



The Significance, Conservation Potential and Challenges of a Traditional Farming Landscape in an Asian Metropolis: a Case Study of Lai Chi Wo, Hong Kong

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■ Abstract

Lai Chi Wo is a remote farming valley located in the northeast of Hong Kong, China. The agricultural landscape is the result of more than 300 years of interaction between a traditional Hakka settlement and its natural environment, which reflects the ancient Chinese Feng Shui philosophy. Although the site is one of the most intact and authentic vernacular cultural landscapes in South China, with important environmental and cultural values, there is no effective protection system available to conserve the landscape as a whole. Its isolation, and the weak attachment of the younger generation further threaten the landscape's sustainability. Since 2013, a collaborative local initiative has been implemented to revitalize the landscape, the natural and cultural heritage, and the community of this once-deserted village. The regeneration of this agricultural landscape has provided a portal for wider society to participate in the environmental and cultural stewardship process.

KEY WORDS: Lai Chi Wo, traditional farming landscape, farming terrace, *Feng Shui* village, *Feng Shui* forest, rural revitalization

■ 1. Introduction

At first glance, Hong Kong is a hustle and bustle cosmopolitan city, well known for its overpowering urban landscape, with high-rises and high-density development. Only 24.2% of its area is, in fact, covered by urban land-use (HKSAR 2017a). Beyond the metropolis lies another, disappearing, rural Hong Kong, where the vast farming landscape once supported the living of most of Hong Kong's population. Many farmlands, orchards, and terraces still exist, although most are abandoned. There are also depopulated villages, that have been shaped by generations of rural communities who have designed, constructed, and managed the farming landscape for hundreds of years. Among them is Lai Chi Wo, one of the most intact traditional farming landscapes still existing in today's Hong Kong.

The traditional farming landscape in Hong Kong is the result of long-term interactions between human settlements and their natural environment; the landscape setting also embodies the ancient Chinese wisdom of *Feng Shui*. This paper examines the spatial setting, the cultural and ecological characteristics of Lai Chi Wo, and presents Lai Chi Wo as an example to discuss the significance, conservation potential, and challenges of the traditional farming landscapes in Asian metropolises, such as Hong Kong.

■ 2. Lai Chi Wo: a traditional Hakka farming landscape

Hong Kong is situated at the mouth of the Pearl River estuary (Figure 1, left) and is characterized by its rugged topography. Flatlands are scarce, therefore most of the large, early settlements

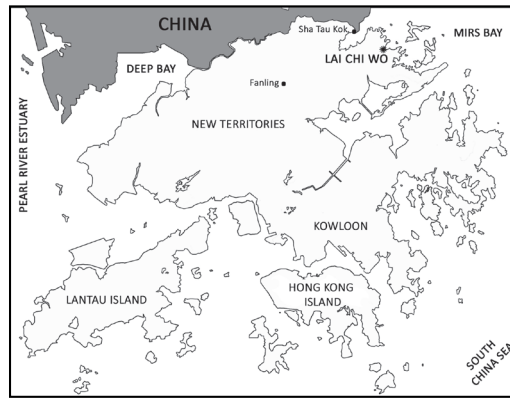


Figure 1. Location map of Lai Chi Wo and Hong Kong

are located at the northern and northwestern side of the territory, where extensive flatlands could be found (Owen and Shaw 2007). The northeastern part of Hong Kong, on the other hand, is far more rugged, with fewer flatlands available for traditional paddy farming. These hilly landscapes were usually inhabited by the late settlers, the Hakkas (客家), 300 years ago. In Hong Kong, the Hakkas are recognized as one of the four major indigenous ethnic groups. They are a subgroup of the Han Chinese that originated in northern China who began to settle in the territory after the repeal of the Coastal Evacuation Order in 1669 (Liu 1999).

Lai Chi Wo is located in the remote valley of the northeastern shore of Hong Kong (Figure 1, right) and is about 13 km from the closest downtown area. It is a natural valley, with an area of about 1 km², embraced by mountains, with the northern side facing Mirs Bay. The archeological findings from the site showed that there has been human activity since 2,000 years ago (HKSAR 2014). The village was settled in the late seventeenth century by two Hakka clans, the Tsangs (曾) and the Wongs (黃). Their ancestors adapted to the rugged topography and modified the hillslopes into terraces for paddy farming. At its agricultural prime in the 1950s, Lai Chi Wo fed a few hundred villagers and supported nearby fishing communities. The farmlands once covered more than 40 hectares of land. Today, the site is enveloped and isolated by the statutory protection areas.

The village was once abandoned in the 1990s–2000s and most of the villagers moved abroad. However, the Hakka community of Lai Chi Wo still demonstrates very strong community cohesion and attachment to their motherland, even when most of the villagers live abroad. For every traditional festival, such as the spring and autumn tomb-sweeping festivals (春秋二祭) and the ten-year *Dai Jiu* festival (打醮), the overseas villagers return to Lai Chi Wo to join in the rituals. They still use their Hakka dialect within their community. Lai Chi Wo is also the center of Hing Chun Yeuk (慶春約), a rural alliance of seven nearby Hakka villages, connecting the Hakka communities of different villages together.



3. Feng Shui – an ancient Chinese philosophy and science of co-existence with nature

Traditional farming landscapes in Hong Kong embrace the Chinese notion of human coexistence with nature. This was expressed through the ancient Chinese belief system of *Feng Shui*. *Feng Shui* literally means “wind and water” in Chinese. It is an esoteric set of geomancy theories and practices that “allows humans to comprehend and take advantage of the forces of nature that surround them, but also guides the creation and maintenance of landscapes” (Watson 2007). People believe practicing *Feng Shui* can ensure good fortune, that includes wealth, progeny, good harvests, and official positions (Knapp 1990). *Feng Shui* is deeply rooted in Chinese culture and has shaped almost every settlement landscape in ancient China, including rural villages, such as Lai Chi Wo.

Figure 2. An ideal layout and symbolic elements of a Feng Shui village (Mak and Ng 2005)

An ideal *Feng Shui* setting model was established in ancient China to help people find and modify a site for settlement, as shown in Figure 2. It follows two fundamental principles, “facing onto water and sunny side” and “backing onto mountain and shading side” (Cheng and Kong 1993). The landforms are undulating rather than linear, blessed with gentle winds and slow, meandering streams to promote good and gentle circulation (Coggins 2003). Lai Chi Wo village sits northwest, at the



Figure 3. This aerial photograph, taken in 1956, gives a glimpse of the old farming landscape and Feng Shui setting of Lai Chi Wo and nearby branched villages. ①=Lai Chi Wo village, ②=Hillside Feng Shui forest, ③=Estuary Feng Shui forest, ④=Paddy terraces, ⑤=Mui Tze Lam village, ⑥=Kop Tong village, ⑦=Siu Tan village. (Mapping and Survey Office, Hong Kong SAR Government)

foothill, and facing southeast to the sea. The settlement lies between two ridges on the southern, sunny slope, forming a protective arc to shield the village from cold winds in the winter, yet they receive sun throughout the year (Owen and Shaw 2007) (Figure 3). The village stands above a floodplain and is nourished by slow moving, meandering streams. The axial arrangement of village houses also ensures that the heat of the sun is seasonally captured, or evaded, by the southeast-facing front (Figure 4). Between the village and the hills, a species-rich, mature, forestland is maintained, the *Feng Shui* forest. It blankets the hills behind, while all other hillsides were stripped bare for fuel in the old days. The *Feng Shui* forest serves as a natural barrier to protect the village from landslides and hill fires, as well as moderating the microclimate and providing natural resources, such as foods and fuels (Yip et al. 2004). Furthermore, the villagers of Lai Chi Wo plant bamboos to block the bad (strong) wind and maintain an estuary *Feng Shui* forest near the shore to protect the village from sea wind and wave, which is unique in Hong Kong. The *Feng*



Figure 4. The layout plan of the village houses: all houses are neatly arranged along three vertical and nine horizontal lanes with the same facing direction (southeast) enclosed by the village wall according to the note given by the Feng Shui master hundred years ago to optimize living environment and control over-expansion which might exceed the carrying capacity of the landscape



Figure 5. The Hakka traditions preserved in Lai Chi Wo. Upper left = Hakka snack, Cha Kwo (茶粿), made with rice powder and local plant *Paederia scandens*, upper middle = Traditional rice farming tools displayed in the village exhibition room, upper right = Building mortared wall using soil, rice straws, raw sugar/sticky rice and oyster shells, lower left = Earth god worship, lower right = Hakka Unicorn dance (舞麒麟)

Shui setting is a characteristic landscape feature of traditional farming villages in South China and it has been proven that the embracing hills and the southern exposure were an ideal spatial configuration for village settlement and paddy rice cultivation (Lovelace 1985).

Feng Shui displays the philosophical thinking of the ancient Chinese about the concept of balance and harmony with nature in the development of traditional settlements, with many specific manifestations that embody the rich comprehension of nature's rules. It represents a Chinese indigenous form of environmental design and management that builds community solidarity (Coggins 2003). Today, Lai Chi Wo village still endeavors to protect its *Feng Shui*, although perhaps not quite so strenuously as before; these principles guide the management and the use of the environment by emphasizing elements of the natural order that have worked for generations. The traditional belief system protects not only the site's integrity as a *Feng Shui* village but also sacred trees under the earth god as a tradition of worshipping nature. This strong belief has made the site the most intact *Feng Shui* farming village in Hong Kong, whereas most other similar landscapes have been destroyed, fragmented, or intruded in modern South China upon rapid urbanization (Cheng et al. 2009).

4. Farming landscape: a place to incubate nature-based culture

Historically, most of the villages in Hong Kong were villages of rice subsistence farmers. Lai Chi Wo was no exception: two crops of rice and,

often, a third crop of winter sweet potatoes, were grown in the small farming fields. The warm and humid climate resulted in a prevailing farming mode of paddy rice cultivation among villages in the South China region. The Hakka ancestors opened the foothill and upland areas; they terraced the hillslopes along the contour lines into small, flat farming plots to adapt their double-crop rice tradition into the marginal hilly terrains they occupied. Some steeper upland terraces were used to grow fruit trees. The terrace design was an important landscape modification feature, associated with the local Hakka culture, in response to rice cultivation and soil erosion (Fan 1992). The farming terrace system was supported with an extensive, but carefully designed, irrigation that directed the freshwater source from the upper hills to feed every single terrace field and farmland for the cultivation of rice and other crops.

Natural resources have never been limited in Lai Chi Wo. A wide application of local materials could be found in every aspect of the previous village life. The villagers used stones collected from the streams and hills to build retaining walls to support terrace and irrigation channels. They used local trees, grasses, and bamboos as fuels and for making farming tools and weaving baskets. Local soil was the basic building material to produce mud bricks and mortared walls. The local plants provided rich resources for making clothes, dyes, foods, etc (Figure 5). The use of local, natural materials, as well as the way the Hakka ancestors built their dwellings on slopes, minimized the economic input under the previous harsh living conditions. And this close and reliant relationship with the natural environment incubated the indigenous knowledge of nature,

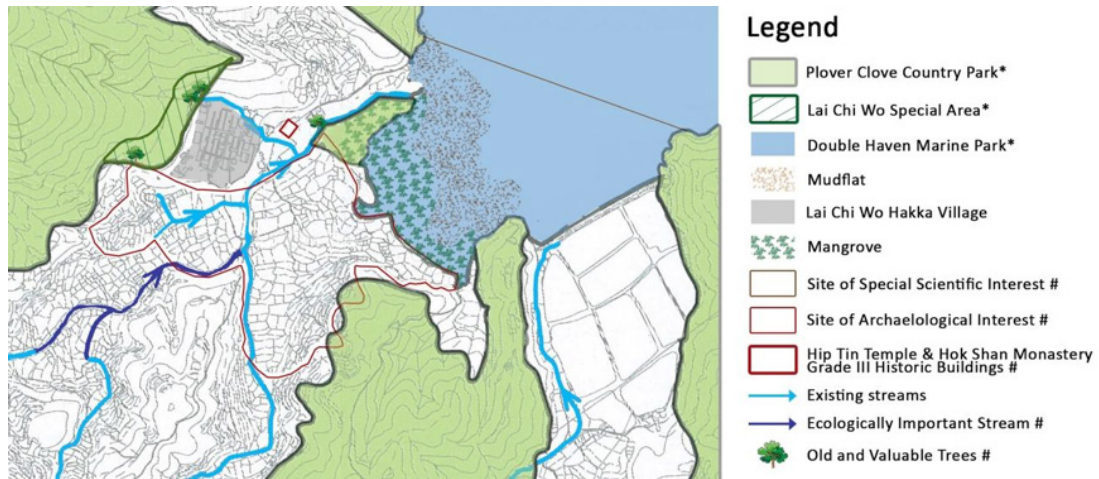


Figure 6. Map of Lai Chi Wo's environmental and cultural resources. * = Statutory protection system. # = Non-statutory conservation status

adaptation, and the mindset for the sustainable use of natural resources for the sake of long-term self-sufficiency. It has become a form of a unique natural manifestation of the local Hakka culture, which can still be seen from the village's older generations today.

5. Revitalization of deserted landscape

The rice farming tradition continued essentially unchanged in rural Hong Kong until the mid-twentieth century. After World War II, however, the government started to massively develop the rural areas that, together with the influx of refugees of the Civil War in mainland China, led to an important directional change in local agricultural development, which heavily impacted on the rice farming tradition of rural communities (Liu 1999). From about the 1960s, rice farming ceased to be practical in the villages because of the ever-increasing opportunities for better-paid work in towns and abroad. The young people of the villages moved to urban areas, abroad to the UK, or other European countries, to seek new job opportunities, leaving the farmlands lying abandoned. The last paddy field in Lai Chi Wo went out of production in about the late 1970s. The original farming community of Hakkas was gone. On the other hand, the rich environmental resources of Lai Chi Wo has attracted the government to invest substantially in nature conservation. The government announced the establishment of the Plover Clove Country Park in 1979 to protect the water catchment, and later the designation of the Yan Chau Tong Marine Park in 1996, to protect the marine resources in the inner sea (Figure 6). The hillside and estuary *Feng Shui* forests of Lai Chi Wo have been zoned as protected areas because of the species richness and abundance as well as its unique composition (HKSAR 2017b). The site is also an integral part of Hong Kong's UNESCO Global Geopark due to its special geological significance and part of the irrigation streams has been recognized as

Ecological Important Streams too. Recent research further indicates the outstanding integrity of the subtropical forest-mangrove system which is associated with a human settlement, probably the best in China, displayed in Lai Chi Wo catchment (Morton 2016). However, it must be noted that the major dwelling and farming areas of Lai Chi Wo are still privately owned and not designated to any statutory protection but enveloped by a statutorily protected area. The environmental protection designation of the surroundings has successfully protected the enclave, Lai Chi Wo, from any development so far, including road access, but, further exacerbated the isolation and inaccessibility, which cut-off Lai Chi Wo from economic opportunities and accelerated its abandonment. The village was deserted. Farmlands were left abandoned and overgrown with trees. The terrace and irrigation structures collapsed and degraded. Only the village houses were minimally maintained, relying on the remittances sent back from the villagers who were resident abroad or in town. This socio-economical change has terminated the long-term intimate interaction of the indigenous rural communities with the natural environment, completely detaching the local community from their homeland.

In 2013, a local initiative, named "Sustainable Lai Chi Wo," was launched (<http://www.socsc.hku.hk/psl/laichiwo>). It is a multi-year, rural revitalization program led by The University of Hong Kong, in collaboration with the local indigenous community, NGOs, and the private sector to revitalize the landscape, natural, and cultural heritage as well as to rebuild the community network of Lai Chi Wo (Figure 7). This is the first revitalization attempt in Hong Kong for a deserted village. The program implements farming, research, and capacity training via a collaborative approach, and engages not only the local community but also the wider society to participate in rural sustainable development. This program helps the retired villagers to resettle and attracts

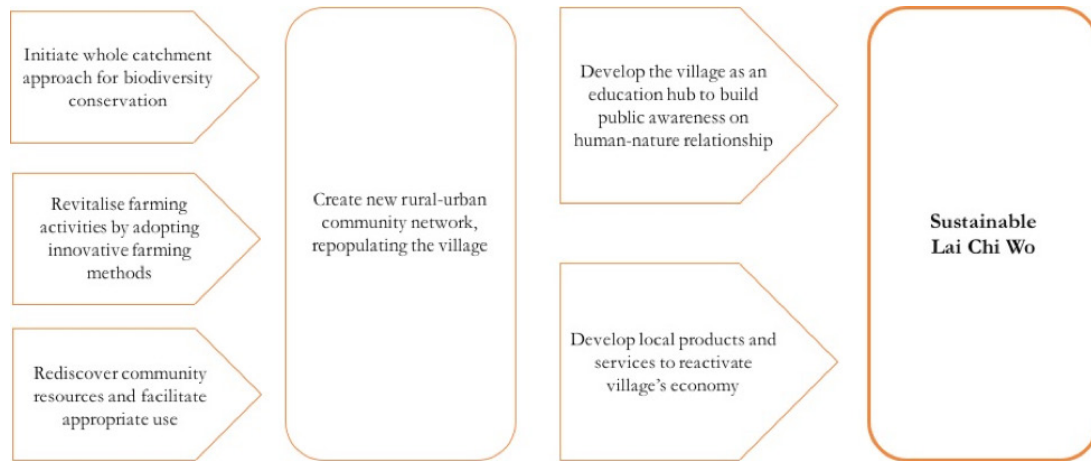


Figure 7. The program logic of the Lai Chi Wo's revitalization

new settlers from the city who have a strong environmental consciousness to move into Lai Chi Wo and set up their own farms in order to restore the vibrancy of the farming landscape and community. So far, the program has restored the farmlands and irrigation system of five hectares of land and facilitated the setup of seven community farms by villagers and new settlers for small-scale organic production. The village has been repopulated from zero population to near 20 active, indigenous villagers and non-indigenous new settlers regularly living, farming, and running small tourism-related businesses inside the village since the program started.

6. Conservation challenges and sustainability

As a continuing organically evolving cultural landscape, Lai Chi Wo displays a high level of spatial integrity, cultural authenticity, and ecological uniqueness, which is rarely seen in any modern metropolis under the force of rapid urbanization. Lai Chi Wo, as a case, exemplifies the interlinking relationship of nature–culture in the context of a traditional agricultural landscape, in which the understanding of the traditional system and lifeway of Lai Chi Wo provides a powerful reminder of environmental stewardship and its fragility against urbanization and globalization (Atha 2012). “Rural” has long been absent in local mainstream discussions on the city’s development until the recent environmental awakening and raised awareness of food security among the society. The village revitalization of Lai Chi Wo has brought the topic of rural sustainability to wider public discussion (SCMP 2015). Nevertheless, the current heritage protection in Hong Kong is monument-focused and little attention has been paid by local government to any historic landscapes (Atha 2012). The privately owned dwelling and farming area of Lai Chi Wo cannot enjoy statutory protection, whereas the current environmentally centered country park and marine park system neglects the

importance of the nature–culture interaction and under-represents the cultural significance of the landscape. The recognition of “cultural landscape” in the local heritage protection system, therefore, would help the development of appropriate conservation strategies to safeguard the fruits of nature–culture interactions.

Moreover, there is a more critical succession issue. The indigenous participants of village revitalization are mainly the returned villagers from overseas who are usually over 60 years of age. They are the last village-born generation who know the customs, remember the traditional knowledge, and have witnessed the village’s changes over time. They provide the most valuable first-hand information for the reconstruction of Lai Chi Wo’s genuine history and culture. However, their next generation, mostly born abroad, has never lived in or even visited the village. The young generation is unlikely to return, but they will succeed the land and property ownership from their parents. Their weak attachment to Lai Chi Wo indeed poses considerable uncertainty about the continuity of the Hakka tradition and the long-term sustainability of the privately owned site in the near future.

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