



TRANS-URBAN-EU-CHINA

Transition towards urban sustainability through
socially integrative cities in the EU and in China

Deliverable

**D1.1 Report, including good practice examples in Europe
and China, derived from the knowledge base**

WP 1 Community building and place-making in
neighbourhoods



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EXECUTIVE SUMMARY

The narrative that WP1 built with the glossary seeks to scientifically identify general concepts and urban design approaches that can contribute to creating socially integrative neighbourhoods and cities, with two major fields of emphasis.

The first relates to social identity and sense of community, individual awareness and responsibility.

The second deals with building crafts and cultural heritage, traditional knowledge and creative industries. In fact, the main objectives of WP1 are: to identify integrated and design-oriented approaches for Chinese and European cities that maximize co-benefits and minimize potential trade-offs between human, cultural, environmental and economic drivers; this process will provide, in a final stage, recommendations for community building and social inclusiveness, through public engagement, education, digital innovation. So, WP1 aim is to identify how to balance city development with tangible and intangible cultural heritage and specific opportunities for intervention on public spaces both in China and Europe.

The comparison between EU and China has been done in a systematic way, through different “topics of comparison”, identified as a first step of the research work: these “topics of comparison” correspond to different fields of research interest. They tie together, in a comparative and critical manner, almost two *words* and *places* from EU and China or highlights peculiar aspects useful to define the methodological and cognitive framework of each specific task (Table 1 and 2).

The research work based on development of *words* and *places* linked to the topic “*Community building through public engagement*” (Task 1.1) illustrates how public engagement has been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom public engagement was considered in the first place.

As for the *Knowledge Base* phase, the authors analyses citizens’ perspectives to identify opportunities and challenges of public engagement, in efforts to achieve sustainable lifestyles that enhance the vitality and quality of urban life.¹ The authors map citizens’ needs through insights from theories of social practice and user-centered design, and experiment context-specific and citizen-centered studies and participatory design approaches. In view of the following *Transformative Knowledge Base* phase, the authors on one side identified urbanization trends and the emergence of new, smart technologies tailored to specific locations or user-groups, while on the other side, identify forms of organization and physical/digital communication where social negotiations and agreements take place. This will provide input for the development of feasible new design interventions and instruments for community development, aimed at individuals and communities. Gains for stakeholders are then disclosed, including policy makers, urban authorities, design agencies or consultants. This is done by ways in which the public may and may not be engaged in order to achieve sustainable neighbourhoods and communities. For *words* Task 1.1 identifies three “topics of comparison” that have to be intended as the main aspects that, within the topic of the task, can be compared: evolution of sense of community

¹ Each section has been drafted by one or more individual researchers, referred to as “authors” throughout the report.

in history, actual organizations (stakeholders) influencing community building and scientific methods/approaches. For *places* Task 1.1 identifies seven “topics of comparison”, that correspond to seven different places among EU and China: government-professional initiative (Qinghe, Beijing), enterprise-professional initiative (Chuangzhi Community Garden, Shanghai), government initiative (Da-Shi-Lar, Beijing), professional initiative (Dongsinan, Beijing), community of residents in cooperation with municipality (Svartlamoen, Trondheim), online social participatory network (Reykjavik, Iceland), citizen driven transition towns (Landås Bergen, Norway).

The research work based on development of words and places linked to the *topic “More inclusive cities through education and digital innovation”* (Task 1.2) revolves around the highly debate issues of how education and/or digital innovation have been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom these innovations were implemented in the first place, was raised. As for the *Knowledge Base* phase, the authors analyse transition examples in Europe and China that rely on lifelong education and advanced digital tools to achieve socially integrative neighbourhoods (aligned with task 4.3.1 cataloguing). The authors then consider the role of public and private institutions that provide networks for citizens living in urban areas in Europe and China, with particular attention to the educational system. Finally, they verify the state of lifelong education in Chinese cities and its influence on the urban social tissue.

In view of the following *Transformative Knowledge* phase, the research work leverages on the role of lifelong education as a primary service of a knowledge-cantered society and a pivotal mechanism for promoting harmony and unity. It brings a great contribution to broaden the comparative analysis on education and active ageing in Europe and China, with relevant policy implication on education and input on urbanization policies. With the ultimate aim of providing *Recommendations*, the dissertations build on the role of lifelong education and the support of advanced digital tools to promote social inclusion and achieve a sustainable development for urban-rural areas, considering gender, as well as the needs of different age groups of the population. The dissertations also contribute to Subtask 4.3.3 to identify strategies in urban governance and planning based on evaluation of data, sharing information and analysis for the competence centre proposed in WP4. For *words* Task 1.2 identifies four “topics of comparison” that have to be intended as the main aspects that, within the topic of the task, can be compared: towards all stages of life, towards aging people, towards children, public facilities for education. For *places* Task 1.2 identifies three “topics of comparison”, that correspond to eight different places among EU and China: close the S&T gap between rural and cities (Zhenfeng Middle School – Middle School S&T Museum in Guizhou Province and Scarabò, Macerata, Italy), popularization of science into rural school (Zhongguancun Inno Way – Makerspace in Beijing and studycase in Marche region, Italy), Effectation of the education museum in rural area (Baiyangdian RSM – Rural Star Makerspace, Luoyang Lohas RSM - Rural Star Makerspace and The Museum of Science and Education of the San Isidro Institute of Madrid, Ørestad Gymnasium in Copenhagen).

The research work based on development of *words* and *places* linked to topic “*Socio-economic values through heritage preservation*” (Task 1.3) illustrates how heritage preservation has been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom heritage preservation was considered in the first place. As for the *Knowledge Base* phase, the authors compare the varying approaches to cultural heritage preservation in Europe and China, in particular the ability to balance city development with tangible and intangible cultural heritage (along with Task 3.1). Both a historical and a current perspective have been adopted, including preservation of physical and non-

tangible environments that contribute to community building and local identity. Moreover, authors also highlight challenges connected to cultural heritage in the urban transition process, including issues related to population pressure, development policies of local economies, and financial support for heritage sites. In view of the following *Transformative Knowledge* phase, the research work then builds on recent proven methodologies to ensure the heritage preservation and to leverage on touristic promotion, through practices such as culturally sensitive renovation and urban place-centring of designated sites and events, related to intangible cultural heritage. It identifies the socio-economic values of cultural heritage for the transformation of the community and local inhabitants, based on case studies. With the ultimate aim of providing *Recommendations*, the authors stress the importance of urban heritage as a key resource to improve the urban liveability and to foster economic development and social cohesion. The authors assume that incorporating in the preservation of intangible cultural heritage the role of older generations can raise awareness among young people. For *words* Task 1.3 identifies four “topics of comparison” that have to be intended as the main aspects that, within the topic of the task, can be compared: local and national understanding of heritage, links between heritage protection and neighbourhood regeneration, heritage conservation vs. development, policies and planning processes. For *places* Task 1.3 identifies three “topics of comparison”, that correspond to five different places among EU and China: neighbourhood as cultural heritage (Roros, Norway), neighbourhoods, monuments and buffer zones (Xi'an Bei Yuan Men Historic District, The Muslim District and Historic Centre of Tallin, Estonia), historic district and gentrification (Bakklandet, Norway).

The research work based on development of *words* and *places* linked to topic “*Place-making and design of public spaces*” (Task 1.4) illustrates how place-making tools and design of public spaces have been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom specific place-making and design tools were introduced in the first place. As for the *Knowledge Base* phase, in the place-making process, authors analyse the quality of urban public spaces as a place of human activities, where social interaction and participation can happen. The aim is to map the processes of social agreement for building of new communities, as well as the forms of spatial organization where these agreements take place. In view of the following *Transformative Knowledge* phase, the research work assesses the best practices in which place-making is influenced by the design quality of public spaces: in the context of the structural changes that Chinese population is currently experiencing, it is imperative that the aim of design action leverages on public engagement. With the ultimate aim of providing *Recommendations*, the analysis promotes spatial quality through a catalogue of design and planning approaches, adapted to living conditions in China and Europe. In particular, it focuses on how contemporary urban design should take the human scale as a main principle, promoting the cultural tradition of the city as a place of human activities. For *words* Task 1.4 identifies one “topic of comparison” that has to be intended as the main aspect that, within the topic of the task, can be compared: how to shape a community from planning perspective. For *places* Task 1.4 identifies four “topics of comparison”, that correspond to ten different places among EU and China: street / pedestrian area / market (LaoMen Dong, Nangjing, mixed uses in mid-rise residential communities, Liuyun Xiaoqu, Guangzhou and Macrolotto Zero, Prato, Italy), cultural role in community transition (Xiaopu Village – Songzhuang Town, Tongzhou District, Beijing and Monte Carasso, Switzerland), worker housing (Jiu-Xian-Qiao, Chaoyang, Beijing and Matteotti Village in Terni, Italy), renovated traditional community (Ju-er Hutong Dongcheng, Beijing and Case del Quartiere, Turin, Italy).

1 INTRODUCTION

The scientific aim of this work is to establish a critical glossary based on significant *words* and *places* that identify urban design approaches that can contribute to creating socially integrative neighbourhoods and cities. The comparison between EU and China has been done in a systematic way, through the preliminary identification of several “topics of comparison”: this would tie together in a comparative and critical manner almost two *words* and *places* from EU and China or highlights peculiar aspects useful to define the methodological and cognitive framework of each specific task (see Tables 1 and 2).

This series of *words* and *places* represents a tool to identify common concepts developed at this stage. *Words* define a shared and common terminology vocabulary, while *places* show lessons learned from the perspective of the socially integrative potential of the experiments carried out so far. *Words* and *places* are shared among WP team and help to develop a common base for the further development of the research work in the next phases of the project, namely “Transformative Knowledge” and “Recommendations”.

2 METHODOLOGICAL INTRODUCTION. WORDS, PLACES, TOOLS

To set up the “Knowledge Base”, the team of WP1 used an argumentative method that analyses phenomena in an interdisciplinary way, i.e. not by contrast but by interlocking between Western and Eastern culture. We rely on a consolidated literature models that just proved its scientific effectiveness in the field of humanities related to urban studies and cultural studies on China. Methodologically, seminal works for critical and interpretative researches related to *words* are: *Dictionnaire de la Chine contemporaine* (edited by Thierry Sanjuan-Paris, Colin, 2006), *L’aventure des mots de la ville* (edited by Christian Topalov, Laurent Coudroy de Lille, Jean-Charles Depaule, Brigitte Marin – Paris, Robert Laffont, 2010) and *China in Ten Words* (Yu Hua – New York, Anchor books, 2012). For the parts related to *places*, scientific literature models can be consider *Cities without ground: a Hong Kong guidebook* (Adam Frampton, Jonathan D. Solomon, Clara Wong – ORO Editions, San Francisco, 2012) and *The Handbook of Urban Morphology* (Karl Kropf – Chichester, Wiley & Sons, 2017).

We collected *words* (often in the form of locutions or concepts) that express crucial notions in relationship to the main topics of each task. We described *places* in which it is possible to identify and analyse transitional process that generate good practices, in Europe and in China, in relationship to the main topics of each task. In addition to a division (see Table 1 and 2) specifying whether the analysed context is European or Chinese, *words* and *places* have been categorized to facilitate the understanding of their choice and to guide the reader in the dissertation related to their analysis. The categorization has also facilitated the definition of the objectives and themes to be explored on the EU and China axis. Each “topic of comparison” illustrated in Table 1 and 2 facilitate the “knowledge base” process linked to the specific topic of each task.

In writing the glossary, the team of WP1 had the aim to answer to the following main questions:

- What is a Socially Integrative City (SIC)?
- Which tools can we offer to analyse transition processes towards it?

WP1 focuses on the community level and identifies three categories that characterize a SIC: people, space and institutions. People occupy space and both are influenced by institutions through their organizations and set of rules. In our dissertations, people are represented by local inhabitants, migrants and vulnerable group, such as kids and aging people. Analysing people, good practices demonstrate that SIC can be achieved through the acceptance of diversity, combining social structure and social cohesion. From a spatial point of view, SIC can be achieved through a sense of belonging and mix of functions. Organization and rules should encourage the integration of residents into decision making system, joint responsibilities of owners and residents, give more rights to residents and more dialogue within the local community. To enhance a transition process through a SIC, public engagement and education are the main tools that WP1 has identified. Public engagement could be seen as the integration of residents (including migrants) into decision making system that means rights, responsibilities but also more dialogue and communication within the local communities (e.g. with the help of NGOs architects, urban planners, experts and also local community have the opportunity to discuss together planning and decision actions). To improve such a process, local government uses formal and informal educational processes to promote inclusion and integration in inhabitants of neighbourhoods that present specific social characteristics or problems to be solved. People and communities should encourage each person to realize its potential to improve identity through specific tools such as self-

construction or urban agriculture: these actions try to eliminate the knowledge gap between the people in order to promote integration with each other, such as in the rural urban areas in China. As far as transition, it is feasible, a SIC by promoting a more social participation, bottom-up processes and active citizenship by mixing private and public subjects.

Digital tools are encouraged in this transition processes and can be applied in the field of science education, lifelong education, active aging, but also as means to collect data for defining the best design process do design cohousing spaces, inclusive social building or very local educational museums. In any cases, it is important to integrate school activities with human potential at all stages of life, and to involve not only operators or public institutions, but all the community, from children to elderly, from residents to immigrants.

Public space could be seen as the protagonist of the several dissertations of each *word* and *place* in each Task. In fact, one of the crucial aspects to look at to achieve a SIC is understanding the tension between the sense of belonging to a place and the sense of being a part of a place. This is the way to discuss the difference between what is public and what is collective: to do this research work each Task developed its own methods that can be summarized in scientific literature review and reinterpretation of objective data in subjective and interpretative drawings. Each Task investigated in various ways the sense of belonging in relationship to the way in which public spaces are designed and built and the role of public space in relationship to its uses.

In a nutshell, the tools that WP1 recognizes to identify the transition process for a SIC are: (a) exchange of cultural value, (b) informal education, (c) fostering of collective memory through tangible and intangible heritage – more generally, sense of heritage and (d) participatory planning of public spaces (Figure 1).

What is a socially integrative city?

Which tools?

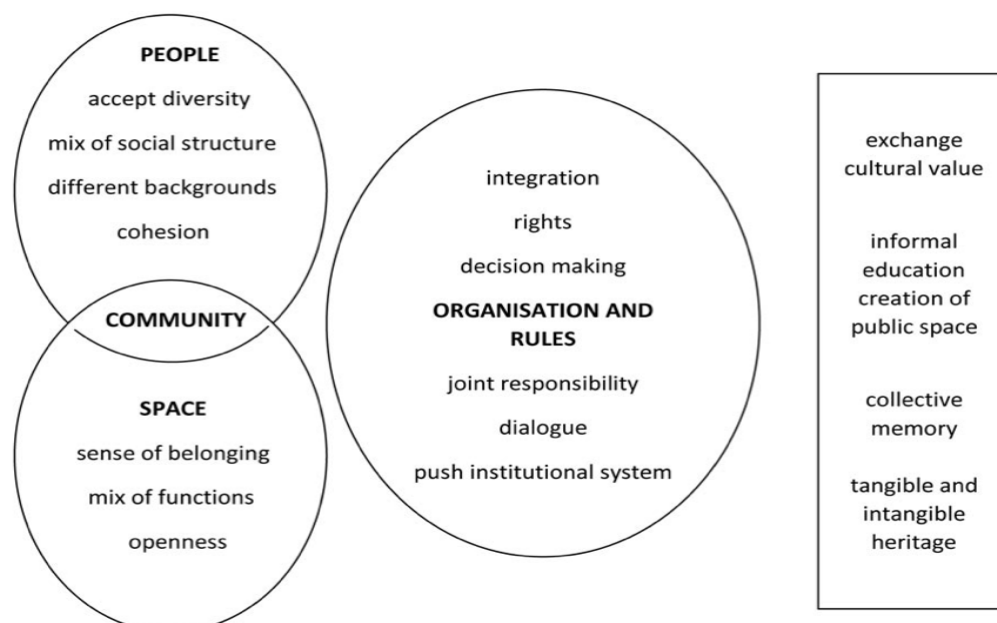


Figure 1 Socially Integrative City - Methodological scheme

In conceiving the glossary, *words* are useful to better comprehend the analysis done for each *place* both for Europe and China. In fact, the interest towards each place is to comprehend the real transition process that generates a good practice finalized at creating a high quality urban and sustainable urban space: the interest is not describing places for what physically they are but in comprehending social integrative practices in a transformative process that led to good practices to be considered in the future (Figure 2).

In this sense, goals of WP1 could be identified as follows:

- understanding how institutions physical environment, cultural value and design approach can interact;
- going beyond the simplification of the concepts of “top-down” and “bottom-up processes”;
- trying to understand how it is possible to start a participatory process;
- comprehending how people manage conflicts, imagining questions on which people could practice together;
- identifying “disturbances” (creation of niches able to reach agreements) as tools that produces transition, since “bad” and “good” disturbances are both parts of a positive transition.²

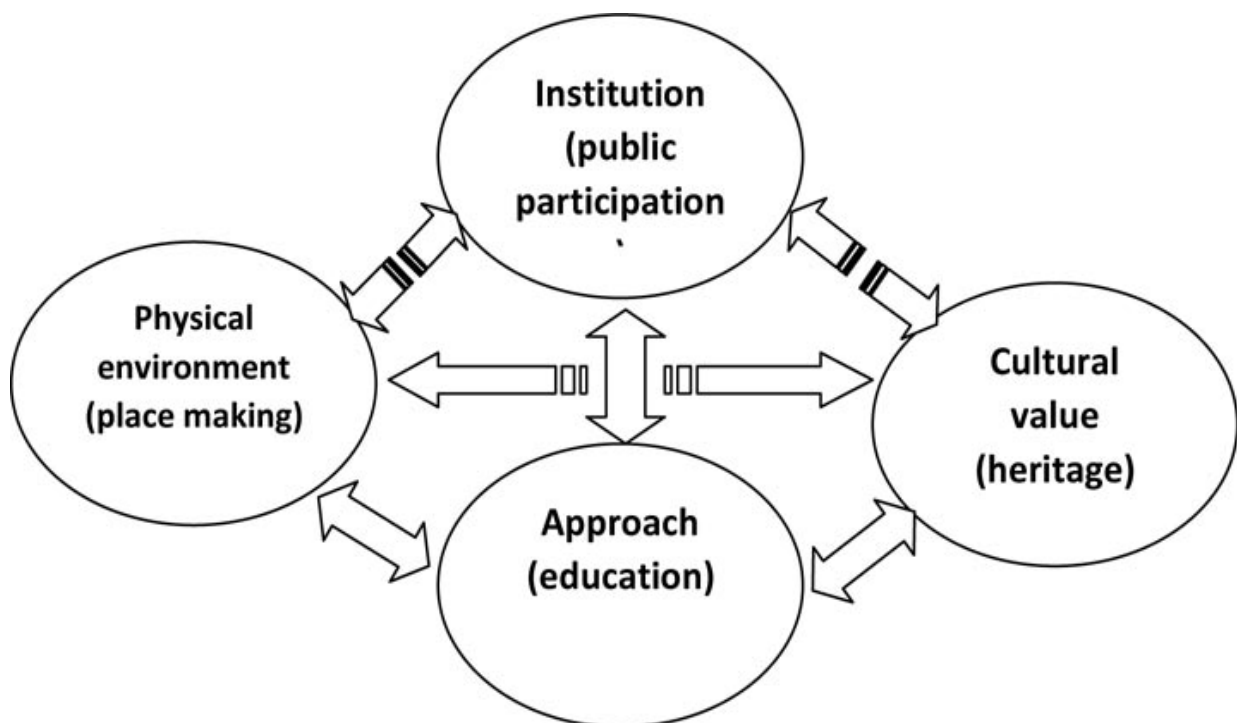


Figure 2 Transition process - Methodological scheme

² This is especially relevant for China as, promoted by various levels of governments, the country is transitioning from a less urban to a more urbanized society with increasingly intensified land use and higher quality of life (Wang, J., Wang, X. (2015). Transition of Chinese urban-rural planning at the new-type urbanisation stage. *Frontiers of Architectural Research* 4:341-343.).

Table 1 List of analyzed words:

TOPIC OF COMPARISON	WORDS China	WORDS Europe
Task 1.1: Community building through public engagement		
Evolution of Sense of Community in history	Community: Chinese community in historical evolution	Community: European community in historical evolution
Actual organizations (stakeholders) influencing community building	Residents' committee; Villagers' committee; Proprietors committee/homeowner committee; Sub-district office as governmental office	Dugnad; Velforening and Borettslag
Scientific methods/approaches		Cross cultural research perspectives on participatory design processes in China
Task 1.2: More inclusive cities through education and digital innovation		
Towards all the stages of life	Science education	Lifelong education
Towards aging people	Active ageing	Cohousing
Towards children	Makerspace	Innovative learning environments
Public facilities for education	Educational museums	Educating city
Task 1.3: Socio-economic values through heritage preservation		
Local and national understanding of heritage	Tangible and intangible heritage	Tangible and intangible heritage
Links between heritage protection and neighbourhood regeneration	Heritage in neighbourhoods (past –present)	Gentrification
Heritage conservation vs. development	Heritage and business	Heritage in modern society

Policies and planning processes	Chinese planning practices for heritage sites	Grass root initiative
Task 1.4: Place-making and design of public spaces		
How to shape a community from planning perspective	Residential planning (hierarchical system); Self-contained facilities based on resident quota and service radius; Gated community	Streetscape; Urban agriculture; Co-Design

Table 2 List of analysed places:

TOPIC OF COMPARISON	PLACES China	PLACES Europe
Task 1.1: Community building through public engagement		
Government-professional initiative	Qinghe, Beijing	
Enterprise-professional initiative	Knowledge & Innovation Community (KIC) Garden, Shanghai	
Government initiative	Da-Shi-Lar, Beijing	
Professional initiative	Dongsinan, Beijing	
Community of residents in cooperation with municipality		Svartlamoen, Trondheim
Online social participatory network		Reykjavik, Iceland
Citizen driven transition towns		Landås Bergen, Norway
Task 1.2: More inclusive cities through education and digital innovation		
Close the S&T Gap between rural areas and cities	Zhenfeng Middle School – Middle School S&T Museum in Guizhou Province	Scarabò, Macerata

Popularization of science into rural school	Zhongguancun Inno Way – Makerspace in Beijing	Study case of cohousing in Marche region, Italy
Effect of the education museum in rural area (curiosity and imagination of kids)	Baiyangdian RSM – Rural Star Makerspace; Luoyang Lohas RSM – Rural Star Makerspace	The Museum of Science and Education of the San Isidro Institute of Madrid; Ørestad Gymnasium in Copenhagen
Task 1.3: Socio-economic values through heritage preservation		
Neighbourhood as cultural heritage		Roros, Norway
Neighbourhoods, monuments and buffer zones	Xi'an Bei Yuan Men Historic District; The Muslim District	Historic Centre of Tallinn, Estonia
Historic district and gentrification		Bakklandet, Norway
Task 1.4: Place-making and design of public spaces		
Street / Pedestrian area / market	LaoMen Dong, Nangjing; Mixed uses in mid-rise residential communities. Liuyun Xiaoqu, Guangzhou	Macrolotto Zero, Prato
Cultural role in community transformation	Xiaopu Village – Songzhuang Town, Tongzhou District, Beijing	Monte Carasso, Switzerland
Worker housing	Jiu-Xian-Qiao, Chaoyang, Beijing	Matteotti Village, Terni
Renovated traditional community	Ju-er Hutong Dongcheng, Beijing	Case del Quartiere, Turin, Italy

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human, cultural, environmental and economic drivers; this process will provide, in a final stage, recommendations for community building and social inclusiveness, through public engagement, education, digital innovation. So, WP1 aim is to identify how to balance city development with tangible and intangible cultural heritage and specific opportunities for intervention on public spaces both in China and Europe.

The research work based on development of *words* and *places* linked to the topic “*Community building through public engagement*” (Task 1.1) illustrates how public engagement has been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom public engagement was considered in the first place.

As for the *Knowledge Base* phase, the authors analyse citizens’ perspectives to identify opportunities and challenges of public engagement, in efforts to achieve sustainable lifestyles that enhance the vitality and quality of urban life.³ The authors map citizens’ needs through insights from theories of social practice and user-centered design, and experiment context-specific and citizen-centered studies and participatory design approaches. In view of the following *Transformative Knowledge Base* phase, the authors on one side identified urbanization trends and the emergence of new, smart technologies tailored to specific locations or user-groups, while on the other side, identify forms of organization and physical/digital communication where social negotiations and agreements take place. This will provide input for the development of feasible new design interventions and instruments for community development, aimed at individuals and communities. Gains for stakeholders are then disclosed, including policy makers, urban authorities, design agencies or consultants. This is done by ways in which the public may and may not be engaged in order to achieve sustainable neighbourhoods and communities.

The research work based on development of words and places linked to the topic “*More inclusive cities through education and digital innovation*” (Task 1.2) revolves around the highly debated issues of how education and/or digital innovation have been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom these innovations were implemented in the first place. As for the *Knowledge Base* phase, the authors analyse transition examples in Europe and China that rely on lifelong education and advanced digital tools to achieve socially integrative neighbourhoods (aligned with task 4.3.1 cataloguing). The authors then consider the role of public and private institutions that provide networks for citizens living in urban areas in Europe and China, with particular attention to the educational system. Finally, they verify the state of lifelong education in Chinese cities and its influence on the urban social tissue.

In view of the following *Transformative Knowledge* phase, the research work leverages on the role of lifelong education as a primary service of a knowledge-centered society and a pivotal mechanism for promoting harmony and unity. It brings a great contribution to broaden the comparative analysis on education and active ageing in Europe and China, with relevant policy implication on education and input on urbanization policies. With the ultimate aim of providing *Recommendations*, the dissertations build on the role of lifelong education and the support of advanced digital tools to promote social inclusion and achieve a sustainable development for urban-rural areas, considering gender, as well as the needs of different age groups of the population. This research work also contributes to Subtask

³ Each section has been drafted by one or more individual researchers, referred to as “authors” throughout the report.

4.3.3 to identify strategies in urban governance and planning based on evaluation of data, sharing information and analysis for the competence centre proposed in WP4.

The research work based on development of *words* and *places* linked to topic “*Socio-economic values through heritage preservation*” (Task 1.3) illustrates how heritage preservation has been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom heritage preservation was considered in the first place. As for the *Knowledge Base* phase, the authors compare the varying approaches to cultural heritage preservation in Europe and China, in particular the ability to balance city development with tangible and intangible cultural heritage (along with Task 3.1). Both a historical and a current perspective have been adopted, including preservation of physical and non-tangible environments that contribute to community building and local identity. Moreover, authors also highlight challenges connected to cultural heritage in the urban transition process, including issues related to population pressure, development policies of local economies, and financial support for heritage sites. In view of the following *Transformative Knowledge* phase, the research work then builds on recent proven methodologies to ensure the heritage preservation and to leverage on touristic promotion, through practices such as culturally sensitive renovation and urban place-centring of designated sites and events, related to intangible cultural heritage. It identifies the socio-economic values of cultural heritage for the transformation of the community and local inhabitants, based on case studies. With the ultimate aim of providing *Recommendations*, the authors stress the importance of urban heritage as a key resource to improve urban liveability and to foster economic development and social cohesion. In this way authors assume that incorporating the role of older generations in the preservation of intangible cultural heritage can raise awareness among young people.

The research work based on development of *words* and *places* linked to topic “*Place-making and design of public spaces*” (Task 1.4) illustrates how place-making tools and design of public spaces have been meaningful in a ‘story of transition towards a new regime of socially integrative cities’ and why/by whom specific place-making and design tools were introduced in the first place. As for the *Knowledge Base* phase, in the place-making process, authors analyse the quality of urban public spaces as a place of human activities, where social interaction and participation can happen. The aim is to map the processes of social agreement for building new communities, as well as the forms of spatial organization where these agreements take place. In view of the following *Transformative Knowledge* phase, the research work assesses the best practices in which place-making is influenced by the design quality of public spaces: in the context of the structural changes that Chinese population is currently experiencing, it is imperative that the aim of design action leverages on public engagement. With the ultimate aim of providing *Recommendations*, the analysis promotes spatial quality through a catalogue of design and planning approaches, adapted to living conditions in China and Europe. In particular, it focuses on how contemporary urban design should take the human scale as a main principle, promoting the cultural tradition of the city as a place of human activities.

3 WORDS

3.1 COMMUNITY BUILDING THROUGH PUBLIC ENGAGEMENT

3.1.1 EVOLUTION OF SENSE OF COMMUNITY IN HISTORY

Community, generally speaking, means a group of people with some relations and a certain shared territory where they live and work. Community is a much diversified concept. It can be a small-scale settlement such as a village, or a large-scale organization such as a nation or a transnational organization like European Union. It can be defined by different dimensions such as social, economic, cultural and political aspects. In this section, we consider community as a basic unit of socio-spatial system with the emphasis on the mechanism of how local people are organized and integrated to form the whole society. In the following part, we will introduce the concepts of community, sub-district office, residents' committee, villagers' committee, and homeowner committee to analyse community's diversified forms, its administrative framework, and its operation mode (Figure 3).

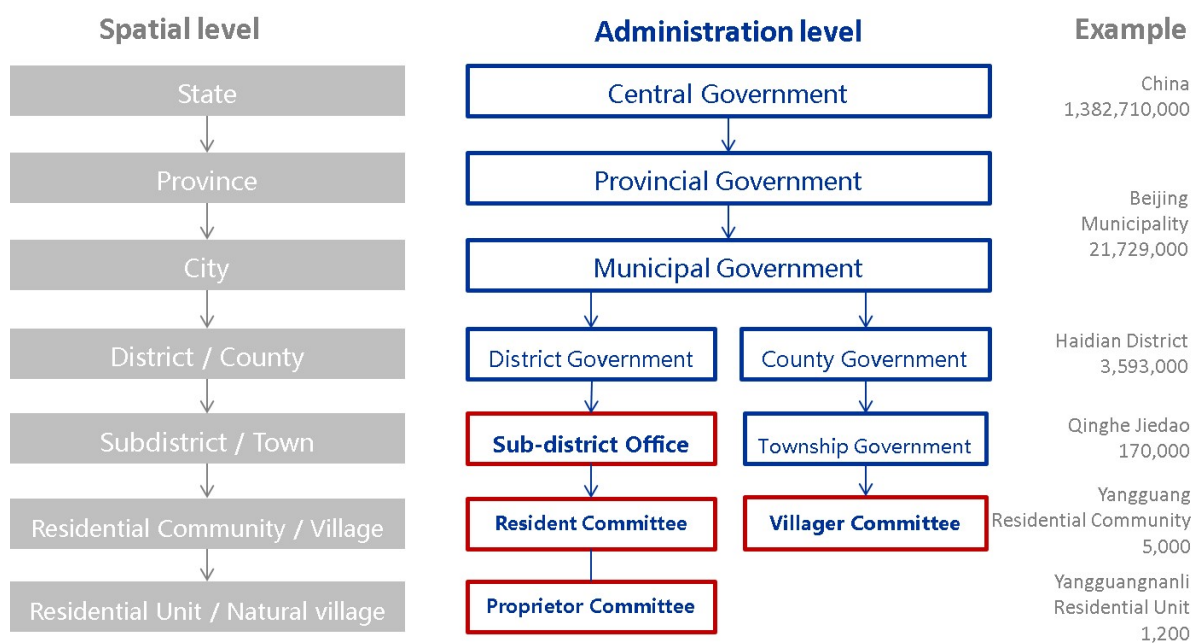


Figure 3 Administrative hierarchy in China for understanding the Words (Source: Chen Yulin, Liu Jian, Liu Jiayan, Hamama Badiia)

3.1.1.1 Community: Chinese community in historical evolution

Community is a dynamic concept in China. It can be traced back to the basic organization form of collective production (well-field system in the Shang and Zhou Dynasties) and has transformed along with the evolution of the institution and pattern of city building (Li-Fang in the Tang and Song Dynasties).

The typical type of community of traditional rural China is clan community. Since the founding of PRC (1949) and until 1980, work unit (Danwei) compounds were built in the centrally planned housing system. Since the housing reform in 1980s, commodity housing community has become the dominant form.

Clan community is a community of traditional rural China. Clan community is built by the members of clan. Local gentry takes a lead role in community affairs. The form of a clan community is usually determined by the organization of agricultural production and local natural environments (Fei, 1939; Skinner, 1997). Besides housing, a public building and a plaza are usually located in the Centre of the community for religious and cultural function, such as temple (Wu, 2014).

Traditional neighbourhood is a very common form of community in historical Chinese cities transformed from the Li-Fang System of the Tang & Song Dynasties (A.D. 618 – A.D. 1279). In north China, traditional neighbourhood is a “hutong-courtyard” system, which can be traced back to the Yuan Dynasty through the Qing Dynasty (A.D. 1271 – A.D. 1912). The residential quarters are characterized by introverted yards surrounded by single-story houses. The land use is mixed, with primary schools and temples within the residential blocks and major commercial facilities along the main streets.

Since the founding of PRC in 1949 up to the 1980s, work unit (Danwei) compounds were built as a form of community. Work unit compound is built and managed by work unit where houses are allocated to work unit staff as part of social welfare. Work unit compound is characterized by mixed use of work places, housing, educational and cultural facilities and other living services. It is an ideal community setting in balancing job and housing and reducing commuting.

Commodity housing is built by real estate developers. Most of commodity housing has the attributes of homogeneous residential use, gated community, and high-rise buildings. It is managed by neighbourhood committee and maintained by property management company.

3.1.1.2 Community: European community in historical evolution

Understandings of and practices within communities and their historical development vary widely in Europe. Their role depends on how community is defined, which will naturally vary with time, place, scale and type (e.g. identity or organization) of community studied. Communities in the north, south west and east of Europe will naturally have entirely different purposes and organizations. Here we elaborate on a broad understanding of the post-1945 European concept of community. The word ‘community’ derives from the Old French *comuneté*, which comes from the Latin *communis*, i.e. ‘shared in common’. In its most general form, this means that community is about something shared between people in a specific locality. Nevertheless, we need to specify further, as ‘sharing something’ can be said to have been the basis of human development since the *homo sapiens* came about (Harari, 2014).

The European discussion of community often starts with making a distinction between *Gemeinschaft* and *Gesellschaft*. The two different concepts originate from the German sociologist Ferdinand Tönnies who described two types of human association: *Gemein-schaft* (often translated as 'community') and *Gesellschaft* ('society' or 'association'). This distinction was useful as a way to think about how humans tie together. *Gemein-schaft*, i.e. community, stresses personal social interactions, and the roles, values, and beliefs based on such interactions. On the other hand, *Gesellschaft*, i.e. society, stresses indirect interactions, impersonal roles, formal values, and beliefs based on such interactions (Tönnies, 1887). Thus, as community is what we are concerned with here, we can see that it in Europe typically is thought of as originating and occurring through local and personal experiences. According to Weber these experiences can be affectual or traditional. *Gesellschaft*, on the other hand, is thought to be more consent-based through rational agreement (Waters and Waters, 2015). Importantly, this distinction is not thought to be strict, but is constantly changing, overlapping and the two are mutually influencing each other. For sake of simplicity, we take community to simply mean people who share a common geographical neighbourhood as well as those with a common identity or interest, making it closer aligned to Tönnies definition of *Gemein-schaft* (EuCDN, 2014). This can also be called local communities.

To continue along these lines of thought, large-scale community-influencing events (i.e. *gesellschaft*), such as the formation of the European Union, including the general feeling after the second world war in Europe must be taken as heavily impacting the developments of local communities in post-1945 Europe. In Norway, for instance, there was a strong and widely shared feeling of working together to rebuild the country. This was likely similar in other countries of Europe, also as witnessed by the efforts that went in-to economy and trade-related initiatives such as the early-stage European Union. The experiences made during the two world wars themselves also likely impacted the organization and feeling of belonging in local communities of Europe due to the hardships experienced, which made people depend more on one another. Large-scale incidents such as the economic crisis, climate change or trade-wars still impact local communities today and the strength of a local community arguably is a determinate factor for how severely people are impacted by such macro-scale changes.

A well-organised local community can mean a great deal for the happiness and life quality of inhabitants in the neighbourhood. As pointed out by Putnam (2000), it is 'beyond a doubt that social connectedness is one of the most powerful determinates of our well-being' (p. 326). Initiatives that focus on community development in Europe, such as the European Community Development Network (EuCDN, 2014) take as a starting point that 'people have the right to meaningfully participate in society, though also participating in decisions that are made about them and acknowledge that some groups in our societies have little access to this type of participation' (p. 12). Central guiding principles for the EuCDN has been to promote collective learning, empowerment, meaningful participation and active citizenship, collective decision-making and action for equality. These principles therefore emphasize that in Europe, community development is seen as a participative, constantly evolving and dynamic process. From this we can derive that an 'undeveloped' or not well-functioning community in Europe

necessarily must lack these participative and equality-oriented criteria for a good community. Moreover, on a scale from non-functioning to well-functioning, we can generally state that most communities in Europe are at some point in-between the two extremes, and that there always will be something that can improve.

It is rather difficult to pick some examples of well-functioning communities in Europe. For this reason, we choose to highlight some important elements that are observed in a selection of localities. These are:

- The role of elderly in local communities
- The role of volunteer fire departments
- The role of local pubs
- The role of community centres and clubs
- The role of the dugnad in Norway (described further in WORDS)

The role of elderly in local communities

In a well-functioning local community, we can argue that use value is higher than ex-change value. By this we mean that use values, i.e. that are not measurable in terms of economy or exchange and from which one cannot necessarily earn money, is fundamental. This type of use value is often measured in the time and care that is spent by some people in a community that benefits the whole community. In Europe, such a role is often filled by the elderly. In Norway, for instance, it is common to see elderly people who are retired that help organizing local workshops, volunteer in sports association, assist in school exams, and help keeping parks and local areas clean.

The role of volunteer fire departments

Volunteer fire departments exist all over Europe and have an important role in local communities not only in ensuring safety of the local neighbourhood, but also in building a sense of togetherness. Volunteer firefighters contrast with career firefighters, who work full-time and receive a full salary. In some communities, the definition of a volunteer firefighter includes those who receive some pay for being on call and/or at-tending emergencies, known in other countries as 'retained' firefighters. Volunteer and retained firefighters are expected to be on call to respond to emergency calls for long periods of time and are summoned to the fire station when their services are needed. They are also expected to attend other non-emergency duties as well (training, fund-raising, equipment maintenance, etc.). In some countries, such as Germany, Austria and Switzerland, the majority (e.g. 97% of all German fire fighters) are volunteers. This leads to a strong sense of community, and often newcomers to a local community would join the local volunteer fire departments as a way to get introduced to the community.

The role of local pubs

A pub, or 'public house', is an establishment licensed to sell alcoholic drinks, which traditionally include beer (such as ale) and cider. It is a relaxed, social drinking establishment and a prominent part of British and Irish cultures. In many places, especially in villages, a pub is the focal point of the community. According to the Guardian (2008), 'Britain's 47,000 pubs can be traced back to the inns along the roads that the Romans built. They became so popular that in AD965 King Edgar is said to have limited them to one per village.' Referred to as their 'local' by regulars, pubs are typically chosen for their proximity to home or work, the availability of a particular beer or ale or a good selection, good food, a social atmosphere, the presence of friends and acquaintances, and the availability of recreational activities such as a darts team, a skittles team, and a pool or snooker table. The pub quiz was established in the UK in the 1970s.

The role of community centres and clubs

Community centres are public locations where members of a community tend to gather for group activities, social support, public information, to pass on and retell local history, and other purposes. They may sometimes be open for the whole community or for a specialized group within the greater community. Community centres can be religious in nature, or can be secular, such as youth clubs. A club is an association of two or more people united by a common interest or goal. A service club, for example, exists for voluntary or charitable activities; there are clubs devoted to hobbies and sports, social activities clubs, political and religious clubs, and so forth.

3.1.2 ACTUAL ORGANIZATIONS (STAKEHOLDERS) INFLUENCING COMMUNITY BUILDING**3.1.2.1 Residents' committee**

Residents' committee are autonomous organizations of residents in urban China. Its members are elected by local residents and are responsible for managing residents' daily affairs. Residents' committees are in charge of community safety, public sanitation, and conflict mediation.

In China, residents' committee and villagers' committee are parallel administrative institutions. While villagers' committee is based in rural areas, residents' committee is based in urban areas. Given the fact that villages and communities are operated in different production systems, their social organization patterns are thus different. Generally speaking, while villagers' committee is strongly economically connected with local villagers, residents' committee has no economic connection with local residents.

The organization of residents' committee was established under the "Regulations on the Organization of Chinese Urban Residents' Committees" in 1954 and was further legalized under the "Organization Act of Chinese Urban Residents' committee" in 1989. According to the law, residents' committee is a bottom-level autonomous organization of residents' self-management, self-education, and self-service. Its tasks include: 1) to handle public affairs and public welfare of local residents; 2) to mediate civil disputes; 3) to assist the maintenance of public order; 4) to assist the government or its branch agencies to work on affairs that are related to residents' interests, such as public health, reproduction

planning, social relief, and youth education; and 5) to convey residents' opinions, requests and suggestions to superior government or its branch agencies.

According to the 1989 law, a new residents' committee needs to be established in accordance with the principle of facilitating residents' autonomy, and it is generally established within the range of 100 to 700 households. Its establishment, revocation and scale adjustment shall be determined by the government of a district or a municipality without a district. A residents' committee usually consists of five to nine members. All committee members shall be elected by local residents. For example, Yangguang community, a typical community in Qinghe sub-district, has approximate 5,000 residents (1,500 households).

Theoretically, residents' committee is an autonomous organization, which means that their work focus is residents. But in reality, a large proportion of the tasks of residents' committee are assigned by sub-district office, which leads to the fact that little time is left for the residents' committee to deal with autonomous affairs. Current urban governance system in Chinese cities can be summarized as "two levels of governments (municipal government and district governments), three levels of administration (municipal government, district government, and sub-district office), and four levels of implementation (municipal government, district government, sub-district office, and residents' committee)" (Yang & Yu, 2012). There are many reasons explaining the current situation. One possible reason is that the fiscal budget of communities is regulated by sub-districts offices. In recent year, there has been great discussion on how to liberate residents' committee from heavy administrative affairs and many experiments have been carried out across China. For example, Qinghe sub-district in Beijing explored the mechanism of residents' council to reach a balance between top-down administration and bottom-up autonomy. In 2017, Beijing municipal government released the "Guidelines for Work of Community Council in Beijing" which encourages citywide communities to establish community council to inspire residents' enthusiasm for public participation (Figure 4).



Figure 4 Public space in commodity housing community (left) and work-unit community (right), Qinghe Sub-district, Haidian District, Beijing (Source: Chen Yulin, Liu Jian, Liu Jiayan and Hamama Badiia, 2017)

3.1.2.2 *Dugnad*

In Norway, all citizens are familiar with the phenomenon ‘dugnad’ (plural form: dugnader). It can be described as a form of communal and voluntary work done together with other people, to benefit an individual, a family, a neighbourhood, a social institution or charity organisation. Vik (2017) describes it as a practice and characterises it as a well-established way of mobilising the public. The word “dugnad” is an old Norwegian word derived from the verb “dugé”, which means “be good enough”, “be fit”. It can be said that during a dugnad everyone does their best and can thus show to be “good enough” as a contributing and equal member of society. Originally, dugnad often involves physical work for the improvement or maintenance of the neighbourhood (Frimannslund-Holmsen, 1956/2011) but today the concept covers a much broader set of activities, and includes various forms of contributions in the context of schools, cultural institutions, but also activities that benefit friends, family and neighbours. The word is also frequently used in the contraction “Dugnadsånd” which essentially can be translated as ‘the spirit of will to work together for a better community’. Dugnad as a social phenomenon has existed since the 13th century, has been used as a common term of various sharing practices since the 17th century, while the first written definitions originate from the 19th century (Lorentzen and Dugstad, 2011).

Today, in most cases a dugnad implies an unpaid, voluntary contribution to either individuals or community (Figure 5). It often implies a contribution in the form of time, for example to be spent on physical activities (such as cleaning or construction). It comes also in the form of preparing food or gifts that can be sold for the common good, buying wholesale goods and selling them onwards for a premium (with the difference being donated to the common good), offering expertise, or providing resources (for example building materials for the construction of a playground), all without getting paid for it. It has both a social and a temporary character, meaning that one dugnad itself usually lasts for a day, or up to several days in case of for example a peer-to-peer type dugnad, such as a contribution to painting a neighbour’s house. In the latter case, the neighbour will often reciprocate with a joint meal, and an (possibly unspoken) promise to help out the one(s) contributing with a dugnad sometime in the future.

As such, the concept ‘dugnad’ is very much based on social reciprocity, and may be subject to social norms and rules which may be difficult to interpret for those new to the neighbourhood. Participation in dugnader may strongly contribute to one’s social status, particular in rural areas, where it can be regarded as a binding, social phenomenon by those who participate and who are familiar with local customs, norms and values, but also as excluding or at least challenging by those who are newcomers to or outsiders inside the community. Those, who do not sufficiently contribute over longer periods of time (something which the community will keep track of using its collective memory) may never become truly part of the social structure in the community.

Haugestad (2003) poses that the “dugnad economy” offers a middle road between radical egalitarianism and meritocratic individualism. This “middle road” implies social limits to inequality and inefficiency. The egalitarian aspects of the dugnad economy secure a fair share of the benefits to all participants. The meritocratic aspects, on the other hand, secure efficiency and fair benefits to those who contribute extra to the common good.



Figure 5 Example of dugnad in Helsinki, Finland: raking leaves (Source: Flickr)

It is also associated with the concept of self-mobilisation (Vik, 2017), where citizens team up to ‘get things done’ in cases where the municipality may not have the (financial) resources to realise the wishes of the community.

Dugnad may also be regarded from another perspective. In the Norwegian social-democratic system in which democracy and codetermination take a central place, policies on all levels, including in local contexts that directly affect quality of life, will be sent out on hearing to all involved. Even on the individual household level, citizens are invited to share their views by either sending written comments, or by joining local meetings where politicians and policy makers meet those potentially affected by those policies. Though not as strong as in the case of the dugnad-type described above, participation in such meetings may be seen as a type of dugnad; it is an individual responsibility to provide

politicians and policy makers with the best possible basis for making decisions, taking into account all possible views on a particular matter. However, those put in charge of making decisions affecting the community may be seen as depending on such input from citizens, and even their legitimacy may depend on it (Klepp, 2001). This perspective is especially important for local committees such as for example related to parents running parents' associations within schools, volunteers running sports clubs, or local festival organisers. Citizens may be found to contribute to such hearings even though their enthusiasm to do so or their engagement in relation to the matter at hand is limited; after all, who would like to spend his or her entire evening discussing ways to earn money for the next school tip?

In conclusion, dugnad is an important and perhaps even essential element of Norwegian society, securing social democratic principles and codetermination, and is thereby a strong contributor to community building and securing citizen engagement in matters than affect the community as whole.

3.1.2.3 Villagers' committee

Villagers' committees are autonomous organizations of villagers in rural China. Committee members are elected by local villages and are responsible for managing villagers' daily affairs. They have the duty for economic development, village safety, public sanitation, and conflict mediation.

Villagers' committees have similar functions as residents' committee, with stronger influences on the social and economic life of the villagers because of the tie related to collective land ownership (see Table 3). According to the "Law of PRC's Land Administration" (revised version in 2004), rural land is collectively owned by villagers, and is operated and managed by villagers' committee; differently, urban land is state owned and urban residents do not own any collective assets such as land.

Villagers' committee evolved from the concept of "production team" which was proposed in the "Draft Amendment to the Rural People's Commune Work Regulations" in 1962. The concept of villagers' committee was legalized by 1988 "Organization Act of the Villagers' Committee" which was revised in 2010. According to related law, villagers' committee is a bottom-level autonomous organization of villagers' self-management, self-education and self-service. It implements democratic elections, democratic decision-making, democratic management and democratic supervision. Its major duties include: 1) to handle public affairs and public welfare of the village; 2) to mediate civil disputes; 3) to help maintain public order; and 4) to convey villagers' opinions, requests and suggestions to the government.

Villagers' committee shall be established with the consideration of villagers' living conditions and the size of village population, in accordance with the principle of facilitating villagers' autonomy, economic development and social management. The establishment, revocation and adjustment of the scope shall be initiated by the government of township and towns, agreed by the villagers' assembly, and approved by the government of county. A village can be divided into several villagers' teams according to the villagers' living conditions and the relationship of collective land ownership.

In China's fast urbanization process, thousands of rural villages have transformed to urban communities in last several decades (Figure 6). Beside the transition in physical environments, the management

institute also faces great challenges in the transitional process. One key challenge for villagers' committee is how to shift from economic development to public service provision.



Figure 6 Village courtyard (left) and new village housing (right), Wuhang County, Henan Province (Source: Chen Yulin, Liu Jian, Liu Jiayan and Hamama Badiia, 2012)

Table 3 Comparison of residents' committee & villagers' committee (Source: by Yulin Chen)

	Residents' committee	Villagers' committee
Area	Urban area	Rural area
Main function	Public service provision	Economic development & comprehensive services
Land ownership	State owned; residents do not own any collective assets such as land	Collectively owned by villagers; operated and managed by villagers' committee
Economy function	No economic connection with local residents	Strong economic connection with local villagers

3.1.2.4 Velforening and Borettslag

In Norway (and other Scandinavian countries) various forms of "residents committees" play an important role in engaging citizens in activities that benefit local communities. Two of these are 'Velforening' and 'borettslag'.

A 'velforening' (plural: velforeninger) is hard to define, even for Norwegians, but it is generally understood to be a "residents association", which represents community buildings and public spaces located in a specific area of a town, independent of political views and considerations. These associations do not represent the interests of individual households, but aim to represent a specific neighbourhood as

a whole, and to address the challenges that this community is facing. In Norway it is considered a good way to solve challenges that have an effect on the local living climate, especially in cases which the municipality cannot prioritise. A velforening can also act as an intermediary between the municipality and local residents, to address cases where the municipality has acknowledged that input from, and cooperation with residents is required to solve certain issues. In general, a velforening has as a goal to develop a more liveable and lively neighbourhood and strengthen ties between citizens in a local area. In many cases, residents pay a small (often voluntary) yearly fee, even though there is no official membership. In 2007 almost 8000 velforeninger were registered in Norway, a 25% increase since 1997 (which could be due to improved registration practices at the municipality level) (Koht, 2013).

Velforeninger are interesting cooperation partners for municipalities. They can channel the needs and wishes of the local population to municipal decision makers and contribute to the dialogue between public administration and society with both ideas and approaches to solve local challenges.

Enjolras et al. (2012) estimate that 13% of Norwegian citizens participate actively in a velforening, probably higher in rural areas, and that likelihood of participation increases exponentially when a family has children, or expects to be living in the neighbourhood for at least three more years. Financial contributions to a velforening are usually voluntary (all citizens in a neighbourhood will usually receive an invoice which one can choose to pay or not) although compulsory membership forms also exist; however, there is little evidence that this implies a higher level of engagement in activities (Koht, 2013).

In Norway, an important part of the velforening's tasks involves activities related to creating and maintaining public spaces. The table 4 shows the occurrence of responsibilities for a variety of public spaces according to a 2003 study (Koht, 2013). The table also shows the percentages of velforeninger that in fact own the land for these spaces.

In many cases velforeninger receive financial support for establishing these public spaces from the municipality, under the condition that it will take care of maintenance (both cleaning and repairs).

Activities also involve the organisation of various celebrations (like National Day, setting up a neighbourhood Christmas tree, or midsummer (Sankthans) celebrations), neighbourhood parties, bazars and markets, sports events, and trips to nature (Koht, 2013).

Though some velforeninger use spaces in the local school or library for gatherings, many own a 'velhus', which can be best described as a community club house, which can be anything from a relatively primitive shed to a proper family house-like building. These are often rented out for meetings by others for a minor fee.

'Borettslag' (both singular and plural form) is a Norwegian term for housing cooperatives where house owners share financial and practical responsibilities for maintaining a shared building and its surroundings. It is a tenant-owner's association implying joint ownership of property in which the whole property is owned by a co-operative association, which in its turn is owned by its members. Each member

holds a share in the association that is proportional to the area of his apartment. Members are required to have a tenant-ownership, which represents the apartment.

Table 4 Occurrence of responsibilities among velforeninger for a variety of public spaces (Source: based on Koht, 2013).

Type of public space	Percentage (n=599)	Space owned by velforening (%)
Playing ground	64,5	51,5
Recreational area	24,4	13,2
Street lighting	23,4	8,5
Football pitch	15,5	10,2
Swimming area	9,8	4,0
Bathing jetty	8,8	6,0
Park	7,0	5,2
Ski slope	7,0	3,5
Nature trails	5,8	1,7
Community club house	5,7	5,5
Sidewalks	5,7	3,8
Parking areas	5,5	4,8

Both velforeninger and borettslag are run by volunteers from the local community who are representing many of the households connected to the community building and/or public space in question. They usually have an active board consisting of members elected during a yearly gathering. During various meetings, usually open to all members, initiatives are discussed and decisions are taken (Henriksen, 2006). A velforening or borettslag often functions as a communication channel between local residents and for example the municipality. Nordahl (1996) points out how a velforening often play important mediating roles in living areas that are under strong outside pressure, especially related to municipal policies that regulate these living areas.

Similar to the principle of 'dugnad', unwritten rules of participation are an important aspect of 'velforeninger' and 'borettslag'. Living in a neighbourhood implies a certain degree of participation in such organisations, and the norms associated with it contribute to shape and maintain a social order (Henriksen, 2006). It is however considered challenging by many such organisations to tempt citizens into taking a position in the board. Especially for an active velforening or borettslag, the work load involved may be higher than what is usually expected from a voluntary contribution to the neighbourhood, especially in cases where there is outside pressure as previously mentioned, and where active dialogue

with the municipality, site developers or building entrepreneurs is expected or required (Henriksen, 2006). Schiefloe (1985) point out that active participation in a velforening's or borettslag's activities and meetings does not necessarily mean that citizens have a strong wish for interaction with neighbours through supporting these committees but that it is rather related to a responsibility towards the community which facilitates that others have that opportunity, should they have such a desire.

3.1.2.5 Proprietors committee/homeowner committee

Homeowner committee is a civil organization of representatives of homeowners who live in same residential community. This organization is responsible for collecting opinions of homeowners and supervising the operation of the property management company (Read, 2003). They have the right to draft and modify the budget plan of the special maintenance fund and the usage plan of the public space of the community. A homeowner committee usually consists of five to eleven members, who are elected by homeowner assembly.

The establishment of homeowner committee can be traced back to "Regulations on Property Management" in 2003 and "Law of Property Rights" in 2007. In 2009, Ministry of Housing and Urban-Rural Development of PRC released "Guidelines for homeowner assembly and homeowner committee". According to related regulations, homeowner committee shall perform the following duties: (1) to implement decisions of the homeowner assembly; (2) to convene the general meeting of homeowners to report on the implementation of property management; (3) to sign property service contracts with the property service company which are recruited by the homeowner assembly; (4) to collect opinions and suggestions of homeowners and property users and to supervise and assist property service company in fulfilling their property service contracts; (5) to supervise the implementation of the statute; (6) to urge homeowners to pay property service charges and other related expenses; (7) to organize and supervise the collection and use of special maintenance funds; (8) to mediate disputes between owners arising from the use, maintenance and management of property; and (9) other duties conferred by homeowner assembly.

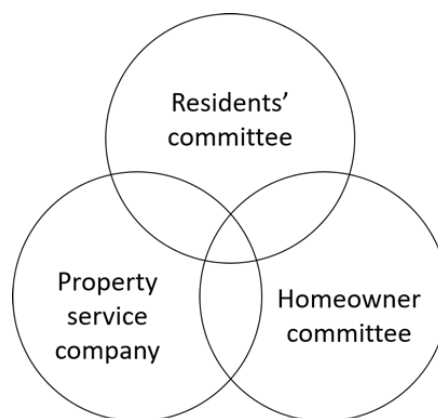


Figure 7 Three key roles in Chinese urban community (Source: Chen Yulin, Liu Jian, Liu Jiayan and Hamama Badiqa)

There are three key roles in the management of Chinese community: 1) residents' committee is in charge of public affairs related to community; 2) homeowner committee is responsible for the operation of the property, and 3) property service company is recruited by the homeowner assembly to provide service to the community (Figure 7). If there is any conflict between them, they can ask the local sub-district office for help.

3.1.2.6 Sub-district office as governmental office

Sub-district office is the lowest level of governmental agency in Chinese cities. It connects the higher government tiers and the local communities. Its duty includes implementing policies from upper governments and collecting opinions from local communities.

In Chinese administrative divisions, sub-district is at the same level as towns. While towns are located in rural areas, sub-districts are distributed in urban areas. According to 1954 "Regulations on the organization of sub-district offices in Chinese cities", a new sub-district office needs to be established if the population of a district or a municipality is more than 100,000. In 2018, China has 8,241 sub-districts and 31,647 towns. Using Beijing as an example, Beijing City has 16 districts, within which there are 140 sub-districts and 182 towns. Qinghe sub-district, a typical sub-district in Haidian District of Beijing, has a population of approximate 170,000, occupies an area of 9.37 km², and consists of 29 communities (Figure 8).

The establishment of sub-district office in China was rooted in 1954 "Regulations on the organization of sub-district offices in Chinese cities". This regulation defined three major functions of sub-district office: 1) to implement tasks from district or municipal government; 2) to guide the work of residents' committee; and 3) to collect opinions from residents. Since China's reform policy in 1980s, Chinese administrative system has also experienced a reform process, which was characterized by decentralization of power and downward shift of the focus of urban management. Under this trend, more tasks have been assigned to sub-district office, such as to regulate market, to provide social welfare, and to maintain transport facilities, environment and landscape, etc. On the other hand, with the dissolution of work-unit institution, functions related to politics, society, education and welfare which previously belonged to work-unit, were shift to government and society. Thus, sub-district office has taken charge of a large number of public affairs such as urban management, social welfare, community services and cultural development.

According to 1954 regulations, a sub-district office usually has three to seven staff. However, in nowadays, most sub-district offices in China have 50 to 180 staff. In large cities, the average number of staff of sub-district offices is more than 100 (Rao and Chang, 2011). Departments inside a sub-district office cover almost all sectors of a municipality or district government, ranging from urban management, community service, economic development, social welfare, to cultural activities.

As sub-district office is the branch of municipality or district government, its main focus is to carry out policies, but not to make a decision. If they want to solve a local problem, they usually need to report problems to upper governments, wait for their responses, and then follow their instructions. This mismatch of right and duty reduces the work efficiency of sub-district office to some extent. In recent years, under the context of governance transition from “Big government and small society” to “Small government and big society”, some experts suggested to provide sub-district office with more power, and at the same time to leave more autonomous work to residents’ committee and society (Rao and Chang, 2011).



Figure 8 Map of Qinghe Sub-district (Source: courtesy of Qinghe Sub-district office)

3.1.3 SCIENTIFIC METHODS/APPROACHES

Cross cultural research perspectives on participatory design processes in China

Both literature and recent empirical research suggest that performing research that involves interaction with users in another culture can be challenging due to differences in social, cultural, political and geographical contexts. Such differences may exist due to researchers coming from another culture (such as European researchers doing field research in China) or for example because of a difference between having an academic (for the researcher) and rural background (for the participant), or both. Some of the issues that previous research has indicated include challenges related to permission to interact with citizens, identification of and access to appropriate (groups of) users, building trust with users, and issues related to social desirability and prestige response bias, to name a few.

Based on a literature search of English and Chinese literature, and additional interviews with European researchers with broad experience in China, this chapter briefly discusses a number of these challenges. They are mainly illustrated by quotes from both literature and interview, and many of speak for themselves. The chapter is based on a thesis by NTNU student Huiyang Yu (Yu, 2018).

A key prerequisite for being able to do meaningful research that involves interaction with citizens in the context of participatory design, community building and citizen engagement is to have an understanding of context and people during field work.⁴

Liu (2004) illustrated an example about the field research in a project of old housing renewal that wrong conclusions are easily drawn by researchers if they are unaware of local contexts, and participants are unaware of other than local contexts.⁵ Another challenge is related to participants who are afraid to make mistakes, or to show lack of a professional background.⁶

Chu et al. (2017) illustrated the exploration of community stakeholders' experience involved with planning and implementing community-based family programs. The project used four focus group with social workers, and six in-depth interviews with steering committee member within half-year. Here, a main challenge related to doing participatory research included the balancing of scientific rigor with accommodation for the needs of the participants.⁷

⁴ Quote 1: '...even for Chinese practitioners and researchers, and given that China is big country with great local diversities, you have to be mentally prepared to overcome the culture and language barrier, and to get familiar with local situations...' (Yu, 2018)

toilet. The result surprised the researchers: almost all people chose the traditional one. After further investigation, it turned out that people that lived in that courtyard had never seen a modern toilet...' (W. Liu, 2004, p. 13 (translated))

⁵ Quote 2 '...the survey was sent out to investigate which type of toilet people would like to choose for their future housing plan, where the choice was between a traditional and a modern toilet. The result surprised the researchers: almost all people chose the traditional one. After further investigation, it turned out that people that lived in that courtyard had never seen a modern toilet...' (Liu, 2004, p. 13 (translated))

⁶ Quote 4 '...Designers invited school teachers to participatory design workshops to brainstorm about new classrooms and reflect on tools and teaching environments. However, it was very difficult for them to bring up constructive ideas in the beginning because the teachers (...) had stereotypes of what a classroom should look like. In addition, the teachers were hesitant to share their idea because they meant they were lacking professional architectural design knowledge to propose ideas for design...' (Zhang, 2007, p.77 (translated))

⁷ Quote 3 '...Some respondents felt that the project maintained strong scientific standards more than it accommodated the needs of the community. The challenge with completing questionnaires (e.g., difficult wording,

Another key aspect of successful interaction with Chinese participants is building trust and inter-personal relations. The interviews suggested that getting to know participants via informal ways like having lunch first,⁸ and then conduct the interview or field research, was usually a constructive way forward. Laying foundations for relationships before actually commencing actual field work is very helpful. One of the interviewees mentioned that to achieve the trust, especially from important people, she had sometimes to go through activities that was perceived by her as a type of test, such as visiting the underground mine to interview a coal manager, so as to prove interest in the topic at hand, before being able to get access to other resources and contacts.⁹

Organizing co-creation activities with citizens and other stakeholders may be challenging, since traditionally development activities in China are led by governments, who may lack knowledge and have information bias (Deng et al., 2015). Participants without strong ties with, and back-up from, formal associations may not be willing to express their views publicly as they may be afraid of potential retaliation from their superiors (Kornreich et al., 2012). In these cases, privacy issues and an unfamiliar - for western researchers - system of expressing opinions are core issues to understand as they may lead to inauthentic responses from participants. In literature, this phenomenon is described as 'tokenism', referring to situations where participants provide information that is politically correct though not necessarily in line with their own opinions, either because of fear for retaliation, or because lack of belief that sharing authentic opinions will in fact be put weight on or considered at all.¹⁰

Researchers should be aware of potentially sensitive issues, and avoid asking controversial questions, as participants may have many concerns of what consequences their answer could cause. Controversial questions may also lead to weakened inter-personal relationships, especially when such questions are raised in a straightforward way. Open conversation could make people feel comfortable to talk. People may feel threatened when they are stressed and are asked a lot of questions. It is important to inform participants about the purpose of the participation to eliminate the concerns of consequences and the sense of insecurity. If participants understand this purpose, their answer may be closer to the truth, even if the question is controversial.

It was pointed out that in order to have meaningful contextual dialogues researchers need to understand the demographic background of participants. Age is one important factor to consider.¹¹ Another

long and repetitive, and difficult to follow-up with participants) was repeatedly noted by respondents...' (Chu et al., 2017, p. 106)

⁸ Quote 5: "...If you want to do a more appropriate interview there, it would help a lot that to know the people first. To meet, or have a lunch or something first, and then to do the interview or ask questions. You need to lay the foundations for the relationship before you actually do the interviews." (Yu, 2018)

⁹ Quote 6: "...If you want to cooperate with them, you have to learn what they are doing, and respect it. Thinking of the craftsmanship and traditions, they certainly have some good reasons to be like that, otherwise the traditions would not have survived. Also, you need to treat locals as partners" (Yu, 2018)

¹⁰ Quote 7: "...you have to understand the culture, the hierarchy... I guess people take risk to say things that are controversial or unfollowing the 'line', as that might cause them trouble, and it's natural that they are cautious..." (Yu, 2018)

¹¹ Quote 8: "... I think generally there is a big gap between young people and old people. Young people don't have interests in old people's experience, especially about war period, the starving period. Young people are more analytical and are criticizing more. And, for old people, we often get the answer like 'it's not for me to say', and 'the government should decide', while young people say, 'they should really do something about it, it is horrible'. So, there is big difference between generations" (Yu, 2018)

main issue is the potential difference between interacting with urban and rural people. Many people in urban cities are from rural area before they moved to the city and can be seen as immigrants. Even though rural and urban people may represent the same spread in personalities, important differences may exist when interviewing them. In large cities, people may hardly know each other. But as villages often consist of small neighbourhoods, people might know each other, and when they were asked questions, they may have more concern for the matter at hand, and be careful of providing meaningful answers, as opposed to urban people. However, hutong communities in large cities may have similar characteristics as rural villages. Here, citizens are also very aware of the social codes and rules.¹²

Participatory design approaches in an urban context require often a long process, and may be subject to a standard target-driven project procedure used in government projects, as illustrated by Zhang (2007)¹³ and Wilkes (2006)¹⁴. Based on empirical research (Yu, 2018), getting access to participants is reported to be one of the biggest challenges for foreign researchers performing participatory design or ethnographic research in China.¹⁵

Simply attempting to use email or phone in order to contact ‘important people’ was by many interviewees found to be unfruitful, and it was suggested that power hierarchy is the main reason for this. Another interesting challenge is related to a more flexible way of time management in China, which has both positive and negative implications.¹⁶

Apart from securing support from persons and institutions higher up in the hierarchy, the importance of having support from the street-residential committees is also stressed, as members are usually very concerned with the local neighbourhoods’ daily life, though it was also mentioned that some committees are mainly passive. Personal experience from the interviewed researchers made clear that it could be very difficult to conduct work for outsiders without local partners.

In several interviews with the experienced researchers, a tendency was expressed of participants illustrating things that are opposite to their actual behaviours. One of several examples of gathered refers to a situation where participants were asked about their garbage sorting behaviour: when asked about this, they would probably still say yes, as the main stream of the society is promoting recycling

¹² Quote 9: “I have never seen an urban space like Beijing in any part of the world. Interpersonal relationship is dominated by a labyrinthine homogenous network of yards and hutongs, forming a powerful network structure that is both human and urban.” (Yu, 2018)

¹³ Quote 10: “...Due to the tight time plan for reconstruction, participatory design was emphasized in the process, but its implementation was not as effective as expected. Many architects were only briefly and hastily involved in participatory design process because of lack of time. When it is just a matter of arrogantly choosing a program, or opening several seminars, it does not meet the spirit of participatory design...the intensive time requirement was clearly inconsistent with the goal of full interaction between designers and users....” (W. Zhang, 2007, p. 80) (translated)

¹⁴ Quote 11: “...Technicians spend little time in the villages and often have a poor understanding of community members’ needs. They often only engage in extension activities when project funds become available, and mostly promote technologies that superior agencies think are needed, rather than what the communities themselves feel they need.” (Wilkes, 2006, p. 210)

¹⁵ Quote 12: “It is difficult to get the access to people for interview and find the people you want to talk with...I guess it is difficult anywhere, but it is even more difficult in China...you need to understand the social hierarchy behind, and why they would be contacted with you’.” (Yu, 2018)

¹⁶ Quote 13: “...One thing I like about doing research in China is that people are very flexible with time. Once I asked for scheduling time for an interview and they told me just come to their place anytime and give them a phone call when I’d arrive. This is completely different from scheduling a specific time at once so that I could plan several interviews in that day, which is impossible in China.” (Yu, 2018)

and sorting garbage. It was noted that people often express how they think that things should be when asked how the status is. However, this should perhaps not be seen as lying, but more like a way of expressing. It could be for easy communication; people may use stereotypes in their answer to let others understand the conversation and create resonance. On the other hand, it could also refer to archetypical social desirability or prestige response bias.

Summing up, challenges of communication are common for several projects. Recommendations for researchers performing participatory design approaches in China include:

- **Researchers need to consider the learning-ability of participants.** They should avoid to incautiously think that participants have the same level of understanding about the methods, process and the objectives of PD.

- **Researchers are advised to engage local people in an early stage of their research, as local inhabitants are the sources of local knowledge.**

Researchers should build relationships and cultivating positive connections with participants in Chinese communities. Researchers shall not take for granted the responsibility of conducting communication throughout the entire participatory process, because the relationships between participants can develop into lasting partnerships that can lead to additional collaborations (Chu et al., 2017). Interpersonal relationship skills of researchers are of crucial importance in building the collaborative relationship with all stakeholders (Liu et al., 2006). They should be aware of concepts such as ‘avoiding confrontation’, ‘keep harmony relationship’ and ‘avoiding losing face’, which is related to fostering nobility and dignity.

- In case of large-scale participation, especially in online studies, **researchers need to cultivate trust and relationship with participants.** Citizens may largely depend on extended social network for exchange of (emotional) opinions, and treat trust and relationships as more valuable than explicit product information in terms of organizational online services.

- **Researchers need to understand that participants may need to have certain level of knowledge about the process, background, motivations and techniques used in the research.** However, it can be challenging for design researchers to achieve efficient communication and at the same time control scientific rigor. The latter may need to be compromised, and the “expert language” may need to reduce when communicating with participants who may not have the same level of knowledge (Spinuzzi, 2005).

- **Simplified processes and tools may provide a certain level of help,** and, paradoxically, a focus on the process instead of just the end result may create more meaningful end results, e.g. the principle of participatory carrier design (Du, 2016).

- **To avoid unauthentic responses from participants and cope with privacy issues,** researcher should place more focus on the issues of ‘how’ an actual design should look rather than looking at the issues of ‘why’ or even ‘should people participate’, in order to avoid tokenism (Lee, 2008).

3.2 MORE INCLUSIVE CITIES THROUGH EDUCATION AND DIGITAL INNOVATION

3.2.1 TOWARDS ALL THE STAGES OF LIFE

3.2.1.1 *Science education*

Basically, there are two kinds of science education, one is the formal science education which is operated in school. The standards for formal science education provide expectations for the development of scientific knowledge and scientific habit of mind for students through the entire school years and beyond. The traditional science education curriculum includes physics, chemistry, biology, nature and so on.

The formal science education started from the UK. The first person who was employed as a science teacher in a British public school was William Sharp in 1850. Sharp is said to have established a model for science to be taught throughout the British Public Schools (Bernard Leary, 2004). After that, the British Academy for Advancement of Science (BAAS), which was founded in 1831 and called The British Science Association (BSA) right now, promoted teaching of “pure science” and training of the “scientific habit of mind”.

After the popularity of science education in the UK, the trends started to effect the education system in America. Another kind of movement, STEM, emerged from America in the late 20th century and has had a strong influence on the science education today. The STEM movement focuses on the education of science, technology, engineering, mathematics and later they think arts is also very important to make a complete education system, called STEAM. The national research council published National Science Education Standards in 1992, which set detailed standards for STEAM teaching and for the professional training of STEAM teachers. There are three basic rules of STEAM. First, STEAM education emphasizes the intersection of science, technology, engineering, humanities, arts, and mathematics. Second, STEAM education focuses on hands-on practice and develops students' expertise through long-term training. Third, STEAM education encourage students to solve practical problems in real scenario and devote to create project-based learning.

China began to form their own formal science education system from 1981. In March 1981, the ministry of education issued “the full-time five-year primary school teaching plan (revised draft)”, made clear that “according to the requirements of the four modernizations, we must strengthen the elementary school science education”, and then a course named “natural” was introduced in the primary school education system. In early 2001, the ministry of education began to adjust the national standard of science education. According to the new standard, the name of the subject was changed from “nature” to “science”. This change not only reflects the expansion of the teaching content, which is given priority to the natural sciences, values and the relationship between science, technology and society (STS), but also includes the method and process of scientific inquiry. Now, all the primary school in China have science in the curriculum.

Apart from formal science education, informal science education developed very fast in all kinds of ways, especially with the help of information technology. It is the science teaching and learning that occurs outside of the formal school curriculum in places such as museums, the media, and community-based programs. There are many kinds of informal science education, including science centres, science museums, Techlab, makerspace and so on.

As the development of digital technologies, makerspace became a very popular kind of informal science education in the world. A makerspace presents readily-available materials which can act as a provocation for inquiry, as well as modern technology and items to invent with. Makerspace also referred to as hackerspace, hack lab, which is a community-operated work place for people with common interests in computers, machining, technology, science, digital art or electronic art to do a project together (Niaros, 2017). From the perspective of education, makerspace is a platform, which shares similar functions and characteristics of science education in school. Both of them prominently feature exploration, collaboration and innovation, and all participants can accrue science education by a new pattern of learning by doing. But the participant of makerspace can be much more diversified which beyond age, background, location, etc. There are many successful and well-operated makerspace in the world, like Minerva University in American, Group T of University of Leuven in Belgium and even some high school established their own makerspace and enrolled makers from everywhere (Koo Hsueh-Yung, 2015).

3.2.1.2 Lifelong education

Since antiquity, the idea of lifelong education has been closely linked to the intuition that the need to learn throughout one's life is a necessity ingrained in mankind. What Sophocles, Plato, Cicero, Seneca and others have in common is the belief that there never comes a stage in life when one stops learning. Throughout history such intuition has reappeared in different guises (Forquin, 2004).

Unlike the idea itself, expressions referring to lifelong education have appeared in the language of English pedagogy since the 1920s. In this field two pioneers of the concept of lifelong education are Lindeman (1926), an American, and Yeaxlee (1929), an Englishman. Both agreed on the fact that education goes beyond the formal sphere and into the informal one, and that it is an endless process as it is inseparable from life and from everyday learning experience (Dozza, 2012). By contrast, the expression *éducation permanente* appeared in France later on, in 1955, due to a plan of *éducation permanente de la nation* related to the reform in teaching launched at the time (Tricot, 1973). Indeed, the movement for popular education stimulated the concept, promoting the two-fold goal of cultural growth and citizenship.

Lastly, the actual concept of lifelong education clearly emerged during the 1960s, within the framework of adult education, when it both finally gained its full meaning and became widespread. After World War II, there flourished the hope to eliminate illiteracy and all difficulties that limited human and democratic development. Likewise, the need arose to set adult education within a wider context than that of merely fighting illiteracy, even though that need was considered a crucial goal. An initial response to the issue was offered by UNESCO with the Second World Conference on Adult Education, held in Montreal in 1960. At the conference it finally became clear that adult education is a vital and integral part of every national system of education, following education for children and young persons. Therefore, for the first time the educational process was conceived as a continuous, lifelong process. The ensuing proposal attempted to overcome school-oriented educational approaches, with the aim of meeting the needs of a constantly changing society. Besides basic education, a modern society also demanded the implementation of educational policies capable of unleashing the human potential in order to enable its citizens' realization and to strengthen the awareness of their role in the civil, social and economic realms (Mencarelli, 1964; UNESCO, 1960).

On the one hand, adult education represented the space where the concept of lifelong education was acknowledged and from where it spread. On the other hand, three years after the publication of the

manifesto of lifelong education (Lengrand, 1965), the latter separated itself from the issue of adult education, even within the context of UNESCO, during the General Conference in 1968 (UNESCO, 1968). Lifelong education has since been considered a whole set of educational processes, which also includes initial child education and adult education, and involves the individual's whole existence and entire personality dimensions (Lorenzetto, 1976).

The history of lifelong education continued with its consecration in the report by UNESCO titled *Learning to Be* (1972), closely related to the concept of an educating community. After that, it went through alternate phases, rather positive in theoretical terms and quite negative in practical ones, until its current and, sometimes, conflicting connection to the paradigm of lifelong learning (Barros, 2012).

To sum up, lifelong education stands for total education. Firstly, because it does not separate childhood, adolescence and adult pedagogy, nor formal and informal levels of education. Secondly, because it goes beyond the boundaries of school education, falling into the categories of post and extra-school education, together with vocational training. It is complete, because it refers to the homogeneity of the individual, of one's existence and of educational processes. Its main focus is people and their unlimited expressive and communicative possibilities. Lifelong education places its hopes in human growth inside a community characterised by active participation and active citizenship, and by the pursuit of a common good, as well as in the ethical and critic-creative forces that belong to human beings. Furthermore, it requires social, political and institutional commitment to meet everyone's right to education at all times and in any place. Ultimately, lifelong education is a leading, normative and regulating idea useful to set up an educating society which can limit the effects of many narrow approaches and reductive anthropological perspectives, in favour of that truly human development (Cropley, 1979; Dozza & Ulivieri, 2016; Lengrand, 1970; Schwartz et al., 2009; Suchodolski, 1992).

3.2.2 TOWARDS AGING PEOPLE

3.2.2.1 Active ageing

One of the most important social transformations characterizing the 21st century is the global ageing.

In 2050, the elderly over 80 will be more than double of 2015 (from 4% to 8,6%) (UNDESA, 2015), reaching the triple (12%) in 2060 (EU, *Active ageing*). In 2050, more than a quarter of the population will be over 65 (OMS Europa, 2012: 3).

In response to the global ageing trend, at the end of the 1990s the WHO called for a paradigm shift, proposing a positive concept of ageing, seen as "a positive experience" and not only a condition of a physical, mental and social growing inefficacy. The WHO "three pillars" of active ageing are: *health*, *participation* and *security*. Active ageing "allows people to realize their potential for physical, social, and mental well-being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance" (WHO, 2002: 12).

For WHO the global ageing has been a "triumph" of humanity. The last century saw an extraordinary lengthening of life coming true. For example, in 1910, the life expectancy of a Chilean woman was 33 years old; today, just a century later, it is 82 (Ministero della Salute del Governo Italiano, 2012).

But global ageing is also a big challenge for policy because "pensions, health care and long-term care systems are likely to become unsustainable, with a declining workforce that is no longer able to meet the needs of the growing number of the elderly." (EU, 1995-2018)

Being able to build the conditions for active ageing is therefore a goal with “win-win” characteristics (Morrow-Howell, 2010) as there is an advantage for both older people (who – in this way – live better their life even in old age) and society (that can save on health care costs and count on the “energies” of the elderly to be involved in volunteering, in work activities of various kinds, in the use of cultural, tourist and recreational services, etc.)

For this reason, the EU devoted the European Year 2012 to promoting active ageing as a basis for solidarity between generations. In this context, guiding principles for active ageing were elaborated by the Social Protection Committee and the Employment Committee. The Active Ageing Index has been developed by the United Nations Economic Commission for Europe (UNECE) <http://www.unece.org/info/ece-homepage.html> to assess the untapped potential of older people. The European Innovation Partnership for Active and Health Ageing is fostering innovation to raise healthy life expectancy (EU, 1995-2018).

In China, in 2000, the proportion of people over 65 years old reached 7.0%, indicating that China has entered an ageing society (Office of the National Commission on Ageing, 2006). In 2016, China’s population over the age of 65 reached 150 million, accounting for 10.8% of the total population (National Bureau of Statistics, 2017). Since 1982, China’s population over the age of 65 has been growing at 3.29% per annum, far quicker than that of the total population in the same period (0.91%).

According to the analysis and forecast of the Office of the National Commission on Ageing (2006), 2001-2020 is a period of rapid aging for China. By 2020, the population over the age of 60 will reach 248 million, accounting for 17.2% of the total population. 2021-2050 will be a period of accelerated aging. By 2050, the population over the age of 60 will approach its peak, reaching over 400 million, about twice the number of children, and accounting for more than 30% of the total population. 2051-2100 will be a period of serious ageing. The total number of people over the age of 60 will gradually come down, but stay at the level of 300-400 million people, accounting for about 30% of the total population.

Compared with other aging countries (mainly developed countries), population aging in China is characterized by “fast speed”, “getting old before getting rich” and “imbalance”. According to statistics, it took most developed countries at least 45 years to see the proportion of senior citizens over 65 years of age to increase from 7% to 14%, yet for China, the process will take no more than 30 years. As a result, China will already reach a fairly high level of aging when its social and economic development is far below the level of developed countries. Population ageing in China is also unique in the sense that the trend is more visible in the economically developed eastern regions than the backward central and western regions, and more visible in the rural areas than cities (Jiang Chunli, 2016). In addition, as the average life expectancy of male is lower than that of female in China, the proportion of women in the elderly population is significantly higher than that of men. According to the 2010 statistics, women account for 51.3% of the population over 60 years of age, and over 60% of the population over 80 years of age (Huang Ming’an & Chen Yu, 2018).

The survey on the living conditions of the elderly people in China’s urban and rural areas conducted by the National Commission on Ageing (edited by Dang Junwu, 2018) shows that the life quality of the elderly population in China gives no reason for optimism. More than 50% of the deaths of people over 60 years old in China can be attributed to dietary risks and hypertension. Only about 30% of the elderly are in good health, half of the elderly are in good dental condition, and about 60% of the elderly have severe feelings of pains. More than half of the elderly have taken physical examinations and never

smoke or drink alcohol, but there are also the other half of the elderly that never take exercises and have bad sleep. At present, there are more than 30 million elderly people over the age of 80, and more than 40 million disabled elderly people in China, who have a strong demand for elderly care services.

The survey also finds that a considerable number of the elderly are still quite active in consumption: in 2015, 14.31% of the elderly had spent money on travel in the past year; 13.1% of the elderly made it clear they had a plan for travel in the coming year, and 9.1% said they may travel in the coming year. 5% of the elderly often surf the internet, and the proportion of the elderly living in cities is 9.1%, and for junior elderly at the age of 60-69 years, the proportion is 12.7%. Watching news programs (80%), watching movies and TV plays (65.4%), chatting (21.2%), stock investment (14%) and online shopping (12.4%) are the most common online activities for the elderly.

In terms of employment, the number of the elderly people in China has increased rapidly since 1990. Compared with 1990, the population at the age of 60 and above increased by 31.885 million in 2015, which means an increase of over 30 million in 25 years. At the same time, the number of people at the age of 65 and above and still employed also increased by 13.954 million, up by 115% in 25 years. Most of the employed elderly are relatively young and healthy, with the 60-64 year group accounting for 42.8% of the total. The gender gap in the employed elderly population has been significantly narrowed: in 1990, the proportion of employed elderly was 21.1% for male, and 7.5% for female; in 2015, the proportion dropped to 16.5% for male, and rose to 10.4% for female.

China's long-term family planning policy and rising life expectancy are important reasons of the deepening trend of population ageing. Now, the Chinese government has adjusted the original "one-child" family planning policy, but according to analysis, even with the complete liberalization of the policy, it will still be difficult to slow down the aging process (Huang Ming'an & Chen Yu, 2018). To meet the challenges of an aging society and enable the elderly to play their social functions more actively and fully is an important direction of China's public policy. The Report of the 19th National Congress of the Communist Party of China stressed that efforts must be made to "actively respond to the trend of population ageing, foster a policy system and social environment featuring elderly care, filial piety and respect for the old, promote the combination of medical services and elderly care, and accelerate the development of elderly care programs and industries".

But active ageing is also an incentive to change society. What is the meaning of our life once the tasks related to procreation and work have been concluded? WHO intends to oppose to the traditional association of old age with retirement, illness and dependency, forcing "a new paradigm [...] that views older people as active participants in an age-integrated society and as active contributors as well as beneficiaries of development" (WHO, 2012, p. 43). However, the centrality assumed by the economy in Western societies marginalizes the elderly as not very "productive" from an economical point of view, or at most redeems them as "consumers". In this sense, active ageing becomes an opportunity to question oneself about those relational, community, cultural and even spiritual deep needs the older people are the new bearers of. J.L. Borges writes (*In Praise of Shadow*): 'Old age (this is the name that others give it) / may be the time of our happiness. / The animal is dead or nearly dead. / Man and his soul remain. [...] I reach my centre, my algebra and my key, my mirror. / Soon I will know who I am'. This search for the centre – which Neumann (1954: 261-418) called *centroversion* and which becomes urgent in the second half of life – may be an opportunity to criticize the economic model of society that aims to "make profitable men and women's whole lives" (Barcellona, 2012) and also to

relaunch new forms of sharing and communitarianism our society strongly needs (Bauman, 2001; Amoroso & Paloma, 2007).

3.2.2.2 Cohousing

The *cohousing* is a housing modality that provides (next to the traditional private residence) common areas for sharing cohousers such as: multi-purpose rooms, common kitchens, laundries, co-working, spaces for children and the elderly, hobby rooms, but also shops of bikes, of organic products, bars and cafes. The modalities of constitution, the typologies and the normative and juridical aspects of a cohousing are quite diversified. What seems to be essential is the presence of a *bottom-up approach* between cohousers, especially where there are strong ideal motivations. However, the importance of concurrent public interventions to support initiatives must be kept in mind, inaugurating new synergies between the public and private sectors, not just from a *welfare mix* perspective, which sees the involvement of “service producers” in a mercantilistic-commercial sense (Rodger, 2000), but hopefully of *community welfare* (Donati, 2000), or of shared policies between the state and the third sector (Deluigi, 2014: 95-100).

Living in cohousing involves a transformation of inhabit as the mere residential dimension is not considered sufficient to guarantee the quality of life. Great importance is given to sociality between cohousers and to the integration with the urban context, favoured by the presence of sharing spaces and by the opening of cohousing to the urban context, encouraged by the presence of services. Cohousing thus can become the incubator of new forms of sociality, of educational/democratic processes and of public ethics.

For some structural aspects, cohousing is similar to the North American *gates community* (Chiodelli, 2010). But in the European context, the interest in these housing solutions is more directed towards *social housing*, as shown for example in the action carried out by the *European Federation of Public, Cooperative & Social Housing*, inspired by experiences of sharing between citizens already present in some northern countries, such as in the Scandinavian countries and in Denmark. These new forms of living aim at combining in a new way the social and sustainability dimension with the economic, urban and architectural-design one, in order to build a new *urbanité* (Choay, 2008).

A particular incentive to adopt cohousing solutions comes from the front of active aging. In fact, the sustainability of welfare systems is particularly problematic since - for two decades - on one hand, we have been witnessing to their constant weakening and, on the other hand, to a future in which the percentage of elderly people will always be greater. To allow the elderly to be active as long as possible, avoiding them the humiliation of social, relational and work marginalization, which then also involves physical deterioration, is a priority in a society that is increasingly aging.

However, it would be simplistic to think cohousing solely as a solution to the problem of economic welfare sustainability (Walker & Maltby, 2012). As mentioned above, the emphasis given to new forms of sociality and integration with the urban context promoted by social housing can be interpreted as alternative proposals to the “Fordist” model of cities and suburbs design, in which the territory is a dependent variable of the economic cycle (Magnaghi, 2010, p.25). The “metropolis form” characterizing the modern city, regardless of its size, represents the very negation of the concept of city as it erases differences, relationships with the environment, complexity, culture and identity, covering the territory of “non-places”, or spaces lacking, in identity, relationships, history (Augé, 1996).

Therefore, the discourse on new forms of shared living should be framed in the broader socio-economic context that saw the triumph of hyper-globalization and of the consequent delocalization logic (Rodrik, 2011). The territories have been decertified and reduced to mere “resources” which can compete in the global market space. This has led to an impoverishment of the societies/socialities/ cultures present in the territories. However, new sensibilities have arisen placing a renewed and balanced exchange between man and territory at the centre. We began to talk about ‘individuality of places’ and of the ‘self-organizing processes’ characterizing them (Dematteis, 2007: 35), of “common goods” (Ostrom, 1990), of the centrality of people and communities (Amoroso, Paloma, 2007), of a vision that deconstructs man’s subordination to economic rationalization (Sapelli 2018). Cohousing can take advantage of these ‘crisis forces’ not to create new ghettos, but settlements open to the territory and in interaction with the urban context of belonging, constituting a potentially important element for that ‘globalization from below’ (Garofoli, 1991) that can reactivate the democratic and educational potentials present in human communities.

3.2.3 TOWARDS CHILDREN

3.2.3.1 Makerspace

Urbanization is the trend of our times (United Nations, 2014). In order to balance the economic development and the both social and ecology environment problems which come along with urbanization, science and technology plays a vital role in this progress. Through the installation of countless wireless sensors and the utilization of the IoT, the networked/sharing technologies installed usually target better energy and garbage management; reduced water consumption; improvements to citizen mobility; and crime prevention (Albino et al., 2015; Walravens, 2015).

With the fast construction of urbanization, Hollands (2015) claims that the unrestrained deployment of these technologies is shaped around the motives of suppliers, i.e. the commodification of their existing products and services. Therefore, an environmentally harmful consumption of ICTs increases without serving the true needs of the citizens or even addressing actual problems (Niaros, 2016). Under this circumstance, two kinds of needs emerged very strongly, both of which are related to citizen participation. One is to solve local development problems through the integration of local instruments and world resources. Another one is to narrow down the gap of utilization of ICTs and the S&T knowledge between different citizens.

Makerspace, also known as hackerspace, fablab, is a kind of platform which not only offers a place for people with common interest to do a practical entrepreneurial project, but also a place for science communication and technology extension. The fundamental characters of makerspace include: i. sharing, solidarity and cooperation; ii. distrust of authority, that is opposing the traditional, industrial top-down style of organization; iii. freedom, in the sense of autonomy as well as of free access and circulation of information; and iv. embracing the concept of learning by doing and peer-to-peer learning processes as opposed to formal modes of learning (Kostakis et al., 2015).

In this project, we assumed makerspace as an important platform of more inclusive cities to promote innovation and productivity during the process of urbanization. The inclusive characters of makerspace can be seen in two parts. First, to integrate local resources including technologies and intellects and global resources to solve local problems; Second, to communicate basic S&T knowledge or transfer useful technologies to public.

As China enters a “new normal” phase of slower growth, Chinese government put forward the popular entrepreneurship and mass innovation as a new growth strategy in 2015. Under the strong support of Chinese government, makerspace developed very fast in China these years. The makerspace in China is more like a combination of traditional makerspace and the incubator. Most of the projects in makerspace are all aimed to entrepreneurship in China (Yanping Li, Wu Chen, 2017). According the newest data from Torch High Technology Industry Development Center, China has 5737 makerspaces which help more than 4 million start-up technology companies by providing services such as management training, investment chance and office space.

The key character of makerspace in China is a service platform of innovation and entrepreneurship, but it contains a lot of training processes and informal science education characters like communicating basic S&T knowledge to public. For example, makerspace have good communication and strong connection with experts on different scientific areas, the participant in makerspace can always get useful information from science experts. And also, some of the makerspace begin to collaborate with schools and colleges to make training sessions of innovation, science popularity and entrepreneurship.

Particularly, in order to boost the innovation and entrepreneur activities in Rural China, the Ministry of Science and Technology of the People's Republic of China (MOST) launched The Rural Star Makerspace (RSM) project in July 2016. RSM shares the similar organization structure with the maker space, but the participator are mostly farmers or someone who want to practice innovate activities related to agriculture in rural area. Similarly, the key point of RSM is entrepreneurship and it is an important platform to integrate all kinds of innovation factors to improve the industry in rural area. But in practice, the RSM always plays an important role of science education to farmers and students nearby. Some Star Makerspace even set up a small college to transfer scientific knowledge of agriculture and management skills. For example, Baiyangdian RSM, which located in Xiongan District comprise Smart Technology, Star College, Star Incubation, Ecology Demonstration, The Culture of Science and E-commerce.

3.2.3.2 Innovative learning environments

The school buildings that accompanied the advent of mass education were characterized by static classrooms with frontal settings, functional to a learning model as transmission and to the maintenance of the discipline. The basic structure of a school based on this educational model, included classrooms with raised teacher desks and pupils' desks arranged in parallel rows and large connecting corridors (Meda, 2016). Spaces conceived in this way do not allow us to give effective answers to the challenges posed by today's knowledge society.

First of all, today's school must allow different methods of teaching and learning (in plenary, individual, in groups, with or without technology, inside and outside the classroom), based on the active involvement of the student and on an active interaction with the surrounding community. Secondly, the school is called to a more articulated organization of the educational plan, which can no longer be limited to the calendar of lessons, but must propose an extra-curricular proposal able to cover the whole day and meet the varied needs of pupils and of the community in general. Another non-secondary aspect, the school must now be compared with other training agencies, in a more or less implicit regime of competition. This scenario requires a redefinition of the school spaces, which needs flexible and reshaped environments, able to support the expansion of the educational offer in terms of services and time and to adequately accommodate a growing number of users (school population and citizenship) (Gennari, 1997).

The need to pay attention to the organization of spaces and furnishings for learning, has deep roots and animated the educational experiences and reflections of prominent exponents of pedagogical activism such as Maria Montessori, Célestin Freinet and John Dewey, who - although through different perspectives - have had the merit of considering the school environment as a decisive educational factor. We can remember, in this regard, that both Montessori and Freinet had emphasized the need to activate a close collaboration between architects and pedagogists to create spaces and school furnishings functional to new pedagogical approaches. This is a very modern perspective, which anticipates the current one of “pedarchitecture”, that is «a pedagogical architecture attentive to the person and to its originality, uniqueness and relatedness, which links together the two disciplinary fields » (Marcarini, 2014, p. 165).

During the recent years, the topic of school spaces has affected various areas of international research, reaching interesting scientific evidence. For example, the correlation between school spaces and learning outcomes has been deepened, and several studies, such as the project *Clever Classrooms* promoted by the University of Salford (Manchester, UK), have shown that pupils' performance improves considerably when the classroom in which they study is beautiful, colourful and welcoming (Barrett and al., 2015). Several international projects, such as those promoted by the OECD (2013) and European Schoolnet (*Future Classroom Lab*), have contributed to decree the overcoming of the traditional concept of classroom and school, bringing to light the need to design new learning environments, in which not only knowledge is acquired, but also skills are developed through educational methods which increasingly benefit from the support of technology and continuous comparison with the outside world.

Many governments have tried to adapt to this change in the conception of school spaces, developing national plans for school buildings. This happened, for example, in Portugal (*Parque Escolar*), England (*Building Schools for the Future*) and in the Australian state of Victoria (*Building the Education Revolution*) (OECD, 2012). In general, governments have proposed non-prescriptive guidelines, which have allowed, independently of the outcomes obtained in different contexts, to bring out an idea of the school understood as a space to “live in all respects”, which therefore requires be designed according «the most modern parameters of eco-sustainability, energy saving, ventilation, acoustics, lighting and use of colors» (Borri, 2016: p. 121).

In terms of concrete achievements, two main approaches have been established. One is the *top-down approach*, prevalent in the Anglo-Saxon countries, which involves the use of predefined templates and standardized schemes applied by a team of experts. The other is the *bottom-up approach*, which provides for a participatory planning among students, teachers and architects (with the involvement sometimes also of pedagogists and didactic experts). This approach is adopted above all in the countries of northern Europe.

Particularly interesting is the case of the *Community Schools* or *Community Centres* in the United States, which offer an experience of close interaction between school, community and territory, for which the school hosts activities and services aimed at students and citizens. This idea of a school open to the territory in Europe has found its most complete expression in the civic centre which, inspired by the philosophy of the smart city, proposes itself as an eco-sustainable urban context designed to offer the citizen efficient and quality services, where the school acts as a catalyst pole and a generator of knowledge.

The trends of international research and planning in the field of school buildings are demonstrating how the school of the future should be built not only through the contribution of technicians, but through a continuous dialogue between different professionals. This in order to intercept the multiple needs of school users and of today's society, which call for a dynamic and multifunctional school, conceived as a place to "live" even beyond the time of lessons through spaces for study, free time and dialogue and as a truly inclusive environment, not only compared to students with special needs, but also with respect to all the components of the school ecosystem and beyond, to embrace the entire community in which the school is located (Tosi, 2016).

3.2.3.3 Educational museums

The role of the museum changed a lot in recent years. The museum has long been considered as a place of conservation of the cultural heritage dedicated to élites. This perspective has changed radically especially since the '70s and '80s, on the basis of the affirmation of the *Nouvelle Muséologie*. This movement, officially born in Marseilles in 1982, proposed to erase the gap between the public and the museum, giving the museum a leading role in the process of social and cultural emancipation of a community, of identity recognition and of territorial economic development. In this way, the museum started to be perceived as that collective space capable of breaking down every kind of barrier (social, cultural and even physical), which had already been theorized at the beginning of the '70s with the concept of ecomuseum (de Varine, 2005).

Therefore, in recent years we passed 'from the concept of the museum-temple to that of the museum-workshop' (Bertuglia et al., 2004: p. 31), in which attention is given not so much to the objects exposed, but to the experience of growth and knowledge that these objects generate, independently from the type of heritage stored in them (artistic, scientific, scholastic, etc.).

If it is true that there are still museums, that have the appearance of the 'sacred temple' reserved for a few, it is equally true that an ever increasing number of museums have changed their image and there are many new museum forms that put at the centre of their mission interaction with the outside world, investing considerable energy and resources in the field of education (Hooper-Greenhill, 2007). Among the new generation museums with a distinctly educational vocation, we can certainly include the museums of science and technology.

The first real S&T Museum with a physical building can be traced back to the year of 1683 in Oxford, England, which is called the Museum of the history of science right now (Robert, 2006). At first, the S&T Museum mainly focus on collections of specimens for research and exhibition. Gradually, the hands-on concept and educational function were accepted by more and more museums. According to The Hague 1989 (ICOM, 1989), the ever-changing role of museums in the societies they serve are to education, to cultural innovation and to the preservation and shaping of cultural and environmental values within the parameters of local context. Similarly, the education role became the core function of S&T Museum and allow visitors to participant in the exhibition by touch a button or make an experiment. The Germany Munich's Deutsches Museum in the early 20th century was the first modern interactive S&T Museum. Nowadays, S&T Museums are more like the combination of this two kind of Museum in most countries. The S&T Museum are not only a place of collection of science specimens but also a science centre for visitors to explore hands-on experiments.

China started the construction of S&T Museum in the late of 20th century, and the first real S&T Museum was built in Tianjin in 1995, after that a lot of S&T Museums were built up in different provinces

(Chen, Fang, 2006). Most of the S&T Museum in China are more like Science Centre and the education has a key role. An important example is the China Science and Technology Museum in Beijing, which proposes an exhibition with several educational paths. Through scientific, informative and interesting exhibition contents designed to invite visitors' participation and interaction, the museum presents scientific principles and technological applications, and encourages visitors to explore and practice with their own hands in its efforts to popularize scientific knowledge, thinking, methodology, and spirit (CSTM, 2014-2015).

Another category of museums that potentially has a strong educational vocation is represented by the museums of school and education. The first museum of this typology appear around the '70s and '80s, in the wake of the International Movement of New Educational Museums, established in those years in the countries of the north and central Europe on the basis of the French *Nouvelle Muséologie*. The movement intended to mark the distance with the old pedagogical museums of the nineteenth century, promoting the birth of new museums focused on conservation and enhancement of the "historical-educational and educational heritage" (Carreño, 2008). This expression indicates a wide range of goods that, together with traditional book and archival goods, also includes material goods (such as buildings, furnishings, school aids, school furniture elements, etc.) and immaterial goods (practices, uses and school costumes, etc.). It is a very heterogeneous set of goods, united by the fact that they were designed, produced and used for educational purposes. The school and education museums represent, therefore, unique realities, which allow to realize a deep interaction with different types of public (from the school age child to the elderly person, from teachers to families, from museum operators to professionals of any sector) because they insist on an experience common to all regardless of gender, age and origins: the school (Meda, 2013).

Today there is a tendency to talk about school and education museums as a single category, even if in the school museums there are welcome goods linked preferentially to the scholastic reality, while the educational museums propose to represent the educational processes, promoted by other educational agencies. There are, then, different types of related museums, which deal with the conservation and enhancement of the historical-educational heritage. Among these we can mention the educational and / or scholastic museums, the childhood museums, the classrooms-museum, the museum schools and the demo-ethno-anthropological museums, which often present reconstructions of old classrooms inside them, in order to tell the different dimensions of the cultural history of a place. Currently, museums of historical-educational heritage are well represented in Europe. There are 60 in Germany, 41 in France, 26 in Spain and over 60 in Italy (Meda, 2013, p. 512). However, not all the school and educational museums have activated paths for the enhancement of their collections, giving rise to specific educational paths, even if this direction is inherent in the DNA of this particular type of museums that represent the scholastic and/or educational past (Brunelli, 2018).

3.2.3.4 Educating city

The idea of educating city has a long history dating back to ancient Greece. According to Plato the education of citizens aimed at involving the individual in the life and growth of the city/*polis*, while the city itself helped to educate its citizens and develop their potential. That idea, along with the project of the educating city, is also present elsewhere and thereafter varying, of course, in context and historical period.

Conversely, the concept of educating city, which was followed by and adhered to the current one of learning city (Longworth, 2006), developed in the framework of lifelong education and took shape

during the 1970s (Piazza, 2013). The report by UNESCO titled *Learning to Be* (1972) highlighted the educational ability of a society, conceived as an educating community, seeking to face the current challenges of the time and those in the future concerning the universal right to learn and to educate oneself during one's lifetime. The original French version of the report included a direct reference to the expression *cit   educative* (educating city). This document validates the opening observation in this section: in order to stress the need for school to be supported by the city in its educational role, the report quotes Plutarch, 'the City is the best teacher' and, above all, 'the City educated the citizens. The Athenians were educated by its culture, by *paideia*' (p. 162).

Moreover, with the OECD report titled *Recurrent Education* (1973) the relationship between education and the city took on a pivotal role in the development strategies of the city itself and that stimulated the specific promotion of the educating cities. By so doing, emphasis was placed on the concept of total education (school, extra-school and post-school education), typical of lifelong education, and on giving priority to different levels of educational integration. That was the starting point of the first international congress on educating cities held in Barcelona in 1990.

There have since been several international congresses on this subject, which has gradually come closer to lifelong learning logic rather than to lifelong education. Nevertheless, thanks to the Barcelona congress, The *Charter of Educating Cities* was drawn up and The International Association of Educating Cities was set up in Bologna in 1994, nowadays including 476 cities worldwide.

Starting from the original idea of the educating city and up to attention presently devoted to it, there have been no changes to the need to consider the city a place capable of promoting the continuing education of its citizens and of benefiting from the spread of learning availability. The principle on which this necessity is grounded and which supports such need, is that people have educational needs and potential they should be able to satisfy where they live, thanks to the educating commitment of the community and its contribution to the creation and realization of educational processes.

Henceforth, the educating city is an anthropological place opposed to the no-place (Aug  , 1992). It is a home, neither anonymous nor featuring the ethnology of loneliness. It embraces its own citizens both to meet their need for complete fulfillment and to achieve their own enrichment through unfailing educational care. In this regard, by looking beyond the merely economic functionalist outcomes, while focusing on the educational purposes of a new morality and of learning humanism (Osborne, Kearns & Yang, 2013), it may be easier to realize the positive consequences of an educating city in terms of intellectual and cultural growth, active citizenship, improved social cohesion and reaction to global changes, increase in personal and community well-being (Longworth & Osborne, 2010).

However, those consequences may occur if the concept of educating city is accomplished not by reducing the role of school education (Mottana & Campagnoli, 2016), but rather by implementing educational integration proposals like the ones mentioned above. When most attention and efforts were devoted to the issue in Italy, several works were published that led to the recognition of primary goals: (i) the creation of an integrated educational system, in which school would be supported by the city, the latter being conceived as a «large educational classroom, and an educational laboratory» (Frabboni, 1991: 35); (ii) the collaboration between urbanism, architecture and pedagogy (Gennari, 1989), so that both school and the city could be turned into spaces in tune with the educational needs of people of all ages, starting from the youngest.

Therefore, the educating city is not only a city capable of harmonizing different educational and training operators, of involving the whole community in the learning and educational process of its inhabitants in a lifelong approach, and of affecting such process by expanding and consolidating its cultural opportunities as well as its means of communication, education and learning. Indeed, the educating city is also the city that thinks over its urban areas and their design in pedagogical terms, ensuring the availability of its physical space, hosting indoor and outdoor educational events which enable the city itself to be rediscovered, and understood anew from an educational perspective.

3.3 SOCIO-ECONOMIC VALUES THROUGH HERITAGE PRESERVATION

3.3.1 LOCAL AND NATIONAL UNDERSTANDING OF HERITAGE

3.3.1.1 Tangible and intangible heritage in China

China is a unified multi-ethnic country with time-honored history and splendid ancient civilization which has endowed the Chinese nation with extremely rich cultural heritage. This rich and colorful cultural heritage is the crystallization of the wisdom and civilization of the Chinese people, the fundamental component of Chinese culture, the bond of affections between all ethnic groups, the foundation of national unity, the important bridge to transmit and inherit Chinese civilization and also the reflection of our aspiring national spirit.

As early as in the 1950s, China began to establish the protection system of cultural heritage. At present, a relatively complete protection system of tangible cultural heritage has already been formed. In recent years, great efforts have been made by the Chinese government in protecting the intangible cultural heritage. In 2004, the Ministry of Culture and the Ministry of Finance issued information to formally kick off the implementation of the “National Project for the Protection of Folk and Ethnic Cultures”. The scope of intangible cultural heritage covers: poems, fairy tales, epics, stories, legends and proverbs that have been spread orally among people for a long time; folk performing arts like traditional music, dance, drama, quyi, acrobatics, puppet show, shadow play, etc.; folk practices like rituals, festivals, sports, competitions, production related and life related customs; folk traditional knowledge and practices related to nature and the universe; traditional handcraft skills; and cultural space related to the above-mentioned expressions. The CPC and the government attach great importance to the protection of cultural heritage. All concerned departments and institutions have also done a lot of work and have made remarkable achievement. China is now making efforts in gradually establishing a relatively complete protection system.

However, with the acceleration of globalization and modernization, dramatic changes have taken place in China’s cultural ecology: intangible cultural heritage is confronted with great challenges and a lot of orally and behaviorally transmitted cultural heritage disappear one after another; a great deal of traditional craftsmanship is on the verge of extinction; a large number of precious objects and materials of historical and cultural values are destroyed, deserted or lost in foreign countries; arbitrary misuse and excessive exploitation of intangible cultural heritage occur from time to time. Therefore, the protection of intangible cultural heritage brooks no delay.

3.3.1.2 Tangible and intangible heritage in Europe

It is almost an impossible task to define tangible and intangible heritage. Often we associate heritage with an object or site that has been granted a place on some list, it being a national or an international list. This gives prestige and publicity. However, heritage is first of all something that exists in people’s

mind. It is how we value our surroundings that creates heritage, be it the built environment or traditions carried on from previous generations. Thus, heritage embraces almost all aspects of our life, but will be interpreted or valued differently according to the relation a person has to it.

ICOMOS define cultural heritage in the following way, supporting the importance of the local people's experiences and roles in this:

“Cultural heritage is an expression of the ways of living, developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural heritage is often expressed as either intangible or tangible cultural heritage. Crucially, its value can lie in the ordinary as well as in the extraordinary.” (ICOMOS, 2002)

To be granted a formal recognition to for example UNESCO's World Heritage List, is a long process of national and international experts' evaluation. It is a top-down decision where certain expectations to how it will be managed are included. The criteria UNESCO made in 2005 are as follows:

- “to represent a masterpiece of human creative genius;
- to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- to bear a unique or at least exceptional testimony to a cultural tradition or to a – – civilization which is living or which has disappeared;
- to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria) (<https://whc.unesco.org/en/criteria/>)”

These criteria are not necessarily in compliance with the local understanding and needs. Whilst this can be called “an official list”, we can also talk about an “unofficial list”. This is the relation people have to their own history and surroundings. It is the relation between people and their memories, connected to places and objects. This is not defined by experts, but has created through a “bottom-up” process. (Harrison: 2010).

The connection between tangible and intangible heritage are inseparable. As Rodney Harrison points out, for every tangible heritage there is intangible heritage entwined in the object. An obvious example of this is the language we use to describe it, language being a very important part of our intangible heritage.

UNESCO defines intangible heritage as:

“the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups, and, in some cases, individuals recognize as part of their cultural heritage.” (UNESCO: 2003)

This is embracing most parts of human life. It is natural to ask then if this diminish the value of intangible heritage. Instead it can be seen as strength, giving the space for people themselves to define their cultural roots and traditions.

3.3.2 LINKS BETWEEN HERITAGE PROTECTION AND NEIGHBOURHOOD REGENERATION

3.3.2.1 Heritage in neighbourhoods (past – present)

The heritage in neighbourhoods or in communities can be understood as having a definite geographical structure and space, with human's living community. In those neighbourhoods or communities, the heritage and the human activities have an interactive relationship and a strong connection. Because of the lack of cognition of integrated conservation, the protection of heritage and neighbourhood has been fragmented in the past.

Regarding the relationship between heritage and neighbourhood, heritage progressively becomes a valuable resource and a unique identity of the neighbourhood. At the same time, the protection and exploitation of heritage make contribution to the sustainable development of neighbourhood. The neighbourhoods or communities could provide power and suggestions for its heritage protection, the residents of community are also the creators, participants and inheritors of its heritage. By stimulating the initiative of community residents, the implantation of policies and theories of heritage conservation could be more efficient, which will also optimize the virtuous circle of heritage protection and community development.

Heritage is a critical part of community identity. For the better protection of heritage in neighbourhoods or in communities, how to arouse the participation of residents will be the key point. Community participation is a process of community participating in decision making, management and supervision of heritage site protection and tourism via certain means and in certain forms. Specifically, community residents participate in decision making, planning and development of heritage site tourism, management, supervision and protection of heritage site, cooperate with other stakeholders and apply institutionalized and legal participation means and strategies.

Heritage site is the regional space and relevant physical environment for the survival of world heritage. In terms of its definition, community and its residents are part of the environment that world heritage relies on, and they are significant for the protection and tourism development of heritage sites. Protection of heritage site and tourism development help each other forward, but also have contradictions, and community carries the duty of protecting heritage site, and plays an irreplaceable role in tourism development.

Considering characteristics of heritage site and the significant role of community in heritage site protection and tourism development, the four driving forces model was established, including interest drive, government pushing, tourism development attraction, environmental protection pressure. Four factors in the model show reasons of community participation in heritage site protection and tourism development from different perspectives, and the four factors influence and promote the development of each other.

Community is one of the stakeholders in heritage site. The subject of community participation in heritage site protection and tourism development is community residents. Community residents as the principal subject among all stakeholders have the most complicate character and the most important position. They have three identities in the heritage site protection and tourism development, namely

owner of the heritage site, a part of the heritage resource or heritage tourism product, provider of tourism service, particularly in humanistic heritage sites.

Government and community are major stakeholders of the heritage site, they play different roles in heritage site protection and tourism development. Heritage site protection and tourism development cannot leave government and community. Government pushes community to participate in heritage site protection and tourism development. Community indeed plays a significant role in heritage site protection and tourism development, but it is pushed to a disadvantaged position by governments at all levels and relevant departments. Due to social culture and political background, community participates in heritage site protection and tourism development of China mainly in economic means.

Tourism development has become a significant approach for local community changing living environment, increasing income, improving public services and infrastructures, and promoting popularity. Tourism development of heritage site is also a necessary means for local community promoting popularity and communication with outside. Excessive tourism development of heritage site brings great pressure and threat to environment of heritage site. The goal of setting up world heritage is to protect cultural relics and natural landscapes with universally-acknowledged significance and value, and to ensure their inheritance and development.

To summarise, the community is an indispensable element for heritage site protection and tourism development. Community participation is an indispensable choice for the sustainable development of heritage site.

3.3.2.2 Gentrification

Ruth Glass was the first to introduce the term gentrification in 1964, after studying this process in London (Glass:1964). Since then an important discussion has taken place concerning the development of our cities and preservation of old neighbourhoods. There are both negative and positive arguments for gentrification, both sides bringing forward valid arguments. When Glass first introduced the concept she claimed it was a phenomenon only happening in global cities in America and Europe. It is fair to claim that this is not the case. Gentrification happens everywhere, to a larger or smaller extent (Atkinson and Bridge, 2010).

Gentrification could be defined as a process where a middle class, with economic and political influence reclaim central parts of the city from poor and working class residents (Smith: 1979). What trigger this is that it has developed a gap between current property values and potential values (Smith: 1998). Tim Butler (:1997) studies the reason why the inner-city of London is attractive to the rich and middle-income. It has created a shift in social geography and conservation/preservation has played a major role to create, what he calls, a “feel” of the area. Reasons given for wanting to move range from wanting to have a bigger home, to minimize commute to work, a potential for profit later on, and live in a cosmopolitan area.

From a study of the impact of the Metro lines in Taipei, Taiwan, Lin and Chung (2017) show how this leads to gentrification, not only of the inner city, but also in the suburbs. In the suburbs the gentrification was revealed by a move of highly educated residents and real-estate developments. In the inner city the gentrification was first of all manifested by a significant rise in house prices. This metro-induced gentrification is very relevant for the development of Chinese cities.

So what are the pro and cons of gentrification?

One positive effect is a stabilization of declining areas. Conservation and rehabilitation of old historic areas is an important factor in the process of gentrification. This rehabilitation of property takes place both with and without state sponsorship, attracting people with high earnings and education. In turn, this will increase property values and reduced vacancy rates. It is also an encouragement for new activities with increased viability of further development. It is likely to create increased new local economic enterprises. Another result can be an increased social mix, creating a pulsating and vibrant society with different cultures. It can also have the effect of decreased crime.

There are of course also some serious negative aspects of this process. A new community and culture is created. With a new group of affluent inhabitants moving in rent and real-estate prices will increase. Affordable housing is disappearing, being replaced by a renovated expensive market. Also other costs will increase and local services change, making life difficult for the poor community. This has led to displacement of the original inhabitants. In some cases it has even led to displacement and housing demand pressure on surrounding poor areas. For the old inhabitants this can come at a great psychological cost, the neighbourhood is changed and uncertainty about the future is real. In some extreme cases homelessness is a result. This has led to community resentment and conflicts between the old and the new inhabitants.

In a heritage perspective the process of gentrification is not a straight forward case. It can “rescue” some areas worthy of being preserved from total decay. At the same time it loses some of its authenticity. The built environment will be changed in the process, how sensitive these changes are to the original will of course differ. Just as important is the intangible local culture and tradition. A new group of people take over the neighbourhood and the traditional way of life is disappearing.

3.3.3 HERITAGE CONSERVATION VS. DEVELOPMENT

3.3.3.1 Heritage and business

As an important public resource, the economic value of heritage has been increasingly considered by stakeholders in the process of social development. According to the theory of conservation economics, heritage is an economic commodity who has an asset life cycle much longer. It's also a “cultural capital” with both cultural attribute and economic attribute. The experience of other countries in the world than China show that the heritage is also a non-renewable resource, which makes it a priceless treasure for human. Through the combination of heritage and business, economic benefits could be created in tourism industry. The combination will also promote the development of other derivative industries, like the tertiary industry around the heritage site. In a word, heritage plays an active role in market economy and local economy.

The heritage has two major economic values: direct value and indirect value. The direct value includes the income mainly from the rent, commercial stores, tourism activities, entertainment industry, etc. The indirect value includes its culture value and aesthetic value, which are unique and have potential economic growth point in the future.

The tourism industry development of heritage site bring an obvious benefit. On the one hand, tourism development of heritage site brings more job opportunities for the residents, and increases their income; they get economic benefits by selling tourism products; they have more opportunities to communicate with outside. On the other hand, tourism development of heritage site has both positive and negative impact on the community. For instance, population pressure on heritage site increases con-

stantly, if not strictly controlled, it will surpass the population carrying capacity, and natural environment of heritage site will be destroyed. Tourism development means increasing visitors, and shock to local lifestyle, ideology and heritage concept.

From a larger perspective, it's clear that the market economy also has both positive and negative effects to the heritage protection. It will provide the financial support to the heritage protection projects, and will also help to build up a competitive mechanism for the heritage protection, sometimes it could even inspire the citizens to participate in the process of heritage protection.

In recent years, the attention that the world pays to the intangible cultural heritage (ICH) prompts the protection and usage of this cultural value and then make more of it be shown, to be protected, be restored and be further developed. However, such kind of behaviour also leads to the overexploitation and destruction of the intangible cultural heritage to some degree. Besides, this makes some of the heritage generate a sense of commerciality and even lose its original meaning and confronts with extinction. Such phenomena also arouse people's attention to pay attention and research into the protection sector of the heritage.

Many protective measures have been discussed and undergone experimental tests. At present, the following measures are frequently-used: first, economic measures. Such as on June 2005, the Archives of Chengdu City made use of the equipment as film, camera shooting and tape to record and sort the rich local characteristic folk art in a round way; second, administrative measures. For example, carry out a census of the heritage and set up the directory system for the representative heritage; third, legislative measures, in the face of the worldwide topic about the protection of the intangible cultural heritage, on the one hand, we need to use the present intellectual property system, and make breakthrough advancement in the combination between the IPS and the protection of the intangible cultural heritage. On the other hand, we should seek other measures besides the IPS to protect the intangible cultural heritage. Such measures include human rights protection, historic preservation, natural and cultural heritage protection, traditional crafts protection, folk art work protection and so on; fourth, academic measures, such as art review, literature publicity, academic research and others.

These measures are featured in the diversification of the ways and the comprehensiveness of the types, and some of the measures have already received rather good results. However, with the development and changes of the world social economy, the ICH suffers from the new environmental problems caused by the tourism development, among which an urgent one is brought out by the experience economy, for the emerging and development of it brings new changes to the tourism, demands a higher request for the development of the tourism resources and the design of the tourism products. All of these generate more challenges to the protection of the ICH.

3.3.3.2 Heritage in modern society

History is very important for modern society. It gives us information about the background, where something comes from, the roots. By getting to know the history of something, we feel we also learn about its essence. If we want to learn about a country it is natural to start with its history. When we visit museums we enter into a past, getting a glimpse into a long gone society. We admire monuments, being representatives for a grand history. Also, if we want to learn about fellow humans, his or her history can tell us about this person. CV's are used to give us information about the person's professional abilities. We can even learn about our self by looking back at our life, feeling we get a better understanding of whom we really are and why we act like we do.

David Lowenthal's title "The Past is a Foreign Country" (:1985) has become a well-known quote. It indicates that the connection between present and the past is more complicated than what is described above. By using the concept honour and dignity, Berger (:1973) describes how the European understanding and interpretation of people have changed, both regarding how we interpret others and our self:

"In a world of honour, the individual discovers his true identity in his roles, and to turn away from the role is to turn away from himself—in "false consciousness", one is tempted to add. In a world of dignity, the individual can only discover his true identity by emancipating himself from his socially imposed roles—the latter are only masks, entailing him in illusions, "alienation" and "bad faith." (Berger, 90 - 91:1973)

So, the past is a foreign country, and our interpretation is grounded in our society's norms, seen through the eyes of our culture and values. So when we visit heritage sites or museums, our understanding of it is based on our values and way of life. We cannot fully comprehend the past, but we can learn something.

Heritage is a way to remember the past, be it tangible or intangible. Rodney Harrison (:2013) points out how forgetting is an integral part of this remembering. To be able to preserve or create memories, it is necessary to also forget parts. Remembering is an active process, where what is seen as important or valuable remain. To remember everything would be overwhelming, not to say impossible, so what we regard as insignificant needs to be forgotten. It creates a manageable room, both for the individual and the collective memory.

Rodney Harrison goes on by claiming that heritage is facing a similar problem today by its wide definition. We are overwhelmed by heritage, and the value therefore diminishes. What is of no importance for us today or for future generations should be forgotten, he claims. One problem with this is that we do not know the future, and we do not have the same memories. What is important for some may not be of any relevance for others.

Heritage is political. What one chooses to conserve is a statement about what is important to remember, or not to forget. They are symbols; of a social order, grand story telling or every-day life. They may be regarded and valued differently, depending on the interpreters own story.

The questions regarding what we can know about the past and what is worthy of being preserved does not take away any arguments for the importance of remembering the past, but it tells us about the limitations of our understanding. We cannot be in the shoes of our ancestors, seeing the world like they did. But we can get some insight.

3.3.4 POLICIES AND PLANNING PROCESSES

3.3.4.1 Chinese planning practices for heritage sites

In 1950, China began a national inventory and assessment of the significance of its cultural sites. In 1982 the Law of the People's Republic of China on the Protection of Cultural Relics, consolidating previous legislation, entrusted primary responsibility for the conservation of cultural heritage to the government, while regulating the actions of conservation professionals. At the international level, in 1985, China ratified the UNESCO World Heritage Convention. Then in 2004 China signed the UNESCO Convention for the Safeguarding of Intangible Cultural Heritage.

In order to implement these two conventions in China, the State Administration of Cultural Heritage and Ministry of Housing and Urban-Rural Development has established the Department of World Cultural Heritage, and also published the China's Tentative List of World Heritage Sites. The cities or sites that intend to apply the UNESCO's World Heritage Site must be included first in the China's Tentative List. To apply for the China's Tentative List, some documents are required, including a proposal with the basic introduction and the management plan of site. The urban planning project for the heritage site such as Heritage Preservation Plan will also be required, this Heritage Preservation Plan must conforming to the principle of protection development.

For example, Wuhan City of Hubei Province has been declared a National Historic City in China as well as Traditional City of the Revolution. The local government had devised plans for the conservation of the historical and cultural heritage of the area. Based on the Chinese government recognition of the National Historic and Cultural Cities in 1982, since 1984 Wuhan adopted the first Wuhan Historical and Cultural Preservation Plan, completing it in 1994. In 1995 this plan was integrated to the Comprehensive Urban Plan of the City and in

1996 was improved the previous preservation system. In 2003 with the creation of the document Wuhan Old City Style and Outstanding Historical Architecture Preservation Management and Regulations, the regulations, policies, requirements and responsible for the historical heritage preservation were established: as well as there were defined and classified the historical and architectural styles, historical blocks and squares, limits of the areas for the old city and the social activities in there, among others. This document was integrated into the Wuhan Economic and Social Development Plan. In 2006 with the establishment of the Wuhan Comprehensive Plan 2006-2020. The previous plans for the city's heritage protection plans, were adapted to the new conditions of the heritage definition and national policies for heritage preservation, recognizing: historical blocks and squares, historical sites, old city style, recognizing the "historical urban landscape". All of these types were included into the heritage protection system and its limits were redefined into the comprehensive plan as well as in the list of important and urgent preservation sites.

In the last few years other heritage preservation plans have been done. In 2008 was created the "Wuhan City Plan for Preservation and Plan of the Purple Line Area (Important City Areas)", which involves the preservation plans for historical blocks and squares, historical sites, historical architecture inside the purple line area and cultural relics. At the same time, new specific plans for the protection of specific heritage sites that have survived to the city development were established, notably addressing: historical governmental buildings, ancient city of Wuchang District and the Foreign Concession Area of Hankou District.

The cultural heritage in Wuhan is very antique. Hankou and Wuchang districts contain not only historical but also cultural heritage. The historical buildings are covering different uses such as hospitals, schools, offices, residential areas and buildings, religious, baking, industry, theatres, restaurants, etc. The material heritage of these districts not only has historical value, but also a high level of artistic value, as it reflects a variety of architectural styles, making Wuhan architectural landscape very exceptional among other cities in China.

3.3.4.2 Grass root initiative

Heritage has become a key element of the development of cities and an asset for urban renewal strategies. Historic neighbourhoods and cities have become valuable spaces because of their sense of

place, the concentration of cultural activities that reflect local identities, and the increasing economic relevance of global cultural tourism (Bandarin and Van Oers, 2012). However, the production of heritage is not a neutral process. It implies a process of reinterpretation of the past in order to engage with the present. In consequence, it is also about challenging existing power relations and transforming how communities are perceived and classified (Smith, 2006).

Two main approaches to the production and conservation of heritage, each of them related to different scales. The first one refers to the production of global heritage supported by international organisations such as UNESCO and/or national governments. This approach has been criticised for leaving out local communities from the production of heritage, and even from heritage sites themselves (Bianchi and Boniface, 2002); a second approach refers to the production of unofficial discourses of heritage, mainly at a local level. This approach emerges from the actual relationship of people with objects, places and practices, and therefore it constitutes a bottom-up approach to the production of heritage (Harrison, 2010).

Cultural tourism is one of the fastest growing tourism sectors. It is often seen as a generator of the resources necessary to preserve and enhance cultural heritage (Chiabai et al., 2013). It is also considered to be the main motivation for tourists and a recreational activity since the early 1980s (Lord, 1999; Kowsurat, 2010; UNWTO, 2015). According to the International Council on Monuments and Sites (ICOMOS, 1976) cultural tourism should exert positive effects on these sites by contributing to the maintenance, protection, and socio-economic benefits of the local population (ICOMOS, 1976). Also, Robinson and Smith (2006) in their book "Cultural Tourism in a Changing World" argue that tourism can be seen as the main way to generate rapid economic development in countries with limited natural resources. On the other hand, they further elaborate that the development of a (cultural) tourism industry includes additional responsibility in terms of interpretation and representation of events and activities (Robinson and Smith, 2006). Indeed, Timothy (2011) stresses the role of interpretation in revealing the importance of places, peoples, and events, as well as the need for considering the community in the interpretive planning process.

However, while tourism may contribute to socio-economic development, it can also lead to irreversible damage and destruction of heritage resources (Orbaşlı, 2000; Russo and Borg, 2002; Dumont et al., 2005; EUA, E. a., 2009; Kowsurat, 2010), as well as negative impacts on the local community in terms of social disruption and increased costs of living (Albert et al., 2012). Therefore, the appropriate management of tourism is needed to create harmony between conservation management and tourism planning in a way that satisfies the goals of both and reduces its negative impacts. So the concept of sustainable tourism emerged to meet the needs of tourists and host communities while simultaneously maintaining the integrity of cultural sites (UNEP and WTO, 2005; Boniface, 2013; UNWTO, 2015) without compromising the ability of future generations to meet their own needs (WCED, W.C., 1987; Swarbrooke, 1999; EUA, E. a., 2009; UNEP and WTO, 2005). This requires a multi-faceted approach aiming at fulfilling the economic, socio-cultural and environmental needs of the targeted communities as well as tourist ambitions and expectations (Richards, 1996; ICOMOS, 1999; NWHO, 1999; Harris et al., 2002; UNEP and WTO, 2005; EUC, 2007; EU, E.C., 2012). This new concept "transforming the historical cities into attractive tourist destinations" was adopted by international and national organizations to bring many opportunities to the local people and solve their problems using cultural assets (UNEP and WTO, 2005; Albert et al., 2012). Different cities around the world have tried to establish strategies for sustainable tourism management. Until now there has been no optimized approach that

can be adopted for all destinations. Each context has its own variables that need to be considered while planning for a long-term sustainable development of the destination. However, previous experiences in the management of tourism in cultural heritage sites have shown the failure of existing top-down approaches “where policies are defined by central administrations” as they do not consider local community and many stakeholder’s involvements in the planning process (Chiabai et al., 2013). Especially that tourism is changing over time and could not be achieved without their support (WCED, W.C., 1987; Telford, 1988; Heemskerk et al., 2002; Maginn, 2004; EUC, 2007). Stakeholders’ participation is an active process where stakeholders influence, control, and shape the decision-making process that could affect them to raise the standards of planning outcomes (Rukendi et al., 2010). Bottom-up approaches that adopt stakeholders’ participation can be considered as a key for the successful management of sustainable tourism in cultural and heritage sites (Richards and Hall, 2000; Fontaine, 2005). However, engaging all relevant stakeholders into the participation processes remains as one of the main challenges in tourism management. Today, there are so many techniques to design participatory processes providing different levels of involvement (Fontaine, 2005; Chiabai et al., 2013; Hatipoglu et al., 2016). However, the lack of institutional structures for collaboration hinders stakeholders’ involvement (Hatipoglu et al., 2016). This is in addition to the lack of stakeholder awareness of critical issues and their knowledge of sustainable tourism principles (McComb et al., 2016).

Since the last two decades, public participation has become a worldwide issue as the bottom-up approach has spread across the field of heritage conservation and city planning. But some research shows the problematic issues in public participation in built-heritage conservation. Indeed it is important of public participation in built-heritage conservation and provides an understanding of the role of public participation in decision-makings in other countries but the major problem issues in public participation in built-heritage conservation including different preferences regarding what is worthy of conservation; the lack of an effective public participation mechanism and integrated heritage conservation approach in the decision-making process; the different and conflicting interests of various stakeholders; power disparity; propaganda and mobilisation of interest groups; and the lack of knowledge on heritage conservation.

3.4 PLACE-MAKING AND DESIGN OF PUBLIC SPACES

HOW TO SHAPE A COMMUNITY FROM PLANNING PERSPECTIVE

3.4.1 RESIDENTIAL PLANNING (HIERARCHICAL SYSTEM)

Since the establishment of the People’s Republic of China in 1949 and the introduction of the socialist public housing system, Chinese cities underwent significant changes in terms of physical planning structure and socio-spatial organization. Investment in housing developments were a priority on the agenda of the communist party to solve the pressing and challenging housing shortage of that period. Mao Zedong’s purpose was “*Production first, livelihood second*”, hence, industrialization was identified as the key factor for modernization and the major function of cities. The goal was to control the growth of urban population and reorient cities from consumption to production (Lu et al. 2001). Due to the limited financial, technical and professional conditions, Chinese urban planners were looking for simple urban housing models to ease the development of large scale residential areas, and to placate one of the biggest problems faced by the newly formed PRC.

In the early 1950s, the most popular public housing developments in China were in the form of linear-south-north oriented residential blocks. Composed of one to three stories, these residential developments were lacking a complete and integrally planned public facilities and services (basic amenities – such as kitchen and toilet – were shared among the residents). Following the new economic and political directives to pave the way for China's own Socialism model, the socialist public housing system experimented several urban models ranging from Clarence Perry's 'Neighbourhood unit' to the Soviet neighbourhood model and Residential Quarter, to the hierarchical three-level of housing planning structure of Residential District, Residential Quarter or Residential Community, and Residential Cluster.

At the beginning of the 1950s, the concept of 'Neighbourhood Unit', proposed in the 1920s by American architect Clarence Perry, was introduced in the planning and design of public housing areas. Based on specific prescription for the spatial arrangement of residences, the management of supplementary facilities for the residents, and the organization of streets and services, few projects have been realized according to the Neighbourhood Unit approach in China, as it has been criticized for being a "capitalistic" concept and was soon abandoned.

With the establishment of the Socialist Public Housing System, Chinese urban planners adopted, in 1953, the Stalinist-Soviet-Style-Neighbourhood concept, also called the perimeter block or perimeter courtyard block due to its spatial layout. The adoption of the new urban model was greatly encouraged. However, its morphological features emphasizing a European-style spatial layout with mainly east-west oriented dwellings and the symmetrical-spatial organization of the blocks, resulted in an evident contrast and non-adaptability to the local climate, and practically was in contradiction with the living habits of many Chinese residents (Lu 2006). Consequently, its use was soon replaced by another Soviet-style residential concept, the "Residential Quarter"- Xiaoqu – in 1957 (Hui 2013).

The Residential Quarter, which was no more than a large-scale version of the Neighbourhood Unit, with its planning concept of residential areas supplied with a comprehensive assortment of communal public services and facilities, embodied the socialist ideology within the urban social structure and responded to the need of collective distribution of the resources in the residential areas. Unlike the previous failed urban model experiments, the Residential Quarter became the basic unit for the planning and design of residential areas in China.

However, from the 1970s, the planning and design of residential areas was directed towards integral planning and self-sufficiency in terms of public services and facilities (Hui 2013). Corresponding with the period of economic growth and social stability, after the turmoil of the Cultural Revolution (1966-1976), investment in housing developments and increase in the living standards became more and more emphasized (Lu et al. 2001). Moreover, innovative concepts and approaches towards the promotion of a socialist public housing system with Chinese characteristics was encouraged. In the 1980s, along with the market-oriented reform, the economic growth, which resulted in a much more diversified and differentiated requirements for living standards, the need for larger scale housing developments, than those achieved through the previously adopted Residential Quarter, led to the introduction of a new urban system for the planning of residential areas, the so called three-level planning structure of Residential District – Quarter – Cluster. According to the Code of Urban Planning and Design for Residential Districts (GB50180-2002), the residential areas in the People's Republic of China are planned and designed following a hierarchical structure based on the number of residents and households: Residential District – Juzhuqu - (30,000-50,000 residents or 10,000-16,000 households),

Residential Quarter or Residential Community – Xiaogu - (10,000-15,000 residents or 3,000-5,000 households), Residential Cluster – Zutuan - (1,000-3,000 residents or 300-1,000 households) (Li 2011; China City Planning Review 2011) (see Table 5 and Figure 9). In China, the subdivision of the residential areas using a hierarchical system was first used during the planned economy period, as a direct influence of the former Soviet Union's planning theories. The structural organization of the residential areas was in compliance with the distribution and operation of the public service facilities at different levels, as well as the administration of the local government (Hui 2013).

Table 5 The hierarchical subdivision of the residential areas and the relative households and residents number. (Source: National Code of Urban Residential Areas Planning and Design (GB50180-2002))

	Number of Households	Number of Residents
Residential district	10,000-16,000	30,000-50,000
Residential quarter	3,000-5,000	10,000-15,000
Residential cluster	300-1,000	1,000-3,000

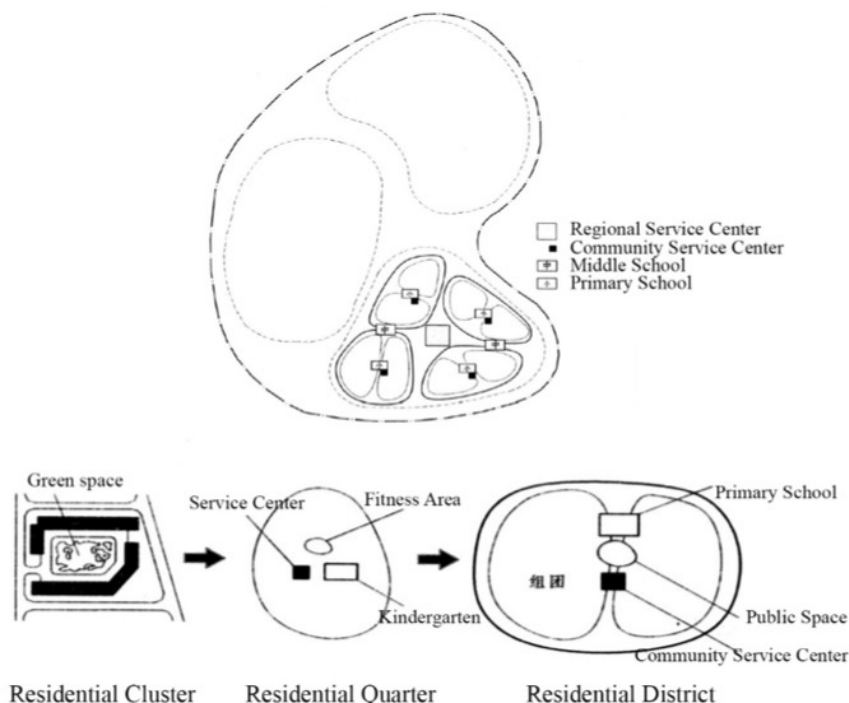


Figure 9 The three-level structure of the residential areas and the distribution of the basic functions at the residential Cluster – Quarter – and District (Source: courtesy of Zhang Helin, Tsinghua University – Edited by Badiaa Hamama)

When it was introduced during the planned economy period, the hierarchical 3-level planning system was seen as a turning point in the planning and development of residential areas in China. Beyond the enlargement of the size of public housing areas, there was also an attempt to integrate the housing system in the broader urban organism, and conceiving it no more as separate and autonomous entity. The relationship of the residential areas was enhanced, along with the promotion of a 'human-centred' approach in the design and distribution of public service facilities, better represented in the so called 'Thousand resident quota and service radius'. The planning ideology based on the 3 hierarchical levels continued its influence on Chinese cities although the collapse of the socialist system and the adoption of a market oriented economy in the 1980s. However, recently these planning ideology have shown many limitations, especially its inadaptability to the changing market, and consequently was heavily criticized. Many cities have revised their standards for residential planning and design, proposing new ideologies like the '15-minutes, 10-minute, and 5-minutes' daily service circles, aiming to reduce the size of the residential blocks and put more emphasis on the distribution of the public service facilities.

3.4.2 STREETScape

The way in which streets are lived and perceived is a fundamental topic to understand the spatial feature of different urban cultures and their social side. In Europe the street is traditionally the place of self-representation: the "Strada Nuova" in Genova has been designed in 1550 to allow noble families to build their own palaces in a competition of beauty, richness and power. In the American tradition the street became overall a place dominated by its market role (see the book by Venturi on Las Vegas, 1972). In China streets are the real public space for people's daily life and its essential activities (trading, eating, playing, discussing): their role in urban life is so strong that sometime a street can appear even where the planning didn't establish that.

It is hard to say which the origin of the street was. Nowadays we mainly divide urban path into two types: the *road* and the *street*. One refers to the road and highways which connected towns and cities; the other one refers to lanes and communities which lined with houses and other buildings.

When we are looking back at the history of the street, no matter in which corner of the world, the development of the streets is closely connected with the architecture history, sociology, and even literature and drama. If we talk about the western urban public space, we may need start from the square, but for the eastern countries -especially in China- the streets represent the most representative urban public space that can be used together without the class differences. The street used to be the only public easement, with the function of public association and passage. And now it is the transition and buffer area of different functional spaces and one of the few shared space between all sorts of people.

In the Chinese dictionary, the "street" is described as "the road that has buildings on the both sides". There are plenty words are concentrated by the word "jie" (street) such as "jie fang" (neighbourhood), "jie shi" (street market), and "jie tou xiang wei" (means on the streets and alleys) etc. If we consider the street a physical space, then the "jie fang", "jie shi" somehow have more social meanings. "Jie fang" used to refer to the streets in community, which turns to the adjective of the neighbour living nearby. Thus we can see that the street has such an important social meaning in people's daily life.

Originally the Chinese cities have been top down designed according to a "chessboard" settlement, called Li Fang system. But during tang and Song dynasty the urban population density increases, so

that the Lifang system gradually no longer adapts to urban growth. The shrinking living space and the prosperous social economy have made the street become the most important space for urban public culture. The residents in the bottom who make up the majority of the city's population live in low, dense houses. Because of the small indoor space, crowded houses spacing lead to insufficient light in the interior space. Therefore, the daily life of many residents, such as the three meals a day, manual activities, meetings, leisure activities, etc., have to be moved outside. This has prompted the culture of the market or generates the street culture.

From the beginning of Chinese cities to today's booming growth of high-density cities, the Chinese cities have experienced an initial formation of "Shijing" culture, which is a "crowded culture" with special Asian characteristics. Not only for cars, had street gradually become a space for residents living and a place for public interaction. What we can see from the analysis of the painting "Along the River during the Qingming Festival" is that the urban structure changed after the collapse of the previous "Li-Fang System" (a planned public "chessboard"). Because of this transformation, the ancient Chinese city structure was no longer strictly follow the "Li-Fang System", which the urban formation produced by the government under harsh management. The slack management changed the living space of urban residents, and this change prompted further diversification in urban functions and forms. The resulted "Shijing" space can be recognized as the crucial public space in China for thousands of years.

Nowadays, in the process of high-speed urbanization in China, street space comes up with a lot problems such as poor quality, overflow of motor vehicles, and lack of security. The poor construction standards, mechanical urbanism, driving force of economic, and the rapid growth of cars and population, make streets no longer a comfortable place to communicate.

In modern China, urbanization process has developed rapidly. As we know, Le Corbusier's ideas were first recognized in the communist camp: the Soviet Union built more than 500 new industrial cities to develop the barren land of Siberia. Every city is almost planned and designed in the way of "Glorious City" in an attempt to create a socialist utopia. After the establishing of New China, Beijing became the largest test site for Soviet urban planning theory. There, the theory of neighbourhood units is based on a safe community with relatively self-contained, no motor vehicle threats. Furthermore and by another hand, in the first half of the twentieth century, some Chinese colonial cities such as Shanghai and Tianjin introduced the surrounding streets of Europe.

In actual operation, due to the consideration of urban rapid traffic priority and the security orientation of the community, the entrances and exits of pedestrians and motor vehicles in the residential quarters are reduced to a minimum. Therefore, the urban space is divided into closed "streets". The "big courtyard" is a concentrated expression. This kind of family service to the state institutions is an enlarged version of the community, and its clear feature is that the towering walls clearly separate the "big courtyard" inside and outside. This form of residence seems to bring back to China's earliest closed "Lifang system" system, in a monotonous and occluded way of living. This way of separating with high walls seems to be inconsistent within the theories of Le Corbusier, because what Le Corbusier advocates is now integrated into the city, and there are not many walls. However, this Chinese-style approach is very similar to the urban characteristics of Beijing's traditional courtyard houses: a boundary of a residence or institution must be very clear, in order to establish a border with a high wall. In btw still remain streets (with their *streetscape's* idea).

3.4.3 SELF-CONTAINED FACILITIES BASED ON RESIDENT QUOTA AND SERVICE RADIUS

Planning, construction and management of the public service facilities, is of paramount importance for the daily life of the masses and the liveability of a city. The national standard of planning and design (GB50180 – 1993) for the allocation of public service facilities in residential areas, has played an important role in the distribution and allocation of public facilities in residential areas across China. After the housing reform of 1994 and the consequent changes in the management structure of residential areas, the GB50180-1993 has been revised in 2002 as a measure to redefine the national standards of public service facilities and meet the new requirements for urban development (see Table 6). The public service facilities are distributed hierarchically following the three-level structure of Residential District – Quarter – Cluster (see Table 7). The standard of planning and design strictly determines the quality and liveability indicators of the residential areas. As a result of the rapid economic and social development, residents have put forward new demand for public service facilities, consequently the previously adopted code GB50180-1993 proved to be inefficient, and many cities reviewed their methods for the allocation and distribution of public service facilities in the residential areas (Bai 2017).

Table 6 Number of households and residents for the different residential levels. Comparison of the code for urban planning and design GB50180 – 1993 and the revised version of 2002 (Source: National Code of Urban Residential Areas Planning and Design (GB50180-2002))

	Number of Households		Number of Residents	
	1993	2002	1993	2002
Residential district	10,000-15,000	10,000-16,000	30,000-50,000	30,000-50,000
Residential quarter	2,000-4,000	3,000-5,000	7,000-15,000	10,000-15,000
Residential cluster	300-700	300-1,000	1,000-3,000	1,000-3,000

In 2006, Beijing's Municipal Government issued the newly revised index for the allocation of residential public service facilities in the city, the so called "Beijing City Residential Public Service Facilities Planning and Design Indicators" (Beijing Municipal Government 2015). The index optimized and adjusted the supporting facilities framework, dividing it into six categories and 52 indicators, and added several new services (*ibid*).

The 1993 edition of the national standard facilities addresses 8 categories: education, medical and health services, cultural and sports services, business services, financial posts and telecommunications, municipal public utilities, administrative management and others. In the revised version of 2002, a "community service" facility was added, social service facilities such as nursing homes and disabled care centres, business services and administrative management services; medical and health care have been further strengthened.

Table 7 The hierarchical allocation of the compulsory and selective public service facilities in residential areas. (Source: Code of Urban Residential Areas Planning and Design (Gb50180-93))

	Residential district	Residential quarter	Residential cluster
Compulsory facilities	Secondary school, hospital (200-300 beds), outpatient clinic, cultural centre, comprehensive food store, restaurant, Chinese and western medicine store, bookstore, market, other tertiary industry facilities, electricity opening and closing facilities, public toilet, sub-district office, police station, other administrative buildings	Child-care centre, kindergarten, elementary school, health-care centre, sport facilities, comprehensive food store, restaurant, bank, post office, community service centre, property management office, electricity transformer room, street lamp switch room, public toilet	Convenience store, security defence station, residents' committee office, garbage collection station, public parking lot
Selective facilities	Nursing home, sports venue, telecommunication branch office, elderly care centre, disables care centre, heating station, gas pressure regulating station, solid waste transfer station, public garage or parking lot, bus terminal station, fire station, fuel supply station, air defence basement	Chinese and western medicine store, bookstore, market, elderly care centre, heating station, solid waste transfer station, public parking lot, bus terminal station, fuel supply station, air defence basement	Child-care centre, sport facilities, heating station, electricity transformer room, high pressure water pump room, public toilet, air defence basement

Before the housing reform (1994), residential areas were under the exclusive management of the work units. However, with the collapse of the socialist model, the implementation of an alternative management model in the new market-oriented society became of extreme importance. In 2000, the Ministry of Civil Affairs urged for the promotion, throughout the whole country, of the new concept of 'grass-roots management system' (Bai 2017). The inclusion of the community concept in the standards of public service facilities is an important decision, because beyond its technical significance, it recognizes the increasing role and importance of the community's opinion about the allocation of the public service facilities.

The implementation of the national standard for the allocation and distribution of the public service facilities, does not only serve as a technical mean, but is also an important measure for the maintenance and supervision of public interest, as well as the improvement of the liveability index of the residential areas. In some provinces and cities such as Guangzhou, Nanjing and Chongqing the allocation of public services is designed according to a comprehensive system (Bai 2017). They have extended the residential district so to include the municipal and regional level, with the aim to better connect the various facilities and services at the different levels, and enhance the quality of life of the residents.

In the national standards code, the public service facilities configuration structure is more reflected in the so called 'thousand resident quota index'. Self-contained facilities regulate necessary elements of

a residential area, such as public greens. They need to meet with certain criteria so as to create liveable spaces. Thousand residents' quota regulates the minimum area of building or land of necessary public services for every thousand residents. These criteria are set to provide sufficient public facilities for residents. Service radius is an important planning standard for a reasonable distribution of public facilities and utilities in residential areas. It is used to define the scope in which public facilities can provide proper services for local residents. In fact, it regulates the maximum distance from any housing unit to necessary public service facilities, such as education, medical, and commercial facilities. These criteria are set to facilitate residents' access to public services. Different kinds of public facilities and utilities usually have different service radius according to their specific carrying capabilities. However, not all cities and provinces are adopting the thousand resident quota index (Bai 2017).

The GB50180-1993 has guided the allocation of public service facilities in residential areas for many years. However, it showed greater limitations that many cities, in 2002 and 2016, revised it to meet the new demands and needs for public facilities by the residents.

However, despite the different adjustments made to the national code for the allocation and distribution of public service facilities in residential areas, enriching them from meeting the basic need of the residents' daily life, today the complexity of the built environment and the social structure are raising new challenges that need to be taken into account to create a harmonious community. One of the challenges is how to coordinate the relationship between the national compulsory standards and local public service planning standards in the process of improving the multi-level planning standard system from the state to the local levels. Second, with the continuous promotion of the social and economic development goals, how to guarantee the advance also of the public service facilities.

Demand for public facilities is getting more diversified and heterogeneous from one community to another within the same urban tissue. In this complex environment a key issue is how to act in a flexible way maintaining social equity and public interests.

3.4.4 URBAN AGRICULTURE

The current urbanization process is leading to a persistent expansion of artificial surfaces to the detriment of agro-systems, thus contributing to the degradation of natural ecosystem and loss of agricultural land: this results in a reduction of biodiversity and overexploitation of natural resources, with strong effects on global food security and environment protection (EU Commission, 2011).

The negative impacts of urban expansion on food security include damages to land and water resources, overloaded production-distribution systems, traffic congestion, less fresh and nutrient food, new consumption patterns and additional costs to access food (FAO, 2011).

However, cities are not only part of the problem but also part of the solution.

A more urban-centred food system approach can integrate the urban-rural connection and secure food provision, promoting a more localized food chain and urban resilience.

In this context, urban agriculture plays a key role because it advantages not only food production but also environment and society.

Going forward, the demand for sufficient and healthy food will grow and, in that case, urban agriculture will become essential (Zhu, 2016).

However, even though urban agriculture increased its popularity over the years, becoming a large-scale phenomenon (FAO, 2008), it still lacks a unique definition.

Most governments have not provided a definition of urban agriculture, in laws or local regulations, because they have not officially recognized this phenomenon yet. Consequently, urban agriculture is often informal and unregulated.

Despite this, some definitions have been given in the literature by EU networks, international organizations, and academia.

The Cost Action- a European Union network of researchers- states that urban agriculture “spans all actors, communities, activities, places and economies that focus on biological production (crops, animal products, biomass for energy, [...]), in a spatial context that, according to local opinions and standards, is categorized as urban” (Lohrberg et al. 2015).

Differently, FAO - Food and Agriculture Organization of the United Nations - briefly describes urban agriculture “as the growing of plants and the raising of animals within and around cities”.

Also, Roggema defined urban agriculture as “the growing, processing and distribution of food or livestock within and around urban centres with the goal of generating income” (Roggema, 2016).

Whereas, scholars like Adornato define urban agriculture highlighting not only the area where the agricultural activities are conducted but also their economic and social impacts. Thus, urban agriculture is described as “a localized activity within an urban and peri-urban area that aims to produce and distribute a wide variety of food products and services, using relevant amounts of human and material resources of that area, and concurrently giving relevant amounts of products and services to that area” (Adornato, 2013), that “thanks to its multifunctional and multi-ideal contribution, has a fundamental role in the process of sustainable, agricultural and urban development” and it “expresses a new economic (proximity market) and social (based on solidarity and subsidiarity) models” (Adornato, 2015).

In the light of the above, the definition of urban agriculture appears deeply linked to food and biological production, therefore to food security and biodiversity protection.

The activities included in the context of urban agriculture are: vegetable and olive growing, floriculture, fruit picking, cultivation of aromatic and medicinal herbs, and livestock farming.

In this context, a distinction between gardening and farming is often made to underline whether the agricultural activities have the main purpose to merely produce food - i.e. farming - or to achieve other social goals - i.e. gardening - (McEldowney, 2017).

The definition of urban agriculture is also extremely linked to the area where the agricultural activities are carried out, that has to be “urban” or “peri-urban”. Consequently, it can take place in public and community gardens, allotments, roof gardens, balconies or backyards, urban farms - that could be social, therapeutic or educational.

Therefore, urban agriculture has a small-scale implementation compared to conventional industrialized production, occurring in rural areas (Keeffee, 2016).

The definition seems also linked to the impacts of urban agriculture on economy and society. Particularly, urban agriculture is characterized not only by geographical proximity between producers and consumers in the urban area, but also by socio-economic proximity, because of local money circulation and civic involvement.

Urban agriculture promotes social inclusion because all citizens, especially vulnerable groups and people with fewer opportunities, could obtain major benefits by participating in farming and gardening activities.

For example, urban agriculture facilitates access to fresh food for low-income city dwellers, because locally produced food implies short food supply chains, and that means less transport, packaging, and storage costs which leads to cheaper food.

Therefore, the large-scale benefits of this phenomenon include urban resilience, food security support, biodiversity protection, reduction of CO₂ emissions, creation of green areas in the cities, economic advantages and social inclusion.

In conclusion, even if the definition of “urban agriculture” appears quite wide and still unresolved, it is possible to set forth the three main features of this phenomenon that has to consist in 1. agricultural activities, 2. located in an urban or peri-urban area, 3. to achieve relevant economic, social, and environmental benefits.

3.4.5 GATED COMMUNITY

Generally, gated community is defined as “walled or fenced housing developments, to which public access is restricted, characterized by legal agreements which tie the residents to a common code of conduct and – usually – collective responsibility for management” (Atkinson and Blandy 2005). However, while in Western countries, the phenomenon of gated communities is a recent one, and often associated with higher socioeconomic status, enclosed and physically well-defined urban spaces, ranging from residential areas to markets, is a practice deeply rooted in the Chinese history, and it can be traced back to the feudal society (Figure 10 and 11). Gates and walls have always been part of the Chinese urban landscape (Wu 2005, Huang 2006, Xu and Yang 2009, Pow 2009). Among the most recognizable features of traditional Chinese cities is the walled enclosure, with gates on its four sides. The ideal model for the planning of traditional Chinese (Imperial) cities can be found in the Wancheng diagram in Kaogongji (Source: Shatzman Steinhardt, 1999)

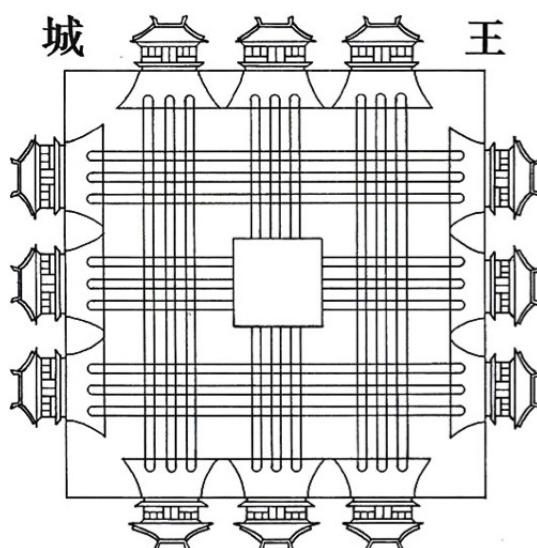


Figure 10 The Wancheng diagram in Kaogongji (Source: Shatzman Steinhardt, 1999)

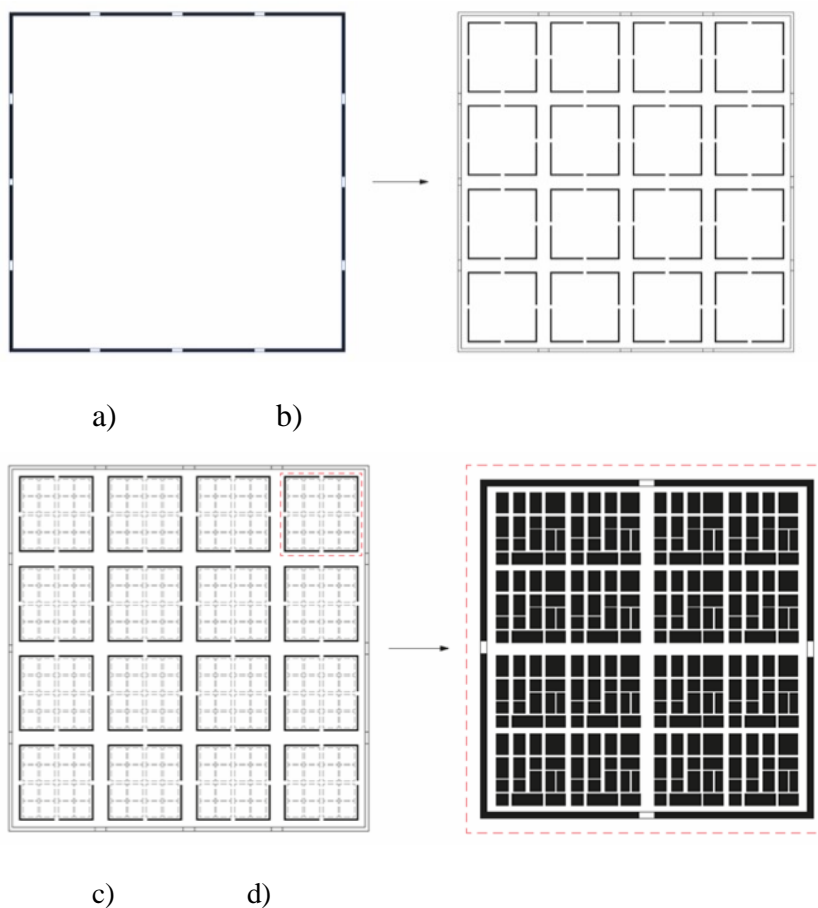


Figure 11 Schematic illustration of the typical urban structure of a Chinese city during the Tang Dynasty; a) the city's outer walls and gates, b) subdivision of the city into walled and gated wards with different sizes and functions, forming a checkboard urban layout with clear functional zones, c) the wards themselves were subdivided into various sectors by the internal road network structure (known as xiang, long and narrow alleys), d) theoretical subdivision of a typical residential ward into sixteen sectors. The sectors in turn were subdivided into variable parts (Source: Hamama 2017)

“While the very idea of neighbourhood is contested among observers as either a physical place or a perceived environment or a socio-economic unit, in China it does have a clear physical setting. It is a broadly residential area, usually occupying a well bounded mega plot and often taking the form of a city block or two in the broader metropolitan scheme of things” (Rowe et al. 2016). The act of enclosure acquired different meanings during the various political, social and economic environments. In some periods it was used as a tool to maintain the social stability, in others as an efficient instrument for the allocation and distribution of the public service facilities, at the different levels of the society, and in others as a community or individual choice (Hamama 2017). The long existence and continuity of the gate in the Chinese urban context demonstrate its flexibility to adapt to various circumstances.

However, the decline of the danwei system, the transition from a controlled collective socialist society to one dominated by market forces, resulted in the collapse of a series of social securities and benefits and the rise of new uncertainties. It was, especially, in this period that the phenomenon of gated communities acquired an unprecedented meaning, on one hand it represented a new way of making

profit, and on the other hand it represented the urban element for the many Chinese people looking for the recovery of privacy, identity and subjectivity extensively suppressed by the supremacy of the former communist collectivism practices. In the process of transition from living quarter as social welfare to commodity housing, the newly privatized community allows for both feelings of 'security' (Pu 2003) and 'self-determination and escape from government control' (Pow 2007b).

Yet, in the new changing era of fears and desires, demand for a new security, sense of belonging and safety, the private developers have identified in the wall a lucrative urban tool for the development of new enclosed urban settlements, mostly 'illusory images' that play on 'feelings and hopes' of the new emerging classes rather than on functionality and urban growth. Taking advantage of the continuous deterioration of the quality of the urban environment, they started advertising secluded 'bubbles' as a solution against the chaotic, polluted and congested urban surroundings. 'Chinese developers have successfully capitalized on a growing hunger for status by building on the gated community's inherent qualities of safety, and cultivating a flair for contemporary foreign chic' (Mars and Hornsby 2008). The fast urbanization of many Chinese cities ended up by building, in some cases, large enclosed blocks which are now targeted for being at the origin of traffic jam and low road density.

Despite the problems associated with it, the phenomenon of gated communities, in contemporary Chinese cities, should be looked at beyond its strict physical existence (Hamama 2017). The gate assumed also a strong cultural and social meaning, becoming a quasi necessary element for the communities to localize themselves in the fast changing cities. They carry meanings for people's identities and daily lives. And beyond their visible presence in the urban landscapes, the existence of the borders seems to have an invisible aspect which is their representation in people's minds, they are the manifestation of mental and psychological barriers too (*ibid*).

3.4.6 CO-DESIGN

Co-design stands for all those design approaches attempting to engage some or all stakeholders in the process and procedures of cooperatively designing solutions, so that the generation of results is verified throughout their development with potential or future users, or those affected by their implementation. Co-design requires a committed participative environment: participants (self-appointed representatives among a designated group of interest, potential or future users, and the like) are invited to cooperate in the phases of problem setting, design, development, evaluation of alternative proposals and their final implementation. Among the many possible applications, from IT app to human resource management, spatial design and place making actions provide the setting in which co-design bends over the political sphere.

In order to understand how co-design activities recombine technical knowledge and disciplinary status, it is worth noting that these activities define a new articulation of the relationship between experience and competence, with the first generally outweighing the latter. The experience – in line with what has been defined as 'the know-how' by Richard Sennett or 'capabilities' by *Amartya Sen* – determines a new central role in the creative and making process. In this light, design actions related to co-design retract conventional participatory processes generating a kind of movement against specialization.

An increasing number of architects and activists, often gathered in multidisciplinary collectives, place co-design practices at the centre of their activity, finding ample presence in exhibitions and magazines,

and giving rise to neologisms that characterize their action: Do-It-Yourself Urbanism, Tactical Urbanism, Bottom-Up Urbanism, Guerrilla Urbanism. Specific groups and collectives are renown for these approaches, such as: Raumlabor, Plastique Fantastique, Practice, Gravalosdimonte Arquitectos, What if: projects, Studio for Unsolicited Architecture. Moreover, collectives linked to public institutions and universities also adopt these approaches acting as 'third parties' (neither public administrations nor commercial enterprises) in urban processes, such as Rural Studio, a design laboratory of the University of Auburn, established at the beginning of the 1990s, on the initiative of Samuel Mockbee, and founded on the principles of learning-by-doing through the collective dimension. Other initiatives include also the activity of professional offices, such as Elemental in Chile, a "for profit" company associated with the Pontifical Universidad Cattolica de Chile and COPEC, one of the largest companies in the Country, whose importance with reference to co-design issues is not in the participatory dimension of the project, yet in the possibility of replicating the initial idea through shared and self-produced design practices.

Over the last decade, many exhibitions attempted at building a common framework for punctual and rather place-oriented practices. We can remember here: Space Pioneers Berlin. Exhibition on urban planning through temporary use (Gallery Plattform, Berlin, 2005); Fresh (annual exhibition promoted since 2006 by the COAM, Madrid); Actions: What you can do with the city (CCA, Montreal, 2008-2009); Unplanned: Research and Experiments at the Urban Scale (Superfront LA, 2010); DIY Urbanism: Testing the Grounds for Social Change (San Francisco Planning + Urban Research Association, 2010-2011); Spontaneous Interventions (American pavilion at the XIII Biennale di Architettura, Venezia, 2012); Small Scale, Big Change (MOMA, NY, 2010), Uneven Growth: Tactical Urbanisms for Expanding Megacities (MOMA, NY, 2014-5). Initiatives follow one another, often with a strong focus on emerging urban regions, but not only: co-design in challenging conditions, which indicates increasingly clever and sustainable strategies and processes, establishes replicable trajectories and tactics within increasingly heterogeneous contexts.

According to some practitioners, co-designing the urban space enhances opportunities for user empowerment and generally provides a democratization of collective decision-making and public processes. However, others see the risk of annihilating political and technical responsibility in decision-making and, all in all, see the appropriation of democratic decisions that affect many only by those who have time and attitude for active engagement as a potential threat.

4 PLACES

4.1 COMMUNITY BUILDING THROUGH PUBLIC ENGAGEMENT

There has been a long and winding road of the development of community planning in China in the past seventy years, which may be divided into four periods with quite different characteristics. Since the founding of the People's Republic of China, under the background of planned economy system, the community planning, or so called "juzhuqu guihua" (residential area planning), is mainly focused on the arrangement and distribution of homogenized housing units to the staffs in a "danwei" (working units), dominated by the government and the subordinate "danwei". Since the housing system reform especially the marketization of housing construction and supply in the late 1990s, the housing real estate developers have gradually become an important force in housing supply through the booming housing market, and the emphasis of community planning has been turned into providing comfort and pleasant community physical environment and housing units oriented to specific clients. While since the early 2010s, along with the transformation of Chinese urban development into new-type urbanization, especially in some megacities, like Beijing, Shanghai, Shenzhen, etc., the urban development priority has distinctly transformed from new district expansion to stock-based renovation. In 2013, the central government put forward the concept of social governance and later an all-dimensional development of social governance with the principal feature of multi-body participation has been accelerated through a series of policy statements. In this context, a new type of community planning has sprung up in recent years which focuses on integrative and sustainable development of the whole community. Different from the traditional residential area planning which is mainly led by the government and professionals, this kind of new type community planning has shown distinct characteristics of multi-body participation, including the government, social organizations, professionals and community residents, etc.

Four frontier community planning practical cases in Beijing and Shanghai in recent years are taken as examples, including Da-shi-lar, Dongsinan, Qinghe in Beijing, and Knowledge & Innovation Community (KIC) Garden in Shanghai. In each such case, there are different definitions and distribution of the role of multi-participants, to demonstrate a new picture of close interaction and cooperation between the government, society and market at the grassroots level of new-type urbanization. Each such case shows that, although with distinguished participation characteristics including government-led, social organization driven, and interdisciplinary university teachers and students-driven, etc., there are some common features shared by the four cases, like the government taking the leading role, social and professional force engaging in establishment of participation platform, as well as public space acting as the key focus of community planning. Each such case it reveals a new trend of multi-body participatory community planning development is gradually formed, aiming at whole scale development of communities, as a response to the people-centred urbanization strategy proposed by the central government, while the engagement capacity building of community should be further improved.

4.1.1 GOVERNMENT-PROFESSIONAL INITIATIVE

Qinghe, Beijing

Qinghe Jiedao is located in Haidian District, northwest of the central urban area of Beijing. Historically, tracing back to the Han Dynasty, it served as an important military town on the northwest outskirts of

the former Beijing City, and later has long assumed the function of an important sub-regional commercial centre since the Qing Dynasty. With the rapid urbanization process, today's Qinghe has changed from the original rural market town to a sub-district ("Jiedao") on the periphery of the central urban area. Qinghe Jiedao covers an area of 9.37 km² and has a population of around 170,000, including 80,000 immigrants (2017). There are 29 communities under the jurisdiction of Qinghe Jiedao, involving various types of residential areas such as "danwei" yards, commercial housing compound, urban villages, and mixed settlements. Most of the socio-space problems in the process of rapid urbanization in China may be found here, including the urban-rural dual differentiation, socio-spatial differentiation, short of public service and public space, low quality of outdoor environment, etc. With a typical characteristic of "semi-urbanization" in Qinghe, namely the urbanization of population is far lagging behind the urbanization of space, many problems have emerged, such as social segregation of different groups, poor sense of community identity and belonging, weak public awareness, and so on.

Since 2014, a group of scholars and students from different departments of Tsinghua University, including sociology, urban planning, architecture, landscape and fine arts, etc., have conducted a series of work analysis combining community governance with community planning, in close collaboration with the Qinghe Jiedao Office. This project concentrates on three main perspectives: community governance innovation, participatory spatial planning, and community service improvement, with the purposes of inspiring the vitality of the community, promoting public participation, and exploring the ways in which governmental management and social self-organization positively interact.

The work carried out so far can be divided into two phases.

In the first phase, from 2014-2016, it focused on optimizing the community governance structure. The Tsinghua team conducted a wide range of detailed investigations into the communities in Qinghe, and found that the administrative tasks of community residents' committees were too heavy to perform the autonomous function which should be the fundamental one as identified in the law, thus it resulted in ineffective communication between community's demands and governmental resource investment, and the community had no impetus, ability, or resources to pursue self-development. Therefore, the first step is to restructure a more open and active grassroots governance platform. The team, in full coordination with Qinghe Jiedao, devised a consultation and coordination mechanism at community level, in order to help the communities to elect the discussion committee members, to establish consultation rules, etc., in three selected communities respectively representing the old community, "danwei" compound community, as well as gated community. Thus the joint meeting consisting of the community party branch, the community residents' committee (including the discussion committee members), and the property management agency was formed regularly, and relevant organizations and individuals were invited to participate in each specific topic. Moreover, many workshops have been organized to improve the abilities of raising issues, discussion and consultation, coordination and solving problems of the Jiedao Office, the community residents' committee, and residents. They have been also encouraged and trained to formulate common goals and future images of their communities, as well as action measures. Aiming at a whole scale improvement of communities, the entire process of community planning from the proposal, negotiation, decision-making to implementation, has been opened up. After more than two years of development, collective actions in communities have derived from the joint meetings, people working together to improve the community environment including the reconstruction of bicycle shelters and green planting, beatification of building façade (Figure 12).



*Figure 12 Community residents collaborated with Tsinghua team to beautify the building façade
(Source: courtesy of Xiao Lin)*

It helped remove the common limitation of “negotiations without actions” of community residents’ committees for a long time. Residents were pleased to see, and with more confidence in the power and outcomes of self-negotiation and joint action.

The second phase of work, from 2017 till now, has focused on three inter-related aspects: community governance innovation, public space improvement, and social service enhancement, through interdisciplinary collaboration. The work has stepped upward to the Jiedao level, in order to promote the structural reform, and push forward community planning and community governance in more communities. For example, the team helped the Jiedao Office to optimize the expenditure system of public special fund for community development, fostered a hub-type social organization in cooperation with the Jiedao Office working on community governance ability improvement, developed community mutual assistance system and home-based aged service, and established the community planner system to assemble a group of urban planners, architectures, landscape designers, sociologists, social workers, and students majoring in related subjects to long-term take root in Qinghe’s community planning, etc. Through participatory planning, co-construction and co-governance, it helped to cultivate the subjectivity of community and rebuild the public sphere, not only the physical environment but also the neighbourhood relationship and interactions have been greatly improvement, demonstrating the co-ordinated advancement of space reproduction and social reproduction.

4.1.2 ENTERPRISE-PROFESSIONAL INITIATIVE

Knowledge & Innovation Community (KIC) Garden, Shanghai

The KIC Garden is located in the Chuangzhi Tiandi Park in Yangpu District, Shanghai. The KIC Tiandi is a public activity centre and an innovative service centre, where the universities, the science and Technology Park, and neighbourhood communities join together and interact. It was constructed by the Yangpu Science and Technology Innovation (Group) Co. Ltd. and the Hong Kong SHUI ON LAND Group, covering an area of 83.9. hm2, within which lies the KIC Garden with an area of 2200 m2. The garden was a typical vacant open space left in rapid urban development because of the municipal pipeline passing through.

Since 2016, the developer of this area, i.e. the Yangpu Science and Technology Innovation (Group) Co. Ltd. and the Hong Kong SHUI ON LAND Group, cooperated with a non-profit organization named "Siyecaotang", renovated the land into the first community garden in an open district in Shanghai, with the main idea of Permaculture with widely community engagement. After renovation, the KIC Garden becomes a community public space integrating leisure services, public activities, community agriculture and landscape, promoting nature education, neighbourhood communication, and community resource sharing (Figure 13).



Figure 13 Bird's eye view of the KIC Garden (Source: courtesy of Liu Yuelai)

There are four main types of actors in the process of the renovation and operation of the KIC Garden: the local government, the enterprises, the social organization and the residents. At the government level, the Office of Wujiaochang Jiedao, as the territorial administrator, helped establish the community self-governance mechanism with "self-governance office" as the main operator, promoted public participation in community development through multiple channels by purchasing social services from social organizations. In addition, the KIC community residents' committee has offered propaganda and support and organized residents' participation from the beginning of the project, which plays an important role in community integration and interaction. At the enterprise level, the KIC Tiandi of SHUI ON LAND Group played a significant role from the planning and design to the construction, operation and maintenance of the KIC Garden. The main funding is provided by the Chuangzhi Tiandi, and maintaining the continuous open and sharing of this space is also a reflection of corporate's social responsibility. Moreover, the KIC Tiandi employs a third-party social organization to manage and maintain the garden and helps with the propaganda and implementation through its large platform. At the social organization level, "Siyecaotang" conducts the technical guidance, daily management and activity organization work. The various activities planned and organized by "Siyecaotang" function as a bridge connecting the government, enterprises and residents. As for the residents, they participate in the use, management and maintenance of the KIC Garden through different ways. Under the support of the enterprises, the guidance of the government and the cultivation of the social organization, some community organizations have been emerged and grown up, such as the Huayou Club with the elderly as the main body, the Little Volunteers with children as the main body, and the Fashion Horticulture with most young people.

The process of renovating the KIC Garden can be divided into four parts. The first one is decision making dominated by the government. The government integrated resources to create a platform for open

dialogue among the enterprises, the residents, and the social organizations, and helped to reach consensus on a rational division of work and balanced development. The second one is inclusive design. The inclusive design of the KIC Garden is a process of empowerment, requiring designers to understand in depth the habits of residents in using the space and the residents' common memory of the community, and encourage and help the residents to participate in the design of public spaces. The third part is participatory construction. Through the process of construction, residents were able to touch the earth and nature in urban space and form the sense of community identity and belonging. The fourth part is multi-party participation in management and maintenance. Through the different activities, a communication platform is established between the universities, the enterprises, the government, and the residents to form a stable network of relationships so that the community's public space can both link more external groups and enhance the connections between internal groups.

With the social organizations as the hinge, linking the community self-governance organizations, the voluntary organizations, as well as the enterprises, and establishing partnerships with the government sectors and bringing the positive forces of the government, the enterprises, and the residents into full play, the KIC Garden has become a source of community vitality and harmony, and an important basis of social building. It serves as a venue for community residents to participate in horticultural activities in a co-constructional and shared way, provides communities with opportunities for communication and sharing, so as to promote interaction breaking through the barriers causing by generations, economic status and social classes.

4.1.3 GOVERNMENT INITIATIVE

Da-Shi-Lar, Beijing

The Da-Shi-Lar area is located to the southwest of the Zhengyang Gate, very central site in the Old Beijing City, covering an area of 1.26 km². It has been one of the most prosperous commercial areas since the Ming Dynasty in Beijing, famous till now for the maintaining of the historical urban fabric and traditional lifestyles in hutongs for hundreds of years. While it has gradually declined in recent decades, with serious physical and social problems, such as population and facilities aging, narrow roads, poor living condition, disadvantaged groups' concentration, social disorder, etc. As one of the relatively intact historical and cultural blocks in the Old City, Da-Shi-Lar's protection, renovation and revitalization is faced with various challenges: high population density, shortage of appropriate public facilities, deteriorating urban landscape, and the complicated and strict protection and control regulations to the historical areas leading to impossibility for large scale redevelopment or industry replacement. It has long been a tough challenge to find a suitable path to guide the local residents to participate in the regeneration of Da-Shi-Lar, even hard to find an effective operating model for reference to settle well the contradictions between industry upgrading, livelihood improvements, community building, historical protection, and sustainable urban development, etc. This has also resulted in the lack of initiative of local peoples in protecting and developing this area, so that the living, social and economic conditions continue to deteriorate even harder.

Since around 2010, the Xicheng District initiated a series of urban regeneration projects in the Da-Shi-Lar area, to create the cooperation opportunities between government and market, attracting numerous designers, planners, architects, artists, and business to bring their ideas, workshops, and projects into this area, to integrate the old city protection with socio-economic revitalization.

One of the most important features of this new mode of urban regeneration is to transform the former approach of large-scale demolition and redevelopment into a more flexible and more resilient way such as the “systematic planning and organic renewal”, considering Da-Shi-Lar in an interconnected social, historical, cultural and spatial context and concentrating on innovative network establishment and nodes insertion. The renovation of some courtyard and hutongs as nodes and clusters was carried out in the way of systematic planning and community participation, and a networked triggering effect was then generated. In this way, based on the careful protection of the existing urban fabric and landscape, a more flexible way of using the space is explored. More importantly, it transforms the passive state of a single entity (government or enterprise) to implement the renovation of the whole region, into the positive prospect of co-construction of local residents and enterprises together with participation of social resources, resulting into a community where new and old residents, traditional and emerging industries are intermingled with each other, constantly renewed, and coexist.

Another significant principle of the regeneration of the Da-Shi-Lar area is multi-subjects participation including government, market and social entities, based on the “Da-Shi-Lar Platform”, established by the Xicheng District and functioning as an open work platform. The government and the market positively interacted, and in collaboration with urban planners, architects, artists, and designers and entrepreneurs, in order to explore a new mode of organic regeneration in historical and cultural area. The establishment of such a platform not only links together different stakeholders to participate into the process in different stages with different responsibilities clearly defined, at the same time, it also attracts a large amount of diverse social groups and resources into the whole process.

The organic regeneration of the Da-Shi-Lar area can be divided into three phases: pilot practice, community participation and integrated development. In the first phase, much attention was paid to improve people's living conditions and solve the problem of relocation and compensation for residents who were voluntary to move, so as to release some development space. At the same time, the improvement of the infrastructure was initiated, the “Da-Shi-Lar Platform” was established, and several key issues were explored through small-scale trials including how the old buildings can be renovated, what kind of business can enter and how to enter, etc. In the second phase, the goal of community building and the new mode of multi-party cooperation were proposed (Figure 14). The work of community building was carried out in a flexible way based on diversified characteristics and needs of residents and entrepreneurs. In the third phase, on the basis of local participation, the government retreated to the role of supervision, public service and management, formulating the rules for urban planning, industry operations, etc., leaving space for the community itself to prosper.



Figure 14 Courtyard renovation as a trail project (Source: courtesy of Jia Rong)

4.1.4 PROFESSIONAL INITIATIVE

Dongsinan, Beijing

The Dongsinan area is located in Dongcheng District, as a part of the historic and culture district in the Old Beijing City. It is famous for the well-preserved traditional courtyards and hutongs, especially many former residences of celebrities. In 2014, the Shi-Jia-Hutong Area Landscape Protection Association was established by a group of local residents, institutional representatives, and urban planners, etc., as an NGO with the main objective of hutong area landscape protection, bringing the residents, the property owners, the local government, and various social forces together on a platform to jointly participate in the protection and regeneration of the neighbourhood. With its support, not only the physical landscape in Shi-Jia-Hutong area has been gradually renewal, but also, and even more important, the social self-organization and self-management abilities as well as social belongs have been greatly improved.

There are several important measures adopted by the Shi-Jia-Hutong Area Landscape Protection Association in the process of neighbourhood regeneration and community building, initiated with the establishment of the system of community planners. Planners maintain the whole-scale protection of the traditional hutong landscape, pay close attention to the improvement of residents living conditions, take the establishment of community self-governance and social participation mechanisms as the development goals, use the methods of public participation throughout the entire planning process, so as to promote the implementation of regeneration projects and improve urban governance (Figure 15).



Figure 15 Community planners organizing participatory planning meeting (Source: curtesy of Zhao Xin)

On the basis of community planner system, the Shi-Jia-Hutong Area Landscape Protection Association conducted a series of interventions concentrating on improving the public environment of courtyards and community liberal and arts education. The most important work is the improvement of the shared space in courtyards, as well as the public environment in hutongs and streets. Meanwhile, a significant mechanism was encouraged to be popularized as the "courtyard self-governance system", bringing

residents back into the discussion and management of public affairs in courtyard environmental self-management, and eventually to lead the residents to get back to the centre of courtyard self-governance. The Shi-Jia-Hutong Area Landscape Protection Association, working together with the Jiedao Office, recruited six professional planning and design institutes to take charge of the participatory design of courtyard renovation as volunteers. The planning and design teams took the lead to formulate the work processes including preliminary survey, participatory design, implementation preparation, construction and long-term maintenance. During the project, the community planners played a role in holding the principles of planning implementation, incorporating resources and social support, and organizing residents' participation. After the project, not only the environmental quality has been improved, but also the relationship among neighbours has become more harmonious. The community planners also cooperated with the community residents' committee to promote community liberal and arts education, including organizing surveys of oral history of the Shi-Jia Hutong area, establishing Hutong Tea House-Community Convention, and holding the exhibition "Design for People" in Beijing International Design Week in 2017, etc. It is hoped to lead the residents to understand the community better, mine shared memories, shape the common vision of home, establish civic awareness, and eventually achieve the internal renaissance of the historic area.

The Shi-Jia-Hutong Area Landscape Protection Association has initially explored a self-regeneration way without dependence on large scale investment and combining the "top-down" and "bottom-up" approaches. They integrated community planning and community building, based on the protection of hutong landscape, to promote improvement of living conditions and social governance, and have gradually fostered the endogenous power of the community. At the same time, they used planning as a platform to integrate multiple resources, bringing together various social forces. And in the process of long-term cooperation, they have built up local co-construction partnership to accompany neighbourhoods to grow together. In addition, the practice is led by the Jiedao Office as the local government. It shows a close integration of the top-down support from various sectors and combines it with the "bottom-up" capacity of residents' autonomy, demonstrating the concept of "good governance".

4.1.5 COMMUNITY OF RESIDENTS IN COOPERATION WITH MUNICIPALITY

Svartlamoen, Trondheim

Svartlamoen is an alternative district which describes itself as 'a gathering of houses in a little place called Lademoen north east of the centre of Trondheim, a city in Norway'. According to their official webpage, Svartlamoen is Norway's first urban ecological area, prioritising environmental sustainability with a flat organisational structure, a transparent economy, low standards and cheap rents. Most of the buildings there were built at the end of the 19th century or the beginning of the 20th century. Svartlamoen is a result of many years of political struggle, which culminated in 2001 when the city parliament decided to rehabilitate (not demolish) the existing buildings and develop the area as an experimental arena for city ecology (has a very special regulation plan 'reguleringsplan'). Before this, in 1996 and -97, the preservation of the neighbourhood engaged a large amount of people in Trondheim, amongst them several artists, writers and musicians, and this engagement likely contributed to turn the decision to not demolish the area. A landmark building, which for some time served as Norway's tallest wooden building, completed in 2005, was built there as the first new construction after this reorganization (svartlamoen.org, 2018). Svartlamoen is (legally) administered by means of two trusts (one for commercial properties and one for housing) where the inhabitants and the city parliament both elect members of the steering committees. Amongst the many local initiatives there, they have

a shared garden, an annual festival called 'Eat the rich', a local free/exchange shop, a pub, a stage and concert area, and several smaller spaces for exhibitions. Today, only around 250 people live in this area (trondgam.wordpress.com, 2013).

Internally the area is structured with a housing association where all inhabitants are members, and there is a monthly 'district meeting' where decisions pertaining to the area are made, following the consensus principle. In addition, the area is divided into five neighbourhoods with their own 'local democracies' where decisions concerning the specific neighbourhoods are made, and representatives for the different internal groups and committees are chosen. The development of the area in itself is 'dugnad'-driven (see WORDS). A master thesis from 2017 (Østerli, 2017) assesses this part of the city with respect to how historical and cultural values are protected through the built environment in this local community. Østerli (2017) concludes that long-term municipal ownership of the district has been an important framework condition for allowing the type of local culture that has been established there. Moreover, Østerli (2017) concludes that the inhabitants of Svartlamon have 'played an important part in the housing management where the prevailing value of life quality instead of money' (p. 65) have been crucial in preserving and maintaining local community heritage protection.

There are several projects at Svartlamon that could be emphasised in this short report, but we have here chosen four different initiatives, with great impact on the local community there. These four are: The tallest wooden house in Norway at the time, the self-building project, the People's kitchen and Ivar Matlaus Bokkafe.

The tallest wooden house

Given Svartlamon's status as experimental zone, several unorthodox projects have been initiated there, which have paved the way for similar projects elsewhere in Norway. One such project is the landmark wooden house, which at the time of completion in 2005 was the tallest wooden building in Norway. The locals just call it 'Nyhuset' (the new house), and consists of massive, untreated wood, which needs less maintenance. The building has received some international attention, for instance at an exhibition in Copenhagen in 2012 about new Nordic architecture, and at the architecture biennial in Venice the same year it served as an example of buildings successfully promoting social welfare.

The self-building community¹⁷

Another experimental project worth mentioning is the 6 self-built houses (one of which is for common use, the other five are homes) that was finished in 2017. On their own websites, this project is named 'Experimental Housing at Svartlamon', and the whole process is detailed and documented with pictures there in English (Figure 16). Briefly put, this project originated from a master's thesis by two architects, that had the idea that if residents could take part in designing as well as building their own housing, there would be a greater sense of ownership and a better fit with their own ideas, thus leading to improvements for their lives and ultimately also the local community. Below there is a picture showing the organization of this project, as well as a picture of the houses during construction. This way of organising building-projects has a long history in Trondheim (and Norway as a whole), with people (future neighbours) coming together to build their own communities in order to pool resources and spread risk.

¹⁷ For a full description in English with picture, see: <http://eksperimentboliger.no>.



Figure 16 Experimental housing at Svartlamon, Trondheim (Sources: <http://eksperimentboliger.no>)

Ivar Matlaus Bokkafe (café)¹⁸

Ivar Matlaus Bokkafe is a volunteer-run (alternative/anarchist/anti-establishment) book & vinyl-store, small 'movie theatre', meeting-location, hangout and 'House of Literature' located at Strandveien 23 in Svartlamon. The book café is operated on an idealistic and collective basis and specializes in underground and non-profit literature. Books and literature can be purchased at Ivar Matlaus, but it is also acceptable to read the materials at the café without paying. For the locals the café is a local culture-bearing institution, and a part of the link between the Svartlamon community and the local anarchist youth-house UFFA from where modern Svartlamon has its roots, with its history reaching back to 1982. The cafe then opened in Svartlamon in 1996, and in addition to housing many activities like book-launches, discussion forums, movie screenings and lectures, it has cheap prices and a varied selection of strange and wonderful books and vinyl from around the world. When open, there's usually waffles and coffee, and in the evenings often also something stronger available. Ivar Matlaus Bokkafe lies door by door with 'Infokafeen', which also houses a host of initiatives, amongst them the People's Kitchen.

The People's Kitchen

The People's Kitchen was started in 2009 and is a place where people gather to eat free vegan food every Tuesday. One can also join to prepare the food, and also to collect food from stores. The food is gotten for free from local stores that would otherwise have thrown it away, and the project is based entirely on unpaid volunteers. The gathering every week gathers between 10 to 30 people depending on the time of the year (summer more popular than winter) and has become a fixed institution and gathering point for like-minded people from Svartlamon and from all over Trondheim. The initiative is very popular amongst international students that arrive to the town, and works as a way for them to integrate quickly to the local community. The initiative was started by two locals who originally got

¹⁸ For more information, check https://www.thefullwiki.org/Ivar_matlaus.

the food through ‘dumpster diving’ (literally finding food in dumpsters), and then inviting friends over to their place for dinner. As the initiative increased in popularity and more than 60 people were participating they needed a location, and found a suitable one at Svartlamon. The initiative is not only popular amongst the locals in Svartlamon, but also amongst students and other people living other places in Trondheim. The initiative has today expanded to also include ‘food saving’, i.e. finding and distributing food that would have become waste, which expands beyond Svartlamon.

4.1.6 ONLINE SOCIAL PARTICIPATORY NETWORK

Reykjavík, Iceland: Participatory budgeting in collaboration with Citizens Foundation

Reykjavík is the capital and largest city of Iceland, located on a peninsula in the bay Faxaflói (Store norske leksikon, 2018). Its history stretches back to the settlement of Ingolf Arnarson in year 874 (Store norske leksikon, 2017). Until the mid-1700s, it was nothing but a large farm, but in the 1750s a wool factory was established and the place became a fisheries and trade centre. As late as in 1801 Reykjavík did however still only have 307 inhabitants. In 2018, the capital region has 222,484 inhabitants (Reykjavíkurborg, n.d. b). Most people work in the service sector and in industry, especially related to fisheries (Store norske leksikon, 2018b). In Iceland as a whole, tourism is its fastest growing business. The country experienced a growth from 1.8 million tourists in 2016 to 2.4 million visitors the year after.

Reykjavík is further home to public institutions and buildings such as the parliament – the worlds’ oldest functioning parliament, Alþingi, built in 1881, the government building and the university, as well as a number of museums, embassies, and concert hall and conference centre Harpa (Store norske leksikon, 2018a;b). The government building, the national library and the national theatre are located where the first settlement was. Reykjavík’s city hall can be found by the lake Tjörnin (Store norske leksikon, 2018b). Reykjavík also has Iceland’s largest harbour, established in 1913-1917 and now a popular residential area, and the second largest airport after Keflavík. The buildings in Reykjavík are mainly detached houses, but there are also some (concrete) apartment buildings, most heated by means of water from hot springs.

Reykjavík is led by the mayor and governed by a city council that consists of 15 members (Reykjavíkurborg, n.d. a). The city council decides on the use of revenues and implementation of the projects of the municipality.

In the second half of the 20th century, following its independence from Denmark in 1944, Iceland was seen as a country with stable and functioning welfare, electoral and party systems (Jonsson, Åström & Karlsson, 2013). Over the last two decades however, it has lived through an economic boom followed by the shattering financial and political crisis in 2008 that included the collapse of its three largest banks and led to popular protests and the 2009 “pots-and-pans” revolution (Hardarson & Kristinsson, 2011; Jonsson, Åström & Karlsson, 2013). The frustration, antipathy and lack of trust in established systems that followed opened up for new kinds of movements. In November 2009 Besti Flokkurinn (the Best Party) was founded by Jón Gnarr, an actor, writer and stand-up comedian, based on a platform that included witticisms but also statements such as “Cancel all debts: We listen to the nation and do as it wishes because the nation knows what’s best for itself” (Boyer, 2013, p. 278). It was at first considered a joke by the political elite, but in 2010, Gnarr ran for mayor of Reykjavík, and in May 2010, Besti Flokkurinn got 34.7 % of the popular vote and gained six of the 15 seats of the city council.

Among the initiatives of the party were experiments in direct participatory democracy through an official partnership with the Citizens Foundation (Boyer, 2013). Citizens Foundation is a non-profit organisation based in Reykjavík, established following the economic crisis in 2008 (Citizens Foundation, n.d.). Its mission is “to bring people together to debate and prioritize innovative ideas to improve their communities”, and its goal “to help citizens get their voices heard and to encourage citizens participation in governance”.

Besti Flokkurinn dedicated funding for participatory budgeting, and the Citizens Foundation’s Better Reykjavík website (<http://betrireykjavik.is/>) allowed citizens to recommend and vote on budget priorities for local neighbourhoods (Boyer, 2013; Citizens Foundation, n.d. b). According to Citizens Foundation, the website was launched one week before the elections and open for all parties to crowdsource ideas, but mainly used by Besti Flokkurinn. During the first month that it existed, the Better Reykjavík platform was used by 40 % of the city’s electorate, in turn leading to the collaboration with the city council.

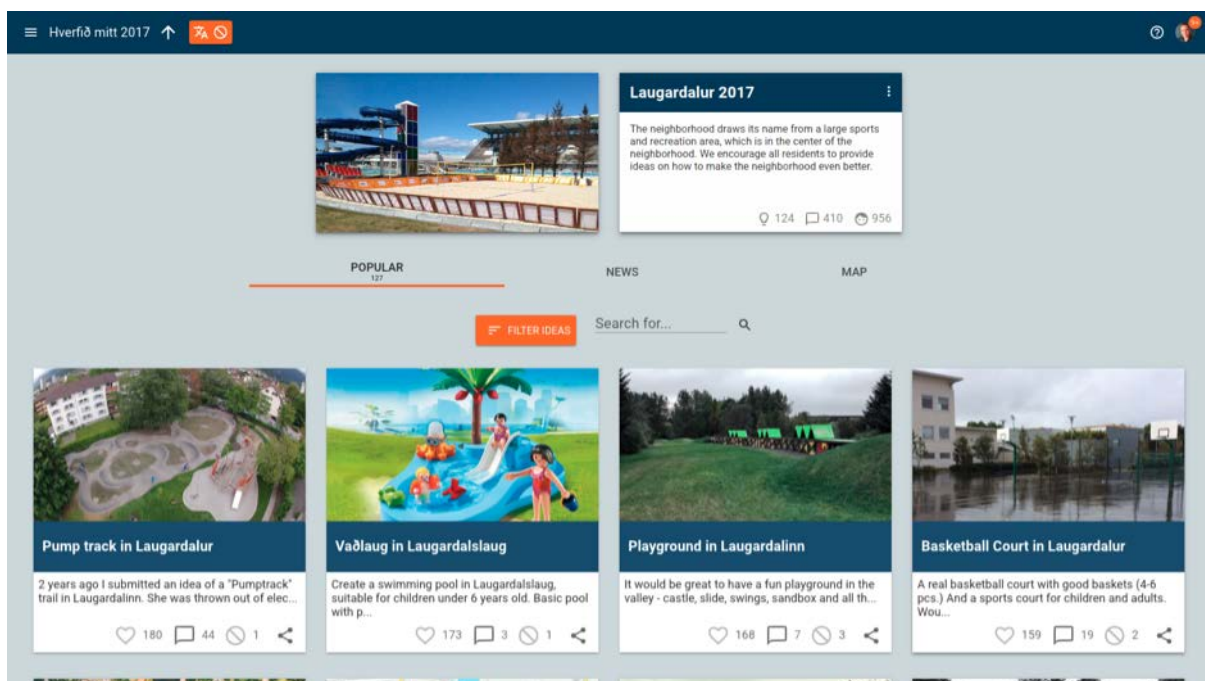


Figure 17 My Neighbourhood on the Better Reykjavík platform (Source: Bjarnason, R. (2018) Citizen participation and digital tools for upgrading democracy in Iceland and beyond)

Today, Better Reykjavík is an online participatory social network with 20,000 registered users (Citizens Foundation, n.d. a). Reykjavík’s participatory budgeting has taken place there since 2011 on the My Neighbourhood platform, previously referred to as Better Neighbourhoods (Figure 17). Each year, 450 million ISK (more than 3 million €) is allocated to the implementation of citizen ideas in order to improve Reykjavík’s neighbourhoods (Citizens Foundation, n.d. c). Between 2012 and 2017, 608 ideas have been approved. The Your Priorities web app enables citizens to submit and debate ideas, whereas the allocation of budget happens through Open Active Voting. Technology is however not a quick fix for challenges such as attracting young people (Financial Times, 2017).

Citizens Foundation (n.d. c) describes the process as the following: The foundation writes the software, the city of Reykjavík runs the election and the national registry authenticates the voters. For a period of one month, any citizen can submit ideas on how to improve their neighbourhood. The ideas, their cost and feasibility is in turn evaluated by the city of Reykjavík's construction board, before citizens' vote in an electronic, secure and binding way. Each person over the age of 16 can vote, and chooses a neighbourhood to vote within and projects to vote for. When selecting a project, voters can see their budget being spent, and other projects there is no budget for are "greyed out".

In 2017, the city of Reykjavík also crowdsourced ideas for its educational policy using Better Reykjavík (Citizens Foundation, n.d. b). According to Citizens Foundation, this was the first time that Icelandic government policy was crowdsourced.

Citizens Foundations today provides a range of open source solutions for civic engagement. According to their website, these tools are used for a range of purposes, from idea generation in communities to making decisions or providing advice on budget choices for refined ideas, in many different countries. The Your Priorities app has for example been tested in Estonia, Australia, Scotland, Wales, Norway and Malta (Financial Times, 2017).

The organisation has received a number of awards for its work (Citizens Foundation, n.d. a). For "Better Reykjavík" it won the European award in the 2011 e-Democracy Awards. In 2015, for its "Better Neighbourhoods" project in Reykjavík, it was awarded the Nordic Best Practice award by the mayors of the Nordic capitals.

4.1.7 CITIZEN DRIVEN TRANSITION TOWNS

Landås, Bergen: "Bærekraftige liv" ("Sustainable lives")

Landås is a residential neighbourhood in the district Årstad, located approximately 5 km southeast of the city centre in the municipality of Bergen, Norway's second largest city, in Hordaland County. Landås was a separate district until Årstad was established in a merger between Landås and Løvstakken in the year 2000 (Store norske leksikon, 2012). The residential development in the area happened from the 1950s, and it has for example also been home to the pedagogics and arts divisions Bergen University College (Store norske leksikon, 2009), now part of Høgskulen på Vestlandet, and to the Landås church built in 1966 (Norges kirker, n.d.). Landås today has approximately 6100 inhabitants (Bergen kommune, 2016). Its residents are generally highly educated. The share of low education levels is one of Bergen's lowest (Bergen kommune, 2016).

The network organisation Bærekraftige liv («Sustainable lives») was established by three neighbours in 2008, focusing on Landås school district (Eimhjellen, 2016; Bærekraftige liv, n.d. c). Its goal, as formulated on its Facebook page which has approximately 5000 followers, is to reduce the ecological footprint and increase quality of life, "at the same time and where we live" (Facebook, n.d. a;b). Bærekraftige liv has a core group taking care of some administrative roles, but is generally a bottom-up initiative with little steering and formal organisation, with the ambition to contribute to a sustainable society largely through self-organised neighbourhood initiatives and organic growth (Harboe et al., 2018).

The network is based on the belief that the move from action to attitude is more effective than going the other way around, and it reports to also be experiencing this in practice (Bergens tidende, 2017;

Bærekraftige liv, n.d. c). Whereas the very first activity, the screening of a movie on sustainable development had limited attendance, having distributed invitations through networks and put up posters in the area, a cooking class organised in the autumn of 2008 attracted 90 participants (Eimhjellen, 2016). The activities of Bærekraftige liv now include sharing and swapping of favours and things – rides, tools and sports equipment, as well as repair workshops, redesign, and social activities like walks and parties (Bergens tidende, 2016; 2017; Eimhjellen, 2016; Bærekraftige liv Norge, a;c). In addition, information meetings and courses in urban farming, composting, wood felling, movie-making, vegetarian cooking and carving of sheep are arranged. Eimhjellen (2016) distinguishes between four types of activities: First, thematic evenings centred on a topic and a presentation, a movie or a discussion, second, practical activities such as wood felling, bike repair or courses, third, development and planning of larger projects such as energy upgrades or new transport solutions, and fourth, celebration and parties such as the annual Landåsfesten. He identifies around 20 thematic and largely self-organised groups, each with their own leader. Bærekraftige liv also owns and runs Matkollektivet, a distribution channel for locally produced food in the region, established in 2014 to connect local farmers and people living in urban areas, offering a food subscription service and an online shop (Matkollektivet, n.d. a;b).

While starting locally in Landås, other communities have joined over time. The network Bærekraftige liv Norge today refers to itself as a neighbourhood movement (Bærekraftige liv, n.d. c): “We lift each other out of paralysis and inspire a life worth living for you, others and the earth.”¹⁹ It describes the neighbourhood as a site in which all the problems of society can be found, but also all the solutions; they have just not been found yet²⁰. Local communities are seen as living labs that allow for experimentation at the interface between individual engagement, wishes and knowledge, and great and urgent societal challenges.

According to its website, the Bærekraftige liv network now consists of 30 different neighbourhoods (Bærekraftige liv, n.d. b). In addition to the activities and experiments taking place in local communities, Bærekraftige liv also (as of 2017), consist of two other parts or branches (Bærekraftige liv, n.d. c). The second, “NABO”, is the national level of the neighbourhood network. It works as the interface between the grassroots experiments and society in general, initiating projects that are too large to be carried out on a voluntary basis. Its goals are to contribute to the establishment of additional green neighbourhood networks, inspire continuous work in established networks, contribute to experience sharing across the local communities, strengthen knowledge about the role of local communities in environmental transitions, establish connections with international actors, and finally, strengthen the dialogue with government and business (Bærekraftige liv, n.d. b). The third branch of Bærekraftige liv, Lystgården, is a centre for sustainable food and culture established in a listed building at Landås hovedgård (Medium.com, 2016).

¹⁹ «Bærekraftige liv er en bevegelse av nabolag der vi får store ting til å skje. Vi løfter hverandre ut av handlingslammelsen og inspirerer til et liv verdt å leve for deg, de andre og kloden.»

²⁰ «Ditt nabolag er en liten verdensdel. Der bor alle storsamfunnets problemer, men også alle løsningene. Vi har bare ikke funnet alle enda...»

The movement has received a number of prizes and awards (Bærekraftige liv, n.d. c). It is frequently invited to share experiences at conferences, in media, research, business and politics on how to involve civil society in creating societal change.

Bærekraftige liv Norge is further member of the international Transition towns' movement. In an interview conducted by Harboe et al. (2018), one of the initiators explains that the motivation for self-organisation is different within Bærekraftige liv than what can be seen elsewhere, and for example what was the case in southern Europe following the financial crisis. Rather than happening out of necessity, Bærekraftige liv is a platform for leisure activities and about community building and meaning-making. This is confirmed by a pre-project on transition town initiatives in Norway. A survey conducted in Landås shows that social and environmental motives are most important to participants (Forskning.no, 2014). The movement makes it possible to become part of a community, and strengthens local development and identity. According to Haukeland, researcher at Telemarksforskning, Norwegian Transition town initiatives, including Bærekraftige liv, share three characteristics (Forskning.no, 2014): For the participants, the approach to lifestyle changes is pleasure-based. Second, the initiatives are based on a holistic approach to local transformation; it is based on voluntary work, but initiatives also work across sectors, involving municipalities, business and research. Third, the initiatives have a positive effect on the local communities, promoting social, cultural and economic values, in addition to environmental ones. According to Harboe et al. (2018) however, a challenge experienced by the Bærekraftige liv network is how to govern the self-organised and organically growing. Important challenges may be left unaddressed because activities are done on a voluntary basis.

4.2 MORE INCLUSIVE CITIES THROUGH EDUCATION AND DIGITAL INNOVATION

4.2.1 CLOSE THE S&T GAP BETWEEN RURAL AREAS AND CITIES

4.2.1.1 *Zhenfeng Middle School – Middle School S&T Museum in Guizhou Province*

Science & Technology Museum is an open place to everyone and provides education opportunity to people. China started the construction of S&T Museum in the late of 20th century, and the first real S&T Museum was built in Tianjin in 1995, after that several examples of S&T Museums were built up in different provinces. Most of the S&T Museums in China are more like Science Centres and education is their key role. Take the most popular one for example, China Science and Technology Museum's predominant educational form is exhibition education. Through scientific, informative and interesting exhibition contents designed to invite visitors' participation and interaction, the museum presents scientific principles and technological applications, and encourages visitors to explore and practice with their own hands in its efforts to popularize scientific knowledge, scientific thinking, scientific methodology, and scientific spirit. But in China, not every city has an S&T museum. Most of the small cities don't have S&T museum. In this situation, the middle school S&T museum project provides an important way for the people in small cities or counties to get science education. And some of them turned out to be very successful to provoke the curiosity of kids. Zhenfeng Middle School is such a good example.



Figure 18 The distribution of MSSTM in CHINA (Source: CSTA, 2017)

In March of 2016, China's state council general office issued "The civic scientific literacy action implementation plan (2016-2020)". According to this document, the improvement of public science literacy is an urgent important issue during the 13th Five-Year Plan. Lately, China Science and Technology Association (CSTA) enhanced construction of Rural Middle School S&T Museum Project, which was launched in 2012, as a useful effort to flat the S&T gap between rural and urban China.

The project aims to transfer S&T knowledge and the way of scientific thinking to the students. CSTA set specific goal of this project, which are to improve the rural youth science literacy, to promote the equalization (in terms of equal distribution/access) of science education resources, to promote the science and technology museum exhibits. Until the end of 2016, there are 293 MSSTM in China (Figure 18). Especially, Tibet constructed 77 MSSTM and ranks NO.1 of China, so that every county in Tibet has at least one MSSTM.

The MSSTM of Zhenfeng Middle School make a very good example of this project. Zhenfeng located in Qianxinan State which is a city in the southwest of Guizhou Province. The teachers and students in Zhenfeng Middle School show great enthusiasm towards the school S&T museum. Not only make a good use of the common exhibits but also create new exhibits by themselves. Most attractively, the school sets a "Golden Ideas" area and encourages students to write down their new thoughts of DIY, investigation and social practices. And then the science tutor will try to help students to make the "Golden Ideas" to come true. On the 28th science and technology innovation contest of Guizhou province, a project of the S&T team of Zhenfeng Middle School won the Second Prize, and "sky city" and "corn harvester" fiction painting won the Third Prize.

4.2.1.2 Scarabò. A city to educate

Macerata is a town of medieval origin (5th-6th century) in the Marche Region (IT), with about 42,000 inhabitants. It was built on a hill between the northern valley of the Potenza River and the southern valley of the Chienti River. It is also located 60 km from the Umbria-Marche Apennines and 30 km west of the Adriatic Sea.

Starting from 2017, the festival of education entitled "Scarabò. A city to educate" has been held in Macerata, which was conceived, organized and directed by Laura Copparoni, PhD in Human Sciences - Theory of Education curriculum.

The festival takes place on the second-to-last weekend of May and runs through the streets, squares, internal courtyards of ancient buildings and other public and private spaces, especially outside, of the historic centre.

"Scarabò" is in line with the idea of educating city (Frabboni, 1991; Longworth, 2006; Longworth & Osborne, 2010; Osborne, Kearns & Yang, 2013; Piazza, 2013), from the beginning to its most recent developments, intertwining with the perspective and objectives of lifelong education (OECD, 1973; UNESCO, 1972). In fact, the idea that animates "Scarabò" is the idea of a city that helps its citizens to educate themselves and develop their potential, promotes the right to learn outside and beyond formal channels throughout the lifetime, integrates the education system by becoming an educating community and that, through this care towards its own inhabitants, draws its lifeblood for a general enrichment of itself and of the society to which it gives body. The same Copparoni, interviewed by the author at the latest festival, says: 'A city that puts in place a significant educational project, undoubtedly contributes to offer its inhabitants a better life. This institutes that the city becomes both object and space for education, which feeds itself through the growth of the people who live there. If we think of education as a task that takes on an entire community, as a collective fact and as a social practice, we should think of the urban space as an environment in which each person can make his own contribution, and which each can satisfy the totality of his/her educational needs in. In this sense, the city becomes 'educating', a lifelong learning and education place'.

Scarabò's connection with the concept of educating city still goes along with stimulating a possible relationship between urban planning, architecture and pedagogy (Gennari, 1989; Saija, 2012). The decision to place the event in the historic centre of the town is not random. The goal, above all, is to allow for the educational rediscovery of spaces usually used in other ways and for other purposes, as well as to rediscover *tout court* some spaces forgotten by a citizenship that tends to decentralize, relocating in the suburbs. It is also the case of sparsely frequented spaces, or hidden in a manner of speaking, but not less important is the intention to lead the city to pedagogically reflect on the opportunity of an urban design that will be able to outline the physical spaces as spaces in line with different educational needs. Both Copparoni and the participants of the last May festival highlighted this additional factor element.

A final aspect of an educating city's identity, which Scarabò promotes through the actions and educational practices implemented, is the inclusiveness, that is the attitude, on the one hand, to make differences interact and reconcile as for a better integration and social cohesion and, on the other hand, to initiate learning situations useful to encourage the development of active citizenship and social participation.

Having clarified the main concatenations between Scarabò and the idea of educating city, it should be noted that the festival offers over 40 educational and training workshops dedicated to children from 0 to 13 years old, families, teachers, educators and ordinary citizens. These workshops are conducted by various public and private subjects, educators, entrepreneurs, traders, grandparents, etc., and cover various topics, such as music, creative writing, reading, theatre animation, philosophy for children, drawing and painting, dance, work handicraft manual, creative recycling, etc. In addition to all of this, there are also fun and recreational activities.

The pedagogical-educational research that will be conducted on this event, considered as a case study, will focus on the deepening of the following topics: Scarabò and the learning processes; Scarabò and the educating city; education and urban design; education and social inclusion; lifelong education and educational policies; education and technology. In this regard, structured audio interviews will be carried out, addressed to the participants to the festival (adults and children) and to the conductors of laboratories (Figure 19). Furthermore, videos of main activities will be recorded.

These are the results of a test conducted this year: 50 participating children with their parents; 9 interviews to the leaders of the educational workshops; 118 interviews to participating adults; 55 interviews to children; 6 videos of educational activities. This was made possible thanks to the help of 9 students from the University of Macerata.



Figure 19 Images of “Scarabò. A city to educate”, 19th-20th May 2018 (Source: Scarabò E.T.S.)

4.2.2 POPULARIZATION OF SCIENCE INTO RURAL SCHOOL

4.2.2.1 Zhongguancun Inno Way – Makerspace in Beijing

In China, a more inclusive city always means to provide the same development opportunity for people from different backgrounds, especially for people from rural areas. Lately, new technologies and new platform create new chances for Chinese cities to become more inclusive. Here we’d like to introduce two kinds of places, makerspace and science and technology museum.

Makerspace is an open space for everyone who want to get useful technical knowledge or learn entrepreneurship experience and we took it as a perfect place of learning-by-doing. There are two kinds of makerspace in China, one is in urban city, and the other one is called Rural Star Makerspace (RSM) launched by Ministry of Science and Technology. Most of the RSM located in the city suburbs, and the aim of RSM is to help farmers accrued working skills in the city and help people (not limited to farmers) to find entrepreneurial opportunities between rural and urban areas.

Zhongguancun Inno Way is a cluster of makerspace. It has gradually assembled a total of 45 entrepreneur service agencies including Garage Café, 36Kr, Entrepreneur’s Training University, Tsinghua SEM X-elerator, Legend Star and Shengjing International Innovation Incubator and totally incubated 1900

start-ups including 222 overseas teams. 743 teams have obtained the financing and the total amount has reached RMB 9.104 billion.

Since 2016, Zhongguancun Inno Way has been upgraded to a global entrepreneurship and innovation resource centre (Figure 20). Zhongguancun Inno Way provide two kinds of service to start-up companies. One is entrepreneurship and innovation management service, including training, broadcasting, incubation, community, exhibition, etc. Another one is investment service. There are specific investment platforms which provide all kinds of investment plan to start-up companies in different stage.



Figure 20 Zhongguancun Inno Way (Source: official website of Z-innoway <http://www.z-innoway.com/>)

4.2.2.2 Study case of cohousing in Marche region

Foreword

The cohousing is a housing modality that provides (next to the traditional private residence) common areas for sharing among cohousers such as: multi-purpose rooms, common kitchens, laundries, coworking, spaces for children and the elderly, hobby rooms, but also shops of bikes, of organic products, bars and cafes. These spaces can also include communication modalities with the outside to favour interaction with the territory. Cohousing thus can become the incubator of new forms of sociality, of educational/democratic processes and of public ethics. Inspired by experiences of sharing between citizens already present in some northern countries, such as in the Scandinavian countries and in Denmark, cohousing affects the European context for its social dimension (social housing). Unlike the exclusive American gated communities, these new forms of living aim at combining in a new way the social and the sustainability dimensions with the economic, urban and architectural-design one, in order to build a new urbanité (Choay, 2008).

The modalities of constitution, the typologies and the normative and juridical aspects of a cohousing are quite diversified. What seems to be essential is the presence of a bottom-up approach between cohousers, especially where there are strong ideal motivations. However, the importance of concurrent public interventions to support initiatives must be kept in mind, inaugurating new synergies between the public and private sectors, not just from a welfare mix perspective, which sees the involvement of “service producers” in a mercantilistic-commercial sense (Rodger, 2000), but hopefully of community welfare (Donati, 2000), or of shared policies between the state and the third sector (Deluigi, 2014: 95-100).

It is therefore necessary to proceed with study about elderly, using a set of tools such as: closed answer questionnaires, focus groups, narrative interviews, and by examining some cases, by studying the existing literature and / or visiting some directly cohousing structures.

Case study

In Ascoli Piceno there are two social housing structures, both on the initiative of the banking foundation Cassa di Risparmio of Ascoli Piceno (CARISAP). The banking foundations are private non-profit institutions that pursue socially useful purposes, promoting economic development, safeguarding the environment, culture, artistic and cultural heritage. CARISAP has created the social housing project “Abitiamo Insieme Ascoli” (Living Together Ascoli), with the purpose *to recover, through an innovative residential formula, the social heterogeneity typical of the historical centres of the provincial cities, with the profound spirit of solidarity that animated them and that enriches them. [...] The objective [...] is to trigger the replenish of the historical centres of central Italy in the values of solidarity and social heterogeneity, encouraging their revitalization through the creation of a new offer of rented living spaces with a significantly lower rent to that of the market. A process of redevelopment of the public and private heritage of the historical centres of central Italy, which is able to support the micro economy of the territory from the start of the project with the use of local skills and professionalism (CARISAP, 2013).*

Both structures are of historical-artistic importance: Palazzo Sgariglia, in via Mazzini, is one of the most beautiful buildings in the city; the former college-convent of the congregation of the Sisters of the Child Jesus (Figure 21), in the corso di Sotto 10, is also a structure of historical-cultural interest.

The social purpose, in particular, was to support two categories of users: for the former college-convent the intent was to facilitate young couples with a control prices rent; at Palazzo Sgariglia, on the other hand, it was to foresee the coexistence of tenants belonging to different generations, including elderly. Therefore, it is not an ageing cohousing dedicated only to elderly, but also for this reason interesting to examine.

In both structures there are common areas: as far as the former convent is concerned, there are ample spaces for socializing and for children play. At Palazzo Sgariglia there is a common laundry and a large courtyard inside the building, available both for the aggregation of condominiums and for the opening of the building to the citizens with exhibitions and cultural initiatives, shops and craft shops, as well as for a “zero kilometre” catering activities.



Figure 21 Former college-convent of the congregation of the Sisters of the Child Jesus (Source: Abitiamo Insieme Ascoli)

To promote the social dimension, preliminary meetings were held to clarify the sense of living in a cohousing. However, even though in the informative materials on the characteristics that the participants should have possessed to be suitable for cohousing, in the announcement to identify the tenants no prescriptive indications were provided for.

CARISAP has concluded its task once the cohousing has been operational, by transferring ownership and management of the houses to Prestiti Investimenti Sgr, a savings management company established on 24 February 2009 on the initiative of “Cassa depositi e prestiti S.p.A.”, an Italian Ministerial controlled, to operate in partnership in social housing initiatives (Decree of the President of the Council of Ministers July 16, 2009 – National Plan of Housing).

At the former convent the social dimension is present and favoured by the presence of the Voluntary association “Abitare together Ascoli” (AIA). Here, some activities are carried out in common in the spaces provided for this purpose and activities such as some Sunday outings are organized. At Palazzo Sgariglia, however, the results were rather negative, with an absence of any socialization between cohousers. Here, common activities are absent and also its openness to the outside. The restaurant foreseen in the project is still under construction, but some cohousers oppose its realization, preferring privacy and silence.

Critical analysis

The controversial results of the Ascoli cohousing allow us to highlight the difficulties of social housing initiatives. Some characteristics of the Ascoli initiative appear to be harbingers of misunderstandings.

First of all, the controlled rental prices have meant that social housing was equated with council housing.

Secondly, the bottom-up social construction process of cohousing appeared limited to some preliminary thematic meetings, which did not allow however to constitute a real path of self-knowledge and self-planning, prevailing the incentive coming from external inputs.

In particular, thirdly, since the activities were started with external financing, the risk that condominiums adhere only instrumentally to cohousing ideals to obtain high-quality accommodation at affordable prices is high.

Therefore, it is necessary to underline the delicacy of cohousing initiatives, which requires specific cohousers motivations, which may be the result of particular critical conditions (such as situations of unease, old age, economic fragility) or particular ideals (above all a strong “ecological-social” motivation). The bottom-up processes favouring self-knowledge and self-organization among participants seem indispensable, even if they must be facilitated by the public-private side in terms of funding or with the provision of specific services, such as meeting spaces, presence of counsellors and / or educators attentive to motivational processes, presence of facilitators both in the initial phase and in itinere.

Finally, social housing is an expression and has consequences on the social dimension of the neighbourhood and the city and therefore must appear as the result of a widespread feeling. In this regard, it is noted that the Municipality of Ascoli Piceno has not carried out an activity to promote the social aspect, limiting its activity to define rental cohousing criteria. It would have been important to envisage a higher involvement of all the institutional and not-institutional actors involved in the initiative.

It is also important to provide cohousing with catering services (perhaps using local products, allowing the enhancement of local culinary culture), laundry, nurseries, libraries, conference halls and other cultural-recreational activities. In the visited cohousing these are only partially present. Such spaces / activities would be an opportunity for the establishment of relational and communicative flows that would have the aim both of consolidating relations between cohousers, and of allowing cohousing to interact with the social context of the city.

4.2.3 EFFECTION OF THE EDUCATION MUSEUM IN RURAL AREA (CURIOSITY AND IMAGINATION OF KIDS)

4.2.3.1 Baiyangdian RSM – the Rural Star Makerspace

Located in Xiongan District, Baiyangdian RSM is definitely a representation of the Rural Star Makerspace in China. Baiyangdian RSM is comprised of six parts, Smart Technology, Star College, Star Incubation, Ecology Demonstration, Culture of Science and E-commerce (Figure 22).

Star College of Baiyangdian RSM undertakes a very important role of science education and technology intension. Cooperates with Beijing science and technology commission, Baiyangdian RSM gets lots of important agricultural intellectual and innovate resources which make it a useful platform of entrepreneurship and a successful college for farmers in the near area.



Figure 22 Six parts of Baiyangdian RSM (Source: Wang Huiwen (2018) *The Construction of Baiyangdian Rural Star Makerspace by Beijing and Xiongan*. *China Rural Science & Technology*, pp. 56-59)

4.2.3.2 The Museum of Science and Education of the San Isidro Institute of Madrid

The San Isidro Institute is located in the heart of Madrid, near the ancient cathedral of the Spanish capital. Currently it hosts a bilingual higher school, where lectures are given in Spanish and in English. San Isidro is considered the temple of Spanish education and is four centuries old. The institute was established in the middle of the sixteenth century by the Jesuits and in 1603 was awarded the title of Imperial College. The institute soon incorporated the ancient Estudios de la Villa (1346) and the Mathematical Academy created by Philip II in 1582. Subsequently, it also hosted university level courses, even if the because of the resistance of the ancient universities of Salamanca and Alcalá de Henares, San Isidro didn't acquire the right to confer academic degrees. In 1725 the institute became a seminary nobilium, in which the humanistic education was combined with the study of the chivalric sciences and the military arts. In 1757 Charles III expelled the Jesuits from the Spanish dominions and the institute took the name of Los Reales estudios de San Isidro. The Jesuits returned to the leadership of San Isidro between 1814 and 1834 (with an interruption during the three-year revolutionary period). In 1835 San Isidro became a lay institution within the Spanish state school system (Simón Díaz, 1959).

Although in the seventies of the 20th century the institute underwent heavy architectural interventions, its ancient structure remains largely intact, so much so that in 1983 the Dirección General de Bellas Artes y Archivos declared San Isidro artistic historical monument and promoted important restoration work.

San Isidro, in addition to having a very rich history, can boast another particularity, as it houses a small Museum of science and education, which represents an exemplary case of its kind, as it is a school museum with a specific vocation, that of conserving and enhancing historical educational collections dedicated to teaching science.

These collections were the protagonists of a recent cataloguing project, realized within the CEIMES project - *Ciencia y educación en los institutos madrileños de enseñanza secundaria a través de su patrimonio cultural, 1837-1936*, which allowed an initial census of the materials present in the Museum (CEIMES, 2008-2012). From this provisional catalogue, it appears that the Museum preserves different types of materials: 683 stuffed or preserved in the liquid animals, of which 277 specimens of birds, 75

mammals, 131 fish, 45 reptiles and amphibians, 149 invertebrates and 6 dioramas; 56 bone remains of animals; 52 human bone remains; 950 shells; 56 entomological boxes of insects; 300 educational models, including 40 specimens of animals, 81 plants, 49 prehistoric objects, 8 specimens of anthropological nature, 66 elements of human anatomy and 56 of palaeontology; 619 specimens of plants; 51 specimens of wood, seeds and fruit; 74 foils and didactic frameworks; over 2,000 specimens of minerals and rocks; 340 specimens of fossils. These materials are also supported by a large collection of scientific books, which have been reorganized and partly digitized within the initiatives promoted within the CEIMES project (Martín Villa, 2012).

The precious and vast heritage of the museum enjoys a good state of conservation. The materials stored in it were mostly donated by former students or professors and come mainly from France and Germany.

The original core of the Museum dates back to the mid-nineteenth century, when the natural history professor Sandalio de Pereda engaged in the preparation of a cabinet of natural history, to promote the study of science among new generations. Sandalio de Pereda entered the institute of San Isidro in 1853 and in 1870 he was appointed director of the cabinet, a position he held until his death in 1886. In this old science cabinet we can trace the origins of the Museum of Science and Education of the San Isidro institute, which was opened to the public in 2010, following an impressive research and reorganization of the scientific heritage of the institute realized with the active contribution of the students of San Isidro (Fraguas, 2010).

The Museum is currently an integral part of the educational activities carried out at the institute and is open to the general public every afternoon and by appointment even in the mornings. Among the visitors to the museum we can meet school children from other institutions, but also scholars of the history of science and citizens or curious tourists. It is not rare, moreover, to find the students of San Isidro, who in turn perform the function of cicerone.

The outfitting of the Museum is particularly evocative and unfolds in one of the most beautiful parts of the San Isidro building. It is crossed by an austere Baroque staircase, which acts as a "window" and "metaphor" of the path of knowledge offered by the Museum. On the ground floor the visitor is welcomed by a reconstruction of a nineteenth-century schoolroom, with its benches, complete with a pen and inkwell and old notebooks, which can be read and consulted. This set up aims to engage the visitor and introduce him on a journey back in time, along the paths of the history of science. This process of immersion in the past is also favoured by the projection of a video in black and white, which traces the history of the institute. Along the walls of the ground floor, moreover, you can observe old study plans, books written by the teachers of the school and you can know the names of the illustrious students who attended the school of San Isidro.

The first part of the staircase is accompanied by political and physical maps of early twentieth-century Spain and drawings of pupils dating back to the late nineteenth century. Continuing the ascent you will encounter objects related to the study of physics, including a compressed air gun built at the end of the eighteenth century in the laboratories of the institute and used to teach children the parabolic pitch. In the part that flanks the third flight of the stairs, it is remarkable a periodic table of the twenties of the twentieth century painted by hand.

The first floor of the museum is dedicated partly to specimens of minerals and partly to botanical models made of paper mache from France. These are materials produced between the end of the nineteenth century and the beginning of the twentieth century.

Along the way to the next floor, you can see two large photos in which are portrayed the ancient classrooms of geography and natural sciences of the institute. Next, an exhibition of ancient microscopes and some precious dioramas made for the taxidermy laboratory. But the element that most captures the visitor's attention in this stretch of scale is "the tree of life". It is a tree 5 meters high, which houses insects, invertebrates and stuffed animals, arranged according to the nineteenth century phylogenetic concept. The tree prepares the visitor for the collections on the second floor, where the atmosphere of an ancient cabinet of natural history is recreated, thanks to the presence of a rich collection of animals, many of which are rare or extinct.

The last part of the scale and the final part of the exhibition is entirely reserved for the human being. In this section you can admire a human skeleton, posters of human anatomy and a rare human-sized detachable model made of papier-mâché and realized in 1869 (Figure 23).



Figure 23 Museum of Science and Education of San Isidro (Source: Fraguas, R. (2010) *Pupitres con cuatro siglos de historia* (p. 6). *El País*. Available from: http://ceimes.cchs.csic.es/sites/default/files/Pupitres01_0.pdf [Accesed: 5th October 2018]. The image is taken from this article @ *El País*)

In recent years, the Museum has assumed a central role in the teaching practices of the San Isidro Institute and has been at the centre of numerous projects to rediscover and disseminate the scientific heritage preserved in it, which have stimulated students to undertake innovative learning paths,

through which was able to combine the use of new technologies with the requirements of cataloguing, conservation and enhancement of the Museum collections.

The case of the Museum of Science and Education of San Isidro can be included as one of the best practices necessary to create a socially inclusive city, where past and present coexist profitably to activate processes of knowledge able to involve different categories of citizens.

4.2.3.3 Luoyang Lohas RSM – Rural Star Makerspace

Luoyang RSM is one of the first national RSM which was certificated by MOST. It is located in the suburb of a big city-Luoyang in the central China. Lohas RSM have already help 50000 farmers to participate into the business between urban and rural area. The education courses is the key character of Lohas RSM. Because of their big success in Luoyang, they were invited to open education courses in other cities (Figure 24). There are three topics of the education courses. First, they help farmers to get useful agriculture production skills. Second, they broadcast agriculture management knowledge. Third, they invite successful entrepreneurs to share their entrepreneurship experience.



Figure 24 The education courses in Luoyang Lohas RSM (Source: Lohas Rural Star Makerspace, 2018.11)

4.2.3.4 Ørestad Gymnasium in Copenhagen

What should the school of the third millennium look like? It is not easy to answer this question, but surely one of the most interesting examples of contemporary school building is represented by the Ørestad Gymnasium in Copenhagen.

The institute, which welcomes students between 16 and 19 years, was completed in 2007 and is part of an important urban redevelopment initiative that involved the Ørestad district, a new area of Copenhagen, built at the beginning of the years Two thousand near the city airport. The Ørestad city project involved an area of 310 hectares that currently hosts 6,000 inhabitants and has led to the construction of homes, shopping centres and educational venues conceived with a view to the smart

city. The beating heart of the whole area is represented by the Ørestad Gymnasium, which was conceived as the hub of the cultural revival of the area and as a test bench for the recent higher school reform launched in Denmark (Foster, 2012; Ørestad Gymnasium, 2018).

The building covers an area of 12,000 m², costs 27 million euros (€ 2,250 per m²) and was designed by Studio 3XN in Copenhagen (3XN Website). Currently it hosts over 1000 students. The project has been developed taking into account the most recent discoveries of green building, with particular attention to the aspect of energy saving, lighting quality and choice of materials. But the philosophy that inspired the design of the entire building is essentially pedagogical and moves from the idea that physical space plays an important role in promoting the success of educational dynamics. The Ørestad Gymnasium has adopted the most recent acquisitions gained by European research in the field of school buildings, focusing on an organization of spaces based on two key concepts: open space and technological infrastructures (McGrane, 2012). Behind these choices is the clear desire to foster new opportunities for study, learning and educational planning, which allow students to feel an active part of the educational pathways and teachers to realize teaching activities really centred on students (Moscato, 2016; Tosi, Moscato, 2013).

In the Ørestad Gymnasium the classes are open and functional spaces, characterized by efficient technological structures and modular furniture, which can be moved and combined in a simple way. The environments are organized by thematic areas: humanities, social sciences, natural sciences, physical and musical, aesthetic and visual, area for interdisciplinary activities, area in common with the administration, library, canteen, gym etc. The students have available islands of tables, stages and steps, areas for relaxation and reading, characterized by large cushions and puffs and an environment, the agora, designed for events that involve the entire teaching community.

In a space conceived in this way, the student lives the school environment in a dynamic way, alternating moments of lesson, study and exercise with those of leisure and exercise. The school day takes place in a dynamic way, according to an organization that goes beyond the usual scheme consisting of fixed hours, frontal lessons and periodic checks (Jenkin, 2015). The teaching activity focuses on double lessons, theme days or weeks, interdisciplinary activities, project work and cooperative learning (Figure 25). Also, textbooks are not in use, but all lecture materials are available on a free platform (Google) (Indire ricerca, 2013).

The school is open throughout the day, closes at 9 pm and students can stay there all day, studying or using the facilities of the institution and, if they require an entry card, they can access the building, even at the weekend. These elements also help to draw the image of a school that is much more than a place to study, but it is a place to live in its entirety, where the student moves freely, between spaces for personalized learning, group projects and formal and informal opportunities for comparison and socialization (Trung, 2010).



Figure 25 Special classrooms dedicated to specific study experiences, such as the scientific laboratory and the music hall (Source: Moscato, G. (2012) *Una scuola senza Carta. Il modello architettonico e didattico-organizzativo alla base dell'Ørestad Gymnasium*. In: *Quando lo spazio insegna. Convegno Nazionale*, 16 maggio 2012, Roma, Sala della Comunicazione, MIUR. Available from: <http://www.indire.it/quandolospazioinsegna/scuole/orestad/> [Accessed: 5th October 2018]. All the images of this article are taken from this article: @Indire)

4.3 SOCIO-ECONOMIC VALUES THROUGH HERITAGE PRESERVATION

4.3.1 NEIGHBOURHOOD AS CULTURAL HERITAGE

Røros, Norway

Historic Background

Røros is an old mining town situated on a mountain plateau in a remote part of Trøndelag County in Norway. After a copper ore was discovered in 1644 a town was established, and Røros Copper Works was active for 333 years. In 1977 it closed down after the mining company was declared bankrupt. In 1980 it was inscribed on UNESCO's World Heritage List, and in 2010 extended to include a buffer zone of approximately 480 ha.

The owners of the works were mostly rich citizens of Trondheim, the closest town approximately 100 kilometres away. The king gave the owners' rights to a number of privileges. They had the right to use all the ores they found and free access to waterfalls and forest. In addition, they had the right to labour from people in the area, for a reasonable pay. After some time, the Copper Works were to become one of the richest mines in Europe.

At the start Røros had a very small population. However, the possibility for paid work was very attractive and the population grew quickly. This was mainly from surrounding areas, but also from bordering areas in Sweden. A few German mining experts also came, introducing technology the Norwegian did not have. Main part of the workers came from simple backgrounds, probably tenants and younger

sons of farmers. There was also a small upper-class consisting of Danish-speaking owners of the copper mines. In 1700 the population had grown to around 2000, from almost zero.

This new society developed a unique culture different from the medieval farming system they came from. First of all, a working class developed, being wage earners. In addition to this they were small-holders, holding cattle for their own consumption. This was important for surviving through hard times of unemployment or wars. This combination of wage earning, and farming has been typical for Røros up to our time.

The people owned their townhouses, and if no one had a claim to land they could take it for production of grass to the cattle. Most households had two to three plots of land around the town. The last household to keep cattle in the outhouse building in town ended in the mid-1980s.

Included in the heritage site is the town, consisting of one- and two-story wooden houses surrounding the smelter and waterway system. The industrial rural cultural landscape and urban agricultural practice are preserved in addition to the transportation system, including a winter route open from November to May. The totality of this traditional settlement shows how shaping of the cultural landscape and a unique way of life developed.

Røros town

The most visible landmarks of Røros today are the church, the slag heap that grew steadily, and the lack of trees after the forest being felled very quickly to be used in the production.

The houses were at first mainly consisting of one floor, with a basement. Later two floors became more common. Up until the end of the 19th century the facades towards the streets were dominated by blackened logs. In the back of the house, surrounding a yard, were the cowsheds and stables, in addition to other buildings used for the necessities of running a farm. It is a very dense and efficient use of space. From around the 1880s important changes took place. Swiss-style dominated more and more, and the shape of the houses and roofs changed. There were sporadic discussions about creating a museum and preserve some of the buildings. In 1920 this finally came through. The Protection of Building Act preserved eight houses and building groups.

The inter-war period was a very difficult time for people living in Røros. This meant, among other things, that houses in bad condition was repaired, and not torn down which would probably have been the case under normal circumstances. This is one of the reasons Røros is relatively well preserved. In the 1960s the Swiss style was removed with the intent to bring the style back to 1700 -1800 Røros. Reasonable loans from the governmental Housing Bank and support from the governmental office of Cultural Heritage were given to house owners that wanted to repair and conserve their homes.

This combination of farming and townhouse we find in Røros is unique in Norway. With good financial help the homes, and the facades towards the street was taken care of, preserving a most valuable and charming town. However, the outhouses surrounding the yard suffered. By the 1950s most of them were no longer in use, quickly leading to deterioration. In 1996 "The Outhouse Project" started to rescue this unique combination of farming and townhouse. The project is still going, the goal being to renovate and repair 400 outhouses. Much attention is paid to traditional craftsmanship and remove as little as possible of the old material.

Today

There is an on-going discussion between professionals, politicians and local owners concerning how and what to preserve. This includes everything from what kind of windows are acceptable, what colour is the original to what kind of new buildings should be allowed. That many of the houses and the ground are in private ownership adds to these disagreements. An intangible aspect is also a part of this. There are for example residence requirements for anyone buying a house inside the town centre, requiring the buyer to live there at least 6 months of the year. This is to avoid Røros becoming a holiday resort.

Being on UNESCOs World Heritage List comes with responsibility. To increase the importance and value of the site the area under preservation was recently extended to include a buffer zone, identical to the old "Circumference". This is the area where the Copper Work was given privileges to water, forest and workers. This gives us an almost complete picture of human adaptation in a remote area with extreme weather condition. It now includes the mining, smelter, transport systems, cultural landscape, technology and a way of life.

Today Røros is a vibrant town, even though the cobber mines closed a long time ago. Tourism, conferences and income from cabin owners are of course an important part of the new economy. This is reflected in the shops, with for example many clothing stores and locally produced handicraft. In the yearly marked, arranged in accordance with tradition in February, local traditional food products are for sale (Figure 26). This includes both Norwegian and South-Sami traditions. It also includes not so traditional items, with products you find in any market or fairground. It is likely to assume that the architectural and spatial environment is a vital part of the success. In addition, Røros has managed to attract new industry, replacing the old copper mine.



Figure 26 A main street during winter market (Source: by Stephen Fairhurst)

4.3.2 NEIGHBOURHOODS, MONUMENTS AND BUFFER ZONES

4.3.2.1 Xi'an Bei Yuan Men Historic District; The Muslim District

The Muslim District in Xi'an is situated in the middle of the city centre, north of the Drum Tower. The majority of the population are Han Chinese, approximately 40.000 people, but there are also a considerable number of Hui-Chinese, about 20.000. Even though they are in minority they have a considerable impact on the atmosphere and expression of the area.

The Hui are descendants of traders from the Middle East travelling to China along the Silk Road approximately 1000 years ago. Through generations of intermarriages with Han Chinese, preferable women, they have adopted many of the Chinese traditions and lifestyle, except their religion. There are not many Muslim Districts left in China. In for example Beijing and Shanghai they have disappeared.

Entering the Muslim District from the broad and busy streets of downtown Xi'an is like coming to a different world. The streets are narrow and the houses are mostly one or two storeys, in a Ming or Qing -dynasty style. Here the pedestrians compete for the right of way with both cars and tricycles. The pavements are filled with chargrills filled with food for sale and souvenir shops displaying their goods. It is noisy and smoky, narrow and crowdie. The dimensions of the streets and height of the houses provides a warm and interesting atmosphere (Figure 27).



Figure 27 Busy streets at lunch time (Source: Lisbet Sauarlia)

Courtyard Houses

The houses are built in the local traditional courtyard style. Most of them are relatively narrow towards the front, but can be very deep, varying from one to four courtyards. Running a small business is the main profession for the Hui. This is reflected in the traditional organization of the courtyard houses. The production for the family's business took place in the back yard. The middle part was reserved for the living accommodation, hierarchically structured with the oldest generation occupying the rooms in the middle towards the back. Sons with their family lived in the side rooms. The front part was reserved for the shop, selling the family's production. Some families would bring their goods out on a stall in the street, whilst others would travel around offering their produces.

This kind of “production line” is very rare these days. One reason for this is that it is not economically feasible. The manpower required is too high. Children are not available for helping out in the same degree anymore; concentrating on education is seen as a better investment. The space inside the houses is also under pressure for residential purposes. A result is that more and more of the merchandise that are sold are not local products, but produced in factories outside the area.

Another trend that is changing the area is the introduction of chain restaurants. They are introducing a new style and layout that is in harsh contrast to the traditional style. Some shops and restaurants are also going deeper into the courtyard than before, some all the way, breaking the tradition with house owner living and doing business in the same dwelling.

The location of the Muslim District in the middle of the city centre makes it very attractive. In addition to this the practice that all sons inherit means that more and more people are entitled to a share of the courtyard house. This creates a serious pressure on space. The extended families are disappearing, being replaced by nuclear units. The open courtyards are therefore sometimes replaced by a narrow passage way, giving room for bigger apartments. Wooden structures are replaced by concrete, and several floors are added on to what used to be a one or two storey wooden housing area. The traditional wooden gate is replaced by aluminium gates. Also inside the courtyards the aluminium gates are found. They are protecting each nuclear family's privacy from the rest of the extended family. The result is added space and more apartments for families. Indoor bathrooms and kitchen makes life more convenient. It does however also create darker outdoor space with no room for common activities and very little ventilation.

This lack of common space will most likely affect the everyday life of a family. From being extended families, with shared social and economic life, there are now no room for common activities. Jean Paul Loubes describe the same, but with reference to the Xi'an Muslim community at large.

“Public space is the place for public facilities, services and functions. It is the place of expression of collective life in its social, economic dimensions. Public space is the place of collective memory. It allows the access, practice, preservation of the monuments in a city, which are the common historical and cultural heritages of the group” (Loubes: 1997)

The monuments

The mosques in the area can be described as living monuments. Most of them are built in the traditional Chinese temple style, with open courtyards divided by gates. On the sides there are buildings for different practical functions, like offices and washrooms. The prayer hall is in the back of the building complex. According to Chinese building traditions, houses are built according to a north–south axis. The mosques, however, are pointing towards Mecca, creating a west–east axis. The decorations are mainly in Chinese style, but influenced by Arabic style, creating a very unique expression.

There are about 10 mosques inside the District, the most famous being the Great Mosque, built during the Tang Dynasty. It is also the biggest, with 5 courtyards. In 1956 it was protected by the “Historical and Cultural Site Protection at the Shaanxi Province Level”, and in 1988 also on the list of “Major Historical and Cultural Site Protected at the National Level”. It is a busy mosque with Muslims coming for their daily prayers, domestic and international tourists visiting, and children playing.

In a globalized world and a China that has opened up along time age, the Arabic cultural influence on people is getting stronger. The Hui speaks the local Chinese dialect, no matter where in China they live. However, now children are offered to learn Arabic in the mosques, and in daily speech they use certain

words making it possible to identify them as Hui. More and more people are also wearing clothes that signal their religious and ethnic background. As pointed out earlier, the layout of the houses is in traditional Chinese style, but there will be markers identifying their background. This can be for example a picture of Mecca or Chinese characters with Arabic style on the wall.

There are building regulations for the area, which unfortunately are not always followed. One is the heights of the buildings. Especially around the monuments, houses should not exceed a certain height. It is meant as a buffer zone to protect the monuments. Also the permitted number of floors outside the buffer zone is not always followed. New architectural styles and materials are introduced, breaking with the tradition. As people get more money, they also can afford a more comfortable life. Sometimes the preferred style is a more modern one, similar to what you find outside the district. This in turn can make the place less interesting to visit, both for tourists and locals, affecting the businesses.

The Muslim District in Xi'an is a unique area. Even though it is facing some problems it is a place well worth taking care of.

4.3.2.2 Historic Centre of Tallinn, Estonia

Tallinn is the capital of Estonia. Situated on the northern coast by the Baltic Sea, it became early an important trading port. Today Tallinn is one of the best preserved and complete medieval cities in Europe, and in 1997 it was included in UNESCO's World Heritage List, but already in 1966 The Tallinn Old Town conservation area was established.

Much due to the strategic location for trading between Scandinavia and Russia Tallinn became a trading hub, with extensive international contacts. In 1219 Tallinn came under Danish rule and in 1248 it got city rights. For a long time, Tallinn alternated between being under Danish, Swedish or German control. From 14th to 16th century the Germans dominated, and Tallinn became one of the most important trade ports for the powerful Hanseatic League, as well as one of the most remote. This German influence is reflected in much of the architectural style, also today. The prosperous trade created substantial wealth which is reflected in the grandness of especially the public buildings, but also the merchants' private houses.

Historic Centre of Tallinn consists of two parts. On UNESCO's World Heritage List, it is described in the following way:

"The upper town (Toompea) with the castles and the cathedrals has always been the administration centre of the country, whereas the lower town preserves to a remarkable extent the medieval urban fabric of narrow winding streets, many of which retain their medieval names, and fine public and burgher buildings, including town wall, Town Hall, pharmacy, churches, monasteries, merchants' and craftsmen's guilds, and the domestic architecture of the merchants' houses, which has survived to a remarkable degree. The distribution of building plots survives virtually intact from the 13th – 14th centuries" (UNESCO; Culture; World Heritage Centre; The List; Tallinn. Figure 28)

In 2008 the buffer zone of the protected area was enlarged to encompass not only the historic centre inside the city wall with the upper and lower town, but also the fortification built in 17th century surrounding the whole city and green areas including streetscapes and views, mainly from the 19th century. This ensures a more complete heritage site. Beside the cityscape, Tallinn is also famous for its magnificent skyline that can be seen both from land and sea.

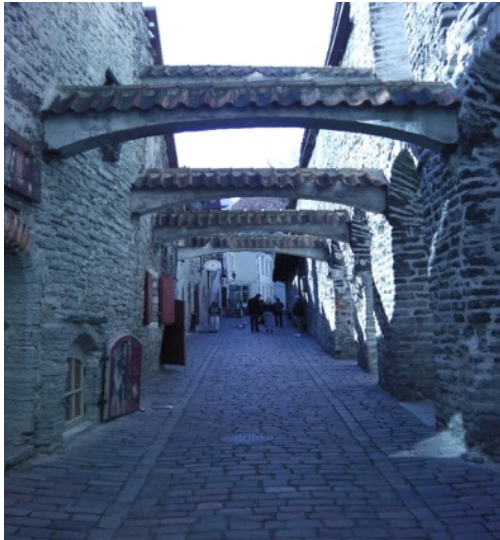


Figure 28 Narrow alley in lower town (Source: by Stephen Fairhurst)

Another most important factor adding to the uniqueness of Tallinn is that its traditional use is still in function. The upper town is still the administrative centre of the country. The lower town is still a residential area with businesses, religious functions and what else a city needs. So, beside the tangible values, there are also intangible traditions well alive.

Despite wars and fires through the centuries the city is very well preserved. A period of relative weak economy has also prevented massive changes and modernization. However, now tourism has entered as an important factor. Only from the cruise ships approximately 10.000 tourists visit every day, in addition to ordinary visitors. This creates a big opportunity to earn money, but also put a big pressure for new functions in the city. As the economy grows the possibilities for making these changes is a challenge. The need for hotels, restaurants and other facilities tourists request is a delicate matter.

Another threat is the need for new housing. Outside the buffer zone high rise buildings are planned. This can endanger Tallinn's famous skyline. There are also examples of positive changes. After liberation from Russia ownership of property was in some areas unclear. Especially in neighbourhoods with wooden housing lack of maintenance and upgrading not taking in to consideration the historic values were the result. Now, however, these areas are seen as valuable and resulting in important restoration are being conducted. This can be regarded a part of a gentrification process.

Today Tallinn is often referred to as the Silicon Valley of Europe and is again a thriving and inventive centre for business. It will become the headquarters of European Union's IT agency, and NATO Cyber Defence Centre of Excellence is located there. Tallinn has also created many international companies, one of them is Skype.

4.3.3 HISTORIC DISTRICT AND GENTRIFICATION

Bakklandet, Norway

Bakklandet is a neighbourhood in the city of Trondheim in Trøndelag County, Norway. It lies in the borough of Østbyen on the east side of the Nidelva River between the Bakke Bridge (Bakke bru) and the Old Town Bridge (Gamle Bybro). The neighbourhood is dominated by small, wooden houses and

narrow streets. It is among the major tourist attractions in the city. In 1965, the road plan for Trondheim proposed that a large area in Bakklandet be demolished to make way for a four-lane motorway which would connect the road "Elgeseter gate" with the road "Innherredsveien". The plans were met by opposition from locals, and by the early 1980s the plan was shelved, even though the city's environmental council had approved depopulating the neighbourhood in 1974.

The history of Bakklandet

Bakklandet was first built in the early 1600s. The centre of Trondheim had grown a lot, and the need to build outside the river run began to sign up. Bakklandet became Trondheim's first suburb. The Swedes sieged Trondheim in 1658, and burned down the buildings of Bakklandet. According to the drawing, from 1674, there was only scattered settlements at that time. In 1681 the city bridge was built, which increased traffic and opportunities on the Bakklandet side of Nidelva. Continuous urban fires in the wooden-building were the reason for Trondheim's permanent fire order in 1689, prepared by engineer Friderich Pincier. The fire problem led to a ban on adding to the docks in Köpmannsgata, for ships that had open fire on board. There was also a ban on the storage of flammable goods such as cranes, tar and gunpowder. The sailing ship of the day needed fire for cooking and heating, and the need for storage of flammable goods was present. The trading houses therefore set up breweries on Bakklandet, and the activity shot speed.

In 1718, Trondheim was again besieged by the Swedes, this time with Carl Gustaf Armfeldt in the lead. Bakklandet was again completely burned down, but this time it was Norwegian troops who burned the suburb as a part of the defence of the city. The recovery took place quickly, and the development continued. In 1772 to 1780 the streets were paved, and at that time there were 160 farms and 14 breweries on Bakklandet.

Until the middle of the 19th century, Bakklandet was administratively out of town, and the suburb developed into a bustling trading place. Establishments such as a ropeway and shipyard, drop and crane were established in the area. The venues and residential buildings followed and unregulated as the area was, streets and houses became the place where there was natural space. There were usually fishermen, craftsmen and workers who settled in the district. The houses were small and it was simple cows. The breweries were also smaller than those in Köpmannsgaten.

From the 1960s the district was threatened with remediation. A new route to Trondheim was planned, and the settlement on Bakklandet had to be removed. There was great commitment to preserving the old settlement, and enthusiasts were at the forefront of the struggle against the municipality. Their involvement did not lead to immediate victory, but the municipality has never completed the plans.

From the 1970s, the settlement has been restored, and Bakklandet is today a very idyllic district, and many tourists are taking the trip here. The struggle for conservation has proved to be very important, and today it is hard to think back on the municipal plans. Regardless of political colour, all Trondheimers are proud of this district, and usually show it to visitors.

The battle for Bakklandet

This part of the history of the wooden district in Trondheim is set mainly in the 1960s. There was widespread consensus during this period that the old wooden quarters of the city needed to be renewed – and that the old wooden houses should be replaced by modern buildings that both economically and in terms of functionality were better suited to the demands made by modern society of a city's material structures. This modernisation project reflected a hegemonic understanding of the city

as an economic arena adapted to a modern, capitalist economy. As an important measure, Trondheim drew up a municipal masterplan for the city's development and management of land use, presented as a first draft in 1965, which prepared the ground for the demolition of the historical city centre of Trondheim.

The battle for Bakklandet was largely in the 70's. On the one hand, Trondheim municipality, which since the early 50's had plans to turn Bakklandet into an efficient road system for the city. On the other hand, the association and conservationists stood. The municipality was largely ruled by the Labor and the Right in this period. AP's post-war reconstruction efforts were carried out in the sixties and sixties, but with modernization and facilitation for increased prosperity, as a leader. In these good intentions, it was also understood that something had to be sacrificed on the altar of progress. The conservation thought was quite remote, and those who claimed something else were seen as sand in the machinery. The AP received good support from the Right in this, and the city council was quite coordinated. We did not have time to preserve, we should modernize and adapt to the rapid development of the world. The Americans put people on the moon in 1969. Who cared for old houses? A common point of view among politicians and the people of Trondheim was "The Rivet of the Shit!"

The conservationists were often residents, associations, and enthusiasts. Good support was to be found in the growing "suffering environment" (SUF = Sosilian youth youth). The sufferings were politically on the outer left, and at the end of the sixties were notoriously marked as significant political activists. The first organized initiative to take care of the district came from the "Environmental Group on Bakklandet" in 1971. The environmental group was the precursor of the Bakklandet and Lillegårdsbakkens Velforening. Their goal was to preserve Bakklandet as a residential area. Many in the area lived in quite dilapidated houses, but the cost of living was affordable. Students also took part in the conservation idea, although they lived only for a limited period of time.



Figure 29 Bakklandet (Source: <https://www.trondelag.com>)

Occupations were used as a means of preventing demolition. Velforeninga took the initiative to move people into the empty houses. It prevented homeless people from using the houses as night-sleepers and that the houses were due further. It was claimed that the municipality proved that the houses were left empty for the due date to be strengthened. The charity contributed to the fact that the house was able to prevent maturity from being used as an argument for demolition.

Today, Bakklandet appears as an idyllic district and with good living conditions. It has become one of the city's most important tourist attractions, and is known far beyond the country's borders. Trondheim tree house shelter is now considered one of Europe's most important. The goal of the activists was reached, but with a biscuit: Today, Bakklandet is so attractive that housing prices have shot in the weather, thus excluding many from living there (Figure 29).

4.4 PLACE-MAKING AND DESIGN OF PUBLIC SPACES

4.4.1 STREET / PEDESTRIAN AREA / MARKET

4.4.1.1 *LaoMen Dong, Nanjing*

LaoMen Dong is a leisure area located in the south part of Nanjing, along the City Wall and the South City's gate. This part of the city experienced an impressive mutation in time, mainly since 2003 when a number of governmental plans have been approved with the goal of revealing the historical traces²¹. In 2009 the "House Renovation Project" started and many historical courtyard houses and traditional alleys were destroyed. The old residential fabric was replaced sometimes with high-rise building and, in other cases, with the so-called "New fake-historical building". This is the case of *LaoMen Dong* renovated in 2013 by the City Bureau that recognizes it as an important trace of the traditional Chinese settlement. The area was a residential inner village characterized by a dense fabric of Ming courtyard houses. The estate operation has been developed in two different phases. The first one was devoted to creating a shopping and leisure area tracing the Chinese atmosphere of the past but with more contemporary morphological characters, as the width of the streets. This settlement seems to be the natural extension of *Fuzimiao* touristic area, mainly known as a shopping spot, creating an ideal connection between it and the City Wall. In the second phase, located near the city's gate, the commercial vocation was maintained along the main streets and as an extension of the previous operation. In the inner part of it, in contrast, a new removal model was applied and 80 urban villas were built.

Which space – a typological overview

The commercial area is faced using a revised model of the traditional courtyard house that is amended from time to time in responding to different functional needs. Despite the external appearance, which actually refers to the Ming Style in the treatment of the facade, the traditional composition of the house²² isn't always respected. Some buildings are characterized by the typical sequence of small rooms and yards but in many others a unique open-space has been used to face the contemporary commercial needs, creating a contrast between the plan and the exterior. Mainly we can observe a two-floor architecture, but differently, from the original settlement we cannot recognize the repetition of a specific type. In the first phase area, we can indeed observe the juxtaposition of different

²¹ www.njghj.gov.cn

²² see Gazzola Luigi. 1999. *La casa della Fenice*. Roma. Diagonale

models, from the temple to the Republican building, and provincial' styles. In contrast with the introvert organization of the courtyard house, in many cases the units are quite open on the street, both at the first and second floor, resemble the inside *façade* (the one facing the yard) of the traditional dwelling. This peculiarity is more evident for the buildings facing the main alleys, but many singularities are used to compose the space.

In the second phase settlement, we can recognize a repetitive gesture in terms of types used. For the commercial building located along the Main Street and alleys, a quite open façade gives the possibility to look inside creating pedestrian shopping streets. Along the inner alleys, on the other hand, a more introvert and "house oriented" type characterize the space, creating a dichotomy atmosphere in-between the borders of the area and the inside part. A similar type quite was used in the residential fabric, located in the core of the area and protected by pedestrian alleys and gates. This can be considered as a new type of morphology in terms of the relationship between building, accesses and streets. This type of residence seems to refer to an east-west mixed model, closer to the *Lilong* type like *Shikumen*, where the role of the yard seems reduced. Inside the residential part, we cannot recognize the usual functional *mixité* able to inscribe the traditional inner villages' organization. Seems we are facing a declination of the western concept of zoning.

Which space – the urban role (property or use)

LaoMen Dong is an estate operation able to describe perfectly one of the trend of the Chinese contemporary city. Taking advantage of the higher land's price in the inner city, both Municipal Bureau and developers have an interest in relocating inhabitants to pursue high-end new urban strategies (Figure 30). Moreover, the "fake antiques" atmosphere can be considered a model that, taking place from Xintiandi in Shanghai (Wu and Zhang, 2015), is rising as a pattern to be repeated. This type of settlement acts as an urban catalyst attracting not only tourism but moreover investments in the surrounding area. The repetition of this model seems to be used as started for a more comprehensive urban transformation.



Figure 30 Axonometry of LaoMen Dong - shopping area (Source: local developer brochure)

4.4.1.2 Prato, Italy: The Italian Chinatown. Macrolotto 0_Social integration through art, culture (and production?)

Prato is one of the main Italian industrial districts and is often considered a typical example of this socio-spatial organization (Becattini, 2000). Starting from the second post-world war, the agglomeration of SME in the textile sector gave rise to the historical industrial district that has radically changed in the last twenty years. Beside the macroeconomic and sectorial transformations, both at global and local level, since the Nineties, a new industrial sector arises, the pronto moda (the apparel industry) that today accounts for the 25% of local GDP (Lombardi and Sforzi, 2016). The rise of this industrial sector is mainly related to the settlement of the Chinese community in Prato and lies in both production teams in Prato and transnational Chinese networks across Europe (Tan and Zhu, 2014). Starting from the middle of the 1980s, the migration flows, mainly from the Zhejiang Province, define a change both in the urban life. Foreign inhabitants – mostly Chinese – account for the 20% of the official residents, with peaks of over 50% in two districts, the old city centre and the bordering area that extends westwards (Bressan and Radini, 2009).

Today, Prato is the third largest Chinese community in Europe. The new inhabitants have built up a new production model that uses dismantled buildings in the so-called “Macrolotti” areas. In particular, the part of the city that extends westwards from the mediaeval walls has been named “Macrolotto 0” by the urban planner Bernardo Secchi in 1996 during the elaboration of the Masterplan. Secchi (1996) described the Macrolotto 0 as an “inner outskirts” without public spaces and not integrated with the surrounding urban fabric.

“Macrolotto 0” was the first industrial development of Prato outside the historic city walls and the driving force of the past industrial district. Later, it becomes a predominantly Chinese neighbourhood. During the years, the complexity of the relations between Italian and Chinese citizens emerged forcefully and has triggered social tensions (Lan, 2014). In particular, the arrival of Chinese citizens leads the local population to consider the immigration as the main reason for the decay of the neighbourhood (Nielsen et al., 2011).

While Macrolotto 0 has been the place where the traditional industrial district took place, nowadays it is the centre of the challenge facing the social-economical transformations of Prato, related both to the pronto moda emerging sector (with more or less 3.000 companies located here) and to the need of integration of the Chinese Community in a middle-size Italian city. According to Cerruti But (2018), contemporary interpretations of the Macrolotto 0 are mainly three. The first one is an economic interpretation describing Prato, and the Macrolotto 0, as a double district in which the Chinese community (almost a “district in a district”) adopts ways of living pretty similar to the ones typical of the city-factory in the ‘80s. The second interpretation describes the Macrolotto 0 as a “transition zone” where the appropriation and modification of the space by the Chinese community reveal at the same time discording and harmonious attitudes. According to this interpretation, Bressan and Cambini (2009) describe Macrolotto 0 in this way: “buildings are concentrated in just a few square kilometers, with the past clashing with the present, big factories now broken down into innumerable micro enterprises, the workshops in the side streets off the Via Pistoiese, blocks of flats just a few decades old, charming little houses dating to the early twentieth century, supermarkets burgeoning from the ruins of the wing of a factory (as in Via Bonicoli), shops selling goods from China, shops selling yarn accessories, bakeries and so on. (...) Despite the warehouses waiting to be reutilized dotted here and there, the

area contains numerous blocks of flats still inhabited by the immigrants, their children and grandchildren” (p. 2). Finally, the third interpretation highlights the social mobility of the Chinese community and its progressive spread from Macrolotto 0 towards the richest areas of Prato.

Besides these interpretations, differently embedded in the urban space, local government aimed to re-shape the Macrolotto 0 as a creative district, in which culture and creativity are used as tools of integration between Italian and Chinese communities. In recent years there have been initiatives of small transformation, such as the multi-awarded “Piazza dell'Immaginario” by Dryphoto Contemporary Art (2014, recently dismantled. Figure 31). At the same time, various creative industries and associations - such as Artforms, [chi-na], CUT Temporary Urban Circuit, Side - MOO, Lottozero, Sixteen, MDT Studio, Studio Court 17, Kinkaleri_spazioK - progressively located in the district. Meanwhile, the City of Prato was working on a more ambitious project, called “Macrolotto Creative District”, covering an area of 44 hectares and based on the role of public space as a backbone of the transformation and place-making strategy. The project includes the construction of a new large square, the recovery of former industrial buildings to accommodate spaces for aggregation and sociality, a metropolitan market, a media library and a co-working place, as well as interventions for sustainable mobility such as the creation of an area “30 km/h” and pedestrian and cycle paths.

The investment involves 6 million euro of regional contributions (ranked first in the regional call aimed at financing urban regeneration projects) and 2 millions of municipal investments. The works tendering procedure began at the beginning of 2018, the construction of the market began in November 2018. In the overall context of “Prato al Futuro”, the Operative Master Plan adopted by the municipal government in September 2018, the urban strategy for Macrolotto 0 shows the important ambition to manage a sustainable transition of one of the most decisive neighbourhoods for the future of Prato, both for its location and its historical role, planning an “open” space where to define the full integration of the Chinese community into the social and urban fabric.



Figure 31 *Piazza dell'Immaginario, Prato* (Source: <https://www.pratosfera.com/2017/06/13/piazza-dellimmaginario-vince-premio-architettura-toscana-2017/>)

4.4.1.3 Mixed uses in mid-rise residential communities. Liuyun Xiaoqu, Guangzhou

As a result of extended land plot lease to real estate developers, the urban layout of cities in China seems to correspond to inwardly focused communities that internalize semi-private amenities. A residential compound is a predictable pattern: almost identical buildings, although design of details may vary; edges marked by blind walls or green amenities, almost without any interaction yet providing access to local connectivity; regular size housing 20,000 households or above; high floor area ratio (FAR). Among other aspects, potential buyers find in such arrangements sense of protection, control over potential intruders, and assimilation to consolidated ways of living. Innovation of design in residential compounds is generally limited or discouraged, with standardized models being not imposed by law but simply more convenient.

However, this rigid fragmentation has been challenged and modified in a continuous negotiation within the boundaries of planned zones that provide local innovative arrangements. Liuyun Xiaoqu, in Guangzhou, is a compound of mid-rise buildings built in the 1980s, 9-storey high and set in small blocks, with limited car accessibility. It was built contextually to Asian Games 1987, next to major sport facilities. In the following 15 years, the main commercial pole of Guangzhou developed in its adjacency, with four shopping malls—including Teemall, one of the earliest shopping malls built in China—and an important public transportation hub which includes the first and still most used intersection of subway lines 1 and 3, several urban buses, and BRT since 2010.

Liuyun Xiaoqu illustrates a thriving transformation of common mono-functional residential compounds. As far as residential compounds built in the 1980s and 1990s were very limited in services and units located at the ground-floor were not as attractive as residential spaces, a natural shift in ground-floor uses started that introduced stores for the local communities and cheap room available for small businesses.

According to the reconstruction of ITDP, Guangzhou Industrial and Commercial Bureau limited such conversions in 2000, selected specific areas for conversion in 2002, banned conversion in 2005, allowed some transformation in some selected areas in 2007, and finally stated the positive effect of residential-commercial conversion, as supplier of job opportunity, if all neighbouring owners agree on the conversion of some premises into commercial use. However at street-level committee the conversion of residential to commercial uses is so popular and successful that over 59,000 residential units were reported to have been converted stores in Guangzhou, workshops and small offices (ITDP, 2013: 123). At least in relatively central places, such changes impact positively on the general urban environment of compounds, increasing the number of people using pedestrian pathways, improving inhabitants' care for green amenities, regularizing car traffic and parking lots, and generally softening the physical edges with urban functions that do not radically impact on the organization of communities.

In Liuyun Xiaoqu, conversion started because of the initiative of individual owners in early 2000. When the entire city was preparing for the imminent Asian Games 2010, authorities suggested to limit transformations to the peripheral blocks, banning commerce from the cores of the communities; three months later the mayor pushed the Planning Bureau to reconsider the importance of commerce for the area and provide guidelines for conversion. Although guidelines regulate facade restyling and reg-

ularize power network and AC system only, the retail atmosphere has improved animating with fashion shops and bars an attractive pedestrian area, with a pleasant atmosphere for occasional visitors that do not conflict with private spaces and homeowners. Gates were removed in the main pedestrian alleys, privileging urban connections with public roads.

4.4.2 CULTURAL ROLE IN COMMUNITY TRANSFORMATION

4.4.2.1 Xiaopu Village – Songzhuang Town, Tongzhou District, Beijing

Located at the Eastern suburb of Beijing, Xiaopu village, today a national and global centre for contemporary art and the biggest artist community in China, is the headquarter of Songzhuang town in Tongzhou district 通州区. Situated about 28 kilometres away from the city centre, Xiaopu village was mainly dedicated to agriculture, before being transformed into a national and global centre for contemporary art. However, with an annual agriculture production of less than a fifth compared to Songzhuang's other 47 villages (Zhang 2014), Xiaopu was the poorest area in terms of economic growth which pushed the local authorities to transform it into one of the first eleven cultural and creative industry clusters in Beijing in 2006 (Ren and Sun 2012). Far before the decision of the town government to launch its plan to develop Songzhuang, the economic situation of the village started changing after the arrival of the artists in 1994 (Zhang 2014). Xiaopu village is composed mainly of three distinct zones: The Art Zone in the north of the site, the Village Zone, located in the South, and the Factory Zone in the midst of the previous two zones.

In terms of typology prototypes, Xiaopu village is composed mainly of six different typologies: village houses, factories, art studios and galleries, low-rise shop-houses, mid-rise building, and detached buildings. The main focus of this research will be the Art Zone as it is the biggest concentration of the artist community (Figure 32).

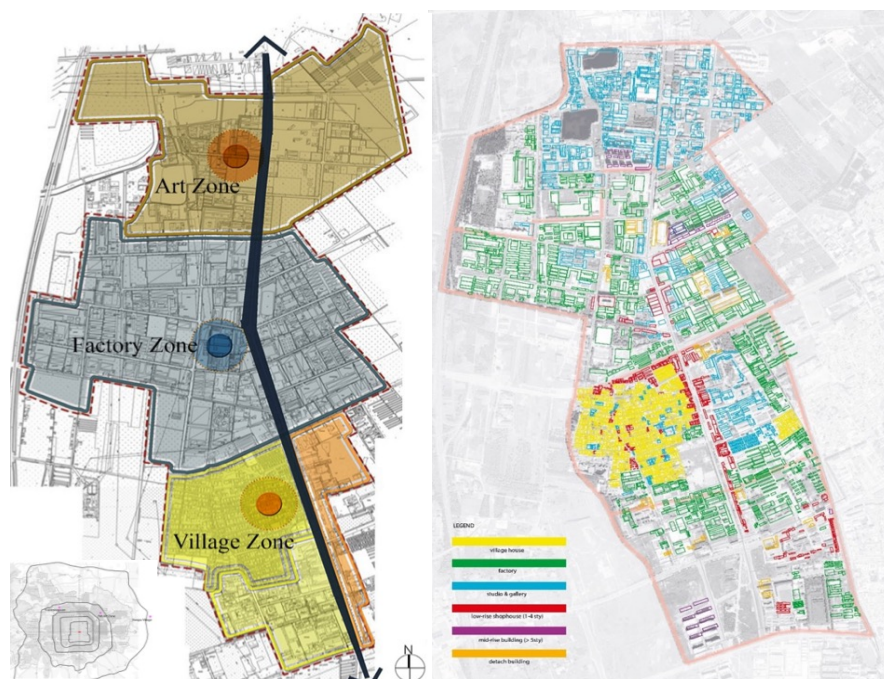


Figure 32 Location and typology prototypes maps of Xiaopu village (Source: By Badiia Hamama based on the outcomes of the Design Studio III at Tsinghua University, 2016, Songzhuang, Creativeness, Low-Carbon, 2013, and Baidu maps, 2018.)

From Yuanmingyuan to Songzhuang – The Continuous Journey for an Alternative Space of Creativity

Songzhuang artist village matured in the 1990s, in the context of China's opening to marketization and globalization. The first artists moved to this new place, looking for new fortune and fame, as well as the relative relaxed jurisdictional organizations in those rural areas, were the same that have been evicted from Yuanmingyuan, one of the first artists' community and artist village appeared in the mid-1980s in China. It was previously located near the Old Summer Palace north-west Beijing, and within the actual third and fourth ring road – in the 1990s the third ring road defined the limits of the Chinese capital city and urban construction beyond it was strictly controlled.

Facing constant harassment by the police in the early 1990s, artists' community in Yuanmingyuan Artist Village began to look for a new base. Xiaopu provided an ideal environment because of the availability of large, cheap-to-rent space, the relatively more relaxed political atmosphere in rural areas, and its close proximity to the city (Zhang 2014, Wang 2010). The arrival of the new community of artists to Xiaopu village was seen as a threat to public safety, and in 1997, Tongzhou district listed Xiaopu as one of the most potentially dangerous public security hotspots in the district (*ibid.*). However, the new community of artists were soon identified as a new source of revenue and economic revitalization, and allowed to settle in the village. The local government's plan was to increase revenue through alternative land use, which resulted consequently in converting land from collective ownership²³ of the villagers to public ownership under the direct control of the town government (*ibid.*).

The Search for a Variant Economic Revitalizer and the Rapid Transformation of the Artist Villages

The interest of China in the creative industry sector started in the years 2000s (Ren and Sun 2012) as an attempt by the Chinese authorities to find new sources of economic revitalization and promote Chinese culture. In Beijing, most of the creative industries are located in the far suburbs mainly for two reasons, the land affordability, and the characteristics of these 'isolated' spaces not yet affected by the ghost of rapid urbanization, and most importantly the limited governments' administrative control over the collectively owned land which is managed and led by the villages' committee. Far from the hustle and bustle of the city centre, the outskirts of the city attracted many artists seeking alternative and flexible spaces for their need of creativity and a different lifestyle. However, the interest in the many benefits that could result from the creative industry sector, pushed many local governments to start a quick and rapid urban transformation of the artist villages as a way to promote different economic growth, especially of those areas still based on manufacturing labour and agriculture. According to Keane (2007), in China, cultural industries have become a strong tool to transform and modernize the urban economy.

Consistent with the outcomes of Ren and Sun (2012), cultural industries in China are strictly related to the land politics and real estate speculation, which in turn resulted in a rapid transformation of the

²³ **Collectively Owned Land (集体土地 jí ti tu dì):** According to the Law of Land Administration of People's Republic of China, there are two kinds of land ownerships in China, i.e., state-owned land and collectively owned land. Collectively owned land includes the land in the rural and suburban areas of cities, except that it is otherwise owned by the state pursuant to law, and should be managed and administrated by the local rural economic organizations. It is articulated in particular by the law that the lands for homestead of farmers and the lands and hills for private use are also classified as collectively owned land. (source: China City Planning Review, Issues, 2012 No. 3)

artist villages mainly for economic profit, rather than for a real cultural industry development. Converting the agricultural land of Xiaopu village to alternative uses was seen as a profitable opportunity for both the village reputation and the villagers themselves. Artists have been then allowed to settle, and the rapid transformative process of the socio-spatial structure of Xiaopu village started. In 2009, Songzhuang was home to about 100,000 residents and 3000 artists of which 80% were living in Xiaopu village (Ren and Sun 2012).

The boom of the creative industry sector in Songzhuang, resulted in a multitude of constructions and projects (residences, studios, museums, galleries and infrastructure projects) carried out with the involvement of different private and collective actors and investors, such as the city and district government, village governments, private entrepreneurs (*ibid*). With the growing interest in the economic potentials of Xiaopu village, rural land has been rapidly converted to new urban functions mostly for residential, cultural, and commercial uses.

With the conversion of land from collective ownership to public ownership, many changes occurred in the socio-spatial urban fabric of Xiaopu village. By the end of 2008, there were nearly 900 artists living in Xiaopu (Zhang 2014). Having first contributed to the transformation of Xiaopu from one of the most underdeveloped and poorest villages in Songzhuang, to a new hub for thousands of artists, attracted by the hope of making a name for themselves, many of the original artists, under the pressure of urban redevelopment and the considerable rise in renting prices, are no longer able to afford staying in the village (*ibid*).

Xiaopu artists' village, originated from the desire of an independent community of artists with the intent to form an autonomous and alternative space for creativity and lifestyle, maintained its self-governing for almost a decade. However, with the launch of the culture industry reform, marking a new era of flexible relationship between politics and culture in China, Songzhuang artist village experienced a rapid process of institutionalization and commercialization, which transformed it from an autonomous artists' community and undeveloped rural village into an officially recognized art establishment and economic growth engine, threatening the artists' community due to the rising land prices. Despite the rapid urban transformation of Xiaopu village and its concrete-infill, the place is still desolated, most of the galleries and the few commercial stores aligned along the street are usually empty or closed. Many constructions are undergoing, mainly apartment complexes and commercial facilities. The aim of the government is to transform Xiaopu village into an international hub for culture creation and tourism district with Chinese characteristics. Till today, Xiaopu village is not yet the second 798 of Beijing, however, the consequences on the artists' community could be predicted, due to the over interest in the economic potentials, and the role that Xiaopu village may play in promoting the Chinese culture on an international scene.

4.4.2.2 Monte Carasso, Switzerland

Since 1979, the Swiss municipality of Monte Carasso has undergone a radical transformation, moving from being a rural village, without particular characteristics that would differentiate it from similar realities, to a place of social and cultural aggregation. Monte Carasso is a model widely emphasized by critics and seen as the result of the genius of a renowned architect and the commitment of an enlightened local administration. The reasons for the triumph of the Snozzi's utopia are to be found not only in the new proposals and in the enthusiasm with which citizens have believed in an urban project that has no known precedent, but also in his relations with a globally growing territory, in the

regulatory framework that has allowed its implementation, as well as in cultural and behavioural attitudes typically Swiss, difficult to find elsewhere (Figure 33).

The events that led to the celebrated urban success of Monte Carasso began in May 1977. Snozzi elaborated a proposal for the reorganization of the whole urban centre; a proposal that led, in the course of 1979, to the modification of the existing urban planning tool and to the formulation of a new Piano Regolatore welcomed by the population and by the local Administration. Snozzi maintains the perfect legality of an integration with the ancient, according to the principle of conservation as an active intervention already theorized for several decades – and still debated at the time – by Ernesto Nathan Rogers, Roberto Pane or Bruno Zevi, but never applied so radically before in an urban scale intervention in Switzerland (Rogers 1954; Pane 1959; Zevi 1983, pp. 152-153).

The correct application of building regulations in particular means that the entire urban agglomeration created year after year is strongly characterized from a figurative and formal point of view and marks the difference compared to what generally occurs in the new districts of the contemporary city where you always feel foreign. Here, and in every part of the territory, there is a strong feeling of belonging to the place (Croset 1996, p. 5): today, among the local population there is a widespread opinion that Luigi Snozzi should be credited with having succeeded in giving a public dimension to all the interventions, both conceived for the community and designed for private individuals, creating a *unicum* at the service of man and the quality of life within the community (Bologna, 2014. Figure 34).

These considerations concerning Monte Carasso reinforce the principle that a historic centre is the ideal place for the protection of a people's traditions, since the active potential of local culture is deposited in it (Fano 1974, p. 17): the relationship of mutual trust created between a mayor (who is allowed to remain in office continuously for over thirty years under Swiss law), an architect and the entire municipal population has allowed to build a unique reality of its kind where the population regains its dignity as a local community. This was made possible by a long and purely Swiss tradition, which sees the village as a place with agricultural and artisan origins, where the diversity of languages, customs and buildings finds a coherent synthesis (Gubler 1988, pp. 24-37). Monte Carasso is therefore difficult to imagine outside the Swiss context, certainly for a question of urban standards, but even more for a common sense of democracy that here has allowed the development of its ideal model of city. The integration of modern architecture into an existing context and the quality of life of the individual within the building environment are two concepts that Swiss public opinion has been progressively educated in over the years. For examples, the principles linked to the Wakker Prize, created in 1972 by Henri-Louis Wakker, awarded each year by the Swiss League for the protection of the national heritage to the municipality or the Swiss organisation which over time has demonstrated its commitment to enhancing its architectural, urban and environmental heritage.

Looking the high quality of life in the cities nominated for the Wakker Prize each year to see how the cantonal guidelines – drawn up on the basis of these few guidelines – Monte Carasso has found a general application, of which an example is the Luigi Snozzi's plan. However, Monte Carasso represents an excellence if you think of how the formation of the new historic center has contributed, over a period of thirty years, to make major changes not only from the point of view of architecture and town planning but thanks to these to the ways of life, interests and aspirations of the population; in other word to the local popular culture.

In 1993, Monte Carasso won the Wakker prize as well as the Prince of Wales from Harvard University and in the same year Luigi Snozzi was also awarded the Beton prize. Nowadays, every year hundreds

of foreign tourists visit the municipality and in the summer hundreds of students and young architects take part at the international planning seminar held by Snozzi since 1993.

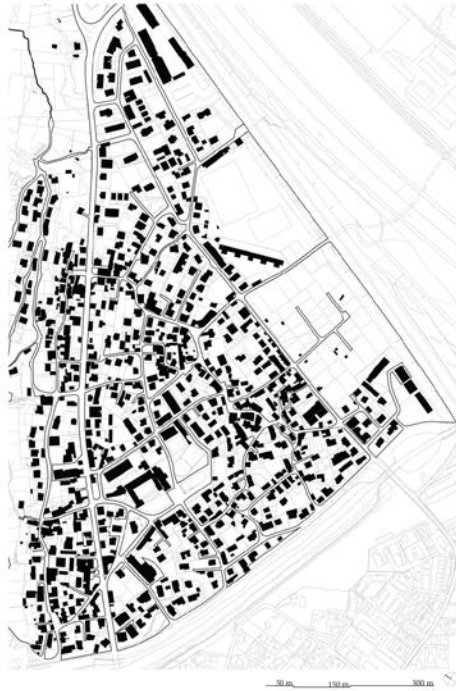


Figure 33 Monte Carasso: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)



Figure 34 Monte Carasso: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)

4.4.3 WORKER HOUSING

4.4.3.1 *Jiu-Xian-Qiao, Chaoyang, Beijing*

The Transition from a Centrally-Planned to a Market – Oriented Economy

Representing a typical *danwei* or work unit compound, Jiuxianqiao was built in the 1950s during the socialist period. Located in the north-eastern part of Beijing, Chaoyang district, Jiuxianqiao underwent a strenuous up-down period of urban redevelopment, which is still today at the centre of negotiations and debate. It is a significant case which witnesses the radical changes occurred in the transitional period – from a centrally-planned economy to a socialist market-oriented economy with Deng Xiaoping – in terms of urban policies, governance modes, top-down structure, and the emergent grass-roots mobilization which led to more involvement of the community in the process of urban redevelopment and decision-making. When, in December 1978, China decided during the Third Plenary session of the 11th National Congress of the Chinese Communist Party (CCP) to open its door to the outside world, and launch its new economic reforms, as a revolutionary step of disconnection from the former political and economic socialist ideology, cities have been identified as the new engine for the national economic growth. “The adoption of economic reforms in China in 1978 not only had profound impacts on its socio-economic development, it also significantly changed the environment in which urban planning operates” (Yeh and Wu 1996b).

The collapse of the socialist ideology, and the adoption of a market-oriented theory – which abandoned the previously adopted ‘planned growth’ and ‘egalitarianism’- led to significant shift in the urban context. Since the establishment of the People’s Republic of China, in 1949, urban housing, with the exception of the rural housing which remained private, was considered a welfare good and has been provided within a socialist system. However, “the severe national fiscal deficit in the late 1970s, triggered a series of decentralization policies that aimed to diversify financial burdens to localities” (Wu 1995a).

Housing Commodification and the Decline of the Danwei Urban Unit

In this transitional environment, ‘commercialization of housing’, as a measure to generate new sources of income was launched, “specifically it was decided to expand housing construction, while simultaneously increasing the effective demand of residents for housing by discontinuing its distribution as welfare and adjusting the expenditure structure” (Lu et al. 2001). Furthermore, in 1994, the State Council promulgated a new policy which transferred development rights that belong to the municipal government and work units to private individuals. The land reforms, the transition from housing as a welfare good to housing as a commodity product, the privatization and decentralization of power, the emergence of different private owners - whom initiatives became the dominant source of investment in the newly established socialist market – led to the emergence of a new series of urban problems, along with multiple actors and interests.

In the new fast changing urban environment, the work-units, representing the fundamental socio-spatial urban parcel of the socialist Chinese city, has gradually declined. “The urban reforms aiming to increase efficiency and re-commodify labour have given more autonomy to unit managers to hire, dismiss and discipline staff” (Walder 1989). Most state owned enterprises (SOEs) start losing their competitiveness in the new established socialist market, forcing many of them to move elsewhere, leaving behind many unemployed workers and retirees. As the role of the work-units, especially those

in heavy industry became insolvent “their workers are laid off and became the new poor” (Solinger 2000).

Community Resistance and the Break-Down of the Public-Private Partnership in Jiuxianqiao Redevelopment Project

Jiuxianqiao was among the first industrial base for electronics to be built in Beijing. As most danwei or work-units²⁴, Jiuxianqiao was planned as self-contained urban unit, combining work, residences, public services and facilities. It covers a total area of about 300 ha, 90 ha of which is occupied by residences. Due to the housing reforms, in the 1990s, and the necessity to redevelop urban land for more profit and rapid growth (Zhang et al. 2003), many of Jiuxianqiao former factories have been developed into profitable high-quality residences and offices, while the low quality and dilapidated housing inherited from the socialist period maintained their status, raising the discontent of the original residents who start appealing for the improvement of their living conditions.

Typology of residential buildings, in Jiuxianqiao, are mainly tube-shaped apartments (floor area per unit: 9/5 m², shared kitchen and toilet on each floor), unit apartments (floor area per unit: 35/50 m², separated kitchens and toilets), one-level room units (floor area per unit: 9/5 m², communal detached toilets and bathing facilities. Figure 35).

In 2004, Beijing Municipal Government and Chaoyang district government initiated the process of redevelopment of Jiuxianqiao, establishing a coalition with the DKYG enterprise group. Although the district government and the DKYG formed a strong partnership in redeveloping Jiuxianqiao, DKYG were keener to develop residential blocks for high profit, leaving the high density and low profit redevelopment to the district government (Zhang et al. 2016). Blocks A and B were identified for high-quality commercial housing development, and blocks C to J for affordable housing and public facilities. However, the two parties arrived to an agreement, after long negotiations, which would have allowed the redevelopment of the whole areas for both social and economic purposes (Zhang et al. 2016).

Nevertheless, this coalition did not last for long as the Ministry of Land and Resources decided, that by August 31, 2004, land use rights for all real estate development, must be transferred only by public auction. In fact, the DKYG private developers were planning to transfer right land use through a bilateral agreement with the Chaoyang district, which was more profitable. Consequently, the new policy for land use rights transfer, resulted in more uncertainties leading the DKYG group to modify the previously agreed terms and conditions for the redevelopment of Jiuxianqiao. Specifically, they reduced the compensation for relocating the residents, increased the prices per square-meter, and required residents to pay more for relocation (Zhang et al. 2016).

The new wave of changes led to a growing disapproval from the individuals and community of Jiuxianqiao, forcing the Chaoyang district, in 2008, to opt for a public vote on Jiuxianqiao redevelopment, as

²⁴ **Danwei (单位 dan wèi):** Danwei is the basic function unit and management unit of Chinese cities during the planned economy period. In the Danwei system, the state organs, the state-owned enterprises, and the state-owned public institutions were units not only for work or business, but also for social life and political administration. The members of a Danwei usually had a strong dependence on Danwei in such aspects as social status, employment, retirement insurance, medical treatment, housing allocation, and welfare. Along with the economic transition and social transformation, the Danwei system was gradually broken up and replaced by the community system. (Source: China City Planning Review, Issues, 2012 No. 3)

a way to maintain social stability and temper the protests (Zhang et al., 2016). The negative results of the vote caused the suspension of the project and the withdrew of the DKYG group. These important grassroots mobilization allowed the residents to potentially stand against colluding parties, acquiring the important power of being part of the decision making process (Zhang 2002), and negotiate for compensations.

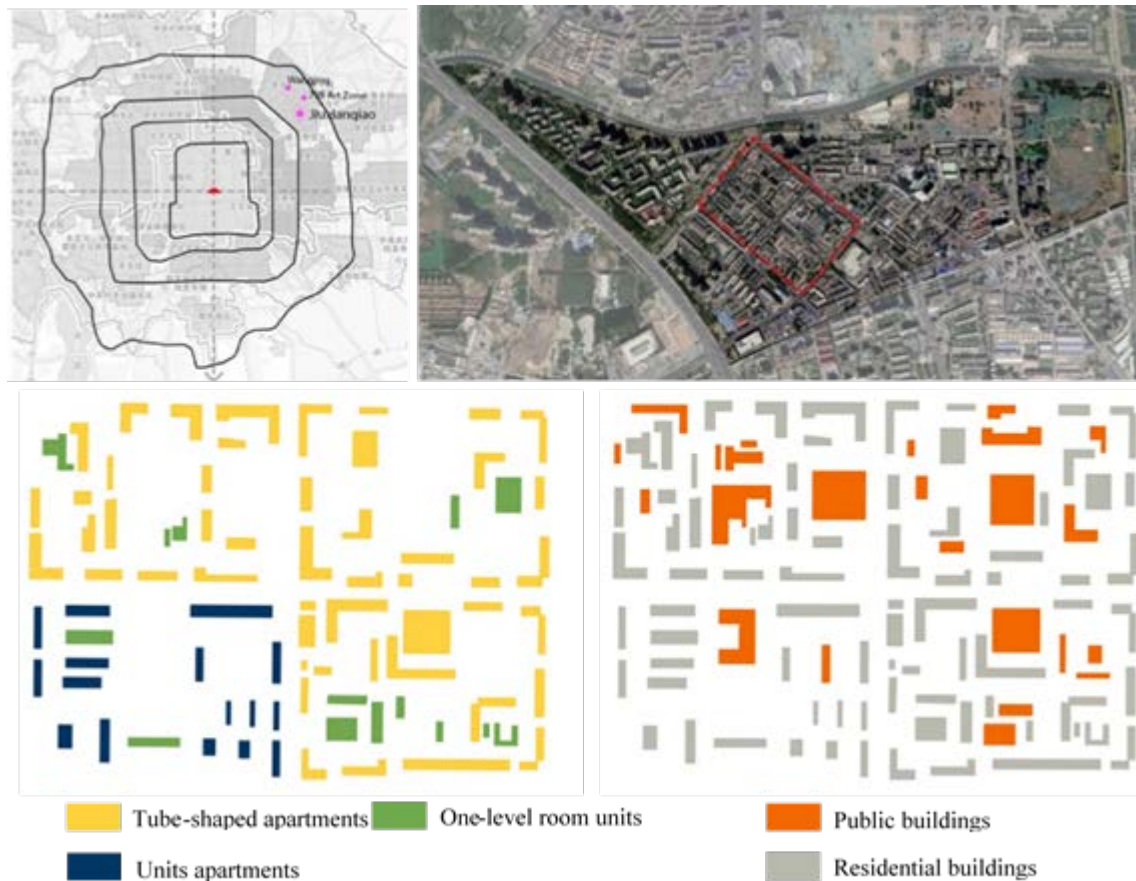


Figure 35 Location and satellite maps of Jiuxianqiao and buildings typology analyse of one of the most characteristics clusters in Jiuxianqiao, with its distinct urban morphology and buildings' arrangement typical of many danwei of the planned economy period (Source: courtesy of Chen Yiran; analysis by Hamama Badiia, Liu Jian, Liu Jiayan and Chen Yulin; Google Earth for the satellite maps, 2018)

In 2010, as a response to the appeal of the residents to enhance their living conditions, this time with more transparency in the compensation process, Chaoyang district government decided to restart the project of redevelopment of Jiuxianqiao, with the re-involvement of the DKYG group. This time the residents were more involved in the decision making, and only the blocks which had a majority agreement (more than 90%) on compensation rates could proceed with redevelopment (Zhang et al. 2016). Different compensation choices were made according to the residents' needs and financial capacity. In 2011, blocks I, J, G, and H had the majority of votes for redevelopment and underwent the process of redevelopment. In 2014, 2723 families moved back to the newly built residential units (*ibid*).

Current Challenges and the Future Scenario for Jiuxianqiao

With a total registered population of about 70,000 residents, Jiuxianqiao occupying a strategic position in Chaoyang district, it is still under the process of negotiation with the residents who are not satisfied with the proposed compensation plan. Located just northeast the 4th ring road and south the Ba He river, it is close to three important urban areas in northeast Beijing, the 798 Art Zone, the Chaoyang Park, and the large residential and technological area of Wangjing. Plans for any kind of redevelopment projects in the area are still facing many challenges, and are subject to the results of negotiation with the residents.

In a previously authoritarian State controlled work-unit context, community role in the urban (re)development was limited if not totally absent. However, it is believed that recently communities are being more engaged by voting in residential committee ²⁵elections (Gui et al. 2009). Jiuxianqiao is a demonstrative example of how more and more projects of urban redevelopment in China, mainly forced by the growing social protests and discontent, shifted from a strictly State-private partnership to a more inclusion of the communities in the decision making process, compared to previous times.

4.4.3.2 Matteotti Village, Terni

“For building communities, not monuments” summarizes the Royal Gold Medal of Riba, assigned to Giancarlo De Carlo; that confirm the importance of the formal results at international level, deriving from his criticism of the Modern Movement and the large social role played by an architectural experience such as participation.

The first test field for his theories was the Matteotti Village, built in Terni at the beginning of the 1970s. It was the redevelopment of the Italo Balbo Village, a Fascism district built to accommodate the workers of the city’s steel plants. The Matteotti Village is one of the first and most complete examples of social housing: its design was elaborated with the sociologist Domenico De Masi. The aim is to establish a dialogue between future users of the village: the workers of the steel plant of Terni. Giancarlo De Carlo defines his work as an architecture of “participation”, in which he does not want to create an art work, but to integrate the users of his work into the design. The participation consisted in modeling the project on the guidelines of the users of the village. Thus, the process of realization of the project did not appear as unilateral: once the condition was clarified, the architect began to define with his interlocutors the real and overall needs, and then the specific needs on which it was possible to discuss about the configuration of the houses. To start the process of participation in 1970 he organized an exhibition to show a series of examples of neighbourhoods built around the world, and from there began the process of discussions and interviews with the workers of society.

²⁵ **Resident Committee** (居民委员会 *ju mín wei yuán huì*, in short, 居委会 *ju wei hui*): The resident committee is the administrative organization of communities or neighbourhoods in Chinese cities. It is the self-government organization of urban residents, having jurisdiction over the non-agricultural residents in cities and towns. According to the provisions of the Organization Law of the Urban Residents Committee of the People’s Republic of China, the resident committee is a grass-root organization for the self-governance, self-education, and self-service of the local residents of a community or neighbourhood. (Source: China City Planning Review, Issues, 2012 No. 3)

In particular, De Carlo defines a series of key elements: a clear separation of pedestrian paths from the vehicular traffic; a composition of private and collective green areas; public services for the inhabitants and the surrounding areas; typologies with a clear and flexible organization; housing equipment based on the formation of fixed elements destined to facilitate the most elementary functions.

From these principles, 15 different types of dwellings are created, varying in 3 further arrangements, for a total of 45 solutions, constituting a typological abacus of variations on a common scheme. Five blocks are thus delineated, formed by different living cells that make up the framework of the village, and the discussion shifts to the study of each individual apartment. Families are guided to choose through small models of housing and each nucleus outlines its needs and the consequent characteristics of their own home. Terni assigns the first 250 dwellings, generated by the first phase of the project and divided into 45 different types of housing. The integrated decision-making process can be seen in the motivations of a given articulation of space while it must be reiterated as the hanging paths, collective spaces and stair blocks, forming part of the general configuration of the village, were never questioned (Figure 36).

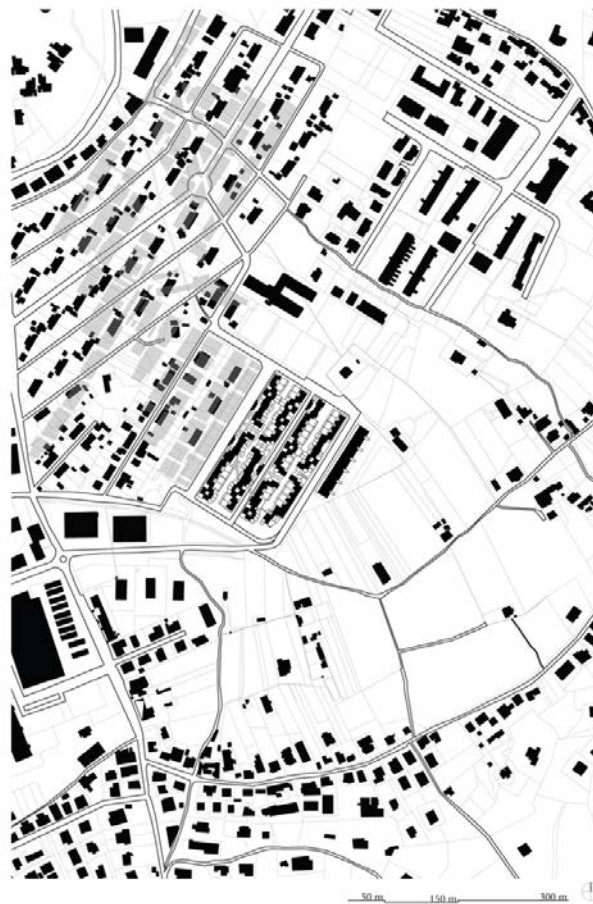


Figure 36 Matteotti Village: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)

The district now has 700-800 inhabitants, divided into 254 apartments. The village consists of four parallel buildings, separated by paths and equipped green areas, and a fifth block of four floors structured differently. The collective spaces, green areas, balconies, and pedestrian paths still represent the strength and reason for the current satisfaction of the inhabitants.

In the case of Matteotti Village, the term participation cannot be reduced to a sterile label, a narrow definition is not enough to describe this vision in continuous movement and expansion. The presence of pedestrian paths, clearly separated from the roads, the services designed for the community and the common spaces evoke a sociality that refers to De Carlo's youthful intuitions (Figure 37).



Figure 37 Matteotti Village: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)

4.4.4 RENOVATED TRADITIONAL COMMUNITY

4.4.4.1 Ju-er Hutong Dongcheng, Beijing

The Siheyuan 四合院 and its Fate in the Era of Economic Reforms

The *Siheyuan* 四合院 – quadrangles or courtyard surrounded by buildings on all four sides – is one of the most representative housing forms of Beijing's historical urban layout, the basic microcosmic unit of Beijing's capital city plan (Boerschmann 1912), and a classical archetype of Chinese vernacular architecture. Since the advent of the economic reforms, and the consequent land reforms and housing marketization, the *siheyuan* started an unprecedented process of physical and cultural decline. The

Ju'er Hutong, by architect Wu Liangyong, is located northeast of the Forbidden City, in the famous area of Nanluoguxiang and close to the historic Drum and Bell Towers. It consists of an 8.2-hectare block dating back to the Yuan dynasty. Like many of the historical dwellings in the central city, the Ju'er Hutong was reversing to considerably deteriorated conditions, and it had been selected as an experimental site for renewal by the Dongcheng District in 1989 (Wu 1999), following the effort of many researchers who were opting for a "metabolic change rather than total clearance and rebuilding" (Row and Ye Kan 2014) of traditional residential neighbourhoods.

Previously, in Beijing most attention in terms of preservation was given to the City's historical monuments, while little attention was given to the traditional residential neighbourhoods (Wu 1999). According to Abramson (2001) "preservation of Beijing's monumental qualities involves problems of national-cultural, political, and ideological symbolism to a greater degree than does the preservation of the vernacular architecture". Hence, this is one of the several reasons, which led to the decline of a considerable number of traditional neighbourhoods.

'Repair the Old and Make It Look Old' 修旧如旧

In the 1980s Beijing began its urban redevelopment plan with the 'Old and Dilapidated Housing Redevelopment' projects aiming to improve the quality of the residential areas and meet the pressing housing demand. Several projects were rebuilt following the philosophy of '*repair the old and make it look old*' (修旧如旧- xiu jiu ru jiu). The renewal approach sought for the implementation of traditional elements of Chinese architecture into the physical process in rebuilt neighbourhoods (Fang 2000, Acharya 2005). The Ju'er Hutong project was built under the so called '*organic*' renewal concept, which consisted in borrowing traditional architectural styles and elements from the pre-existing urban form when dealing with the urban redevelopment of historical neighbourhoods. The Ju'er Hutong was designed according to the New *Siheyuan* concept, or new courtyard prototype mimicking the enclosed physical form of the traditional *siheyuan* neighbourhoods.

Wu Liangyong, leading a Tsinghua team of architects and researchers, identified three main objectives for the Ju'er Hutong project: improve the living conditions of the community through the creation of a new courtyard housing prototype, that would attain an ideal balance between isolation and ventilation while increasing the intensity of land use; foster the sense of community, and enhance the residents' attachment to each other and to their place; and allow them to regain the sense of privacy and spatial control originally afforded by the traditional courtyard environment (Row and Ye Kan 2014).

The New Courtyard or 'Quasi-Courtyard' Prototype

The housing renewal experiment of Ju'er Hutong project – 438 m long and 600 m wide – with a terrain level of *quasi* 100 cm below the street level due to road reconstruction (Wu 1999), was subdivided into four phases of development (Figure 38). Phase one was completed in 1990 and phase two in 1994 (Wu 1999). The proposed phases three and four were not implemented due to 'rising land value, the loss of government subsidies, and the developers' concern about a lack of profit' (Zhang 2016). Phase one of the project has won several awards, including the 1992 World Habitat Award (Wu 1999), and was highly celebrated by the Beijing Municipal Government as a successful example of urban renewal.

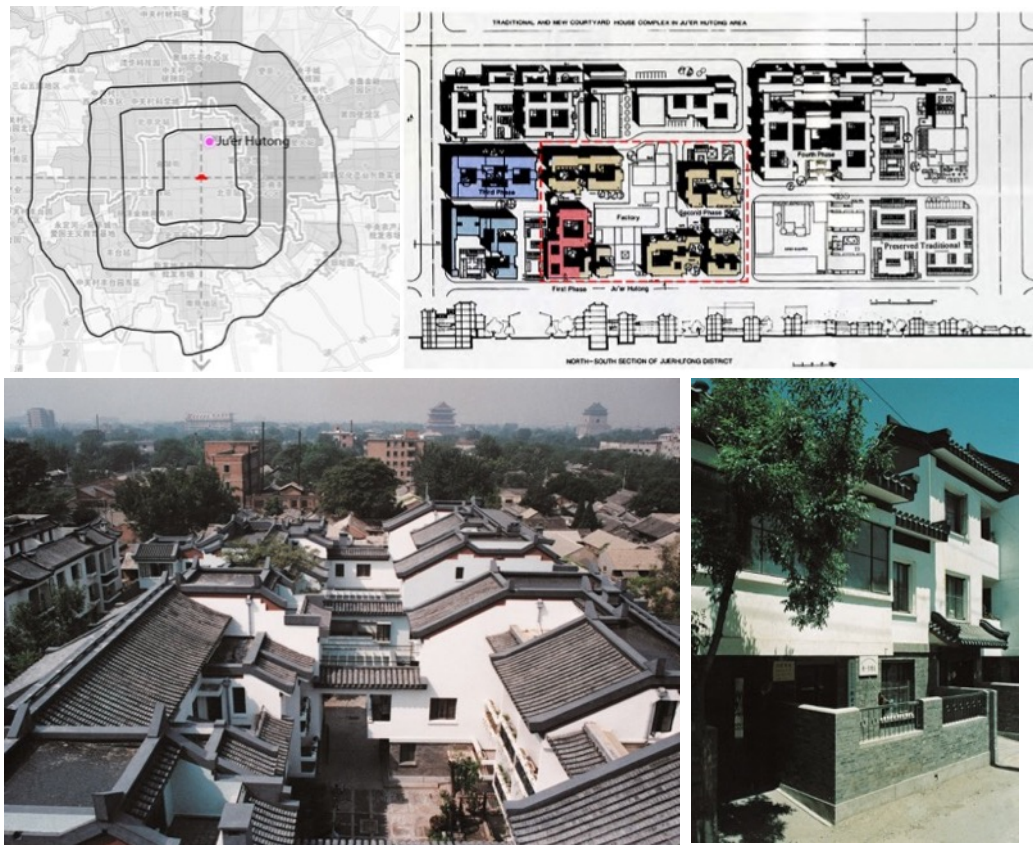


Figure 38 Location of Ju'er Hutong Neighbourhood in the north-eastern Dongcheng district of Old Beijing (Source: drawing by Hamama Badiaa, Liu Jian, Liu Jiayan and Chen Yulin, based on Baidu maps, 2018), illustration of the four proposed phases of its urban redevelopment and views after the completion of the project (Source: courtesy of Wang Nan, Department of Architecture, Tsinghua University)

The Ju'er Hutong Project was highly praised for improving the living conditions of its residents and was widely believed to be resuscitating Beijing's inner-city life (Acharya 2005, Wu, 1999). The new courtyard houses improved the living conditions of the residents providing the different units with larger spaces, and modern facilities (private kitchen and bathroom, balcony and terraces) that could not be found in traditional neighbourhoods.

Since ancient times, the physical layout of Old City of Beijing, composed of the distinct and unique courtyard houses, have been an integral element in the evolution and formation of the community and community life based on mutual respect and socio-cultural values (Row and Ye Kan 2014). Characterized by an intimate and close relation between the indoor and outdoor spaces, as well as the gentle separation and hierarchy between the different scales of spaces – public, semi-public and private – the traditional neighbourhoods' urban morphology and space-making system fostered a strong spirit of communal identity and sense of belonging.

The Ju'er Hutong Experiment and the Challenges Facing the Preservation of Old Neighbourhoods

The new three to four story buildings with modern amenities were believed to improve the standard of living for local residents in the Ju'er Hutong Project, encourage social interaction, and maintain the

traditional community-spirit through the implementation of traditional architectural elements. However, in contrast to the official press on the results of the Ju'er Hutong, the findings of Zhang and Lu (2016) suggest that the adopted organic renewal approach was a failure, as it did not really succeed in maintaining the neighbourhoods' social networks and did not increase households' residential satisfaction. These results echo similar findings by Zhang Donia (2016), which sustain the new courtyards seldom facilitate neighbourly communications because of the changes in social structure – as nearly all the original residents had sold or sublet their units to urban elites or foreigners – and the insufficient sunlight in the small yards did not encourage residents to linger. The close building distances which resulted in poor sunlight (Zhang 2016), may have contributed to the increased dissatisfaction especially of the residents living in the lower floors. However, the outcomes of the project, as explained by the architect Wu Liangyong (1999), have been negatively influenced by the pressure to raise the floor area ratio (FAR), resulting in a far from ideal form. The size of the courtyards has been considerably decreased, compared to the classical Beijing's *siheyuan*, in order to achieve larger private spaces equipped with modern facilities.

However, the experiment in the Ju'er hutong neighbourhood, represented an important achievement in the face of the many challenges faced by historical neighbourhoods in the 1980s – and still today. Wu Liangyong, given the height limit – three to four storeys – and the pressure to rise the FAR – floor area ratio – adopted a new and different renewal process, consisting in the replacement of the worst dwellings, and the 'restoration' of the once still in good conditions. Hence, this metabolic and organic strategy was an alternative to the commonly used method of blanket demolition and replacement of the old neighbourhoods in Beijing, regardless of their historic, social or cultural value. The Ju'er hutong project is an attempt to achieve a balance between the many challenges, constraints, and limits imposed by the new marathon for economic profit in the 1980s, where the value of traditional neighbourhoods were almost totally neglected, and the necessity to preserve the historical value and spirit of the area. The Ju'er hutong achieved a balance between the historical and economic dimension, the social and cultural aspects, community life and privacy supporting a living, vibrant multi-cultural neighbourhood.

Built almost three decades ago, the Ju'er Hutong project is still an interesting evidence of the complicated task of balancing the socio-spatial and economic factors in many projects of urban (re)development in Chinese historical neighbourhoods, where political and economic interests are strongly intertwined causing the paralysis if not the failure of various projects of urban renewal. Designed with the ambition to improve the residents' living standards, and revive the traditional community-life, the Ju'er Hutong, can be considered unique in its nature today in Beijing, which adopted the metabolic process of urban redevelopment avoiding the total replacement of the historical 8.2 – ha area.

4.4.4.2 Case del Quartiere, Torino

The Turin 'Case di Quartiere' are places where the citizens can have meetings, share hobbies, attend courses, take part in cultural events and promote paths of active citizenship. In other words, spaces that for their social role would not make it difficult to define 'public'. Today they are nine experiences, located on eight out of ten districts of the municipality, especially in peripheral areas, and recently joined in an urban network.

This net was officially born in 2014 when seven structures, promoters of local empowerment, answered the call 'che fare 2' (*what we have to do 2*). The announcement, promoted by the association 'Doppiozero' and supported by several foundations, proposed to allocate a contribution of 100,000

euro to a cultural project, potentially reproducible, that placed itself in the logic of encouraging positive dynamics as a response to the crisis. The submitted, then winning, proposal "Di Casa in Casa" was set out to coordinate the activities of the houses of the Municipality. The goal was to develop, and gradually consolidate a network between these realities, weaving knowledge, experiences and projects. A network based on the activities that already individual houses carried on: practices that can drive forms of social inclusion built on informal, vicinal, familiar and friendship ties. Initially the projects involved were 'Cascina Roccafranca'²⁶, The 'Casa di Quartiere in San Salvario'²⁷, 'La Casa nel Parco'²⁸, the 'public bathrooms in via Aglié'²⁹, the 'Barrito'³⁰, '+Spazio4'³¹, the 'Cecchi Point'³² and, after a few months, also 'casa delle Vallette'³³ and 'Bossoli 83'³⁴ the joined the group. After a first period the last one left the group. Each of these has had different spaces, services, community reference according to local 'social humus'. In addition, the organizational structure changes home to home: in some cases, there is an 'in participation' foundation, in other cases a consortium of cooperatives or second level association but anyway the role of these institutions has become to address the initiative of associations and informal groups. Furthermore, they were realized in obsolete and unused public structures (former farmhouses, former public facilities, former factories or warehouses) and only in few cases the spaces were renewed before the re-opening as Casa di Quartiere. Despite these differences, the network in 2014 had already offered about 200 annual courses, 420 events open to the territory, 33 branches of consultancy theme, carried out by more than 120 associations

²⁶ It was inaugurated in 2007 as the result of the regeneration work financed by Urban2. The Foundation that coordinates activities has had the ability to take up the legacy of the European project bringing together associations, born on that occasion, and stimulating new sociocultural initiatives. It has a popular restaurant, a baby parking, a coffee and offer spaces to several local groups to promote workshops, courses, counselling activities or events.

²⁷ It has occupied the former public baths of the district. The Local Development Agency, born in a regeneration initiative, played a key role in its foundation. Nowadays the house host a popular café, a cycle-repair shop, a co-working space, several artistic workshop, a time bank and has a strong relationship with the cultural district activities.

²⁸ It was built on municipal initiative and is the headquarters of the Community Foundation of Mirafiori; an institution that already at the end of the last century have coordinated initiatives to trigger local empowerment. Besides promoting leisure activities or workshops for citizenship, it offers space for work and musical and theatre events. It also promoted initiatives including cohabitation solidarity and experiences of urban farming.

²⁹ Initially they were re-opened for several homeless people in the neighbourhood and now a space full of artistic and cultural initiatives with a strong multicultural component.

³⁰ It was inaugurated in 2011 to revive the public toilets in the hospital area of Turin. Today, as well as hosting the public showers, it has a multipurpose space, a hostel and a food court where it hosts culinary, musical and cultural initiatives.

³¹ It was realized as part of a project coordinated by the municipality with the region and the 'San Paolo' foundation with the aim of encouraging and accompanying the sense of belonging to the territory. It is hosted in unused spaces of the local administration. There it coordinates a package of initiatives to hold together people of different ethnic groups, the local associations and the traders.

³² The structure has been active since 2001 as a youth educational centre. In 2009 started a restoration work of the entire block. The goal was to improve and enlarge the spaces for educational and cultural activities. Nowadays the proposed activities rang from art courses to design workshops without losing the educational youth prerogative.

³³ Even in this case an intervention of renewal of a cultural experience has been running since 2001. Former parish oratory, which had been mainly devoted to theatrical activities, today it is shaped to propose cultural, expressive and aggregation activities for the local community

³⁴ The experience was born originally as a cultural association for the promotion of musical event. The association Hiroshima Mon Amour already active in Turin since 1987 has today decided to renew its cultural offer opening to the territory with participated courses, seminars and workshops.

or informal groups and had involved had more than 9000 habitual citizens and over 40,000 passers-by. Overall houses deal, and take care, of about 12,000 mq of public ownership spaces, used to socio – cultural aims, of which 5,000 of open space.

These structures, all born after 2007, are moreover the outcome of unexpected evolution of some urban policies promoted by the municipality of Turin during the last three decades. Indeed they have taken place mostly in peripheral and marginal areas, where the discomfort was, and in some places still is, an expression of a lack of cultural integration, poverty and weakness of the welfare system. Here the Case di Quartiere offer a space to listen to the inhabitants' needs and to engage them in promoting initiatives.

Which space – a typological overview

These experiences have taken place inside some obsolete and un-used public structures: former farm-houses, former public facilities, former factories or warehouses. The process of renewing the spaces, as well as the changing social role and the related organization structure, has been rarely the outcome of deliberately designed programs rather the result of 'incremental' evolutions and of 'cross interactions dynamics'. However, today, we can identify some recurrences in the adaptation of the 'old buildings' to the 'new needs': the presence of a welcoming space, the desire of customizable space rather than impersonal and polyvalent, the will of controllable places able to guarantee safety to users without excluding the free access. Indeed the 'new' type consists of flexible and temporary spaces, capable to offer spaces of intimacy and security even in a public context where citizens can share affinities and interests.

This adaptability occurs sometimes in relation to vacant spaces or other times alternating practices in the same place. Sometimes, instead, the situation is reversed: the importance of doing a specific activity in a particular space moves toward an adjustment of it according to the availability. Such variation, today, has also a relevance in the different relationship between each house and its context: sometimes the houses act as nodes on a social network of empowerment initiatives, other times they are boxes hosting local activities or, other times, the initiatives are created there and distributed on the territory.

Which space – the urban role (property or use)

In summary, the experience of the neighbourhood houses illustrates an ongoing change affecting a 'public' which is no longer defined by the nature of its property or even by its universalistic and inclusive component. Reading the morphology of the spaces, it seems hard to recognize an opening to the outside, a heterotrophy of use which had characterized the public space of the last century, at least in the common sense attributed to it (Figure 39). Indeed, here, the 'public' seems to make more reference to a dimension of use, of readiness for modification, of belonging to local open communities, rooted in the territory.

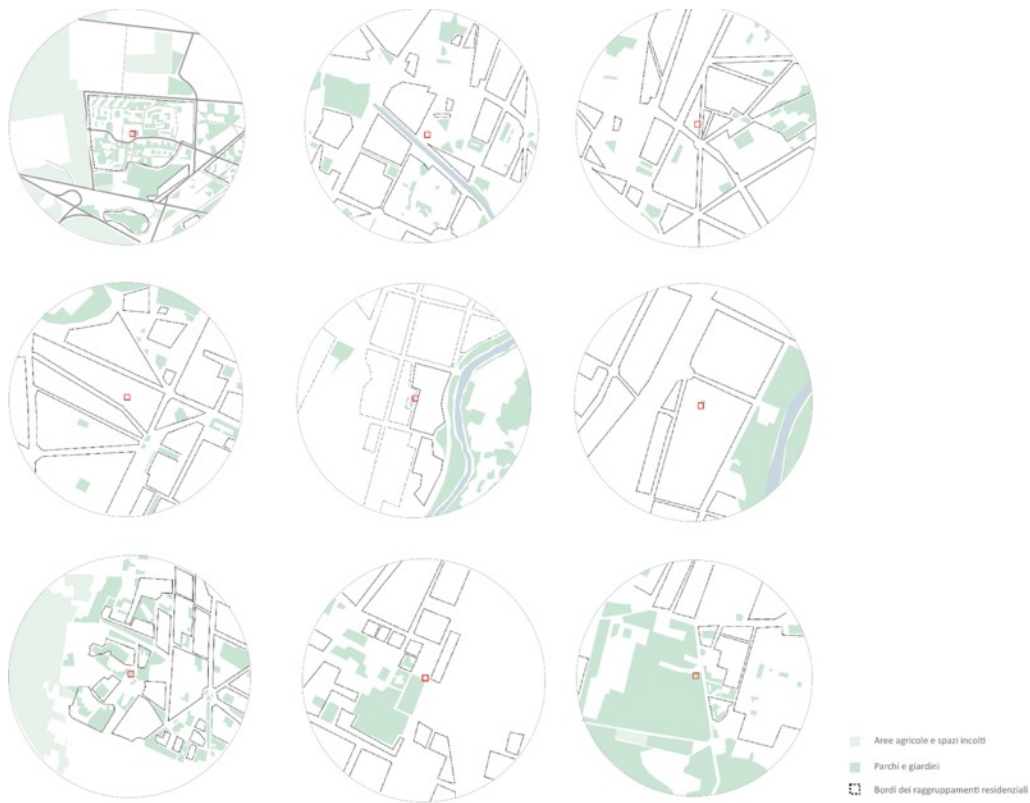


Figure 39 Morphology of open spaces and boundaries of homogeneous and consolidated blocks around the original Case di Quartiere (Source: by Simone Devoti)

5 ELEMENTS OF KNOWLEDGE DERIVED FROM THE RESEARCH ACTIVITY

The research path of the first year of work has corresponded to an important moment of growth for the whole team involved in WP1. The work allowed the team to develop shared methods for scientific knowledge linked to urban design approaches that can contribute to creating socially integrative neighbourhood and cities.

This process has been facilitated by the interdisciplinary nature of the issues dealt with and by the different methodologies used. So diversified approaches have been united by the intent to accumulate knowledge on transition processes, in European and Chinese case studies, which have led to strengthen social identity and sense of community as well as individual awareness and responsibility. This research work has identified best practices of integrated and design-oriented approaches for Chinese and European neighbourhoods and cities.

Research activity conducted around the topic of *Community building through public engagement* (Task 1.1) led to analyse citizens' perspectives to identify opportunities and challenges of public engagement, in an effort to achieve sustainable lifestyles that enhance the vitality and the quality of urban life.

Another aim has been to map citizens' needs through insights from theories and social practice and user-centred design, as well as experiment context-specific and citizen-centred studies and participatory design approaches. This has been explored through a comparison of how citizens are organized on the local level and revealed both similarities and differences between China and Europe. Similarities mostly refer to the nature of the tasks that must be addressed in communities, which may be rather universal. Differences are related to the legal status and level of voluntary participation in the various mode of organization. In China, bottom-up organization of villagers' committees is regulated by law, and defines, among others, tasks like self-management, self-education, and self-service. Although characterized as an autonomous organization, its duties and elections processes are formalized by law. A formal European counterpart of the Chinese villagers committee is difficult to identify, but organizations such as the Norwegian *velforening* do have similar tasks: ensuring safety and welfare on the level of the local neighbourhood including its public spaces, especially where municipalities do not have dedicated resources. On the smallest scale, similar observations seem to be valid when comparing the Chinese homeowners or proprietors committee with its Norwegian 'equivalent', the *borettslag*, which has a legal status just like in China, and similar tasks, such as securing safety in housing blocks and dealing with contracts with various service and maintenance providers. However, Norwegian *borettslag* and *velforeninger* usually are autonomous and do not related to a higher-level organization.

Participation may also be on a more voluntarily level, although engaging with such organizations may be voluntary on paper, but subject to peer pressure in practice. In this sense, there may be reason to believe that both officially organized forms of participation as well as peer-pressured ones may be equally strong mechanisms to secure citizen engagement, especially in homogeneous societies and communities.

With respect to community building, Task 1.1 noticed both differences and similarities between China and Europe. Differences related to the scale and form of organization (i.e. the Citizens Foundation in Reykjavik with online participatory budgeting versus residents' committees in China without any

online participations). Differences are related to how they emerged (e.g. to revitalize and protect historically and culturally significant neighbourhoods, or in response to political, economic, environmental and urbanization-related crises), where the initiative came from, and to what extent they are part of or work to build national and international neighbourhood and city networks. Similarities are related to the fact that initiatives in both places are often based on volunteers, such as elderly living in the community. Also, we identified specific local meeting places that are centres to community building both places, such as the local public house (i.e. the 'pub' in Europe or the 'tea house' in historical China). Another similarity was the basis of residents' committees, which was observed in different communities both in China and in Europe. Both Chinese and European cases demonstrate collaboration between stakeholders across public and private sectors, academia and civil society.

Knowledge derived from the developing of the topic *more inclusive cities through education and digital innovation* (Task 1.2) focused on the analysis of transition examples in Europe and China that rely on continuing education and advanced digital tools to achieve socially integrative neighbourhoods and cities. The analysis has taken into consideration the role of public and private institutions that provide networks for citizens living in urban areas in Europe and in China: a particular attention has been given to the educative system as well as the state of continuing education in Chinese cities and its influence on the urban social tissue.

The topics of transition and socially integrative cities have been explored from the pedagogical and economical perspective. Based on Task 1.2 perspective, a social integrative neighbourhood or city is a city that, from the transition perspective, promotes increased social participation, 'bottom-up' and 'learning by doing' processes and active citizenship mixing private and public subjects. Transition processes are made possible involving all the community in their activities, from children to students, from adult people to old people until common person and using digital tools in formal and informal practices and places of education. As a consequence of this analysis, a socially integrative city should be an educating city, which uses formal and informal educational processes (schools, museums, makers spaces etc.) to promote the inclusion and integration of its inhabitants; allows each person to realize its potentials, capabilities and rights to lifelong education; promotes the identity of the community, i.e. the self-construction of the sense of community and, last but not least, integrates people with different background (knowledge gap, region – places, cultural differences).

In the field of *Socio-economic values through heritage preservation* (Task 1.3) the knowledge based process has led to compare the varying approaches to cultural heritage preservation in Europe and in China with a special attention to the ability to balance neighbourhood and city development with tangible and intangible cultural heritage. The perspectives adopted have been both the historical and current ones, including preservation of physical and non-tangible environments that contribute to community building and local identity. Knowledge derived from the research activity highlighted challenges connected to cultural heritage inside urban transition, including issues related to population pressure, development policies of local economies as well as financial support for heritage sites. Task 1.3 has used a comparative approach to explore different solutions and challenges heritage sites face in a process of urban transition and modernization. This processes has included elements related to the so called 'intangible' and 'tangible' heritage, through the development of three sets of cases, each consisting of one from China and one from Europe: they have been selected due to their importance as heritage sites and for the purpose of comparison. The words chosen to elaborate significant concepts in this field have helped to identify successes and challenges these places have experienced

regarding heritage, and different solutions to similar situations. Some of the words are more fact-oriented, others are more of an analytical nature. This has provided us with a structure, providing background data and tool for comparison. The elaboration of words shows the changes of focus of heritage, from protection method to economic value. It also shows the different emphasis between China and Europe and could reflect the potential trend of further development. The study of three sets of cases, describes an initial image of cities, which let every partner to set up accordingly a further research plan and site visiting plan.

Topics related to *Place-making and design of public spaces* (Task 1.4) helped to build knowledge in the field of place-making process, specifically in terms of quality of urban public spaces. Urban public space are places of human activities where social interaction and participation can happen. The followed research path started from the implicit assumption of *a priori* case studies that already presented elements of a socially integrative city, already recognised, spread and intended as successful processes of urban transition. It continued with a process of research carried out *a posteriori* trying to understand the origins, matrices and roots of that successful and recognizable point of arrival. This analysis has highlighted tortuous roads, both in Europe and in China, that show how obtaining a socially integrative city through a process of transition does not completely tie in with the political context in which we find ourselves working.

The knowledge path explored by Task 1.4 has been carried out through critical tools made available by the disciplines of architecture and urban design, such as the quantitative and qualitative analysis of data, the nature of the regulations in force of each place and through an operation of critical re-drawing of four case studies (two European (Figure 33, 34, 36 and 37) and two Chinese (Figure 40, 41, 42 and 43)). This last operation has its roots in a consolidated western twentieth-century practice of analysis of urban morphology carried out through the graphical tools. Part of the research process aimed to define the theme of the drawing in relation to the object of the analysis (e.g. space of living, conviviality, those for children, public space) and to the type of place to be represented (a house, a courtyard, a street, a square), finding case by case the right kind of representation (the choice has been itself a research object). Task 1.4 identified also the knowledge base process to recognize the so-called “genetic code of a urban organism” (following Saverio Muratori’s ideas), starting from the analysis approach employed by Robert Venturi, Denise Scott Brown and Steven Izenour for the representation of Las Vegas spaces and the synoptic representation “Nolli’s Las Vegas” that still represents an excellent synthesis tool capable of giving “selective” information that symbolise spaces in relationship to certain issues and problems. All these analysis tools have led Task 1.4 to observe how the case studies can be considered successful, at least in part with a global “budget” that corresponds to zero: in fact, for each place, to growing situations correspond unresolved critical issues.

Research path related to knowledge base phase of Task 1.4 highlights the strength of urban projects whose goodness is revealed in the urban and spatial concept with respect to the employment by its users: these are stories that represent processes linked to the territoriality (physical, procedural, bureaucratic) in which they are born but from which general principles can be extrapolated. These principles linked to specific places, if related to concepts identified in words, allow us to outline a framework of knowledge useful to outline, in an absolute sense, a series of best practices in Europe and in China. Moreover, the combination of theoretical notions expressed in the words, combined with specific issues related to specific places, has allowed the development of an effective method of graphic restitution able to give a visual and immediate answer to urban and social issues.

All elements of knowledge derived from the first twelve-month research period are the basis for developing research work in the next steps of the research project. Transition processes that make a socially integrative city will be considered as the conceptual basis for the further developing of the research work. In summary, knowledge base phase has been useful to WP1 to map and analyse citizen perspectives in Europe and in China, to identify opportunities and challenges of public engagement, to understand the role of educational system that improve networks of citizens living in urban areas, to analyse experiences on active preservation in Europe and in China of cultural heritage and, finally, to map place-making process influenced by the design quality of public spaces, including processes of negotiation of citizenship rights and social agreement.

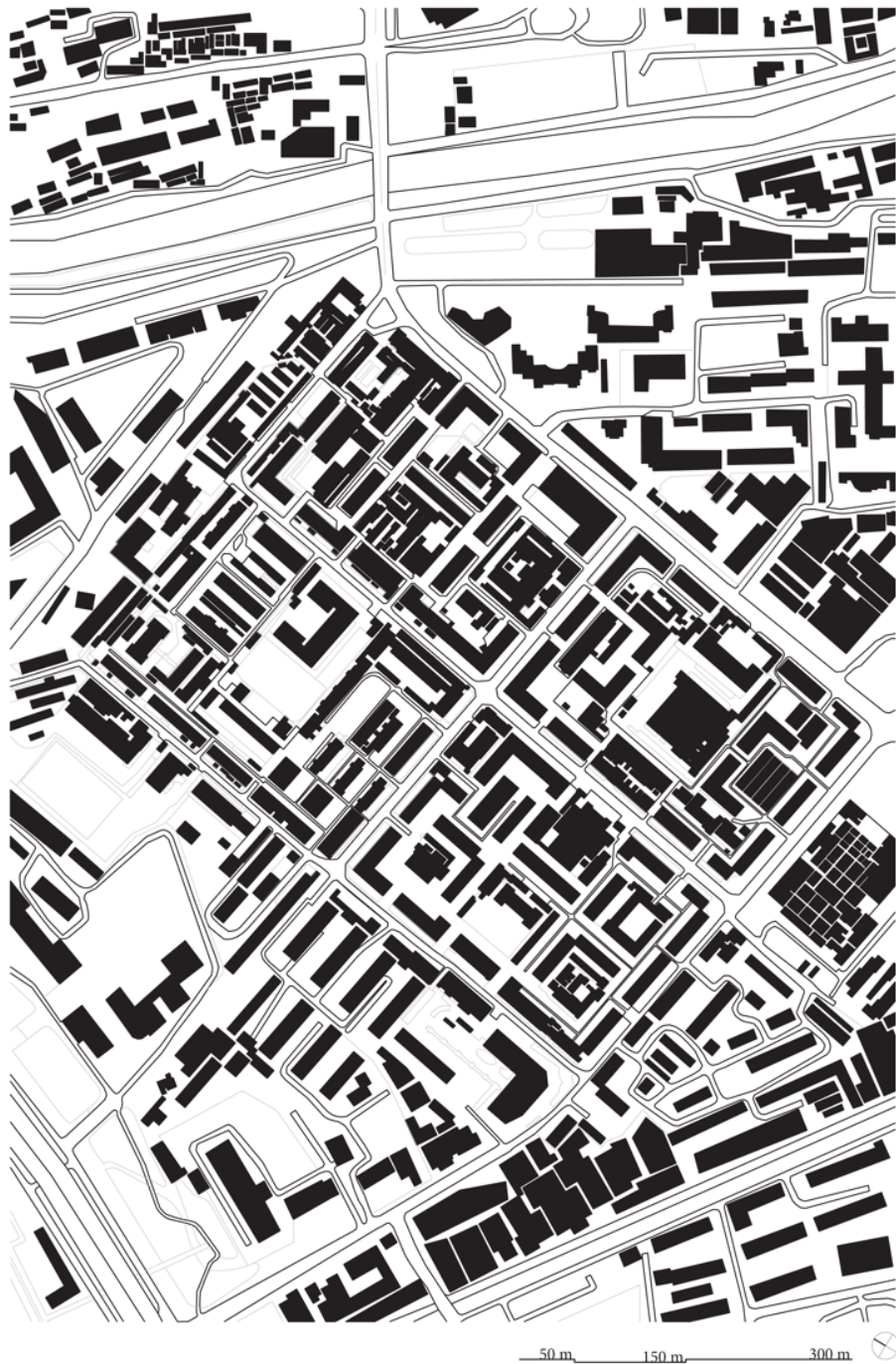


Figure 40 Jiu-Xian-Qiao: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)

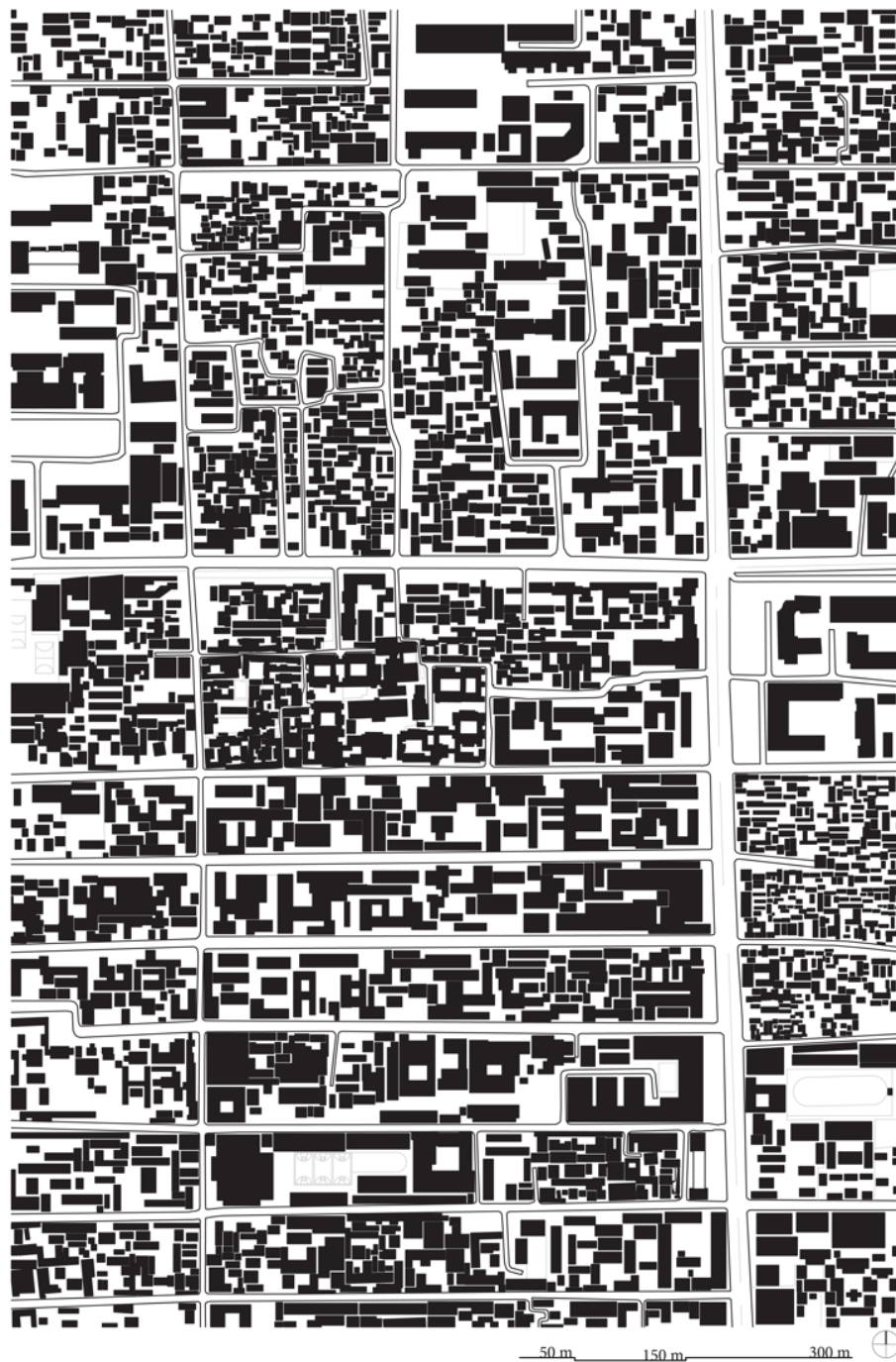


Figure 41 Ju-er Hutong: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)

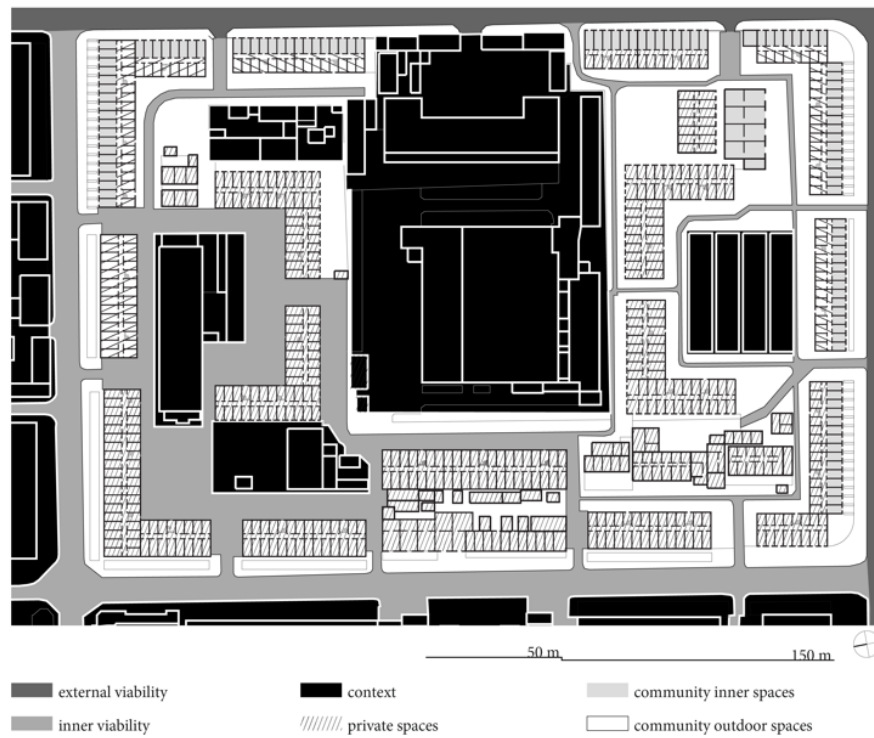


Figure 42 Jiu-Xian-Qiao: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)



Figure 43 Ju-er Hutong: critical redrawing from cartographic sources (Source: by Camilla Forina, Alberto Bologna and Maria Paola Repellino, 2018)

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