

ADAPTING VILLAGES: AN ARCHITECTURAL FRAMEWORK FOR REGENERATING DONG MINORITY SETTLEMENTS.

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Abstract

Inspired by Michel de Certeau's seminal work "The Practice of Everyday Life" which considers the modes of social behaviour by individuals and groups as critical in the production of a collective sense of culture, this paper investigates the idea of village regeneration applied to the Dong (侗) Minority community in Mainland China. The Dong ethnic minority people are one of China's 56 ethnic groups, who live in the region delimited by southwest Hunan, southeast Guizhou and north Guangxi. With a population of almost three million and a long history of more than 1,000 years dating back to the Tang Dynasty, the Dong communities are today, in a similar manner to many other Chinese rural settlements, deeply affected by the phenomenon of 'Village Hollowing'. This unprecedented exodus of rural populations to expanding urban areas, has resulted in almost vacant villages inhabited by struggling communities of mostly elderly and young people.

The complex relationship between daily life, rituals and buildings is a vital part of how the Dong community dwell within their environment. Dong culture is essentially a material culture, they possess no written language, where their most important means of self-identification derives from an inherent relationship between the inhabitants and their artefacts, rituals and their architecture. Public structures such as the "Wind-and-Rain Bridge" and "Drum Tower" are at the heart of all social activity, supporting an elaborate public space system anchored in daily practice. This social structure which results from the habitus of acquired and settled dispositions of its individuals, represents Dong's greatest asset to stem the exodus to the city.

The study will focus on villages along the Pingtan River (坪坦河) in Tongdao County, Hunan Province; specifically concentrating on Gaobu (高步), a village of approximately 2500 inhabitants with a rich history dating back more than 1000 years, as a pilot village for a regeneration strategy. The research methodology is based on an alternative approach of "Adaptive Re-use", engaging and transforming the Dong Minority's existing rich social heritage in order to reimagine and enhance collective life and work experience which will provide a better rural living for the whole Dong community for years to come. By investigating the fundamental social and environmental challenges facing the Dong Community through a new approach of Architectural Prototypes, offering a vision for a new

collective and co-operative system, incorporating multiple functions that respond to the needs of the community in relation to: local environment, climatic conditions, agricultural cycles, available resources and traditional architectural customs.

The project argues that the Dong Minority villages offer a unique and to this day relatively under explored academic topic, to understand how minority cultures have adapted and changed their traditions to coexist within a majority society. Their inherent social/spatial structure is an instrumental asset to animate social life and if adapted can coexist with modernization rather than simply replacing it. Specifically through the analyses of their public architecture that transforms architecture beyond a mere formal solution into a social/spatial syntax, this project seeks to study the system of inherited dispositions, to develop an alternative reactivation plan.

Keywords

Rural Village Regeneration, Dong Minority Architecture, Rural to Urban Migration, Chinese Minority Social Village Structures, Architectural Prototypes

1 China's Lost Villages

"In the next 20 years an estimated 280 million Chinese villagers will become city dwellers, attracted by urban jobs and opportunities".

(Messmer & Chuang, 2013, p. 11)

To talk about China's rural villages one cannot escape the reality of unprecedented urban development in China. Since the late 1970's following Deng Xiaoping's economic reforms, China has experienced an unparalleled exodus from the countryside to the city. As a consequence of this mass migration, villages are rapidly disappearing. According to China's ministry of Civil Affairs, in 2002 there were 3.6 million villages, while in 2012 the number reduced to 2.7 million. In an effort to transit its economy to an increasing domestic market, it is estimated that China is losing 300 villages a day (Poon, 2015), where in the next decade the Chinese government plans to move hundreds of people from rural areas to cities.

As reported by the leading sociologists in the field, Prof. Martin King Whyte, this process has led to the creation of "One Country, Two Societies" system (Whyte, 2010, p. 25). Whyte explains that the paradoxes of the Rural-Urban inequalities in contemporary China are linked to profound changes imposed after the communist revolution, creating a population that was effectively bound to land. To this day, Whyte argues, China is still struggling with the repercussions of this legacy, where the aspects of inequality beyond the frequently cited income disparity, relate to: access to education and medical care, the digital divide, housing quality and location. All these factors result in sentiments of strong urban discrimination, particularly by the so-called 'urbanites' towards rural residents and urban migrants.

When it comes to village preservation, there is little or no time for nostalgia in China. Any incentive to increase China's growth is typically met with open hands as Deng Xiaoping's phrase "Development is the ultimate principle" attests to. In order to put into perspective the implications of China's relentless growth on rural life, one has to read Messmer and

Chuang's magnum opus, *China's Vanishing Worlds*, (Messmer & Chuang, 2013) which over a period of seven years forensically documented the status of China's Villages and the disastrous consequences that modernization policies have had on the rural landscape. Of specific importance in the context of this paper, is their focus on the social/spatial dimension of how villages operate and the associated culture of geomancy, fengshui, together with other philosophical and esoteric knowledge that help understand daily village life.

2 Dong Minority Culture

In his book "Allegorical Architecture: Living Myth and Architectonics in Southern China" (Ruan X. , 2006) Ruan outlines the fundamental relationship between architecture and the identity of the Dong community.

"It is architecture that 'speaks' to them, and it is an architecture that is primarily for its inhabitants. The built world indeed is the extension of their body and mind; their experience with architecture is figurative, and their understanding of the built world is allegorical."

To understand Dong culture it is essential to be acquainted with their environment. Dong live in a mountainous area in south China at the junction of the provinces of Guizhou, Hunan and Guangxi. The landscape of rice terraces, bamboo forests and tea plantations is still predominantly intact. Their architecture is intrinsically connected with the land and the topography, generating a harmonious relationship between nature and man-made structures. Their architectural timber heritage is one of the last remnants of an ancient culture in China that is still alive.

In 2006, 27 Dong villages applied for UNESCO world heritage status, and in 2013 were granted tentative recognition (UNESCO, 2013). The report quotes:

"Dong Villages are a perfect integration of humanity and nature, and they reflect the Dong peoples' principle of adapting themselves to nature for survival and development. The Dong Villages are not only an organically evolving landscape, but also a continuing landscape. It has retained its positive social role in the contemporary society connecting with traditional lifestyle, and is a testimony to the evolution and development history of the Dong Nationality."

Central to how the Dong community adapt to nature, is the role of the family unit and social rituals. Dong society is organized around the concept of Kuan (款), which is a form of hierarchical social organization, with a common ancestor or elder at its core; Kuan society links many households that are blood relatives to form a larger family unit. Each family unit constructs a 'Drum tower' that is regarded as a symbol of the family's wealth and status. Drum towers are considered the centre of the Dong's cultural and spiritual life. Symbolically, they represent both a tree and a shelter, Drum Towers are located according to *fengshui* rules and all other buildings in the village must not exceed the height of the village's drum tower. Drum towers, still today are the centre of all political decision making, also function as a type of totem pole and a spiritual symbol for each large family unit, where important events such as celebrating a baby's first month of life, as well as public gatherings, debates, official announcements, dancing and singing events are all held.

Inspired by Michel de Certeau's seminal work "The Practice of Everyday Life" (Certeau, 2006) which considers the modes of social behaviour by individuals and groups as critical in the production of a collective sense of culture, we borrowed the idea of resistance to research the practical procedures behind how the Dong Minority community could reactivate long lasting social customs to become relevant in a contemporary setting.

Our study focused on nine Dong Minority villages located along the Pingtan River, Tongdao - Huaihua region, Hunan Province, namely: Gaobu, Gaotuan, Yanglan, Pingtan, Hengling, Pingri, Shangdutan, Huangdu and Yutou (ordered from South to North). The methodology of the survey relied on generating a Dong Village atlas, that traced and detailed the historical and current status of the villages, exploring how a common, collective ethnography is embedded into the social and spatial rituals. Rather than pursue a tectonic and symbolic study of Dong Architecture, a topic which has already been comprehensively studied by Klaus Zwerger in his book, *Vanishing Traditions: Architecture and Carpentry of the Dong Minority in China*, (Zwerger, 2006) our survey looked into the symbiotic relationship between architecture and the collective, exploring how inherent social systems embedded into the village can become projective platforms and reveal new possibilities within the existing.

Central to all social gathering spaces within Dong settlements is the "Wind and Rain" bridge, a circulation infrastructure that connects villagers directly with their primary source of life and also the village's *raison d'être*, i.e. the river. As well as being a true feat of timber engineering, the bridge is empowered with special spiritual powers that protects the village and allows a complex social programme to function. Men and women have different responsibilities within Dong Society, to this effect the bridge is designed with segregated areas for both sexes. Women are allowed to cross the bridge but not rest in the main section, an area reserved for men. While a separate annex, an articulated tower structure, is typically added to house females. Each public space is crafted according to Dong's social hierarchies, where the articulated form of the architecture represents only the first level of understanding of a culturally layered space.

3 Regenerating Villages

Due to a combination of reasons, there has been an increasing number of renowned Chinese architects working on projects for rural villages. In a recent interview with the NY Times (Qin, 2016), architect and Professor Chen Haoru explains the factors behind these new rural opportunities. Restrictions on the transfer of rural land have been relaxed. Urban residents, weary of repeated food-safety scares and environmental crises, have become increasingly interested in rural lifestyles and organic farming. Domestic tourism, bolstered by the growth of the middle class, is booming.

Projects undertaken vary in scope and in scale, the most notable examples including a village library outside Beijing by Architect Li Xiaodong (2015), a rural community centre by He Wei (2000) and probably the most renowned project for the regeneration of whole village of Wencun outside Hangzhou by Amateur Architects led by Wang Shu and Lu Wenyu (Dong,

2015). According to Wang and Lu, it is imperative to first understand the “natural ways” of the village everyday life, before being able to inject a new social impetus.

The starting point of their project and the reason why the architects selected to work with Wencun village, was the ‘normal’ nature of the village: no noticeable tourist attraction, no important historical reference, simply a run of the mill agricultural village with the potential for reformulation. Working closely with the community, the architects developed a hybrid language, somewhere between traditional Chinese architecture and modernism, founded on an in-depth study of the construction materials of the village, creating a phased reconstruction strategy which Kenneth Frampton describes as the starting point to “resist the ongoing wanton destruction of built heritage of China’s culture” (Frampton, 2017)

Examples of this nature, prove that a tailored, bespoke architectural design can aid local residents regain confidence in their cultural tradition through experimentation that forges new relationships with the past rather than simply bypass heritage in the name of economic progress.

4 Architectural Prototypes

Our study will focus on Gaobu, a village located along the Pingtan River in Tongdao County, Hunan Province of approximately 2500 inhabitants with a rich history dating back more than 1000 years, as a pilot village for regeneration. The methodology was based on an alternative regeneration approach of “Adaptive Re-use”, engaging and transforming the Dong Minority’s existing rich social heritage in order to reimagine and enhance collective life and work experience, providing better rural living for the Dong community for years to come.

The notion of the “prototype” is here inspired by the work of the architect Cedric Price who in his urban project of 1997 entitled “Magnet” (Price, 2012) proposed a series of temporary projects that would provide public amenities and stimulate new patterns of public engagement in the city. Price’s theoretical position relies on “magnets” being facilities with inherent possibilities of change, growth and adaptability compared to buildings. Price argues that architects often see buildings as a cure for social problems, a role he believes they are singularly ill-suited to, as they are: too slow, too solid and too late. The architectural prototype is here conceived, as opposed to the prevailing use of the term in the architectural field where it is commonly associated with digital fabrication, as a context-sensitive designed project that serves as a working model for the implementation in numerous analogous situations. The prototype as a paradigm, encourages rethinking of existing ecosystems in order to produce and incorporate novel expressions as well as new performances.

The proposed approach is expected to address existing weaknesses in current regeneration programmes put forward by both national and regional authorities, which rely on a static planning strategy heavily geared towards tourism promotion. Following the “tentative recognition” award by UNESCO (2013) to a number of Dong Minority villages along the Pingtan River valley, many local authorities have swiftly embarked on a policy of employing local customs as a symbolic asset in the development of a new tourist economy with potentially catastrophic effects. Entire villages cease to be operational economic and social

entities reliant on agriculture and the environment, falling victim to a “theme park” mentality that produces a quasi-state of cultural taxidermy.

This project argues that the Dong Minority villages offer a unique and to this day relatively under explored academic topic, to understand how minority cultures have adapted and changed their traditions to coexist within a majority society. Their inherent social/spatial structure is an instrumental asset to animate social life and if adapted can coexist with modernization rather than simply replacing it. Specifically through the analyses of their public architecture of the “Drum Tower” and the “Wind and Rain Bridge” that, as argued by Raun (Ruan X. , 2006), transforms architecture beyond a mere formal solution into a spatial syntax that informs and organizes social structures, this project seeks to study the system of inherited dispositions, i.e. the “habitus” of Dong Minority cultures, to develop an alternative regeneration plan.

Central to each prototype will be the input from local residents. To this regard, the Dong minority have two key assets. Firstly, Dong community live within an autonomous prefecture falling outside the direct jurisdiction of China’s central authorities and secondly Dong have strong existing social structures where each community is led by both a male and female village chief.

5 A Place to Play and Learn

Although our original study, *“Reactivating the Social Spaces of Chinese Ethnic Minority Villages”*, focused on developing several rural prototypes, designed during a 2 weeks summer school organized by CUHK School of Architecture together with Guangzhou University Department of Architecture in June 2016, this paper (for pragmatic reasons) will focus on a single prototype as a means to demonstrate an architectural framework of reactivating a minority village via ‘surgical’ social programme insertion.

Children represent Gaobu's biggest asset towards a sustainable future. With most of the working population gone, Gaobu is today populated by two predominant demographic groups, children and elderly. Most children are raised by their grandparents until the age of ten, when they are forced to leave and study in nearby towns. Educational facilities such as schools and libraries are poor and in some cases non-existent, hence this prototype seeks to generate an educating incubator offering facilities for both children and elderly.

During our fieldwork we also observed that many of the local customs such as crafts, singing and music were slowly becoming extinct, and the possibility of creating a knowledge centre where both modern and traditional teaching could happen in tandem would benefit the community. Additionally Gaobu’s inhabitants are in urgent need of education relating to issues such as food and health; for example until the late 1980’s locals did not consume hardly any refined sugars, while today sugar is endemic within the village, supplied to most children via the ubiquitous village shop, with the associated predictable consequences.

After consulting the village chief we agreed that the most pressing amenity the community needed was a local library, a venue where children and the elderly could meet and share stories. The conceptual thinking behind the prototype developed from the site itself, which

we selected together with the Gaobu's chief. Contrary to Han villages, Dong chiefs have the authority to appropriate land vacated by families that have emigrated the village for more than 10 years.

Located on the shores of the river, adjacent to one of the 4 main village bridges, the site of the new prototype is a vacant plot squeezed in-between a small village gate and a community centre. Its trapezoidal shape perimeter has 3 distinct sides directly in contact with the river facing north. A key feature of the site is its steep topography, resulting in the plot being surrounded by multiple stairs each connecting to different places, i.e. site and gate, site and river, etc.

Having witnessed how stairs become a key architectural element in Dong daily life, a place where people usually congregate around and especially a place where children love to play, stairs became the generating idea of the prototype. Rather than use the stairs of the new library as a circulation element we decided to wrap the stairs around the perimeter of the plot, in the process creating an inner 'doughnut' void space inside. This internal space would become the room where people would engage in classes and public events while the stairs would act as both the reading area and the bookshelf. The building becomes a dynamic circulation and programmatic vessel for villages to interact with and not a static centre devoid of life.

The idea is that while children are playing they can also stop and read books or listen to a story, rather than a chore, reading becomes fun. We introduce three functions in the form of separate rooms: A small children theatre, a reading rooms and a mezzanine for studying. The whole buildings is made in timber, where the inner core will be fabricated off site while the main structure, the stairs and the outer façade are made from local wood. The bookshelf will be an enclosed space, with glass panes and timber panels protecting the books from the elements. Finally, the library will have two entrances: one from the river and the other from the village gate. The total area of the floor plate is approximately 90 sqm.

6 Conclusion

At the core of this project lies a philosophy of generating new life to allow Gaobu village to move forward into the future but at the same time remain strongly connected to its existing village cultural roots. Dong culture and family structure strongly focus around the notion of public social spaces, from the "Drum Tower" to the "Wind and Rain Bridge", socializing in public is an integral part of Dong culture. This library starts off from this premise and attempts to create an "adapted" new typology of social space for children that isn't simply an extension of the school or a depository of books.

This project is part of a wider "Minority Village Reactivation" scheme looking at ways of regenerating village life within the Dong Minority and become a new paradigm to stop urban migration. The 'Adaptive Reuse' strategy, via a reinterpretation of the 'in situ' built environment, focuses on developing a village toolkit, of concrete examples taken from the Gaobu pilot village. Special attention will be given to public facilities commonly missing or lacking in most villages as well as enhancing the human relationship with nature embodied

in the Dong culture. Eventually our masterplan will build on the existing relationships the research team has built with both the villagers and the policy makers over the next 18 months. It will strive to promote a rural Dong growth strategy, a redevelopment scheme that may provide an interesting example for other rural minorities in China.

Finally by directly integrating the knowledge gained from designing and specifying the architectural prototypes into the proposed masterplan, the emphasis will be to share this research knowledge with policy makers, and to establish a series of new relationship with potential stakeholders interested in potential co-production projects.

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Figure 1_Gaobu Village with the site of the prototype in the foreground



Figure 2_Section through the Library Prototype

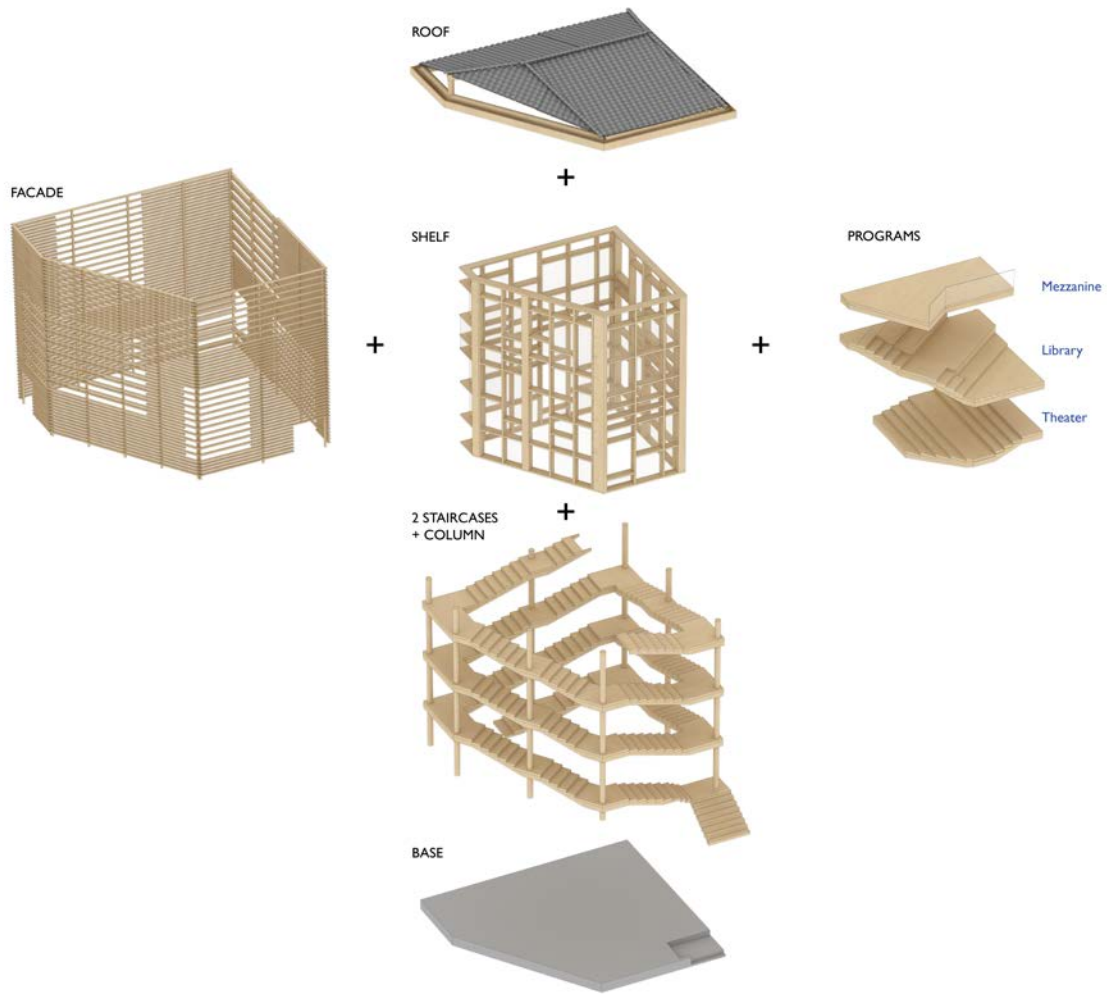


Figure 3_Architectural Elements of the Library Prototype

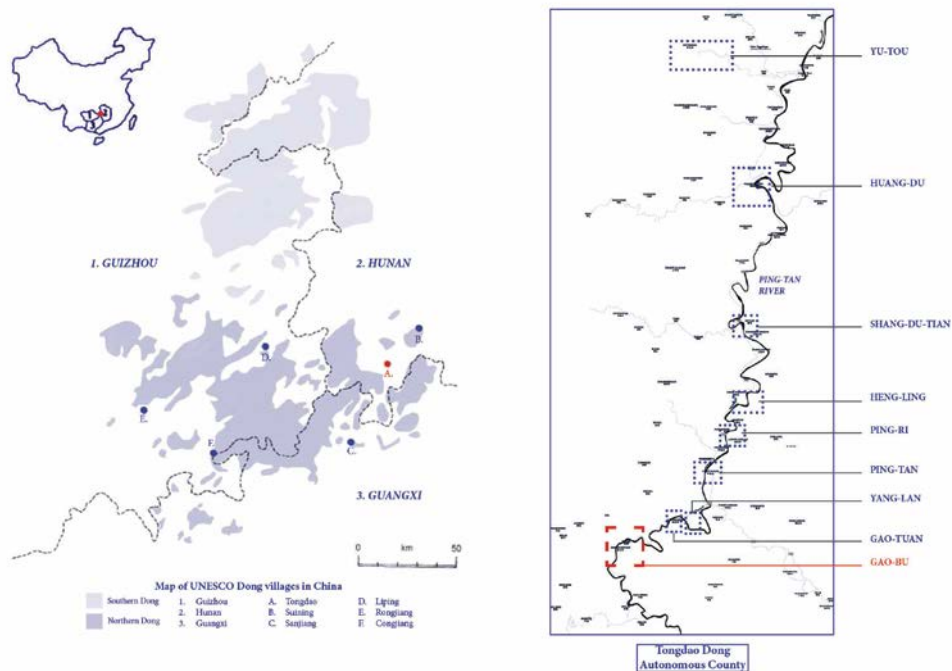


Figure 4_Two maps situating the Dong Minority region and the project area.

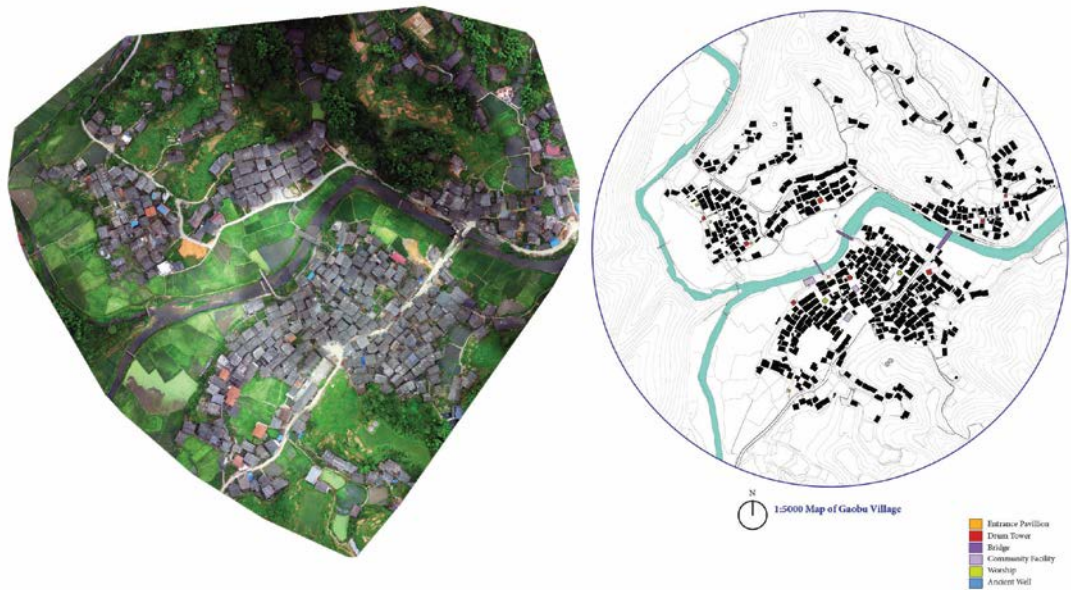


Figure 5_Aerial view and Plan of Gaobu village

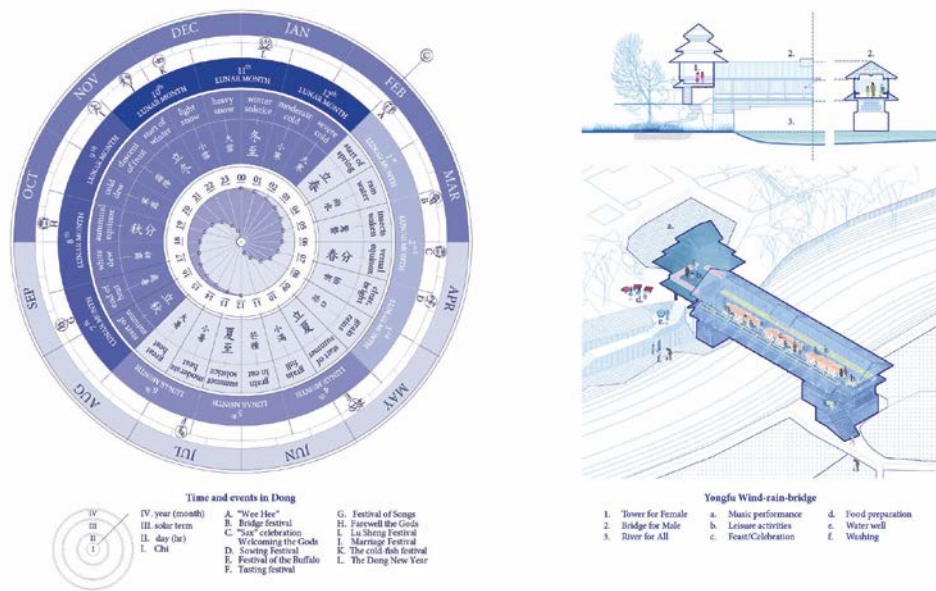


Figure 6_Two diagrams showing the Dong rituals and the functions of the "Wind and Rain" bridge.