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PLANNING FOR CHARACTERISTIC TOWNS IN CHINA

Addressing the Cultural Dimension of Sustainability in Celadon Town, Zhejiang

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Planning for Characteristic Towns in China

Addressing the Cultural Dimension of Sustainability in Celadon Town, Zhejiang

MSc thesis of the Master Urban Environmental Management, Land Use Planning

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EXECUTIVE SUMMARY

Characteristic Towns are towns characterized by a single strong economic activity; they have a long history in mainland China. Many examples evolved in the course of history and recent times, such as the famous Chinese Rice Wine Town, Shaoxin (rice wine industry), Woodcarving Town, Dongyang (woodcarving industry) and Dream Town, Hangzhou (financial industry). Most of these towns developed into well-functioning nodes in secondary, regional urban networks. With traditional or newly evolved local specialties creating local identity, those cases emphasize the effectiveness of bottom-up planning, lifestyle maintenance, environmental enhancement and community attractiveness. In Zhejiang Province, a Characteristic Towns Strategy adopted in 2015 the concept of Characteristic Towns in promoting the upgrading of traditional urbanization patterns to modern sustainable urbanization. The strategy was inspired by the *One Village One Product* (OVOP) concept in Japan, and shares some features with the development of existing Characteristic Towns, except for its top-down planning, in which governmental authorities and enterprises are leading actors.

This thesis addresses the problems and opportunities of the Characteristic Town Strategy from the point of view of sustainability, including the cultural dimension of this concept. Celadon Town (*celadon* is a famous glazed pottery produced in Zhejiang Province) is taken as a representative case study.

Many towns in PRC currently experience a loss of cultural identity because of neglecting civil society participation in town planning. This thesis shows that participatory mapping of Cultural Ecosystem Services can encourage bottom-up

involvement in Characteristic Town planning, enhancing cultural sustainability. Participatory mapping appears to successfully identify how citizens perceive the value of cultural characteristics in their town before and after the implementation of the Characteristic Towns Strategy. In Celadon Town perceived key features for town planning are characteristics impacting the cultural value of an area, such as sociability (e.g. integration of business with residential area); connection (e.g. properly designed roads connected to the neighbourhood); and recognition of waterfronts (Riverside), cultural heritage elements and user-friendly green spaces. A great diversity in high value cultural elements contributes to cultural sustainability. People appear to have a high degree of consensus on the positive value of natural and historical elements, preferring them over manmade and modern elements.

It is concluded that the sustainable planning of Characteristic Towns requires thorough understanding of the cultural identity as perceived by local citizens, rather than inventing or rebuilding culture identity in a top-down process by the authorities. The role of intermediaries should be highlighted (e.g. business associations and educational institutes can increase the awareness of local identity in industrial and societal culture), to safeguard multi-functionality in culture and industry, reinforcing urban cultural identity and quality of life.

ABSTRACT

Cultural sustainability is a key factor for sustainable development. In the Characteristic Towns Strategy, a planning concept which was recently announced by China national government, there is limited discourse on the culture role in sustainability. Based on region branding by promoting a local historical and/or modern urban industrial activity, the strategy has made multifarious impacts since 2015. Focusing on how could Characteristic Towns contribute to cultural sustainability under the Characteristic Towns strategy, this paper discussed the feasibility of cultural identity assessment in Characteristic Towns in Zhejiang. Three research objectives were achieved: 1) Contextualisation of the Characteristic Towns in Zhejiang, China, 2) Discussion of cultural identity assessment in Celadon Town 3) recommendation for the Characteristic Towns planning. Mixed methods were used, including literature review, participatory cartography, survey.

Keyword: sustainable urbanisation, cultural ecosystem services, participatory cartography, Characteristic Town.

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CEC	China Enterprise Confederation
CEDA	China Enterprise Directors Association
CUPC	China Urban-townisation Promotion Council
CUWC	Central Urbanisation Work Conference
DRBL	Development and Reform Bureau of Longquan
ESPON	European Spatial Planning Observation Network
EGTC	European Grouping on Territorial Cooperation
GDP	Gross domestic product
ICT	Industry Computed Tomography
MHUD	The Ministry of Housing and Urban-rural Development of China
MoF	Ministry of finance the Ministry of Finance of China
NCCP	National Congress of Communist Party of China
NDRC	The National Development and Reform Commission of China
NGO	Non-governmental organisation
NPO	Non-profit organisation
PDRC	Provincial Development and Reform Commission of Zhejiang
RO	Research objective
SCC	State Council of China
UN DESA	United Nations Department of Economic and Social Affairs

1 INTRODUCTION

The traditional industrial structure in Chinese cities and towns is currently undergoing a revolution. Recently, *The Notice about the work of Characteristic Towns Planning* states that 1,000 selected towns will be authorized as Characteristic Towns this year in the PRC (MHUD, NDRC, & MoF, 2016). The concept of Characteristic Towns originated and developed in Zhejiang province since 2015. Inspired by innovation of Zhejiang, the national government promoted the Characteristic Towns Strategy through China. Zhejiang plans to develop 100 Characteristic Towns within three years. Different from administrative divisions, each of these towns, which are about three square kilometres in area, will gather companies of one specific industry while being provided certain preferential policies to support their development (Wu, 2016).

Since the shift in focus to sustainable development today in China (Andressen, Mubarak, & Wang, 2013), many studies about the Characteristic Towns strategy have focused on sustainable development, strongly emphasizing the economic management dimension (see fig. 1). Despite that cultural development is the fourth pillar of sustainable development (Hawkes, 2001), the Characteristic Town Strategy lacks underpinning from the point of culture. Still, although cultural sustainability is not mentioned as a subject, it may well be associated with part of the issues (i.e. Tourism, traditional rural economy, etc.), the role of culture as a key indicator for urbanization quality in the field of Characteristic Town study is largely absent.

- Macroeconomic management and sustainable development
- Architectural engineering
- Economic system reform
- Tourism
- Rural economy
- Industrial economy
- Culture
- Finance
- Chinese policy and international policy
- Enterprise economy
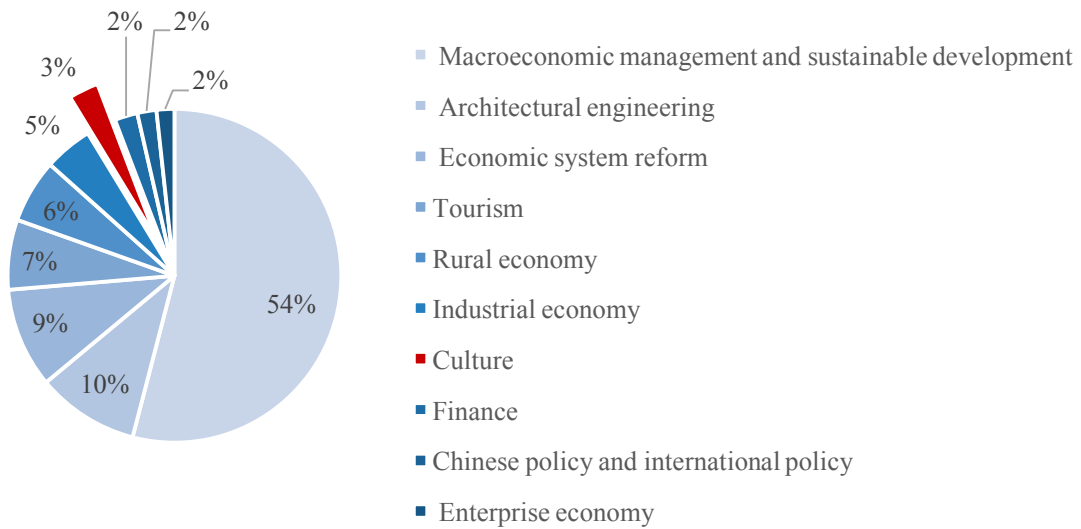
Figure 1 Subject distribution of papers on the topic of Characteristic Towns Plan (source: cnki.net)

In last decades, centralised urbanization has been enforced in China. The character of this urbanization mode included profit-oriented development, excessive industrialization, population explosion, development of metropolises, environmental degradation, etc. During centralised urbanisation, cultural sustainability has evidently been neglected (Griffiths & Schiavone, 2016). The negative effects on social cohesion caused by this profit-oriented planning method can still be traced in many aspects today, particularly in the cultural aspect, which is a critical factor in the success of sustainable development policies, the motivation and driving force of development and people-oriented societies (Duxbury, Hosagrahar, & Pascual, 2016).

Within this context, the main societal question for this thesis is: How could Characteristic Towns contribute to culturally sustainable? Inspired by the recognition of the Cultural dimension as the Fourth pillar of the Sustainability Conceptual Model, combined with the notion of Cultural Ecosystem Services, I implemented the Cultural

Ecosystem Services concept in the planning process of Celadon Town, Longquan, Zhejiang, to explore the feasibility of constructing an instrument for cultural identity assessment in the Characteristic Towns. This results in recommendations for planning of Characteristic Towns based on assessment results and previous experiences and theories reported in literature. Research objectives were formulated for operability and to achieve significant results for both Celadon Town planning and other urban-rural planning studies in China and comparable situations.

1.1 BACKGROUND OF THE PLAN

1.1.1 CHALLENGING THE UNKNOWN WITH PAST TRAUMA

'With green hills and blue waters in sight, bear the image of your homeland in mind. '

--The Characteristic Town task of urbanisation in China (CUWC, 2013)

The goals for China's urbanisation process were presented at the 2013 Central Urbanization Work Conference (CUWC, 2013). In the Characteristic Towns Strategy, this poetic sentence has been stated emphatically again. The connection between the Characteristic Towns and New Urbanisation has been highlighted.

In March 2014, *the National New-Type Urbanisation Plan* (2014-2020) was introduced (NCCP, 2014). New Urbanisation in China is based on sustainable development concept. The Plan declared that in the future China, urbanisation will take a quality-focused and people-oriented approach, instead of the previous over-reliance on physical construction and spatial expansion (Zhou, 2015). Before the New Urbanisation Plan, the urban-rural binary structure in China had existed for a long time (Young, 2013).

Traditional urbanisation has caused environmental problems. In 2012, China accounted for 12 percent of the world's total energy output. Urbanisation and industrialisation has accelerated urban reconstruction. Large scale reconstruction and refurbishment intensively increased the building energy consumption in China. In addition, in the last three decades, about 40,000 historical and cultural relics spots disappeared, while more than half of them were ruined by planned reconstruction (Qiao, 2013). Even now, many old buildings and districts are still under the threat of demolition and rebuilding.

The Characteristic Town Strategy, which proposed to strengthen local cultural identity by one dominated characteristic industry, is being considered as a new tool for fixing degraded binary urban-rural structure and bridging the gap in economy, culture, and environment.

1.1.2 REALITY OF TOWNS: CHARACTERS DEPEND ON ECONOMIC FUNCTION, INSTEAD OF SPATIAL MORPHOLOGY

The traditional urbanisation comes at another price: cultural identity degradation. Old memories and characteristics of the region have been demolished through reconstruction. Places are designed in same look, regardless of the original style, due to the ubiquitous modernisation and over urbanisation. This historical issue is still influencing the development logic of government and planners in certain Characteristic Towns (C. Wang, 2017).

Endowing a region with a new cultural or environmental identity is a phenomenon that has occurred in China after the economic boost. Western-style buildings and landscapes

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occur not only as isolated incidents distributed throughout the current urban structure, but also in concentrated and themed communities that duplicate identifiable Western examples (Bosker, 2013). In certain Characteristic Towns without conventional industry or character, this phenomenon is common. Hangzhou Angel Town, located in Anji, Zhejiang province, is a small village with a western style name. The main industry in Hangzhou Angel Town is the theme-park-centered tourism. The Hello Kitty Theme Park, which was launched there in July 2015 (fig. 2), has effectively promoted local business and regional employment. Neither its castle-like buildings and landscape, nor the theme park culture with Japanese cartoon character is relevant to the local culture here.

Figure 2 Anji (now Hangzhou) Angel Town, , Zhejia Anji ng(source: J. Xu, 2017)

Chinese authorities have recognised the drawbacks of chasing economic growth through creating commodified cultural experience without local authenticity (Qi & Zheng, 2011). However, in the practical construction of Characteristic Towns, 'culture similarities' are commonly demonstrated. In this regard, cultural similarities not only refer to identical concepts of cultural development, but also similar ideas in cultural

extension (C. Wang, 2017). Some Characteristic Towns display a preference for historicizing the local area through the construction of new buildings in ancient-looking styles. These buildings may have little to do with local architectural history or the surrounding landscape, but they demonstrate the official desire to bring in as many tourists as possible (Hartog, 2017).

The sustainable performance of Characteristic Towns might be restricted by over-commoditized culture and profit-chasing planning, especially in rural areas, particularly when populations in rural areas with lower education levels have insufficient awareness of sustainability and local culture conservation. For example, to gain more income, many inheritors of non-material cultural heritages abandon conventional craftsmanship with hundreds of years of history. Instead, they choose to be employed in industrial areas (C. Wang, 2017).

Cultural factors are intrinsic components of the lives we lead. As Duxbury et al. commented, "Identity is not a starting point; identity has become a negotiable destiny" (2016). Planning for a Characteristic Town should firstly realise the local demands of cultural and social activity in a human-scale perspective, so that the local awareness of cultural sustainability can be improved. Currently, the correlations between culture and sustainable development is not clearly realised, and the integration of culture within broader holistic urban planning and development continues to be an issue due to both conceptual and operational issues (Duxbury et al., 2016). Characteristic Towns in China need a planning approach for culturally sustainable development that contributes to overall sustainable development.

1.1.3   WHOSE TOWN? INSUFFICIENT PARTICIPATORY ACTIVITIES

Except for the problem of the single-minded pursuit of economic development, the phenomenon of same-looking urban design can also be attributed to the problems stated by some critics of participatory development: assuming pre-existing communities and overwriting the complexity and unevenness of local society (Gwanzura-ottemöller & Kesby, 2005).

From the policy documents, I found that the Characteristic Towns has two development modes: the enterprise dominant mode, and the enterprise-government collaboration mode. The policy stated the development principles: government guiding, enterprises dominating, and market-oriented operation. According to the modes of town development, the role of local people in the town planning has not been elaborated in the strategy. It is fair to conclude that the lacking of understanding of local people's perceptions and experiences of cultural values in the area they live in caused cultural sustainability reduction in the Characteristic Towns.

Culture belongs to all local people. Plurality and democracy of culture cultivation process is important (Duxbury et al., 2016). Culturally sustainable development as a policy of human rights can be considered as an occasion to gather all people living in a place to improve the quality of life in place. For instance, public space is a place of social interaction as well as key for the identity and landscape of the city. It belongs to all inhabitants and it has a general relationship with culture and other common properties. Urban design and infrastructure must have cultural relevance and resonance. Understanding residents' perception of space is a pathway to meet public vital interests.

Therefore, to achieve culturally sustainable development of the Characteristic Towns strategy, knowledge and demand of cultural values among local people should be understood.

1.2 RESEARCH PURPOSE AND QUESTIONS

From the previous statement about the current situation in Characteristic Towns and all of China, research objectives and questions were formulated. Emphasizing on the cultural sustainability as a key capacity contributing to sustainable development, the general question of this paper is, how could Characteristic Town contribute to culturally sustainable urbanisation in the context of Characteristic Towns policy?

My research adapted the Cultural Ecosystem Services concept for the planning process of Celadon Town, Longquan, Zhejiang, to explore and discuss the feasibility of constructing a modified instrument for cultural identity assessment of Characteristic Town. Three objectives were formulated for research operability and significant result for both Celadon Town planning and the Characteristic Towns strategy.

Specific Objectives:

1. Contextualise the Characteristic Town concept in Zhejiang, by retrospective review of the history of urban planning in Zhejiang and analogous theories in other countries.
2. Explore the feasibility of assessing cultural identity in Celadon Town, Zhejiang.
3. Provide recommendations for the Characteristic Towns strategy based on the results of the Celadon Town study and the experience and knowledge from reviewed concepts and cases.

Then several Sub-Research questions have been established

- How did the Characteristic Town concept evolve from its original protocol to current concept?
- Which other international concepts are relevant to the Characteristic Town? And which part of their planning methods can be applied to Characteristic Towns?
- In which way can cultural identity be assessed in Characteristic Towns in China?
- What did the result of the cultural identity assessment in Celadon Town reflect?

2 THEORETICAL FRAMEWORK

The process of framework formulation inspired the conduction of research, and helped in identifying the limits of generalizations. It demonstrated an understanding of theories and concepts that are relevant to the purpose of growing regional cultural sustainability in the context of Characteristic Towns Plan in China.

In this chapter, theories that are relevant to the research question were first introduced. The correlations of three concepts, Culture as the fourth pillar of sustainable development, Cultural identity as a key value for sustainability, and Cultural ecosystem services, will be elaborated. This part will provide an insight into how existing theoretical literature contextualised the relationships between sustainable development and cultural identity, as well as how the concept of cultural ecosystem services can be adapted as an instrument to value the cultural identity during sustainable development. After that, the contextualisation of the Characteristic Towns in China and Zhejiang province will be introduced as basic knowledge for further research. Lastly, I reviewed and briefly elaborated on three comparative planning theories.

2.1 CULTURE AS THE FOURTH PILLAR OF SUSTAINABLE DEVELOPMENT

As the Characteristic Town Strategy in China has already presented ambitions in sustainable development, proper cultural implications should be considered during long-term planning influencing a community (Luft, 2016). To improve cultural sustainability in the Characteristic Towns, a culturally sensitive planning approach should be implemented. It can empower both marginalized or common individuals and communities to participate in cultural and political life (Duxbury et al., 2016).

In this research, the theoretical basement is sustainable development concept. The concept of sustainable development is globally interpreted as a demand to access sustainability untidily within environmental, economic and social spheres (UN DESA, 2002). 'People, Planet and Profit', Triple-P Model, shortly interpreted the demand and the aim of sustainability (Elkington, 1997). John Hawkes, who raised the Four Pillar Model of Sustainability, upgraded the previous model. He defined culture as a new pillar as 'the expression and manifestation of what it means to be human'. This model presents the relationship between community's activity and quality of life and its 'cultural engagement, expression, dialogue, and celebration'. Hawkes insisted that, cultural vitality is as essential to a healthy and sustainable society as social equity, environmental responsibility and economic viability (Hawkes, 2001).

Figure 3 Three models of Culture and sustainable development: culture in sustainable development, culture for sustainable development, and culture as sustainable development. Adapted from Culture as fourth pillar of sustainable development (Dessein et al,. 2015)

As early as 2006, Nurse stated that culture should be recognised not just as an extra pillar of sustainable development along with environmental, economic and social objectives because peoples' identities, signifying systems, cosmologies and epistemic frameworks formulate how the environment is perceived and lived in. Culture shapes what people mean by development and determines how people behave in the world. His statement was the idea of "culture as the fourth but central pillar of sustainable development." (Nurse, 2006)

In 2015, based on the four-pillar model by Hawkes, Dessein et al adapted and developed it into a series model, which elaborated the various ways of understanding culture's relations with sustainable development (see fig. 3). Their research claimed that there were three types relations of culture and sustainable development: Culture in sustainable development, Culture for sustainable development, and Culture as sustainable development. In the first model, culture in sustainable development, culture is added as a fourth pillar, as presented in the Hawkes model. The second model shows the culture mediating between the pillars of Planet, People, and Profit, which means

culture is functional for sustainability (this reflects the theory developed by Nurse). The third model, culture as sustainable development, shows culture is the foundation for sustainable development. The arrows in the model show the constantly changing dynamics of culture sustainable development.

2.2 CULTURAL IDENTITY FOR SUSTIANABLE DEVELOPMENT

In Nurse's opinion, culture was the central pillar and fully intertwined with that of the other pillars of the Profit, the People and the Planet. The factor Nurse emphasised is the importance of cultural identity for sustainable development. An alternative method of sustainable development prioritizes the values below in order (2006):

- Cultural identity (the social unit of development is a culturally defined community. The development of it is originated in the specific values and institutions of this culture).

- Self-reliance (every community relies fundamentally on its strength and resources).

- Social justice (the development effort should give priority to those most in need).

- Ecological balance (the resources of the biosphere are utilized in full awareness of the potential of local ecosystems as well as the global and local limits imposed on present and future generations)
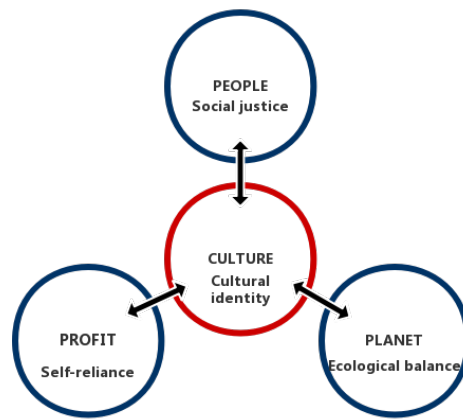
Figure 4 Adapted Nurse's statement into the basic four pillar model

Figure 4 adapted Nurse's statement into the basic four pillar model. It elaborates cultural identity as a value for the pillar of culture in sustainable development. Cultural identity is the key research subject of this paper. For culturally sustainable urbanisation under the implementation of Characteristic Towns strategy, cultural identity enhancement in the Characteristic Towns should be considered as an important approach.

2.3 CULTURAL ECOSYSTEM SERVICES: EVALUATING IDENTITY BY PARTICIPATORY CARTOGRAPHY

As previously stated, Nurse considered the cultural identity as a factor that defined the social unit as a community. In conventional communities, cultural ecosystem services are constitutional for cultural identity and human survival (Milcu, Hanspach, Abson, & Fischer, 2013).

Cultural ecosystem services are composed of the immaterial benefits that develop from human-ecosystems interrelations (Chan, Satterfield, & Goldstein, 2012). They are less obviously related to human well-being than to provisioning and regulating services.

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Cultural ecosystem services consist of indicators of spiritual improvement, religious values, cognitive enhancement, recreation, reflection, and aesthetic perception (Millennium Ecosystem Assessment, 2005). Comparing with Nurse's five elements of cultural identity, the value of Cultural ecosystem services presents the cultural identity in a non-monetary but more comprehensive form. The interrelations between the cultural identity and the cultural ecosystem services values contribute to the cultural identity measures.

Cultural services are not directly shown in the ecological environment, they are the outcome of dynamic and sophisticated relationships between ecosystems and humans in the environment over a long period of time. Culture is a key driver of ecosystem change. Meanwhile, environmental properties are highly connected with cultural identities, sense of place, social activities, and visual presentation. Regional natural or semi-natural features are often correlated with the identity of an individual, a community, or a society (Terry C Daniel et al., 2012). In addition, cultural ecosystem services constantly rely on intermediate ecosystem services, and cultural values evolve from ultimate cultural ecosystem services integrated with other forms of characteristics (Milcu et al., 2013). Also, the valuation of cultural ecosystem services can present an overview of the cultural properties value in different dimensions. By reviewing relevant research, valuation of the cultural ecosystem services was generally classified into three types, socio-cultural assessments, biophysical assessments, and economic assessment (Iniesta-Arandia, García-Llorente, Aguilera, Montes, & Martín-López, 2014).

However, I found that the earliest Chinese literature that introduced the Cultural ecosystem services was conducted by Zhang and Zhao in 2007. The study discussed the future trend of the cultural services under the Millennium Ecosystem Assessment scenarios in the global view (Y. Zhang & Zhao, 2007). After that, Chinese researchers commonly adapted the biophysical and economic assessment for cultural service evaluation (S. Li, Guo, Yang, & Yang, 2009).

However, the Millennium Ecosystem Assessment proposed that measuring the cultural values should follow the principle of participation. It suggested that the ecosystem approach notably emphasizes the fundamentality of a socio-ecological system approach and valuation, and that policy regulation has to encourage local participation in natural resources management as part of a cultural landscape, coordinating local knowledge and institutions (Sarukhán & Whyte, 2005). In some Characteristic Towns in China, problems have resulted from limited participation from local people in the planning, who have been calling for a solution by which local knowledge can be used optimally for building cultural identity in the town. After an overview of previous studies, researchers stated that more future research is necessary on constructing non-monetary measures for cultural ecosystem services valuation and integrating these into easy-to-practise instruments (Daily et al., 2009).

In this case, participatory cartography might be an option for socio-cultural assessment of cultural services. Usually, cartography by local participators can show a deeper insight into the services within an area than is available from technical surveys. Cartographic visualisation of perceptions and preferences present spatial positioning of

valued ecosystems in the area and, result in the identification of key focal areas for cultural services management (Plieninger, Dijks, Oteros-Rozas, & Bieling, 2013). Although participatory cartography has been a popular tool for sustainable urban planning, there are limited studies in China that have adapted it for cultural management purpose. Mostly, the implementation of this tool was in the fields of natural resource or common property management, in the way of biophysical or economic measures, combined with GIS (He, Zhou, Weyerhaeuser, & Xu, 2009; X. Wang, Yu, Cinderby, & Forrester, 2008; J. Xu et al., 2005). This research will close this knowledge gap by integrating the cultural ecosystem services concept with participatory cartography tool to assess the cultural value in the Celadon town, for local cultural sustainability enhancement.

2.4 STUDYING THE CHARACTERISTIC TOWNS: POLICY AND COMPARATIVE CONCEPTS

This section introduces the Characteristic Town Strategy in China, and representative theories and concepts that contributed to its development. Ideally, the review for this research would be conducted with as many available policy documents and literature as possible. However, due to limitation of time and resources, three relevant concepts and theories were selected for this research, and were able to provide sufficient relevant findings. Two of the concepts originate in Japan, Community-making (Machizukuri) and One-Village-One-Product (Isson Ippin Undo), while the third concept, Polycentricity, is from Europe.

2.4.1 POLICY ANALYSIS: THE STRATEGY IN CHINA AND ZHEJIANG

Because China has a hierarchical planning system, understanding the interpretation of Characteristic Towns concept in both national and provincial policy documents is necessary. Hence, the key points from selected policy documents were introduced, including the definitions of the Characteristic Towns on a national scale and in Zhejiang province, and the process of its authorisation and assessment.

NATIONAL MOVEMENT AND GOALS

In early 2016, the document, *the Several Opinions of the State Council on the New-type Urbanisation Planning* proposed policies in accelerating leisure tourism and folk cultural inheritance in Characteristic Towns (SCC, 2016) . After that, the national council specified that until 2020, the goal is to develop 1,000 unique and vigorous towns with the specific functions of leisure tourism, educational technology, traditional cultures and favourable living conditions (C. Wang, 2017).

Although there are different definitions of Characteristic Towns in different provinces, the national government in China defined it as: Relying on one characteristic industry or environmental element, the development of Characteristic Towns synchronizes characteristic industry, cultural identity, tourism, and residential functions. It is a new form of urbanisation that integrates the industry into urban or rural spaces coherently, and a cluster combined with scenic spots, industrial zones, urbanizing area (MUHD, NDRC, & MoF, 2016).

ZHEJIANG CHARACTERISTIC TOWNS: EVOLVED FROM 'MASSIVE ECONOMY' TO INDUSTRY CLUSTER

The Characteristic Town concept was firstly initiated in Zhejiang in 2014. After its success in economic and cultural spheres, it was launched nationwide in 2016. Nowadays, many cases have been identified connecting the success of the Characteristic Towns Strategy in Zhejiang with the provincial industrial, economic, and socio-historical phenomena.

According to official accounts, Characteristic Towns in Zhejiang are neither administrative units, nor industrial parks, but rather, platforms independent from the city (ezhejiang.gov.cn, 2017), planned with the ideology of innovation, coordination and coherent development, and environmental sustainability. These platforms support seven categories of emerging industries including information economy, environmental conservation, health, tourism, fashion, finance and high-end equipment manufacturing. In addition to specified industry orientation, these towns also have multiple functions as areas for residence, tourism and cultural activity (Liang, 2016; Yu, 2015). As for the location of the towns, most are in suburban or rural areas, others are self-contained quarters of mature urban areas (Hartog, 2017).

Since the reform and opening-up of China in the late 1970s, many small counties or towns with commercial characteristics have been established in Zhejiang Province. These small regions are each specific in a certain industry, e.g. the wholesale of small consumer goods, woodcarving products, and building materials. These regional agglomerations contributed greatly in provincial economic growth in the last few decades (China Newsweek, 2017), and the economic activity it was based on was named 'massive economic'. Massive economic played an important role in the

development of Zhejiang, accelerating the rural-urban urbanisation through the way of local economic and demographic agglomeration (W. Xu, Jiang, Yu, & Tang, 2006). The massive economic can be dated back to the 'handicraft era' of Chinese history. Since the industrialisation, 'massive economic' emerged frequently, and was interpreted as early as the end of nineteenth century by economist Alfred Marshall (Marshall, 1922). Contrary to large scale manufacturing industries, 'massive economic' refers to 'numbers of small-scaled plants clustering in a specific district' (Wei, Lv, & Cong, 2015).

With the growth of media and e-commerce, and increasing proportion of tertiary industry, new spatial patterns of regional economic activities have developed Those progressive regions were impacting other traditional industrial areas in China. Since then, two general planning patterns, industrial areas with neighbourhoods, and industrial areas with scenic areas, have become the prototypes of the Characteristic Towns today. In such, Zhejiang government formally proposed the Characteristic Towns Strategy.

In the book of Wei, Lv, and Cong, mechanisms of two concepts, massive economic and industrial clusters were studied. The book stated that the transition from massive economic to industrial cluster benefited in increasing economic efficiency by optimizing the spatial management of resources. Particularly, lower-tech industries were altering distinctly from massive economic to industrial cluster when high-tech industries were agglomerating (Wei et al., 2015). Interestingly, the same trends were found in the Characteristic Towns development in Zhejiang. As mentioned, high-tech

industries, business incubators and innovation centres in Zhejiang have provided the foundation for the bloom of Characteristic Towns that collaborated with internet enterprises, e.g. the Cloud Town, invested by the Alibaba co ltd. The Characteristic Towns Strategy was developed as a tool to accelerate the industrial reconstruction, and corrected issues found in the current concept of massive economics. A comparison between the Characteristic Towns, 'massive economics', and industrial cluster can contribute to a more comprehensive contextualisation of the Characteristic Towns in Zhejiang. In Table 1, the features of the three concepts were analysed and concluded based on a report made by Zhao in 2017, the book by Wei, et al, and knowledge from previous reviews.

Table 1 Comparative analysis of three regional urban development theories in Zhejiang: Massive economics, Characteristic Towns, and Industrial cluster (Wei et al., 2015; Zhao, 2017)

Types	Scale	Industrial structure	Functions
Massive economics	small	Industrial Manufacturing: agglomeration of one or few products produced at a location, low-cost competition, low technological innovation	Production
Characteristic Towns	small (under 3 km^2)	Seven emerging industries: independent from the downtown, high innovative capability, environmentally friendly.	Production, culture, tourism, community
Industrial cluster	large	Industrial Manufacturing: organic regional production system and supporting industrial chain, concentration of high-grade innovative capability	Production

As the table and previous discussion presented, the Characteristic Towns concept in Zhejiang share some features with the industrial cluster. Both concepts have higher capability of innovation and diversified industrial types than massive economics. However, the scale of the Characteristic Towns is the smallest, and specified to be less than 3 km2 by authorities. This is also related to the differences between their regional production system: industrial cluster usually has a large-scale organic regional

production system and supporting industrial chains that are incompatible in small scale towns. The significant feature of the Characteristic Towns in comparison with the other two is the functions it contains covers production, culture, tourism, and community. In contrast, both massive economics and industrial cluster only have the production function.

APPLICATION, AUTHORISATION AND ASSESSMENT OF THE CHARACTERISTIC TOWNS

The table 2 below shows the analysis of the policy documents announced by China national authorities in the view of the roles that governments and enterprises played in the Strategy. The process and requirement of application and authorisation of the Characteristic Towns, as well as the relations and functions of governments and enterprises were introduced.

Table 2. The national policy documents introduced the roles and relations of governments and enterprises (Rural Development Department of MHUD, 2016; MHUD, NDRC, & MoF, 2016; NDRC, 2016)

Document	Authority	Highlight
The Notice about the work of Characteristic Towns Planning 2016 (July 2016)	MHUD, NDRC, MoF.	Highlighting the character, market dominated, deepening reform.
The Notice about the Recommendation of Characteristic Towns (August 2016)	Rural Development Department of MHUD.	Requirement of candidate towns: in the past five years of town area, there were no major security accidents, major environmental pollution accidents, major ecological damage, major social mass incident, or historical and cultural relics demolishment. Application and assessment: 1. Application from enterprises: the application should generally be initiated by enterprises. It should include documents about basic information of the area and the enterprise, future blueprint, etc.

		2. Assessment by professionals and governors from provincial and regional authorities. 3. In the case the candidate town was authorised by regional authorities, the application will be submitted to and assessed by Rural Development Department of MHUD, and Agriculture Department of MoF.
Circular on Implementing "Project of Thousands of Enterprises & Towns" and Promoting the Development of Beautiful Small Cities and Towns (December 2016)	NDRC, China Development Bank, China Everbright Bank, CEC, CEDA, CUPC.	Organic integration of enterprises structure transition and Characteristic Towns development: government guiding, enterprises dominated, market-oriented operation

Despite that many documents have been introduced as guidance for the Characteristic Town development, few of them indicated the cultural sustainability (only surfacing in the basic requirements for candidate towns: no cultural/historical relics demolishment). Instead, documents mainly focused on the regulation of government involvement and enterprises, which emphasizes their responsibility to the forging of cultural characteristics for the industry (see table 2). The reason for this might be the fact that the Characteristic Towns Strategy implication requires a large amount of financial investment, thus governments are dedicated to attracting entrepreneurs to participate and offer capital or political support (R. Zhang, 2017).

The initiative of the Characteristic Towns Strategy sees provincial governments submit candidate regions and plans, with authorised towns receiving national political and financial support to commercialise local industrial characteristics. Each Characteristic Town should be planned based on a certain industry. Yet, in both Zhejiang and national China, the enterprises and government play decisive role in the selection of the characteristic industry for the town, which also represents the future cultural identity

there. There is no regulation or planning guidance for non-conventional cultural identity forging. Focusing on the formation of comparative capacities and supply advantages to meet the market demands, the development mode of Characteristic Towns corresponds to the regulations of the market economy, rather than the local cultural identity (Liang, 2016).

The dominant role of government and enterprises in the policy documents are inadequate for a town's cultural sustainability. Policies and suggestions on cultivating cultural industries and traditional culture inheritance, as well as a combination of culture and tourism, are inadequate (C. Wang, 2017). Furthermore, in provincial and national documents, the important role of bottom-up participation has not been highlighted in the process of cultural identity forging in the Characteristic Towns.

2.4.2 EXPANDING THE CHARACTERISTIC TOWNS TO GLOBAL THEORIES AND CASES

Integrating cultural elements in the development of Characteristic Towns should consider local and traditional cultures, find unique characteristics, inherit cultural origins and encourage the development of craft culture. It is also essential for these processes to be combined with modern factors, on an international scale, and make cultural vitality by innovation (C. Wang, 2017). In the case of Characteristic Towns Strategy in Zhejiang, authorities draw their inspiration from worldwide famous cases, e.g. Davos region in Switzerland, Greenwich in United States, Watch-making town in Switzerland, and Provence in France (Liang, 2016). In such, study of global theories

and cases that relevant to regional revitalisation is necessary, especially for advance knowledge of cultural values management.

JAPAN: ONE-VILLAGE-ONE-PRODUCT CONCEPT

At the China New Urbanization Development Summit 2017, Qiu, vice-minister of MHUD, said that the first stage of the Characteristic Town development in China was the period Town + One-Village-One-Product. In his opinion, 'Characteristic Town' is actually a complex, dynamic system, with the historical development and progress of thousands of years, and is still constantly changing its connotation and form (Top News, 2017).

The One-Village-One-Product movement is a regional government strategy that originated in Oita, Japan, in 1979 and ended around 2003 (Murayama & Son, 2003). China was the first foreign country that realized the potential of the One-Village-One-Product as a planning strategy. In the 1980s, facing acute problems regarding rural-urban immigration and rural communities' degradation, Shanghai, China initiated One-Hamlet-One-Product movement to promote the industrial development to create goods produced in surrounding rural areas, so as to revitalise the regional economy (Igusa, 2006). Located nearby Shanghai, Zhejiang province officially introduced the One-Village-One-Product Plan in 2001(Yang, 2017). The One-Village-One-Product in Zhejiang is typical of the massive economic (Wei et al., 2015).

In Japan, the One-Village-One-Product concept has three principles. The first is the principle of 'local but global', which involves making globally welcomed products that

show the local specialities and culture. Second, 'self-reliance and creativity' was indicated as innovative thinking to realise One-Village-One-Product products through self-initiated actions optimally utilizing regional resources. Third, 'human resource development' is conceptualised as stimulating proactive citizens with a challenging and creative spirit (Murayama & Son, 2003). These principles were proposed to utilize communities' own abilities to decrease over-reliance on public sectors. Hence, the implementation of One-Village-One-Product concept in Japan was contributed by both local people and the government.
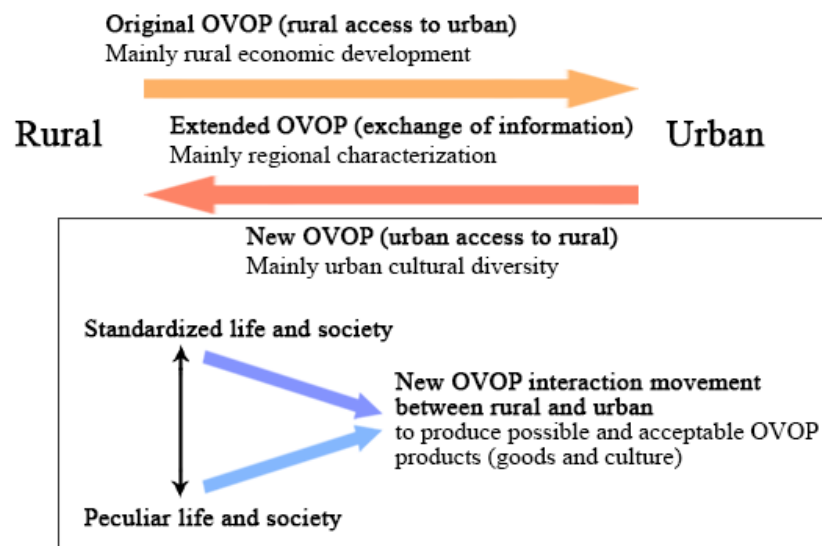
Figure 5 One-village-one-product from original to new (Murayama, 2015)

In the past, the rural and urban relations were simply divided in two types, rural-urban one-way access (e.g. rural-urban immigrants) and urban-rural information exchange (e.g. regional characterisation) (see fig 5). The new One-Village-One-Product concept emphasised urban cultural diversity. The purpose of the concept in its new stage is achieving diversity of society and mutual understanding between urban and rural, through the movement in cultural aspects and interactive behaviour. The new One-

Village-One-Product policy will shape regional unique characteristics, and promote it beyond a region (Murayama, 2015). Different from the previous two stages, rural areas are expected to attract urban resources in the new One-Village-One-Product stage. It is a balance between standardized modern life and peculiar life, which is a new lifestyle that people today, especially those who from urban area, are looking for.

JAPAN TO TAIWAN: ONE-VILLAGE-ONE-PRODUCT AS A PATHWAY TO COMMUNITY-MAKING IN TAOMI VILLAGE

In Japan, the Community-making movement has inspired the evolution of One-Village-One-Product. The impetus for a community-making movement was the excessive post-war economic growth and transformation that resulted in largely increased disparities between rural and urban area, and the great rural-urban migration (Chang, 2015). The first generation rural-urban migrants had attachments with hometowns and old memories, and became typical of 'metropolitanisation of nostalgia' (Kelly, 1986). This specific urban-rural relationship in post-war Japan founded the bases for the political economy of locality (Chang, 2015; Claymone & Jaiborisudhi, 2011). In 1980s, the rural entrepreneurialism (Harvey, 1989) emerged as rural citizens devoted themselves as communities to the movements of rural redevelopment. The new strategy of this action was contextualised as a cooperation of the nation, the business, and the society, which proposed to connect new local intermediaries (e.g. local authorities, firms, and non-governmental agents).

The community-making concept is closely related to the strong desire of residents to have self-determination in their lives, to maintain their lifestyle, to improve the living

environment standard and to enhance community attractiveness. The movement in Japan is aiming on realizing 'attractiveness reproduction' with the target on enhancing the community space value, social economy value and culture value.

As discussed above, Community-making emphasizes the multiple-stakeholder participation with the bottom-up method (Xing, Bin, & Hideki, 2017). The movement has also impacted regional revitalisation in Taiwan, China. A successful case is Taomi village, which is famous for its characteristic ecotourism industry. Taomi is a rural village situated in Puli Township, Nantou County, Taiwan, China. In 1999, a 7.3 magnitude earthquake destroyed 70% of the small village. In the initial post-earthquake period, NGOs and educational organisations participated in redevelopment with an attention on ecotourism industry development based on the local natural resources (C. C. Wang, Cater, & Low, 2016).

Taomi's redevelopment encouraged local citizens to become involved in the reconstruction, and enhanced their sense of belonging. Education and communication were essential to changing the mind-set of the villagers, such as community-centric training courses including cooking, painting and construction skills (W. Li, 2013). Over the course of a decade, external professionals and intermediaries helped residents to enhance the environmental value of the area and maintain the rural lifestyle. The economic structure is dominated by NPOs with local government supports. Taomi's success presented how a collaborative endeavour can regenerate an entire community. It also reflected how NPOs and other intermediaries can become social enterprises,

turning challenges into opportunities to help the local community to achieve a sustainable economy (Chen, 2016; Y. Xu, 2014).

THE POLYCENTRICITY CONCEPT IN ZHEJIANG AND EUROPE

In recent years, many coastal regions in China, like Zhejiang, have experienced rapid polycentric urban development, with the emergence of new sub-centres in both suburbs and exurbs, while even some medium or small cities have more than one centre (X. Liu & Wang, 2016).

In the research of Bai et al, Central Place Theory (Christaller, 1933) and Locational Cluster Theory (Arthur, 1990) were integrated into a new model for understanding the spatial distribution of productivity in those two theoretical dimensions. The model assumed that all the micro-activities of locational clusters happen in a specific hexagonal homogeneous space. It was adapted for elaborating the spatial socio-economy structures transformation in Zhejiang (Bai, Chen, & Wang, 2016).
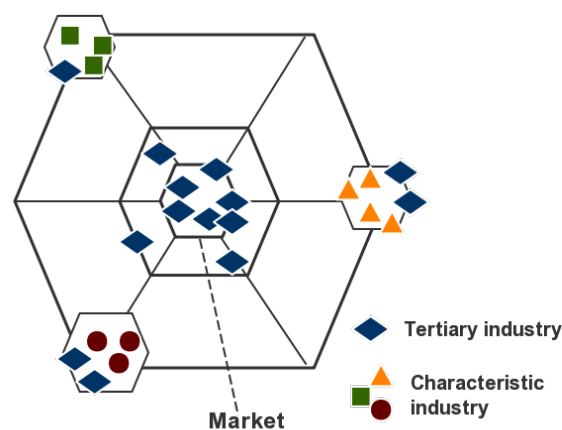

Figure 6. Spatial pattern of Characteristic Towns in Zhejiang (Bai et al., 2016)

In the model presents the Characteristic Towns spatial pattern, the polycentric structure can be recognised (see fig 6). Bai et al explained that, the development of massive

economic and traditional industry clusters has increased the density, competitiveness, and basic factor costs in centres/clusters of Zhejiang. Since then, some industrial sites started moving to the periphery. This counter-urbanisation phenomenon was a typical decentralisation process, but the new sub-centres/clusters have gradually emerged in the peripheral areas. The new agglomeration developed the networks of second tier clusters with characteristic industries, guaranteed the operations of those industries, increased the efficiency of resource use.

The Characteristic Towns Strategy contributes to transforming the traditional structure to a sustainable industrial spatial structure including patterns such as belts, circles and networks. The co-development of the Characteristic Towns, polycentric urbanisation, and metropolitan development is expected to be balanced in future Zhejiang (Bai et al., 2016).

The Polycentricity concept has notably been emphasized by the European Grouping on Territorial Cooperation (ESPON EGTC, 2014). In 2014, ESPON has released a future strategy and vision for the European Territory 2050 "Making Europe Open and Polycentric" (Ostrom, 2010; Ulied et al, 2014), stating that the combination of Openness and Polycentricity represent the most coherent territorial strategy supporting economic growth and competitiveness, safeguarding social cohesion and sustainability. Interestingly, the Characteristic Towns strategy and the European Polycentricity concept share comparable goals: spreading opportunities throughout regions, increasing resilience and diversity of development, further bridging gaps of economic and welfare conditions (ESPON EGTC, 2014; the Ministry of Housing and Urban-rural

Development et al., 2016). "Making Europe polycentric requires unleashing regional diversity and endogenous development as well as territorial cooperation as means to optimise the location of investments and reduce regional disparities, to support balanced and polycentric urban structures, favouring compact settlements and smart renewal of cities, as well as a sustainable management of natural and cultural resources" (ESPON, 2014, p. 12). This is a reasoning that could apply equally well for the Characteristic Towns strategy, when adopting integrated sustainability objectives.

3   RESEARCH METHODS

This research proposes to figure out how can the Characteristic Towns Plan be implemented in a culturally sustainable way, in which way the local cultural identity can be valued and managed properly. Focusing on this general goal, the research methodological framework was set up (see fig 7).

The framework begins with my personal knowledge and experience. Based on personal view and existing problems of the Characteristic Towns, it is necessary to conduct a general literature review for research questions orientation. The theoretical framework was the output of the general review stage, in which the basic theories (cultural as forth pillar of sustainability, cultural ecosystem services concept, participatory planning) I mentioned in previous chapter contributed in the research design and culturally sustainable planning instrument development. After that, knowledge gap was elaborated as: 1) the inadequate discourse of the culturally sustainable development in the Characteristic Towns planning, 2) insufficient practise of socio-cultural approach for cultural ecosystem services assessment in China. In such, research questions were

formulated. By integrating current problems, knowledge gap, and theoretical basis, the

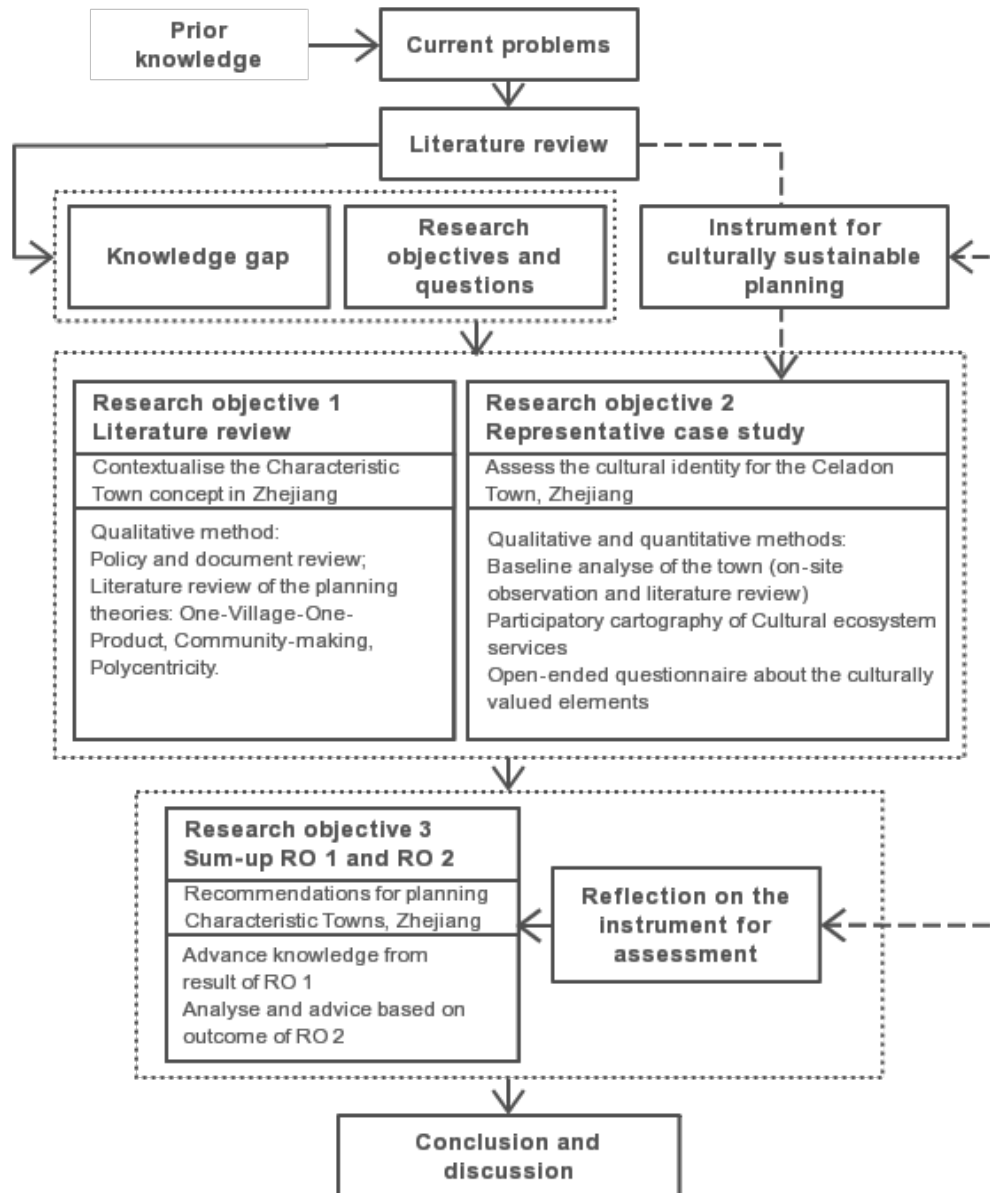research questions were formulated.

Figure 7 Methodological framework

After completing the proposal phase, the explorative phase begins with the

contextualisation of the Characteristic Towns concept in Zhejiang (research objective

1), followed by the instrument practice in the representative town, Celadon Town, in

Zhejiang (research objective 2). After all information from RO 1 and RO 2 is

summarised, the recommendation for the Characteristic Towns strategy was established (research objective 3). Meanwhile, the reflection on the cultural identity assessment instrument, which contribute to theoretical and practical modification of it, was also presented in the future suggestion about planning process. In the end, the discussion and conclusion of the research were carried out.

Two data collection approaches were required in the explorative phase: literature review for contextualise the Characteristic Town concept, and representative case study to explore the feasibility of cultural identity valuation. In such, mixed method approach informed the research procedure, that in this thesis requires a more detailed explanation and is discussed in the following sections.

3.1 LITERATURE REVIEW FOR CONTEXTUALISATION OF CHARACTERISTIC TOWNS CONCEPT

Due to China's geographic and demographic variety, each provincial government has declared their own policies and definitions of the Characteristic Town. Indeed, contextualisation of the Characteristic Towns concept at the national level is difficult, and the description might be quite general and abstract. Focusing on the Characteristic Towns in Zhejiang, selected policy documents were reviewed for a deeper understanding about the theory and practice in Zhejiang province, to assist the further study there.

Firstly, government documents at the national and provincial levels were reviewed. Then, the scientific articles, publications, and leading web portals were reviewed for an insight into the historical evolution of the concepts. The literature review contributed

to the comparative study of the Characteristic Towns concept and relevant concepts in Japan, Taiwan, and Europe, which already have been mentioned in the theoretical framework.

3.2 THE EXAMPLE OF CELADON TOWN, ZHEJIANG

3.2.1 REPRESENTATIVENESS OF CELADON TOWN WITHIN ZHEJIANG PROVINCE

To ensure the cases fit within the research scope and the outcomes could answer the research questions, Celadon Town was chosen because it is:

- Authorised by a government as a Characteristic Town in Zhejiang, to meet the focus of this thesis;
- Managed and planned for the Characteristic Town development, which was based on its local adequate cultural valued properties
- under the implementation of the Characteristic Town strategy for at least a year, so there were sufficient effects on cultural identity made by the strategy to be investigated

The Celadon Town is in Shangyang area (27.9° N, 118.8° E), Longquan, south-western Zhejiang. Shangyang is 36 kilometres from the downtown of Longquan. The Celadon Town has a total area of 3.21 square kilometres, and construction scale within is 1.36 square kilometres (Township Government of Shangyang, 2010). Like most of areas in Zhejiang province, Shangyang is a hill area covered with dense forest. It has sufficient water supply from rainfall and rivers crossing the up-and-down terrain. Because the Characteristic Town is not administrative, the accurate population of Celadon Town

area cannot be specified. Governors in Shangyang and residents offered the information that the permanent resident population in the Celadon Town is about 4,000.

Celadon is a type of pottery denoting wares glazed in the jade green celadon colour, originated in the Celadon Town area, Longquan, Zhejiang. Celadon Town witnessed the history of the development of the celadon industry. Today, old buildings located in the town such as the state-owned celadon kiln, the national celadon research Institute, ancient industrial buildings and so on, are still conserved. Its genuine celadon culture history and heritage property provided the basis for cultural ecosystem assessment in situ. The varied terrain and large natural area in the town also make the cultural ecosystem services study of Celadon Town more significant. Moreover, the explorative practise of the Characteristic Towns policy has been implemented in the town since December 2015 (DRBL & PDRC, 2015). According to the published report and news, it was assumed that the planning in the town has started making effect.

3.2.2 STUDY DESIGN

The study of the Celadon Town had two phases. The first phase presented the baseline analysis of the town, and a baseline map of the Celadon Town area was made. This phase was based on: 1) literature review of policy and maps relevant to Celadon Town Planning, and 2) on-site observation conducted in Celadon Town. The baseline analyses were expected to present which cultural value management approaches were used by local authorities and social sectors in both spatial planning and regulation aspects. The map depicted the in-town blue-green system, network, cultural relics and historic sites, and building area. Three key spatial planning documents were analysed

for baseline map making (see Appendix I): *Spatial Development Plan of Celadon Town, Shangyang, Longquan* (The Management Committee Celadon Town of Longquan & Andi Design Ltd, 2015), *Planning and Design of the Celadon Town, China* (South Design Ltd, 2012), and *Master Plan for Land Use in Shangyang, Longquan, 2006-2020* (Township Government of Shangyang, 2010).

In the second phase, my approach applied methods for cultural ecosystem services assessment and acquired local environment knowledge through a combination of participatory cartography and open-ended survey. During the participatory mapping process, respondents were required to provide an element that made them receive this service in the place they indicated in the map. Some tools have been adapted from previous research to represent cultural ecosystem services and special areas during participatory cartography, for instance:

- Using pens to identify sites on the map
- Using color-coded dots sticker for pointing out sites on the map
- Pre-identifying and numbering selected sites on the map and interpreting those sites in a questionnaire (Plieninger et al., 2013)

According to previous knowledge, I decided to combine the former two tools, since pre-identification of site might distract respondents from an instinctual decision.

3.2.3 CULTURAL ECOSYSTEM SERVICE INDICATORS SELECTION

The practise to value cultural ecosystem services started with the 10 categories defined in the Millennium Ecosystem Assessment (Sarukhán & Whyte, 2005). Due to previous knowledge of Celadon town, this research discarded two services, 'cultural diversity'

and 'knowledge systems'. These are difficult to transcribe into questions that would be significant to Celadon Town residents (Plieninger et al., 2013). Moreover, several local informants mentioned that although culture exchange has been supported by government as a benefit of the Characteristic Towns Policy, Celadon Town is still a developing rural area influenced by dominant local folk culture.

In the case that the Millennium Assessment does not explicitly define the cultural ecosystem services, this research adapted one indicator question for individual service. Eight cultural ecosystem services were selected: Spiritual and religious values, Educational values, Inspiration, Aesthetic values, Social relations, Cultural heritage values, Recreation and ecotourism. This research proposed to present the different services in a way that would be easily understood by respondents that may have limited knowledge of the cultural ecosystem services concept.

In order to help local people to understand the definitions of cultural service and provide valid answers, the translation of cultural ecosystem services definitions and indicator questions were based on the Chinese literatures and studies about Cultural ecosystem services conducted by Zhang, Dong et al (Dong, Zhu, Gao, & Li, 2014; Y. Zhang & Zhao, 2007).

3.2.4 DATA COLLECTION AND ANALYSE

In December 2016 and January 2017, 20 face-to-face survey were performed. Each inquiry was conducted by one interviewer and took on average 10 min. The three-page

survey consisted of a questionnaire and a modified map of Celadon Town plan (South Design Ltd, 2012). The anonymous survey comprised 8 questions for 8 cultural services.

Part I. The survey began with an overview about the cultural identity concept and the background of this study. After that, respondents were explained the process of mapping and cultural services connotations. The survey focused on the question: which place in the Celadon Town do you perceive or use cultural ecosystem services to the highest extent? This study proposed to present the different services in a way that can be easier understood by respondents have limited knowledge of the cultural ecosystem services concept. A table includes the definitions and number of corresponding cultural services, and 8 questions to locate the sites of services was made (see table 1 in Appendix II). Respondents were required to point the site with numbering code of the service on the map.

Part II. Once a Cultural Ecosystem Services site was pointed out on the map, respondents were asked an open-ended question: what element in this site makes you receive this cultural service? Each element was required to be written down on table 2 in Appendix II.

After completing a total of 20 surveys in Celadon Town, participatory cartography results were transferred into Photoshop. Elements were translated from Chinese to English properly, and analysed using SPSS for statistical analyses.

Pinpointed sites of individual services were transferred into a map with specific colour. Seven maps with corresponding coloured site points were made. Then, all maps were merged into one map. This step helped to present distribution, intensity, richness and diversity of seven cultural services in the town. The cartographic representations were then compared with the baseline analysis map, to observe the relations between

environmental context in the town and culturally valued area identified by respondents. Moreover, analysing the mapping results with the official plan of Celadon Town indicates the effectiveness of top-down management and intervention of cultural values.

In total, 140 elements were collected from Part II responses. Those elements ranged widely from artificial cultural properties, living creatures, ecospheres, etc. All elements were translated and categorised into 19 general objects by their features. An overall ranking of the occurrence times of all objects was carried out, as well as a ranking within individual cultural service (see fig 10 and 11). The features of the objects were analysed for a deep insight into how local people perceived properties as culturally valued.

4   RESULTS OF CELADON TOWN STUDY

4.1 BASELINE ASSESSMENT OF CELADON TOWN

Current cultural value management and regulations in the town

In 1957, State-owned Longquan Porcelain Factory and Institute of Celadon Research were set up in today's Celadon Town area. In 2009, Piyun Food Co., Ltd established Piyun Celadon Villa Project here. But the role of Shangyang region was the supplier of celadon manufactures, because those cultural properties and tertiary industries related to celadon culture, e.g., Longquan Celadon museum, celadon culture and creative industry parks, have already been settled in downtown Longquan for many years. Since 2011, the significant regional economy growth contributed by Piyun group was noticed by Municipal government of Longquan. Therefore, The National Celadon Town

Strategy was introduced by authorities, and later, *the Planning and Design for Celadon Town, China* was conducted (South Design Ltd, 2012). In order to support the development of the celadon industry as a cultural brand, a series of standards and policies were put in place by authorities, including *The Financial Subsidy Policies for the Specialty Stores and Master Studios of Celadon and Sword-making Industries in Celadon Town, China* (Municipal Bureau of Protection and Development of Celadon and Sword-making Industries Longquan, 2013), *The Implement Suggestions on the Pilot Work of Homestay Facility and Agritouritsm in Shangyang, Longquan* (Municipal Government of Longquan, 2014), *Some Suggestions on the Cultural Development of Celadon and Sword-Making Industry in Longquan* (Longquan Municupal Government & the Party Committee of Longquan Municipal Government, 2013), etc.

In 2015, Zhejiang province announced the first 37 authorised Characteristic Towns, including Celadon Town.

Baseline map: situation of cultural values and basic environmental context

To analyse the region systematically, a baseline analysis map of current Celadon Town situation was made (see fig.8).
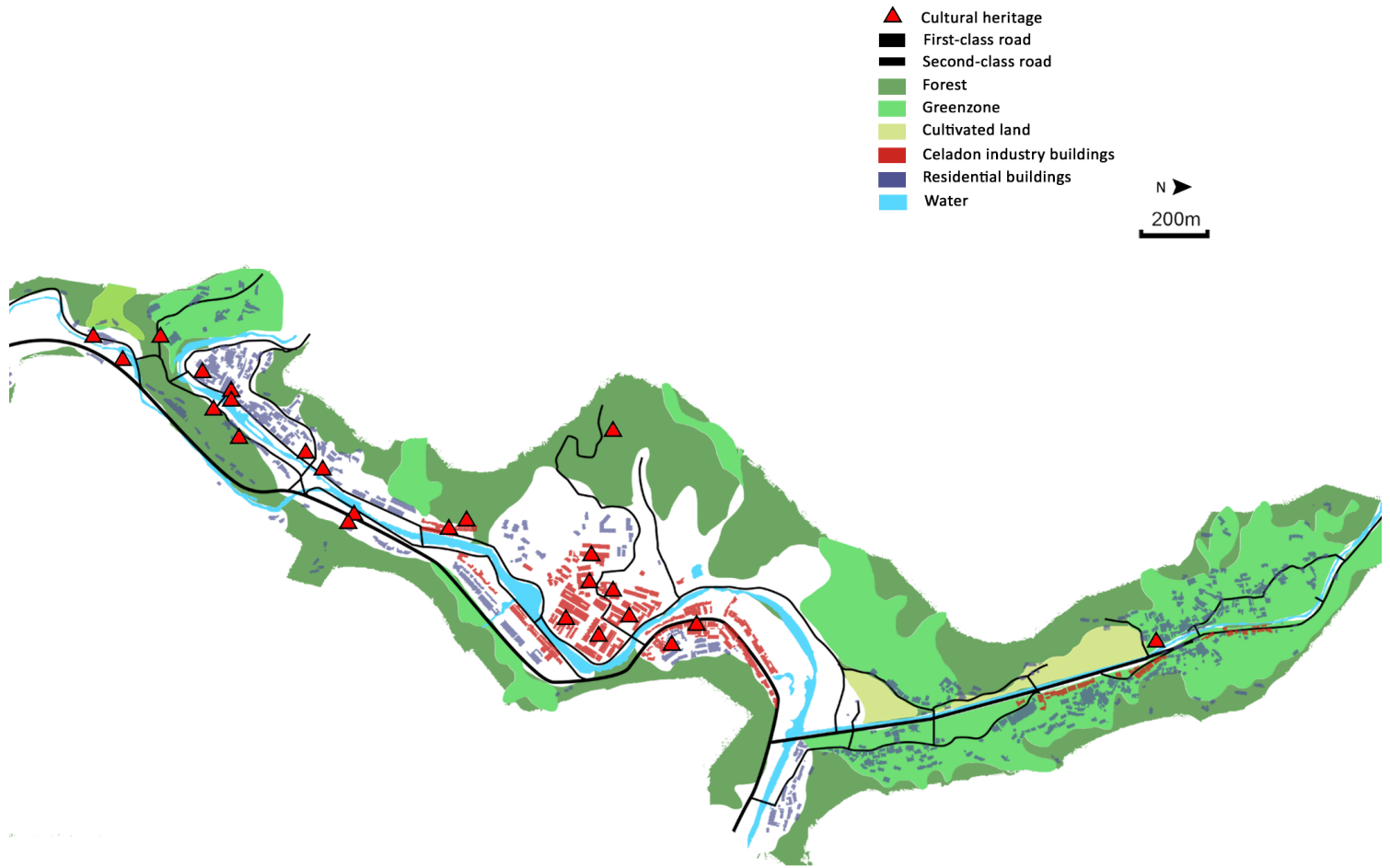
Figure 8 Baseline map of the Celadon Town, Longquan, Zhejiang

The town has large scale green area. Three types of green area are defined: forest, green zone, and cultivated land. The hilly land is an advantageous condition for its thriving forest and ecosystem diversity. About 30 percent of the total town area is forest area, 1,000 m^2, with high vegetation coverage. From the conversations with informants, forest area offers local people wood, animal grazing, even clay for celadon making. Except for certain allocations of residential buildings in forest area, figure 9 shows that the condition of the local landscape is in a relatively natural state (South Design Ltd, 2012).

Figure 9 the natural condition of the Celadon town(source: field work)

The large number of the celadon industry buildings in the town shows the dominance of the characteristic industry. In addition, the buildings were comprised of a family workshop and small studio, mixing the living spaces with the working spaces in the buildings. This situation reflected the local business model (see fig 10). The living function of many local buildings have been moderately transformed into business function by the SoHo lifestyle, not only in the case of the Celadon making, but also in other small-mid business cases, e.g. B&B homestay, organic farming produce. The B&B economy in the town is prosperous. More than half of the celadon workshop buildings have a homestay facility.

Figure 10 Buildings have living and business functions(source: field work)

In total, 24 cultural heritage destinations are spread over the town. Most of them were in good condition and under preservation. Except a small-scale agglomeration in the

centre town, the dispersive distribution of cultural heritage properties has led to inconvenient transportation between destinations. Some local informants mentioned that insufficient infrastructure and planning of tourism routes have discouraged the culture development and heritage promotion.

4.2 RESULTS OF PARTICIPATORY CARTOGRAPHIC: SPATIAL PATTERNS OF THE CULTURAL VALUED SITES
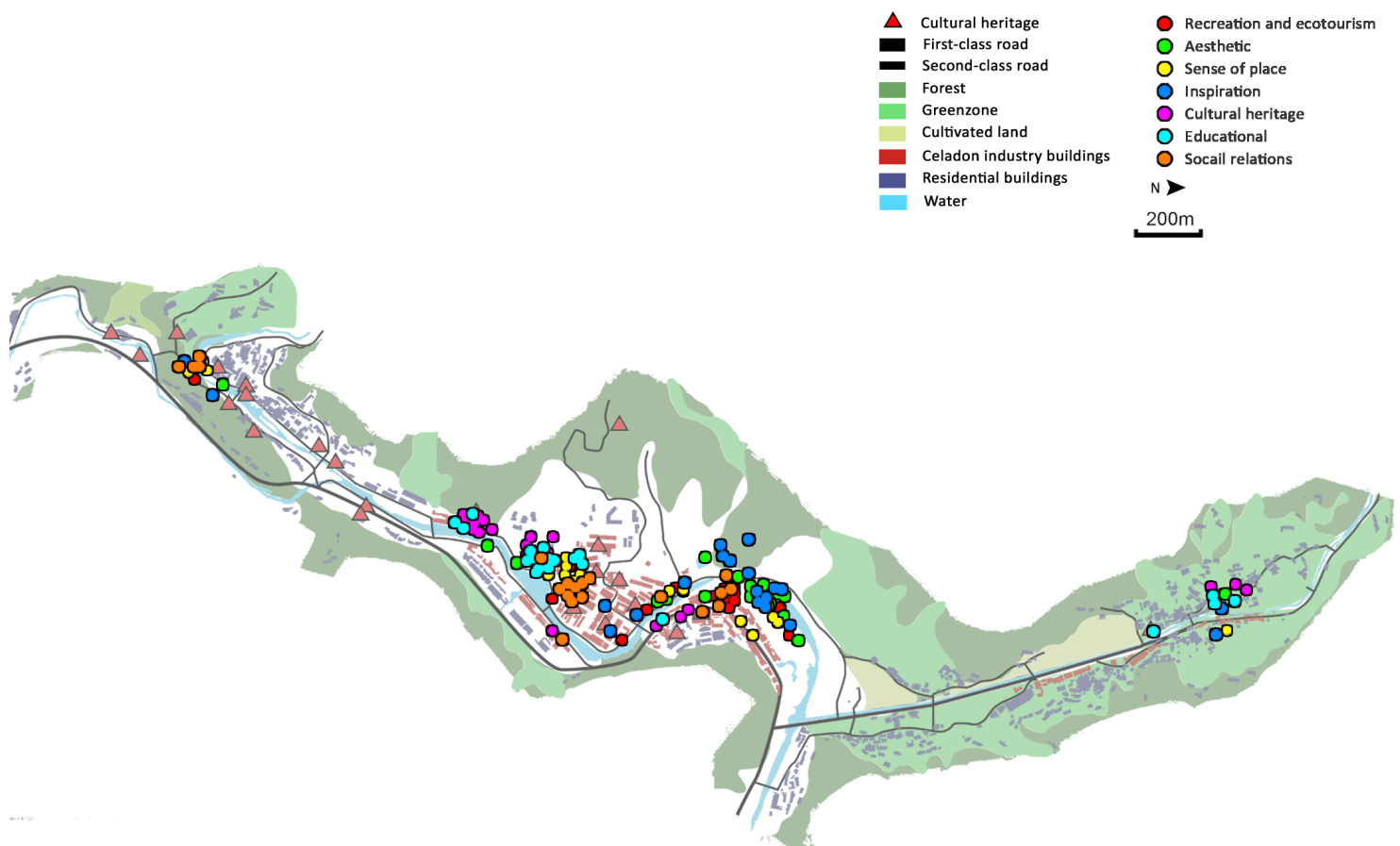
Figure 11 Map of cultural ecosystem services sites and baseline map in the Celadon Town

The merged map plots all points of sites on the baseline map, with each colour of the points representative of the services (see fig. 11). 'Spiritual and religious values' was discarded, because only two respondents had pointed to sites of this service, and neither

of these sites were in the research area. The respondents delineated a total of 140 sites,

20 for each individual service. Figure 12 shows the results of seven individual services.
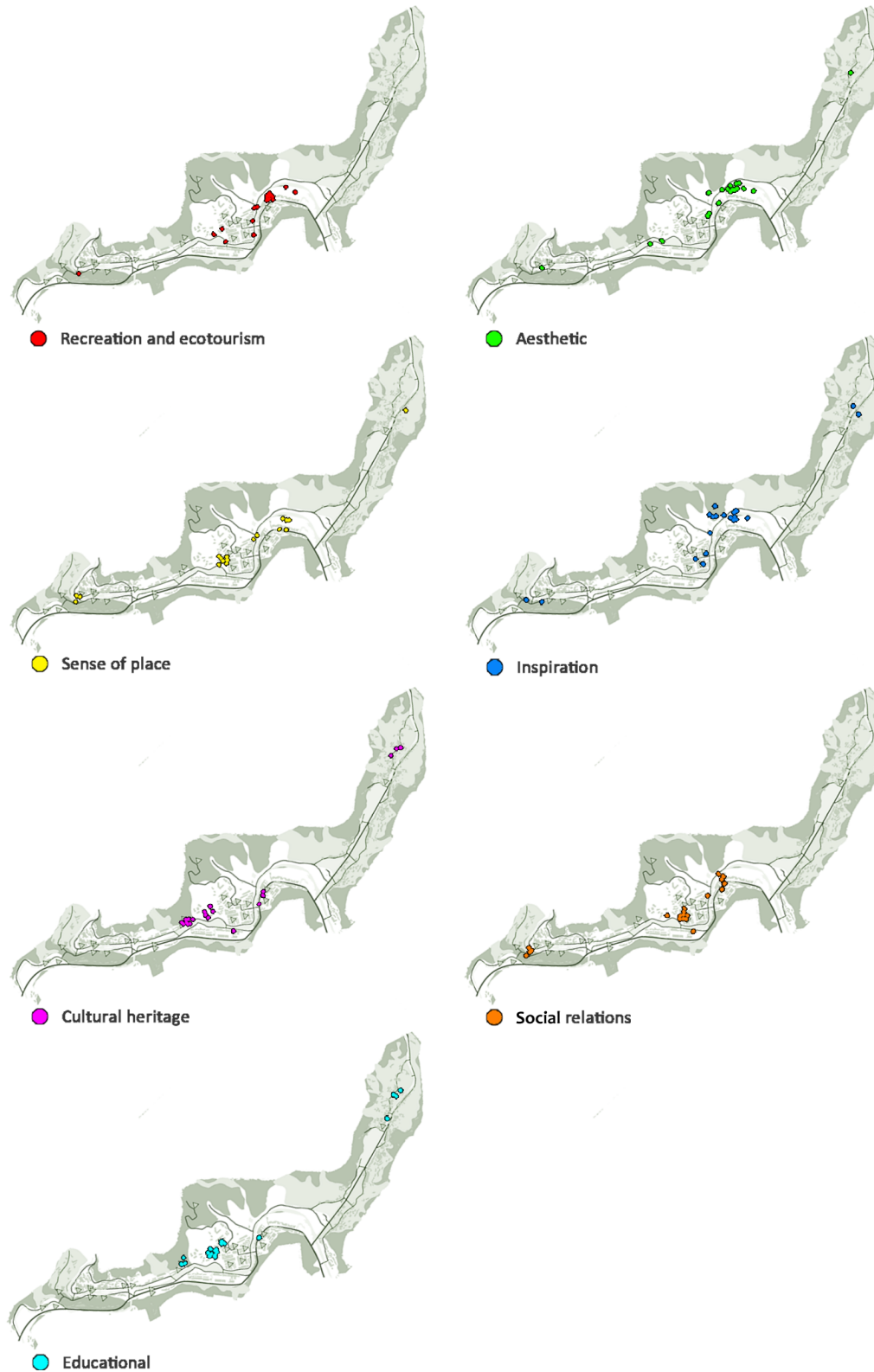
Figure 12 The spatial patterns of places provide each Cultural ecosystem services

4.3 RESULTS FROM OPEN-ENDED SURVEY

4.3.1 NARRATIVE RESPONSES

Except for answering the open-ended questions, respondents also expressed their opinions about the cultural identity of their town and the impacts in the local culture of the of Characteristic Towns Strategy. This part presents several key elements of the descriptive information I collected during random talk and survey.

Communication and social activity

"I used to dance with my friends in the Cultural Park. For me, the big celadon sculpture in that park represents the identity of our town. At the sign of the sculpture, I remember all good times we spend together there."

"Personally, the view from my home, also my studio, is beautiful and culturally valued enough. I meet new people and old friends here every day. We just stay here, talk about celadon history, make celadon product… all those things made this place cosy and attractive for me."

Memory

Another keyword, Old tree, which has been remarked as an important item by three respondents. In their opinion, this old tree was an element that reminded them of childhood memory:

"There is a big ancient tree at the end of the Celadon town. When we were little kids, it was our play spots. We climbed it and played around it. That tree is getting old now. The government might want to remove the tree because it made difficulties for construction of the Characteristic Town here."

One of the respondents mentioned the element with cultural value, the scrap of Celadon. She explained that local celadon workshops and kilns sometimes abandoned unqualified celadon products on the riverbank, those fragments of celadon made her sense of place of the town. Such detailed and sophisticated cultural properties can hardly be noticed by neither local nor external authorities and planners.

4.3.2 RESULTS ANALYSIS

To determine the proportion of objects that can provide cultural services value, the times of occurrence of objects (t_o) were ranked (see fig 13). The top three objects were: Natural riverside (t_o =26), Ancient kiln (t_o =23), Landmark smokestacks (t_o =12). The least mentioned object was Scraps of Celadon (t_o =1). Objects Bird, Waterfront, Exhibition hall area, and Bakery/grocery have been mentioned 2 times. In all of 19 objects, 4 objects were newly designed and built since the Characteristic Towns strategy enforced here (*Celadon sculpture square, Piyun Central Park, Exhibition hall area, Waterfront*). 4 objects were designated as cultural destinations under the strategy (*Ancient kilns, Landmark smokestacks, Ancient dwelling houses, Farming area*), which were conserved by the strategy in the original condition. The remaining 11 objects were mainly natural and historical objects without any refurbishment or top-down intervention.
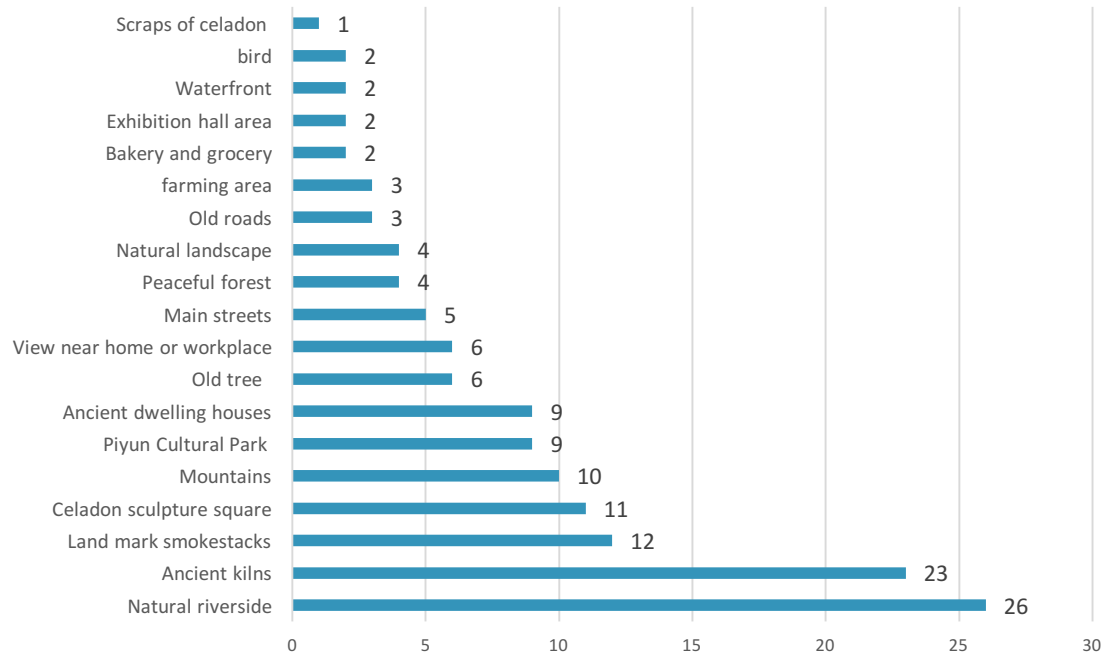
Figure 13 The time of occurrence of objects (t_o)

By ranking occurrence times (t_o) of objects for individual cultural service, the key objects that contributed to corresponding cultural value were determined in table 3.

Table 3. ranking the objects by each Cultural ecosystem service

Cultural Services	Objects	t_o
Recreation and ecotourism	Natural riverside	7
	Celadon sculpture square	5
	Birds	2
	Ancient kilns	2
	Bakery and grocery	1
	Main street	1
	Old tree	1
	Exhibition hall area	1
Aesthetic	Natural riverside	10
	Mountains	5
	Celadon sculpture square	2
	Old tree	1
	Ancient kilns	1
	View near home or workplace	1
Sense of place	Landmark smokestacks	5
	Piyun Cultural Park	3
	Natural riverside	3
	Waterfront	2
	Main streets	2
	Exhibition hall area	1
	Ancient dwelling houses	1
	Old tree	1

	Scraps of celadon	1
	Ancient kilns	1
Inspiration	Natural riverside	6
	Peaceful forest	4
	View near home or workplace	4
	Mountains	3
	Ancient kilns	3
Cultural heritage	Ancient kilns	7
	Land mark smokestacks	4
	Piyun Cultural Park	3
	Ancient dwelling houses	3
	Natural landscape	2
	View near home or workplace	1
Educational	Ancient kilns	7
	Ancient dwelling houses	5
	Farming area	3
	Old roads	3
	Natural landscape	2
Social relations	Celadon sculpture square	4
	Landmark smokestacks	3
	Piyun Cultural Park	3
	Old tree	3
	Ancient kilns	2
	Main streets	2
	Mountains	2
	Bakery and grocery	1

5 DISCUSSION

5.1 CHARACTERISTIC TOWN STRATEGY FOR ECONOMIC ENDS

In the Zhejiang province, the Characteristic Towns Strategy is a tool for the shift in industrial structure. The long history of regional small-scale economy in Zhejiang contributed to the initiative of the Characteristic Towns. Previously, the 'Massive economic', an industrial geographic structure during the industrialization, described the economic structure in Zhejiang. It referred to the spatial centralisation of economic activities that lower costs and increase economic efficiency, which was caused by specialisation of regional services or products, labour sharing, and knowledge and information exchange (Marshall, 1922). Massive economic has contributed to economic growth in Zhejiang, but its drawbacks have become clear in recent decade.

For example, the mono-industrial structure of massive economic makes the economy vulnerable to market changes. Some researchers claim that the economic structure 'industry clusters' can fix those problems (Z. Liu & Li, 2015). However, the Characteristic Towns Strategy also accomplish these tasks. By comparing the Massive economic, industry clusters and the Characteristic Towns, it is fair to say that the Characteristic Towns is a type of industry cluster, with highly diversified functions (e.g. tourism and residential functions) and more high-end elements (e.g. high-tech industry, e-commerce).

The result of the comparative study shows the protocol of the Characteristic Towns is a One-Village-One-Product concept, which has been a part of the Community-making movement in post-war Japan. Community-making is one of the most influential planning theories in Japan, even Asia (Watanabe, 2006). The driving force for its set-up was the problems of urban-rural disparity caused by rapid post-war urbanization in Japan. The rural-urban immigrants usually kept attachments to hometowns and memories of their past life, and were full of enthusiasm in planning and designing their living places. Since then, Japanese government has recognized the importance of culture in regional revitalization (Chang, 2015). Community-making might be generally defined as activities self-motivated by local people to conserve and develop the physical and/or non-physical aspects of their community (Watanabe, 2012). The successful principle of self- help and self-management of communities has become a part of residents' value system and their 'lifeworld' (Kusakabe, 2013).

From the literature and policy review, I found that the driving force of the two Japanese planning concepts mentioned earlier, community-making and One-Village-One-Product, was people's bottom-up desire of self-revitalization and cultural identity (metropolitanism nostalgia). In contrast, the Characteristic Towns development in Zhejiang was primarily motivated by economic demand (economy structure transition).

This point of view is also reflected in the Characteristic Towns' policies. The policy stated the developing principles: government guided, enterprises dominated and market-oriented operation, which showed the dominant role of economic purpose in the Characteristic Towns development. Secondly, locality or authenticity of industrial characteristics of candidate towns were not required. The Strategy embraces diversified industry types and town location (rural/urban) for profit optimizing, which also means the character identity can be invented by enterprises. Besides, the process of development and planning has limited participation from local people. Authorities and enterprises have overall responsibility for local cultural identity building.

The decisive role of enterprise in the policy is reasonable. As the place where the Characteristic Towns concept was started, Zhejiang has been well-known for its thriving private enterprise landscape. Individual and private businesses, which are operating separately and distinctly from governments, founded the basis for the development of industrial towns. In addition, the Characteristic Towns Strategy implication requires large amount of financial investment, therefore local governments have dedicated (e.g. making beneficiary policy for enterprises) to attract entrepreneurs to participate and offer capital support (R. Zhang, 2017).

5.2 CULTURAL IDENTITY MOLDING AND BOTTOM-UP APPROACH

Indeed, economic state is an important indicator for regional development, as well as the vitality of enterprising activity. In the case of One-Village-One-Product movement in Japan, among varied revitalization endeavors, it constructed a business model with wide influence. However, like is mentioned in the problems of current towns, the over-commodified culture, which has resulted from the profit chasing development, can ruin sustainability not only in the culture pillar, but also other aspects. Sometimes local governments develop towns to access GDP targets, ignorant of market regulation. In these cases, towns without specialities have been authorised as Characteristic Towns so as to receive financial and political benefits from national government(China Newsweek, 2017).

Local identify commodification may be irresistible when planning with the enterprises involvement. To tailor local available materials and resources into an industrial character identity (conventional or non-conventional) under the Characteristic Towns strategy, the way of molding local specialty and identity in One-Village-One-Product and Community-making Japan are a useful reference.

Like the Characteristic Towns Strategy in China, the specialties of One-Village-One-Product Japan were not always traditional, but were often created for revitalizing the local economy. There are three ways to invent local specialties (Chang, 2015).

1. Non-conventional specialty invention is a task assigned to regional civil servants, and is usually practiced by governmental associations represented by local businesses or of those from the same commercial district.

2. Sometimes, business owners and managers in the same neighborhood gather and discuss the future development of the town. They meet once per week to study trial products or services of local specialties, and also organize regular events or festivals that can attract tourists and the return of locals to the town.

3. Moreover, the specialty invention can be done by individual enterprisers and capitalists from local area or outside, who have their own unique products or services and declare the commodities to be representative of the locality.

Those points reflect that One-Village-One-Product in Japan was generally conceptualized as a cooperation of the nation, the business, and the society in a way that David Harvey named "entrepreneurialism" (Harvey, 1989). The strategy encouraged the incorporation of new local agents into the process(Chang, 2015).

Although in both Characteristic Towns Strategy and One-Village-One-Product Japan authority and enterprises have responsibility for molding the identity of cultural or industrial character, the role of local people and intermediaries is different between those two concepts. Obviously, Japan's One-Village-One-Product ensures the participation from intermediaries (e.g. local business association) and local individuals who have knowledge or experience of local business development and marketing (e.g. local shopkeepers). Moreover, self-motivated individuals and groups often organize events to learn and discuss about local cultural and specialty development.

This third-party participation in regional planning and development is explainable. One-Village-One-Product is under the umbrella of Community-making. Except for the noticeable bottom-up power of community, the theory of community-making commonly presented that to make or remake a community, it is necessary for the molding of subjects to match the blueprint of local communal life (Chang, 2015). This

means the cultural identity in community-making and One-Village-One-Product is molded from and relies on local life experiences, which are collected through the participation of local people and community.

Regarding the analysis of the role of third party (local people and intermediaries) in the process of regional cultural identity molding in Zhejiang Characteristic Towns strategy and Japan's One-Village-One-Product and Community-making, some conclusions can be drawn. Since Japan's planning theories, One-Village-One-Product and community-making, were protocol for Characteristic Towns strategy, they share many features, e.g. for regional development, promoting certain local products/characters (which have either existed for ages or were newly invented by enterprises/capitalists) with either conventional or non-conventional features. But it is worth noting that the Characteristic Towns in Zhejiang, or China, has not adapted the core connotation of Japanese regional planning methods, which highly emphasizes the bottom-up approach in planning process.

Returning to the differences in motivation mentioned, the driving force of Japan regional revitalization were local cultural demand and self-motivation for cultural identity building, in the specific context of post-war urbanization, while Zhejiang Characteristic Towns focus on upgrading the economy structure, which is more similar to a high-level goal in a top-down perspective. Different motivation and social-economic conditions resulted in different planning approaches. The way Characteristic Towns Strategy deals with local participation has a reasonable explanation. One possible explanation for this could be the non-administrative feature of the

Characteristic Towns in Zhejiang, which have been claimed in the policy documents. These areas do not have specific regional administrative department. Without effective government guidance, the high self-motivated planning of bottom-up approach from local community can be risky.

5.3 COMMUNITY, PARTICIPATION, AND SUSTAINABILITY

Civil society, which is composed of local self-management groups and the coexistence of an assemblage of intermediaries, has shown its contributions in the bottom-up methods in the One-Village-One-Product and community-making theories. The function of community still works smoothly in Japan's civil society state today. Community-established organizations, particularly neighborhood intermediaries, are one of the key actors in Japanese civil society due to their high proportion of participation planning (Kusakabe, 2013).

Despite the different backgrounds and goals between these similar planning theories in Japan and Zhejiang, a common principle for planners and authorities is that how local people perceive the cultural values in the place they live in should be understood through a participatory planning approach. Bottom-up approaches in Japanese community provide many advance techniques that can be referred to in culturally sustainable development in the Characteristic Towns of Zhejiang.

One advantage of planning with participation from local organizations and representatives is that the participatory process can enhance the cultural identity among local people by increasing their self-awareness as a contributor of living place planning. Meanwhile, Karl Marx and Frederick Engels stated with nostalgia that community is

the only place that people can escape from excessive capitalism, and so allow unfettered human-scale development and individual freedoms, namely, the realization of humanity as a species (Marx & Engels, 1970). According to this statement, community as a group offers the individual a sense of belonging, increases the local sociability, and provides social services that contribute to democracy. It promotes individuals' participation in the regional planning, and not only in the aspects of cultural identity and business.

Another advantage of bottom-up planning is that it can directly impact positively on the effectiveness of local culture sustainable planning. Culture is an immaterial perception which requires a long-term cultivation in the area, with planning towards the culturally sustainable need to understand the local culture from local people's perspective. Local identity cultivation is the development in which residents get involved with the local daily life and receive sense of belonging (Chang, 2015). Identity is not a predetermined factor in a community, and its cultivation has become a key factor in and contributed by communal projects. The plurality and democracy of the cultivation of cultural identity are important (Soini et al., 2015). With regards to these interpretations about the relationship between cultural identity and local people, it is fair to say that participation planning ensures that the perceptions and demands of local people can be collected for cultural service development. Their opinions should be the bases for local cultural sustainability, not only because residents are the main users of the area, but also for a more effective planning process. When molding cultural identity without local people's description of the cultural landscape in which they grow up, the new identity can hardly be accepted by local people. If the identity is not

accepted locally, how can this kind of symbolized cultural characteristic be sustainably attractive for visitors? Therefore, bottom up planning for cultural identity building in Characteristic Towns can advance the performance of culturally sustainable planning and better satisfy local people's emotional and physical needs.

5.4 POLYCENTRICITY AS A TOP-DOWN CONTROL

In contrast with the two Japanese concepts, the Polycentricity planning theory in Europe exhibits a macroscale and top-down perspective. As bottom-up planning approaches highlight the self-management and self-help of local community, Polycentricity concept might be considered as a guide for national/provincial administrations.

In addition to the positive features, e.g. strong local authenticity and cultural identity, in bottom-up planned areas, excessive community self-management might make the place a closed and stagnant locale (Massey, 1994). As previous stated, the Characteristic Towns as non-administrative regions need to be regulated by provincial/national administrations. On the question of negative localism caused by an excess of bottom-up planning, learning from the Polycentricity concept for "a global sense of place" can benefit the Characteristic Towns' sustainable development (Harvey, 1996; Massey, 1994).

Regarding the previous research, the function of the polycentricities for industrial clusters has been discussed: the spatial configuration of polycentricities has impact on the regional productivity. The industrial clusters in polycentricities was the reason and outcome of high productivity, because it provided advanced services which benefited

in the efficient cooperation between polycentricities, such as financial services, transportation network, and information exchange. The convenience and inter-firm sharing are the key reasons for the development of industrial clusters (Markusen & Venables, 1996).

5.4 CELADON TOWN STUDY: PARTICIPATORY CULTURAL VALUE ASSESSMENT AS A TOOL FOR BOTTOM-UP PLANNING

The study of the Celadon Town gathered valuable information about both the practical aspect and theoretical aspects of Characteristic Towns. The following parts discusses the process and outcome of the Celadon Town study in those two aspects.

5.4.1 PRACTICAL SIGNIFICANCE: DISCUSSION OF CULTURAL VALUES UNDER THE CHARACTERISTIC TOWN STRATEGY

These study outcomes have many practical implications for the management of cultural properties with multiple functions (Fagerholm & Kayhko, 2009). Highlights of the assessment of cultural identity and its possible contributions to future development are analysed, particularly in accordance with the context in Celadon Town.

Cultural services hotspots distribution

The results show that, respondents located cultural services sites in particular patterns, presenting the hotspots and cold-spot of cultural services. In this research, cultural services points in similar pattern by attributing high culture values to some sites, especially to the town center, riversides, and building areas. Those features can be indicated in the open-ended question responses (Plieninger et al., 2013). When

analysing the baseline map with results of cartography and open-ended questions (see chapter 4), the natural riverside seemed meaningful for the cultural value of Aesthetic, reaction and tourism, and inspiration, and partly for the sense of place, in the term of both natural riverside and waterfront. The object ranking also awarded the top rank to the Natural riverside (see fig. 13). Hence, water bodies were of utmost importance for cultural service valued sites. Those three services also highly connected to other natural objects such as mountains and peaceful forests. Historical properties, mentioned by respondents as landmark smokestacks, ancient kilns and dwelling houses, had importance for the Cultural heritage service and Educational service (see fig. 12 and table. 3). In contrast, even though the top-down planned objects were not offering as much value as natural objects, the large scale public spaces, namely the objects Celadon sculpture square and Piyun Central park, were significantly attributed to the social activity and sense of place services.

However, the results correspond to some previous research (Plieninger et al., 2013; Suckall, Fraser, Cooper, & Quinn, 2009; Van Berkel & Verburg, 2014), in which the connections of between cultural services and landscape properties have been recognised, that especially be contributed by the elements, e.g. water, forest, cultural properties, and also semi-designed structures.

Environmental sociability and cultural services

In addition to the previous results that have been detected by European and British researchers, this research recognized the relationships between environmental sociability and cultural identity. In the Celadon town, sociability in a site positively

impacted the cultural values people received there. But in certain cases of cultural services, inspirations or aesthetic values, respondents preferred areas with elements that satisfied their sense of privacy. The following part elaborates on the relationships of the agglomeration of high cultural identity sites and environmental sociability, which was related to specific economic and socio-cultural features of the Celadon town.

During the talking with local people, I found that many of them prefer linking daily social activity with cultural values (see part 4.3.1). Those connections between people constructed the cultural identity of the town for individuals. Figure 12 shows that most sites of cultural services, especially the Social relation service, were distributed in areas with social activities, e.g. center area in the town with higher density of living buildings and business buildings (celadon industry). But in some other residential areas which also have living functions, few cultural service sites can be seen. This situation might be correlated to the finding in the baseline analysis of the Celadon Town. As previously stated, the function of building in the Celadon Town is multiple, those commercial and residential complexes buildings integrate the living function, business function, and workshop function, particularly that in the center area of town. The center has been a business activity gathering area since ancient times in the towns and villages; this attracted celadon business to set up there. In Celadon town, due to the specific mode of celadon product manufacturing, the workspace of the celadon industry is mostly a household workshop. Moreover, the current prosperous economy of homestays in the town has diversified the functions and users of buildings. As I observed this situation during the field work, some local celadon makers mentioned the mixing of multiple functions of their house as well. The users of those buildings included residents who

live in the building (living function), travelers, local or out-of-town customers, celadon makers and trainees (business and workshop functions), etc.

This investigation indicated that the special features of celadon business space, which was caused by its manufacturing mode thorough ages, increased the public life diversity and socioeconomic mixing in town center. In Jan Gehl's view, these two factors impact the quality of life, which also made the site attractive (Gehl Institute, 2016). The relevance of the positive correlations between cultural identity and site sociability also were supported by some other interesting factors. For example, culturally valuable sites were more likely located by secondary roads or paths. Except for the reason that the busy main roads were not able to offer sufficient cultural services, small and unplanned paths have the ability of increasing sociability by creating more interaction opportunities between people (Carr, Francis, Rivlin, & Stone, 1992).

On the other hand, figure 12 indicates that, in some cases, the correlation between sociability and cultural service value was not positive. More respondents perceived the service of Inspiration in the mountain or forest area. (Thus, not only in the case of sociability, management and planning of local cultural services should consider people's different needs by different services).

Ideals and reality: unidentified expectation caused by Top-down planning

Data and information from this Celadon Town study can help authorities and planners in recognizing the effectiveness of their efforts up to now in Characteristic Towns planning.

Before the completion of the cartographic results of this study, the baseline analysis map of the Celadon Town showed some potential sites which might be identified by respondents as an area with high cultural service value. Around these potential places were cultural heritage destinations, green area, and waterscape. Although some of those designedly invested and planned areas were expected to provide more cultural values, only several potential places were pointed out by respondents. The gap of the ideal and the reality can be explained further by analyzing the open-ended questions responses.

The analyses of objects collected in Part II show that, on one hand, natural and historical elements with less top-down intervention were more likely to offer local people with cultural services. On the other hand, cultural value management without local participation and knowledge only made limited contribution to cultural sustainability. Some people also provided some potential culturally valued properties that have not been noticed by authorities (see part 4.3.1). Newly created objects have less capability to provide cultural service values than those which have been properly conserved in their original condition (see fig. 13). Thus far, this discussion argues that, even by spending a lot of manpower and material resources on the planning, many top-down intervened elements have not met the expectation of authorities, particularity the newly created elements. However, figure 11 presents that there were some less intervened elements that had a higher cultural value, although their cultural values were often underrated by local people due to ineffective cultural identity management from authorities. Many culturally valued elements have not been identified and managed, e.g. an old tree, scraps of abandoned celadon products. Without local participation in

Characteristic Towns planning, such personally perceived environmental details were difficult to be identified by authorities from a top-down perspective.

5.4.2 METHODOLOGICAL CONSIDERATIONS OF CELADON TOWN STUDY

The top-down planning approach in Characteristic Towns Strategy has already had a negative impact on local cultural sustainability (J. Xu et al., 2005). The participatory planning is not corresponding to the Chinese planning systems; commonly, the nature of the planning system is centralized, top-down, and limited in local participation and communication between all actors.(X. Wang et al., 2008)

Adapting cultural service indicators set by Millennium Ecosystem Assessment 2005 in 2005 (Sarukhán & Whyte, 2005) , participatory cartography served as counter-mapping (Peluso, 1995) that presented the different locations of perceived culturally valued sites and top-down planned cultural sites in authoritative plan map (Smith, 2003). By analysing the result, the distribution of culturally valued sites can be identified, as well as the popular cultural properties which offered people cultural services.

The identifying of the cultural valued properties by researcher or planners from the environmental context or their personal experience or knowledge is subjective. Contrary to previous cultural ecosystem services research, the assessment instrument in this research collected the culturally valued properties from local people. Certainly, finer-grained information about the physical landscape properties that provide cultural services is needed (Norton, Inwood, Crowe, & Baker, 2012). The properties people

perceived as providing value for the service can indicate which details and elements in the sites affect the cultural values in this area, in their opinion.

There is significance of this assessment as an instrument for Characteristic Towns plan. It can identify the location and richness of cultural valued sites in the town, as well as the diversity of the cultural identity. By comparing the participation result and the baseline analysis map, we can see the effectiveness of the authoritative plan and management, and the environmental features of cultural identity hotspots. Open-ended questions contributed to the identification of diversified and detailed potential cultural elements. By categorizing those elements by objects, the features of the objects can present which kind of properties in the town provided local people with cultural value. The ranking of all objects presented the local people's preference of the cultural properties. Ranking the objects provided details about certain cultural service presented and which kinds of object offered this service most effectively.

The relationships between identified cultural valued elements show that there is considerable overlap between current individual cultural ecosystem services. The study of Celadon Town shown that respondents cannot clearly separate certain cultural service from the other. This can be understood – and appreciated – as evidence of the inter-linked, holistic nature of cultural ecosystem services. It reflected previous views that individual respondents perceive cultural services in different ways, which depend on their backgrounds (Plieninger et al., 2013).

The spatial scale selection of cultural services assessments is a question that have been discussed in many existing researches. Respondents sometimes locate cultural services

in areas outside the research scale (Plieninger et al., 2013). In Celadon Town case, only two respondents pointed to Spiritual and religion service sites, and both sites bordered the town area. Because of this, the Spiritual and religion service was discarded in the research analyses. However, this not mean that Spiritual and religion values have not contributed to the cultural identity in the Celadon Town.

In addition, choosing a proper spatial scale is challenging for cultural services study, as cultural properties are usually perceived from a distance, and result in mismatches of the space, ecosystems, and cultural services (Plieninger et al., 2013). For instance, some cultural elements collected from Part II responses were extremely abstract and vague, e.g. 'the beautiful scenery around my home', or 'peaceful surrounding area of my shop.' I categorised them into one object, *the view near home or workplace.* In this occasion, the elements/objects which were mentioned as cultural services suppliers have less of a direct relationship with the actual locations of the corresponding services. The view that respondents perceived was indeed culturally valued, but some cultural services are not directly attributed by any particular environmental properties (Brown, 2005), thus this may have biased the outcomes.

6 CONCLUSIONS AND RECOMMENDATIONS

The discussion part presented the features and advanced ideas for the Characteristic Towns development from the reviewed theories and cases. Based on the result of the Celadon Town study, the impacts on the town planning from the current Characteristic Towns strategy implementation were also analysed. This part will conclude the study and clarify the results presented while answering the research questions.

The Characteristic Town Strategy in China is based on town branding by promoting a single local historical and/or modern urban industrial activity. This can be various types of industries, e.g. traditional Chinese wine, textile, ICT-industry, etc. In the study of Longquan, the authorities selected the pottery industry, which led to the re-branding of the town into Celadon Town. Initiated from the Zhejiang province in 2015, the Characteristic Towns strategy is a tool for new urbanisation in china. The reasons for its widely application throughout China is the historical problem caused by traditional urbanisation, and current challenges from the rapid economic growth.

The spatial expression of this policy can be recognised as a polycentric spatial urbanisation pattern, emphasising co-development between clusters of settlements within a specific area, characterised by the type of industry selected. Most of the Characteristic Towns developed into well-functioning nodes in secondary, regional urban networks. With traditional or newly evolved local specialties creating local identity, those cases emphasize the effectiveness of bottom-up planning, lifestyle maintenance, environmental enhancement and community attractiveness. As described previously, the Characteristic Towns is the assembly node of high-end elements. It is also the joint of industrial framework: when Characteristic Towns are located in the polycentric point, they can receive functions from the centre beneficially. When the Characteristic Towns distribute around the polycentric surrounding area, their active

high-end industrial elements can positively impact on the low-end manufacturing there (Bai et al., 2016).

In Zhejiang Province, the Characteristic Town is more like a type of industry cluster, with more functions and high-end elements. The Characteristic Towns strategy aims at promoting the upgrading of traditional urbanization patterns (massive economics dominated) to modern sustainable urbanization. Regarding this, the strategy focuses on the conflicts between the following: localism 'massive economic' and weak industrial restructuring capability, sufficient traditional industrial resource and insufficient high-end elements, excessive urbanisation and cultural similarity.

Originally, the Characteristic Towns strategy was inspired by the One-Village-One-Product concept in post-war Japan. During the Community-making movement in Japan, bottom-up planning from the communities has contributed to the regional revitalisation in the Japan. One-Village-One-Product as a part of movement also emphasized on the participatory planning. These Japanese concepts share some features with the development of existing Characteristic Towns, except for its top-down planning.

In these Town areas, the specific industry is promoted by a hierarchical collaboration of governmental institutions and local entrepreneurs (either private or semi-state), through a procedure led by the provincial government. This is related to two factors. Firstly, those Characteristic Towns are supposed to result from market competition, rather than policy design. Secondly, the strategy is responsible for accelerating provincial economy development, instead of cultural sustainability.

6.2 SUMMARY OF THE CHARACTERISTIC TOWNS STRATEGY IMPLEMENTATION

So far, this chapter has focused on the contextualization of the Characteristic Towns in Zhejiang province, and which planning theories it originated and evolved from. From the study on the selected Characteristic Towns in Zhejiang, we can see the feasibility of cultural value assessment in Celadon town, and how local people perceived the cultural properties in the town. This part will summarize how the Characteristic Towns strategy Zhejiang works in terms of culturally sustainable development and effect on people's perception of local cultural values.

The Characteristic Town Policy in China is a valuable urban regeneration planning concept, which still could gain considerably in societal impact by using the fourth dimension of the sustainability concept (building on the civil society demands to incorporate cultural aspects), by making the benefits of cultural ecosystem services explicit, and by alleviating the hierarchical style of planning through participatory mapping of the development potential. This would lead to a much stronger societal fabric, by actively integrating secondary branches of industrial activity with the main one.

The top-down planning and profit-oriented development were factors that might threaten the future sustainability of the towns. For the candidate towns, the authenticity of culture is currently not a requirement. The cultural characteristics can be conventional or not, since the character industry is designated by enterprises and market demand. The responsibility of cultural identity molding is taken by governments and

enterprises. Cultural value management has barely involved local participation. In the case of the Celadon Town, enterprise winning the tender (in fact a consortium of several enterprises and local workshop owners) proposed to focus on both economic development through large scale factories, and stimulation of re-establishment of former family farm workshops.

The Characteristic Town Strategy appears to be successful in the following ways:

- It can speed up the development of the regional economy and promote development and progress in urban and rural areas. The economic development of the Characteristic Town Area of Longquan was shown in the representative case study (c.q. Celadon Town). Several people interviewed confirmed that the Celadon Town is now more attractive for working and living.

- Improving the image of the town as continuing a valuable local tradition and innovating a promising branch of local industry. This was confirmed by local informants and the increased publicity in newspapers and internet at a national and even international level.

- After the intervention from the Characteristic Towns Strategy, some natural and historical cultural properties were conserved in their original condition. The proper cultural values management increased the cultural services value in the town.

- The strategy received financial and political supports from governments, promoted the cultural identity enhancement for character industry branding.

- As a new type of industry cluster with more function (e.g. tourism, living functions, etc.) and high-end elements, the Characteristic Towns in Zhejiang contributed to the economy structure transition in Zhejiang Province. It fixes the problems of traditional urbanisation and massive economy.

- Cultural industry is a key factor for economic growth and cultural value enhancement. In the town with mono-cultural and industrial characteristic, it helps in diversifying traditional economic structure (Nurse, 2006).

The Characteristic Town Policy – and especially its top-down style – appears also to have negative consequences:

- Ultimately, the strategy aims at economic development, instead of cultural value and identity growth. The profit-oriented development can threaten the sustainable development of the town, especially in culture pillar.

- The inhabitants' perception of being involved in the local developments, which leads to a decreased sense of belonging among people not involved in the celadon industry

- The focus on celadon industry leads to negligence of other local industries, highly valued by the inhabitants of the region, e.g. mushroom growing, organic farming, etc. Over-focus on one industry in the town restrain the development of other local products. There is no organic network of supply-demand cross various industries.

- The insufficient participation has resulted in the gap between the cultural value that authorities expected and the value people perceived. Without

understanding how local people perceived the cultural properties in the town, the top-down planning cannot increase cultural identity effectively.

- Top-down planning is unable to capture the details of immaterial value. In the Celadon Town case, some culturally valued elements could possibly be demolished during the development of the town.

- From talking with local people in Celadon Town, it was mentioned that there were many historical and cultural sites located around the Celadon Town area. But the gated development of the town area resulted in poor traffic infrastructure and service facility in boundary area. Thus, those out-of-town cultural sites were unable to connect with cultural sites in Celadon town. Due to the disconnect between cultural properties in and outside of the town, visitors were unwilling to stay in the Celadon Town for too long, since the next destination was far from here.

6.3 RECOMMENDATIONS FOR CULTURALLY SUSTAINABLE TOWN PLANNING

Taken together, these discussions and summarisations provide significant insight into the main research question of this paper of how Characteristic Towns could contribute to culturally sustainable urbanisation in the context of Characteristic Towns policy. From the perspectives of these issues, this part proposed relevant recommendations, so that cultural factors can play a better role in construction of sustainable Characteristic Towns.

Bottom-up approach application

The Celadon Town assessment is a bottom-up planning instrument which can capture the locations of cultural sites, and details of cultural properties people perceived. Analyzing the cartography result with the baseline condition in the town provided important information about which environmental and geographical condition in the area can possibly become a cultural site. Thus, applying the assessment instrument for the Characteristic Towns planning benefits in culturally sustainable development by optimally utilizing local cultural knowledge, realizing local people's needs, and improving the effectiveness of planning and intervention from the authorities.

Meanwhile, the authorities of the Characteristic Towns strategy should recognise that exorbitant attention on economic benefits causes imbalance between economic effectiveness, cultural and social effectiveness. In community planning, democracy and participatory planning have been considered as key factors for the balance and rationalisation of different stakeholders' interests (Monardo & L. De Bonis, 2007). For cultural and social effectiveness, the government needs to realise the significance of participatory planning and bottom-up approach in the Characteristic Towns development.

In some cases, governors or authorities have limited knowledges to arrange bottom-up and participatory planning to optimally use local knowledge about cultural and environmental identity (Hohenthal, Minoia, & Pellikka, 2017). However, local people need be empowered by governments, so as to contribute to cultural identity self-management, and carry out plans for places they live in. Learning from the progress of

cases all over the world, there are several suggestions to help government with bottom-up planning in the Characteristic Towns.

- Encourage local people to participate in cultural value management, and encourage them to design the participatory methods. For example, using participatory cartography in which the indicators of cultural values and properties were discussed and designated by participators.

- The bottom-up approach needs to encourage local communities and thirds party intermediaries, e.g. NGOs, NPOs, business or trade associations, etc. Previous researchers of community-making concept have studied the three main factors contributed to regional sustainable development in Japan: institutional capacity, the community networks, representatives in the voluntary, private, and public sectors (Kusakabe, 2013). With the help of intermediaries, local people and authorities can communicate more effectively and smoothly. Moreover, intermediaries have the function of networking and resource coordination for both government and local people, in which economic and cultural resources can be utilised more efficiently, thereby more rapidly reaching the stage where local government and citizens share the same sustainability goals.

- Educational activity organised by government or intermediaries can positively impact on people's understanding and self-management ability of local cultural values (e.g. Taomi community-making case). The insufficient professionals and researchers in the fields of cultural identity study and management is a problem in Characteristic Towns development (C. Wang,

2017), especially in rural area China. Training for supplier labor, participation systems (e.g. resident planner), and sustainability awareness offers people the knowledge about sustainable cultural development and cultural commodity marketing, which also benefit in the Characteristic Towns cultural development.

The Characteristic Towns implementation in Zhejiang

Except for advice about the bottom-up approach in the Characteristic Towns, here are some suggestions for current problems which have been recognised in the Celadon Town study.

- Mono-cultural identity that is created by excessively focused industrial character might be too simplistic not only in local economic spheres, but also socio-cultural spheres, and restrain the diversified and equalised growth. The Characteristic Towns need to try and combine the characteristics of the other valued activities in the branding of the main product (i.e. small scale, local, traditional, high quality etc., which could apply as much to mushroom growing and organic farming as to celadon production).

- The intervention and management from authorities should be based on local people's knowledge and perception of cultural properties. In the case of Celadon town, people prefer natural and historical elements as cultural properties. They also admitted that those properly conserved and managed ancient properties provide more cultural value than that before the Characteristic Towns Strategy implementation. However, sometimes highly

invested design or refurbishment cannot be perceived by users with expected cultural values, because of insufficient evocativeness.

- Many researches are indicating that the monetary value of natural and semi-natural landscapes is higher than the that of the intervened or artificial environment (Balmford et al., 2002). From responses, the preference of natural elements also indicated the value of nature. The Characteristic Towns should manage the natural, semi-natural, and artificial properties in a balanced state in the town. Like the New One-Village-One-Product concept insisted, the balance between standardized modern life and peculiar life is an attractive lifestyle for those urban population. Therefore, the planning and cultural properties management in historical industrial Characteristic Towns, e.g. the Celadon Town, should devote to the modern-peculiar cultural identity development.

- Management of culturally valued elements in the town requires matching physical and service supports. In Celadon town, cultural values of some properties are underrated, because the poor connection between those dispersed properties and main cultural elements cluster, e.g. transportation system for local people and tourism sign system for tourists.

- Sociability enhancement for culturally sustainable development is necessary. Commonly, social activity increases the identity of the place, because 'a sense of spatial identity is fundamental to human functioning' (Proshansky, Fabian, & Kaminoff, 1983). Hence, the accessibility and publicness of the

culturally valued sites are important factors for strengthen cultural identity of the town.

- Characteristic Towns are recommended to be formulated into a Polycentricity pattern in the macroscale level. Because Polycentricity is a top-down solution for drawbacks of bottom-up planning, e.g. over autonomy, and gated town. Polycentricity concept promotes co-development with the Characteristic Towns in neighbouring regions, increase provincial diversity and development of the Characteristic Towns. Thus, it can fix the issue of disconnection between cultural properties in the Celadon Town and out of the town. Moreover, Polycentricity opens the provincial Characteristic Towns markets to the national and global competition and promotes higher level of sustainability.

6.4 RECOMMENDATIONS FOR FUTURE RESEARCH

Currently, the measures and understanding of regional cultural services have not been sufficiently researched, because of the obstacles identifying the significant immaterial and subjective assets, and the difficulty valuing these elements in monetary ways (Dou, Zhen, De Groot, Du, & Yu, 2017). Future research need attention in how to enhance the validity of information about individual perception collected by participatory approach.

Although the straight-forward way of implementation of participatory cartography and its easy information visualization have encouraged respondents' participation, it was difficult to clearly explain the connotation of cultural service to local people. This might

not only be because of the limited education level in this rural area, but also because of the vague and abstract definitions of cultural services (T. C. Daniel et al., 2012). For instance, some respondents felt that the services Sense of place and aesthetic made them confused, which might have resulted in overlapped answers. Besides, the indicators and cultural services from *the Millennium Ecosystem Assessment 2005* may not be applicable enough to be directly assessed in Celadon Town, Longquan.

In regard to all those issues, a larger sample size might fix some methodological problems in this research. For example, the indicators of cultural identity or cultural services can first be collected from local people, and then integrated with the indictors and services from *the Millennium Ecosystem Assessment 2005*, to reformulate a set of suitable cultural identity indicators in Celadon Town. Besides, the survey and questions to locate the services on the map should be discussed and reviewed with local people or stakeholders, to make sure that the researchers and respondents understand the cultural identity concepts and indicators in the same way. In this way, respondents can easier understand and evaluate the indicators which were developed on their own knowledge and living area, and the result can contribute to the planning in a more targetable approach.

The thesis outcomes suggest that newly and top-down planned cultural sites do not have a large impact on local people's perception of cultural value. It is worthwhile to research whether this is inherent to the Celadon Town study only, or that in other cases, those brand-new properties offer same value as those natural cultural properties.

From existing studies, the benefits of the Polycentricity structure for the regional cultural identity maintenance and improvement in urban planning is noteciable (Colin Ahren Mattison, 2016; ESPON EGTC, 2014; Garc, 2004). The study of the Polycentricity theory contributed to the Characteristic Towns macroscale planning. This research elaborated the positive impact from polycentrism connection on the openness and global development of the town, but the relationship between polycentricism and cultural identity in the Characteristic Town area remain open to investigation.

Many researchers also argued about the disadvantages of excessive polycentrism planning. For example, Colin et al stated that the polycentric regions might be lack of a clear dominating regional center which guides sectors of policy, economy, culture, etc. and constitute of few larger-volume cities that do not notably differ in scale or significance and more smaller cities (Colin Ahren Mattison, 2016). In contrast, Garc believed that in Barcelona, the excessive use of events and festivals as symbolic instrument to bloom identity and brand locality presents a top-down planning to cultural management, that in which regional characteristics being considered as a marketing tool. Moreover, the development of cultural polycentricities somehow contributes to the space gentrification. For instance, although there are various cultural clusters, low-income groups have no sense of belonging or not being allowed to remain part of top-down planned cultural polycentricities (Garc, 2004). Garc's arguments were also reflected in this research; local residents perceived lower local cultural values than authorities' expectation, when they have not been involved in local cultural values management and top-down planning process. Characteristic Towns in Zhejiang, as

young, non-administrative, and extreme small-scale polycentrism regional planning concepts, need more research on how to balance the relationships between the self-management of local cultural identity (bottom-up) and provincial authoritative planning in a polycentrism manner (top-down).

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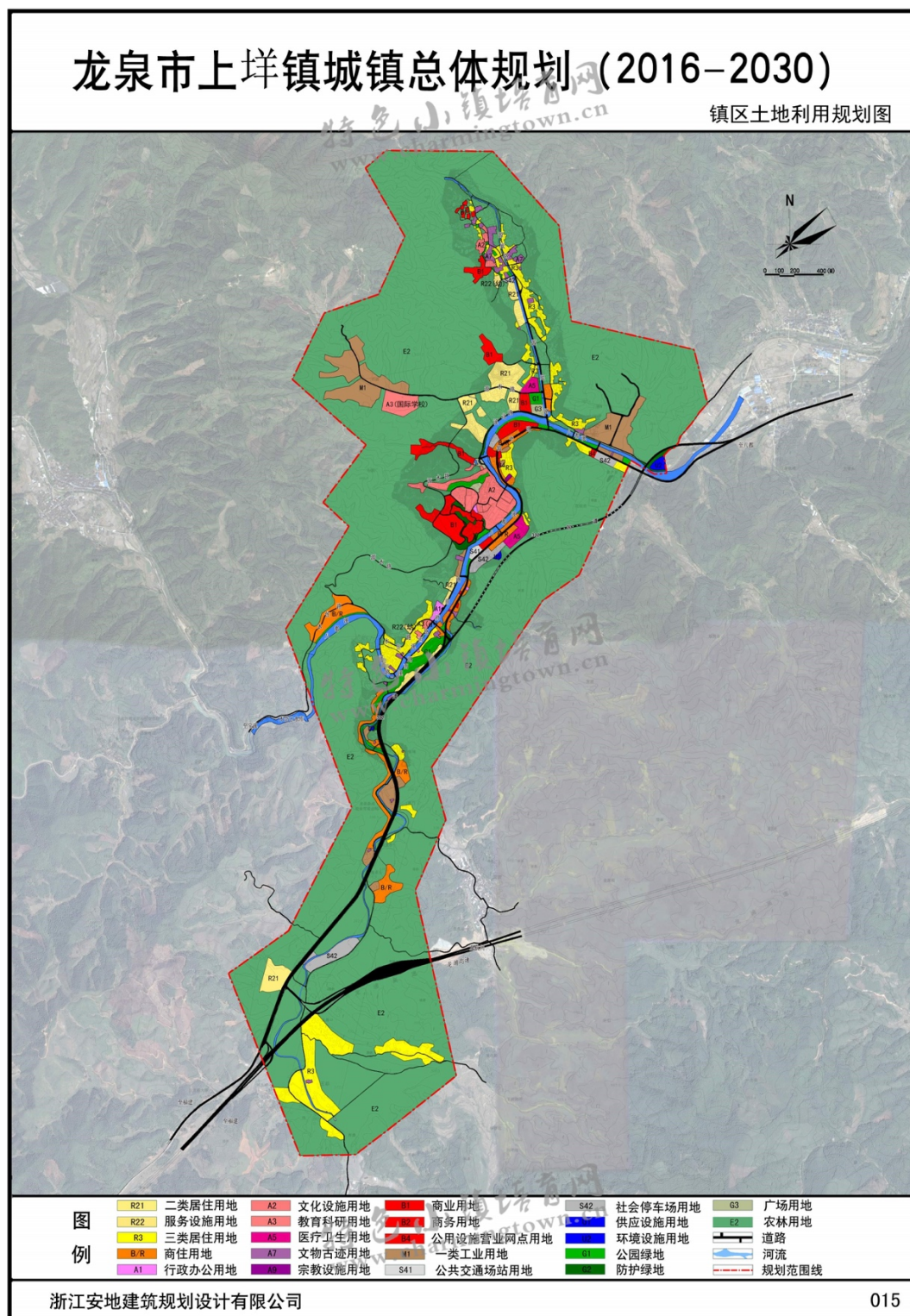
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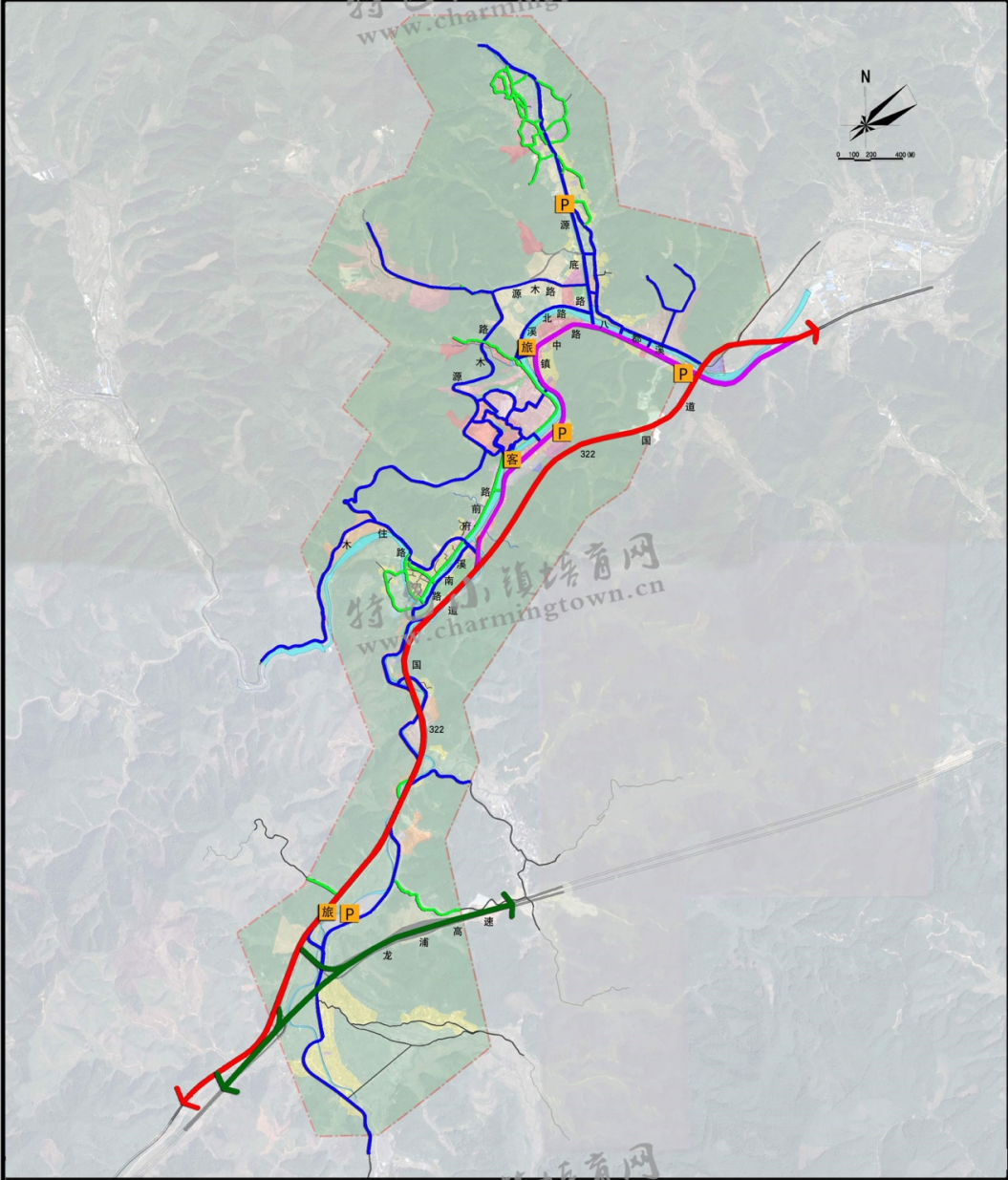
APPENDIX I PLANNING OF CELADON TOWNS

Land Use Planning of Shangyang

Integrated Transport Plan of Shangyang

龙泉市上垟镇城镇总体规划（2016-2030）

镇区景点及游线规划图

N

古宅古韵　梯田风光
古宅古韵
源底慢村
古宅古韵

瓷画艺村　徐仰山烈士纪念公园
瓷画艺术基地　杜头埕碗厂龙窑展示与体验
旅游集散中心　东入口节点
青瓷创意基地　青瓷水街
陶艺创客村　披云青瓷文化园
围瓷记忆
金宏龙泉窑制瓷作坊

瓷韵古村　曾芹记古窑坊
田园风光　横山头公园
曾芹记水碓坊
小溪梗龙窑
古道人家　炉窑湾村龙窑
原龙泉瓷器一厂龙窑
黄渡桥龙窑
梯田风光
农家休闲　南入口节点

图例
主游线　河流
支游线　规划范围线
主要景点
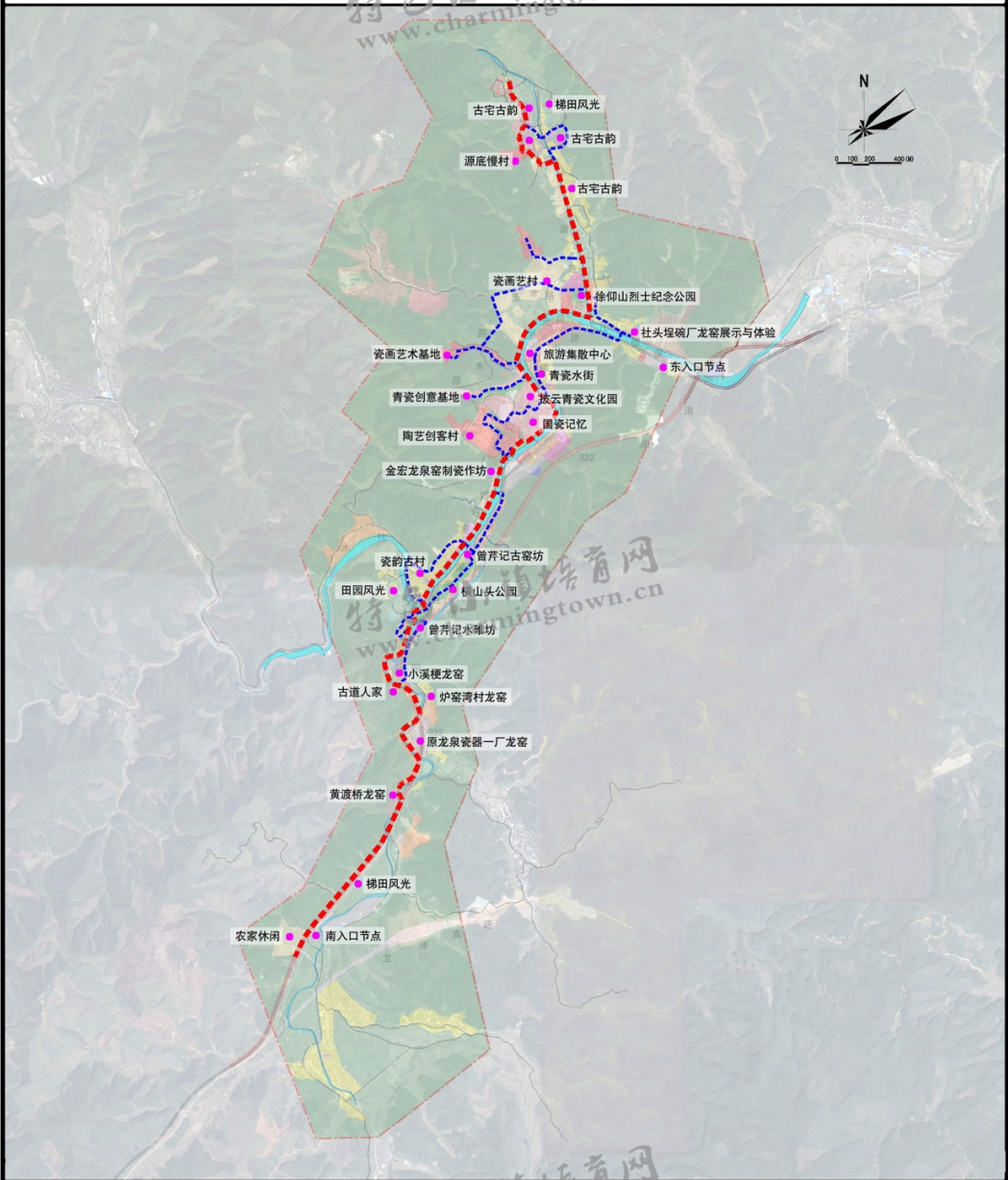
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Cultural and Historical Sites Plan of Shangyang

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Survey of Cultural Identity Assessment in Celadon Town, Longquan

Introduction

Hi, I am a master student from Wageningen University, the Netherlands. My current research is about the culturally sustainable development of Characteristic Towns in Zhejiang. The Cultural identity is an important factor for regional development. Under the Characteristic Towns Strategy, the development Celadon Town need more attention on the culturally sustainability enhancement. In order to understand and manage the cultural values in Celadon Town, I would like to invite you to participate in this survey of Cultural Identity Assessment in Celadon Town. The survey has two parts, and might take you 10 mins to complete.

Part I Participatory cartography of cultural services

Cultural services values are key indicator for cultural identity assessment. In this part, please firstly check eight cultural services with their definitions and corresponding numbers in the table 1 below. Then, point out the sites on Celadon Town map in the next page, that you have perceived or used certain cultural services there, and note down the number of that cultural service by the point.

Part II Collection of element that provided you with cultural services

After you completed the cartography part, please answer the question for each cultural service site you just pointed out: what element in this site make you received this cultural service? Based on your personal experience, give only one element with the highest significance of corresponding cultural service for each site you mapped. The elements can be anything. Please write down the elements in the table 2 below.

Table 1 Definition, questions for cartography, and numbers for each cultural services (Sarukhán & Whyte, 2005)

Cultural Services	Definitions	Questions	No.
Spiritual and religious values	Many religions attach spiritual and religious values to ecosystems or their components	Where in the Celadon town do you have spiritual or religious attachment?	1
Educational values	Ecosystems and their components and processes provide the basis for both formal and informal education in many societies	Where in the Celadon town do you feel provided the basis for either formal and informal education about the environment?	2
Inspiration	Ecosystems provide a rich source of inspiration for art, folklore, national symbols, architecture, and advertising.	Where in the Celadon town do you gain the inspiration for art, folklore, national symbols, architecture, or advertising?	3
Aesthetic values	Many people find beauty or aesthetic value in various aspects of ecosystems, as reflected in the support for parks, scenic drives, and the selection of housing locations	Where in the Celadon town do you enjoy the beauty of the landscape (both nature or artificial)?	4
Social relations	Ecosystems influence the types of social relations that are established in particular cultures. Fishing societies, for example, differ in many respects in their social relations from nomadic herding or agricultural societies	Where is the site that serves as a social meeting point?	5
Sense of place	A concept often used in relation to those characteristics that make a place special or unique as well as to those that foster a sense of authentic human attachment and belonging.	Where in the Celadon town do you have the sense of place from the ecosystem?	6
Cultural heritage values	Many societies place high value on the maintenance of either historically important landscapes ('cultural landscapes') or culturally significant species	Where in the Celadon town do you feel is highly linked to historically important landscapes ('cultural landscapes') or culturally significant species?	7
Recreation and ecotourism.	People often choose where to spend their leisure time based in part on the characteristics of the natural or cultivated landscapes in a particular area	Where in the Celadon town do you spend your leisure time?	8

Table 2. Cultural services and elements as providers

Cultural services	No.	Elements
Spiritual and religious values	1	
Educational values	2	
Inspiration	3	
Aesthetic values	4	
Social relations	5	
Sense of place	6	
Cultural heritage values	7	
Recreation and ecotourism.	8	

Thanks for your participation!