

Visual Studies



ISSN: 1472-586X (Print) 1472-5878 (Online) Journal homepage: www.tandfonline.com/journals/rvst20

No heritage found on map: the vanishing villages of Hong Kong

Scott R. McMaster

To cite this article: Scott R. McMaster (07 Jan 2025): No heritage found on map: the vanishing villages of Hong Kong, Visual Studies, DOI: <u>10.1080/1472586X.2024.2438881</u>

To link to this article: https://doi.org/10.1080/1472586X.2024.2438881





No heritage found on map: the vanishing villages of Hong Kong

SCOTT R. MCMASTER

Sunway University, Malaysia

Twenty years after its 1997 handover back to China, Hong Kong remains a unique place on the world's stage. British colonialism has left many enduring marks on Hong Kong identity as well as on its physical landscape. One of the most peculiar, and controversial, is the legacy of the Small House Policy of the New Territories; an agreement reached between the British and the village leaders after it leased the New Territories in 1898. In a city of severe land scarcity, this unusual law grants decedents of 'original villager's' families (mainly Hakka people), upon their 18 birthday, rights to build a maximum three-story house of no more than 2100 sqft. With skyrocketing housing prices downtown, this has created a boom of these 'village houses' being build and sold, mainly to 'new villagers' migrating from the city, on lands that once were Hong Kong's farms and rice paddies. This has led to rapid changes in the visuality of these once traditional villages. Most notable is the disappearance of the traditional Hakka ancestral family homes. This visually driven study employs multimodal methods to seek a more in-depth picture of current village life in North Eastern New Territories, Hong Kong by observing, documenting, collaboratively creating, and jointly analysing the multimedia data captured. This study documents the derelict, intact, restored, in ruin structures, attempting to trace revitalized elements of traditional Hakka villages via their design, layouts and relationship with the natural environment. The study looks at how the making and sharing of imagery can foster dialogue and analysis of the current state of flux of these villages, its land and reconsider the 'place' they occupy and how these changes may affect visual cultural identity.

POSITIONALITY

Moving to Hong Kong in 2017 and taking up a new position as professor of visual arts at a local university I knew, based on my almost decade of living in urban Korea, that I needed to take up residence outside the dense urban areas of the city and be closer to nature. That is how I ended up residing in one of the villages, covered in this study, on Ting Kok Road. Straddling the

sea and mountains it reminded me of where I grew up in Newfoundland. During my daily commute and wondering how I might use my previous image-based research (McMaster 2018) to create a research proposal that could be grounded locally, I began to note these old, dilapidated homes peeking out behind a hoard of ubiquitously banal village homes. Scarce as they were they nevertheless were present in small quantities in each of the villages along Ting Kok Road, they once again connected back to Newfoundland, prompting me to think about the old salt boxes that were suffering the same fate of neglect and abandonment due to the collapse of the fishery since the early 90s. The homes in various forms of decay also connected to my creative practice often dealing with themes of transformation through an aesthetic lens of deterioration. This formed the root of my inquiry, wondering how these homes came to be in this state, what could I learn about the culture behind them, and what connected them? As well as what significance they held in Hong Kong's history?

BACKGROUND

Since the implementation of the 'Small House Policy' (SHP) (Ma, 2016) village life in the New Territories has seen tremendous change on many levels (Lee and Distefano 2002). The SHP is a guideline established outside of Hong Kong's normal housing regulations and stipulates succession of lands to indigenous villagers once they have come of the age of 18 (Lee and Distefano 2002; Ma, 2016). The guidelines are quasi-traditional in that they hark back to Qing Dynasty rules and traditions and the New Territories have historically been treated differently than the rest of Hong Kong due it being leased not ceded lands (Chan 1999). Following WWII, there was a general decline in subsistence farming in the New Territories as villagers went abroad for work (Chan 1999). Construction in the New Territories is also exempt from more stringent Hong Kong regulations and codes meaning that a village house can be erected rather quickly and cheaply (Ma, 2016).

Scott R. McMaster, Associate Professor in the Department of Art, Design, and Media at Sunway University, is an award-winning international artist and researcher, who has cultivated a dynamic 20-year career in contemporary image-making. His work, celebrated in prestigious venues across Asia, Canada, the US, and Europe, features acclaimed projects such as "The Accidental Self" and "Hong Kong Obscura", showcased at venues including Kuala Lumpur Portrait Awards, Trieste Photo Days, and Singapore Art Week. His insightful research into Hong Kong's precolonial Hakka visual culture, funded by the Hong Kong Research Grants Council, and ground-breaking PhD research, awarded the highest accolade in his field, unveils new perspectives on global visual culture in a networked world, showcasing his profound engagement with cultural narratives and digital-era global issues.

This combined with Hong Kong's skyrocketing housing market in the downtown areas has prompted new interest over the past few decades in the quieter and more affordable villages of the New Territories (Cox 2015; Moir 2006). This produced a leasing/selling off of traditionally inherited lands passed down for generations by villagers' families (Ma, 2016) and produced an excess of ubiquitous 'Spanish-style' villas (Lee and Distefano 2002; Ma, 2016) devoid of any reference to the Hong Kong locale or its traditional ancestry. Today these bland village houses are even more pronounced and easily seen simply by casual observation or a quick tour using Google Street Views. This is particularly severe in the North East of Tai Po. However sandwiched in between these pervasive modern constructions are rare links to the traditional Hakka past, poking their heads out providing a stark contrast to the endless beige, brown and grey tiled villas, tracing back to hundreds of years of history. As Tang, Wong, and Lee (2007) point out the 'Green Belt' initiative, while seemingly representing conservation and preservation of regions along Hong Kong's Country Parks, in practice remains 'ambient and flexible' in its implementation. This means that the land and villages that skirt these natural areas, such as Pat Sin Leng and Plover Cove Country Parks, are under increased pressure and scrutiny by developers and the government who are quickly running out of land in the urbanized centres to develop (Ma, 2016; Tang, Wong, and Lee 2007). While there are successes in village conservation and revitalization (though not without controversy), such as Lai Chi Wo Village (Singh 2016), outside of these rigidly designated historic areas there is ambivalence and uncertainly. As Singh (2016) claims this uncertainly is due to the multiple bodies in charge of designating and overseeing the preservation of these old and abandoned villages.

Using the Antiques and Monuments Office (AMO) of Hong Kong's website I viewed what was currently preserved (graded historic) or under consideration and when I looked along the areas of Ting Kok and Bride's Pool Roads there were only a few pieces dotting the interactive map. However other areas, such as Wu Kau Tang, Luk Keng and most other villages apparently possessed nothing of interest or value, in terms of preservation or heritage. At the time, zooming in on the map in many villages in the area returned the message 'No heritage found on the map'. This observation combined with the increased pressure to develop mean there was both an opportunity to explore these villages more thoroughly and an imperative to do so as soon as possible. An additional discovery was made while searching the AMO site was that even when it comes to the buildings and places that are documented and displayed the records leave much room for further details and higher quality images. Clicking on virtually

any image displayed on their site led to a low-resolution pdf image that did not provide much context, one does not know what is to the side or behind the point of view of the camera. Many options now exist such as aerial drone footage to simply adding more images from more angles with a high-quality full frame camera, to give the viewer a better idea of how a building or historic place exists today in relation to its surroundings, as well as high resolution images to see intricate details clearly.

If one travels today, by bus, car or on foot, along Ting Kok Road, one can see many new village houses under construction and old ancestral homes condemned or destroyed. Since the commencement of this project the numbers of traditional homes have dwindled considerably. What once stood on those plots of land, be it vegetable patches, old traditional Hakka homes or 100 +-year-old trees is unknown to passers-by and has largely gone undocumented. However, what once existed there and throughout the surrounding areas is still known to those villagers who have lived there for much of their lives. This presents us with both another opportunity to gain from the lived experiences and opinions of people who are part of a by-gone era and a rapidly vanishing way of life. While it was this initial observation of dwindling stylistic elements, such as more traditional Hakka village architecture, that drew me to this study this was not a meant to be merely a survey of only the physicality of these villages. These structures serve as visual beacons to deeper knowledge which cannot be seen from the road or any websites and is emblematic of more complex changes and issues which lie under the surface and may take on many other forms, yet unknown. That is why this ethnographic research was grounded in-situ with the hopes that the more obvious visual changes would serve as a jumping off point that could lead to unique discoveries and a better understanding of this rapidly transforming region and all but vanished way of life. As Abbas noted this disappearance 'does not connote vanishing without a trace' (1997, 45); however, the traces that do remain are tenuous at best and rapidly eroding. However unlike the post-handover decolonization of Hong Kong Abbas references in his book, the material visual cultures that I have studied here existed hundreds of years before the British arrived.

This study sought to examine what connections exist between remaining elements of traditional Hakka villages (such as architectural style, ritual practices and environmental relationships) and broader shifts in village life and identity across Hong Kong's Northeastern Tai Po region. The inquiry focuses on understanding recent visual and structural changes in village infrastructure, natural surroundings and community practices, as well as villagers' perspectives on

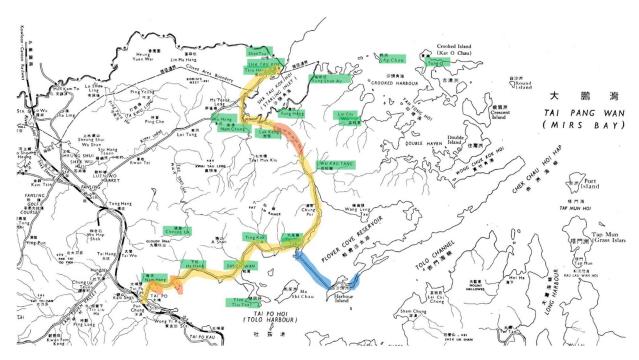


FIGURE 1. Map of study area from 1974 (courtesy of https://www.hkmaps.hk); starting in Tai Po the yellow line follows Ting Kok and Bride's Pool Roads extending up to the Chinese Border in Sha Tau Kok. Highlighted in orange a section of Bride's Pool Road, Tai Po industrial estate, and new town are under construction, in blue newly completed Plover Cove Reservoir, and in green most of the villages included in the study.

these transformations. By documenting local views on challenges to the preservation of Hakka ancestral homes and visual culture, the study also considers how these traditional forms and motifs contribute to both cultural continuity and the collective memory of the villages. Additionally, this research investigates how multimodal, image-based methods can elicit nuanced insights into these cultural shifts, beyond those typically expressed through text alone (Bagnoli 2009).

Approximately 26 villages are scattered throughout the study area and documentation took place in all (highlighted below) but 1 village, likewise interviews were not conducted in 4 of the villages, therefore 21 case studies were conducted in total. The study took place along the Ting Kok-Bride's Pool Road area (Figure 1) beginning with an initial pilot for feedback from a handful of villages, followed by extensive documentation that was followed up with interviews with villagers to gain a better understanding of trending issues and opinions on rapidly changing village life. In total approximately 50 people were interviewed during the pilot and larger study.

FIELD WORK

Pilot Study

The project began in 2018 with a 1-year pilot study conducted with the goal of flushing out issues and ideas for the larger study to follow and testing some of the methods such as in-situ elicitation and 'walking interviews'. Contact had already been made (in person) with village elders/leaders in La Chi Wo, Fung Yeun and Ha Hang to seek permission to conduct the research. Informal interviews were conducted with some of the leaders and villagers and the initial feedback was very positive and encouraging. The informal interviews helped garner a general sense of the recent changes and challenges in village life and facilitated development of the larger study and guide the field work and observations to come. Interviews were conducted in both Cantonese and English (according to preference of participants) with the help of my research assistant doing translation.

Lai Chi Wo Village

This was the first destination in late April 2018, it served as an example of one of the few remaining intact Hakka villages in Northeast Tai Po. It is also worthy of note due to the recent agreement between the village and the Hong Kong Government on a revitalization and guest house scheme. Upon arrival a village elder was sought to explain the purpose of the project and get permission for documenting the village for my project. He happily sat for a short 25 min interview. Afterwards the elder showed us around the village (one of many 'walking interviews') and brought us to several large old camphor and banyan trees that formed a natural northern village border. During our walk, we passed a home with a large banner, stretched across the width of the house, against the guest house

4

scheme, calling it a 'bunch of lies' and a large wall was also spray painted with a sign in English and Chinese against a government representative stating 'LAM CHIU YING NOT WELCOME'. The village elder did not go into detail about the controversy about the project, simply stating that some people disagreed but that most were on board. More detail on this issue is covered by Kao and Ng (2017) who state that many overseas villagers felt they were not properly consulted, and the project was moved ahead without their consent. Besides these rather obvious visual changes to the village, there were also small signs on many and caution tape stating 'no trespassing without consent of the owner' posted by the Hong Kong Countryside Foundation. In addition one of the large tradition homes was condemned, due no doubt to last fall's two typhoons, it was leaning precariously to one side. None of these signs or damage to buildings were present during my initial visit while hiking in September 2017.

Yue Kok Village

This smaller village sits in an almost polar opposite position to isolated Lai Chi Wo, in the shadows of Tai Po's towering housing estates. There remains only a single traditional Hakka ancestral home (Figure 2), and I

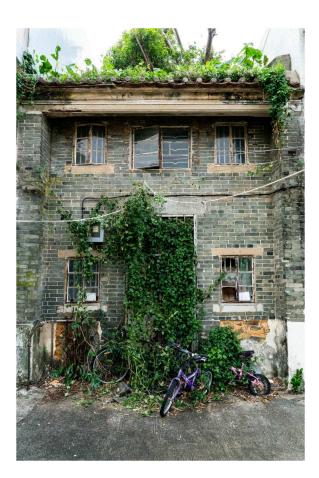


FIGURE 2. Last traditional home standing in Yue Kok Village completes with a tree growing out of its rooftop

was informed by another resident the owners lived abroad in the UK. This resident also consented to an interview and told us she was not Hakka but a 'new villager' who had been renting her home for over 15 years. She informed us the village was under the Chang Clan, unfortunately I was unable to get in touch with the village elders that day (or afterwards) or through official channels.

Fung Yeun Village

This amalgamation of several smaller villages surrounds the relatively new Mont Vert Apartment complex which is a private development built over former village farmlands. On the Mak Family side, there is a small cluster of traditional Hakka ancestral homes, one of which consisted of a derelict, a brand new 2 story home, and a 100-year-old still intact home, all side-by-side. The owner said he lived abroad and that the derelict home would be next to be torn down and another new structure erected. When asked about the other old ancestral home and the possibility of preservation he said it was unlikely due to the complexity and expense. He allowed me to go inside and document the interior (Figure 3). It was mainly used for storage but also contained a small shrine. One exceptional feature of the home that was immediately noted was how much cooler it was than outside, it had to be close to 5 degrees difference to the sweltering mid-30s temperatures outside. This is probably due to the high-pitched ceilings



FIGURE 3. Interior of a traditional two-storey Hakka home

and roof and the clay materials used to insulate the home, upstairs these elements could be seen close up and the techniques of interlocking wood, clay and tile more evident. This visit allowed a more intimate view of a traditional Hakka Home.

On the west side of Mont Vert, another cluster of old Hakka homes stood, and I was lucky to meet the village leader of the Yip clan, who had just arrived home from work. He pointed out some lassie fare attempts at preserving a couple of homes with newer tiles piled in front of their crumbing clay facades. He then happily showed us his ancestral home, which has a dilapidated farm house on the end full of artefacts from the villages farming heyday. He pulled out a wooden bowl and showed us how it was used for collecting greens and precious herbs. He told us a little about Mont Vert and that the rest of the former farmland and perhaps all the villages would eventually end up being another similar development. He pointed to a large old banyan tree which he said would probably remain.

Ha Hang Village

Ha Hang is a small-medium sized village a few minutes east on Ting Kok Road from Fung Yeun. After some surveying and walking around the village I ran into some villagers, and they consented to speak with me. These two cousins both spoke English fluently as they both migrated the UK and one was still a resident there, only back for a visit. They were both elders from the Lee clan. One cheerfully took us on a walking tour of the village explaining about how the old toilet facilities used to work and their relationship with farming. He showed us the new village hall, some shrines and where they used to gather water from natural spring, which is now 2 metres below ground level (Figure 4). This is due to the land reclamation and the building of the Taipo Industrial



FIGURE 4. 'Well below ground', this water source now sits 2 metres below ground level after the industrial estate land reclamation project levelled the land where seashore once was.

Estate and Ting Kok Road. The last thing they wanted to show was where an old tree once stood, it was knocked down months earlier during a typhoon and marked where the seashore used to be. They both shared stories of swimming, catching fire flies and fishing in the early evening there. When asked about preservation, Mr. Lee remarked on how he would like to keep his old ancestral home intact, but it was difficult to source the original material such as the tiles for the roof, he also said modernizing the homes for better living was complicated (It should be noted the home was later torn down and a new one rebuilt in its place).

What connected these villages in the pilot is that they were founded on the sea, they have a strong relationship with nature, and although they expressed a desire for preserving the visuality and culture heritage inherent in their relics or ancestral homes at the same time they shared a somewhat fatalistic view that their disappearance was inevitable. The information they provided touched on the pivotal issues of changes, challenges to the villages, and introduced the important themes of geography and infrastructure which would be expanded upon in the larger study.

Field Work Continued (the RGC Funded Project)

After receiving funding from the Hong Kong Research Grants Council, a full 3-year study was planned. Audio-Visual (AV) documentation of villages/village life was conducted by recording lossless/high-quality imagery and video. This began with a second multimedia survey of La Chi Wo Village which is an excellent representation of a preserved/revitalized and intact Hakka village (Singh 2016) with the traditional Hakka ancestral home features that were sought elsewhere. Using this village as a reference provided better context of the visual and other elements that were documented in the villages that followed but may not have been as visible due to other villages' unpreserved nature and presence of construction and flux. After La Chi Wo, the documentation proceeded organically to the villages of Ha Hang working back and forth along Ting Kok Road to Sam Mun Tsai, Po Sam Pai, Tai Mei Tuk, etc., and Bride's Pool Road to Wu Kau Tang, Kuk Po, etc., until Sha Tau Kok Village the outermost visit done on Crooked Island's Tung O Village in Mir's Bay on the Chinese border. Approximately 26 villages in total are scattered through the proposed study area and documentation took place in all but one village. This was due to an inability to contact the indigenous village leaders through any official channels, or by impromptu visits to the villages, this village (or rather the villagers

that were present when I visited) declined interviews, they stated that unless I could 'promise a road would be built to the village they were not interested' conveying the sometimes frictional relationships with those perceived to be from government. A similar sentiment was mentioned by other villagers in that many local government and post-secondary entities have had some interest in the villages; however, it was not their stories they showed interest in but rather the artefacts that remained as significant relics of Hakka and Chinese traditional culture.

This information further strengthened the underpinnings of this study as it prized villager's knowledge and the sharing of their stories over preservation by removal of cherished objects from their familial past. Instead of attempting to remove these objects from their context the objects served as jumping off points during our interviews providing richer more in-depth connections with the people and places they occupied.

Walking Interviews and Elicitation

Interviews were conducted using various forms of multimodal elicitation following well established practices (Banks 2001; Mitchell 2004; Pink 2013; Rose 2012) using the physical objects while walking through the village as well as the environment (Akbari 2019) and images (Harper 2002) present or previously captured to enhance and prompt the participants, and providing opportunities for them to reveal additional thoughts and information that may not have been directly shared via interviews alone. I also sought to build on the use of visual elicitation used in my previous studies (McMaster 2012, 2015, 2016, 2018) bringing successful online methods into field studies. Although villagers were often asked if they had any old photos to share the majority usually had none, some produced poor quality photocopies of old village images but did not possess the original film or prints. Some village halls did have some older images in frames from the past and they were used as entrance points for further image elicitation.

In the case of this study the villages themselves, the artefacts and natural surroundings became in-situ sources of multimodal or 'holistic elicitation'. Guided tours and a less formal method of 'walking interviewing' proved insightful and yielded not only a lot of visual data but also allowed for a freer exchange of ideas and opinions that transcended a typical sit-down face-to-face interview. This method is sometimes referred to as 'walking as knowing', 'Walks, in other words, are not simply alternative descriptions or representations of

places; they are alternative ways of performing places into being.' (Dányi 2017, 31). This informal method of interviewing also allowed for the environment to become a 'mnemonic mediator', as homes, nature and objects prompted stories and questions which triggered memories of the past, such as the 'tree stump' discussed below.

Following the pilot, interviews and documentation were set to begin again in early 2020; however, the pandemic delayed the start until the fall, and despite the help of local district councillors in making formal contact and scheduling interviews with many of the villagers the start-stop nature of restrictions posed innumerable challenges for the project. Nevertheless, I was able to reach all but a few villages and I was even able to conduct multiple visits in many villages (Ha Hang, Fung Yeun, Lai Chi Wo). In early 2023, some of the group gathering restrictions were finally lifted and I was fortunate enough to be invited to two key celebrations in two villages, one was the 100-year anniversary of a threevillage alliance celebrated with the making of traditional Hakka braised pork belly, and the other was the birthday of Guandi, protector and bringer of prosperity for another village. The latter celebration involved a complex series of Hakka 'Qilin' or Unicorn dances by each of the six families of the village concluding with a large banquet where neighbouring villages also attended. Both of these events were prominently featured at the exhibition.

FINDINGS

Analysis of both image and interview data was ongoing, thematic and iterative. Dominant themes and categories of the data were identified in the context of the project's aims and aspects of changing village life in addition to the emergent themes and issues that came from the villager's interviews. The focus was on what they saw as the most significant aspects of local visual culture, changes and challenges from the past and present as well as their thoughts on the future of village life. Grounded theory (Charmaz 2006, Glaser and Strauss 1967) allowed for active participation in the study as villagers guided me towards what they thought were the most important elements that should be seen, talked about or documented. For instance the two cousins in Ha Hang showing me the stump of a large old tree knocked down by a typhoon, it marked the former seashore (now Ting Kok Rd.), where they used to swim and catch fireflies (Figure 5).

Another instance was the presentation of a 'Bridal Chicken Cage' (Figure 6) by the wife of a village elder in



FIGURE 5. The tree stump shown to me by the cousins (left), a highlighted aerial image of Ha Hang from 1964 showing the tree on the high tide mark/seashore (right, circled).



FIGURE 6. Hakka Bridal Chicken Cage used in marriage ceremonies.

Wu Kau Tang. In each instance I made no formal requests for artefacts, I simply explained how my interest in the villages stemmed from my fascination with the traditional homes and what the overarching questions I had about the villages were. Then I asked them in that context what did they think were some of the most important aspects of the village that I should know, or document were, and this invariably led to a 'walking interview' (informal tour) in every village. This was invaluable as I would have never seen that tree stump as worthy of noting on my own and this was later connected to aerial imagery (confirming their story) which then shaped the entire layout and presentation of the exhibition. This method also proved useful in looking at the imagery that would be selected for the exhibition, described later, as it was the issues and themes brought up by the participants that directed me in my curation.

My study began with the visual as an entry point and then grounded theory allowed participants to help uncover people's relationships with different elements that make up a village, both tangible and intangible. In the following sections I touch on the main findings in reference to my original research aims that sought to examine changes, challenges, and the past, present and future state of village's tangible and intangible culture.

Infrastructure, Agricultural/Lifestyle and Environment

One of the first things that one may notice when visiting these villages is that even though they are located sideby-side, sometimes just 100 metres from each other, there are almost no connecting paths or roads between them. They are only connected by the main road of Ting Kok, previously the shoreline of Tolo Harbour, which was built long after the villages were established hundreds of years ago. All villages now have a more haphazard layout, contrasted with more grid like traditional forms of the past. This is due to the way land has been divided up in a precarious fashion since the Small House Policy. Plots of land are typically irregular with odd shapes and angles and often have narrow slivers bearing signs that they are claimed as 'government land', scattered throughout these private plots.

The aspect of land use illustrates the somewhat isolated nature of each village in the past, while there was cooperation and trade between them, they were largely self-reliant. As one Villager commented, 'Ours was a village which kept to themselves and was not open to outsiders'. Therefore the importance of subsistence agriculture and or/fishing in all the villages' past is evident through discussions about rice cultivation,

waterways, farming practices, so the impact of developments like the Shuen Wan reservoir cannot be understated. With the exception of only a few villages the construction of the dam and land reclamation projects influenced the most profound changes across the area. Not only did these colonial-era projects essentially end hundreds of years of farming, but they also caused changes in the environment, such as the decline of seafood due to pollution and habitat loss, irrevocably affecting villagers' ways of life and livelihoods. As one village elder noted (echoed by many others):

The construction of the Shuen Wan (Plover Cove) reservoir caused the migration of the villagers and most of them were not planning to come back to the village anymore, therefore, when the farmland was left abandoned and some financial groups tried to buy it for development, the villagers had no reasons to reject, and thus rebuild over the old houses and more outsiders² to come and live are the common stories in the village.

Another major change that coincided with the dam's construction was the building of Ting Kok Road (Figure 7). Although its completion brought some positives like electricity, sewage and water, it also brought Hong Kong much closer and many children began to travel into the city for schooling. There they experienced not just a cultural clash but one of language as well:

Many popular cultures such as TV drama, radio broadcasts were all in Cantonese. A TV drama had a show called 'A chai' (呀燦) that was portraying images of the people who just came from mainland and were ignorant to everything in Hong Kong. This had caused [Hakka] people to dare not to speak in other dialects in front of everyone gradually.



FIGURE 7. From left to right the villages of Lo Tsz Tin, Lung Mei. Ting Kok Road forms the line between them and the sea, and Plover Cover reservoir is seen in the top right.

This villager expressed how he and others were bullied or ostracized for speaking in Hakka when they began to attend schools in the city. He said they adapted by consuming more Cantonese TV programs and this gradually lead to a dissolution of the language. This showcases how a new a road being built, something one might consider a rather banal change, had far-reaching consequences for the fabric of village social life, often in unexpected ways.

Traditional Practices, Migration and Generational Diaspora

Participants extensively mentioned the theme of migration, and a significant number of villagers did move abroad, especially to places like the UK and Australia. This led to a decline in the indigenous population and a shift in cultural practices, language and values among the younger generations. As one family, who migrated decades ago but was back for a visit stated, 'We want to take care of the house because it is our family house, if we don't come back, we are afraid it will collapse. Also, I grew up here and miss the lifestyle'.

The impact of migration did and continues to affect almost all the villages, as many people who left have not returned and those that do are elderly and find the upkeep of home and property to be burdensome. One of the main drivers of migration was the large colonial infrastructure project now known as 'Plover Cover Reservoir', which diverted all runoff from the surrounding mountains into the new artificial lake. As a villager from Lung Mei commented:

Change began in 1964 when the Shuen Wan (Plover Cove) reservoir was [being] built. The water from the valley was intercepted to the reservoir and thus caused a shortage of water source for farmland. Many villagers thus quit farming and immigrated to UK, about 60% of the villagers left.

Many participants mentioned various traditional practices and rituals within the Hakka culture, such as making Hakka Chaguo (steamed bun/cake), the importance of ancestral worship, and the symbolic significance of rituals like combing the bride and groom's hair. These practices have deep-rooted meanings and play vital roles in maintaining cultural identity and connections to the past. As one woman, originally from one village but married into another remarked:

We made Hakka Chaguo that our mother taught us in the past. We also had Qilin dance in the past to celebrate different events and celebration because there were many people living in the village, however we do not do it now because there are only three of us still living here.

Generational shifts are evident in the decline of interest among the younger generation in Hakka culture. Younger villagers are more focused on new styles of living and may not be as connected to traditional practices, leading to concerns about the imminent loss of cultural heritage. As another villager lamented, echoing the above; 'We think the techniques of making the Chaguo (茶果) will be lost as no one is willing to learn now.' Cha Kwo is a traditional Hakka steamed glutinous rice cake that includes peanuts, sesame seeds and brown sugar, it comes in colours of green, black and orange. The sentiment of the villagers above is largely true, over several years of visiting these villages I found only one, Kat O, was still making these treats and the cooks were both elderly. They made them for tourists who visit the island only on weekends.

As previously mentioned, a large portion of villagers migrated to Western countries but not all villagers migrated out of Hong Kong, many of the next generation simply moved into the city:

The next generation does not want to live here anymore because they need to work in the city, younger villagers are not keen on the traditional Hakka culture, their children cannot speak in Hakka, and they prefer a new style of house.

The above point re: the 'next generation' was illustrated several times during my project. Early on, during the pilot, one of my assistants accompanied me to an impromptu visit to Ha Hang village, it just so happened that day was a special occasion as several villagers from abroad had returned. They were having a feast of traditional Hakka pork belly, roast goose and other dishes and invited us to join, that's when I discovered that my assistant, in speaking with the villagers, had some Hakka ancestry on her mother's side. She confessed that she had never eaten any Hakka dishes, and it pleased the villagers, who were excited for her to try them all. As the meal wound down a few people began dividing and packing up the leftover pork, goose and vegetables. That's when one of the elderly village men pointed out another huge shift compared to when he was my assistant's age (early 20s), he said that back then having meat was a rare occasion usually reserved for Chinese New Year and even then, it was not plentiful. 'Compare that to now', as he gestured at the takeaway boxes, 'we have more than enough, and everyone gets to take some home'.

Later, near the end of the project when documenting/ participating in the making of Hakka braised pork belly



FIGURE 8. Final stages of the making of Hakka braised Pork Belly.

(Figure 8), a woman in her mid-30s and living in Germany observed the preparations with her German spouse. She said it was the first time she had witnessed it being made and to have the opportunity to eat it. When I asked if she had any interest in ever coming back and taking up residence in her parent's ancestral village her answer was a firm 'no'.

Architectural Heritage, Modernization and Government Policies

Various government policies, such as the small housing policy and water supply developments, have had significant impacts on the Hakka villages. These policies have influenced land use, population dynamics and the preservation of cultural practices. As one villager expressed 'The colonial government had been treating the villagers unfairly. They repossessed their farmland for the construction of conducted pipes [water catchment] to the Shuen Wan reservoir'. This was a resounding sentiment across all the villages that the government was the cause of both the demise of the traditional ways of life as well as attempts at individual preservation/revitalization of practices such as farming, traditional homes and structures through bureaucratic indifference.

As the initial driver of this study, the changing landscape of traditional Hakka homes was often discussed, and villagers usually highlighted the challenges of maintaining and preserving them. The tension between traditional building methods and modern government regulations, such as height restrictions and renovation/construction approvals, has hindered the preservation of their architectural heritage. However, some were more pragmatic and wanted a better life for their family and thus welcomed the conveniences of a modern home:

Some villagers felt unfortunate to tear down all the old houses in the village. However, they all wanted to have a better living environment for them and the next generation. They would support it if the government wished to retain the tradition of the houses, however, it is not up to them to decide.

In terms of newly constructed village houses (built according to the rules of the SHP), traditional Hakka (or even Chinese) stylistic elements were virtually non-existent. In all of the villages studied, only one home had a few vaguely 'Chinese' stylized elements in its design. Otherwise all newly built homes followed a typical builder's design of horizontal small tiles (some smooth, some textured), which were usually either beige or light grey in colour (Figure 9).

From a fairly objective point of view (architecturally), almost all newly built homes are rather banal and devoid of any cultural markers of any kind. Looking back through each decade, one can see changes in village home appearances via the materials used, they largely differ between the 1980s, 1990s, 2000s and 2010s.³ This makes identifying the time periods when homes were built fairly easy with only a few outliers.

The last period of Hakka traditional home revival was during the 1960–1970s, during this time homes were built or renovated with a large 'ghitou' or cement front ridge which hid the tiled roof from view. This ridge usually had the build/renovation date inscribed in the middle and was accompanied by several Chinese motifs

such as Lotus flowers, or a single red star (like those on the Chinese national flag), these were embossed and painted (Figure 10). The 1970s also marks the last decade of predominantly two-story homes being built as the Small House Policy was enacted in the mid-70s and most chose to build three-story homes to maximize the space as footprints for homes were limited, the land scarce and often contested.

When asked if the actual date inscribed was indicative of a build or renovation date villagers from different villages answered in the affirmative for both (Figure 11). Going back further in time, it becomes even more difficult to determine the precise age of village homes, while some were known, most were not, and those interviewed relied on memory and stories, such as ones from their grandparents to roughly date the home's construction period. It is thought that many were built at the turn of the century around the start of the colonial period while a few examples are thought to be over 150 years old, built around the mid-1800s.

Each village's specific style, although similar, stems from the geographic region in mainland China from which the families originally migrated and thus all possess a unique take on a familiar ancient design. Often when asked about the significance of a particular motif the response was almost always that it was 'Fung shui'. Other typical design elements such as often relate to prosperity and good fortune. Most villages and individual households preserved some relics, stored in their



FIGURE 9. (91 + 92): A typical modern three-story village house (left), a modern village house with some Chinese stylistic elements (right).



FIGURE 10. Collage of typical motifs found in the friezes adorning renovated village homes from the 60s and 70s.



FIGURE 11. A trio of homes in Kuk Po built/renovated in 1965.

ancestral halls and homes. These take different forms from place to places but include decorative bridal chicken cages (Figure 7), former decorative ridges or 'Gegiake' (Figure 12) or sedan chairs, used for transporting gods/idols from the ancestral halls for rituals.

Outside of the communal (familial) ancestral halls private residencies also survive a variety of traditional relics, various ceramics, hand carved wooden emblems and plaques, intricate wall paintings, camphor cabinets and ritual items (Figure 13).

The stories shared by the villagers helped to shed light on the complexities of Hakka culture in Hong Kong, including the interplay between tradition and modernity, generational shifts, economic changes and the challenges of preserving cultural heritage in the face of urbanization and globalization. These findings signify how talking about visual changes provoked deeper insights into the challenges these villages faced in the past. The changes brought about by the construction of the reservoir lead to the abandonment of farmland and mass migration, the new roads led to education, a loss of language and adaption of new culture. Along with the



FIGURE 12. (121 + 122): Close-ups of former decorative ridges or 'Gegiake' that once adorned an ancestral hall (left), and private home (right).



FIGURE 13. (131 + 132): Close-up of a ceramic dish with natural scene (left), hand carved camphor tools used for making designs in traditional treats for special occasions (right).

transformation of the visual landscape that came with the reservoir's development were severe social-cultural impacts that affected both the agricultural and demographics of the villages.

EXHIBITION

Using grounded theory, that prized villager's voices and alternative ways of knowing, allowed participants

to help direct the study by selecting the most prominent visual elements from their homes and artefacts they prized or felt represented their village or Hakka culture to be documented. This led to approximately 10,000 images being captured that documented homes, personal and community objects, nature and rituals. Then based on a thematic and visual analysis that connected the images back to the most important themes that emerged from the interviews and the concerns raised by villagers a curated selection was made, tailored to each village, while also showcasing the visual elements that connected them all. Originally these images were to be shown first as small exhibits in each village to encourage more intimate participation and feedback, but the project's objectives were hampered by the pandemic. Instead, a culminating exhibition was held at the end of the project period in June 2023. In it a selection of 15-40 images per village was displayed organically, chosen based on key points from interviews and collected visual data (Figure 14).

Each village was showcased with an upscaled orthographic aerial map, a main image, and clusters of smaller images, selected interview quotes and blank A4s to record memories or feedback (Figure 16). The centrepiece of the installation was a large 10-by-5-metre map from 1974, with lights placed carefully to highlight those villages studied, villagers in attendance were also encouraged to write on and one noticing her

village was absent from the 1974 survey map proceeded to add it (Figure 15). Individual village displays were placed in approximate relation to the map following from West to East/ North-East. As we explore the map, we see the completion of the Sheun Wan (Plover Cove) reservoir to the East in 1973, a remarkable engineering achievement. To the West, the construction of the industrial estate and Tai Po Centre have begun, later dramatically reshaping the landscape and impacting the villagers' lives in both positive and negative ways. For all villages it brought plumbing, roads and electricity but for most of the villages the dam and its catchments robbed them of the mountain's waters relied upon for farming and the land reclamation projects polluted the harbour once abundant in sea life.

For hundreds of years, Hakka visual culture and rituals of food and dance served as expressions of community ties and cultural traditions within and between neighbouring villages. These are now predominantly carried out by village elders, with the irony being the purpose of these rituals is to bring prosperity to the next generation who show little interest in them or village life, let alone in participation. This exhibition served as a space for tracing and reconciling the past and acknowledging the loss of tangible and intangible cultural heritage, not only for the villagers but also for the general public. The spaces and places, once taken for granted, now held a deeper historical value, inviting a



FIGURE 14. Arrangements of 'clusters' of images from several villages in the exhibition, the two on the left are shown with no space separating them, emphasizing the historic relationship between the two.



FIGURE 15. A portion of the map of the study area featured in the center of the gallery, one of the villagers writes her village's name which is absent from the 1974 survey.

renewed appreciation for their rich and complex history (Figure 16).

The impact of the research and exhibition was profound and far-reaching, drawing both the general public and the villagers who actively participated in the study. The large-scale installation left a lasting impression on those who attended. For the villagers, the exhibition offered a unique opportunity to reconnect with their heritage and reflect on the transformation of their communities over the past six decades. It provided a space for them to reminisce about their traditions, share their stories and contemplate the changes that have shaped their lives. Seeing their villages represented in historical maps and aerial images, along with the quotes from their

interviews, helped them reflect on their cultural identity and the significance of their heritage. While the general public was introduced to a part of Hong Kong's history that was unknown or often goes unnoticed. The exhibition offered new perspectives on familiar places, revealing the complexities and nuances of a region that was undergoing constant change and development. For many visitors, it was a chance to learn about the cultural heritage and resilience of these traditional Hakka villages, which were often overshadowed by the urban development of Hong Kong's more metropolitan areas.

The scale and scope of the installation allowed for a comprehensive exploration of the villages of NE Tai Po, capturing the attention of hundreds of visitors. The carefully curated selection of images, accompanying interview quotes, and historic maps ensured that visitors had an engrossing experience. Furthermore, the exhibition facilitated dialogue and exchange between the villagers and the general public, fostering a sense of unity and understanding. It encouraged discussions about the challenges faced by these communities and a call to recognize and preserve their cultural heritage for future generations. But impact of the exhibition extended beyond this, it ignited a sense of cultural awareness and appreciation, prompting visitors to view these villages not merely as remnants of the past but as living repositories of a rich history worth cherishing and safeguarding. The exhibition served as a powerful reminder of the importance of preserving cultural heritage amidst the rapid changes of modern times.



FIGURE 16. The daughter of a village couple who are trying to revitalize their old family home writes her reaction to the exhibition and reasons why she has no interest in living there.

DISCUSSION AND IMPLICATIONS

The findings gleaned from stories shared by villagers and extensive documentation resonate with broader literature on heritage preservation, cultural identity and visual culture studies (Harvey 2001; Smith 2006). The findings also align with scholarly discussions about the tensions between modernization and the preservation of tangible and intangible cultural heritage within rapidly changing societies, as Lau states, 'Heritage should be understood as a cultural process through which values, meanings and identities are created' (2023, 1153). The project connects to existing work on visual culture and heritage studies by highlighting the challenges faced by indigenous communities in maintaining their ancestral homes, cultural practices and identity amidst a backdrop of urbanization, migration and globalization. 'Heritage is not a thing, site or place, nor is it "found", rather heritage is the multiple processes of meaning making that occur as material heritage places or intangible heritage events are identified, defined, managed, exhibited and visited' (Smith 2012, 2). In the context of this study, this meaning making was created using active participation by villagers and a multifaceted approach to researching that prized them as guides and myself as an apprentice eager to learn from them.

To contextualize the findings in terms of the study's impact and implications in the fields of visual culture studies, cultural heritage studies and arts education I lay out the key points of this visually driven study and how its unique methodology and methods allowed for a more comprehensive and nuanced understanding of not only this part of Hong Kong but many of the issues and challenges faced by the villagers in my study were also experienced elsewhere in Hong Kong and beyond to varying degrees.

Documentation of Vanishing Visual Landscape

The imagery combined with 'walking interviews' provide vivid documentation of the changing visual landscape in Hakka villages, encompassing architectural modifications, shifts in infrastructure and alterations in ritual practices. This first-hand evidence enriches the broader discourse on how visual/cultural elements are transformed by socio-economic changes.

Nuanced Understanding of Cultural Transformation

By capturing villagers' opinions and sentiments, the research contributes to a nuanced understanding of how

cultural transformations impact individuals and communities. This human-centred approach delves beyond physical changes to examine the emotional and psychological dimensions of these cultural shifts.

Intersection of Visuality and Cultural Identity

The project highlights the intricate intersection between visual elements and cultural identity. It underscores how changes in architecture, ritual practices and landscapes influence villagers' sense of belonging, collective memory and identity formation.

Importance of Alternative Modes of Elicitation

The research recognized and exploited the potential of multimodal data and alternative methods for capturing cultural nuances that may not be adequately expressed through textual means. It shows how nontraditional methods, such as 'walking interviews' anchored in grounded theory can yield more substantive results. This contributes to methodological advancements which are broadly adaptable for interdisciplinary use.

Exhibition as Critical Analysis and Reflection

The exhibition provided an alternative method of sharing the findings with both the participants and general public. Through imagery, historic maps and interview excerpts the most impactful parts of the project and stories of the villagers were shown in a holistic fashion. This made it more accessible and engaging than a simple report while also providing a final venue for feedback and critical reflection from the participants.

Critical Examination of Preservation Challenges

The study explores the challenges faced by villagers in preserving their heritage, shedding light on the impact of government policies, urban development and economic changes. This critical examination adds depth to discussions on the preservation of cultural heritage.

Future Implications

By exploring the potential consequences of disappearing traditional elements, the study anticipates the implications for future generations, cultural continuity and historical consciousness. This forward-looking

perspective is valuable for both scholars and policymakers to draw upon to address similar socialcultural issues.

Therefore this project provides first-hand insights, both my own and those of the villagers, into the evolving visual landscape and its implications for cultural identity, heritage preservation and community dynamics. It enriches existing literature by emphasizing the interplay between tradition and modernity in the context of Hakka villages in Northeastern Hong Kong, and by offering a holistic examination of these changes using alternative and emerging methodologies.

The image-based project revealed, initially unbeknownst to me, that the research area held much more significance than simply containing a dwindling number of pre-colonial Hakka homes outside of Hong Kong's urban New Territories. From the Cultural Revolution to massive infrastructure projects and many more subtle changes throughout the 1960-1980s that led to the slow yet steady decline of these traditional Hakka villages that had existed for 500 years. Allowing the visual to lead the way but being flexible to allow other senses to also guide the study provided opportunities to understand the history and most significant changes and challenges these villages faced and are facing. Culminating in an extensive exhibition the project provided a final space for reconciliation of the past and recognition of the loss of both tangible and intangible cultural heritages, not just for the villagers but also the general public, who like me, had taken these spaces and places for granted, not knowing the full extent of its history, the stories of its people, and the sacrifices they made to help build modern Hong Kong.

LIMITATIONS

It cannot be overstated how much the pandemic impacted this study. As the study was set to begin in early 2020, our university and much of Hong Kong shut down in February and most people remained in a state of semi-seclusion until summer when a brief relaxation occurred however, this was quickly dissolved by another wave and the remainder of the project period proceeded with brief periods of relaxation followed by longer periods of restrictions. The villages with a majority vulnerable elderly population necessitated that in person field work also be restricted during these periods. Therefore the project not only lost momentum at times but also lost student, and research assistants due to timing and contractual limitations.

Notes

- [1] Years later in the fall of 2023 after the conclusion of the project, I happened to be hiking in the area and resting in Kop Tong Village (a neighbour of Lai Chi Wo). At another table was an overseas descendant of Lai Chi Wo who was curious about me and what I knew of the area. I told him about my project, and we got on the issue of the guest houses. He told me that the resistance to the agreement with the government was that the length of the lease with those villagers who given up their land was that by the time the newly built Hakka houses were returned to them, they would have passed on and their descendants were largely uninterested in taking up residence there which would lead to the same situation all over again, either decay or a government land grab.
- [2] 'Outsiders' mentioned here, later and in the previous villager's interview refers to the pre-1970s era before Ting Kok Road connected all the villages and 1980s when people from the city began moving into the area but does not reflect the current sentiments of villagers today. Villages today are a mix of indigenous, local Hong Kongers and expats.
- [3] Although it is not known what prompted these changes, it is thought to be simply a matter of shifting local trends and/or availability of materials for contractors.

ACKNOWLEDGEMENTS

I would like to acknowledge the support of the Hong Kong Research Grants Council (RGC), The Faculty of Liberal Arts & Social Sciences (FLASS), and the Department of Creative and Cultural Arts (CCA) at the Education University of Hong Kong (EDUHK) for funding this project at various stages through the Early Career Scheme, Dean's Seed Fund and Internal Research grants. I would also like to acknowledge the support provided to me by district councillors of Shueng Wan, Tai Po NT, for helping to organize introductions to village leaders and of course acknowledge the villagers and village leaders who welcomed me into their homes and rituals, shared their stories of history, culture and described the most significant changes that have impacted them, their ancestors and their villages. I would like to extend my sincerest, heartfelt thanks to all the villagers who participated in my project, their kindness and generosity made everything possible.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author(s).

FUNDING

This work was supported by Research Grants Council, University Grants Committee: [Grant Number 28604519].

ETHICAL DECLARATION

I declare that proper protocols were followed for gaining ethical clearance before the start of my project through the university's Human Research Ethics Committee (HREC: Ref. no. 2017-2018-0190) and that all participants were properly informed of the study's purposes, future use of data collected and consented to interviews and documentation prior to data gathering.

REFERENCES

- Abbas, A. M. 1997. Hong Kong: Culture and the Politics of Disappearance. University of Minnesota Press.
- Akbari, E. 2019. "Spatial Missions: My Surroundings, my Neighbourhood, my School." In *Mobile Media in and Outside of the Art Classroom*, edited by J. C. Castro, 127-150. Cham, Switzerland: Palgrave Macmillan.
- Bagnoli, A. 2009. "Beyond the Standard Interview: The Use of Graphic Elicitation and Arts-Based Methods." *Qualitative Research* 9 (5): 547–570. https://doi.org/10.1177/ 1468794109343625
- Banks, M. 2001. Visual Methods in Social Research. London: Sage. Chan, S. C. 1999. "Colonial Policy in a Borrowed Place and Time: Invented Tradition in the New Territories of Hong Kong." European Planning Studies 7 (2): 231–242. https://doi.org/10.1080/09654319908720513
- Charmaz, K. 2006. Constructing Grounded Theory a Practical Guide through Qualitative Analysis. London: SAGE.
- Cox, H. 2015. Why Hong Kong's Quiet Side Suits Buyers Seeking Green Space. Financial Times, MAY 29. Retrieved from: https://www.ft.com/content/d05d3b00-009b-11e5a908-00144feabdc0
- Dányi, E. 2017. "Walking as Knowing and Interfering." Aggregate 5, 1–32. https://doi.org/10.53965/SAND4791.
- Glaser, B. G., and A. L. Strauss. 1967. *The Discovery of Grounded Theory*. Chicago: Aldine.
- Harper, D. 2002. "Talking about Pictures: A Case for Photo Elicitation." *Visual Studies* 17 (1): 13–26. https://doi.org/10.1080/14725860220137345.
- Harvey, D. C. 2001. "Heritage Pasts and Heritage Presents: Temporality, Meaning and the Scope of Heritage Studies." *International Journal of Heritage Studies* 7 (4): 319–338. https://doi.org/10.1080/13581650120105534.
- Kao, E., and N. Ng. 2017. Lai Chi Wo Village Chief Insists on Go-Ahead for Revitalisation Plan Despite Opposing Homeowners. South China Morning Post, Tuesday, November 7, https://www.scmp.com/news/hong-kong/ health-environment/article/2118791/lai-chi-wo-villagechief-insists-go-ahead
- Lau, P. L. K., and O. P. Y. Chow. 2023. "Theatre Heritage in pre-WWII Hong Kong: A Postcolonial Reading." *International Journal of Heritage Studies* 29 (11): 1141– 1157. https://doi.org/10.1080/13527258.2023.2243450.

- Lee, H. Y., and L. Distefano. 2002. A Tale of Two Villages: The Story of Changing Village Life in the New Territories.
- Ma, J. 2016. "Sustainable Development and Social Policy: A Case of Indigenous Villages in Hong Kong." *Asian Education and Development Studies*. 5. https://doi.org/10. 1108/AEDS-09-2015-0051.
- McMaster, S. 2012. "New Approaches to Image-based Research and Visual Literacy." In *New Horizons in Visual Literacy:* Selected Readings of the International Visual Literacy Association, edited by Avgerinou Chandler, Search, and Terzic, 122–132. Siauliai, Lithuania: SMC Scientia Educologica.
- McMaster, S. R. 2015. "Visualizing Research: Crowd Sourcing Technology for Global Understanding." *Visual Methodologies* 3 (1): 18–34.
- McMaster, S. 2016. "Crowdsourced Representation: People's Drawings of Culture in a Globalized World." In *Emergent Art Education in Canada*, edited by Emme and Shields, 56–66. Victoria, BC: Canadian Society for Education though Art (CSEA).
- McMaster, S. R. 2018. "Crowdsourcing Global Culture: Visual Representation in the Age of Information." *Visual Arts Research* 44 (2): 53–66.
- Mitchell, C. 2004. "Theorizing Dress Stories." In *Not Just Any Dress: Narratives of Memory, Body, and Identity*, edited by Sandra Weber and Claudia Mitchell, 251–272. Lausanne, Switzerland: Peter Lang.
- Moir, J. 2006. Moved by the Pioneer Spirit. Financial Times,
 December 16. http://www.ft.com/cms/s/0/45d9d78c8cae-11db-9684-0000779e2340.html?ft_site=
 falcon&desktop=true#axzz4t0MfijJD
- Pink, S. 2013. Doing Visual Ethnography. London: Sage. Rose, G. 2012. Visual Methodologies: An Introduction to Researching with Visual Materials. London: Sage.
- Singh, H. 2016. How the Revival of a 400-Year-Old Hong Kong Village can be a Model for Rural Heritage Conservation. South China Morning Post, October 8. http://www.scmp. com/news/hong-kong/education-community/article/ 2026078/how-revival-400-year-old-hong-kong-villagecan-be
- Smith, L. 2006. Uses of Heritage. London: Routledge.
 Smith, L. 2012. Discourses of Heritage: Implications for Archaeological Community Practice. The Past-Present as a Lived Social Space: Identities and Materialities in South America and beyond. https://doi.org/10.4000/nuevomundo.64148
- Tang, B. S., S. W. Wong, and A. K. W. Lee. 2007. "Green Belt in a Compact City: A Zone for Conservation or Transition?" *Landscape and Urban Planning* 79 (3-4): 358–373. https://doi.org/10.1016/j.landurbplan.2006.04.006