma takes a walk around the lake in Beihai Park each evening. It's really tiring, I can't do that...

(an 8-year-old girl)

I always play at Beihai Park and Jingshan Park. There is a place in Beihai Park where you can feed the golden fishes in the lake. I have been playing there since a long time ago... I also play at Jingshan Park, where is really close to the Beihai Park...there is nothing special in Jingshan Park. I just go there and take a walk. But I can remember that there was a dinosaur exhibition in Jingshan Park, maybe some years ago...

(an 11-year-old girl)

Like Beihai Park, Jingshan Park is also a famous tourist attraction. As the backdrop mountain to the northern part of the Forbidden City, the top of the hill has the best view looking down to the whole of the Forbidden City. This makes it a popular sightseeing place for tourists. Unlike Beihai Park, where the tourists and locals occupy a different period of time, in Jingshan Park, tourists and locals go to different places in the park. The visitors always crowd on the southern side of the mountain facing the Forbidden City, and the local residents always use the northern part of this park.

There are always exhibitions taking place in the northern part of Jingshan Park, with an educational purpose and designed to enrich local residents' lives. In the summertime of 2016, there was an insect exhibition in Jingshan Park which aimed to help children become familiar with common insects. This exhibition can be described as an intervention, which is explained in detail later, in Chapter Seven.

To conclude, the large scale urban parks provide tourists with the opportunity to enjoy a traditional Chinese landscape, but more importantly, they provide local residents with precious outdoor spaces in the crowded urban central area. From the viewpoint of the local residents, the tourists impact on their daily use of these parks as shared public green spaces.

# 5.2.2 Street parks

In contrast to Beihai Park and Jingshan Park, which are tourist attractions within children's frequented range, the much smaller scale street park in Shichahai is also pointed out by children as one of their most frequently used parks. Though it is named as a children's park, most of the time it is still shared by other age groups. In order to understand children's use of space in its public open spaces, behaviour mappings were conducted in Shichahai children's park.

Shichahai children's park has an area of 700m<sup>2</sup>, and has two flat rubber carpet playgrounds and two small badminton playgrounds. There are no fixed physical exercise facilities or play facilities in this park, except for two kiddie rides at the western corner of the park and two Chinese chess tables with fixed chess pieces placed under the shade of the trees. The components of the Shichahai children's park are shown in Figure 5.30. People enter Shichahai children's park through five entrances, four of which are on Xihainanyan Road and one on Yangfang Hutong. There is an altitude difference of 4 metres within this park, from south to north. Connected by slopes in the middle and stairs in the west, the park has two parts at different altitudes (Figure 5.29).

Behaviour mapping in the Shichahai children's park was conducted in the afternoons from 5pm to 7pm over six days during the summertime of 2017 (see Chapter Three 3.4.2.2 Structured observation). According to the spatial-activity data collected by behaviour mapping, in this park there are several spaces which are especially liked by children (Figure 5.31).



Figure 5.29 Entrance and pedestrian flow in Shichahai children's park

Among these popularly used spaces, the most favoured play spaces are the two rubber carpet playgrounds and the square next to the large rubber carpet playground. The rubber carpet playground provides children with flat ground and a wide space to chase and run, while the square under the trees provides more occluded spaces to conduct stationary play. At the eastern corner of the square, there are several kiddie rides, which are popular with younger children. As well as these extremely popular play spaces, the Chinese chess table is also attractive for some older children. The slope bridging the level difference between the two parts of the whole park is also a good place to play with bicycles, scooters and roller skates (Figure 5.31).



Figure 5.30 Masterplan of Shichahai children's park

It can be seen from these descriptions of the use of space in Shichihai park, that the spaces have different atmospheres and are equipped with different facilities, providing different levels of affordance to support children's play activities. To understand the relationship between the spatial arrangements and children's use of the spaces, we will distinguish the different levels of children's physical involvement and the spatial preferences of these different activities. See the maps, Figure 5.32 to 5.37.



Figure 5.31 Spatial distribution of children

From the lowest level of physical involvement to the highest, Figure 5.32 to 5.37 show the spatial preferences for these different play activities. The stationary games (Figure 5.33), which include chatting, sitting, playing chess, watching others playing, usually take place at three places: the Chinese chess tables, benches and kiddie rides. In these places, chairs, benches and tables are provided for children to sit and play. Stationary play with small-scale physical movements frequently takes place on the rubber carpet playgrounds (Figure 5.34). The children usually stay together, playing with a toy or watching others playing with toys. The main activities involving slow to moderate level translocation, like slow running and chasing, also take place on the carpet playground and the square, as well as on the pavements around these playgrounds (Figure 5.35 and Figure 5.36). Strenuous physical activities like cycling, roller skating or playing ball games frequently happen on the slope which connects the two parts of the park (Figure 5.37). The connecting long slope provides children with a certain level of challenge to play with bicycles, scooters and roller skates, increasing the play value and experience of the equipment. Less structured play, such as passing-through or hanging around to find play partners or opportunities, takes place at the small badminton field or on the slope where there is an open view to observe what is going on within the whole park (Figure 5.32).

The flat and soft rubber carpet playgrounds support most of the children's various play activities, and most of the stationary and slow translocation play takes place on them. However, these carpet playgrounds are not an ideal place for playing with bicycles, scooters and roller skates. The informal play space of the connecting slope is more attractive for challenging play activities involving large-scale physical movements. From these observations and mapping, it can be concluded that each type of play activity has different demands for the arrangements of the space, and sometimes it is the place which determines whether a specific play activity can happen there.

As well as considering the children's activity distribution pattern in Shichahai children's park, we should take account of the different age groups of children and their specific concentration within areas of this park. Figure 5.38 to 5.41 shows the age distributions of the children observed in Shichahai children's park. The younger children, under six years old, are the largest group. They usually play at the flat rubber carpet playgrounds, the square next to the large carpet playground and the pavement leading to the slope (Figure 5.38 and 5.39).

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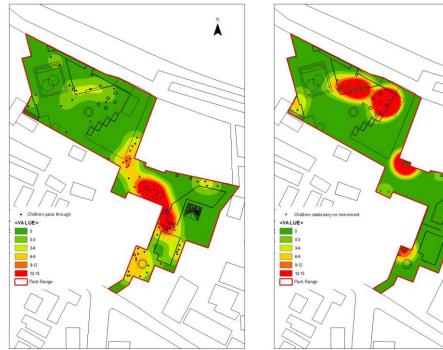


Figure 5.32 Children pass through



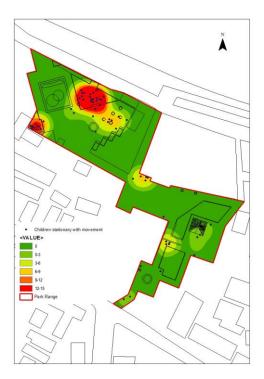


Figure 5.34 Stationary- with movement



Figure 5.35Translocation- slow

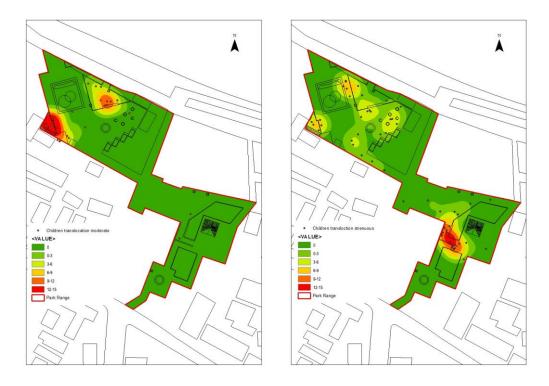


Figure 5.36 Translocation- medium

Figure 5.37 Translocation- fast

As shown in in Figures 5.40 and 5.41, children over six years old play less in this park. They are no longer attracted by the simple fixed play facilities, such as kiddie rides. Most of the time they like to play with other children, chasing or running within the whole park. For the even older children, aged 9 to 11, playing chess is their most frequently observed use of the park.

The areas that the children use most within Shichahai children's park has a strong relationship to the activity types they are undertaking, which depends not only on the facilities but also on the children's age. For the younger children, the flat carpet playgrounds and the fixed play facilities are the most popular places. For the older children who prefer more challenging strenuous physical activities, the flat carpet playground cannot provide adequate play opportunities. Instead of playing on the crowded rubber carpet playground surrounded by slow-moving young children, they use other spaces to develop new play opportunities. Within the children's frequented range, parks are the most frequently used places for outdoor play. Both the famous large-scale urban parks and the small-scale park are frequently used by children in their free time. In the street park, the affordance of rubber carpet playgrounds and places with fixed play facilities are easily perceived and used by children. For the older children, the whole park and especially the spaces with a more challenging terrain are more attractive.



Figure 5.38 Children age 0-2



Figure 5.39 Children age 3-5



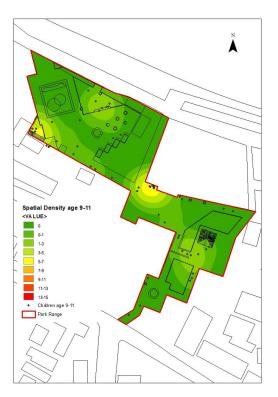


Figure 5.40 Children age 6-8

Figure 5.41Children age 9-11

# 5.3 Play spaces within occasional range

Further than the frequented range is the occasional range. Data collection about children's place use in the frequented range largely relied on interviews with children. For the children living in the central area of Beijing, this occasional range is understood to be the place where children occasionally travel on weekends or holidays. To some extent, these places within the occasional range are some short-haul tourist attractions for the innercity area residents, which include some large amusement parks, theme parks and outskirt village or country parks.

### 5.3.1 Amusement parks

Amusement parks within Beijing are usually described by children as the places where they have had an unforgettable play experience. Even if they have one day off school, they would like to spend the whole day in an amusement park. Compared with parks in the frequented range, the large and complex play facilities in these amusement parks provide far more exciting and fancy play experiences.

I played at an amusement park in Yanqing District (a district on the outskirts of Beijing), there was a really big sky wheel, tree houses on a big tree, and the facilities with four seats, the cross-shaped, something with four people...That there was a large spring under it, it could jump. Anyway, it was really exciting. There was also a huge trampoline. We slept in a recycled container, which is really narrow and crowded, but we have a large French window.

(a 9-year-old boy)

I have been to Future Island. It is a place where you can pretend you are taking your future jobs, such as teacher, doctor and others. You need to finish several achievements when you taking that imaginary job. You can get reward money by experience doing a job. At last, when you come back to real life, you can buy souvenir using the reward money. We went to Future Island during our school trip. I earned a lot of money, but when we come out, I have no time to buy the souvenir.

(a 12-year-old girl)

I really like playing at Happy Valley. This year, I'm tall enough to play the highest roller coaster. Last year, I was still too short to play a lot of facilities. I can only stay at the Ants Fairyland playing the slow and boring facilities for babies. My mom told me when I finish the summer training course on the piano, she would take me to the Happy Valley.

(a 10-year-old boy)

The amusement parks usually provide children with the most exciting and memorable play experiences in their childhood. Though these amusement parks usually target their main consumer targeting at adults. Figure 5.42 and 5.43 show images of Happy Valley as an example of these amusement parks.



Figure 5.42 Roller coaster in the Happy Valley (Source form: <u>http://bj.happyvalley.cn/</u>)



Figure 5.43 Children's playground in the Happy Valley (Source form: <u>http://bj.happyvalley.cn/</u>)

# 5.3.1 Villages on outskirt districts of Beijing

Like their occasional trips to the amusement parks, travelling to villages on the outskirts of the city also provides people living in the crowded central area with different experiences to their ordinary lives. So travelling to villages and experiencing rural life has become a popular trend among urban dweller in Chinese cities in recent times. The villages on the outskirts of cities have all developed and changed into tourists attractions in this trend for agricultural tourism.

In Beijing, these villages on the outskirts provide a release for the urban residents from their busy daily routines. For urban children, travelling to a village can provide experience of playing in a natural environment (see Chapter Seven. 7.3.3 Playing in the natural environment) interacting with people living in a different environment. Like playing in the amusement parks, the experiences gained in a rural area can remain pleasant and joyful in children's minds for a long time.

I like playing at the Beixiaokou Village Park, which is a little bit far from here. We did a barbecue there. There were a lot of trees, so in the summer it will not be too hot under the trees.

(an 8-year-old girl)

I went to Gubei Village this summer. The buildings are built alongside the river. So it looks like the towns in the southern province such as Suzhou.

(an 11-year-old boy)

I usually pick up fruits in Pinggu (an outskirt district). Last week we went to pick up peaches on a farm.

#### (a 7-year-old girl)

These quotations show that play experiences on these occasional visits to a village on the outskirts include barbecue in the rural environment, picking up fruit, playing on a river, and so on. These play experiences in rural environments are quite different from ordinary experiences in the city. Both the amusement parks and the villages on the outskirts share the same characteristic, that they provide urban children with special play experiences that are unlike their ordinary lives. For children living in the central area, play experiences in this occasional range are usually special and memorable.

# 5.4 Play spaces beyond the territorial range

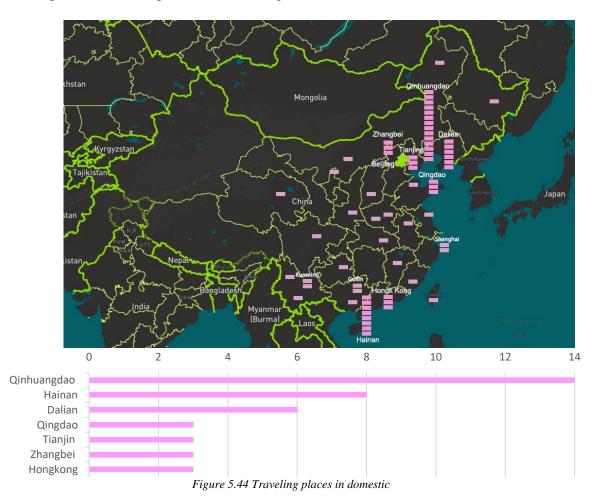
When doing interviews with children I encountered an unexpected and interesting phenomenon, that children described a number of places they had been to when on holiday with adults. This is largely due to the use of the Chinese word for 'play (玩)', which has several semantic meaning in the Chinese language, including the complex meaning of games, toys, making fun of something and sightseeing. Among all these meanings, in daily spoken Chinese the commonly used word 'play 玩' usually has the meaning of 'playing games and toys' and 'travelling or sightseeing'. As a result, the answers to interview questions like 'where do you usually play? (你通常在哪里玩?)' and 'where are your favourite play spaces? (你最喜欢在哪里玩?)' not only contain places within children's territorial range, but also places outside their daily territorial range. The places children mention include not only places in their travelling memory but also places in their imagination, which children have heard about from books or TV programmes. These places do not reflect children's daily use of their surrounding urban environments, but they can be indicators providing a more comprehensive understanding of the overall childhood experience of play.

# 5.4.1 Remote places in the travel range

Travelling to sightseeing places in other provinces within China usually takes place in the school summer holidays, unlike travelling to villages outside Beijing, simply because it takes longer to travel to other provinces. According to the interviews with children, the top three most popular travel places in other provinces are Qinhuangdao (秦皇岛), Hainan (海南) and Dalian (大连). All of these three places are famous coastal cities (Figure 5.44). Indeed, six of the seven most frequently mentioned travel places are coastal cities. For the children living in the central area of Beijing, spending holidays in coastal cities is popular. Of the frequently mentioned travelling places, there is only one prairie town, Zhangbei(张北), around 250 km northwest of Beijing. It is mentioned with the same frequency as Zhangbei, other places like Hong Kong, Tianjin and Qingdao are also mentioned by children as popular cities to spend holidays.

Apart from domestic travel, travelling to foreign countries is also a common experience for children living in the central area of Beijing. The top five popular travelling foreign places are all in Asian countries (Figure 5.45). First is South Korea, followed by Thailand and Singapore, then Japan, with Malaysia last. Asia, the USA and Germany were mentioned twice by children as places where they have had unforgettable travelling experiences.

These travelling experiences are a significant part of urban children's growing up, although they are not common everyday experiences which are included in the narrow defination of play. They provide children with opportunities to interact with real natural environments, experience different cultures and expand their horizons. These travelling experiences have only become common in recent times, as a result of economic development and an improvement in living standards.



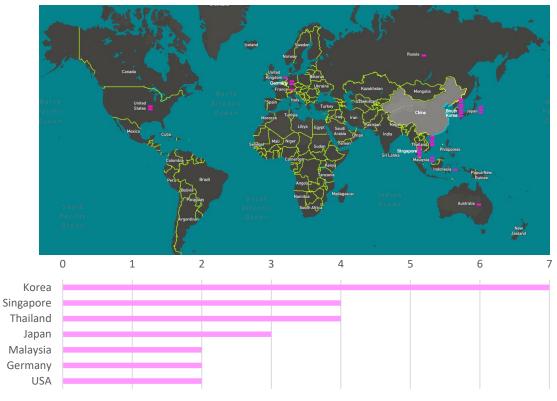


Figure 5.45 Traveling places in overseas

# 5.4.2 Places in the imaginary range

Has been discussed in the literature review, alongside their physical and social environment, the children's inner minds are also significant in their environmental experince (Moore and Young, 1978). Understanding their imaginary world can help us to understand children's perceptions and understanding of the real world. Asked, 'if you have a one day holiday, where would you go and what would you do in Beijing?', intended to explore the most unforgettable memories about children's outdoor play experiences, they actually shared various imaginary playing scenarios. Their answers deviated from the question's intended purpose, but the children's answers give an insight into their imaginary world.

I want to play on the moon, where people have been decades ago...

(a 7 year old boy)

I want to travel around the world. If I can I also want to travel to outer space...

(an 8 year old boy)

I want to go to Australia. Because I want to see the kangaroos...

(an 8 year old girl)

I want to go to Egypt to see the Great Sphinx. I read it before in books, it's really amazing. I want to see it...

(a 10 year old boy)

In children's imaginary world, travelling to space and famous foreign places learned about in books are their dreams. Some of these dreams may be achieved in their future, but some will be more difficult to achieve.

# 5.5 Territorial range of parent and grandparent generations

In order to explore the territorial range of the children's parents and grandparents, data was collected by interviewing local adults. From their oral descriptions, their childhood territorial range can be generally described as the area around their home, bounded by the walking distance of the individual child.

## 5.5.1 Territorial range of parents generation

In the childhoods of the parent's generation, their daily habitual range covered the hutongs, courtyards and street parks in the space around their home.

When I was young, I played freely in the hutongs with my friends. There were not so many cars in the hutongs at that time. After school, we could play in the hutongs or the courtyard until dinner time...

(a male in parent generation)

When I was young, in my mind we have a lot of places to play. We travelled to school alone, after school, we can go directly to the street park to play. It seems our parents never took this seriously...

# (a female in parent generation)

When my son (adult in parents' generation) was young, he usually played in the hutongs, courtyards and other places at any time on his own. We never worried about that...

#### (a female in grandparent generation)

Occasionally, at the weekend or on holidays, children can go to parks further away together with older siblings or parents. But, they seldom had the experience of spending holidays in a remote tourist attraction.

When I was young, at the weekend my family always went to Beihai park or Jingshan park. Jingshan park is free for children, and Beihai Park only charges five cents. Sometimes, we travelled further to the Summer Palace. At that time, in our mind, the Summer Palace was in the very out skirting rural area, almost outside Beijing. (The Summer Palace is located at the north-west near the 5th Ring Road, which is considered part of the inner city in modern times...)

(a male of the parent generation)

Compared with contemporary children who can travel a lot, we seldom travelled to any other place when we were young. Travelling was not a common thing at that time. As local people in Beijing, even the first time I went to the Badaling Great Wall was in the college with my classmate from other provinces...

#### (a male in parent generation)

So the territorial range of the childhoods of modern children's parents consisted of the hutongs and courtyards within in the habitual and frequented range, and parks in the occasional range. Travelling to tourist attractions was not a common play experience.

#### 5.5.2 Territorial range of grandparents generation

The childhood territory range in the childhood of the grandparents' generation, decades ago, is the most difficult to trace because their memories of their use of surrounding space had faded. According to the limited data, the territorial range of grandparents generation was perhaps the most untrammelled and extended of all these three generations.

When I was young, we played at all kinds of places around the home. At that time, outside the Deshengmen Gate (outside the 2nd Ring Road) there were farmlands. Sometimes my elder brother would take me and my younger brother there... when I was young, I played a lot in the hutongs, sometimes with my brothers, sometimes with my classmates...we can play at any place, there were not so many cars in the hutongs, our parents never worried about this. And there were a lot of children in the family, if the oldest could take the younger sibling playing outside the home, it was a release for our parents...

### (a female in grandparent generation)

When I was young, I played in the lakes (Shichahai Lakes) in the summer. At that time, almost all the children played on the street, running, chasing and playing games...there were not so many sports centres or playground, we just played on the street...

## (a male in grandparent generation)

According to these descriptions from grandparents, without strict parental controls and traffic dangers, their territorial range could extend to any places they could get to. In their daily lives, playing in the hutongs, at the lakes and even in the outskirts' farmland were common daily experiences.

The territorial range of the childhood of the parents' and grandparent's generation was harder to trace compared with the experiences of modern children. However, even from the limited data available it is obvious that the children's territorial ranges in the old days were much broader, with the child's home as the centre. The informal places, the hutong, street or pavement, played the most significant role in sustaining children's play across all these three generations. The difference is that there are now more formal play spaces, like the rubber carpet playgrounds, specially designed for children.

## **Summary**

In this chapter, a variety of evidence relating to children's play, in both contemporary and previous childhoods, has been gathered from the data collection methods of interviews and observation.

In contemporary childhood, the territorial range is not limited to the habitual, frequented and occasional ranges. By travelling to other places, both domestic and overseas, children's territorial range has expanded to an extremely large scale. This large-scale expansion of the children's territorial range was unknown to the parents' and grandparents' generation.

In the daily use of surrounding urban environments by contemporary children, playing in car parking areas, on pavements, in squares, green spaces and playgrounds are all common daily experiences in the habitual range. All kinds of parks within Shichahai provide children with various play spaces and opportunities in their frequented range. In the parks, which are usually shared by different age groups, the more formal playgrounds can be more attractive for the younger children, but older children prefer play opportunities to be more challenging and in less formal spaces. In the occasional range, short day-trips to amusement parks or villages on the outskirts of Beijing are a common component of current urban lives. Long distance travel provides some children with opportunities to interact with the natural environment, experiencing different cultures and expanding horizons.

In the childhoods of parents and grandparents, outdoor places used for play were more concentrated in the daily environment in the habitual and frequented range. In their habitual range, more types of space could be used for play, such as hutongs and courtyards, and parks were also popular spaces to spend free time. But travelling outside Beijing was not a common experience for the grandparents' generation.

# Chapter Six People and Partners for Play

## Introduction

To follow our discussion of children's use of their physical environment, this chapter will address the various influences on children's outdoor play arising from other people. The evidence presented in this chapter has been collected from interviews and behaviour mapping. Behaviour mapping, especially, showed the interactions between children and the adults around them. Then, the observed phenomena were discussed with both children and adults in the interviews to further explore the underpinning reasons.

This chapter explores the independent mobility in contemporary children's daily lives (6.1 Narrow scope of children's free range). It is a fact that most of the children's outdoor activities are under strict parental control and close supervision. However, playing and exploring freely in the surrounding environment is also a part of children's instinct, and there are differences between the free range given in parental permission and children's actual activities. This inconsistency is explored in this chapter. We then move on to understand the people accompanying or playing with children in the outdoor environment (6.2 Carers and playmates in outdoor play). Both parents and grandparents take care of children and play with them. In order to systematically describe the interaction patterns between children and their adult carers, various conditions are distinguished in the communications between adults and children, and in the interactions between children and their environments. As well as the adults, the influence of other children, including those who take the dominant role of a playmate, are explored. We will also consider parental concerns about potential safety hazards, which are dominated by worries about traffic and strangers (6.3 Parental concerns about potential safety hazard).

We will conclude by examining free range in the older generations' childhoods, and those generations' play friends and care givers, comparing their experience with that of the present generation.

#### 6.1 Narrow scope of children's free range nowadays

In this research, the concept 'free range' is used to describe children's independent mobility, that is, their independent engagement with their surroundings. According to the research discussed in the literature review (2.3.2 Free range and independent mobility) there are two levels of free-range: mobility licenses and actual mobility. The first refers to the parental permission for children playing alone outdoors, the second to children's actual independent exploration outdoors, whether it is allowed or not. Then the contrast between parentally permitted free-range and the actual mobility of children living in the central area will be explained in detail.

## **6.1.1 Parentally permitted free range**

In order to establish a comprehensive understanding of children's independent mobility, children's free range was discussed with their guardians. According to interviews with parents, the relationship between the permitted free range and the children's own territorial range was the permitted free range is always within the habitual range. Parents described their permissions for their children's free range as follows:

We accompany him when he plays outdoors, but he can play alone in the courtyard...he always plays alone in the courtyard, because we live in the bungalow...

(mother of an 8 year old boy)

He always plays in front of our home, in the downstairs yard... we don't take accompany, because we are familiar with our neighbours...

(mother of an 8 year old boy)

We used to accompany her closely, but this year we try to give her more independence. So this year, we do not always accompany... she can play in the downstairs yard alone, but if she played at the nearby plaza, there would still be a need for adults to accompany...

(mother of a 9 year old girl)

These comments suggest that parents usually allow their children to play alone within their habitual range. This is because they live in courtyard houses where it is easy to keep an eye on their children, or because they have a trusting relationship with neighbours, which makes them feel confident that those neighbouring adults will take collective responsibility for children, and that they will be kept informed of things happening outdoors. With these informal social controls, the adults are still in control of what is going on outdoors, even if they do not stay outdoors with their children.

However, as mentioned in chapter 4, the booming number of floating people and sightseeing tourists in the hutong communities has affected the trust relationship amongst neighbours, and for more and more parents, the informal social control of children's outdoor play can be hard to achieve. In this situation, there were even more parents who did not give any permission for children's independent outdoor activities.

Except for the organized group activities, all the outdoor play needs adults to accompany (her). There is no independence...

#### (grandmother of an 8 year old girl)

Every time he plays outdoors, there should be an adult to accompany. It never changes from he was young until nowadays...

#### (mother of a 9 year old boy)

We seldom take him to play at places far from home. He always plays at the yard downstairs. But even if in the yard, I am still worried about the safety issues... We never let him play alone. Even playing with other children, parents need to accompany, even if parents stay together when children are playing together. My boy is in grade 5, we still do it like this...

#### (mother of a 10 year old boy)

Therefore, from the parents' perspective, the greatest mobility license children can have is to play alone within the habitual range where there are informal social controls. For most of the time, children playing in the habitual range need to be accompanied.

From the other perspective, the children hear these mobility licences being given and emphasised over and over by their adults. According to the interviews with children, the mobility licenses and prohibitions include many rules. They tell me don't speak with strangers... Don't let the strangers know that you are going home alone. Also, don't buy unhealthy snacks from the shops after school...

(a 12 year old girl)

Look both ways when crossing the streets. Waiting for the cars to go first. Go home or travel to school with other children, don't go home alone...

(an 11 year old boy)

I don't need to cross the street when I go to school. So my parents just say if I am followed by some stranger, I need to run to some people I know for help immediately...

(a 12 year old girl)

They told me I can't go into the shops. I can only play in the open space in the courtyard...

(a 7 year old girl)

I can't go to play at the dead end hutongs or some blind spots. Because there are more bad people in these places...

(an 8 year old boy)

I can't play outside our community. Because we don't know the children and people outside...

(a 9 year old boy)

These quotations show that children are told about permitted playing places, dangerous places, responses to safety hazards and traffic rules, all of which are based on adult's perceptions of the environment. These rules are deeply planted in children's minds to protect them from any potential safety risk. In parents' eyes, this can be a rather good thing. In an increasingly dangerous urban environment, parents trying to protect their children, not only by closely supervising their outdoor play, but also by teaching the children to protect themselves becomes the leading trend. Despite the benefit for the children in engaging independently with their surroundings, from the parent's point of view, safety is more important.

# 6.1.2 Everyday travelling to schools

Except for playing in the habitual range under intensive supervision, children living in the central area usually need to be accompanied by adults when traveling to school. According to the field research data, of the 61 children who answered questions about the way they travel to school, only 21 per cent of them travel to school alone, and over 60 per cent of primary school age children never travel to school alone (Figure. 6.1).

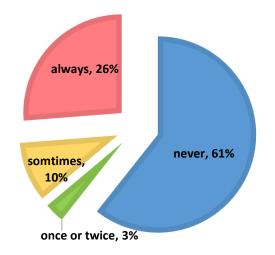


Figure 6.1 Frequency of going to schools alone

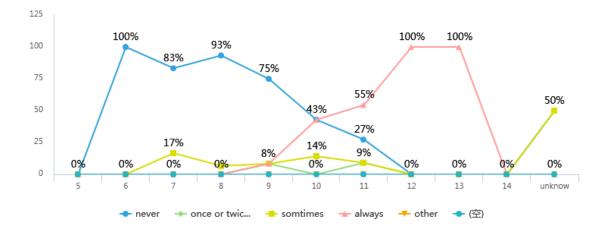


Figure 6.2 Age distributions of travelling to schools alone

The age distribution of the independent travel shows that independent mobility increases with children's age. As shown in Figure 6.2, there is a dramatic increase in the percentage of children who travel to school alone as their age increases. The turning point is at the age of 10, when the number of children going to school alone or with adults accompanying is almost the same. It seems that the age of 10 is a boundary in children's independent travel to schools. According to the data from interviews with children, this is large due to a school policy, called '自主离校 zizhulixiao'.

(Q: can you go to school alone?) No I can't. Because I'm in grade 2 (8 years old), I can't get the licence of zizhulixiao. When I'm in grade 4 (10 years old), I can apply for that.

(an 8 year old girl)

I have the licence of zizhulixiao when I was in grade 3 (10 years old). Because my home is not far from school.

(an 12 year old girl)

The term '自主离校 zizhulixiao' means independent travel to school. It is an agreement between parents and school teachers about the accompaniment of children traveling to school. On the basis of interviews of school teachers, this school policy is widely applied in most of the primary schools in Beijing. According to this 'independent travel' policy, for children under fourth grade, usually around ten years old, independent travel to school is not usually allowed by schools. When children are in the fourth grade or higher, they can apply for the independent travel licence from their school with their guardians' agreement. Without this licence, the school teachers make sure that each child is given to an adult guardian after school, and they take responsibility for the children's safety after school.

So children's independent mobility for their journey to school is largely due to the school policy rather than being the children's or parents' decision. So in the urban area of Beijing, school policy is the main influence on children's independent mobility as far as school is concerned.

#### 6.1.3 Outdoor play beyond licences

We know that for children living in the central area of Beijing, the parental permitted free range is restricted to their children's habitual range, and independent travel to school is regulated by school policy. However, these understandings are from the perspective of an adult controlling their children's independent mobility. From the child's perspective, the actual independent mobility is different. The interviews with children show that most of them aspire to go to school alone or to be independent in exploring their environment. The following quotations show the children's desire to travel to school independently.

(Have you ever travelled to school alone?) No, but I really want to go to school alone...my parents do not allow me to travel to school alone. Because they afraid of me getting lost...

(a 9 year old boy)

My grandparents take me to school and pick up...I really want to travel to school alone. But my parents are still afraid. But I have already taken flights alone to my hometown 5 times since I was 4 years old. But I'm afraid of travelling alone by train because the people on trains are not that safe...

(an 8 year old girl)

Child 1: I never go to school alone, but I really want to have a try. I know the way from my home to school. Child 2. Me too! I'm also want to go to school alone. But every time before we go outside, my grandparents always repeat to my parents, 'take care of your kid, don't get him lost!

(a 9 year old girl and a 9 year old boy)

These quotations show that children want to travel to school alone, but why they are not allowed to do so? Because their parents and grandparents are afraid of all kinds of potential risks, so the children are never allowed to travel to school alone. However, with a strong desire to interact with their environment independently, do all the children always follow the rules given by adults? The interviews with children show that, actually, they go beyond their licensed independent school travel rules. Most of these experiences of independent travel happen in unusual situations:

It was once, my grandma didn't show up after school. I waited for her for a long time, then I can't wait any longer, so I go back home on my own catlike... after that, I get blamed by my parents...

(a 9 year old girl)

After school, I need to go home directly, usually my mom would check whether I arrived home or not on phone. But only once, she was on a business trip, I know that she can't check that, so I went to my classmate's home played for a while, before my dad went home...

(a 11 year old girl)

Not many children mentioned these experiences of independent outdoor exploration during their interviews, perhaps because sharing the prohibited play experience with adults was not a wise choice. After all, children have their ideas about what to share with the interviewer in the interviews. During the direct observation, more independent play was recorded.



Figure 6.3 Recorded out of licence independent play behaviour

Figure 6.3 shows an example of unexpected freedom to play for these three boys. The boy holding the fishnet is allowed to play outside alone. The keys he carries in his belt are the proof he has a mobility licence to play outdoors freely and go back home alone, though he is not allowed to play near the lake without adult company. The other two boys are not allowed to play outside their habitual range without adult company. This fascinating fish catching activity would bring serious blame for these boys if their parents knew about it. Even taking into account the risk of being punished by their parents, they still cannot refuse the exciting play on the lakeside with their friends.

From this example of the boys playing beyond the permissions they have been given, it can be said that though the parental maximal permission for their children's free range is within the habitual range, the actual free range of the children extended into their frequented range. Even though the adult did not allow the children to play beyond their permitted range, the children still find these exciting adventures on their own.

## 6.2 Carers and playmates of nowadays outdoor plays

We have seen that for children living in the central area of Beijing, most of their outdoor play and travel is accompanied by adult carers. The data collected in Shichahai children's park by behaviour mapping, over six days with two hours each day, records a total number of children of 404; and the total number of accompanying adults was 334 (219 parents and 115 grandparents). Both parents and grandparents were recorded when they were obviously taking care or supervising children's outdoor activities. Generally, showing in the Figure 6.4, there are more parents (219) taking care of children's outdoor play activities than grandparents (115); and there are far more female (173 in parent-generation and 59 in grandparent-generation) taking care children than male (46 in parent-generation and 56 in grandparent-generation).

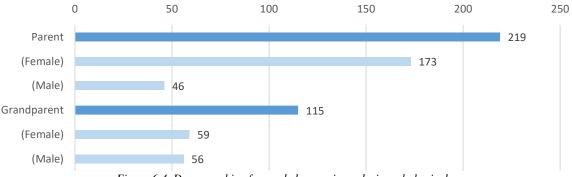


Figure 6.4 Demographic of recorded care-givers during whole six days

# 6.2.1 Parents

As been mentioned, among the adults supervising children's outdoor play, parents were the largest group. Also, there are more mothers taking care of children than fathers in the park (Figure 6.4). Within this general condition, the spatial analysis of the distribution of the maternal and paternal carers shows that most of the space in Shichahai children's park is under the intermittent supervision by the maternal carers (Figure 6.5 and Figure 6.6).

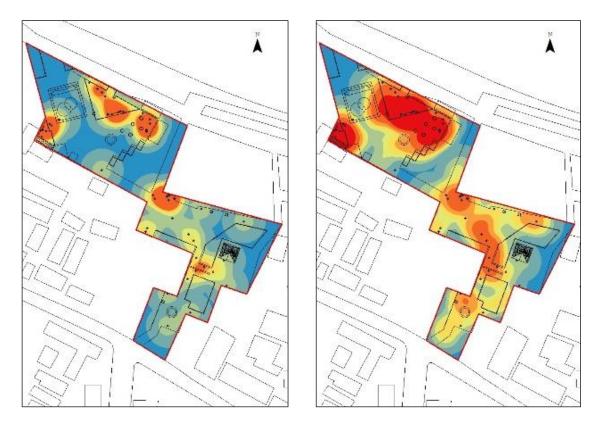


Figure 6.5 Areas supervised by paternal carers

Figure 6.6 Areas supervised by maternal carers

To understand the interaction mode between children and adults in more detail, four types of interactions are distinguished: playing together, close supervision, walking a distance and walking together, taking account of the extent and frequency of the communication and interaction between them (showing in Table 6.1). The first category is obvious and frequent interaction between parents and children. In this type, the child only plays with adults, not with other children. The second category is where parents carry out close supervision but do not take part in their children's play. In this situation, a child plays with other children or on facilities with carers' close by. The third type is the parents watching their children playing from a certain distance without talking or interacting with them. In this type, there is no apparent interaction between parents and children and children. Children are given more opportunities to interact with other children and their surroundings. The

fourth type is when the children and their parents are just passing through. This type can be understand as translocation to join some play activity that is under way, or simply passing through without stopping.

Among these four modes of interaction between parents and children, it can be seen that close supervision takes the largest number (Table 6.1). Spatial analysis shows that most of this close supervision takes place around the kiddie ride and the Chinese chess tables. There is also a large number of parents watching their children playing from a certain distance without disturbing them. This supervision mode usually takes place on the rubber covered playgrounds and places where there are benches for sitting and watching children playing. Playing with children also takes place near the benches by the playgrounds. Walking through the park mostly occurs on the pathways to the park's exits.

It can be seen that the affordance of different spaces can influence parents' behaviour patterns when taking care of their children's play. The benches or chairs adjacent to open space which have an open view to of children playing are the most favoured place by parents, so most of the playing-with-children and remote watching take place around the benches adjacent to the carpet playgrounds. For example, a large number of parents were recorded sitting on the benches and playing toys with their young children. Unlike the benches, which sustain parents sitting and playing with children or watching them, the fixed play facilities provide children with play opportunities but make parents stand nearby to supervise them. For example, when the young children are playing on the kiddie rides, their parents always stand nearby to protect and accompany them. When the children play Chinese chess on the chess table, parents usually stand nearby and give advice.

The affordance of places and their consequent parental supervision patterns also have a strong link with the children's ages. The pattern of play with adults is more often observed with younger children, under three years. The older children, around six years, are more frequently observed playing with scooters, bicycles or roller skating, with parents watching at a distance. When the children are over ten years old, they are not often seen playing in the park, so we can conclude that children change preferences in their play activities as they get older. These changes correspond with changing parental supervision modes.

Interaction pattern between parents and children	Play together	Close supervision	Watching in a distance	Walk-through together			
Parents doing their own things	No	No	Yes				
Children play with other children or facilities	No	Yes	Yes				
Observed number	82						
	02						
	26		53	48			
	36						
Spatial							
distribution							

Table 6.1 Children-parents interaction patterns

Furthermore, the larger number of maternal adults supervising children's outdoor play suggests that the maternal influence on children's experience can be more significant than the paternal influences. Most children's outdoor play in parks happens under all-around protection by adults, and many of these children play with adults rather than their peers. Spatial analysis of these patterns indicates that the affordance of places has an influence on the adult supervision patterns when companying children playing outdoors.

# 6.2.2 Grandparents

According to the behaviour mapping data, grandparents also take responsibility for taking care of children playing in public open spaces. Grandmothers and grandfathers who take care of their grandchildren in the park outnumber fathers (Figure 6.4), while the number of grandmothers or grandfathers supervising children's outdoor play are around the same.

According to the density analysis of accompanying grandparents, the covering ranges of grandmothers (Figure 6.7) and grandfathers (Figure 6.8) are almost the same, but the big difference between grandmother's supervision and grandfather's supervision is that more grandfathers prefer to take their grandchildren to play on the kiddie rides. Grandfathers are the group who are observed taking children to play on the kiddie rides most frequently, but grandmothers rarely do this. It may be because the kiddie rides are a charged play facility. The different concepts of child rearing and household expenditure between grandfathers and grandmothers mean that they have different attitudes towards letting the children play on the kiddie rides, but it has not been possible to confirm this observation with grandparent interviewees.

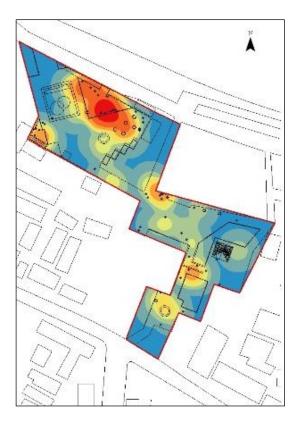


Figure 6.7 Areas supervised by grandmothers

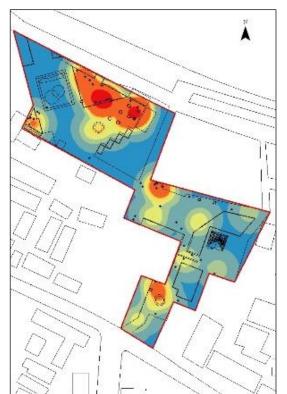


Figure 6.8 Areas supervised by grandfathers

Using the same category system as for parental supervision patterns shows that the dominant accompanying patterns are like those of parents, close supervision and watching at a distance (Table 6.2). But grandparents are less likely to play with children; like parents, most grandparents prefer to sit on the benches and watch their grandchildren play. The two rubber playgrounds and the space in front of the kiddie rides under the trees are the most popular spaces for grandparents to take their grandchildren to play. Grandparents help a lot with taking care of grandchildren playing outdoors in public open spaces, and are seen in the parks with them more frequently than the children's fathers.

Interaction pattern between grandparents and children	Play together	Close supervision	Watching in a distance	Walk-through together			
Grandparents doing their own things	No	No	Yes				
Children play with other children or facilities	No	Yes	Yes				
Observed number	Observed number						
	18	49	27	21			
Spatial distribution							

Table 6.2 Children-grandparents interaction patterns

#### 6.2.3 Other children

Children who live in the central area of Beijing are surrounded by familiar adults when they play, but other children also play an important role as play partners, cooperating protagonists and co-investigators in childhood (Moore, 1986). Whether siblings, cousins, neighbourhood friends or classmates, they form part of the children's social environment. This is as important as their physical environment in its impact on their childhood experience. This observation is supported by the data generated from interviews with children. A large number of children say that the reason for their preference to play outdoors is because there are increased opportunities to play with other children outdoors rather than indoors. Most of the time, in these children's minds, playing with other children is the most attractive part of spending time outdoors.

Q. What is your favourite when you play outdoors? A. Playing with friends...

(a 9 year old boy)

Q. Comparing playing indoors and outdoors, which do you prefer? A. Playing outdoors. Because there are more people, more interesting...

(a 9 year old girl)

I like playing outdoors. Because stay at home is boring, my parents are not at home, but outdoors, I can play with other children...

(a 12 year old girl)

I really like playing outdoors, especially playing with other children...outdoors there are many children to play with me, but there is only myself at home...

(a 9 year old girl)

Q. Do you usually play with other children when playing outdoors? A. Yes, if not playing with other children, it is not play...

(an 8 year old boy)

From this it appears that play with other children may be the value of outdoor play. Indeed, according to the eight year old boy, he does not count playing without other children as a game. The reason behind the tight link between play with friends and outdoor play is that there is usually only one child in urban families. Playing at home always means playing

alone or playing with adult family members. Indoor play may sometimes be fun, but interacting with peer friends is more interesting. For the children who value playing outdoors with friends, a lack of such friends can be a reason to prevent them from outdoor play. The following statements support this:

Q. Comparing playing indoors and outdoors, which do you prefer? A. if there are no play friends outdoors, I would rather stay at home...

(a 13 year old girl)

I playing outdoor in the morning during the summer holidays, but not evening. Because in the evening there are fewer friends playing outdoors, we are boring at home...

(an 11 year old girl)

The longest time I spend playing outdoors is around 2 hours, the least is 15 minutes. Because at the time when I go out, my friends are already preparing to go home...

(an 11 year old boy)

What needs to be made clear is that most of the time when children are saying there are no other children to play with, it means that there is no child with whom they like to play. Each child has their preference of friends to play with. Generally, they prefer to play with children they are familiar with. They also have their preference for playing with boys or girls, as well as older or younger friends.

I always play with girls and one particular boy, but not other boys...because other boys are older than me, I don't like to play with them...

(a 9 year old girl)

I usually play with boys. (Q. Why) Because I don't think girls play outside often. We usually play football together, but girls never play with us...

(a 10 year old boy)

I play outside with Zihan, Pipi and Yangyang. We like playing together. We do not play with other children, because we don't know them...

(an 11 year old girl)

If the children cannot meet their preferred play friends in their habitual range, what do they do instead?

When we go downstairs, if there are other people (children), I would play with them, if not, I will go to play with the exercise facilities alone...

(a 9 year old boy)

I do not play alone. If I can't meet my friend in the yard, sometimes I will find them at their home...If they cannot go out to play. I will also go home...

(an 11 year old boy)

I play with friends if I meet them. But if not, I always play along with the play facilities...I like playing outdoors because there are many friends outside...even if there are no familiar friends, I can make new friends. Or I can play with myself...

(a 7 year old girl)

I go downstairs firstly and find my friend at her home, if they do not go out, I will go home to do my homework. If she goes out, we will play together...

(a 10 year old girl)

So when familiar friends do not show up outdoors, there are three main options to solve this problem: to play alone, to make new friends or to go home. It seems that the older children are more reliant on familiar friends for outdoor play, and if a child cannot find any most would go home immediately. Younger children are more independent of play friends, play outdoors alone and are more open to making new friends.

Now a general picture of children's outdoor play friends can be formed. When playing outdoors, most of the time children randomly meet friends at their favourite play spaces. If they cannot find the familiar friends, they might play alone or try to make new friends or go home. The choice among these alternatives is the child's own decision. Therefore, other children have a significant influence on a child's outdoor play experience and perceptions in the way that exciting play friends make outdoor play attractive, but a lack of play friends can stop children from playing outdoors.

## 6.3 Parental concerns about potential safety problems

Children living in the central area are protected all around, not only by parents but also by grandparents and even school teachers, though they like being independent and playing freely with their peers. This raises the question of the safety issues which make the adults worry and become over-protective. According to the interviews with these different groups of adults, their main concerns about potential safety hazards are worries about traffic accidents and strangers.

### 6.3.1 Worries about traffic dangers

Almost all the adults interviewed had concerns about safety risks in their children's daily lives, and worries about traffic dangers were mentioned by almost all of them. The parental concern about traffic accidents is not surprising. As described in the previous chapters, the popularity of private cars means that most of the public spaces within hutongs are used for car parking, and children play in the car parking areas (Chapter Five).

From the perspective of parents, playing in these car parking areas or the car crowded hutongs is a daily safety risk to their children, but unless they accompany their children when they go outside, there is nothing they can do to change this.

There are so many cars in the hutongs. Lots of them are driven at a very fast speed. Whenever my son goes outside the courtyard alone, we feel very nervous. To make myself feel better, whenever he goes to summer schools or meets friends, his dad or I take him to his destination...

### (mother of an 11 year old boy)

I worry about cars. Almost all people can drive cars nowadays. I know some of them are not skilled enough to have good control of the car, especially when a small accident happens. In the narrow hutongs the road conditions are always complex, I don't believe all of the drivers can keep good control of their cars...

(father of an 8 year old girl)

My boy usually plays in the small open space in front of our home, where there are always several cars parking. I don't like him to play there, because he may get hurt if he doesn't see the moving cars...

(mother of a 9 year old boy)

When my daughter goes outside, there need to be adults to accompany her because there are so many cars in the hutongs. She is too young to focus on so many fast driving cars...

### (mother of a 7 year old girl)

The parents' worries about traffic accidents come from several reasons. The narrow and complex physical environments within hutongs, the increasing numbers of private cars, less skilled drivers and the lack of confidence in whether the young children can take care of themselves all contribute to parental anxiety about traffic accidents.

### 6.3.2 Worries about strangers

A large number of parents also expressed worries about the safety risk brought by strangers, but these were usually expressed in a more implicit way compared with the direct expression of dissatisfaction about the traffic conditions in the hutong. They usually say they worry about strangers, but they always do not want to say more about what kind of safety hazard the strangers might bring.

There are more and more strangers in the communities as more local people move out and rent their house to floating people. No one knows about the newly movedin strangers. Actually, I don't allow my daughter to play outside alone because of these strangers...I'm afraid they are hooligans with bad histories...

### (father of a 10 year old girl)

I told my boy never talk to the strangers when playing outside or on the way to school. If they talk to you or give you food or drinks, you just need to run away. Even so, I'm still worried if he is playing outside alone or going to somewhere alone...

(mother of a 10 year old boy)

I'm worried about the strangers...A lot of reasons. For example, there are a lot of stories about children who get lost and can't be found; and I have a daughter, I need to worry more about her...

(mother of a 7 year old girl)

There is so much terrible news about child trafficking cases. All the parents are afraid of this. So we never let our children interact with strangers...

(mother of a 9 year old boy)

These quotations show that the worries about strangers focus on two specific elements. The one parents express directly is child stealing and trafficking. The other, implicitly expressed, is child molestation. The news reports about child related crime cases exacerbating parental paranoia is also clear from the adult's narrations.

### 6.4 Play friends and carers in previous childhoods

After understanding the narrow scope of children's free range and their playmates as well parental concerns about safety issues nowadays, the interviews with local adults have made it possible to consider the free range, play friends and carers in the childhood play of their parents' and grandparents' generations.

## 6.4.1 Free range in the older generations' childhoods

When asking local adults about their free range in their childhoods, they always gave blurry descriptions of where they could go, but were more explicit about the places where they were not allowed to go.

When I was young, I played outside everyday. I could play at any place, my parents did not mind about that. But I was not allowed to swim in the lakes with friends. (Q: Were there adults accompanying) That's okay. If my dad or uncle take us to play water in the summer time, that's all right...

(male in grandparent generation)

In my childhood, the adults did not give a lot rules about where we cannot go. So we had great freedom playing in this area...

(female in grandparent generation)

When I was young, I was not allowed to play in one of my friends' courtyard because we heard that someone living in that courtyard house had some mental problems. Except that place, there were no rules...

### (female in parent generation)

So for the generations of parents and grandparents, their free range covered almost everywhere in their habitual and frequented range. Parental controls were only issued in prohibiting a number of dangerous places. As for the accompanying of children on their way to school, they never need to be accompanied by adults.

We usually walk to school at primary school age. Never needed to be accompanied by parents. In my memory there was never any student taken to school by parents, only if he is ill or can't walk...

## (female in parent generation)

We go to school alone, never accompanied by adults. Sometime we go with friends and play on the way home. After school, we can play the whole way home with friends...

(male in grandparent generation)

So these older generations enjoyed a wide free range and had independent mobility of travelling to school alone. The modern extremely limited free range was not a feature of those generations' childhood. When the local adults shared their memories about the free range in their childhood, some of them also shared their thinking about the contemporary situation.

When I was young, it was thought that we should be independent, manage ourselves and not bother our hardworking parents; these ideas were promoted in the schools. Our parents did not spend such a lot of time with us. But now, the parents are promoted and even asked to spend more time with children by school teacher and education experts. The children are more dependent on adults, and sometimes when he sees other children are accompanied by their parents, he also asks us to do the same...

(female in parent generation)

From this, it can be seen that the decreasing independent mobility has been influenced by the advocated parenting style. From the parents' perspective, to be a good parent now means taking extreme care of children. Previously, raising children to be independent was advocated.

## **6.4.2 Playing with siblings**

Above all, playing with siblings was a common but significant part in the childhood of both the parents' and grandparents' generations, and was often mentioned by adults during the interviews.

Formerly, there were at least two children in the family, sometimes there were more. It was easy to find play friends...

(Male in parent generation)

When I was young, there were always around two or three children in each family. We could play together or we could play with neighbourhood children...

(female in grandparent generation)

In the childhood of parents and grandparents, siblings were play friends, and in some situations, siblings could take the role of carers.

When I was young, we had five children in my family. My parents hardly had any time to spend on each of us. It was our big sister taking care of us. When we argued with other children, it was our brother who came to help. I also helped with our friends and younger siblings when I grew up older...

## (male in grandparent generation)

When I was young, I have one big brother and one little sister. I played with my brother. If I had arguments with others my brother would help me, and we protected our little sister together when she needed help. We all considered each other...

## (male in parent generation)

Unlike childhood nowadays, siblings had a significant role in playing with and even taking care of younger children. Due to the 'one-child' policy, contemporary children seldom have the experience of growing up with siblings. Without the experience of sharing and taking care of siblings reported in the interviews with adults, the personalities of the contemporary children are different from those of their parents or grandparents.

Today, the children are pretty self-centred. It seems that there is nothing important in their mind except themselves. Some parents are also only children, they are self-centred too. When these only-children have a fight in school or outdoors, sometimes it can develop into a conflict between two families. How big an issue could that be between two kids? But the children get together with their parents, no one wants to make a concession...

### (female in grandparent generation)

Recently, some of the children are too selfish and spoiled. My son isn't that kind of strong personality, he is more soft and gentle. We are afraid he is at a disadvantage when fighting with others...

### (female in parent generation)

The children in recent years, they have no siblings, they don't have the experience of sharing everything with some very close friends. They can be selfish sometimes...

### (male in parent generation)

These adults think that without the experiences of considering or taking care of others, contemporary only-children are selfish and self-centred. It is hard to say what the exact effect is on contemporary children who lack the experience of having of siblings. From these quotations it can be seen that the personalities of modern children have been affected by the altered interaction with play friends.

### 6.4.3 Playing with other children

In the childhood of the parents' and grandparents' generations, playing with other children was the main lifestyle. Adults seldom participated in children's play. Only very young children played with adults.

The neighbourhood children usually played together without adults taking part. Only the very young children, sometimes played with a grandparent. Children older than four years old always played with other children...

(female in grandparent generation)

We played with other children very often. After school we spent a lot of time playing with friends outdoors, or at my home or their home. Adults were busy with their things, if we did not make big trouble, they never cared about us...

## (male in parent generation)

When I was young, there was a uncle who always played with children. He had no job, we call him by his nickname. Except him, there were no adults playing with us. We children played together...

## (female in parent generation)

In previous generations, children had a much wider free range in their daily environment. They could interact with the urban environment independently, along with their siblings and friends. Adults only took very little control of children's independent mobility and seldom took part in children's play, and the dominant parenting style was very different from that of modern times.

### Summary

In this chapter, the research question asking who plays with or accompanies children's outdoor play has been answered by addressing children's independent mobility and that of their friends and carers in both contemporary and previous childhoods. Children living in the central area of Beijing now have an extremely narrow scope of parentally permitted free range within their habitual range. They do not have independent mobility when they travel to school. However, from their instinct, children have a need for independent exploration of surrounding environments and as a result, children sometimes conducted unpermitted independent outdoor play.

The carers of contemporary children, their accompanying adults, are predominantly mothers and grandparents. Fathers form the smallest group of people observed to accompany. When supervising children playing outdoors, most of the carers adopt close supervision to provide immediate protection. A large number of adults play with children nowadays: adults usually take the double role of supervisor and play friend when accompanying their children's outdoor play. This close supervision is largely a consequence of parental anxiety about potential safety hazards, especially traffic dangers and the risk from strangers.

Other children also play a significant role in a child's outdoor play experience. In contemporary childhood, without siblings, playing with other children can be the main purpose of playing outdoors, though it is sometimes difficult to find peer friends in outdoor environments. Things were very different in the past for the children's parents and grandparents.

In past times, children enjoyed a much wider free range. They had independent mobility to almost every place within their habitual and frequented range. Without close supervision by adults, children's play friends were siblings and other children. Adults seldom took the role of play friends and it was usually siblings who took the double role of carers and play friend. The changes of pattern in play friendships across generations is largely a consequence of birth control policies, which have deprived contemporary onlychildren of siblings. The change of in parenting style that has emerged from the onlychild policy as also had a direct influence on children's independent mobility.

# Chapter Seven Activities of play

## Introduction

In this chapter, children's play activities are listed and described in detail, for both contemporary and past childhoods. To describe children's various play related activities, a revised category system has been developed based on the category system of Bishop and Curtis (7.1 Play related experiences in childhood). Children's play related experience of games, natural play and play interventions are described in detail according to this newly developed category system, with a developmental perspective on differences across generations.

Behaviour mapping was carried out in Shichahai children's park to record games played by contemporary children in its public open space (7.2 Childhood game), and more were recorded in interviews with children. Popular games from the childhood of past generations were explored when interviewing adults.

In section 7.3, Natural experiences, the part of natural interactions is described, from raising animals and playing with insects to planting or farming, as well as playing in the natural environment. These natural interaction experiences are also explored across generations.

Section 7.4 explores the play interventions which provide children with additional play opportunities in their everyday lives. They are recorded in detail, both for present and past childhoods. Then, with a special focus on current play interventions with features of public welfare, the operational modes of these interventions are interpreted.

Generally, in this chapter the childhood play activities of the children living in the central area of Beijing are explained from the perspective of games, natural interactions and play interventions. All these play experiences are explored across all three generations.

## 7.1 Play related experiences in childhood

In the literature review chapter (2.2.4 Typology of games), several commonly used classification criteria for children's play behaviour and childhood games were analysed and compared. The classification system developed by Bishop and Curtis (2001), which distinguishes children's play activities as having a high verbal, imaginative, and physical content, was accepted as an effective tool to describe and record children's play behaviour, even with only a small amount of data, so this classification system is applied as a starting point. After collecting data in the real world, this classification system has been further developed by covering a wider range of childhood play related experiences, observed and recorded from field research. The result, which is more than a game classification system of children's games, is used to describe all kinds of children play activities observed on playgrounds, orally described by children, and even recorded in archives or recalled by adults about childhood play in the past.

## 7.1.1 Category system of childhood play experiences

As shown in Table 7.1, in the revised category system the overall play related experiences of childhood are divided into four categories, games, handcrafting, nature interaction and play intervention. Within the category of games, corresponding to the principles developed by Bishop and Curtis, games are sub-divided into games with high verbal, imaginative or physical content, as well as the newly added high technical content games. As well as games, the developed system also has three further types of play experience, handcrafting, natural interactions and play interventions. Play experience of handcrafting is subdivided as hand-making with found materials and with provided materials. Play experience of interacting with nature is subdivided into keeping pets, farming, playing with natural materials and playing in natural environments. Play experience which includes play interventions is categorized as the intervention of special events, seasonal landscape and organized community activities. Table 7.1 is based on the original game classification system proposed by Bishop and Curtis, with the additional categories devised from field research coloured grey.

Category	Sub-category	Details	Examples
Game	High verbal	General verbal games	Joke
	content	5	Riddle
	content	Rhymes	Entertainment rhymes
		,	Counting out
			Clapping rhymes
			Skipping rhymes
		Board games	Chess
		bourd games	Card
			Dice
		Mora	Mora
	High imaginative	Role enactment	Wedding
			Fighting
	content	acting game	Family
			Opera
			Recruit soldiers
			Photograph
		Objects imagination	Branches
		Objects imagination	Mud/sand
			Shades
		Course little t	
	High physical	Game without	Chasing
	content	playthings	Walking Slide
			Spinning
			Jumping
			Racing
			Wrestling
			Climbing
			Hide and seek
		Game with playthings	Spin top
			Pinwheel
			Chinese yo-yo (Kongzhu)
			Steel hoop
			Bamboo dragonfly
			Slingshot
			Glass bead
			Paper ring
			Rubber ban skipping
			HackeySack (Shabao)
			Shuttlecock
			Kite
			Balls
			Rope
			Swing
			Seesaw
			Toy car
			Balloon
			Bubble
			Stone
			Vehicle
			Roller skater
			Kiddie ride
			Skate board
	High technology	Electronic games	Smart phone
	content		I-pad
	content		Computer

Category	Sub-category		Details
Handcrafting	Found materials		Wood
Handeraiting	Found materials		Sheet iron
			Glass
			Paper
			String
			_
			Bamboo split
			Branch
			Leaves
			Straw
			handkerchief
	Provided materials		Painting tools
			LEGO
			Faber-castell
			Handcrafting set
Natural	Keeping Pets	Animals	Dog
	Reeping rees	7 (1111) (15	Cat
interaction			Rabbit
			Golden fish
			Frog
			Tadpole
		Birds	Sparrow
		Dirus	Dove
			Crow
		Insects	Cricket
		Insects	Silkworm
			Fire fly
			Worm
			Grasshopper
			Lady bird
			Butterfly
			Dragonfly
			Ant
			Cicada
	Forming	Dianting	Sunflowers
	Farming	Planting	Radish
			Water lily
			Succulent plants
		Harvorting	Picking fruits
		Harvesting	Harvest crop
	Playing with patural	matorials	Plants
	Playing with natural	materials	Stones
			Woods
			Sand or mud
	Diaving in natural an	vironmonto	Watching stars
	Playing in natural er	wronments	Catching fishes in the river
Intonucation	Evente		Festival
Intervention	Events		Street vendor
			Street performance
	Concorol or weaths	r rolated	Play with snow
	Seasonal or weathe	related	Play in the rain
			Play on the iced river
	Community anti-		Community activities
	Community activitie	.5	community activities

Table 7.1 Categories of childhood paly experiences

### 7.1.2 The changes of play related experiences

The different kinds of play experience are distinguished by different colours. Those which appear to have disappeared are coded in yellow; the play experiences which are shared by different generations are coded in green; and the play activities only experienced by contemporary children are coded in blue (Table 7.1). Overall, there were more types of play in the past and there are fewer nowadays (see Figure 7.1). The decreasing trend of childhood play experiences suggests that there are far fewer play experiences nowadays.

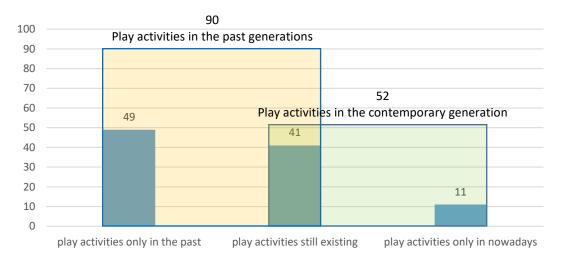


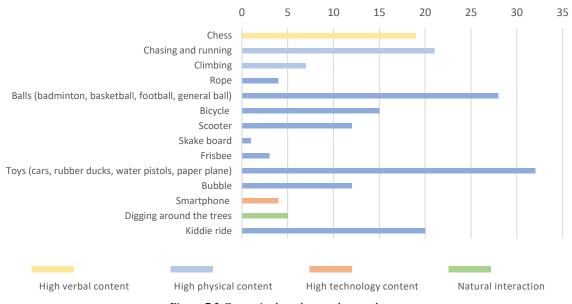
Figure 7.1 Activity types in the contemporary and past childhood

On further exploration, most of the lost play activities are games with handmade toys or the crafting process using the found materials. In the past, there were not many specifically designed toys for children play, and using plentiful materials that were common in daily lives to make toys was a kind of play tradition. The hand-crafting process was an interesting part of the play in itself. In contemporary childhood, the toys children play with are always specifically designed for them. Without having to try hard to find materials to make toys, there are abundant toy products overwhelming children's lives. Even the handcrafting games are always supported by easy access to materials and tool sets. Similarly, the newly emerging play experiences of contemporary childhood are activities supported by sports equipment, such as roller skates, skateboards or electronic games on smartphones or computers.

Childhood play experiences have changed a great deal across the generations. Urban environmental transformation and economic development means that children in the central area are no longer playing the traditional games which their parents or grandparents played when they were young. That is not to say that these urban children have a boring childhood. On the contrary, these children have a more colourful and materially abundant childhood.

# 7.2 Childhood games

In the revised classification system of childhood play experiences, children's games are subdivided into four types, games with high verbal, imaginative, physical, and technological content. The first three types are common play experiences shared within childhoods in all generations, but the games with high technology content are a result of the modern development of electronic technology, which distinguishes the current childhood play experience from earlier generations. In the following paragraphs, children's games in current childhood are described and recorded in detail and the changes of games in the present and the past are compared.



### 7.2.1 Games in contemporary childhood

Figure 7.2 Games in the urban park nowadays

For the children living in the central area, the games they play in public open spaces are less varied during the limited time they spend outdoors. According to the data collected by behaviour mapping in Shichahai children's park (Figure 7.2), no game with a high imaginative content was recorded, and there was only one high verbal content game recorded, a game of chess. The main games played in the urban parks are those with a high physical content, including games with and without playthings. This might be

because the design of the spaces lack affordance to sustain a greater variety of play, and the park is mostly used by young children.

Without playthings, children usually run and chase with each other; they climb trees, fences, benches, steps and the slopes alongside the steps. Most of the time they simply walk around and try to find play partners and play opportunities. For playthings, the children living in the nearby hutongs usually take ropes, basketballs, footballs, badminton, scooters, skateboards and bicycles to play in the park. The flat and open field in the park provides them with space to conduct these high physical content activities, which cannot be conducted in the narrow public spaces in the hutongs. As well as having these sports facilities, children also take some toys to play with in the park, such as toy cars, water pistols and paper planes, toys which can be used both indoors and outdoors. Among these, the bubble blower is the most popular toy among the children playing in the park. When a child blows bubbles there, other children around are attracted and come to play with the bubbles. More than these simple toys, sometimes children also take smartphones to use in the park, as a kind of plaything. The recreational facilities placed in the park are attractive for younger children, though they are simple kiddie rides. At the same time, the children's play activities observed in Shichahai children's park were not limited to games, because the urban park not only provided children with flat open spaces, but also manmade natural environments. Children were observed playing with natural elements, digging in the soil under the trees with branches or other tools.

The data collected from interviews provides further understanding of children's play. They mention games with a high technology content as their favourites, and describe in detail various high physical content games with rules as well as games with high imaginative content.

In modern childhood, electronic games and social media take a significant place. They are a common and necessary component of daily lives nowadays. These emerging electronic recreations take the most of time which the children's parents and grandparents spent on traditional games in outdoor environments.

As I grow up, I'm no longer like playing games any more. I only want to play WeChat (a popular social app)...

(an 11 year old boy)

I don't like playing outdoors. I always play at home. I can play computer games and i-pad at home. If I need to go outside, I can play on my dad's cell-phone...

(an 8 year old boy)

In my home, we have various electronic products brought from the States, such as a remote controlled car. I really enjoy playing with these electronic products. I also tried the AR and VR games before. They are really fascinating. I do wish I could play these fascinating VR games at home...

### (an 11 year old boy)

Though the electronic devices are fascinating and attractive, the outdoor group games can never be replaced in any childhood. According to the children's narratives, there are still group games with rules played in playgrounds nowadays. Several popular games are described as follows:

I like to play Three Words with my friends. That is a person chosen to be the catcher while the others are runners. When the catcher almost catches you, then you can say a term in three words, and then you are freeze, and the catcher can't catch you. You need to stand still until other runners come to unfreeze you. If all the runners are freeze, then we say all the people are liberated together, then all the people are unfrozen...

### (a 12 year old girl)

We play Colour Chasing. (Ask: how do you play that?) A person stands with their back to the others. And then, that person can choose a colour and shout it out loud. If others have that colour on their clothing, the catcher can't catch them. But if they don't, then the catcher can chase them...

### (a 10 year old girl)

I like play Colour Chasing and Steal Oil Rats. (Ask: how do you play the Rats game?) It's easy, just there is a person who pretends to be a cat and somewhere is taken as the pot full of oil, others are rats trying to steal the oil without being caught by the cat...

(a 9 year old girl)

We play Red-lantern, Green-lantern and White-lantern. (Ask: how do you play that?) A person is chosen as the counter. Then he or she counts red-lantern, green-lantern and white-lantern back towards the other people while they are counting; others can run towards the counter. When the counter stops counting and turns back, all the people need to freeze. If anyone moves, he or she loses the game. And if the counter says White-lantern after counting, the counter can turn back and catch the runners. The runner can win if they run to the counter before the counter decides to catch the runners...

#### (an 8 year old girl)

I play Five Step Snack. That is to say, the catcher and the runners all can run only five steps. Then the catcher needs to stretch his or her body to touch the runners. The runners need to avoid being touched by the catcher...

#### (an 8 year old girl)

I like to play Blind chasing. There is a range, we can only run in that range, and the catcher's eyes are covered while he or she is catching others...

(an 11 year old boy)

Although they have different names and rules, these group games played on the open spaces are usually chasing games. Besides these, hide and seek is the other frequently mentioned game, with easier but similar rules. Also, games with a high imagination content are described by children in the interviews. Most times, the imagination is engaged through role play, for example pretending to be Mum and Dad and cooking for the baby; or acting the scenarios of fairy tales or traditional legends. These role-playing games can be flexible in both their role assignments and storylines. They are the result of children's dynamic imagination.

To summarize, games in public open spaces nowadays mainly have a high physical content. Fewer children play games with a high imaginative and verbal content in public open spaces, but games with a high technology content have taken a significant place in children's daily lives. These indoor electronic games compete for children's spare time with high physical content games played outdoors.

## 7.2.2 Games in the childhood of parents generation

The decreasing trend in play experience and the less varied games observed in the field research might suggest that compared with previous generations, contemporary children have a more monotonous life in play. However, the consensus among the adults interviewed is that contemporary children are enjoying a flourishing childhood, one they did not experience themselves. In the minds of the adults, the extremely rich material life and the fast-paced technological advancement have created an unparalleled urban environment for children to explore. In this urban environment, they think that their children are growing up more intelligent than them.

Today, the children play the i-Pad. When we were young, what did we play? We played sticks and mud. The difference between us is as far as the distance from sky to ground. The toys and the games we played when we were young, maybe contemporary children don't like to play. While the things they play in recent days, we couldn't play when we were young...

## (a female in parents' generation)

When I was young, we played small sandbags, rubber band jumping, hopscotch and so on. Most of the time, the sandbags were hand-made and the rubber band was made in a chain with a lot of smaller rubber bands. Recently, the children don't play with these out of date playthings. They play on scooters, roller skaters and other stuff...

## (a female in parents' generation)

When we were young, we played games that never needed to be taught by special teachers. We played with other children, some were older than us, some were younger. Someone can play some games and the others knew the other games, we played together, then gradually, we can play a lot of games. In recent days, the lack of the opportunity of interacting with their peers means a lot of games has to be taught by teachers and played at school with very limited time. Can you imagine my daughter learning the rubber band skipping and playing sand bags from their PE teacher?

(a female in parents' generation)

When I was young, maybe teenage, we already have Nintendo Game Boy; but it was really expensive for the average family, only the kids from the privileged class families could have that; so if any of our friends had Gameboy, we all really admired him and want to play with him, so, this boy would be really popular. But now, no matter whether the Gameboys or the i-Pad are really common in children's lives, they like to play electronic games, but they do not need to admire others.

## (a male in parents' generation)

These childhood play experiences were shared by the parents' generation of the late 1970s and 1980s. Putting their feelings and thinking aside, only paying to attention to the play content in their childhood, it can be found that they play with child friends; they have hand-made toys; they even had the first generation electronic games. Though they had less varied industrial toys and electronic games, they still had a joyful childhood with abundant play.

### 7.2.3 Games in the grandparents generation

In the childhood of the grandparents' generation, most of the time games with a high physical content but without playthings were dominant because of the lack of toys and play facilities.

When we were young, we played with handmade sand bags, both small ones and big ones. Sometimes, my dad would made me some toys using spare wood. These toys could be little sculptures of rabbits and birds. They are very precious, because other children don't have them, and even my big sister don't have... when we were young we played a lot with other children, because we didn't have toys, we played a lot of games with running and jumping. Most of these games are never played by the children nowadays...

(a female in grandparents' generation)

It hard to remember what we played when we were young. We just ran freely in the hutongs and street and everywhere played war games. We never played the things the children play now. They (the recent children) are living a life we were dreaming for when we were young...

(a male in grandparents' generation)

The changes in childhood games feature a decrease in the number of handmade toys and increasing industrial produced toys and electronic games, the result of material wealth. Though play is an essential part of childhood, but the things the children play with and the games they play can be distinctive. Current childhood play experiences, which are supported by the various sport facilities and toys were never experienced by their parents and grandparents in their childhoods, but the handmade toys, which had a dominant position in the past childhood, have almost disappeared now.

## 7.3 Experience of interaction with natural elements

In the inner city area, where the land was taken over from farmland and wilderness a hundred years ago, the urban green spaces have the greatest responsibility to provide urban residents with opportunities for access to the natural environment. Raising animals and growing plants is also part of the experience of interacting with natural elements in urban children's daily lives. On special occasions, short tours to the suburbs on the outskirts where there is still some farmland, and travelling to natural scenery at famous resorts can also provide urban children with the experience of interacting with nature. However, not all these experiences were available to preceding generations.

### 7.3.1 Raising animals and playing with insects in contemporary childhood

According to the interviews with the children, the pets they have are usually dogs, cats, goldfish, ducks, rabbits and turtles. Their parents and grandparents had more choice in their childhood. For example, raising chickens, tadpoles, birds and silkworms are never mentioned by modern children but mentioned by the previous children. Furthermore, the number of children who have pets now is very small. Most of them do not have a pet, even if they really want one, because taking care of pets takes time and effort, which are both limited given the rapid pace of urban lives. It is also the case that parents believe their children would not participate in looking after the pets, but only play with them, bringing additional work for the busy adults.

I don't have a dog, because in my home, there are no older people taking care of them during the day time. So my mom doesn't allow me to have a pet, because if no one takes care of it in the day time, it would be too boring and die..

(a 7 year old boy)

I only have golden fish, I need to change the water by myself. My grandparents do not allow me to have a dog or cat. They are not allergic to the fur. But, they just think that if we have a pet, I would only play with it, but the dirty jobs, such as cleaning and feeding would be all done by them. They don't like that...

(a 7 year old girl)

In addition to playing with a pet at home, watching birds in urban green spaces and observing insects in the residential areas or playing with other small animals and insects living in urban environments can also provide urban children with opportunities of interacting and gaining knowledge about the natural environment. According to the interviews with children, most of them can name a large number of birds and insects living in the urban environment, but few of them have the experience of playing with them or watching these urban inhabitants closely.

I have seen sparrows and swifts around my home. I also saw ladybirds and dragonflies in Beihai Park. (Have you ever caught these insects or played with them?) No, I never play with them...

(a 10 year old girl)

There is a big tree behind my home, there are a lot of birds on that. They are really noisy at night, which means I can't fall asleep at night. (What kinds of birds?) I think they are pigeons and sparrows...

(a 9 year old girl)

There is a wild duck island on the east side of the Shichahai. There are some ducks. Sometimes we feed the ducks using the dog food. They eat the dog food...

(a 10 year old girl)

I know there are ladybirds, grasshopper, cicada and mites in the surrounding environment. (Question: mites?) Yes, they are everywhere. I also saw horses, a tiger and other animals in the zoo. But I don't like zoo. The tiger is so big and so scary. The zoo was so dirty and smelly...

(a 7 year old boy)

Though knowing the names of common birds and insects, urban children still keep a distance from them. Most of the time urban children have a hostile attitude toward them, especially insects, because they are usually afraid of them.

I'm afraid of any of the insects...(the other children) Me too. The worms are so scary, once I was taking a walk with my parents in the park, there was a caterpillar. It was so scary. I had to get on my dad's back. Also, once there was a scary caterpillar, then I tried to run away. That made me nearly fall off the edge of the cliff, fortunately my dad grabbed me at the last second...

(a 8 year old girl)

(Question: do you see any insects in your daily life?) Insects? Most of the time I decide not to look at them, they are so terrifying...

(a 7 year old girl)

I never play with worms or caterpillars, they are so disgusting...

(a 9 year old boy)

These quotations show that the urban children do not lack knowledge about the insects. They are familiar with the insects and their names, but they seldom get to close to them in their daily lives, and there are a number of urban children who are afraid of and have a hostile attitude toward most of the insects who live in the city.

# 7.3.2 Planting and farming in contemporary and previous childhoods

Experience of planting and farming is also a significant part of the children's interaction with natural elements, especially for those living in city centre. Across the generations, this experience has changed.

# 7.3.2.1 Planting and farming in contemporary childhood

Together with their knowledge of small animals, birds and insects, children were also asked to share their knowledge about plants in their environment during the interviews. The plants they can name include chrysanthemum, rose, willow, pine tree, persimmon, pomegranate, aspen and locust tree. All these are common species in Beijing. As well as the species in the immediate environment, the children also mentioned various species which they have never seen but learned about, like Victoria water-lilies and baobab. More than knowing about plant species, the experience of planting and even farming provide a deeper natural interactive experience in childhood, so planting is encouraged and supported in some schools. According to the children's narratives, planting bean sprouts and recording in observation diaries is part of the homework of their science courses. As observed in field research, succulent plants were planted and taken care of by all the children together as shared plants in the classroom of a summer school (Figure 7.3). Also, there is a small unused piece of land within the second ring road which is used as a planting field for children to experience farm work and gain knowledge about crops, an activity organised by the sub-district committee and the children's education centre (Figure 7.4). This is described as an interventional activity in children's lives in a paragraph on play interventions (see in chapter 7.4 Play interventions).



Figure 7.3 Pot-planting in the classroom



Figure 7.4 Farmland one the vacant area within 2nd Ring Road

For modern children living in the urban central area, the experience of farming also includes experiences gained from agricultural tourism. Within the outskirts of Beijing, agricultural tourism is one of the dominant industries. These agricultural tourism experiences contain but are not limited to harvesting fruit and vegetables, fishing and tree planting. As described by the children, these farming related experiences can be interesting and attractive.

We went to pick peaches in a farm in Pinggu (a suburb of Beijing) several days ago. Last year, I also picked up strawberries at another farm. The peaches and strawberries I picked by myself are the sweetest...

(a 8 year old girl)

My favourite play space is the Crab Island, where we can catch crabs...

(a 9 year old boy)

I went to a place to pick vegetables... cucumber, tomato and some super sweet corns. Then they cooked dinner for us using the vegetables we collected...

(a 9 year old girl)

7.3.2.2 Planting and farming in previous childhoods

Compared to gaining farming experiences from tourism farms in modern childhood, the experience of farming or planting was more common in the childhoods of the parents' and grandparents' generations. According to the interviews with local adults, in the childhood of the grandparents' generation, there were large scale farm lands outside the second ring road. In the childhood of the parents' generation, there are the parents' generation, there were farmlands outside the fourth ring road, no more than a twenty minutes cycle ride.

When I was young, outside the Deshengmen Gate (outside the second ring road) farmland could be seen. . . When my son was young, further then Beishatan (between the fourth ring road and the fifth ring road), there were still large scale farmlands. But now, even in Changping (a outskirt district) hardly any farmland can be seen...

### (a male in grandparents' generation)

That is to say, before the large scale urban expansion, in the childhood of both the parents' and grandparents' generations, farmlands were not so far from urban lives. Playing and working on farmland, and could be an easily accessed experience in the childhood. But the farming related experiences in these past childhoods could have a different purpose.

In the childhood of the parents' generation:

In our childhood, the economic reform had taking place. We didn't have a really hard time. The school had an agricultural learning course, which aimed to make us to understand that a better life is not easy to get. So we participated in farm work each semesters...

(a male in parents' generation)

In the childhood of grandparents generation:

'When we were young, my elder brother took me and our little siblings to play outside. Once, we went a little bit farther outside the Jianguomen (second ring road), the potato fields were just harvested. There were still some tiny potatoes left in the field. We were really excited and picked a lot of these tiny potatoes. After that, we always went to the farmland to check whether was there any food left. Sometimes, we also helped the farmers, they rewarded us with food'

(a male in grandparents' generation)

Comparing these experiences from the parents' generation, the planting and farming experiences in the childhood were part of the children's moral education, which aimed to make children treasure their developed urban lives; for the grandparents' generation, the farming experience was related to finding additional food.

## 7.3.3 Playing in the natural environment in contemporary and previous childhoods

For the children living in the urban central area, the childhood experience of playing in the natural environment has changed dramatically across the generations.

7.3.3.1 Playing in the natural environment in contemporary childhood

In contemporary childhood, surrounded by the concrete urban environment except while playing in urban green spaces, most of the experience of playing in the natural environments take places during holidays outside Beijing. As described in Chapter Five, Space for Play (5.4.1 Remote places in the travel range), spending holidays in the coastal cities of Qinhuangdao, Hainan and Dalian, and in the prairie around Zhangbei, is an experience widely shared by most of the children living in the central area of Beijing. Their memories of playing on beaches and the prairie are special and pleasant in the children's minds.

I went to Qinhuangdao several times, I like playing in the sand on the beaches. I could also swim in the sea. The water is really salty when it comes into your mouth when you swim... if I have a day off, I want to go to beach side...

(a 8 year old boy)

I have been to Hainan island. The beaches there were super beautiful, the beach sands were pure white. We also went to Wuzhi mountain (a mountain in the central part of Hainan), we went hiking. I was tired and hot. I did not really enjoy that. But we lived in a tree house, at night, I saw the very beautiful starry sky... 7.3.3.2 Playing in the natural environment in past childhoods

In contrast with contemporary childhood, in which experiences of playing in the natural environment commonly comes from travelling to remote places, in the childhoods of the parents' and grandparents' generations, it was the urban natural environment of lakes and parks which provided children with their experience of playing in a natural environment.

In the childhood of the parents' generation:

When we were young, we went skating on the Shichahai in the winter. At that time, swimming in the Shichahai was already not allowed. We learned to swim in the swimming pool. But skating on the lake was alright...

(a male in parents' generation)

Travelling was not a common thing in our childhood. Living in the urban area, we had almost no experience of interacting with the natural environment. We just went to parks at the weekends...

(a female in parents' generation)

In the childhood of the grandparents' generation:

In my childhood, we like to play around the river (Shichahai lake). The water in Houhai lake was really clean. The shrimps and the fish were easy to see. We liked to catch the shrimps, then we just ate them raw, even without any salt...

(a female in grandparents' generation)

I grew up in a hutong alongside the river (Shichahai lake). When I was young, I swam in the river in the summer and skated on the river in the winter. At that time my elder brother took me and our little brother to play outside. We played around these three lakes. I can still remember that once we saw someone fishing, and then he caught a big fish, he asked us whether we wanted that fish, he could give that fish to us. The kids were all very honest at that time, we all said that though we needed it, we couldn't take it without working for it. When I was young, in the food shortage of the 1960s, we caught clams in these lakes. We caught a lot, we could not eat so much, then we can sell some of them. There were five children in my family, we had a hard life. But at that time, every family lived like this, we

didn't think that was hard. But compared with the children in recent days, what a happy childhood they are having...

(a male in grandparents' generation)

The common point of the experience of playing in the natural environment in the childhoods of both the parents' and grandparents' generation is that it largely relied on local resources. At that time, the lakes in the Shichahai area could be used for swimming, which is no longer possible. The experiences shared by the elder generation usually related to finding food in the surrounding natural environment. The experience of the younger generation was characterized instead as being delightful and joyful. Like the farming experiences shared by the grandparents' generation in previous paragraphs, which also took food finding as their target, these food-finding oriented natural interactive experiences were a very special component in the childhood of the grandparents' generation, something never experienced by the parents' generation and neither experienced or even imagined by their children.

## 7.4 Play interventions

Defined in the literature review (2.5.3 Play interventions), the term 'play intervention' is used in research about children living in disadvantaged environments to refer to play activities which help them overcome adversity by positively interacting with their surroundings and express their emotions. Unlike the play interventions provided for children in adversity, play interventions provided for children living in the central area of Beijing aim to encourage children to go outside their homes, to interact with their peers and to learn some particular knowledge through organized play. In the Chinese language, these interventions are expressed by using the phrase of 'kewaihuodong 课外活动'. By interviewing both children and their parents, as well as participant in the local lives, various play interventions are recorded. Also, the operational mode of these play interventions are explored.

## 7.4.1 Play interventions in contemporary childhood

During the field research in 2016, ten intervention activities were observed in full within the communities in Shichahai area. Most of them were free for children to take part in, and they were carried out within the office rooms of street committees. The information about these community activities was announced through social media. When taking part in these activities, the children were usually accompanied by adults. Table 7.2 shows the details of these observed interventions.

By providing children with opportunities to interact with other neighbourhood children and to have special play experiences outside the home, these arranged interventions are well-accepted and even welcomed by both children and their parents. When doing interviews with adults who accompany children taking part in the organized activities, they showed a mainly positive attitude toward these play activities. For their children's sake, these adults wanted to support children taking part in these beneficial activities.

In recent days, there is only one child in each family. The child always feels lonely with only their parents for company. On school days, he can play with friends at school. But in the summer holidays, it can be difficult to play with other children...

#### (Mother of a 10 year old girl)

We (grandma and grand-daughter) like these activities. Recently, in the summer holidays, if we get information about these activities, we really like to take part in them...

### (Grandmother of an 8 year old girl)

I think these community activities are great. At least, he can go outside home. No matter whether he learns something useful. It is better than stay at home watching TV or playing computer games...

#### (Mother of a 10 year old boy)

According to parents and grandparents, these various play interventions are warmly welcomed by children and well-accepted by adults, because they satisfy children's need to play outdoors and interact with other children. This is not the only reason which makes the play interventions popular among the children. As shown in Table 7.2, the various play interventions are conducted in different places and provided by different organisers, so the purpose and operation of these interventions can be diverse. The operational mode of these various interventions will be explored later. It is worth noting that these interventional community activities are not only carried out in the summer holidays. They are scheduled all year around in the weekend and holidays, but concentrated in the school summer holidays.

Recording Photograph	Avenue	Description Notes
	6 <sup>th</sup> August, 2016	Organized by the Community Youth Club, this safety training course was
	Place: Shichahai Sub-District Community Centre Topic: Summer holiday safety training course. Organizer: Community Youth Club Johnson & Johnson's Company marketing department	given by the staffs from the children's products company of Johnson & Johnson. During this course, by the method of role play games, the self-protection awareness and actions are conveyed, such as the traffic role when across the street, the effective way to get rid of the strangers and the safety tips when stay at home alone during the summer holidays. Though most of these safety roles are already engraved on children's mind, by repetitively emphasized by school teachers and parents. However, because public course was given out by the marketing department of Johnson & Johnson, the final purpose was to build up company image and products.
	8 <sup>th</sup> August, 2016	The sound lled off accurated excurse off all stores reached to bestare of T
	<b>Place:</b> Bell and Drum Tower Square	The organised outdoor sports, in the square between the bell tower and drum tower. In the 1000 $m^2$ square, the children are given a flat and broad spore and broad broad broad broad broad solutions to do collect closing.
	<b>Topic:</b> Roller skating course	טוטמע אמרב מווע נומווובע טע נומוווביא נט עט וטובו -אמנוווץ.
	<b>Organizer:</b> Private Sports Training	
	9 <sup>th</sup> August, 2016	The inner city is a place full of all kinds of cultural and historical heritages.
	Place: Liuyin Street Committee Activity Room Topic: Intangible heritage experience course Organizer: Liuyin Street committee Intangible Cultural Heritage inheritor	To make the children in Beijing aware of these intangible heritages, which might help with the protection of the intangible heritage, different kinds of intangible cultural heritage experience courses are promote within the schools and communities. The one taken place in the Liuyin Street committee, is the inside painting of a glass bottle. Children are provided with all the tools needed. With the guidance by the skilled people, the can paint a tiny glass bottle for themselves.

Recording Photograph	Avenue	Description Notes
	9 <sup>th</sup> August, 2016	
儿童成长青一"创新盖智思维" 新动	Place: Shichahai Sub-District Summer Camp	In the summer camp organized by the shichanal sub-District committee, the children are provided with various curriculum. The intelligence puzzle component standard childron with a wide constraints to the standard standard standard standard standard standard component standard st
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Topic: Intelligence puzzle game	T game, which provide children with a wide range puzzle toys is the one preferred by a lot of children. These puzzle toys are designed to have positive influence on children's intelligence development. Thus "these
	<b>Organizer:</b> Shichahai Sub-district committee Community Youth Club	toys are also well accepted by the parents.
1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	10 <sup>th</sup> August, 2016	
	Place: The cottage	1 The cottage is a private after school children activity centre, which locates nearby Xisibeisitiao Primary school. During the school summer holidays, the contest and hence contest of the school summer holidrys.
	Topic: The Chinese Knot course	The cottage ran several nanocraft courses, such as making the Uninese knot. These courses were open to both parents and children. On the course course courses were open to both parents and children. On the
	<b>Organizer:</b> The Cottage after school hand craft class	רטמו אלי המובוונא נטמום מט נוופ כווווופאפ אוטר נטפרנופו אונוו נוופון כוווומופון.
	10 <sup>th</sup> August, 2016	
	Place: Boluocang Street Committee	To make the children have a better understanding of their big families together with their family histories, this family tree drawing activity was consisted but the draw state of the objection was activity was
	Topic: Family tree drawing	<ul> <li>Organized by the street committee. The children were provided with the example of the family trees and painting tools. They were briefly introduced about the complex bischip terms to address relatives at first.</li> </ul>
	<b>Organizer:</b> Boluocang Street committee	and then asked to use this in their drawings.

Decording Dhotograph	Avoine	Docceintion Natoc
	15 <sup>th</sup> August, 2016	
	Place: Shichahai Sub-District Summer Camp	I uanshan is a kind of traditional fan which has a pampoo handle and round silk cloth fan. On the fan, there are always tradition Chinese ink scinting During the second the second s
	<b>Topic:</b> Tuanshan (团扇) drawing course	<ul> <li>painting. During the course, the children were provided with rans and painting tools to draw pictures on the blank fans. Most of these children are drawing corporations increase but not traditional pointing on the fans.</li> </ul>
	Organizer: Shichahai Sub-district committee	- מוב מומאווונץ כמורסטו וווומפרא מתר ווסר נוממונוסוומו ממווינוונץ סוו נווב ומווא
	Community Youth Club	
	20 <sup>th</sup> August, 201	
	<b>Place:</b> Jingshan Park	<ul> <li>The Jingshan park locates at the horth end of the Torbidgen City, from which could look down the whole image of the Forbidden City. In the cummers of 2016 theory uses an incost of hibition channed on the mordow.</li> </ul>
	<b>Topic:</b> Insects exhibition	area in this park. By putting amplifying sculpture of the different species income the context of the differen
	<b>Organizer:</b> Jingshan Park	releases the drawn children were provided upportunities to know the feature of the common insects, such as the grasshopper, ladybird, cricket et.
	24 <sup>th</sup> August, 2016	- - - - - - - - - - - - - - - - - - -
	Place: Shichahai Sub-District Summer Camp	As an intangible cultural heritage, the herb monkey is a handmade craft made of Chinese medicine herbs. Provided with all the needed materials, the children from from the continue of the children hereitage.
	Topic: Interchange activities with children from	The children from Guizhou province and the hative children were learning to make the herb monkeys together. For the children both native and from fac chith province it was good opportunities to broad evaciances
	Guizhou Province—Herb monkey crafting	
	Organizer: Shichahai Sub-district committee	
	Community Youth Club	
	Intangible Cultural Heritage inheritor	

Recording Photograph	Avenue	Description Notes
	2 <sup>nd</sup> September, 2016	
	Place: Xinjiekou Sub-district Topic: Farmland Organizer: Xinjiekou Sub-district committee Private children education centre	Within the Z <sup>man</sup> ring-road in the very central crowded area, there was a reclaimed area which was temporarily used as the farmland by the nearby neighbourhood, in the year of 2015 and 2016. During this period of time, this area was also used as the agriculture experience field for the children living in the central urban area. However, when the field research was conducted in 2017 this farmland had been developed into a residential building.

Table 7.2 Observed Play interventions

#### 7.4.2 Operation modes of play interventions nowadays

Table 7.2 shows that although the activities took place in the office rooms of street committees, the main organizers of the different events could be different. Some of them were organized by the staff working for the street committee, like the family tree drawing course at Boluocang Street committee; some were led by social workers from the Community Youth Club, like the activities conducted in Shichahai Sub-districts committee; and others were run by private children education companies, like the Chinese knot course in the Cottage. These many organisers make it complicated to unravel the operational modes of these various play related interventions, but by deconstruction in terms of demands, providers and supporters, this intricate operation mode can be understood.

There is a demand for play interventions coming from children, parents, schools and even the government. Each of these has their specific requirements of every stage of the interventions. From the perspective of the children, as described earlier, summer holiday time can be boring when staying at home without classmates or siblings with whom to play: they have a need to meet and play with peer friends. From the perspective of parents, they need to prevent their children from spending a long time in front of screens and feel that the interventions encourage their children to take part in outdoor activities as well as helping them broaden their horizons. From the perspective of the primary schools, encouraging the children to gain more practical knowledge, beyond examination knowledge, is a way of achieving an educational balance.

After all, the Chinese primary school education is always criticized as being too exam oriented. So primary children are required to participate in social practice activities during the summer holiday as part of their summer school homework. To confirm children's participation in social activities, a certificate must be signed by the authorized organizer of the activities.

In China, primary school education is compulsory, led and supervised by the local Education Bureau. The requirement for participation in social activities is made by the Education Bureau of Beijing, and only applies within the primary schools in Beijing. The local primary school teachers have to carry out the Bureau's requirement by asking children to participate in social activities as part of their homework, but they are not the decision makers.

At last, from the perspective of government, it is crucial important to encourage children to understand the splendours of Chinese culture and generate a strong national identity. This aim can be partly achieved through school education, but taking part in cultural heritage protection or participating in positive community lives can help to intensify the sense of national identity and pride.

All these requirements, from children, parents, schools and government, can be tackled by providing children with opportunities to get together and conduct meaningful and beneficial activities during their summer holidays. So organisations from different interest groups combine together to provide children with additional play opportunities and play interventions. These interventions come from different levels of government committees, Committee Youth Club, cultural heritage administrative department, business-company, sports training institution and others. Sometimes the play interventions are run by a single organiser (three of ten observed in this research), such as the roller skating training course run by sports training associations; the Chinese Knot course run by private nursery; and the insect exhibition run by Jingshan Park. More often, the play interventions in the street committees or sub-district committees are collaborations between several combined organizations (seven of ten).

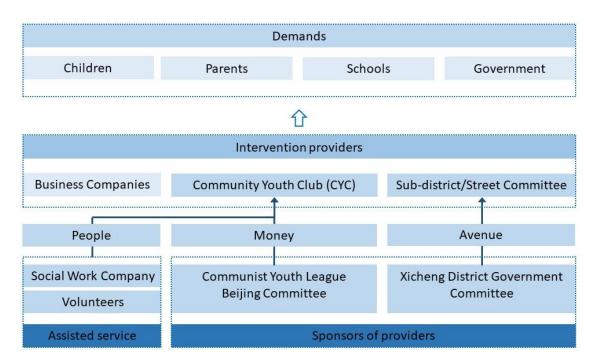
In cooperating on play interventions for the street committees, the different organisations usually take different responsibilities. The street committee and the Community Youth Club (CYC) are the main force in organising play interventions. The street committee usually plays a significant role as the provider of the venue, while the CYC usually takes responsibility for activity planning and providing the necessary materials. Of the seven interventions observed in the sub-district or street committees, three were collaborations between these two organizations.

Standing behind these two dominant organizations is the government financial support. The interventions operated by the sub-district committees, including the street committees within the sub-districts, are supported by the superior government committees of Xicheng District Committee. Each year, the government provides funding to support community gathering activities. The street committee can apply for financial support from the sub-district committee to conduct community activities.

Sponsored by the Communist Youth League Beijing Committee, the CYC organises community activities with the help of professional social workers. The Communist Youth

League Committee belongs to political sector, leading the ideological construction of communist youth. By running collaborative programmes with the street committees, the Communist Youth League Committee can work closely with people. The CYC is only one of the programmes run by the Communist Youth League Beijing Committee, which focuses on young people and aims to create a friendly and supportive atmosphere in the neighbourhood. The majority of CYC's events are conducted by professional social workers and volunteers under the guidance and leading of officers from Communist Youth League Beijing Committee.

Figure 7.5 shows that the operation mode of the play interventions is a linked process in which children are provided with beneficial and meaningful play opportunities. The interventions provide colourful play opportunities for children and have the nature of social welfare, which is provided and operated mainly by government.



*Figure 7.5 Operation mode of the play interventions* 

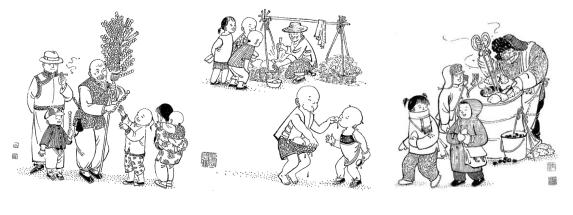
#### 7.4.3 Play related interventions in past childhoods

Interventions provide children with unusual play experiences in their ordinary daily lives. Professionally designed interventions for the children living in central Beijing nowadays have been described as a kind of social welfare led and provided by government. In the past, the popular play interventions were usually brought by peddlers with a commercial purpose. Few of these street vendors and performances remain, and some of their skills or performances are registered as intangible cultural heritage.

One of the most popular interventions in past childhoods were handmade toys and street food. In an age of material poverty, toys and snacks were precious and even a luxury. When the peddlers brought these fascinating products into the hutongs, all the children living there were attracted. Even if not buying anything, playing with children who bought some toys or shared food with others was a pleasant experience. Figure 7.6 shows that these toy-selling interventions included selling hand-made theatrical masks, glass flutes and sugar sculptures. The street foods were simple seasonal snacks like sugar-coated haws, popsicles and roasted sweet potatoes (Figure 7.7).



Figure 7.6 Interventional toy selling (Draw by Zhao, H. & Zhao C. In: Childhood Games)



Selling sugar-coated haws

Selling popsicles

Selling roasted sweet potatoes

Figure 7.7 Interventional street-food selling (Draw by Zhao, H. & Zhao C. In: Childhood Games)

As well as selling toys and snacks, peddlers also brought playful board games into the hutongs. The games of turntable prize and ring-toss (Figure 7.8) were exciting and attractive to children. With the hope of winning the biggest prizes, the best toys, all the children wanted to tested their skill and luck.

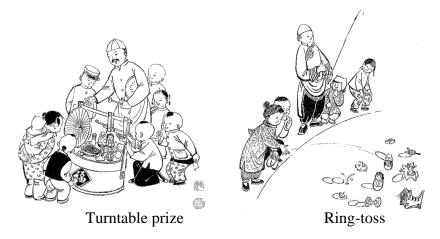


Figure 7.8 Gambling games as play intervention (Draw by Zhao, H. & Zhao C. In: Childhood Games)

As well as the toys and snacks, the street performances were also attractive for almost all the children. These street performances usually included Chinese shadow puppetry, monkey show and sideshows parades are all remarkable memories of the local adults' childhoods (Figure 7.9).

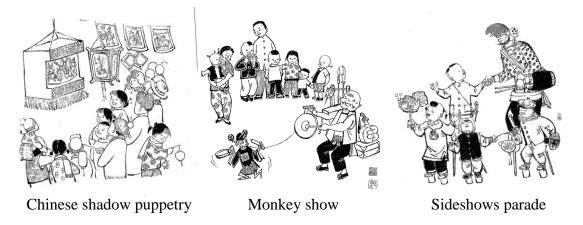


Figure 7.9 Street performances (Draw by Zhao, H. & Zhao C. In: Childhood Games)

Celebrations in the traditional festivals can also bring extraordinary play experiences (Figure 7.10). The delicate lanterns of the Lantern Festival, the dragon dance for the Spring Festival and the handcrafting competition on the Double Seventh Festival are all big events in childhood, giving rise to a whole year's expectation.



Lanterns on Lantern Festival Watching dragon dance Handcrafting competition

Figure 7.10 Play interventions in traditional festivals (Draw by Zhao, H. & Zhao C. In: Childhood Games)

Except for these specially prepared and provided interventions, in past seasonal change and weather conditions could also bring children unusual play experiences. Playing with snow or skating on the iced river were all unforgettable childhood play experiences (Figure 7.11).



Figure 7.11Seasonal interventions (Draw by Zhao, H. & Zhao C. In: Childhood Games)

Compared with the modern interventions, the play interventions of the past were rarely industrial products, but they were attractive for children living in a society of material shortage. In recent days, most of the handmade toys, crafts and snacks sold by the peddlers in the past have disappeared. The traditional street performance of monkey show and sideshows parade are prohibited from playing on the street. Instead, they are performed on the stage and in theatres. Even the celebration customs of the traditional festivals have changed with the social transformation of migrants coming into the central area and the economic development which means that more time is spent working. All these changes mean that the delights and pleasant interventions in the elder generations' childhood are unfamiliar to contemporary children.

## Summary

This chapter addressed the research question about the play activities of the children living in the central area of Beijing across generations. Using a revised category system for play related experiences, children's games, nature interaction experiences and play interventions were explored and compared across generations.

In contemporary childhood, children are surrounded by a mass of industry produced toys and electronic devices. Spending a large amount of time on these toys and play facilities is a strong trend in contemporary childhood. High-physical content games are widely played in the outdoor environment, while high-imaginative and high-verbal content games are less often seen. Without electronic games and abundant toys, children played more types of games in the past, often in outdoor environments with friends.

As a result of urban expansion, contemporary children living in the urban central area are far away from the natural environment. By playing in the urban green spaces and travelling to places where the natural environment is preserved, these children can have this kind of experience. It was easier to get these experiences, playing in the natural environment in previous generations. The improvement in urban living standards means that the purpose of interactions with natural elements has changed. In the time of food shortages, nature environments can be productive and help with food supply. In more recent times natural environments have played a more significant role in providing urban dwellers with enjoyment of beauty, relaxation and recovery from busy urban lives.

Play interventions have changed dramatically from past to recent days. In contemporary childhood, children are provided with additional play opportunities supported by the Communist Youth League Beijing Committee and the government with the aim of improving social life in local communities. In past childhoods, interventional play opportunities were usually associated with festivals and seasonal events.

# **Chapter Eight** Time for Play

# Introduction

This chapter explains children's time spent playing, especially outdoors. To have a comprehensive understanding of this aspect of children's lives, their daily routines are explored (8.1 Children's Daily Activities). The children's self-reported daily activity logs and interviews show that the lives of school-age children are dominated by study. But it is a childhood instinct for play to happen anytime and everywhere so there is a predicable conflict with time spent on either play or study. This generates a conflict between parental control and children's natural instinct which shapes the daily lifestyles of not only the children but their parents too.

The time spent on all kinds of play activities has been analysed (8.2 Time Spend on Play), showing that outdoor play occupies a very limited time in children's daily lives. To understand this phenomenon, both children and their parent's attitudes towards outdoor play are explored. The preconditions of outdoor play are explained in the context of the lifestyle dominated by study, and the influencing factors of the general environment conditions are also considered.

Finally, the time spent playing in the past, during the childhood of the parents' and grandparents' generation is also traced from interviews with the local adults (8.3 Time Spend on Play in Past Childhoods). The comparison across generations shows that current children are allowed to spend the least time on outdoor play, so the reasons for this are explored.

# 8.1 Children's daily activities

According to communications with both children and adults, it is known that children's daily routines can be quite different in the holidays and on school days. As explained in Chapter Three, the main data collection was conducted in the primary school summer holiday, which lasts for two months, from July to September. For the sake of understanding children's daily routines and the length of time they spend on each daily activity during the summer holidays, children's self-reported diaries were the main data collection method. To understand in more detail, semi-structured interviews also included topics about children's daily routine. Most of the data generated from diaries reflects children's daily lives in the summer holidays, while the interviews provide more data about the situation during school times.

# 8.1.1 Six types of children's daily activities

Taken from the daily activity logs and interviews, the various activities described by over two hundred child-participants have been classified into six categories. The classification is based on the children's verbal descriptions of these activities in order to reflect their perception of them. These six activity types are sleep, study, play, transport, eat meals and other daily activities (Table 8.1). These categories are not limited to children's play behaviours, but cover all kinds of activities that they undertake in their daily lives.

Category		Detail activities
study		doing homework
·	study at home	checking homework by parents
		reading books
		practising musical instruments (flute, piano, drum,
		violin)
		practising English
		practising calligraphy
		practising dancing
	study at summer or after	English course
	school classes	math course
	5011001 0105505	musical instrument course
		painting course
		homework tutorial
playing	play at home	playing computer games
piaying	più a nome	playing I-pad
		playing smartphone
		playing LEGO
		watching TV
		post article on social media
		online chat
		play card games
		drawing
	nlowing of summer	play with pets
	playing at summer schools	watching movies
		playing toys
	· 1 1 1	hand craft
	indoor playgrounds	playground in supermarket
		playground in shopping malls
	outdoor play	taking a walk
		running or jogging
		cycling
		rope skipping
		playing badminton
	doing sports in gyms	swimming
		fencing
others	house chore	cooking
		cleaning
		doing laundry
	wake up and wash up	taking shower
		brush teeth
		comb hair
		wash face
	free arrange	free arrange
transport		underground
		car
		bicycle
		walk
eating meals		breakfast
		lunch
		dinner
leen	taking rest	dinner having a nap
sleep	taking rest	dinner having a nap have a rest

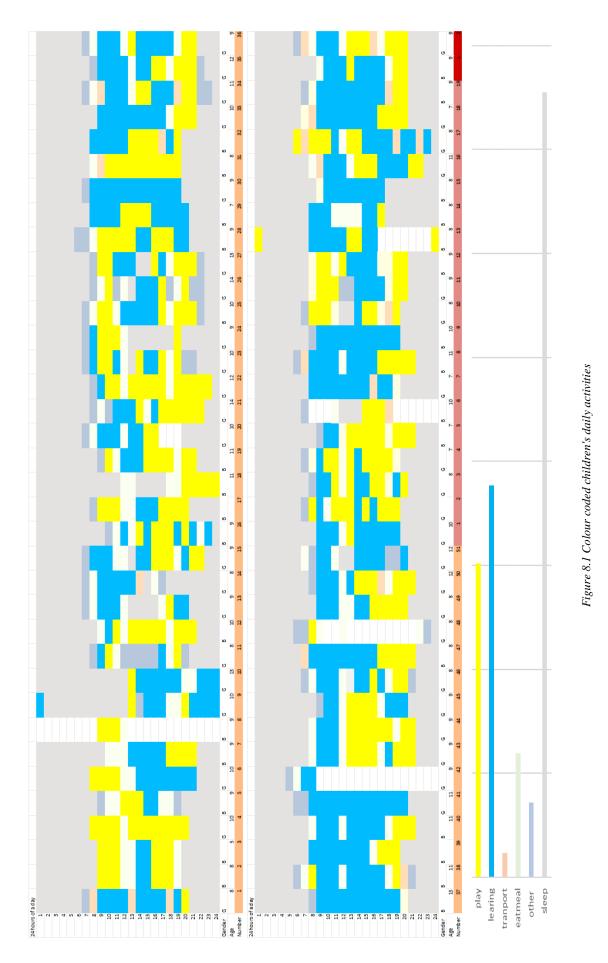
Table 8.1 Categories of children's daily activities

#### 8.1.2 The conflict between study and play

According to the data collected by children's self-report diaries and excluding sleep time, play and study take most of their time. In Figure 8.1, the colour coded diaries show the time distribution of the six categories of daily activities. It can be seen that the time spent on play (yellow) and study (blue) are the main activities. For the primary school age children (aged 6 to 12 years) the time spent on study is more than the time spent on play.

When classifying children's daily activities, it is not always easy to distinguish whether a certain activity is pure play or study, as study and play activities can overlap. Sometimes, study can be playful, and children can learn from play. In this research, the data comes from children's self-reporting, so whether to describe an activity as play or study depends on each child's understanding. However, this subjectivity creates a problem, especially when discussing children's activities in summer schools. Some of the children take the movie time and break time in summer schools as play time, while others only take the time spent in outdoors as proper play time. From the children's point of view, finding a uniform standard to define a particular activity as play or study is difficult.

To make this vagueness clearer, the perspective of parental understanding is applied as a determining factor. The reason for involving this parental perspective is that the parental expectation of the outcome of a particular activity can change the pleasure of a play activity into a repetitive and boring practice activity. That is to say, when the parents expect their children to stand out in any talent or skill, the training and practising can make an easy and pleasant play activity run out of joy. Taking drawing as an example, if there is no parental expectation to win a prize in a drawing competition and drawing is only for a child's interest, it is a kind of play activity. However, if a child trains to acquire painting skills, which their parents consider will be good for their child's further development, it is a study behaviour.



177

After distinguishing study from play, the field research data shows a conflict between play and study in children's daily lives. This conflict lies between children's instinct to enjoy play, and parental control for their children's development. Sometimes the conflict can be sharp. When doing interviews in a summer school, an eight year old boy described his life and his feelings about it:

My mum never allows me to play outside...My dad makes me stay at home doing homework or study...They give me homework five times more than the school homework. If I do not finish (homework) in time, I will be blamed and even beaten by them...They always say this is good for my future when I grow up, I can understand them. However, I do not think so. I'm really tired and upset; the homework makes me dizzy. How could this do some good for me? Compared with staying at home doing homework, I'd like to go to summer schools, at least I can play with classmates and even do nothing just for a rest...

(an 8 year old boy)

In contrast to these strong attitudes towards strict parental control, sometimes the conflict can be eased by transforming the parental control into children's strong self-control.

Sometimes I can be naughty at home, but I would never be naughty at school because I am the best at studying among all my classmate. (If naughty) I'm afraid of being ashamed...

(a 7 year old girl)

Apart from these two extreme examples of children's reaction when encountering the conflict between study and play, most of the time children passively accept that their lives should contain much homework and after-school classes. They do not reject these classes, but they don't enjoy them either. For them, it is a very ordinary life. They have to get used to it.

(Q. How do you think about your after-school classes, is that too much or can you have more?) Of course it is too much, even in my dream I was always going to after-school classes...

(an 8 year old boy)

After school, on Monday and Wednesday I go to Chinese zither class, then I also need to go swimming classes in the evening. On Thursday I have a painting class, on Friday I have a dancing class... (Q. do you still have time to play?) No, not at all...

(a 7 year-old girl)

After school, I go to nursery school, except Tuesday...after nursery school, I go home with my mum. (Q. when you arrive home, then you can have dinner?) No, I will do my homework or practise piano before dinner, then have dinner. After dinner, I also practise the piano crazily, then go to bed...

(a 9 year-old boy)

I have after school dancing class on Monday, Wednesday and Friday at school. I also have class on Saturday and Sunday outside school...( Q.classes fully take your weekend? ) Saturday is full, and Sunday morning. (Q. do you have time to play?) Only a little, I have no time to play on weekdays, only can play on Sunday.

(a 9 year old girl)

I have a math class on Monday and Thursday. I also have Chinese on Tuesday...In Wednesday and Friday, if I finish my homework early, I can go outside to play, but if I finish homework late I can't...(Q. do you think you have enough play time) No, not enough...

#### (6 year old girl)

Based on this data, it seems like the most of children have no opportunity to ask for time playing, because they have to attend a lot of after-school classes arranged by their parents. The conflict between study and play can turn into a conflict between parental control and the children's instinct. In some circumstances real conflict between parents and children can take place, like the eight-year-old boy's struggle in his life in the first quotation. But the data also suggests that children's own interest in different talent classes and their feelings about their life are considered by parents when they arrange their children's routines.

I have the Latin dancing class and two different drawing classes. (Q. do you enjoy these classes?) Yes, I like dancing and drawing. (Q. Do your parents put you into some class you don't like?) No, before enrolling me in any after-school classes they always ask for my opinion...

(8 year old girl)

From the parents' perspective, their children's interests in different talent classes and feelings about their lives are important when arranging their lives. For the parents, the point of sending children to all kinds of after-school classes is to do some good for their children's further development, which might promise them a better future life. If this talent training or the after-school tutorials make their children's life too stressful and depressed, they will not insist on making their children carry on.

My daughter has Chinese zither, English, maths, Peking opera and some other classes. Some of them we enrolled but have no time to attend. We still want to send her to basketball class, but there is not enough spare time...we just want her to develop in an all-around way; I think that is the expectation of all the parents. But it is her mum who insists on putting her into so many after-school classes. I do not think so...when my daughter was young, she had the musical instrument class, she was too young to understand, and she didn't like practising. When we were strict and made her practice, there were many family conflicts. She was always crying while practising ...now that she has grown up a little bit, these conflicts have eased a little bit...

## (father of an 8 year old girl)

Parents also expressed their confusion and reflected on the reasons behind the conflict between play and study in their children's life, though this conflict had not existed in their own childhood. They insist it is the contemporary education system which involves their children in a long-term competition over talent skills and academic performance. In order to help their children achieve a better performance in this competition, parents need to make their children spend more time on study related activities. Some of the parents think that childhood should be full of play and joy, but they are afraid to make any 'wrong' choice which may ruin their children's future. In recent days, the school course my daughter does has been really difficult for her age. What they are learning now in grade two, is the knowledge we learned when we were young, in grade 5. As a result, they need more time to understand this over-level knowledge. (Q.do you think it a good thing or not?) No, it's not. Children should have a happy childhood, especially in the primary school age period. We all know that China is less developed than in other countries, so our children need to learn more to be more competitive. However, is it that necessary? The necessity of making Chinese children learn more difficult knowledge than any other countries should be considered by the education departments. From the parent's point of view, we want our children to have a happy childhood with more play and less study.

#### (father of an 8 year old girl)

Now he is growing up; the study is the principal thing. Younger children who are still in the kindergarten can play more. When growing up and going into primary school, study is the most important thing. We do not send my boy to too many after-school classes, compared with other families who make their children learn from morning to night every day, without time playing outside, we are much better.

#### (mother of a 9 year old boy)

I think that the children in Beijing in recent times are having a very hard life. From kindergarten, they need to have all kinds of classes, then in primary school, middle school and high school even worse. Maybe at the university, they can have several years' leisure time. Then working, more pressure. The whole life in this city is full of pressure.

#### (mother of an 8 year old boy)

An indirect consequence of this focus on study and preparation for adult life is that these after-school classes change not only the children's lifestyle but also their parents', especially the mother's. More and more mothers decide to work full time taking care of their children. This topic is beyond the research targets of this research, though.

...recently, more mums decide to stay at home taking care of their only child, while dad is working. The school classes usually end at 3 pm. After that, if parents are both working, where should the child go? We have tried the nursery school,

but my boy is not good at self-control, so he will not do homework at nursery school. Then he comes home after 6 pm, has dinner, then does homework. There will not be any spare time for any other activities. If we hire a nanny to take him home and make him do homework, we still worry about that. So I decide to do this by myself. I only wish he can grow up quickly. When he has the college entrance examination, I can be set free.

#### (mother of a 10 year old boy)

In his classes, there are many mums who are full-time-mothers. Because there must be adults to accompany the children after school, going home or going to some after-school classes...

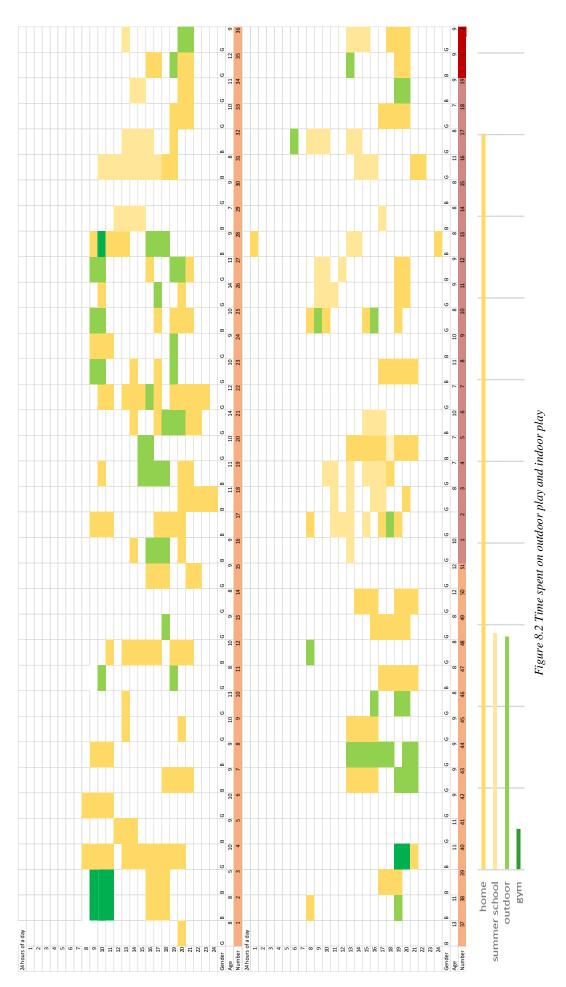
#### (mother of a 9-year-old boy)

Study and play are the two main activities in children's daily lives. One stands for social and parental expectation; the other stands for children's instinct and happy childhood. The urban child's lifestyle is largely shaped by the conflict between these two activities, which also change the parent's lifestyle to some extent.

When dealing with the study and play conflict, most of the time children and parents stand together to make balanced decisions, though the solution is always at the cost of play time. From the children's perspective, most of them have already got used to this kind of life. For them, there are no other choices. From the parent's perspective, some of them understand that the education system intensifies children's learning pressure, but the only thing they can do is to help their children to have more useful skills and be more competitive among their peers. For the parents, they are making the best choice for their children's future.

#### 8.2 Time spent on playing

No matter how much learning pressure children encountered, play is still one of the main activities in their daily lives. The play activities discussed here form the overall play behaviour, including play outdoors, play at home, play at summer schools, play at indoor playgrounds and doing sports in gyms. Figure 8.2 shows the time children spent on different kinds of play.



#### 8.2.1 Playing outdoors or indoors

In Figure 8.2, the indoor play activities are coloured in yellow, outdoor play is coloured green. It is obvious that children spend more time playing indoors at home or in summer schools than playing outdoors. This raises a key question: compared with play indoors or outdoors, do children no longer like playing in outdoor environments nowadays? To find the answer to this question, children were interviewed about their preference for playing outdoors or indoors. Among all the children who answered these questions, the children who like playing outdoors were double those who prefer playing at home or indoors (Figure 8.3).

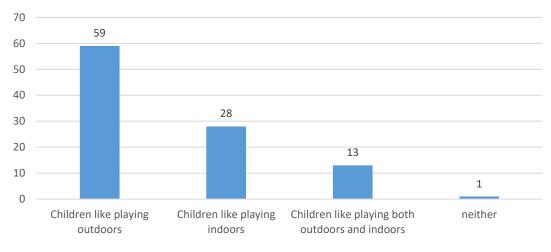


Figure 8.3 Children's preferences of playing outdoors or indoors

The reasons the children gave for playing outdoors are always that outdoor environments are spacious, so they can run and play games involving large-scale body movement. They can also play with other children when playing outdoors, which is better than playing at home alone. Some children also mentioned that the outdoor environment with fresh air and plants is more attractive than the boring environment indoors.

... because outside is more interesting, spacious and more children...

(an 8 year old boy)

I like playing outside with other children.

(a 10 year old girl)

I like playing outdoors, because there are no other children at home to play with me. When I'm playing outdoors, even if there are not familiar friends, I can make some new friends. At least I can play alone. But I still think outdoors is more interesting.'

(a 7 year old girl)

It's so boring playing at home when my mum and dad are going to work. I can only watch TV or play smart-phone. But if play outside, I can play with other children.

(12 year old girl)

...when playing outside, there is a feeling of cool breeze, I like it.

(7 year old boy)

Staying at home is so boring. I like playing football outdoors.

(10 year old boy)

Unlike these children who enjoy playing outdoors, the children who like to stay at home and play indoors have their reasons. Most of them focus on an unpleasant aspect of the outdoor environment, such as busy traffic, hot weather and scary insects. The other reasons are because there are more attractive toys at home. So, it is the unpleasant outdoor environments and the attractive indoor play facilities that combine to make the children prefer to stay at home.

There is nothing to play at outdoors. I would rather spend this time doing my homework.

(a 13 year old girl)

If I go outside to play, there must be someone to keep me company. Otherwise, I'd rather stay at home.

(a 13 year old girl)

Outside is too hot in the summer and too cold in the winter. At home we can use air conditioning, it's more comfortable all year around.

(an 11 year old girl)

I always play at home, seldom play outdoors. It's not really safe for playing outdoors.

(an 8 year old girl)

I am afraid of all kinds of insects. There are a lot of insects outside. So I like to play with toys at home.

(an 8 year old boy)

I always play at home, because there are too many cars in hutongs.

(a 10 year old boy)

I prefer to stay at home reading my favourite books.

(a 9 year old girl)

There are many toys at my home, you can't take a lot of toys to play outdoors.

(a 7 year old girl)

So from the children's perspective, their preference for playing indoors or outdoors is largely dependent on their experiences and feelings when they are playing in one or the other of these environments. Their perceptions of play experience are based on their preference for different play activities. In some of the children's minds, indoor play toys like i-Pad, LEGO and Barbie dolls, are attractive, while others think that running or jumping outdoors is more interesting. The children who prefer to play outside say it is partly because there are more children to play with outdoors. The children who prefer to stay at home say that playing with other children is not a main concern for them.

Figure 8.4 Parent's attitudes towards children's outdoor play

Unlike their children's changing attitudes toward outdoor play for various reasons, most of the parents have a supportive attitude towards children's outdoor play (Figure 8.4). They think playing outside with other children is better than stay at home watching TV and playing with the i-Pad. The outdoor environment helps children to relieve visual fatigue and to build up their body, which is good for their health.

Of course, I'd like my girl to play outdoors. It is good for her eyes. When she plays at home, she always watches TV or plays smartphone.

(mother of a 10 year old girl)

Of course, playing outdoors is better, which is more spacious. He can play on some facilities, such as scooter and roller skates.

(mother of a 9 year old girl)

Outdoor play is better. Close to nature and play with other children.

(mother of a 9 year old boy)

On the contrary, there are some parents who prefer their children to play at home, because of their worries about the complex outdoor environment which may contain potential hazards.

In fact, I prefer my boy to play at home, though it is boring. When playing home, I do not allow my boy to play computer games. So he can draw or do some handcraft. Compared with playing outdoors, playing indoors makes me feel more relieved.

(mother of an 8 year old boy)

I'm not that comfortable when my boy plays in the courtyard. Because it's not that safe in recent days. I'm afraid of strangers or some madman. As you know, in recent days the residents in this area are always elders, but most of these older people have another house in another place, they are no longer living here. They rent the house to some floating people. We can't know whether these floating people are good people.

(mother of a 10 year old boy)

Most children and parents have positive attitudes toward outdoor play, but it is a fact that there is only limited time spent on outdoor play. So, what is the reason preventing children spending more time playing oudoors? After interviewing both children and their parents, it seems that there are two influential factors, whether the children have finished their homework before they go outside to play, and whether an adult has time to accompany children playing outside. Especially on school days, finishing homework is a precondition for spending spare time playing outdoors.

On the school days if I finish homework quickly, then I can have more time playing. Otherwise, I have no time for playing. Recently (summer holidays), I can play outdoors from 7 pm to 9.30pm...'

(a 10 year old girl)

(Q: when do you play outdoors?) After I finish my homework...'

(an 8 year old girl)

My daughter seldom plays outside mainly because of homework. She is young, and she writes homework really slowly. If she can finish homework quickly, she can have more time playing outside. Sometimes, when she has finished her homework, it is too late to play outside.

(father of an 8 year old girl)

In the summer holidays, he can play more outdoors. However, during school days, he always arrives home at around 6 pm, after dinner he needs to write homework, then there is no time to play outside.

(mother of a 10 year old boy)

He has too much homework, and he writing homework really slow, so there is no time to play outdoors.

(mother of a 9 year old boy)

As explained in the previous chapters, most of children's outdoor play needs to be accompanied by adults, so the adult's free time and attitude towards outdoor play is the determining factor of children's outdoor play too. Sometimes when parents do not want to go outside after a long day's work, the children do not have the opportunity to play outside, even if they have finished their homework.

Because we are living on a higher floor, but there is not the elevator. When going downstairs and then up, it will be too tiring and extremely hot in the summertime. So after having dinner, we would stay at home, my boy would just study or watching TV...

#### (mother of a 9 year old boy)

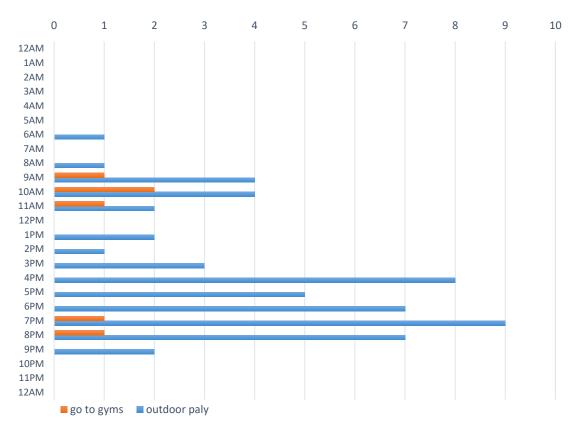
When the children are playing outdoors, there must be adults to accompany. Sometimes the parents just want to be easier, they give their children i-Pad or smartphone to play at home...

#### (mother of a 9 year old boy)

Because we do not have enough time to go outside, the time he (boy) spends outdoors is also limited. Only when I have time I can take him to go outside.'

#### (mother of an 8 year old boy)

To conclude, though the dominant number of both children and parents have a positive attitude toward outdoor play, the phenomenon of children spending only a limited time playing outdoors is the mixed result of learning pressure and parental decisions. Finishing learning tasks is usually a preconditions for playing outdoors, and parental perceptions of the outdoor environment and safety issues can have an influence when they make decisions about whether to allow their children to play outdoors.

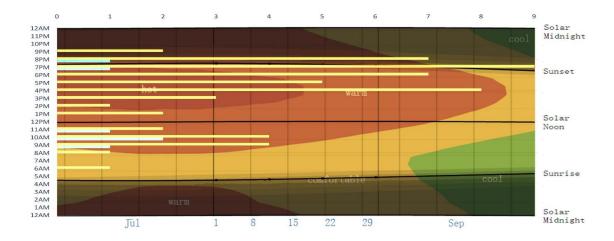


#### 8.2.2 Time for outdoor play

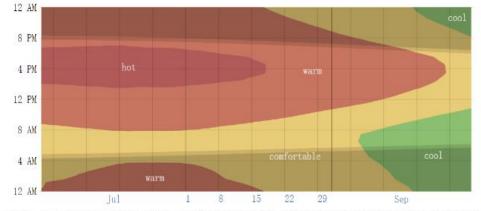
Figure 8.5 Children's preference of time for outdoor play

When looking at the time children spend outdoors, evidenced by the diaries, there are two periods when children prefer to play outdoors or do sport during their summer holidays. One is in the morning, from 9 to 11 am, and the other is in the afternoon from 4 to 8 pm (Figure 8.5). There are usually more children playing in the afternoon than in the morning.

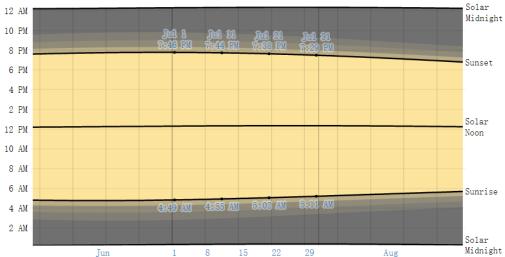
From Figure 8.6, it can be seen that the most preferred outdoor play time, in the afternoon after 4 pm, is also the hottest time of each day, usually between 85 and 95°F. The peak time of outdoor play is around 7pm, when the outdoor temperature has cooled slightly, going down with the sunset. So in the summer holidays the children play outdoors in the hottest part of the afternoon and in the sun-setting evening.



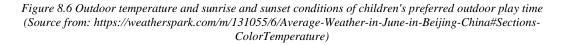
Average Hourly Temperature in August



The average hourly temperature, color coded into bands: frigid < 15°F < freezing < 32°F < very cold < 45°F < cold < 55°F < cool < 65°F < comfortable < 75°F < warm < 85°F < hot < 95°F < sweltering. The shaded overlays indicate night and civil twilight.



The solar day over the course of July. From bottom to top, the black lines are the previous solar midnight, sunrise, solar noon, sunset, and the next solar midnight. The day, twilights (civil, nautical, and astronomical), and night are indicated by the color bands from yellow to gray.



Sunrise & Sunset with Twilight in July

To understand the unexpected phenomenon that children play at the hottest time on summer days, children were interviewed about their feelings and perceptions about the weather conditions and asked whether the hot weather influenced their outdoor play. According to answers from the children who prefer playing outdoors, the hot weather is not a problem.

If it is not raining, hailing or snowing, I can always play outdoors. Oh, on a snowy day I can play out of the home. So, except rainy and hail, I do play outdoors. (Question: how about the hot weather in summer?) Yes, I can still play outdoors...

(a 10 year old boy)

If it is not rainy, I can play outdoors at any time (Question: how about the hot weather?) That's fine for me. Do you think it's really hot? I don't think so. It's fine, it's summer...

(a 10 year old boy)

I would not play outdoors if it is rainy or smog. Other times, I always play outdoors (Question: how about the hot weather?) ... if I have time I will play outside...

(a 9 year old girl)

For the children who enjoy playing outdoors, the hot weather is not an influencing factor for their outdoor play. From their point of view, they are used to the seasonal weather conditions and even the all year around smog. These are the ordinary environmental background to their daily experience. However, for the children who do not like playing outdoors, the outdoor weather can be a main reason preventing them from playing outdoors.

I don't play outdoors very often, because the weather outdoors is always too hot or cold. I get ill too easily. So I don't play outdoors very often...

#### (an 8 year old boy)

I don't playing a lot in the summer time. At home I can enjoy the cool wind of the air conditioner, but the outside is super hot. In the autumn, I will play outside more often...

#### (a 11 year old girl)

Based on the knowledget that parental control can be the dominant reason influencing children's outdoor play, parental perceptions about whether conditions are also took into cosiderate. Comparing children's perceptions about the weather conditions outdoors, it seems that parental perceptions of the weather outdoors can be the main influence on children's outdoor play, whether parents think the bad weather could have an influence on their children's health or if the parents themselves do not enjoy the hot weather.

I don't allowed my boy to play outside on the smoggy days. His school also cancels the PE classes on the smoggy days...

(mother of a 9 year old boy)

When the weather is nice, we take her walking or playing outside. But if the weather is terrible, we will stay at home...

(mother of a 7 year old girl)

Based on these quotations, it can be understood that weather can influence the children's attitudes toward playing outdoors. But when children get used to the weather of each season and take it as an ordinary component of their daily lives, the changing weather does not have a significant influence on their everyday decisions about outdoor play. It is the parental perception of weather conditions which has a stronger influence on children's outdoor play.

#### 8.3 Time spent on playing in past childhoods

Facing heavy academic pressure and strictly controlled by parents, contemporary children spend very limited time playing outdoors, even in the school summer holidays. This was not common in the childhood of older generations.

#### 8.3.1 Plenty of time spent on play

According to the descriptions of the childhood of the parents' and grandparents' generations, they spent plenty of time playing outdoors. There was no difference between the parents' and grandparents' generations.

In my carefree childhood, I had plenty of play time. We almost did not have any homework after school. In my mind, I had an easy and pleasant childhood...

(a female in parents' generation)

I was a younger child in my family. I had a lot of time to play. Our parents were busy, but there were too many children to take close care of each one. Most of the time we play outdoors without any time or space restrictions...

## (a male in parents' generation)

When I was young, I spent a lot of time playing outdoors. School time was pretty short at that time. After school we had a lot of time playing with other children. Even in the school time there were a lot of courses about learning and practicing farming or manufacturing skills...

## (a male in grandparents' generation)

Academic pressure was not a reason for taking time from outdoor play in the past childhoods of both the parents' and grandparents' generations, even though the university entrance examination was resumed in 1978, which might have influenced the childhood experience of some of the parents' generation. The endeavour for better academic performance, even at a young age, is a trend which has only shown up in recent years. As explained by one of the adult participants, in the previous generations the intensive training and preparation mainly happened in high school time to get a better performance in the university entrance examination.

We (he and his wife) attended the university entrance examination when we were young. Without the extracurricular tutorials, we still got good grades and went to universities. I just can't understand why this becomes so difficult for contemporary children. When we were in high school, we got clear about our learning interests and chose from subjects of sciences or art. Then got intensive training for the exam. But now, the children in primary schools have a lot of exams and tests to make sure they have good learning results in each stage...

(a male in parents' generation)

#### 8.3.2 Helping with daily chores

Except for the conflict between learning and studying for the current generation, which was not part of older childhoods, there is another significant difference between the generations: helping with daily chores. In the childhood of previous generations, the older children in families, and especially the older sister, usually took on the main part of taking care of younger siblings as well as helping with daily chores. In families with several children this happened in both parents' and grandparents' generations.

When I was young, I had a little sister, 3 years younger then me. Most of the time, especially in the school summer holidays, when our parents went to work, I needed to take care of her. And when she was in primary school, in the summer holidays, almost all the easier daily chores such as cleaning dishes or floors, were our duty. We did not like doing chores, but we know how to do that.

(a female in parents' generation)

In my mind, the childhood was too far away. When I was young, in my spare time I needed to help my mum cooking and washing clothes. I did not need to help with taking care of my little sisters and brothers, because I had a big sister, and this was her duty.'

(a female in grandparents' generation)

So the significant differences in spending spare time across the generations are that for primary school aged children in past generations, only a small amount of spare time was spent on study related activities, but instead of spending time on studying, children were expected to spend time helping with daily chores such as washing, cleaning and taking care of younger siblings.

## Summary

In this chapter, the research question about the time children spend on play, now and then. has been answered by collecting diary questionnaires from children and by interviewing both children and local adults. Nowadays children's daily routine is dominated by playing and studying, which take most of children's time. Spending time on all kinds of learning related activities is not children's own aspiration, but is a part of parental control, aiming to help their children to have produce a better academic performance and to be more competitive among their peers. To balance the time spent on both studying and playing, children and parents can stand together to make these decisions.

Outdoor play only takes a small part of the play activity of the current generation, who spend more of their spare time on indoor games. One of the reasons for this is that some children find playing electronic games and toys indoor is more attractive, compared with running and jumping outdoors. It can also be because most parents believe that their children's outdoor play requires that they be accompanied by adults. The adults' decision plays an important role in whether children can play outdoors, whether because of parental perceptions about the outdoor environment's, safety, weather conditions or their own free time.

Things used to be different: with fewer learning pressures and more independent playing opportunities, more free time could be spent on outdoor play in the childhoods of the parents' and grandparents' generations, but they sometimes had less time for outdoor play because they might be expected to help with daily chores.

# Chapter Nine Discussion

# Introduction

In the previous chapter, all the research findings of children's outdoor play experiences in three generations were presented in detail in terms of the theoretical model, SPAT. In this chapter, these findings will be further examined by comparing across generations to find the factors which have influenced childhood experiences in the inner-city area of Beijing.

To explore contemporary childhood play experience, the research findings relating to children's territorial range, free range, play friends and carers, the dominant parenting style, play activities and time spent on play are further discussed, taking a broader perspective to consider the special environmental, social, political and cultural environment in the case study area.

To consider the changes in play experience across generations, their transformation is summarised in terms of expanded territorial range, decreased free range, enriching play activities and compressed time of play. The reasons for these changes are also explored, considering the social context in the childhoods of each generation.

Finally, the factors which have a profound influence on children's play experiences are deduced from the perspective of the changing urban environment, urban economic development, policy implications and traditional Chinese culture.

# 9.1 Significant phenomena in children's outdoor play and related experiences

The first research objective was to understand contemporary children's daily play and related experience in their surrounding outdoor environments, using the theoretical model, SPAT. Its dimensions give structure to the discussion, so spaces, key findings about children's territorial range and affordance of play spaces in that range are considered first. In the dimension of people, findings about free range and independent mobility, caregivers and friends, and contemporary dominant parenting style are discussed in detail. The other dimensions of play activities, and time spent on play are then considered.

# 9.1.1 Children's territorial range

In Chapter Five, Spaces for play, the main research questions about where children play in their daily environment were answered. For the children living in the central area of Beijing, the use of their surrounding physical in contemporary urban environments has been systematically described:

- Within the habitual range: ranging from found play spaces to constructed play spaces, children playing in car parking areas, pavements, squares, green spaces and playgrounds.
- Within the frequented range: children playing in urban parks and street parks.
- Within the occasional range: children playing in amusement parks and outskirt villages.

In contemporary childhood, this children's territorial range is expanded by considering travel as one of the methods by which children interact with the outside world. And the realm of children's inner minds and imagination about the world has also been considered as a significant part of children's experience (Moore and Young, 1978):

- Within the travel range, children spend holiday frequently in both domestic and overseas locations. Domestically, the coastal cities are the most favoured; and of overseas countries, those in Asia are the most frequented visited.
- Within the imaginary range, children usually have imagined about outer space, as well as places in foreign countries.

However, in the childhood of parents' generation:

- Daily habitual range covered hutongs, courtyards and street parks.
- Occasionally, at the weekend or holidays, children in the parents generation went further away, to parks, with their older siblings or parents.

In the childhood of grandparents' generation:

• Their territorial range covered hutongs and other places where children can go on foot.

Comparing across generations, it can be seen that in the childhood of each generation, children use every kind of space and places to conduct play, no matter whether these places are designed especially for children's use. This phenomenon is widely report in research conducted in other parts of the world (Woolley & Kinoshita, 2015; Lester & Russell, 2008; Matthews & Limb, 1999; Opie and Opie, 1969). Changing across generations, some places are no longer used by children as play spaces in nowadays, like the hutongs and courtyards. But children have adopted other play spaces in modern times, such as playgrounds, amusement parks and villages on the outskirts of the city. Findings in this research confirms studies conducted in Amsterdam (Karsten, 2005) and Sheffield (Woolley and Griffin, 2015), which shows that childhood outdoor play experiences have become more diverse, thought their use of spaces in daily environments are less various in types.

Comparing across these different types of play space in the contemporary childhood, the constructed playgrounds equipped with fixed play equipment and rubber carpet ground are considered to be more suitable for sustaining children's play by providing protection and facilities for encouraging play. Within these constructed playgrounds, the fixed play equipment are of two distinctive types: fixed play facilities for children; and fixed exercise facilities for adults. The simple design fixed play equipment, such as kiddie rides and chess tables, can attract a large amount of younger children (under 6 year) by providing direct and obvious play opportunities, but they can easily lose their appeal for older children (over 6 and teenagers). The older children are observed to use the fixed exercise facilities for adults and flexible or found spaces more often. Because more challenging play opportunities and various play activities are provided in these places. This finding indicates that, to a large extent, the constructed play spaces in the high density urban central area are failed to provide various play opportunities for children in all age groups.

According to the data present in Chapter five, the flexible spaces and found spaces are also frequently used by children. Different from the constructed play space, these informal play spaces are not specifically designed for children's use. Therefore, it is predictable that, because of without special concerns of children's usage, there can be more potential safety risk when children are creatively using these spaces. Especially, as reported in Chapter five, children are playing in the car parking spaces and vehicle access pavements. In this condition, the risk of traffic dangers can be largely increased, which would have a negative influence on parents' and children's perceptions about outdoor safety and prevent children spending time playing outdoors. Therefore, comparing with the parental concern about traffic dangers reported in research conducted in other countries (McMillan, 2005; Fyhri and Hjorthol, 2009; Castonguay and Jutras, 2010; Fyhri *et al.*, 2011; Platt, 2012; Woolley and Lowe, 2013; Westley *et al.*, 2014; Kyttä *et al.*, 2015), in the central area of Beijing, the traffic danger of children's outdoor play can be a result of children's use of informal play spaces where is traffic danger existing obviously.

Beyond the territorial range defined by Moore (1986), this research found that the urban children's spatial extent and experiential variety of outdoor places was considerably expanded by taking travelling into account. As been explained in the Chapter five, the reason for considering travelling as part of childhood play experiences are twofold. In the Chinese language, the word for play has the semantic meaning of travelling or spending holidays (P.107); and children are usually provided with more time and opportunities for play when travelling and spending holidays at other places. Based on this, for the children living in the central area of Beijing, the common experience of travel largely expands their territorial range. And the play experiences gained from spending holidays or traveling are usually delight and special that differ significantly from ordinary daily play experiences. When comparing across generations, this experience of travel, as a common part of contemporary childhood, can also make a strong contrast between current childhood and the childhood of the previous generations, which can be largely due to the improvement of urban living standard and development of modern transportation.

#### 9.1.2 Children's free range

In chapter six, the research question about people playing with children outdoors is answered. As the starting point, children living in the central area of Beijing have very limited independent mobility in their surrounding environment.

- The maximum parental permitted independent mobility licence children can get is to play alone within the habitual range.
- Independent travel to school is controlled by school policy: most of the time, children over 4th grade (age ten years and older) can have an 'independent school travel' licence, but younger children must be accompanied.
- There is dislocation between permitted independent mobility and actual mobility, and children's independent play can be observed to extend to their frequented range.

However, when the parents and grandparents were young:

- Playing outdoors in places near their home, they did not need to be accompanied by adults.
- Sometimes elder siblings took the responsibility of taking care of younger siblings when playing outdoors, but there were seldom any adults supervising children's daily play.

Comparing across generations, it is obvious that for children living in the central area of Beijing, their free range has decreased dramatically from the childhoods of their grandparents and parents to recent days. This finding corresponds to the reports evidenced in the literature review that urban children's independent mobility has declined over recent generations in many developed countries (McMillan, 2007; Fyhri *et al.*, 2011; Foster *et al.*, 2014).

Generally, for children living in the central area of Beijing nowadays, their parental permitted free range could only exist within their home range and usually excluding most school travel or travel to other places. However, the children's instinctive curiosity and wish to explore unfamiliar environments can lead children extending their independent outdoor activities into the places where are prohibited by their parents (Kyttä *et al.*, 2015). This unconformity between mobility licences and actual mobility of children's independent outdoor play are evidenced in Chapter six. Also, evidenced in Chapter Six,

these beyond-licences activities can be regard as children's secret childhood experiences which they do not like to share with adults. These findings indicate the existence of a hiding side of childhood experience which can be shared among children but can be difficult to explore by adults, which can contents activities beyond parental limits (Kyttä *et al.*, 2015)and creative ways of using spaces (Bannerjee and Driskell, 2002; Cosco and Moore, 2002).

So far as independent travel to school is concerned in the contemporary childhood, previous research acknowledges that distance to school and children's age are the main reasons that children are accompanied on their way to school (Fyhri and Hjorthol, 2009; Carver *et al.*, 2013). In Beijing, these two factors only have a minor influence, compared with the dominant factor, school policy. Study of the policies applied in the inner city area of Beijing shows there are two school policies which influence children's mode of travel to schools. One is the Nearest School Principle, which controls children's entry to primary schools by locating children in the nearest school to their home within the neighbourhoods. The other is the Independent Travel Policy, which directly regulates children's independent travel to schools by their age.

According to the Nearest School Principles, which apply in all the state schools in Beijing, a child can only go to one specified primary school within the area where they are registered as a permanent resident. Parents cannot make choices between schools, but have to send their child to the one located in their nearest neighbourhood. As a direct result of this policy, the distances of children's school travel are controlled so that they are within walking or cycling distance. Therefore, tor the children living in the central area of Beijing, long-distance travel (Fyhri et al., 2011; Veitch et al., 2014; Larouche et al., 2017) cannot be the reason why their travel to school is accompanied by adults. But, children's independent travelling to schools is proved as strictly controlled by the Independent Travel Policy (as been explained in Chapter Six), according to which children under the 4th grade or 10 years old are not allowed to travel alone; older children can apply for an independent travel license from school. This school policy means that the accompaniment of children while they travel to school are agreed between both parents and school teachers, which helps to locate responsibility for child-care more explicitly. Therefore, this finding shows that in Beijing, children's shrinking free range and independent mobility in daily environments is largely influenced by the political implications.

#### 9.1.3 Different play friends and carers of children's outdoor play

In Chapter Six the research question of who children play with was answered. They include not only play friends but also caregivers:

In contemporary childhood, in terms of play friends:

- Playing with other children is one of the main reasons making outdoor play attractive.
- When there is a lack of peer friends, accompanying adults can be alternative playing friends.

in terms of caregivers:

- It is the mothers take the main role of supervising children's outdoor play.
- Grandparents also take responsibility for the care of grandchildren in public open spaces.
- Fathers are the smallest group of caregivers accompanying children's outdoor play.

However, playing with adults had not been a daily experience in the childhood of previous generations:

- Siblings can take the role of both play friends and caregivers.
- Adults seldom take part in children's play.

Comparing across generations, the role of siblings as play friends and caregivers are gradually replaced by parents or grandparents. In the context of Chinese society, the reasons for this change can be largely due to the one-child policy. With its application in the last 20 years, most urban children became the only child in their families, without experience of playing and growing up with siblings, but surrounded by adults, the only child more often had parents or grandparents as play friends. Supported by evidences presented in Chapter six, the main supervision method of children's outdoor play adopted by both parents and grandparents is close supervision, and playing with children is commonly adopted by parents. From the children's perspective, it is not always easy of meeting familiar friends and making new friends in public spaces in the residential area or parks when each child are closely surrounded by adults, whereas playing with the adults around them can be an easy alternative. So the urban only-child playing with accompanying adults are becoming more common than playing with other children.

Compared with research conducted in other parts of the world, where children playing with other children is a common part of childhood (Hart, 1979; Moore, 1986) for the children in the central area Beijing, without siblings but surrounded by adults, playing with adults supervisors is a particular phenomenon recorded in the context of Chinese urban environments.

In the Chapter six, with more in-depth explore of the adults accompanying children's outdoor play, it can be find that female adults take the main part of adults supervising children's outdoor play. Grandparents are also actively involved in taking care of grandchildren. The phenomenon of intensive mothering or maternal dominated parenting style is not rare in both eastern and western societies (Hays, 1996; Paat, 2010; Walls, Helms and Grzywacz, 2016). In China, the predominant traditional Confucian ideology also puts an emphasis on maternal rearing and caring (Hanser and Li, 2017) and the emphasis on mother's full-time caring is a basic family rule in traditional Chinese families (Xiao, 2016). As for grandparents take part in taking care of grandchildren, in traditional families with several generations, joint child-rearing by both parents and grandparents also has a long history. For the elders, taking care of grandchildren is not only a way to enrich their daily life, but also to enjoy family happiness. This understanding of family life has continued from traditional Chinese society until nowadays (Burnette, Sun and Sun, 2013; Hanser and Li, 2017).

However, different from traditional society, in contemporary Chinese society, women participate in all kinds of work. The statistics about their labour force participation shows that in 2017, the female labour force participation rate in China was 61% (for men it was 76%), among the highest in Asia and higher than the average in Europe (Ortiz-Ospina and Tzvetkova, 2017). Conceivable, it can be difficult for women to balance their work and family duties in contemporary Chinese society. In this condition, the joint child-rearing by both parents and grandparents is more like a family demand than life-enjoying choice.

#### 9.1.4 Dominant parenting style of over-supervision

Chapter Six showed that the children living in the central area of Beijing are protected all around to prevent any potential harm, and that the motivation for the protection is parental paranoia about traffic danger and danger from strangers. This phenomenon together with the leading reasons have been widely reported in the UK (Jenkins, 2006), Australia (Foster *et al.*, 2014), New Zealand (Witten *et al.*, 2013), Finland (Fyhri *et al.*, 2011) and others. While, in Chinese society, parental paranoia about neighbourhood safety is influenced and pushed to the extreme by more specific factors including ideology from traditional culture, policy application and social reality.

Traditional Chinese culture attaches great value to families. Seen as the future of the family, children are important for carrying on the family line, especially boys who carry the family name in Chinese families (Li and Li, 2010). Though the social and economic context has changed in recent years, this traditional culture has preserved its long-lasting vitality until now (Li and Li, 2010). In this situation, the birth control policies forbade each family from having more than one child making the only child in urban families rather important and precious. Having such an important role in families, the only child usually gets a great deal of attention from both parents and grandparents. As the positive result, they could have better nurturing, education and living conditions. But at the same time, they can be over-protected by their surrounding adults, who are paranoid about potential risks which might have negative influence on their precious only child's healthy growth.

As for the potential safety risks in children's daily environments, evidenced from Chapter six, the most of caregivers are still worried about traffic dangers and stranger dangers. As mentioned before, in the high-density hutong communities in Beijing, traffic dangers really exist in some of the children's informal play paces, such as car parking and vehicle access roads (Chapter five). Therefore, taking strictly control of children's access of these informal play spaces and taking closely accompany of children's outdoor play can help to reduce the risk of traffic danger. This has become a prevailing idea dominant the modern parenting style in Chinese society.

Parental concerns about stranger-danger are also one of the main parental concerns reported from all parts of the world (Matthews and Limb, 1999; Platt, 2012; Witten *et* 

*al.*, 2013; Foster *et al.*, 2014; Veitch *et al.*, 2014). According to the interviews with adults and desk studies of relevant data, this stranger-danger is felt more acutely in Chinese society. In mainland China, child abduction and trafficking is an existential fact. According to the publicly accessible data from the National Bureau of Statistics, 2016, 618 child trafficking cases were uncovered (NBS, 2016). Though it is hard to calculate the total number of uncovered and unsolved child trafficking cases because of a lack of official data, the fact is that child trafficking cases occur in Chinese society. Anxious about this special stranger-danger, the precious only child in urban families needs to be well-protected, especially because domestic migrants, strangers who elicit fear, are flowing into local communities and changing the social environments within the neighbourhood.

To conclude, over-protecting is a parenting style that reflects the dominant cultural pattern (Füredi, 2001; Jenkins, 2006; Berge, 2013). Corresponding to similar patterns in other parts of the world (Jenkins, 2006; Fyhri *et al.*, 2011; Witten *et al.*, 2013; Foster *et al.*, 2014) in the Chinese social context, the cultural background of valuing children is intensified by birth control policies which feed into parental paranoid about the safety hazards present in children's daily lives. The informal play environment and the real danger from traffic and strangers make over-protection a natural choice, protecting precious children from hazards.

#### 9.1.5 Changing play activities in the context of urbanization

Chapter Seven answered the research question about children's play activities, in different generations, play and related experiences in childhood were described from the perspectives of: games, handcrafting, nature interactions and play interventions.

In the contemporary childhood:

- Games in public open spaces nowadays mainly have a high physical content.
- Toys, fixed play facilities, electronic devices and sports facilities are necessary supporters of children's games.
- The experience of natural interactions can only be found at the tourist agricultural experiences or from travel.
- Play interventions are widely provided in communities as a kind of social welfare.

In the childhood of parents' generation:

- A variety of games were widely played on all kinds of play spaces.
- Handmade toys were the most popular, though video games have shown up in some of the childhoods of the parents' generation.
- The experience of nature was usually through school, and was intended to contrast the miseries of their recent past with their new happiness.

In the childhood of grandparents' generation:

- Games were usually high physical, without plaything.
- The experience of picking up fruit, catching fish, and harvesting crops usually was part of gaining additional food supplies for their families.

Overall, as analysed in the Chapter seven, the changes in play activities in childhood are closely associated with urban economic development which results in enriched urban lives, popularity of electronic products and improvements in social welfare.

Since the economic reform in the 1990s, urban living standards have been largely improved in Chinese cities. With the improvement of material life, traveling to another place and spending a holiday become an essential part of urban lifestyle. For the urban children living in a heavily built-up environment, travelling to rural areas and natural landscape attractions provide them a more diverse experience of interacting with natural elements, such as climbing a hill, swimming in ocean waves, identifying wild huckleberries to eat or gazing up at the summer's night sky (Kahn, Weiss and Thea Weiss, 2017).

At the same time, with the rapid development of the electronic industry, a mass of electronic devices have already changed urban children's lifestyles. As evidenced in Chapter seven, spending more time on the electronic games and on line chatting is one of the reasons children spend less time on outdoor play (Kimbro, Brooks-Gunn and McLanahan, 2011; Beamer *et al.*, 2012; Guo *et al.*, 2017). Also, some of these devices can change the way parents take control of their children, such as the smartwatch with phone and positioning functions which can help parents to contact and control their children when they are away from home. Therefore, surrounded by all kinds of electronic devices, children could develop their own way of spend spare time and communicate or play with others; and parents also find the new way to observe and supervise their children. All these experiences are never experienced or imagined in the previous childhood.

As one of the main findings in Chapter seven, the contemporary children living in the central area Beijing are provided with various play interventions which aim to encourage children to go outside their home, interact with their peers and learn something through organized play activities. Different from play interventions brought by festival events and street peddlers in the past. Most of these play interventions in nowadays are provided by the government as a form of social welfare. By providing children with more diverse play opportunities in the high-density urban life, these interventions not only help to enrich children's daily liver, but also help to generate a supportive and friendly atmosphere in communities, which can help to increase the local sense of belonging of the children and the adults living in the central area. To some extent, these interventions also help to develop and guide the cultural and ideological construction in the minds of urban children.

#### 9.1.6 Decreasing time spent on outdoor play

Chapter Eight tackled the research question about the time children spend on play. For children living in the central area in nowadays:

• They can only spend very limited time playing outdoors, even in the summer holidays.

However, in the past childhoods of the parents' and grandparents' generations:

• Outdoor play occupied most of children's spare time.

Comparing across generation, there is a dramatically decrease in the time spent on outdoor play across generations. As been explained in Chapter eight, the factors which have influenced the time they spend on outdoor play has changed over the generations. In the past, in families with working parents and siblings the older children needed to help with daily chores and even baby-sitting, which could prevent them from playing outdoors. After the University Entrance Examination resumed in 1978, the intensive training and preparation for this examination occupied a great deal of time, but only for teenagers at high schools. Since the 1980s, when televisions became popular in Chinese cities, watching TV became something which might occupy children's spare time (Kimbro, Brooks-Gunn and McLanahan, 2011). In more recent days, the academic pressure on the younger age children (Woolley and Kinoshita, 2015) and parental controls (Kimbro and Ariela, 2011) has become the main reason preventing children from spending time on outdoor play.

With a paticular attention on the contemporay childhood, in which time spending on outdoor playing is taken by acdemice pressure and under parntal controls, the phenomenon of emphasis on study for children can be understand in a more wider context. From the cultural perspective, the emphasis on academic achievement is deeply rooted in Chinese society. Started from the 'imperial exam system' started in the 600s and ended in the 1910s, this exam system was the main method for selecting government officials during the long period of the feudal monarchy (Li and Li, 2010). This made that there was an obvious and strong link between educational success, financial success and improved social status (Quach et al., 2013). Though, with the 'imperial exam system' was abolished at the beginning of twentieth century, the relationship between educational success, financial success, the more social status became less obvious, the

longstanding tradition of valuing school education and educational achievements still strongly influence on Chinese culture.

In recent days, it is the university examination system intensifies the academic pressure on school age children. The University Entrance Examination system was resumed in 1978 and continues today. This national university entrance examination takes place once a year at the national level. To be competitive in this annual exam, getting good education in principal schools can be a guarantee. Because principal schools are defined by their better performance in the unified examinations. Therefore, getting good education in a principal high school, middle school or even a principal elementary school is considered to be the steps leading the way to a top university. Failure at any of these steps is unacceptable for families who usually have only one child to carry the future of the whole family.

The one-child policy also contributes to increase the academic pressure on children's lives. This policy was implemented in 1979 and ended in 2016 adjusted to become a two-child-policy. During the 30 years of the one-child policy, Chinese parents were anxious to prevent their children from, as a popular saying goes, 'losing at the starting line' (Hu, Kong and Roberts, 2017). Becoming the only focus and hope of the whole family means that the only child faces unprecedented pressure. However, the emphasis on study for children is not only an issue in the Chinese context. In the research conducted in Japan, the emphasis on school education and children's academic achievement is believed to explain the decrease in the time spent outdoors (Woolley and Kinoshita, 2015).

Except the acdemice pressure, increasing parntal controls also contribute to the dramatic decreasing of children's outdoor play time. In the case study area, children's outdoor play usually requires accompaniment by adults. Whether to go outside or not depends on adults' decision, not the children's. The factors affecting the adults' decisions are various, so whether the child has finished their study tasks, or after a long day whether the adults still want to spend some time outdoors, or the adults' perceptions of the outdoor weather conditions. If adults decide not to go outside, the children can play indoors instead. Dependent on parental decisions, children spend more time on sedentary play indoors than in running and jumping outdoors. As mentioned in Chapter two, the lack of outdoor physical activities affects children's general health, as shown in the increase in childhood obesity and myopia (Guo *et al.*, 2013; Ma, Mi and Ma, 2017).

#### 9.2 Dominant influence factors of children's play and related experiences

The third research objective dealt with those factors in the changing urban environments which influence children's daily outdoor play experiences. These influencing factors can be understood through consideration of the transformation of the urban environment, economic development, policy implementation and dominant cultural traditions.

#### 9.3.1 Urban environment transformation

As mentioned in the introduction of social context of the case study area in Chapter four, in recent years, there have been an increasing number of domestic migrants flowing into and settling in the inner city area. There are also many tourists who crowd into the parks and hutongs within the home range of residents. These increasing numbers are unfamiliar neighbours and noisy tourists in the hutongs, and have changed the unified and concordant atmosphere of local communities. Child trafficking is a serious problem for Chinese society as the fuse, and parental paranoia about stranger dangers has changing children's use of outdoor spaces and interactions with strangers. The changing social environment in the hutong communities caused by the increasing number of domestic migrants and tourists has negatively influenced children's outdoor play experiences and intensified parental paranoia about stranger dangers (Kyttä, 2004; Fyhri *et al.*, 2011; Foster *et al.*, 2014; Kyttä *et al.*, 2015).

At the same time, the transformation of physical environments in the inner city historical protected area depends on the dynamic balance of two opposing forces, residents' demand for more indoor rooms and private space, and the government-controlled limitation on private construction. These two forces have battled since the urban population started booming in the late 1960s, and since then the productive use of land in the high-density urban central area has been pushed almost to the limit. As a result, in the high-density inner-city area, there are only very limited semi-public and public outdoor spaces in the home range left for residents for the conduct of their daily outdoor activities. In the further range, parks are usually full of sightseeing tourists, so the places left for children are very limited. In the compromise between the increasing demand for space and that for fully developed local resources, children's welfare has been sacrificed. Urban expansion at breakneck speed has made access to the natural environment more and more difficult for urban children, who can be physically alienated from rural lives and far from interacting with real natural environments.

#### 9.3.2 Economic development

As explained in Chapter Four, the economic reform of 1976 has brought economic prosperity in recent years, and the living standards of urban families have been greatly improved. Surrounded by this abundant material world, the lifestyles of modern urban families have changed, and so have children's play experiences. These changes show in the way they spend their holidays, their daily transport methods and play facilities and games.

It has become a basic component of modern urban life to spend holidays travelling and living in other places, a very common experience for urban families. Supported by the development of modern transportation methods, both domestic and overseas travel can be affordable and convenient. For urban children, this experience of travelling to other places has expanded their horizons, providing them with experiences of diverse social and physical environments.

The popularising of private cars has made urban lives much more convenient. According to desk study, the private car did not become popular amongst ordinary Beijing families until the 2000s, but recently the private car has had a paradoxical influence on children's daily lives. The territorial range of urban children has increased as they have been driven to amusement parks and villages on the outskirts of the city at weekends or on holidays. But the increasing number of cars in the narrow hutongs and streets takes up children's informal space and increases parental anxiety about the traffic dangers there (McMillan, 2005; Fyhri and Hjorthol, 2009; Castonguay and Jutras, 2010; Fyhri *et al.*, 2011; Platt, 2012; Woolley and Lowe, 2013; Westley *et al.*, 2014; Kyttä *et al.*, 2015).

The enrichment of material life and the changes in toys and facilities sustaining children's play has also contributed to the transformation of childhood play experience. Children are now surrounded by all kinds of toys, play facilities and electronic play devices. By playing with these modern toys, especially electronic games, children are expected to develop more strategic thinking. In the past, toys were usually handmade, which helped them to be more skilled in handcrafting: the changing of playthings has shifted the emphasis on children's skill development. By acting on children's daily lifestyles, transportation methods and playthings, economic development has transformed children's life experience across the generations.

#### 9.3.3 Policy implementation

As discussed earlier, the one-child policy has had a profound influence on Chinese society. It has profound influence in changing the family structure of urban families, making the only child the centre of each family, changing the distribution of family responsibilities. This has resulted in over-supervision, intensive mothering, and co-parenting across generations. At the same time the only-child generation (before the policy changed to a two-children policy in 2016), the urban only-child was provided with the best resources the family could afford, without sharing with siblings. Their growing-up experiences are unique compared with other generations in China or overseas.

In China, the current University Entrance Examination System has applied since 1978. In this national examination, all the students are tested in three basic subjects, Chinese language, English language and mathematics. Students also choose one major subject from the arts or science. The total scores for the four subjects are the only criteria for university admission. The endeavour to achieve better scores in these examinations explains the heavy academic pressures in contemporary childhood: children spend most of their time on learning activities instead of play.

Furthermore, children's daily experience largely depends on the local resources provided for them(Moore, 1986). The policies which influence their environment are based on the Historical District Preservation Plan and the support policies for enriching community lives. The Historical District Preservation Plan (see Chapter Four) controls the development of the physical environment in the inner-city area by restricting construction in protected areas. The inner-city could not provide its ever-increasing residents with more space for their various outdoor activities, and children find that the places they can use locally have been compressed to the minimum. By contrast with the crowded physical environments, financial and political support from local government and the Communist Youth League Committee provides children with a more friendly and inclusive social environment. By involving children in community activities, the children's daily experiences are enriched and the social atmosphere of local communities is improved.

#### 9.3.4 Cultural traditions

In traditional Chinese culture, families are the basic unit which maintains and enhances the stability of society (Xiao, 2016). Within traditional extended families, family members and kin are closely linked by blood ties, undertaking unconditional and unlimited responsibilities for mutual care and support. In traditional families, children are considered to carry the future of the whole family, especially boys (Chi, 1989). The authority of the whole family usually relied on older males. Child-rearing was the responsibility of both mother and father. Mothers were responsible for biophysical care and physically bringing up the young children, while fathers were responsible for sociocultural reproduction, taking over the training in children's moral and behavioural requirements as well as intellectual skills. The paternal grandparents and female relatives also helped with the daily care of children when the parents needed help (Xiao, 2016).

Influenced by these traditional family values, the phenomenon of over-supervision can be understood as a consequence of the one-child policy and the cultural emphasis on valuing children. Intensive mothering and grandparents co-parenting are also relics of the traditional distribution of family responsibilities. Not only the traditional family values, as interpreted in previous paragraphs, in China, the long-lasting culture of valuing school education and educational achievements intensify parental expectations of children's school grades, which result in children's time distribution on their daily routines.

#### Summary

In this chapter, some special phenomena in contemporary childhood have been studied and explained. Comparing across generations, the changes in childhood play experience have been traced and related to the historical background, including aspects of the modern urban environment transformation, economic development, policy implementation, and dominant cultural traditions.

The transformation of the urban environment which have influenced children's outdoor play experience have been interpreted in respect of the urban social and physical environment. The social environment in the hutong communities has changed dramatically, with increasing numbers of domestic migrants and sightseeing tourists flowing into the city. Negatively influenced by this, children's outdoor play has been affected by intensifying parental paranoia about stranger dangers. For the physical environment, the increasing population of the inner-city has meant that children can hardy find any formal play spaces in their home range, and the large-scale urban expansion has reduced their access to the natural environment.

Urban economic development has also influenced childhood experience by improving the living standards of urban families. With a rich material life, spending holidays travelling and living in other places have become a common part of urban lives and the popularization of electronic games, fixed play facilities and modern playgrounds has diversified play experience. The policies and regulations with a significant influence on childhood experience, birth control policies, university entrance examination system, and regional policies about historic district preservation and child welfares, have had profound influence on children's lives. The cultural traditions which have influenced childhood experiences come from traditional family and social values, with children valued as the future of the family. These values have influenced the division of labour and power relations in childrearing. The tradition of valuing intellectuals has intensifies the emphasis on academic achievement.

In the chapter which follows, the last research objective, recommendations for policy and practice, will be addressed.

#### Chapter Ten Conclusion

#### **10.1 Review of the research**

To address on the knowledge gap that childhood play experience is less known in Chinese cities within the context of rapid urban development, this research take children living in the central area of Beijing as the study case, to understand children's daily experience of playing in their daily outdoor environment now and across their parents' and grandparents' generations. The research findings have shown:

- 1. Contemporary children's play experiences, especially outdoor play experience, analysed in relation to the theoretical model, SPAT.
- 2. The play experiences of their parents' and grandparents' generations.
- 3. Changes in those experiences through a time of overwhelming urban development.
- 4. The reasons for the changes which have taken place in the rapid developing urban environments.

The above understandings have been gained from:

- A review of theories, concepts and research projects providing tools for recording, describing, and determining childhood play experiences, based on the theoretical model, SPAT, which can be used to understand children's play experiences.
- 2. Developing the data triangulation framework of data collection by collecting data from various people, environmental settings and recording texts, using different methods of interviews, diaries, observation and achieves, to ensure the validity of the research design by which reliable data have been generated.
- Collection of contextual data about urban development, policy application and cultural traditions in Chinese cities, especially in the central area of Beijing, to understand the factors which have influenced children's childhood play experiences.
- 4. Involving local children's participation in the field research and collecting data from them by interview, diary, observation; making their feelings and thinking the main point of view for understanding their play experiences.

5. Analysis of collected data by developing a case description based on the SPAT model, then using these descriptive findings to provide appropriate explanations of the described phenomena. Suggestions for future practice are proposed.

#### **10.2 Research contributions**

This research makes contributions to the body of knowledge about children's life in the city in two ways. One expands the existing knowledge about children's growing up experiences into Chinese cities by contributing understandings about children living in the central area of Beijing. The other develops existing theories by working with field research data. Both these benefit the child-related research by providing research results for comparison and reliable research tools.

#### 10.2.1 Contributions to knowledge

The knowledge gap of children's play experience of the environment in Chinese cities is less known. In this research, the childhood play experiences of children living in the central area of the capital city of the People's Republic of China are recorded and interpreted to provide understandings from Chinese perspectives of the changes over three generations. Some of the findings in the Chinese context are corresponding to research conducted in other countries, while others are giving new insights into existing knowledge. This research establishes contributions to existing knowledge by the following issues.

Contemporary children's territorial range in their surrounding urban physical environment in the central area of Beijing has been recorded in detail for the first time. Result shows that children only have extremely limited spaces for outdoor play, and the most of these spaces provide limited play opportunities for children in all ages. The free range of contemporary children is also limited with dislocation between parental permission and children's actual mobility. And the double role adults playing as caregivers and playing friends of their outdoor play have been explored and understood in relation to parental concerns about the potential safety hazards in children's daily life. Though findings about increasing parental concern about safety hazard is widely reported in the world-wide, the one-child policy and the special stranger danger of child trafficking have pushed the paranoid parents to take an over-protected style of parenting in the Chinese context. Also, facing the heavy learning pressure and attractive indoor entertainments, the contemporary are spending very limit time playing outdoors and have less various outdoor play experiences. In this situation, the additional play opportunities provided as social welfare by the government are applied to make improvement and approved to have positive result.

Besides the understanding of contemporary childhood, this research contributes new insights into childhood play experiences in the previous childhoods, of parents' and grandparents' generations. Growing up in the urban central area between the 1950s and the 1960s (childhood of grandparents' generation) and 1975 to 1990s (childhood of parents' generation), before the economy boomed and large scale urban expansion took place, childhood play was very different from contemporary experience. With fewer constructed playgrounds, there were more found places explored and used by children as play spaces in their home range. Greater trust of familiar neighbours and reliance on collective responsibility for children meant that the children had a much wider range of independent mobility in their daily environment. In past childhoods, siblings played the role of play friends and, sometimes, caregivers, where as these roles now have to be played by adults, as most families still have only one child. Compared with contemporary children, there were fewer manufactured toys and play facilities in the old days, when the experience of playing with other children with handmade toys, freely in the spacious outdoor environment, has left the most delightful childhood memories. With less academic pressure, the older generations' children spent more of their spare time playing outdoors.

Based on the comparisons across generations, the other main contribution to existing knowledge is recognition of the impact of the changes in urban development which have influenced children's daily lives: urban economic development, policy implementation and dominant cultural traditions. Among these factors, the implementation of the one-child policy has made the childhood experience in Chinese cities special in various ways, quite distinct from the experience of growing up in other countries. The traditional Chinese culture which emphasizes family ties and school education has made the only child in the urban families precious, with a need to be raised carefully.

As far as we can tell, all these understandings of childhood experience in both contemporary and earlier childhoods in Beijing are being reported for the first time. Referencing to the research conducted in other counties, the leading reasons of these phenomena has the commonness and also characteristic. These understandings are helpful for a comprehensive understanding of children's living conditions for researchers endeavouring to create a better urban environment for children.

#### **10.2.2** Contributions to theories

In this research, the main contributions to theory are the development of the SPAT model for recording, describing, and determining childhood play experiences which allow the application of the SPAT model to understanding play experiences across three generations. The model is based on a detailed understanding of each of four elements: spaces, people, activities and time.

To describe the spaces children used for play, territorial range (Moore, 1986) is applied as a functional description. The concept of the territorial range is developed by modifying the measures and indicators of each of its sub-divided ranges, further expanded by adding travel range and imaginary range.

To describe the interaction mode between children and their carers when spending time outdoors, four interaction patterns emerge from the field research data and are used to distinguish the extent of children playing with adults: the child only plays with adults but not with other children; parents carry out close supervision but do not take part in children's play; parents watch their children playing from a certain distance; and children and their parents are just passing through.

To describe the overall play-related activities in childhood, a category system has been developed and applied in this research on the basis of a structure proposed and developed by Bishop and Curtis (2001). Using the grounded data from field research, the category system of play related experiences contains these four subcategories: games, handcrafting, natural interactions and play interventions.

A more general category system of children's overall daily activities has been developed to describe children's daily routines using more than the four daily activities types summarised by Ferretti and Bub (2014). In this research, children's everyday activities are classified into six activity types: sleep, study, play, transport, eating meals and other daily activities.

The development of the model of SPAT model, the concept of children's territorial range, category system of children's play-related activities and daily activities is presented in

this research and can provide functional tools for researchers exploring children's life experiences in their daily environment.

#### **10.3 Recommendation for policy and practice**

On the basis of understandings about the factors in the surrounding environments which influence children's daily lives, this study proposes several recommendations for both urban planners and landscape designers to make a better environment for urban children. These are proposed for professionals in policy-making, urban planning and landscape designing.

#### **10.3.1 Recommendation for social policy**

In contemporary childhood, children's play experiences are influenced by the effect of the one-child policy, which has made the urban only-child the centre of urban families, surrounded by a rich material life. Both the experiences of being the only-child in the family and the abundant material life were seldom experienced in past childhoods (see 9.2). With the policy changing from 'one-child' to 'two-children' in 2016, the special experience of the only-child generation will also change. It is predictable that there will be more urban children in the future. For children living in the crowded central area, where there is seldom any space left for their use (see 5.1 and 5.2), this increasing demand on outdoor space will become an even more important issue. It will be vital to consider children's needs and hear their voices when planning outdoor spaces in the urban central areas.

At the same time, as shown in this study, the contemporary education system has increased the academic pressure on only-child in urban families (see 8.1.2). An only-child, who carries the future of the whole family, is provided with the best education resources the family could afford. The changing of birth control policy means that several children will share these resources in future. This might help to reduce the excessive educational pressure on children at a young age. Children in the future might have a more relaxing childhood, spending more time on outdoor activities than children now. This will also put pressure on the child-friendly urban environment.

In this research, financial and political support from local government and the Communist Youth League Committee have been shown to have a positive influence, encouraging children to go outside their home and participate in neighbourhood activities (7.4). When changes to the urban physical environment and pressure from the national education system can be too great, promotion of these interventional activities can be a way of providing children with a more friendly social environment where outdoor activities and interaction with neighbours are encouraged. Therefore, as a recommendation, these additional play interventions could be more widely applied in other cities or regions.

#### 10.3.2 Recommendation for urban planning

Because of the Historical District Preservation Plan, the use of places in the protected central area of Beijing is pushed to the extreme. For children, there is seldom any space left for their outdoor play. But children still find their ways to use all kinds of found space (see 5.1 Play spaces within habitual range). Urban planners should not overlook children's need for places or their activities in the high-density historic central area.

As there will be more children in the central area, housing policy there could be changed towards building a more child-friendly city. There could be more flexible and constructed places in the residential area designed to encourage more children to use them. Where there can be fatal dangers, children's activities need to be strictly controlled. In the crowded historical protected inner city areas, hutongs and narrow allies around high density courtyards, there should not be vehicle access or car parking. Only by separating the pedestrian system from the vehicle system will children living in the courtyard houses have more flexible and safe places for their play.

Childhood experience largely depends on the environment children have for their daily lives. For a better experience of growing-up in urban areas, involving children in the urban planning process and hearing their voice can help to understand their needs and create a more child-friendly urban environment. There is a need to establish a belief that children can perceive and express their feelings and think appropriately, that their perceptions and reflections on their daily environment matters.

#### 10.3.3 Recommendation for landscape design

In respect of children's outdoor play environment design in Chinese cities, the main principle should be that a better play environment is abundant in affordance for children in each age group. Given the fact that children's outdoor play is usually accompanied by adult carers (see 6.2 Carers and playmates), consideration of affordance for their adult's activities is also necessary.

To achieve a better play environment for urban children of all ages, a playful natural environment can be brought to playground design. The application of natural elements such as water, sand, vegetation, or even wavy terrain can increase the affordance of playgrounds for children in all age groups and increase their opportunities for natural interaction.

The fixed play equipment in playgrounds needs to be designed for the use of a wider age range. Simple play equipment designed only for younger children should not dominate playgrounds, and more complex play equipment which can sustain older children's more varied play needs to be more often provided (see 9.1.1.1 Affordance of play space). Most importantly, the physical exercise facilities designed for adults should not be accessible as play equipment for children.

#### 10.4 Limitations of research methodology and outcomes

#### 10.4.1 Limitations of methodology as single case study

Carried out as a qualitative research, over 200 children have shared their experiences by participating in data collection with interviews and diaries, and hundreds of children's activities have been observed in their daily play environment. As a flexible designed research, this sample size is not pre-specified but keep collecting until they can fully tell the whole story. Actually, data collections were conducted in the summer time in two years, because the analysis and interpretation of the data collected in the first year suggested new themes, which need to explore by further data collection. Inevitable, this whole procedure of data collection and interpretation can be objective, which largely involves researcher's own identity and point of view, though multiple sources of evidence are applied to achieve the reliability of the database.

Taking the central area of Shichahai as a case study to understand children's outdoor play experiences across generations defines this research as a critical single case study aiming to provide a Chinese perspective on knowledge about childhood play experience in the context of rapid urbanisation. The special environmental, social, political and cultural context of the Shichahai area provide the case with its own identity, which makes this single case study can help shed light on the wider childhood experience in the rapid developing Chinese cities, but cannot provide a more universal understanding pertaining to the general situation in every Chinese city.

#### 10.4.2 Limitations of data collections

In this research, data about the childhood play and related experiences are mainly collected from doing interviews by directly asking participant to describe their childhood experiences. This provides an efficient way to understand childhood experiences not only in contemporary childhood but also in the childhoods of the parents' and grandparents' generations. However, comparing with the play and related experiences in contemporary childhood which can be easily recalled, these experiences existing adult's memories are much more difficult to collect. Especially, for some detailed data about play experience can be difficult to rely on because it depends on fading memories of outdoor place use

and play time. So in this study there might be an imbalance between the amount of information available about the contemporary generation and its predecessors. It is to be hoped that this research will provide a good basis for the use of future researchers looking for background for their studies at a later date.

As for the direct observation of behaviour mapping, there can be possibilities of error in estimating children's ages according to their appearance, as well as judging the relationship between children and their accompanying adults. Before conducting behaviour mappings, researcher has practiced to estimate children's age based on their appearance during interviews and other informal conversations with children. In the most cases, the errors are less than two-year of ages. This has resulted in the data analysis, in which children are grouped with an age difference of three years. By merging children with similar ages into a same group, the data analysis of behaviour mappings could pay more attention on the general relationship between children's ages could be improve by asking children's specific ages in a research conducted within a less open space with more fixed children.

#### 10.4.3 Limitations of data analysis

In the data analysis, one of the main concerns is to record and understand children's outdoor play and related experiences in the contemporary childhood and the changes of these experiences across generations. Comparisons are conducted mainly across generations and with the focus on political, social and environmental changes in the context of urban development. However, there is a lack of in-detailed comparison between boys' and girls' patterns of outdoor activities in any of these generations. Though, the gender differences are also widely reported as an influence factor of children's different outdoor play experiences (Clark and Uzzell, 2002; Beamer *et al.*, 2012; Westley *et al.*, 2014). To improve this weakness, a more in-depth research design which focuses on children's outdoor play experiences only in the childhood of a specific generation could be carried out to further explore the gender difference.

To conclude, as a flexible designed single case study limited by time and resource, this research is designed to be focused and concise by discarding less obvious phenomena or less significant influence factors. But, taking as a starting point, which generation new

knowledge in a special social context, this research could inform further research in various ways.

#### **10.5 Further research suggestions**

Based on the theoretical model of SPAT, further research on children's outdoor play and related experience could be carried out in other parts of China, in large and small cities, towns and rural areas. Also, several potential research topics come to light as a result of the findings of this research:

This research has explored the imaginary range of children living in the central area Beijing, showing that it is closely related to children's knowledge and information intake. The imaginary range might be a route to understanding more of children's inner experience in future research.

Secondly, in this research, the changing of roles friends and caregivers of childhood plays has been recorded across generations, and its influence on children's social interactions and personality discussed. The relationship between these changes of play friends and children's personality development can be further explored.

Finally the play related interventions' financial and political support has only been observed and explored in the central area of Beijing. It should be considered for expansion so that play interventions are available to other communities in other Chinese cities.

#### **Bibliography**

Balsiger, P. and Lambelet, A. (2014) *Methodological Practices in Social Movement Research, Boletin Tecnico/Technical Bulletin*. Edited by D. della Porta. Oxford University Press. doi:10.1093/acprof:oso/9780198719571.001.0001.

Bannerjee, K. and Driskell, D. (2002) 'Tales from Truth Town: Children's Lives in a South Indian "Slum", in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 135–160.

Barton, B. K. and Morrongiello, B. A. (2011) 'Examining the Impact of Traffic Environment and Executive Functioning on Children's Pedestrian Behaviors', *Developmental Psychology*, 47(1), pp. 182–191. doi: 10.1037/a0021308.

Bater, L. R. and Jordan, S. S. (2017) 'Child Routines and Self-Regulation Serially Mediate Parenting Practices and Externalizing Problems in Preschool Children', *Child and Youth Care Forum*. Springer US, 46(2), pp. 243–259. doi: 10.1007/s10566-016-9377-7.

Beamer, P. I. et al. (2012) 'Quantified Outdoor Micro-activity Data for Children Aged 7–12-years Old', Journal of Exposure Science and Environmental Epidemiology. doi: 10.1038/jes.2011.34.

Van den Berge, L. (2013) 'Parenting Support and the Role of Society in Parental Self-understanding: Furedi's Paranoid Parenting Revisited', *Journal of Philosophy of Education*. doi: 10.1111/1467-9752.12008.

Biernacki, P. and Waldorf, D. (1981) 'Snowball Sampling: Problems and Techniques of Chain Referral Sampling', *Sociological Methods & Research*. doi: 10.1177/004912418101000205.

Brandt, L., Ma, D. and Rawski, T. G. (2014) 'From Divergence to Convergence: Reevaluating the History behind China's Economic Boom', *Journal of Economic Literature*, 52(1), pp. 45–123. doi: 10.1257/jel.52.1.45.

Burnette, D., Sun, J. and Sun, F. (2013) 'A Comparative Review of Grandparent Care of Children in the U.S. and China', *Ageing International*, 38(1), pp. 43–57. doi: 10.1007/s12126-012-9174-z.

Carver, A. *et al.* (2013) 'A Comparison Study of Children's Independent Mobility in England and Australia', *Children's Geographies*, 11(4), pp. 461–475. doi: 10.1080/14733285.2013.812303.

Castonguay, G. and Jutras, S. (2010) 'Children's Use of the Outdoor Environment in a Low-Income Montreal Neighborhood', *Children, Youth and Environments*, 20(201), pp. 200–230. doi: 10.7721/chilyoutenvi.20.1.0200.

Chawla, L. (2001) 'Putting Young Old Ideas into Action : The Relevance of Growing Up in Cities to Local Agenda 21', *Local Environment*, 6(1), pp. 13–25. doi: 10.1080/13549830120024224.

Chawla, L. (ed.) (2002) *Growing Up in an Urbanising World*, *UNESCO Publishing*. London: UNESCO Publishing. doi: 10.1134/S0006297915020054.

Chawla, L. and David Driskell (2006) 'The Growing Up in Cities Project', *Journal of Community Practice ISSN:1070-5422 (Print) 1543-3706 (Online)*, 14:1–2, pp. 183–200. doi: 10.1300/J125v14n01.

Cherlin, A. J. (1986) *The New American Grandparent : A Place in the Family, A Life Apart.* 1st edn. New York: Harvard University Press.

Clark, C. and Uzzell, D. L. (2002) 'The Affordances of the Home, Neighbourhood, School and Town Centre for Adolescents', *Journal of Environmental Psychology*, 22(1–2), pp. 95–108. doi: 10.1006/jevp.2001.0242.

Cosco, N. G., Moore, R. C. and Islam, M. Z. (2010) 'Behavior Mapping: A Method for Linking Preschool Physical Activity and Outdoor Design', *Medicine and Science in Sports and Exercise*. doi: 10.1249/MSS.0b013e3181cea27a.

Cosco, N. and Moore, R. (2002) 'Our Neighbourhood is Like That! Cultural Richness and Chilhood Identity in Boca-Baraccas, Buenos Aires', in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 35–56.

Davison, K. K., Cutting, T. M. and Birch, L. L. (2003) 'Parents' Activity-related Parenting Practices Predict girls' Physical Activity', *Medicine and Science in Sports and Exercise*. doi: 10.1249/01.MSS.0000084524.19408.0C.

Dong, L. (1985) 'Beijing: The Development of a Socialist Capital', in Sit, V. F. S. (ed.) *Chinese Cities: The Growth Of The Metorpolis Since 1949.* Oxford: Oxford University Press, pp. 67–94.

Driskell, D. C. (2002) *Creating Better Cities with Children and Youth : A Manual for Participation*. London: Earthscan/UNICEF.

DuRant, R. H. *et al.* (1993) 'Evaluation of the Children's Activity Rating Scale (CARS) in Young Children', *Official Journal of the American College of Sports Medicine*, pp. 1415–1421. doi: http://dx.doi.org/10.1249/00005768-199312000-00016.

Eifermann, R. R. (1971) *Determinants of Children's Game Styles*. Jerusalem: The Israel Academy of Sciences and Humanities.

Evans, H. (2014) 'Neglect of a Neighbourhood: Oral Accounts of Life in "Old Beijing" since the Eve of the People's Republic', *Urban History*, 41(4), pp. 686–704. doi: 10.1017/S096392681300076X.

Ferretti, L. K. and Bub, K. L. (2014) 'The Influence of Family Routines on the Resilience of Low-income Preschoolers', *Journal of Applied Developmental Psychology*. Elsevier Inc., 35(3), pp. 168–180. doi: 10.1016/j.appdev.2014.03.003.

Foster, S. *et al.* (2014) 'The Impact of Parents' Fear of Strangers and Perceptions of Informal Social Control on Children's Independent Mobility', *Health and Place*. Elsevier, 26, pp. 60–68. doi: 10.1016/j.healthplace.2013.11.006.

Füredi, F. (2001) *Paranoid Parenting : Abandon YourAnxieties and be A Good Parent*. London: Allen Lane the Penguin Press.

Fyhri, A. *et al.* (2011) 'Children's Active Travel and Independent Mobility in Four Countries: Development, Social Contributing Trends and Measures', *Transport Policy*, 18(5), pp. 703–710. doi: 10.1016/j.tranpol.2011.01.005.

Fyhri, A. and Hjorthol, R. (2009) 'Children's Independent Mobility to School, Friends and Leisure Activities', *Journal of Transport Geography*. Elsevier Ltd, 17(5), pp. 377–384. doi: 10.1016/j.jtrangeo.2008.10.010.

Gerring, J. (2007) *Case Study Research: Principles and Practices*. New York: Cambridge University Press.

Gibson, J. (1986) *The Ecological Approach to Visual Perception*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Guo, Y. *et al.* (2013) 'Outdoor Activity and Myopia among Primary Students in Rural and Urban Regions of Beijing', *Ophthalmology*, 120(2), pp. 277–283. doi: 10.1016/j.ophtha.2012.07.086.

Guo, Y. *et al.* (2017) 'Outdoor Activity and Myopia Progression in 4-year follow-up of Chinese Primary School Children: The Beijing Children Eye Study', *PLoS ONE*, 12(4), pp. 1–14. doi:

10.1371/journal.pone.0175921.

Hagan, L. K. and Kuebli, J. (2007) 'Mothers' and Fathers' Socialization of Preschoolers' Physical Risk Taking', *Journal of Applied Developmental Psychology*, 28(1), pp. 2–14. doi: 10.1016/j.appdev.2006.10.007.

Hanser, A. and Li, J. (2017) 'The Hard Work of Feeding the Baby: Breastfeeding and Intensive Mothering in Contemporary Urban China', *Journal of Chinese Sociology*. The Journal of Chinese Sociology, 4(1). doi: 10.1186/s40711-017-0065-2.

Hart, R. (1979) Children's Experience of Place. New York: Irvington Publishers.

Harten, N. and Olds, T. (2004) 'Patterns of Active Transport in 11-12 year Old Australian Children', *Australian and New Zealand Journal of Public Health*, 28(2), pp. 167–172.

Hays, S. (1996) The Cultural Contradictions of Motherhood. New Haven: Yale University Press.

Heath, T. and Tang, Y. (2010) 'Beijing's Hutong and Siheyuan: Conservation of an Urban Identity', *Proceedings of the Institution of Civil Engineers - Municipal Engineer*, 163(3), pp. 155–161. doi: 10.1680/muen.2010.163.3.155.

Hillman, M., Adams, J. and Whitelegg, J. (1990) One False Move : A Study of Children's Independent Mobility. London: PSI.

Jenkins, N. E. (2006) "You Can't Wrap Them Up in Cotton Wool!" Constructing Risk in Young People's Access to Outdoor Play', *Health, Risk and Society*. doi: 10.1080/13698570601008289.

Jones, O. (2003) "Endlessly revisited and forever gone": On memory, reverie and emotional imagination in doing children's geographies. an "addendum" to " 'to go back up the side hill": Memories, imaginations and reveries of childhood' by chris philo', *Children's Geographies*. doi: 10.1080/14733280302185.

Julia C. Bishop and Mavies Curtis (2001) 'Play Today in the Primary School Playground: Life, Learning and Creativity', in Curtis, J. C. B. and M. (ed.). Buckingham: Open University Press, pp. 1–19.

Kahn, P. H. (1999) 'The Houston Child Study', in *The Human Relationship with Nature: Development and Culture*. The MIT Press, pp. 95–114. doi: 10.1525/cag.2001.23.1.32.

Kahn, P. H., Weiss, T. and Thea Weiss, J. (2017) 'The Importance of Children Interacting with Big Nature', *Children, Youth and Environments. Natural Spaces and Development*, 27(2), pp. 7–24. doi: 10.7721/chilyoutenvi.27.2.0007.

Karsten, L. (2005) 'It All Used to be Better? Different Generations on Continuity and Change in Urban Children's Daily Use of Space', *Children's Geographies*. doi: 10.1080/14733280500352912.

Kim, S. Y. *et al.* (2013) 'Does "Tiger Parenting" Exist? Parenting Profiles of Chinese Americans and Adolescent Developmental Outcomes', *Asian American Journal of Psychology*, 4(1), pp. 7–18. doi: 10.1037/a0030612.

Kimbro, R. T. and Ariela, S. (2011) 'Neighborhood Poverty and Maternal Fears of Children's Outdoor Play', *Family Relations*, 60(October), pp. 461–475. doi: 10.1111/j.1741-3729.2011.00660.x.

Kimbro, R. T., Brooks-Gunn, J. and McLanahan, S. (2011) 'Young Children in Urban Areas: Links among Neighborhood Characteristics, Weight Status, Outdoor Play, and Television Watching', *Social Science and Medicine*. Elsevier Ltd, 72(5), pp. 668–676. doi: 10.1016/j.socscimed.2010.12.015.

Kuan, T. (2015) *No TitleLove's Uncertainty: The Politics and Ethics of Child Rearing in Contemporary China.* Berkeley: University of California Press.

Kyttä, M. (2002) 'Affordances of Children'S Environments in the Context of Cities, Small Towns, Suburbs and Rural Villages in Finland and Belarus', *Journal of Environmental Psychology*, 22(1–2), pp. 109–123. doi: 10.1006/jevp.2001.0249.

Kyttä, M. (2004) 'The Extent of Children's Independent Mobility and the Number of Actualized Affordances as Criteria for Child-Friendly Environments', *Journal of Environmental Psychology*, 24(2), pp. 179–198. doi: 10.1016/S0272-4944(03)00073-2.

Kyttä, M. *et al.* (2015) 'The Last Free-Range Children? Children's Independent Mobility in Finland in the 1990s and 2010s', *Journal of Transport Geography*, 47, pp. 1–12. doi: 10.1016/j.jtrangeo.2015.07.004.

Larouche, R. *et al.* (2017) 'Test-Retest Reliability and Convergent Validity of Measures of Children's Travel Behaviours and Independent Mobility', *Journal of Transport and Health*. Elsevier Ltd, 6(May), pp. 105–118. doi: 10.1016/j.jth.2017.05.360.

Lester, S. and Russell, W. (2008) *Play for a Change: Play, Policy and Practice: A review of Contemporary Perspectives.* 

Li, W. and Li, Y. (2010) 'An Analysis on Social and Cultural Background of the Resistance for China's Education Reform and Academic Pressure', *International Education Studies*, 3(3), pp. 211–215. Available at: http://journal.ccsenet.org/index.php/ies/article/view/6797.

Loebach, J. and Gilliland, J. (2010) 'Child-Led Tours to Uncover Children's Perceptions and Use of Neighborhood Environments', *Source: Children, Youth and Environments Collected Papers University of Cincinnati Children, Youth and Environments*, 20(201), pp. 52–90. doi: 10.7721/chilyoutenvi.20.1.0052.

Lynch, K. (1977) *Growing Up In Cities: Studies of the Spatial Environment of Adolescence in Cracow, Melbourne, Mexico City, Salta, Toluca, and Warszawa*. London: M.I.T. Press.

Lynch, Kevin (ed.) (1977) Growing Up In Cities: Studies of the Spatial Environment of Adolescence in Cracow, Melbourne, Mexico City, Salta, Toluca, and Warszawa. Paris.

Malone, K. and Hasluck, L. (2002) 'Australian Youth: Aliens in a Suburban Environment', in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 81–109.

Margavio, A. V. and Mann, S. A. (1989) 'Modernization and the Family : A Theoretical Analysis', *Sociological Perspectives*, 32(1), pp. 109–127.

Matthews, H. and Limb, M. (1999) 'Defining an Agenda for the Geography of Children', *Progress in Human Geography*, 23(1), pp. 61–90.

Maudsley, S. L. and M. (2007) *Play, Naturally: A Review of Children's Natural Play.* London: Play England, ISBN: 978-1-905818-15-0

McMillan, T. E. (2005) 'Urban form and a Child's Trip to School: The Current Literature and a Framework for Future Research', *Journal of Planning Literature*, 19(4), pp. 440–456. doi: 10.1177/0885412204274173.

McMillan, T. E. (2007) 'The Relative Influence of Urban Form on a Child's Travel Mode to School', *Transportation Research Part A: Policy and Practice*, 41(1), pp. 69–79. doi: 10.1016/j.tra.2006.05.011.

Moore, R. (1986) *Childhood's Domain: Play and Place in Child Development, Croom Helm.* London. doi: 10.1249/MSS.0b013e3181cea27a.

Moore, R. and Young, D. (1978) 'Childhood Outdoors: Toward a Social Ecology of the Landscape', in Altman, I. (ed.) *Children and the Environment*. New York: Plenum Press, pp. 83–127.

Morrongiello, B. A. et al. (2013) 'Results of a Randomized Controlled Trial Assessing the Efficacy of the

Supervising for Home Safety Program: Impact on Mothers' Supervision Practices', *Accident Analysis and Prevention*. Elsevier Ltd, 50, pp. 587–595. doi: 10.1016/j.aap.2012.06.007.

Morrongiello, B. A., Schell, S. L. and Keleher, B. (2013) 'Advancing our Understanding of Sibling Supervision and Injury Risk for Young Children', *Social Science and Medicine*. Elsevier Ltd, 96, pp. 208–213. doi: 10.1016/j.socscimed.2013.07.016.

Morrongiello, B., Schmidt, S. and Schell, S. L. (2010) 'Sibling Supervision and Young Children's Risk of Injury: A Comparison of Mothers' and Older Siblings' Reactions to Risk Taking by a Younger Child in the Family', *Social Science and Medicine*. Elsevier Ltd, 71(5), pp. 958–965. doi: 10.1016/j.socscimed.2010.05.047.

Murray, L. (2009) 'Making the Journey to School: The Gendered and Generational Aspects of Risk in constructing everyday mobility', *Health, Risk and Society*. doi: 10.1080/13698570903183889.

NPFA (2000) Best play - What Play Provision Should Do for Children. Available at: ISBN 094 6085 33.

Opie, I. and Opie, P. (1969) *Children's Game in Street and Playground*. Oxford: Oxford University Press.

Ortiz-Ospina, E. and Tzvetkova, S. (2017) *Working Women: Key Facts and Trends in Female Labor Force Participation, Our World in Data.* Available at: https://ourworldindata.org/female-labor-force-participation-key-facts (Accessed: 24 May 2019).

Paat, Y.-F. (2010) 'Influences of Mothering and Neighborhood on Children's Behavioral Outcomes.', *Children, Youth & Environments*, 20(1), pp. 91–122. Available at: http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=73942380&site=ehost-live&scope=site.

Percy-Smith, B. (2002) 'Contested Worlds: Constraints and Opportunities in City and Suburban Environments in an English Midlands City', in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 57–80.

Platt, L. (2012) "Parks Are Dangerous and the Sidewalk Is Closer ": Children's Use of Neighborhood Space in Milwaukee, Wisconsin', *Children, Youth and Environments Collected Papers Children, Youth and Environments*, 22(222), pp. 194–213. doi: 10.7721/chilyoutenvi.22.2.0194.

Plewis, I., Creeser, R. and Mooney, A. (1990) 'Reliability and Validity of Time Budget Data: Children's Activities Outside School', *Journal of Official Statistics*, 6(4), pp. 411–419.

Poole, D. A. and Lamb, M. E. (1998) *Investigative Interviews of Children: A Guide for Helping Professionals*. Washington, DC: American Psychological Association.

Quach, A. S. *et al.* (2013) 'Effects of Parental Warmth and Academic Pressure on Anxiety and Depression Symptoms in Chinese Adolescents', *Journal of Child and Family Studies*, 24(1), pp. 106–116. doi: 10.1007/s10826-013-9818-y.

Rasmussen, K. (2004) 'Places for Children – Children's Places', *Childhood*. doi: 10.1177/0907568204043053.

Ren, L. and Fan, J. (2018) 'Chinese Preschoolers' Daily Routine and Its Associations with Parent-Child Relationships and Child Self-Regulation', *International Journal of Behavioral Development*. doi: 10.1177/0165025418811126.

Reuber, P. (1998) 'Beijing 's Hutongs and Siheyuan', *The Canadian Architect*, 10(December), pp. 40–43.

Roberts, J. M. and Sutton-Smith, B. (1962) 'Child Training and Game Involvement', Ethnology, 1(2), pp.

166-185. doi: 10.2307/3772873.

Robson, C. (2002) Real World Research. Second edi. Oxford: Blackwell publishers.

Saint-Maurice, D. (2009) Validation of the SOPLAY Direct Observation Tool with an Objective Accelerometry-Based Physical Activity Monitor. Iowa State University.

Salvadori, I. (2002) 'Between Fences: Living and Playing in a California City', in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 183–200.

Sandseter, E. B. H. (2009) 'Affordances for Risky Play in Preschool: The Importance of Features in the Play Environment', *Early Childhood Education Journal*, 36(5), pp. 439–446. doi: 10.1007/s10643-009-0307-2.

Senda, M. M. (1992) *Design of Children's Play Environments*. New York ; London: McGraw-Hill Incorporated.

Shek, D. T. L. (2005) 'Perceived Parental Control and Parent–Child Relational Qualities in Chinese Adolescents in Hong Kong', *Sex Roles*, 53(9–10), pp. 635–646. doi: 10.1007/s11199-005-7730-7.

Sijtsma, A. *et al.* (2015) 'Television, Sleep, Outdoor Play and BMI in Young Children: the GECKO Drenthe cohort', *European Journal of Pediatrics*, 174(5), pp. 631–639. doi: 10.1007/s00431-014-2443-y.

Sit, V. F. S. (ed.) (1985) *Chinese Cities: the Growth of the Metropolis since 1949*. Oxford University Press.

Sit, V. F. S. (1995) *Beijing : The Nature and Planning of a Chinese Capital City, Wiley.* Available at: https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat000 06a&AN=melb.b1876093&scope=site.

Sit, V. F. S. (1996) 'Soviet Influence on Urban Planning in Beijing, 1949-1991', *The Town Planning Review*, 67(4), pp. 457–484. doi: 10.2307/40113418.

Skår, M. and Krogh, E. (2009) 'Changes in Children's Nature-Based Experiences Near Home: From Spontaneous Play to Adult-Controlled, Planned and Organised Activities', *Children's Geographies*. doi: 10.1080/14733280903024506.

Spilsbury, J. C. (2005) 'We Don't Really Get to Go Out in the Front Yard'-Children's Home Range and Neighborhood Violence', *Children's Geographies*, 3(1), pp. 79–99. doi: 10.1080/14733280500037281.

Stone, M. R. and Faulkner, G. E. J. (2014) 'Outdoor Play in Children: Associations with Objectively-Measured Physical Activity, Sedentary Behavior and Weight Status', *Preventive Medicine*. Elsevier Inc., 65, pp. 122–127. doi: 10.1016/j.ypmed.2014.05.008.

Storli, R. and Hagen, T. L. (2010) 'Affordances in Outdoor Environments and Children's Physically Active Play in Pre-school', *European Early Childhood Education Research Journal*, 18(4), pp. 445–456. doi: 10.1080/1350293X.2010.525923.

Sutton-Brown, C. A. (2014) 'Photovoice: A Methodological Guide', *Photography and Culture*, (7:2), pp. 169–185.

Sutton-Smith, B. (1997) The Ambiguity of Play. Cambidge: Harvard University Press.

Swart-Kruger, J. (2002) 'Children in a South African Squatter Camp Gain and Lose a Voice', in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 111–133.

Veitch, J. *et al.* (2014) 'Are Independent Mobility and Territorial Range Associated with Park Visitation among Youth?', *International Journal of Behavioral Nutrition and Physical Activity*, 11(1), pp. 1–6. doi: 10.1186/1479-5868-11-73.

Walls, J. K., Helms, H. M. and Grzywacz, J. G. (2016) 'Intensive Mothering Beliefs Among Full-Time Employed Mothers of Infants', *Journal of Family Issues*, 37(2), pp. 245–269. doi: 10.1177/0192513X13519254.

Wang, F. *et al.* (2012) 'Stuck between the Historic and Modern China: A Case Study of Children's Space in a Hutong Community', *Journal of Environmental Psychology*, 32(1), pp. 59–68. doi: 10.1016/j.jenvp.2011.10.001.

Westley, T. *et al.* (2014) 'Parental Neighborhood Safety Perceptions and Their Children's Health Behaviors: Associations by Child Age, Gender and Household Income', *Children, Youth and Environment*, 23(3), pp. 118–147. doi: 10.7721/chilyoutenvi.23.3.0118.

Wilhjelm, H. (2002) 'Large but Not Unlimited Freedom in a Nordic City', in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 161–182.

Wilson, N., Martin, A. C. and Wang, C. C. (2007) 'Engaging Young Adolescents in Social Action Trough Photovoice: The Youth Empowerment Strategies (YES!) Project', *Journal of Early Adolescence*, 27(2), pp. 241–261.

Wilson Outley, C. and Floyd, M. F. (2002) 'The Home They Live In: Inner City Children's Views on the In uence of Parenting Strategies on Their Leisure Behavior', *Leisure Sciences*, 24, pp. 161–179.

Witten, K. *et al.* (2013) 'New Zealand parents' Understandings of the Intergenerational Decline in Children's Independent Outdoor Play and Active Travel', *Children's Geographies*, 11(2), pp. 215–229. doi: 10.1080/14733285.2013.779839.

Woolley, H. (2015) 'Children and Young People's Spatial Agency', in Hackett, A., Procter, L., and Seymour, J. (eds) *Children's Spatialities*. Houndmills: Palgrave Macmillan, pp. 163–178.

Woolley, H. E. and Griffin, E. (2015) 'Decreasing Experiences of Home Range, Outdoor Spaces, Activities and Companions: Changes across Three Generations in Sheffield in North England', *Children's Geographies*, 13(6), pp. 677–691. doi: 10.1080/14733285.2014.952186.

Woolley, H. and Kinoshita, I. (2015) 'Space, People, Interventions and Time (SPIT): A Model for Understanding Children's Outdoor Play in Post-Disaster Contexts Based On a Case Study from the Triple Disaster Area of Tohoku in North-East Japan', *Children and Society*, 29(5), pp. 434–450. doi: 10.1111/chso.12072.

Woolley, H. and Lowe, A. (2013) 'Exploring the Relationship between Design Approach and Play Value of Outdoor Play Spaces', *Landscape Research*, 38(1), pp. 53–74. doi: 10.1080/01426397.2011.640432.

Wu, F. and Logan, J. (2016) 'Do Rural Migrants "Float" in Urban China? Neighbouring and Neighbourhood Sentiment in Beijing', *Urban Studies*, 53(14), pp. 2973–2990. doi: 10.1177/0042098015598745.

Xiao, S. (2016) 'Intimate Power: the Intergenerational Cooperation and Conflicts in Childrearing among Urban Families in Contemporary China', *The Journal of Chinese Sociology*, 3(1), p. 18. doi: 10.1186/s40711-016-0037-y.

Yin, R. K. (Robert K.-Z. (2014) Case Study Research: Design and Methods, 5th ed., Los Angeles, California: SAGE. doi: 10.1080/09500790.2011.582317.

Zhang, J., Emery, T. and Dykstra, P. (2018) 'Grandparenthood in China and Western Europe: An Analysis of CHARLS and SHARE', *Advances in Life Course Research*. Elsevier, (September), pp. 1–10. doi: 10.1016/j.alcr.2018.11.003.

Zylicz, P.-O. (2002) 'Adapting During a Time of Great Change: A Return to Warsaw', in Chawla, L. (ed.) *Growing Up in an Urbanising World*. United Kingdom: UNESCO Publishing, pp. 201–217.

#### Literature in Chinese

Ma, G., Mi, J. and Ma, J. (2017) 中国儿童肥胖报告.

Bao, Luquan. 2013. Nature Elements Design in Children Outdoor Play Environment. China Urban Foristry. 2013, 03.

Chen, Chuanrong. 2009. Rethinking of Children's Outdoor Play Environment in Residential Area-Take Hexi District, Naning as Example. *Sichuan Architecture*. 2009, 05.

Chen, Shuqian. 2014. Urban Children Outdoor Play Environment Research in Zhuzhou. s.l.: Middle-south Foristry University, 2014.

Chen, Zhou. 2004. Children-oriented Playground Design. *Journal of Hunan Agricultural University*. 2004, 03.

Gao, Liyang. 2012. Suggestions for Kindergaten Outdoor Environmnt Design. Academy. 2012, 17.

Kuang, Meilin. 2014. Children Park Design in Neijiang. s.l.: Northeast Agriculture University, 2014.

Li, Lan. 2010. Chidlren's Play Space Design in Residential Area. Architecture Knowledge. 2010, 12.

Lin, Si Run & Yulian. 1996. Relationship Between Kindergarten Environment and Children Development. *New Architecutre*. 1996, 01.

Liu, Honghu Cao & Chengshan. 2005. Children Playground Design Mthods Research in Residentila Area. *Landscape Engineer*. 2005, 10.

Ouyang, Yan. 2008. Chilern Playgroun Desing in Urban Parks. Guangxi Horticulture. 2008, 01.

Tang, Liying. 2004. Urban Children Playground Spacial Research. s.l. : Southwest Jiaotong University, 2004.

Wang, Meng. 2008. Residential Area Children Play Environment Design Priciples. *Modern Science*. 2008, 09.

Wei, Jue. 2014. Nature Elements Desing of Children Outdoor Playground in Residential Area. Are and Design. 2014, 03.

Yang, Zhangbin. 2010. Children Playground Design in Danmark. *Chinese Landscape Architecture*. 2010, 11.

Yao, Sumei. 2009. Children Play Facilities in Parks-Research into Fuxing Park and Wujing Park in Shanghai. *Journal of Shanghai Jiaotong University*(Agricultural Science). 2009, 03.

Yu, Guifen. 2009. Children's Playground Design in Residential Area. s.l.: Northwest Agricultural and

Forestry University, 2009.

Zhang, Liz. 2001. Strangers in the City: Reconfigurations of Space, Power, and Social Networks within China's Floating Population. Stanford : Stanford University Press, 2001.

Zhang, Xinli. 2006. Children Should Play in Nature Environment. Preschool Education. 2006, 05.

Zhao, Naili. 2010. *Child-Friendly Neighbourhood In Foreign Countries*. s.l. : Beijing Foristry University, 2010.

Zhao, Huachuan & Zhao Chengwei, (2015). In: Childhood Games. Beijing: Culture and Art Publishing. Page 45-133.

### Appendix

#### Interview Questions with children

- 1. Do you like playing outside?
  - a. Why?

2. Comparing playing inside home with playing outside, which do you prefer?

If *outside home* take details of:

- a. Where do you usually play outside?
- b. Why do you like playing at that place? (Prompt: Whether because it is close to home or it is interesting?)
- c. What do you play at that place?
- d. Whom do you play with? (Prompt: <u>friends</u>, <u>parents</u> or <u>grandparents</u>?)

If *friends* take details of:

- Boys or girls?
- Younger than you or older than you?
- How many people?

If *inside home* take details of:

- a. Play with whom?
- b. How many people?
- c. And play with what kind of things?
- 3. Weekend, holidays and summer vacations
  - a. If you have a one-day vacation, which places do you like to play, in Beijing?
  - b. Why?
  - c. Have you been outside Beijing for sightseeing? Where is that?
  - d. And where is your favourite place?
  - e. Why do you like that place?
- 4. Safety, freedom or the independence level
  - a. Are you going to school alone? (Prompts: parents, grandparents or alone) ]

Why?

- b. How do you go to school and after school courses? ( Prompts: walk, car, bus, taxi) Why?
  - c. Have you ever go to school alone?

d. When you are playing outside whether guardians would also be there? Who are they?

#### Why?

- e. And if you playing outside alone, what are the rules parents give to you? (Prompt: mind the cars, or mind the dogs)
- 5. Basic information
  - a. How old are you?
  - b. What's your parent's job?
  - c. And whether your parents have enough time to play with you?

#### Extended interview questions with children

- 1. Name of primary school
- 2. How long have you lived here? Where did you come from before that?
- 3. About their identification and familiarity about their area
  - a. What is the name of your area?
  - b. How would you describe it to someone who had never been there and who want to know what it was like to be there?
  - c. Please tell me about the history of your area?
  - d. How do you know about that?
- 4. Transformation of their area
  - a. Has your area changed in your memory?
  - b. Do you think it has become better or worse? Why?
  - c. Have you been able to do anything to change it?
- 5. Please draw me a map of the area you live in, and show me:
  - a. The places you do things in, or spend your time
  - b. The routes you travel along
  - c. All the places you think are important in the area
- 6. Details about the area based on the map
  - a. Where is the best place?
  - b. Are there places you parents forbidden you go into?
  - c. Are there any dangerous places in your area? What makes them dangerous?
- 7. Games
  - a. What's the game you usually play with your friends? Please describe them
  - b. Do you think you can learn something through playing games? What is that?
- 8. Interact with nature elements
  - a. Do you know any plant's name in your area? Name them.
  - b. Do you know any name of birds, insects or animals in your area? Name them.
  - c. Do you usually play with any of the plants?
  - d. Do you like to play with animals or insects?
- 9. Learn through outdoor play
  - a. Do you think outdoor play is good for you? In which aspect and how? ( Prompts: health?)
  - b. What new things have you learned about, while going about your area of the city, or while watching things happen there?
  - c. Is this something you wouldn't learn at school, at home, or from TV?
- 10. Weather and air condition
  - a. What kind of weather is worst for you? Why?
  - b. How do you think about the air conditions?

- c. If it is a smog day, whether you will go out to play?
- 11. About school life
  - a. Are you a member of your class committee in your class? What is the tittle?
  - b. What do you like or dislike in your school?
  - c. Whether your parent's strict with you school grades?
  - d. How many after school classes do you attend each week? What are they?
- 12. Please tell me about the best day in your life.

#### Interview questions with adults as guardians

- 1. Details about their child's outdoor play
  - a. Where is the favourite place your child usually plays in?
  - b. What part of the day or night does your child normally spend playing outside?
  - c. What do they play at there?
  - d. Whether you accompany them when they playing outdoors?
  - e. What did your child do yesterday, and where?
- 2. Attitudes toward their child's outdoor play
  - a. Are those places suitable for what they are doing?
    - If <u>no</u> how should be changed?
  - b. Comparing playing outside with playing inside home, which would you prefer to encourage your child to do?
  - c. Do you think your child has enough time to play outside?
  - d. How do you think about your children's outdoor play? Why?
    - (Prompts: is outdoor play good and helpful for your child's development? Why?)
  - e. Do you think you child could learn something through outdoor play?
    - If <u>yes what is that?</u> Do you think that's important for you child?
  - f. Is there any of their outdoor activities unsafe, or improper, or wasteful? Why?
- 3. Take child to other places for a vacation
  - a. Do you take him to other cities other countries for vacation?
  - b. Where?
  - c. How often?
  - d. Why?
- 4. Take care of child
  - a. When your child is playing outside, will you stay close to them and take care of them? Why?
  - b. Could you child play outside alone? If yes: where could they play? If no: Why?
  - c. How far could your child go alone?
  - d. When you child playing outside, what is your main concern?
  - e. Do you think when you child playing outside alone, other parents or adults nearby will take care of them? Why?
  - f. To which extent you will trust others to take care of your child instead of you? Who are they?

#### Interview questions with adults as local residents

1. The childhood outdoor playing experiences, when you are young? (Prompts: Where did you use to play?

What did you use to play?

Whom did you use to play with?

How far could you go when there is no adults accompany?

Are there any spaces you were forbidden to go? Why? )

- 2. Local identification and transformation
  - a. How long have you lived here? Where are you come from before that?
  - b. How would you describe it to someone who had never been there and who want to know what it was like to be there?
  - c. Has this area changed in your memory?
  - d. Do you think it has become better or worse? Why?
  - e. Have you been able to do anything to change it or have influence of change it?
- 3. Compared your growing up experience with the children I nowadays, what is the biggest difference? Which is better? Why?

#### General interview questions with teachers

- 1. Knowledge of their students' daily lifestyles.
- 2. Knowledge of the school policies about children's after school activities.
- 3. Opinion about the academic pressure their students are facing.
- 4. Their understandings of the current situations.

#### General interview questions with Officials

1. knowledge of children's daily life and how do they use their outdoor environments? How does he know that? From their own child's experiences, academic research results or other methods?

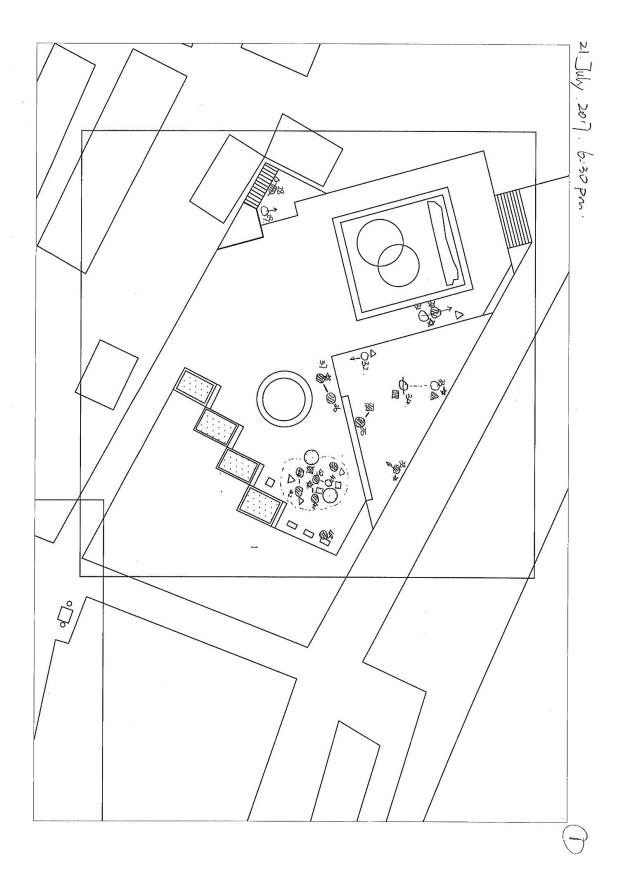
2. The officials' own evaluation of the quality of the children's outdoor environments in that area.

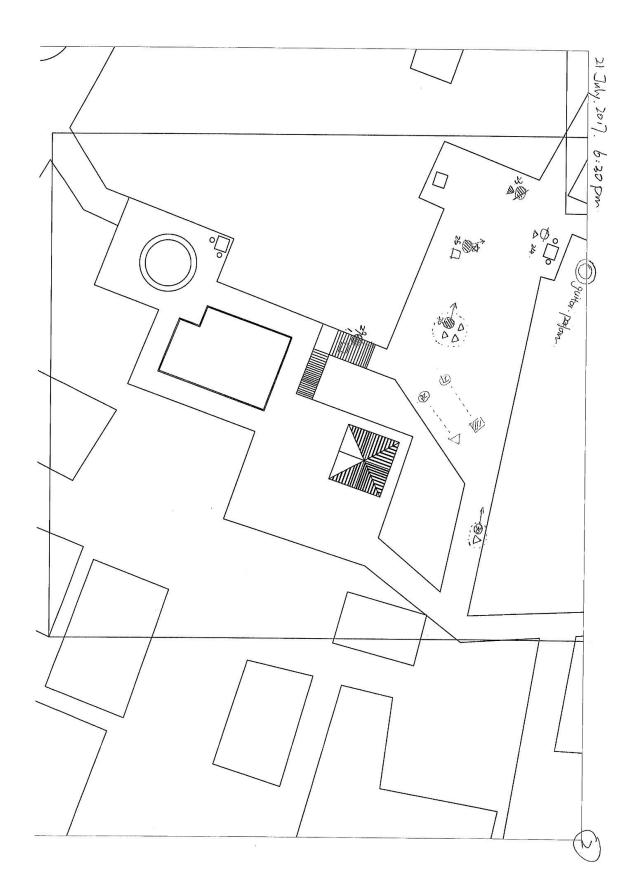
Is there any child related policies?

How do these policies affect the children's life experiences in this area, or how do the policies affected by children?

- 3. Memories of his own childhood environments and growing up experiences.
- 4. His estimate of how that environment and its use by children is currently changing.

# Example of behaviour mapping record





620	6	Number	Apparent age	General play type	
630	$\bigcirc$	28	1	locming to undu	3.1.1.
		27 30	2	running & play avoured play scooter troyeller	3.1.1.
			4	play scopter Troyeller of	3.2.7
		31	3.		3.2.2
		32	2	passic, through	
		33	<u>t</u>	Passic through Playing with bubbles 1	3.2.1
		3/4		watchice	3.1.1
		32	2	Reputer adults	7.
		36.	8	Stand ant talkes with	
		3)	12	Stand on skateboard P.	
		- 38	<u></u>	Scortor	······································
		39	2	f playing with bubbles	
		400	<u> </u>		
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		45	2 :	kiololle ride	
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		27	<u> </u>	Dassie Uningh	
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# Recording form for behaviour mapping.

Reference Sheet

General Legend	General Play Typ	e	Detail Play activities		
Mode Female.	1. Play with High verbal content	1.1 General verbal plays	Joke riddle narrative verbal description Entertainment rhymes Counting out Song and dance Clapping rhymes Skipping rhymes Ball-bouncing rhymes		
122 Devents	i.	1.2 Rhymes			
toys vehicles. Scootars skotteboool,		1.3 Chess games	Chess Card Dice		
0-> passing through.	2. Play with High imaginative content	2.1 Role enactment acting game	Wedding Fighting Family Drama		<u> </u>
0-0 communicating		2.2 Objects imagination	Branches Mud/sand Toys Shade		
0O interaction	3. Play with High physical content	3.1 Game without playthings	3.1.1 Individual	Jump Slide Run	
O \$ O inconflict			3.1.2 Group	High-power it	
-O- Stand. Still, hesting				No it	
			3.1.3 Team	Tug of war	
(_) apparent behaviour. territory		3.2 Game with playthings	3.2.1 Individual	Balls Ropes	Stones Branches
			3.2.2 Group 3.2.3 Team	Balls Ropes Balls	Stones Branches Stones
(O) interventions			5.2.5 Team	Ropes	Branches
N.	4. Making things	Handcrafting	Windmill Kate Van		
	5.Raise, grow, observation and play with animals and plants	5.1 Animals	Dog Cat	Bird Rabbit	
		5.2 Insect	- 2	1	
		5.3 Plants	Willow Radish	Flowers	
	6. Interventions	6.1 Events	Shadow play Monkey show		
		6.2 Seasonal or weather related	Snow warfare Making snow ma	n	
	7. Play with adults				
	8. Play with technology				

T stell need to be clauges.

## **Example of Diary Form**

时间	地点	做什么?	和谁?	开心吗?
Time	Place	Activity	Company People	$\odot \odot \odot \odot \odot \odot$
0: 00				
1: 00				
2: 00				
3: 00				
4: 00				
5: 00				
6: 00				
7: 00				
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23: 00				
24: 00				

姓名 (Name) : \_\_\_\_\_\_年龄: (Age) :

爱好 (Hobby) :

男生 (Boy) □ 女生 (sGirl) □