Bridging the Past and Future
Mitigating the conflicts
between cultural identity and contemporary needs
in Yuliang, China

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Because of the rapid urbanization in China, especially after the 1980s, lots of historical villages are facing the threat of abandonment or demolition. Many remaining villages are still waiting for appropriate preservation and development in order to adapt to contemporary needs. However, currently most developments are putting tourism first, ignoring the potential negative impacts of tourism. When tourism is booming, problems rise, like over-commercialization, inauthentic construction, environmental pollution, lose of local identity. As a result, villages loss their reputation and become empty villages in the end.

This thesis tries to explore the methods that can mitigate the conflicts between local cultural identity and contemporary needs. This thesis takes Yuliang as an example to showcase how the new development could capture local culture as an expression in architecture and adapting essential elements of that architecture as a bridge between past and present.
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# TABLE OF CONTENT

## Chapter 1 Introduction
1.1 Problems ...............................................................7
1.2 statement of future development ..............................8

## Chapter 2 Theoretical Framwork
2.1 Development Background ........................................9
2.2 Literature Review ..................................................15
2.3 Case study ..........................................................18

## Chapter 3 Site Research
3.1 Hui Style architecture ............................................25
3.2 Site selection and background ...............................26
3.3 Site analysis .........................................................31

## Chapter 4 Design
4.1 Master plan proposal .............................................33
4.2 Program offering ..................................................40
4.3 Architecture Design .............................................44

## Chapter 5
Conclusion ....................................................................59

## Bibliography ..........................................................60

## List of figures ..........................................................61
Chapter 1 Introduction

1.1 Problems

With such a long history and complex cultural background, the conflict between the preservation of cultural identity and the actual demands of modernization in China has become more severe, especially with the rapid economic development after the implementation of the Open Gate Policy in 1980. Most developers only focus on short term benefits, by introducing tourism to help the local economy, but ignore its potentially negative impact. As a result, when tourism suddenly became a booming industry, problems arose, such as over-commercialization, loss of authenticity and local identity, lifestyle changes for local residents, and serious environmental damage.

The existing conditions in many historical villages cannot support such a high volume of visitors, which causes many unsustainable results. Visitors may come to a scenic area for an escape from busy urban life, but they get disappointed with the pollution and unexpected chaos. Many local residents renovate their hundred-year-old house, without proper preservation, into a restaurant, store, Airbnb and dump their extra trash into a local creek.

Figure 1. Crowded people in Nanjing Fuzi temple.
Some new constructions, like hotels or informal souvenir stores, do not help to relieve the pressure and protect local identity, even becoming an unwanted language that ruins the culture and environment.

The conflict between the existing infrastructure and actual needs of the visitors exacerbates the negative impacts. These problems arose for many reasons such as improper planning, policy loopholes, and a weak sense of responsibility to the environment. Developers and local authorities barely take their responsibility seriously, especially if there is no appropriate infrastructure system, or development rules and design principles.

1.2 Statement for future development

These historical villages require long-term planning, and sustainable tourism guidelines. New developments should respect the authenticity of architecture and carefully fit into the historical context. Tourism should not be the only factor guiding new improvements in the region. It requires the participation of both residents and visitors.

This thesis project takes Yuliang Village as an example and proposes a regional master plan to relieve current conflicts and problems and develop a new Culture Center design that serves both the local community and visitors and brings visitors and residents together to reactivate the area and preserve the local identity.
Chapter 2 Theoretical Framwork

Overview

Starting with the two conflicting issues, modernization and cultural preservation, this chapter will discuss the historical background of development in China and the significance of mediation between culture and history and contemporary life. By summarizing the current situation and analyzing the development of historical sites, this chapter will examine the factors that cause unsustainable development and the manner in which sustainable design could help in the future integration process.

2.1 Development Background

After the open gate policy of the 1980s, urbanization swept over China so fast that both the city and countryside were under the influence of modernization. As a result, around 90% of old vernacular buildings were demolished. The government and developers were committed to inviting western architects, adopting new building technologies and building new metropolises and a new type of commercial center. This was the period that construction was booming, but with the price of losing cultural identity, and creating environmental pollution.

Figure 3. Village demolished and replaced by high-rise apartments
Beginning of sustainable consciousness

In response to the 1992 Earth Summit, China created its first sustainability rating system in 2006, though initially it had a low implementation rate. Most of the credited projects were one-star green buildings, which means they only achieved the lowest requirement. According to the Building construction Energy consumption Report of 2018, provided by CABEE (China Association of Building Energy Efficiency) the consumption of energy in urban housing was declining, but the consumption in rural areas and villages was increasing.¹

New technologies, sustainable research, and resources only focus on the new urban developments, paying little attention to the existing towns and villages. There are no guidelines to help them integrated the historical value and current needs, and this results in a common stereotype that historic architecture is out of date, and the building conditions are too poor to keep functioning. The cultural and historical value of these villages are underestimated. As the population grows, and contemporary needs increase, massive new construction, with large volume and less consideration of local culture, appears, which is also the main reason for rural energy usage rising. Residents are abandoning their old houses and move to a new modern mid-rise or high-rise community. Historical villages are under the threat of disappearance and destruction.

In addition to the massive unsustainable new construction, the concept and current sustainable design evaluation criteria still only focus on CO2 emission and barely talks about the infrastructure system and community scale sustainability. As Andrew D. Basiago argues in his article on defining sustainability, ‘sustainability’ is not a tangible goal, but an organizing principle governing activity at the level of a system,

¹. CABEE, Chinese building energy consumption research report, 2016
a quality that characterizes social alternatives that will yield vitality. Sustainability is a holistic reaction from many aspects including social, economic, cultural and environmental.

**Culture preservation timeline**

In the 1950s, Liang Si Cheng proposed the plan to preserve the Old City Wall of Beijing. It was the first time preservation entered a discussion in China, though the wall was eventually demolished. The issue of preservation emerged again, when people started to realize the significance of historical sites. Starting from the year 2000 lots of historical sites were nominated for the World heritage list, and people started to realize the importance of historical sites.

In 2013, UNESCO organized an international Congress in Hangzhou, with the topic being: “Culture: Key to Sustainable Development, Placing Culture at the heart of Sustainability.” This was the first discussion that put cultural preservation into the consideration of sustainable development. This congress advocated the strategy of promoting heritage, cultural infrastructures, and sustainable cultural tourism as a force for local economic growth and social inclusion. The argument was that cultural and natural heritage are both irreplaceable sources of life and inspiration.

Besides the obvious cultural characteristics of a place, UNESCO also points out the significance of considering the intangible heritage, traditions or living expressions inherited from ancestors and passed on to descendants, such as oral traditions, performing arts, social practices, rituals, festive events, and knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts.

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3. UNESCO Hangzhou congress, *Culture: Key to Sustainable Development Placing Culture at the heart of Sustainable Development Policies* (2013)
The status of historical villages

The fast pace of modernization causes a big difference between city and countryside, such as in resource allocation, infrastructure condition, and development opportunities. Many young people leave their village and move to a bigger city or town for better jobs and resources. In 2011, China’s population in urban exceeded rural for the first time. While people are eagerly pursuing a fashionable life style and live in a new modern high-rise community in an urban environment, the old villages are in an awkward situation. How to properly preserve and develop these villages is still an ongoing experiment.

Currently, these villages are experiencing 4 different stages based on their development level; undeveloped, slightly developed, tourism developed, and failed development.

According to statistics of the Ministry of Civil Affairs, villages across China are disappearing at an astonishing rate of 300 per day. These villages are either abandoned or demolished and replaced by urbanization.

Some villages with distinctive culture are experiencing a dilemma of transition relative to the future development. Normally, only the seniors still live in villages, and young people only come back during Spring Festival. As a result, the streets look empty with no vitality. Sometimes a few visitors come for their special local identity and a peaceful and rustic feeling, but poor infrastructure and living conditions make the place less attractive. Such small number of tourists do not help to improve the local economy.

The tourism driven villages, are receiving a lot of visitors everyday which is the main financial income for local

4. "Down to the countryside" directed by Leah Thompson, Yufan Sün 2014
residents. In order to earn more money, they are eager to expand their businesses by building an imitated version of traditional housing or renovating their old house without proper preservation guidance. These responses expose the environmental problems of these villages.

There are many cases of failed development of villages in recent years, as these places initially attract many visitors. Developers and merchants build too many inauthentic new traditional stores selling standard mass-produced products that have little connection with region, and the heavy load of visitors harm the local environment and cause pollution. These areas are losing their reputation and attract less visitors, and eventually become empty towns.

Lijiang historical town was added to the World heritage convention list in 1997. Within the next ten years, during the tourist boom, the original 40 thousand Naxi ethnic minority groups were reduced to only a few thousand. Most of the original residents moved out of the town, and were replaced by thousands of visitors and exotic tenants, especially in the commercial district. All the retail spaces were selling standard souvenirs that did not reflect the local character. Too many bars and exaggerated red lantern decorations created too much unwanted chaos and ruined the unique identity of this area. These tenants need to pay the local administration office a high management fee because they need to dispose of about 40 tons of waste per day.

Lijiang historical town’s reputation is getting worse and attracts fewer and fewer visitors. Facing the expensive
management charge and less tourism income, lots of commercial tenants went on strike starting in June 2016.

With the failed development examples increasing, people gradually realize the problem of overdevelopment for these historic villages. There must have a long-term guild that can well preserve local culture and also help to activate the area. The goal of this thesis is trying to set up a series guild that shifts the development direction of these villages into long-term sustainable development.

Figure 8. Commercial tenants went on strike in Lijiang.

Figure 9. Thesis goal diagram.


2.2 Literature Review

Culture & Identity

Chris Abel argues in his book *Architecture and Identity* that “Human identification with a place presupposes that places have ‘character’, that is, attributes which distinguish one place from another and which lend to a place its unique presence.” It is such a unique presence that can give proper self-expression to personalities and social status. Abel also asserts that the formation process of this place identity is interrelated with the cognitive process and social activity. This means that people identify a place not just simply based on its superficial decoration style or simple characteristics, but more significantly based on the unique experience, the mental map of the area and interactive activities that shape the impression and memory of this place. In other words, the key elements that make a place unique are not only what exists in a place, but also what happens there.

Authenticity of Architecture

In the book *Authentic Reconstruction*, John Bold extends the definition of authenticity beyond the original, straightforward qualifying elements of form, fabric and function, to include traditions and techniques, location and setting, spirit and feeling, cultural identity and social value and other internal and external factors. He raises the question of how potentially competing for ‘authentic’ values may be understood as credible or truthful, the further question being, who decides?


6. Ibid, Page 141.

Bold has argued:

“if access to cultural heritage is seen as a function of human rights, decision-makers must heed the voices of individuals and communities; everyone, alone or collectively, has the right to benefit from the cultural heritage and to contribute towards, its enrichment; everyone, along or collectively, has the responsibility to respect the cultural heritage of others as much as their own heritage”  

It is necessary to consider the heritage assets in relation to their cultural context. Consideration of authenticity and its cultural meaning and resonances should bear on the recreation and management of sites for purposes of education, commerce, and tourism.

**Wang Shu, *Zao Fang Zi*, 2016**

Wang insists that new construction within a historical context should always respect the real-life activities and real needs of existing residents because they are the real cultural carrier who witnesses the history of the place. In his project of Ningbo historical museum, the facade is made of tons of broken tiles and bricks that were collected from the demolition site. He combined them with concrete through a traditional craft technique. In order to respect the authenticity of the architecture, he preserves the traditional craft technique and makes innovation upon it to satisfy the current requirement.

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Figure 10. Xiangshan campus, designed by Wang Shu

Figure 11. Traditional tile facade, designed by Wang Shu, image © Evan Chakroff
2.3 Case Studies

Case Study 1: Southern Song Imperial Street

Designer: Wang Shu, Amateur Studio

Site history

This is an experimental design that Wang did in Hangzhou, in 2009. The site used to be an imperial street 800 years ago in the Song Dynasty, and it sits on the central axis of the old city of Hangzhou. It became a famous commercial street later since the Ming Dynasty (15th century). As one of the most representative historical sites, this street witnessed many transitional periods with various architectural styles from different time periods. The street carries people’s memory and has been getting more attention since the Open Gate Policy. Both local residents and the government are concerned about the future development of this area.

Site Problems

During the Hangzhou Urbanization process, there are only 10,000 vernacular buildings (out of 100,000) that have survived. Southern Song Imperial Street is one of the concentrated areas of survivals, so it is very precious for local residents who want to keep the memory of the old city.

When the government came to Wang Shu in 2007, the site

Figure 12&13. Southern Song Imperial Street, Before Renovation
looked like an obsolete area with no maintenance of existing houses and a few stores selling cheap products. Most people tried to leave this area, and most of those who were left were temporary tenants that believed that this place will be abandoned eventually because such a declining situation is against the city’s fast pace of urbanization. While most of the developers are pursuing modernization in the new metropolis zone of Hangzhou, some governors were calling this place “a piece of scrap”.7

**Wang’s design theory**

Wang said that the diversity of architectural styles in this area reflects an authentic historical continuity. There are stone pavements of the archaeology site from the Song Dynasty, street fabric and commercial function continuing from Ming and Qing Dynasty, western style buildings from the semi-colonial and semi-feudal period and early 20th century, and a few modern stores from the 1990s. This was a challenge for Wang as well, who insisted that in order to keep this historical continuity we have to respect the existing real history and fuse the true reality of current requirements into this site.8 Besides the appropriate preservation, the new development will help keep its authenticity and also retrofit the area.

Wang put forward a couple of conditions to the government before he accepted this job. He insisted there would be absolutely no rebuilding a fake traditional style building. He also wanted to keep original local residents, who keep the memory and have the authentic daily activities in this place, which make it like an active traditional cultural showcase instead of a dead example. If only developing the area for commercial use and tourism, the charm of the original life and culture will be lost.

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7. CNTV, *Face to Face, The Ideality and the reality for an architects.* (20120305)
8. Ibid.
Figure 14. Southern Song Imperial Street, Excavated Pavement Ruins on Current Commercial District

Figure 15. Southern Song Imperial Street, Landscape design respond to the local culture.
Evaluation of the project

The overall development concept and theory is very powerful, and the design preserved the historical identity and people’s memory of this place, but the goals are still not satisfied. Because of the increasing visitors, the commodity price is rising. Too many souvenir stores take the place of the grocery stores, which make it hard to satisfy the basic needs of residents, so they do not shop there. Many original residents choose to move out because they think visitors and businessman from outside the region disrupt their privacy.

Visitors come here for the special historic culture and experience, but they do not have other choices of activities other than shopping for souvenirs. It is hard to find cultural character from these standard commodities, so visitors only stay there for a short time which makes stores seem indecline. From the commercial aspect, this area is not fully activated. Residents also complain that only the center street is active, and the alley is still abandoned, which creates a gap between the central street and the surroundings.
Case comparison

Tai Koo Li, Chengdu, 2014. Designer Dr. Hao Lin.

Tai Koo Li is develop based on a Da Ci temple in the center of the city of Chengdu. The developers and designer of Tai Koo Li decided from the beginning to develop this area as a major shopping district. The new development keeps the original village fabric and circulation but totally changes the district function from dwelling to commercial with 66% retail, 4% supermarkets, 10% entertainment, and 20% restaurants.9

The whole area is separated into two zones, a fast zone, and a slow zone. The slow zone is the inner circle around the old temple, which provides a quiet environment for dining and resting so that people can feel the historical value of the area. The exterior fast zone is mainly a fashion shopping area and supermarket. This development satisfied the actual needs of urban consumers and visitors. It is considered one of the most successful commercial districts which has brought lots

Figure 18. Tai Koo Li, Commercial District

of economic benefits and truly reactivated this area. However, there are still some complaints from the original residents and neighborhood that too many luxury stores changed their original memory and impression of this area. They also cannot afford the high price of luxury products, and the restaurant and supermarket area attracts almost 80% visitors.\textsuperscript{10}

From these two examples, both projects are located in the urban environment and they trying to reactivate the area by attracting visitors, but they choose a different focus. Wang is pursuing methods of coexistence between local people and visitors. The Tai Koo Li project is a visitor’s driven commercial district.

The balance between commercialization and preservation is very delicate, especially in the case of countryside villages. Original residents and their lives are a crucial part of the expression of local culture which should not be ignored.

\textbf{Figure 19. Tai Koo Li, Design Diagram}

\textsuperscript{10}. Ibid.
**Inspiration**

The Netherlands pavilion designed by MVRDV for 2000 World Expo in Hannover was intended to showcase a country making the most out of limited space. Six stacked Dutch landscapes form an independent eco-system communicating Dutch cultural sustainability; showing a combination of progressive thinking and contemporary culture with traditional values. The project is a landscape stereotype, including tulips, windmills, and dikes, which experiments with the potential possibility of cultural sustainability and landscape integration. In its conception the Dutch Expo 2000 pavilion presented a yet untested typology and thus functioned as a laboratory; an experimental landscape. The proposal not only saved space but saved energy, time, water and infrastructure.

Figure 20. Netherlands pavilion, Design diagram

Chapter 3 Site Research

The goal of the thesis is to study and experiment with how design can work as an intermediary between visitors and people who still live in a historic rural community. It will also examine how design can integrate cultural identity with contemporary actual needs and help reactivate villages by shifting tourism development towards a long-term sustainable model.

3.1 Hui Style architecture

Hui(Zhou)-style architecture is one of the traditional Chinese architecture styles that prospered 200-600 years ago. The architecture uses bricks, woods, and stone as raw materials, and timber frames for significant structures.\(^\text{12}\) The technical features and aesthetics of Hui-style architecture mostly occur in residential houses, ancestral temples, joss houses\(^\text{13}\), archways, memorial gates, and gardens.

Figure 21. An hui Province location in China


\(^{13}\) Joss house, Chinese temple for worship
3.2 Site background and selection

Region background and problems.
The most of the remaining Hui-style villages are concentrated in the south of Anhui Province. Xidi Village and Hongcun Village in Yixian County, are the first two villages were collectively listed as a World Cultural Heritage Site by UNESCO in 1999. They have been recognized as the best place to appreciate authentic Hui-style architecture. Then suddenly these two villages become famous worldwide and attract lots of visitors. As time has passed tourism’s impact has shown up in this area. Massive new development emerging in the surrounding area in order to meet the requirements of booming tourism. Other Villages also admire their economic improvement and eager to copy their economic success, local governments also encourage the new development to emphasize existing characteristics. People are expecting these modern developments can help them establish better conditions for tourism. Then, a large amount of so-called “new hui-style architecture” or “modern Hui-style” appears with stepped gables, gray tiles, white walls, and other traditional symbols appearing on all new housing, hotels, restaurants, and other new modern developments around these villages.

It seems like that they kept a consistent color connection with traditional vernacular buildings and show the distinction of local identity. However, substantially, these new hui-style buildings have no difference with general buildings in any other place. Even worse, without detailed research and careful regional planing, they disrespect the original building scale, village fabric, and living experience. This approach is unauthentic because they cannot reflect any real local custom and cultural essence besides the simple imitation of visual decoration of shape and color. This simple phenomenon of immitation happening on a large
Figure 22. Historical Villages Concentration Area And Their Development Status
scale will exacerbate the stereotype of superficial symbolic language while ignoring the true cultural essence and underestimating the value of the authentic activities that took place within the building.

Site Selection
This thesis will focus on Yuliang village, which is located in the historical village concentration area. Yuliang is in She County and has a short distance to the old town center. The town center used to have many historical vernacular houses, but over-commercialization already turned the old town to a tourism-driven area. Yuliang, as the largest village near the old town, is also influenced by urbanization and start expansion. Because Yuliang is not in the town center, and still in the earlier stage of re-develop phase. Currently, the tourism has less impact to it so that it has more potential to shift the development to a long-term sustainable direction. New developments of urban sprawl ignoring historical context scale, local identity, which cause high contrast of fabric.
Figure 24. Historical Village Concentration Area Zoomed-in, with site highlighted.

Figure 25. Fabric contrast between historical village and high-rise community in Yuliang
Figure 26. Yuliang Village and Old Town Center

Figure 27. Expansion of Existing Village
3.3 Site analysis

Site history

Yuliang (which means fishing and beam in water in Chinese) village was initially famous for the Yuliang Dam, which dated back to 1,400 years ago. It was the largest water conservation project and important transition point over the Lian river, connecting two cities before the highway reaches this area.

The village was flourishing and expanded during Ming, Qing Dynasty (600-400 years ago). Most of the remaining buildings in the village were built in that period.

Figure 28. Yuliang Village from other side of Lianjiang River
Current problems and constraint

The village used to be the largest village close to the She County Town Center, 1 mile north of the village. In the 1980s, the population was about 2,200. The number dropped to 1700 in the 1990s. Currently, the residents are only around 400 people.

The New Community in the north was built in 2008. There is a wall isolated village from the new community. The fabric and scale contrast between old and new is very distinct. Government policy has forbidden villages from renovating their housing but did not propose any plan for this area. Few tourism activities happen here; a small number of visitors could not help the local economy.

On the village side, people still keep the traditional lifestyle, like washing clothes or even dump trash into water. The environment pollution is also a big problem there.

Figure 29. Yuliang, Current Constraint

14.GONG KAI, YULIANG VILLAGE, Series of the Ancient Architecture in Huizhou Page 76.
Chapter 4 Design

This chapter provides a series of strategies from a large scale Master plan to an architectural design. The goal is to activate the through four aspects: preservation, building reuse, infrastructure, and new development. The design will emphasize a new development area that tries to establish guidance and act as an example of bridging the local cultural essence with actual contemporary needs.

4.1 Master plan proposal

The existing condition separates the Yuliang village from the outside world and treats the whole village as a lifeless exhibition of the past, which causes many wasted opportunities inside of the villages. The village is no longer alive as it supposed to be. The village only keeps its exterior appearance, but inside is empty and lacking vital activities.

Activating the historical village requires the engagement of the whole built environment and participation of both villagers and visitors. The village requires its residents, and they are like the body and muscles that enrich the place. It also needs visitors, like blood, flowing and stimulating the area. The cultural identity is like the core that gives firm support and connects everything. Only by combining all of them, will the whole village become one vital and integral entity.
Step 1: Preservation

There are existing well-preserved and significant landmarks that carried villagers’ memory over generations. Some of them are old wharves, thresholds, or temples. These places are meaningful to this area and make the Yuliang village unique and identifiable.

1. Ba Weizu (the famous calligrapher and seal cutter in the Qing dynasty.) Former Residence, which is the largest vernacular historical housing in Yuliang village.  

2. Yuliang Dam, the stone dame on the Lianjiang River, the village is named after this dam.

3. A hundred stair wharf, a historical wharf

4. Baiyun Buddhist Temple, (originally built in 1618, rebuilt in 1986, currently used by Xin’an research group) 

15. Ibid, Page 98

16. Ibid, Page 138

17. Ibid, Page 134
**Step 2: Vernacular Housing Reuse**

Currently, the local policy prohibits any renovation activity inside the village. This policy did help stop some arbitrary renovations happening that may have heavily damaged the historic site, but it lowers the occupancy rate as well. Because of poor conditions, few vernacular houses still have residents, most of them are abandoned. This is another reason that the number of local villagers keeps decreasing, so it is necessary to help villagers properly renovate their houses.

In addition, instead of continuing expand and develop the surrounding greenfield, reusing part of existing traditional houses as an Airbnb or other activities will primarily relieve the increasing pressure of visitors booming and help control the tourism impact.

The process of building reuse requires careful building assessment, which contains not only the overall form, structural, materials, these visible qualities but also considering some like the villagers’ habit in order to preserve the authentic living experience.

Figure 33. Master Plan, Building Reuse
Step 3: Infrastructure

In the village, many old underground drainage systems inside of the residences are still working. According to a local carpenter, the drainage of the courtyards is made of sand, stone, and charcoal, and covered by moorstone, which has a fast penetration speed. Villagers usually put a couple of tortoises in the courtyard drainage gap. Tortoises can eat food residue, which can help dredge and clean the drainage. During the summer rainy season, the movement of tortoises can stir the water in the drainage gap, increase water evaporation, and relieve stuffiness.

Now, this traditional method is no longer exists in most of the villagers’ houses because of the application of drainage pipes. However, drainage pipes may not work for the historical site because it requires damage to the existing historical stone pavement and has not become a completed system here. Many of these drainage pipes do not connect to the waste management system but directly feeds to the river. Some decentralized waterfront houses that could not connect to the drainage pipe pour waste into the river.

Water access is always a crucial part of local culture. People enjoy fishing, washing clothes, or even walking onto the water dam during the dry season, but increasing water pollution is hurting everyone who lives in this environment. This master plan proposes an onsite filtration system that can integrate gardening and landscape design with traditional drainage methods by exposing the components of traditional drainage and filtration system.

Rather than change people’s lifestyles by preventing daily waterfront activities, an open waterfront filtration system provides water celebration elements opportunities and prevents water pollution.
EXISTING HISTORICAL LANDMARK PRESERVATION
(ancestral hall, bridge, temple)

REUSE
(reuse vernacular building for craft workshop, air bnb)

INFRASTRUCTURE
(water filtration system along the waterfront to present pollution)

Figure 34. Master Plan, Waterfront Infrastructure

Figure 35. Pollution at Waterfront

Figure 36. Local residents washing clothes in river
Step 4: Design New threshold

As the reviving of the village, the emphasis on local identity, and respectful guidance to local culture for new development is the next step. The area between the old village and the new community has the potential to create new thresholds that are showing the cultural essence and eliminating the segregation between tradition and the modern world.

These transition zones can work as a community center, visitor center, or other activity areas that help relieve the tourism pressure of the old village and also provide opportunities to stitch together the life of villagers and community residents.

This thesis takes one of the areas as an example to showcase how the new threshold development could capture local culture as an expression in architecture and adapting essential elements of that architecture as a bridge between past and present.

The design approaches and the building program will be discussed later in this chapter.
EXISTING HISTORICAL LANDMARK PRESERVATION  
(ancestral hall, bridge, temple)

REUSE  
(reuse vernacular building for craft workshop, airbnb)

INFRASTRUCTURE  
(water filtration system along the waterfront to prevent pollution)

NEW DEVELOPMENT  
(potential new threshold, stitching old and new)

Figure 38. Master Plan, New Threshold

Figure 39. Focus Site Context
4.2 Program offering

“Concerned communities and relevant individuals should be consulted and invited to actively participate in the whole process of identification, selection, classification, interpretation, preservation/safeguard, stewardship and development of cultural heritage.”

In response to this view, this thesis emphasizes how to promote the participation of both original residents and visitors. By collecting local activities of both residents and visitors, the project will provide a series of interactive opportunities, combined with the unique cultural experience of the region. It will also respond to government policy and future tourism planning requirements.

Local activities:
Small scale gardens are very common in Yuliang village. Many residents use local stone to enclose a gardening area with bamboo framing. This self-built structure has multiple functions: expanding the growing area of the vine, hanging food products, and hanging clothes on the bamboo framing. It shows up in front of every family. In the autumn, villagers sun-dry their products in the outdoor space. It is also a celebration of the harvest.

The villages has many craft stores and workshops. It has the reputation of ink-stone making and wood carving. With the development of industrial production, the original workshops and craft stores have been replaced by new souvenir stores.

Sun Drying activities
Small scale gardening, food production
Cooking, food product trading
Wood carving
Inkslab making factory
Local tea factory

- Community garden, fruit, vegetable pick up
- Open space, event space
- Exhibition
- Local food market, family restaurant
- Craft workshops, handmaking souvenir
- Local guild/boat tour, information desk
- Air bnb

Wood bucket hooping-
Carpenter

Vernacular Housing
Existing local life and activities
Visitors' expectation

Local food tasting
Meaningful local souvenir
Get to know local culture and knowledge
Have fun
Feel the local unique characters (visually/physically)
Special memory

Seniors activity center
Villagers chatting
Staying

Figure 40. The Collection of Villagers' Activities
There is also a small tea factory located at the crossroads of the village, which produced local tea. With the enlargement of production, the factory moved away.

Due to the loss of young people in the village, remaining senior residents usually sit along the alley or gather together chatting with each other. There is a small senior activity center where people can play mahjong, pool, and many other games. Although some vernacular housing has a poor living condition, compared to life in the midrise community, many villagers still insist on living in their old home.

**Visitors’ needs**

Local Sun-drying activities attract many outside photographers and artists. The surrounding area sometimes has photography exhibitions and craft exhibitions. Students from nearby art college sometimes come to the village to find sketch and photography inspiration. Visitors will need lodging places, an information center, exhibition gallery, and event space. Local food is always a big attraction for visitors.

**Interactive program proposal**

This thesis will propose a combination of the community center and visitor center at the village’s original main entrance, which can gather and integrate the regional resources. By combing both villagers’ daily life and visitors’ expectations, this design will provide some interactive activities, like participating in the local agriculture harvest, learning from a local craftsman, tasting real, local food in family restaurants, and taking a boat tour with local fishermen. Villagers will also have a place to sell their products, soliciting and offering local guided tours to their houses. People’s impressions of this place will not only be shaped by the scene
they see here, but also by what they have eaten, what they have done, and who they have been talking to.

This new threshold will act as a custodian of precious objects, a mediators between places, and a public showcase of tangible and intangible aspects of culture. The program includes community garden, event space, exhibition, local food market, dining area, craft workshop, information desk, and Airbnb.

![Diagram showing Existing local life and activities and Visitors’ expectation]

- Community garden, fruit, vegetable pick up
- Open space, event space
- Exhibition
- Local food market, family restaurant
- Craft workshops, handmaking souvenir
- Local guild/ boat tour, information desk
- Air bnb

Figure 41. Program Proposal
4.3 Architecture Design

To respond to the site context, site 1 will have the gardening and water filtration system, and Site 2 will have the exhibition and lecture space as the education extension from the existing high school. The proposed workshop will also connect to existing ink stores, so people can also learn and join the process of souvenir making. Both Site 2 and 3 will have the storefront retail and market opportunity facing the driveway. The north side of site 3 should respond to the north community residents. Site 4 on the north of the driveway can be used as future housing, but will also have some market space that facing the community exit from the west.
The massing design of this new threshold is initially shaped by villagers’ and visitors’ activity routes. Currently, Site 2 and 3 are parking lots for tourist buses and taxis. Visitors usually spend some time waiting here for the bus. (red routes) However, residents usually do not wander at these two sites, their routes are usually straightforward, leading to their storefront facing the driveway or directly going home (blue routes). These two sites have the potential to provide street food and a shopping experience where villages can easily pass by and get some groceries, and visitors can enjoy the local food. This retail function also respond to the original commercial function of the village.

Figure 43. Concept Diagram
The overall massing also tries to respond to the playground of the high school. Instead of blocking the school with the new building, the design provides an extension of the existing playground.

Using the new circulation routes, the building is broken into small masses to respond to the context scale and cultural attributes.
The design tries to responses to local attributes in the following aspects:

**Alley spatial quality**

Traditional streets and alleys in Yuliang are 10 feet wide on average. There are many branches spread out from the central main commercial street. In the new architecture, the alley is also about 10 feet wide, which creates a long and narrow street quality between the entrance and waterfront.
Figure 46. Design Response to Alley Experience

Figure 47. Spatial Experience Collage
**Courtyard**

Traditional courtyards have the function of ventilation, getting sunlight, water collection, and creating passive cooling. In the new development, this can evolve into an interior courtyard with skylights. There is another exterior courtyard between the lecture hall and the workshop. When there is no event inside the lecture hall, people can sit and meditate there; observing the whole process of rain dropping from the roof and collecting in the courtyard and then penetrating underground. When looking through the courtyard, people are busy with craft making in the workshop. It is a place people can quietly feel the power of traditional knowledge and enjoy watching local activities.

Figure 48. Lecture and Meditation Space
**Divided wall**

The traditional divided wall is made of stone, and having the shape of the triangular gable (mainly built in the Ming Dynasty) and stepped gable (mostly built in the Qing Dynasty). The wall not only divides the family unit but also works like the fire separation wall between the wood structure. The new threshold uses 16” thick rammed earth walls to separate the different functions.

Figure 49. 16” Rammed Earth Wall Separate Different Function Area
Mix-use function

The high-density of traditional vernacular housing and small local scale of commercial activity form a very unique mixed-use housing typology in Yuliang village: Retail in the front facing the street, family workshop in the middle, and the private residential part hidden behind and usually separated by a courtyard. Some housing may not have such depth of the occupied area, they are having the commercial function on the ground level, and the owner lives on the second floor.\textsuperscript{18} The street-facing is mainly commercial uses, which means the ground ceiling height along the street are on the average about 12’, but the upstairs usually has a lower ceiling height. Because of the narrow street, the retail doors are opening inwards and create a flexible and inviting space between the street and interior store. This is opening increases the engagement and communication between store and pedestrian.

To respond to this character, the new development on the north of the driveway has the retail function facing the driveway, and hotel, and Airbnb on the backside and upstairs. Most of the time, people visiting the historic village only can have the ground floor retail experience as a visitor, but inside of the new hotel, they can have the experience of living on the upper floor and watching the commercial activities on the ground floor.

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\textsuperscript{18} GONG KAI, \textit{Yuliang Village, Series of the Ancient Architecture in Huizhou} Page 74.
Figure 52. Design Response of Mix-Use Function

Figure 53. Mix-use House Living Experience on the Second Floor
**Gardening and agriculture activity.**
Small scale gardening is part of the daily life of residents. The proposed new public community gardening encourages interactive activities. By providing a series of spaces for planting, sun-drying, and product selling, visitors can see the source of local products and know the process and even participate in the process themselves.

**Stairs and water access.**
The zigzag alley spatial quality and topography changes at the waterfront creating many stairs, which became another character of this place.

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Figure 54. Gardening in Yuliang

Figure 55. Stairs at Waterfront
Figure 56. Proposed Interactive Gardening Activity

Figure 57. Section of New Water Access Point
Materiality

The traditional cladding material in Yuliang is made of sticky rice flour, lime, egg white, and clay. As time goes by, the white walls become mottled, which creates unique aging quality and reflects the historical continuity. Instead of painting the new development with new white cladding, this thesis proposes to use the rammed earth walls with stone foundations, which are local materials that can emphasize the local identity.

Figure 58. Existing Cladding Texture
Figure 60 Building Section with Courtyard Attribute

Figure 61 Building Section with Stairs Attribute
Figure 62. Site Section
Chapter 5

Conclusion
This Thesis Chose Yuliang Village as an example and act as a guide. By extracting the local cultural essence and re-activating the village with interactive activities, this design tries to balance the requirement of visitors and residents and keep the local identity at the same time.

Historical villages have a rich and powerful cultural heritage. They need a guide to sustain their existing knowledge and a bridge to connect with contemporary needs. As Wang Shu said in his TED talk, “the villages should learn from themselves.” What the historical villages need is not total redesigning or reshaping. They need guidance and the new possibility of adapting the existing cultural essence to new activities. As designers, we should carefully and respectfully identify and extract these core elements and provide space to allow villagers to fill the village with their habits and their authentic activities. The proper guide should be established in a long-term perspective, to make villagers more confident in their own cultural identity.
Resources:


CABEE, *Chinese building energy consumption research report*, 2016

CNTV, *Face to Face, The Ideality and the reality for an architects*. (20120305)

"Down to the countryside" directed by Leah Thompson, Yufan Sun 2014

GONG KAI, *Yuliang Village, Series of the Ancient Architecture in Huizhou* Page 76.

Hao Lin *The Future Tradition, The planning and design for Tai Koo Li, Chengdu*. https://bbs.zhulong.com/101010_group_678/detail31253102/


Wang Shu, "Villages should learn from theirself" TED Talk https://www.youtube.com/watch?v=yt9L5vWRT3U

Su Xiangdong, *Chinese Historical Heritage preservation is not optimistic* http://www.china.com.cn/culture/2010-06/04/content_20186909.htm

UNESCO Hangzhou congress, *Culture: Key to Sustainable Development Placing Culture at the heart of Sustainable Development Policies*


Zhang Fangfa, *The analysis of Tai Koo Li Project* http://www.igreen.org/index.php?m=content&c=index&a=show&catid=15&id=7456
List of Figures

1. Crowded people in Nanjing Fuzi temple scenic area.  

2. Water pollution at Lingshan Temple scenic area, Luoyang, Henan Province  

3. Village demolished and replaced by high-rise apartments  
https://m.aiyangedu.com/GuiZhangZhiDu/626209.html

4. Building collapse due to no maintenance, Zhangdu historical village, Anhui  
http://www.xuanwww.com/news/xcrd/2017-03/22/content_453349.htm

5. Seniors in Jixi village  
http://www.mafengwo.cn/i/7467176.html

6. Town gods’ temple in Shanghai in tourism peak season  
http://leaders.people.com.cn/n1/2016/0503/c58278-28319526.html

7. Tun Xi historical street  
http://travel.cctv.com/2017/05/31/ARTITVdcGjx7H19gu0GMz1hIo170531.shtml

8. Commercial tenants went on strike in Lijiang  
http://www.lijiang.cn/hjxw/social/201606/9987.shtml

9. Thesis goal diagram

10. Xiangshan campus, design by Wang Shu

11. Traditional tile facade, design by Wang Shu. Image © Evan Chakroff

12,13. Southern Song Imperial Street, Before Renovation  
https://read01.com/LKQON0.html#.XfNIl-hKhPZ

14. Southern Song Imperial Street, Excavated Pavement Ruins on Current Commercial District

15. Southern Song Imperial Street, Landscape design respond to the local culture.

16. Southern Song Imperial Street, Less visitors in the alley, and many business in the alley are closed

17. Southern Song Imperial Street, Local residents put a sign of do not disturbing in front of the door.

18. Tai Koo Li, Commercial District  
https://bbs.zhulong.com/101010_group_678/detail31253102/

19. Tai Koo Li, Design Diagram  
https://bbs.zhulong.com/101010_group_678/detail31253102/

20. Netherlands pavilion, Design diagram  

21. An hui Province location in China

22. Historical Villages Concentration Area And Their Development Status

23. Modern Hui-style Community
24. Historical Village Concentration Area Zoomed-in with site highlighted.
25. Fabric contrast between historical village and high rise community in Yuliang
26. Yuliang Village and Old Town Center
27. Expansion of Existing Village
28. Yuliang Village from other side of Lian River
29. Yuliang Current Constraint
30. Master Plan, Existing Historical Landmark Preservation
31. Yuliang Dam
32. Lion Bridge
33. Master Plan, Building Reuse
34. Master Plan, Waterfront Infrastructure
35. Pollution at Waterfront
36. Local residents washing clothes in river
37. Concept Collage of Stitching the Village with High-rise Community
38. Master Plan, New Threshold
39. Focus Site Context
40. The Collection of Villagers’ Activities

Image of Sundring activity
http://www.globaltimes.cn/content/1119441.shtml

Image of Wood hooping-carpenter
http://blog.sina.com.cn/s/blog_a30e8c210102y0yg.html

Image of Ink stone making
http://www.dianping.com/shop/122464783

41. Program Proposal
42. Program Diagram
43-44 Concept Diagram
45. Alley in Yuliang
46. Design Response to Alley Experience
47. Spatial Experience Collage
48. Lecture and Meditation Space

49. 16” Rammed Earth Wall Separate Different Function Area

50. Traditional Mix-Use Function Diagram

GONG KAI, YULIANG VILLAGE, Series of the Ancient Architecture in Huizhou Page 74.

51. Historical Photos of Commercial Storefront in Yuliang

GONG KAI, YULIANG VILLAGE, Series of the Ancient Architecture in Huizho.

52. Design Response of Mix-Use Function

53. Mix-use House Living Experience on the Second Floor

54. Gardening in Yuliang

55. Stairs at Waterfront

56. Proposed Interactive Gardening Activity

57. Section of New Water Access Point

58. Existing Cladding Texture

59. Ground Floor Plan

60. Building Section with Courtyard Attribute

61. Building Section with Stair Attribute

62. Site Section