

*Land Use Policy*

**Un-forgetting Walls by Lines on Maps: a Case Study on Property Rights, Cadastral Mapping, and the Landscape of the Kowloon Walled City**

Lawrence W.C. Lai

*Ronald Coase Centre for Property Rights Research*

*University of Hong Kong*

22 March 2016

**Keywords**

Property rights; framing landscape; planning unit; cadastral unit; Kowloon Walled City

**Abstract**

This paper demonstrates that the framing of post-war Kowloon Walled City through photos has been dominated by the maps commonly used to represent this Chinese enclave in colonial Hong Kong as a place. Inspired by and extending Wylie's (2009) argument that emptiness and presence are equally important, this paper uses basic GIS techniques and hitherto unpublished archival materials to help (a) argues that the colonial government's mindset of clearly defining the spatial boundary of the city, which is a subtle admission of an officially and diplomatically denied otherness in ownership, created the city as a quasi-cadastral unit; and (b) explains how this shaped the framing of the landscape of the city by promoting investment and trade in high-rise housing development units. The government did not destroy its walls. When these were physically

destroyed, it did not ignore the walls' original alignments but treated the city as a planning unit, as if they still existed.

One city (Sector A) built of stones, a perimeter defensive wall of 1,800 feet in total length, 18 feet in height, 14 feet in width along the east, west and south, 7 feet in width along the north side. On the hill (Pak Hok Shan) "behind built" a coarse stone wall of 1,700 feet in length, 8 feet tall and 3 feet wide. One martial god temple, one deputy general's office, one inspectorate office, one martial arts shelter, one armament factory, one gunpowder factory, 14 shelters for soldiers, 4 guardhouses on the wall, 6 store rooms, one water pond, two water wells, signal house for Tiger Head Pass, signal house for Kowloon Pass, 2 smoke signal stations (**Chiu and Chung 2001**: p.56; translated with author's brackets and italics).

## **Preamble**

The definition of landscape in the European Landscape Convention is clear and broad: "Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (**Council of Europe, 2000**) As an area has a boundary, its mapping is part of landscape study. Therefore, "In many countries new landscape classifications are developed and mapping of character areas of

landscapes is considered as a basis for landscape assessment.” (**Antrop 2005: p.30**) Mapping is in this light seen as a record of landscape. In this paper, mapping produced a landscape by defining property rights of the state vis-à-vis what she considered as squatters.

## **Introduction**

Built with a garden in the style of a traditional Chinese landscaped enclave, the Kowloon Walled City Park is now a peaceful oasis in a high-rise urban jungle near an international ocean liner pier (the Kai Tak Cruise Terminal) built on the former runway of the old Kai Tak Airport. Shortly before this public garden was built the place, Kowloon Walled City (KWC), built in the mid-19<sup>th</sup> century as described above in **Chiu and Chung (2001)**, had condescendingly been called “sin city” by the *China Mail* (**Wesley-Smith 1973**) and nicknamed the “City of Darkness,” (**Popham 1993; Girard et al 1999; Carney 2013, 2015**). Although the walls had been demolished by the Japanese during World War II using forced labour, what was built spontaneously within their virtual confines was seen as a high-rise slum built on land governed by neither the ousted British colonial regime, which claimed complete jurisdiction over it, nor the Chinese Nationalist Government, which held such a claim to be illegal.

The KWC was located in the New Territories, which, along with the Shantung (Shandong) port of Weihaiwei<sup>1</sup>, were leased to Britain in 1898

---

<sup>1</sup> This referred to the modern city of Weihai in Shandong Province, China, the former British Colony of “Weihaiwei” (1898 to 1930). It guarded the maritime approach to the capital of China.

under the Peking Convention in the so-called “Scramble for Concessions” after the first Sino-Japanese War and before the Boxer Uprising in 1900. The Convention was signed in the context of the Franco-Russian Alliance much feared by Britain as a tilt in the balance of power against her interest in Europe and elsewhere. **(Endacott 1982)** The Convention provided that the Chinese Government could station officials inside the KWC provided that their presence would not adversely affect the defence of Hong Kong. The leasing of the New Territories was due to British fears of a Russian threat to their interests in the Far East. The saga of the KWC began when the Hong Kong Government expelled all Chinese officials from it on 16 May 1899 and refused to withdraw on the grounds that they were threatening the defence of the colony.<sup>2</sup> **(Wesley-Smith 1973; Sinn 1987)** The government employed British Indian surveyors to conduct a full scale cadastral survey of the New Territories in 1899 to 1904, including the KWC, and then allocated the land within the KWC to Chinese civilians on very short term leases. Militarily weak, the Manchu Government<sup>3</sup> acquiesced in this incursion, but the succeeding Republican government insisted that the KWC was Chinese territory.

---

<sup>2</sup> “The facts are that after the conclusion of the Convention, steps were taken by the Hong Kong Government to assume British control over the new territory. In April 1899. The British party met with armed resistance in the village of Kowloon and a certain amount of fighting and violence took place before the British position was established. We were satisfied that this resistance was attributable to the Chinese authorities in Canton and we decided not to permit the resumption of Chinese civil authority in Kowloon.” **CO129/544/14**, 1933 file disclosed to the public in 1984.

<sup>3</sup> Manchu is the name of the ethnic group. The name of the Dynasty he established was Ching (in Cantonese) or Qing (Mandarin).

The image of the landscape of the KWC as a high-rise jungle with the Concorde and Boeing 747 planes' landing gears lowered above its silhouette, which confounds the common mind, according to western commentators, is, in retrospect, highly mysterious. Many think that the KWC was the result of anarchy due to uncertainty over sovereignty rights. The anarcho-liberal economist may consider KWC a classic case of complete private planning. The freedom of contracts operated there, but unlike Houston and Milwaukee in the U.S. (Lai 2014), there was no restrictive covenant to private environmental planning, as no common law court would entertain any civil lawsuit against land property within the KWC. Upon closer analysis, as this paper explains, the landscape of the KWC was a product of choices under constraints, which are best interpreted as a three-dimensional spatial outcome with mapping playing a significant role.

It is a cliché that “the landlord of all land in Hong Kong except St. John's Cathedral” is the Hong Kong government. In reality, the power of the government over the KWC was far weaker than its authority over the freehold granted to the Church of England to build that church because China denied that the government could do anything in the city without her permission: indeed, before and after 1933 China always insisted that the KWC was Chinese territory.

Approaching the landscape of the KWC from the dimensions of the Euclidian space containing it, this paper submits that the 3D shape of the KWC was actually defined by Hong Kong's colonial administration in its

diligence into clearly delineate its boundaries and restrict its heights in pursuit of specific planning as a manifestation of its authority. This failed where it both acknowledged and re-created the KWC as a cadastral entity, even although the KWC's defining characteristics were long gone. In so failing, the colonial government produced a 3D landscape that demarcated the limits of its effective authority over development within that space. This planimetric focus reflected the mentality and function of a modern state that serves, among many things, a modern property market enabled by land surveying techniques. While forces of international relations mattered, this paper holds that the landscape product of the KWC would not have looked the way it did from the "outside" without the lines the government drew on its maps and plans "for" the KWC. If "critical visualization is to make the invisible visible" (**Kwan 2015**), this paper is reverse engineering, which translates the (once) visible KWC built forms back to the invisible property boundaries stubbornly retained in maps. Such maps underlie Lefebvre's 'conceptual triad' of conceived or planned space, representational or lived space and spatial practices, applied by **Carteir (2002)** to frame landscape formation in modern China.

### **Gazing at the Kowloon Walled City**

The imaging and framing of the KWC's landscape in books were mainly by means of photos and sketch maps of the settlement as it existed during the 1980s, when its fate was sealed. The photos typically show images of the buildings along either its northern perimeter on Tung Tau Tsuen

Road or eastern one on Tung Tsing Road. The sketch maps are generally tracings of the Survey and Mapping Office's survey maps. Had this office not charged a huge royalty, these authors would have reproduced the large scale survey maps and/or aerial photos. An exception is **Lai (1996)**, who used both two survey sheets and a helicopter photos<sup>4</sup>. In any case, the KWC was defined and presented as a cube with its base defined by a survey map and its outermost facades framed by site photos. An excellent example of this was the architectural work by **Ho (1993)**. Within this cube, images of the KWC were represented by photos taken of the inside of flats or its narrow lanes. The only attempt to show a cross-sectional view of the buildings of the KWC was made by a Japanese team of researchers (**Kani 1997**) shortly before it was demolished. The team presented views of the KWC during its demolition. In the KWC Garden, a to-scale 3-D model made of metal is exhibited near the location of the KWC's old southern gate. This physical model validates the cubical imagery of the KWC's landscape as a high-rise housing area. (See Figure 5.)

It could be said that it is natural for writers to take pictures of the KWC from public roads and trace its boundaries according to government maps in their efforts to present an image of the settlement. Upon further reflection, these exercises in 'gazing' were conditioned by the public works of the government in building roads along or close to the actual walls of the KWC and government maps that retained the alignment of the walls. Therefore, the more profound question is why

---

<sup>4</sup> **Girard et al (1999)** used a similar 1972 helicopter photo of the Government Information Service on p.71. Neither used aerial photos taken for mapping purposes.

the government preserved on its maps the alignments of the walls, while the official position of the colonial administration was that it was just another piece of Crown land in Hong Kong, in which case it would have ceased to be a place formally demarcated on the map. The idea is that the persistence of the boundary of the KWC in maps may reflect the government's apparent uncertainty over its ownership rights. The boundaries of the KWC thus set the spatial limits of its effective, as opposed to its claimed sovereignty. In other words, the government defined the KWC as a special zone within which its rights differed from those outside it.

### **Theoretical understanding of government zoning and private property**

When the government encircles on a plan a specific area for whatever planning purpose, it zones and defines that area as a *planning unit* which can become also a cadastral unit if this unit is treated as *de jure* private property. If property in a planning unit is treated as illegal, then due to the risk of planning enforcement the value of the property within the unit would be lower than the case where it is treated as *de jure*. Property value of a flat here (on average about 300 to 400 square feet) was about 30% cheaper than one of a similar size controlled by government building laws outside the City<sup>5</sup>. But if the planning enforcement can only be *de facto* partial if at all feasible, the very act of demarcating an area on the plan as “illegal” for property development will generate a new mode of

---

<sup>5</sup> Interview with the Kowloon Walled City Kaifong Welfare Promotion Association in 2015.

acquiesced development. Inspired by **Wylie's (2009)** idea that absence and nothingness are as important as presence and being in framing landscapes, this paper holds that the KWC became a *quasi-cadastral unit* by the very act of mapping as a mode of framing a landscape. The work of **Stilgoe (1976)** gave an excellent landscape research reason for the importance of maps kept by the government, often ignored by historians, in landscape analysis.

The theoretical proposition of this paper is: that for development within any unit, the greater the constancy of its official boundary, the more its status is enhanced as a *de facto cadastral unit* – with the resulting illegal development becoming private property. Government mapping of the perimeter of KWC on its plans creates it as a **cadastral entity** by defining it as a unit of planning of a peculiar sort. Namely one where government will not clear *de jure* illegal development. Such a cadastral boundary has a great impact on the landscape of the planning unit itself and its adjoining zones. A boundary of a place is the border of discontinuity that both segregates it from the 'outside' and serves as the front where it interacts with that 'outside'. Private property has a locationally clearly delineated, enclosing boundary recognized as *de jure*. It is the natural unit of planning. A place not so enclosed cannot be private property or a planning unit.

### **A succession of maps showing an encirclement policy**

The narrative reported by **Chiu and Chung (2001)** is inexact regarding the

true spatial shape of the KWC, which was planimetrically traced by the British Indian surveyors, as re-presented in simplified form GIS in **Figure 1**. The narrative only mentioned the lengths of the thicker wall of the fort and the thinner wall that went up Pak Hok Shan. From that written account, the KWC might be imagined as looking like something depicted in panel (a) and (b) in **Figure 2**. Both **Figures 2(a) and (b)** show two perfectly symmetrical cities. One is a triangle attached to a rectangle and the other is a triangle on a square, which follows the design principles of Chinese forts. Panel (c) is just for reference as a circular city was more expensive to build.

### **Figures 1 and 2 about here**

Although the perennial official stand of the colonial government was that the KWC was *de jure* Hong Kong territory, it did not demolish its walls or after the Japanese conqueror destroyed these walls disregard their original boundaries. All colonial plans made at different stages always respected the KWC's boundaries irrespective of proposed developments or non-developments. This is not to say that the government was passive due to actual limitations on its rights. It adopted a conscious policy of encirclement and buffer zoning when clearance was impossible because of diplomatic pressure.

From a very early date after China became a republic, "conquest through town planning" (**LeVine 1998**) was attempted, commencing with

a 1921 scheme entitled “Initial Planning for Kowloon,”<sup>6</sup> which contemplated the eradication of the entire KWC with a “grid iron” layout which was the standard for urban Kowloon. This aggressive scheme treated the KWC as non-existent, but somehow the government backtracked and the scheme was replaced by a 1933 plan to convert the KWC into a public garden after clearing all its residents, a plan to which the Chinese Republican Government did not object. The walls of the city and the Chinese cannons would be retained for their cultural and architectural merits. From a plan among documents deposited in the Public Records Office, a linear belt with a width of 120 feet was to be “reserved for open space” along the southern perimeter wall of the *proper* KWC, fanning out to enclose the KWC and its outer perimeter walls to form a park (**Figure 3**). This reserve was surely a proper visual buffer for a park, which enclosed within it a walled city, but also reinforced its defensive walls as the landscape frame of the KWC. The notion of a buffer zone is surely relevant to heritage conservation (**Carreno and ICOMOS Peru 2006**), as open space used as a buffer is typical in planning (**Ryan 2006; Bricocoli et al. 2011**) and a public park is surely a benefit (**Punter 1990**). However, let us not forget that the KWC has its roots in security and defence (**Fernandes 1999**). The British refusal to yield to Republican China’s protests against clearance was argued from an air defence angle: a Chinese presence in the KWC might threaten the Kai Tak Airport nearby, which was a case that was inconsistent with the 1926 Defence Scheme, which identified Japan as the real threat to the security of Hong Kong. It

---

<sup>6</sup> Map HD27 CSO 342 of 1920, Lands Department.

was true that the Anderson Line, which consisted of a series of blockhouses along the Kowloon Range from Devil's Peak to Kowloon Reservoir, was built during the early 1920s based on a military decision in 1910 in anticipation of an attack on Hong Kong by the Chinese Republican Army numbering about 50,000 (**Weir 2012**). Yet, by 1926, the enemy in mind was a maritime power and the Gin Drinker's Line, built below the fog line, replaced the Anderson Line in the late 1930s.

### **Figure 3 about here**

In any event, the clearance of all occupants, who were paid compensation, from the KWC was successful, but the realization of the public park was frustrated by the Japanese conquest of Hong Kong. The Japanese occupier used POWs to demolish all of its stone walls and level the Sacred Hill to the south to obtain fill material to expand Kai Tak Airport. Soon Chinese civilians reoccupied the wall-less place and when the British returned to Hong Kong, they found it once again a Chinese settlement. Attempts to clear "squatters" from the premises in 1947 and 1948 were complicated by Republican Chinese intervention, so the KWC continued to grow into a "squatter area". The reiteration of the validity of the provision of the exception clause <sup>7</sup> in the New Territories Lease complicated the British position because of continuing American diplomatic pressure in favour of decolonisation.<sup>8</sup>

---

<sup>7</sup> "...within the city of Kowloon the Chinese officials now stationed there shall continue to exercise jurisdiction except so far as may be inconsistent with the military requirements for the defence of Hong Kong."

<sup>8</sup> Britain had returned Weihaiwei, leased at the same time as the New Territories on similar terms, to China in 1930.

A government “squatter survey” of the KWC in 1962 attracted a powerful reaction from the People’s Republic of China. In spite of confidently airing its ability to govern the KWC, the government’s confidential dispatch to London, which expressed contentment with merely containing the matter, was far more cautious. That policy was manifested in a map-based Nunnery Scheme<sup>9</sup>, which sought to encircle the KWC with public roads and four medium-rise seven-storey public resettlement housing zones with community facilities and schools called Areas A, B, C, and D (**Figure 4**). The land that became Area D was situated along the outer 1700 feet perimeter wall of the KWC, as described in **Chiu and Chung (2001)** and captured in photos taken during the 19<sup>th</sup> Century (**Lai 2015**). When the Scheme was devised, Area D had been allocated by the government to a local charity in 1950, which built a cottage area under a Crown Land Licence to accommodate Chinese refugees. All other areas were occupied by squatter huts or houses.

**Figure 4 about here**

Of great symbolic significance was that the confidential files all described the wall-less settlement as the “Kowloon Walled City,” which indicated that the government still remembered the walls as its proper boundary, even though the Japanese had destroyed them. In a sense, this refusal to forget was essential in order to not annoy the Chinese

---

<sup>9</sup> The name of this scheme awaits further research.

Government, which had said nothing about the quiet annexation and conversion of Area D. As a tacit *quid pro quo* perhaps, the colonial government reluctantly refrained from taking action to clear a strip of housing development on Crown land between the original eastern wall and Tung Ching Road. This strip was officially called the “sensitive zone” and mapped on the Scheme drawing.

The Nunnery Scheme was interesting, as the plan for the KWC itself was one of “non-planning”. Its significance was one of recollecting the footprint of the KWC in the minds of the officials involved, but which in itself did not produce the final landscape of the KWC as a cubical mass of housing that became infamous in the media and the subject of this paper. When the Scheme was devised, the KWC was a medium rise shanty town with of two to three-storey buildings. From the air, it was not easy to distinguish the proper area of the KWC from the squatter areas in Areas A or B, although C was set apart by Tung Ching Road. The government continued not enforcing any planning or building law regarding development or redevelopment within the KWC. At one point, it was hoped that the residents living inside the KWC and the general public, seeing the environmentally far superior public housing blocks in the four zones under the Scheme, would agree to a whole-scale redevelopment of the KWC into public housing as well.<sup>10</sup> Such wishful thinking did not

---

<sup>10</sup> To maintain an air of ultimate control, an officer of the colonial government expressed the wishful thinking that, D having been accomplished, the Scheme formed “a cordon sanitaire” around three sides of the Walled City” (Colonial Secretary 1976: Minute 9 dated 21 June 1972) AND the public (including residents of the KWC), upon the completion of the Nunnery Scheme, would demand that the government intervene to remove it as a source of negative externalities. The rationale was that the KWC would become “an isolated slum, surrounded by modern buildings” (Colonial

meet with actual support from KWC residents who led a life relatively free from state regulation, especially those who had business operations.

When developers made deals with the residents of the KWC to construct 12 to 13-storey high-rise residential blocks made of reinforced concrete, the government was initially alarmed, fearing a collapse of these buildings and of aircraft on descent into Kai Tak crashing into them and causing a big disaster. Intervention by way of clearing the KWC on the basis of avoiding a major human disaster (due for example to “building collapse”, “aircraft crash”, “outbreak of disease” and “large scale vice and crime”) was proposed with some eagerness, but this did not meet with London’s approval.<sup>11</sup> The government then had to be content with enforcing a policy, formalized in 1972 but not publicly announced, of demolishing any structure of the KWC or the adjoining sensitive zone if they exceeded the height limits set by the statutory “airport heights restrictions” under the *Civil Aviation Ordinance* to accommodate the flight paths of aircraft landing at Kai Tak Airport, the scale of whose operations increased until it closed in 1998. The rationale was no longer military (threatening Kai Tak as an air base), but civil aviation safety. The government’s official stance and language, as revealed in its confidential files, also subtly changed. Both the Communist People’s Republic of China, by then recognized by Britain as legitimate, and the pro-Beijing “Kowloon Walled City Kaifong Welfare Promotion Association” were

---

Secretary 1976: para 4, draft paper at float, underlining authors’).

<sup>11</sup> Secret FCO File No. HK K1/31. Defence Branch (1969), “Policy for Emergencies in the Kowloon Walled City”, SCR 5/3371/6OV, 6 November.

consulted before action was taken to implement the policy. “Kaifong” means residents in a community/neighbourhood. The Kaifong Associations have their equivalents in other Chinese settlements like Macau (Lo 1996). Official “Kaifong Welfare Associations” were actually set up by the Secretary for Chinese Affairs of the colonial administration in 1949 for major urban district. Some have survived to date. (Miners 1981) One official record commented that China accepted the concept of height limits because Chinese planes might soon use Kai Tak Airport.<sup>12</sup> This policy delimited the actual height of the KWC and, together with the retention on maps, the perimeter of its lost walls shaped the public imagery of it as conveyed in the media. From then onwards, the KWC stood far taller than its two-storey squatter or seven-storey public housing surroundings. Meanwhile, the Nunnery Scheme was shelved and Areas B and C remained squatter areas until they were razed to produce a big open space area on the fringes of the KWC.

The theoretically interesting observation of the effect of government maps and airport height controls on built form as a part of the landscape is not just an economist postulating “maximization under constraints” to explain the physical bulk of the KWC. It is, above all, a way of communicating a void within which government administration could not project to its full extent as elsewhere in Hong Kong. Finally, while the colonial government, towards the end of its administration, managed to achieve the 1933 dream of converting the KWC into a public park, the

---

<sup>12</sup> Enclosure 5, Secret FCO File No. HK K1/31.

memory of the walls has been retained. This was accomplished not only by means of maps and photos exhibited in tourist information boards, but also by the planimetrically accurate delineation of the boundary of the Kowloon Walled City Park, which was demarcated clearly from a bicycle park that falls within Area B of the Nunnery Scheme.

**Figure 5** shows a photo of a metallic to-scale 3-D miniature of the KWC before its demolition on public display in the KWC Park near its southern entrance. A group of European students were briefed by a local student on the history of what it represented during a field trip. The model follows faithfully the footprint of the encircled area in the Nunnery Scheme without reference to the actual area of the fort shown in **Figure 1**. **Figure 6** illustrates how the morphology of private subdivision of land within the old walled city within twenty years of the return of the British administration to Hong Kong in August 1945 with the situation when the colonial administration began to buy out occupants with a view to form a public park. **Figure 7** shows the an overlay of the old alignment of the long disappeared stone walls of KWC as measured in the early years of the last century on a modern map. It is easy to see that alignment of the boundary of the Kowloon Walled City Park follows faithfully the walls of the main fort, the target of the Nunnery Scheme.

### **Discussion and conclusion**

The forces that shaped and reshaped the landscape of the KWC are an excellent case study for theorizing property rights, landscape planning,

and conservation in the colonial and post-colonial contexts. In particular, it is an excellent laboratory of attempts by the state vis-a-vis ordinary people to control the physical appearance of a Chinese settlement under unclear property rights due to international disputes. Such attempts were top-down measures which could erase memories of the past via landscaping in the name of slum clearance with an interim measure of “planning the unplanned”. These attempts were subsequently qualified by a desire for public housing redevelopment for the poor and the hope of conserving something worthy of memory for those who resided in the KWC.

Superficially, all three attempts to plan for the KWC in 1920, 1933, and the 1960s envisaged *homogenous* uses. The first try was to transform a rural farming area into a town with a grid iron pattern. The second was to convert the KWC into a park with the walled city inside it. The third, the Nunnery Scheme, sought to produce a vast public housing area with the KWC as the last of a five-phase planning scheme. Upon closer analysis, as described above, the last two schemes retained the alignment of the KWC’s walls with the zone boundary of the settlement as a planning unit that was, in fact, carefully demarcated as untouchable. On the other hand, the absence of mapping information in the Convention of Peking and the failure of the Chinese Republican Government to heed the actual walled boundary of the KWC as a fort apparently kept it ignorant of the seizure of Area D. This state of affairs, which tied in with the ability and compulsive rigidity of the colonial government in mapping

the KWC's "true boundaries," went beyond power politics – the logic of a modern land market is on action and the property boundaries of the self vis-à-vis *another* must be clearly delineated. This further lends support to the argument that subconsciously, the colonial government knew full well that the KWC was *someone else's* (China's) *property*. It all began when British Indian surveyors were tasked with performing a comprehensive cadastral survey of the New Territories and they, by good training, competently represented on maps metes and bounds, walls, and fences that stood as boundaries of social, economic, cultural, and historical significance. Colonial officials as Weberian bureaucrats (whether administrators, policemen, or town planners) of a certain standard in a credible regime that respected property rights could hardly ignore these boundaries. In due course, the boundaries fed back to the land market of the KWC and produced its media-popularized image. The view advanced here shows that cadastral mapping of the KWC worked in the opposite direction to the "tyranny of the map" in Africa, in which the imposition of artificial boundaries ignored social, economic, cultural, and historical realities **(Wolfel 2009; Wood and John 2011)**.

This paper is simple in terms of application of GIS techniques, as manifested by **Figures 1 to 4 and 6**. Yet, with the necessary archival materials, this hopefully serves to demonstrate "simple GIS mapping overlays as a way of communicating complex planning issues in a 'language' that is easily understandable and effective at stimulating policy debate, critical thinking, and learning." **(Wong et al 2016)**

This should contribute to basic research and theoretical development in advancing the state-of-the-science of urban ecology. The stress is not so much on the GIS technique used but what such technique can assist land use analysis. It should hopefully also spur landscape researchers, whose appreciation and representation of landscape has become increasingly Hellenistic at the expense of spatial realities, to rediscover the relevance and pay attention to physical measurement as part of their profession.

### **Acknowledgements**

The author is grateful to Dr. Ken S.T. Ching, chartered land surveyor for his help in preparing Figures 1, 2, 3, 4, 6 and 7; Professor Stephen N.G. Davies for his useful comments on the manuscript; and two anonymous referees of *Land Use Policy* for their valuable advice. He is also thankful to his Teaching Assistant Miss Maria Yu and doctoral student Mr. Mark Hansley Chua for archival research in the Public Records Office of Hong Kong.

### **Illustrations**

Figure 1: Kowloon Walled City as surveyed

Figure 2: Possible alignments of the walls of the Kowloon Walled City according to written Chinese records

Figure 3: Open space reserve outside the Kowloon Walled City on a British Hong Kong town plan of 1933

Figure 4: The “Nunnery Scheme” for the Kowloon Walled City and its vicinity

Figure 5: Reinforcing the image of the Kowloon Walled City by modelling

Figure 6: Differences in the footprints of built up areas in the Kowloon Walled City of 1922 and 1961

Figure 7: The outer (and thinner) wall of the Kowloon Walled City on a modern map

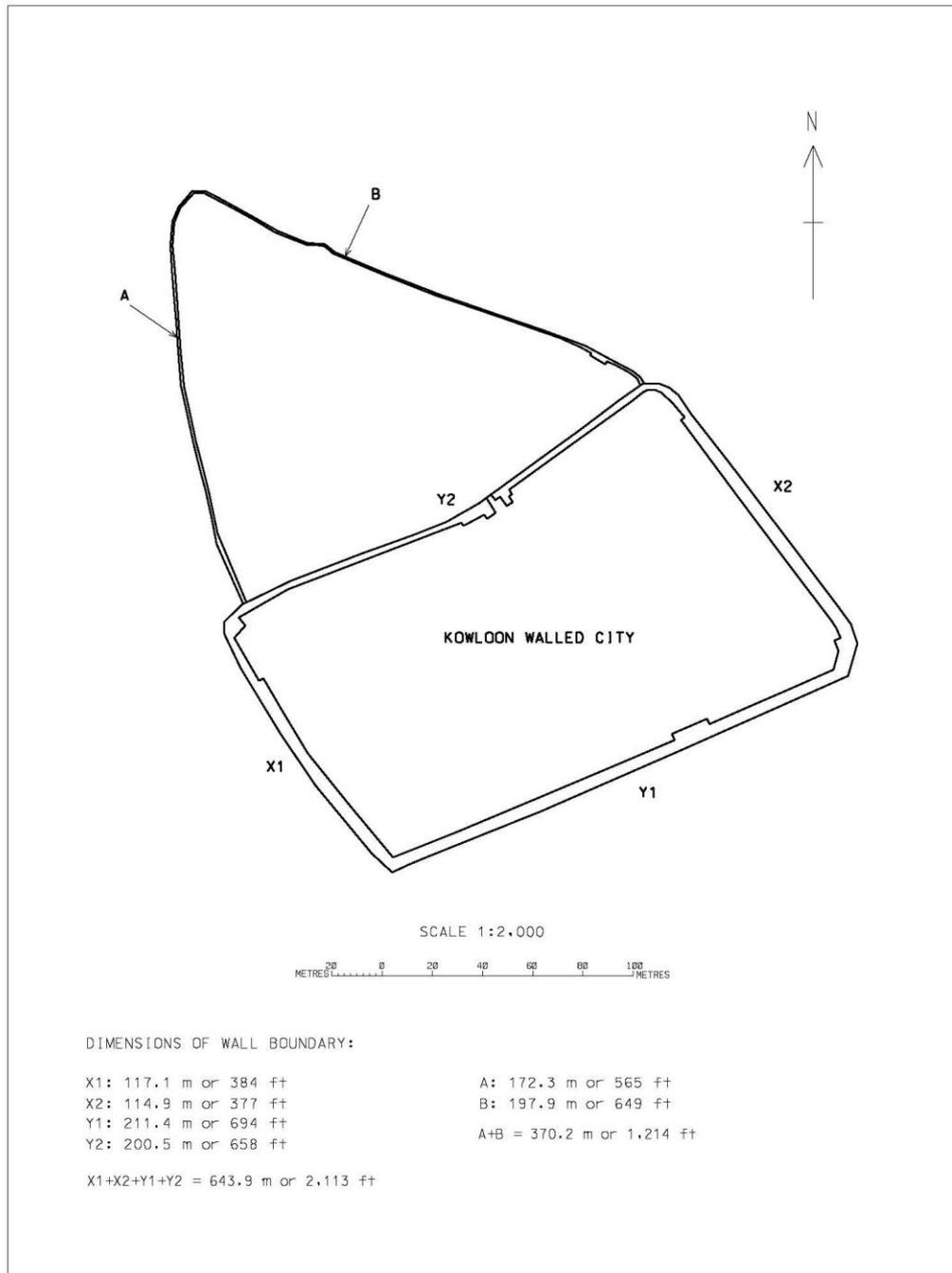


Figure 1

Figure 1: Kowloon Walled City as surveyed

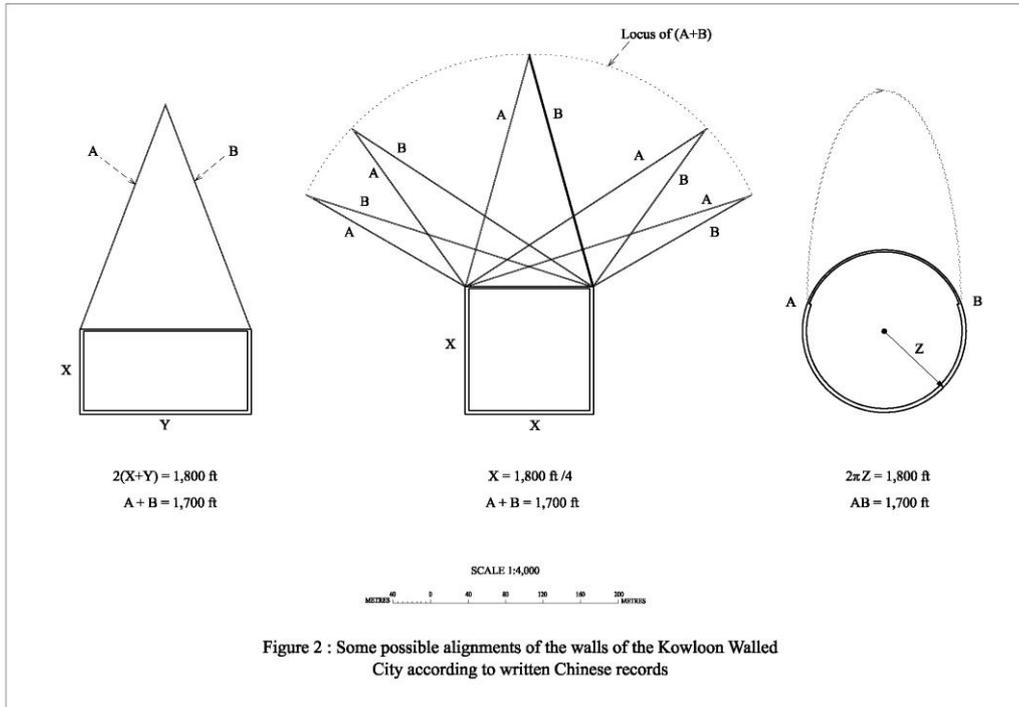


Figure 2: Possible alignments of the walls of the Kowloon Walled City according to written Chinese records

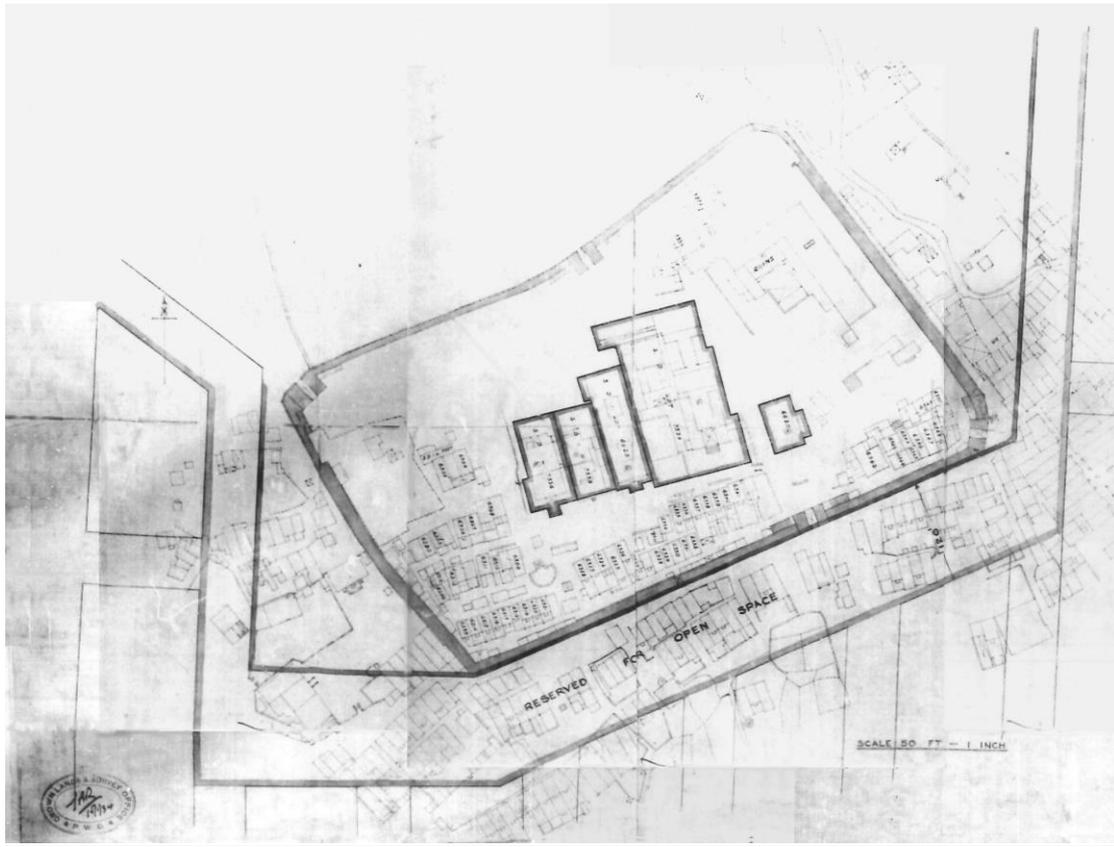


Figure 3: Open space reserve outside the Kowloon Walled City on a British Hong Kong town plan of 1933

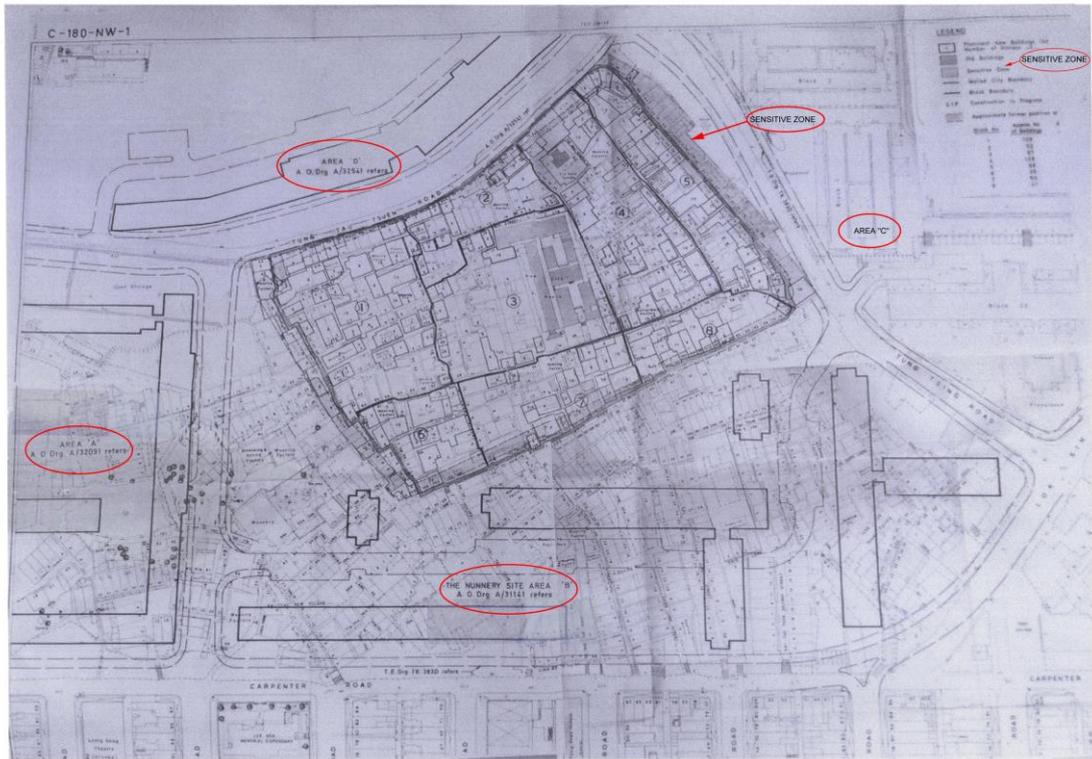


Figure 4: The “Nunnery Scheme” for the Kowloon Walled City and its vicinity



Figure 5: Reinforcing the image of the Kowloon Walled City by modelling

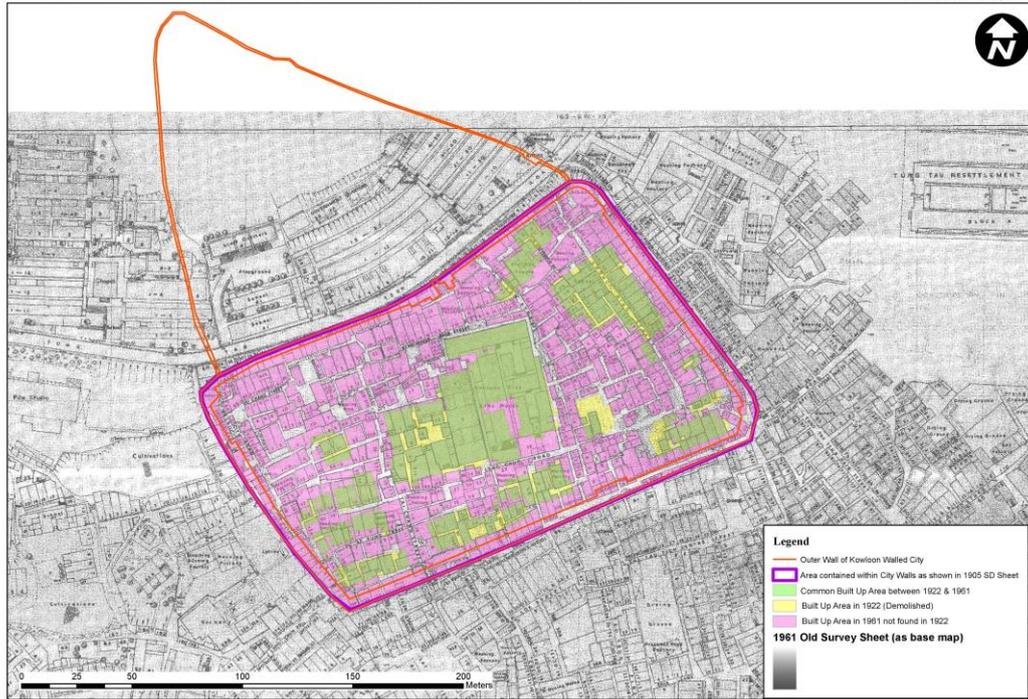


Figure 6: Differences in the footprints of built up areas in the Kowloon Walled City of 1922 and 1961

Outer Wall of Kowloon Walled City on Contemporary Survey Sheet

Scale 1:1,200 @ A3

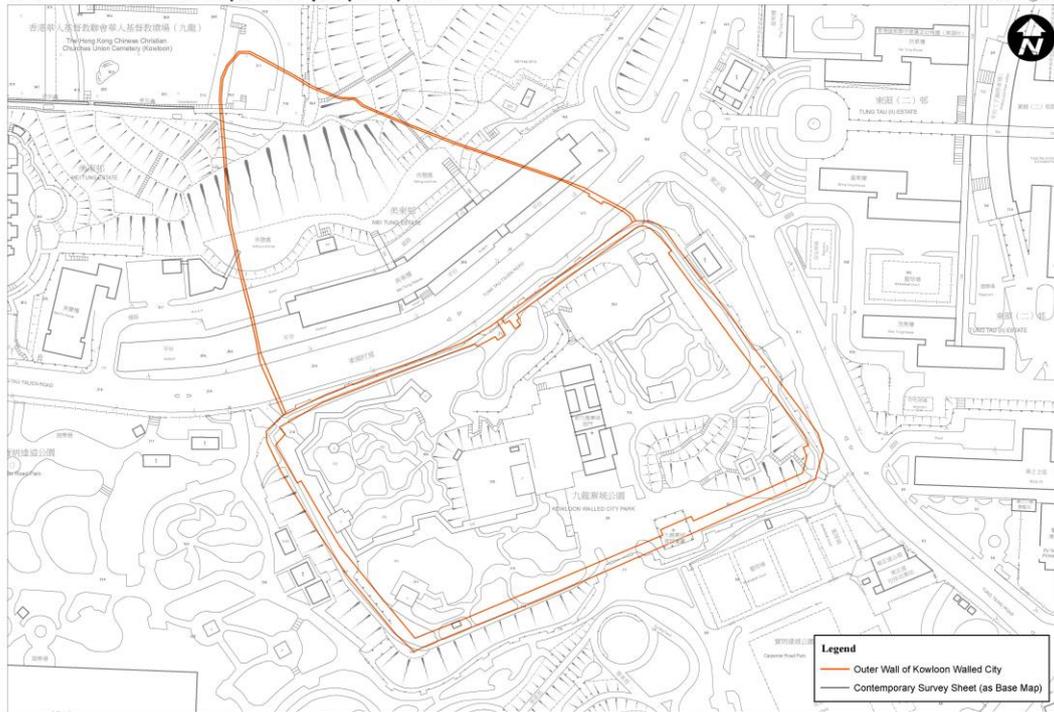


Figure 7: The outer (and thinner) wall of the Kowloon Walled City on a modern map

## References

### Public records

Colonial Office CO129/544/14

Colonial Secretary (1976). "Kowloon Walled City: Implementation of Ad Hoc Committee Reports" Confidential File CR5/3371/60 Part VII. Part I. [HKRS 163-9-233 Part I]

### *Hong Kong Defence Scheme 1936*

Foreign and Commonwealth Office (FCO) File No. HK K1/31.

### Articles and books

1. Antrop, Marc. "Why landscapes of the past are important for the future." Landscape and Urban Planning 70, no. 1 (2005): 21-34.
2. Bricocoli, Massimo, O. de Leonardi, and Paola Savoldi. "Open spaces, walls and housing. The aesthetics and politics of social order." In *Proceedings of the 23rd Enhr Conference: Mixitè: an urban and housing issue*. 2011.
3. Carney, John. "Kowloon Walled City: life in the city of darkness." *South China Morning Post*. 16 March 2013, updated 12 February 2015.
4. Carreno, Martorell Alberto, and ICOMOS Peru. "Buffer zones as a tool for protecting world heritage sites: The case of the heritage routes." In

ICOMOS Symposium, November, pp.28-29. 2006.

5. Cartier, Carolyn. "Transnational urbanism in the reform-era Chinese city: landscapes from Shenzhen." Urban Studies 39, No.9 (2002): pp.1513-1532.
6. Chiu, Yu Lok and Po Yin Chung. Kowloon City. Hong Kong: Joint Publishing, 2001. ISBN 962.04.1970.7 (Chinese publication).
7. Colonial Secretary (1976). "Kowloon Walled City: Implementation of Ad Hoc Committee Reports" Confidential File CR5/3371/60 Part VII. Part I. [HKRS 163-9-233 Part I]
8. Council of Europe, 2000. The European Landscape Convention, Strasbourg.
9. Déjeant-Pons, Maguelonne. "The European landscape convention." Landscape Research 31, No.4 (2006): pp.363-384.
10. Endacott, G.B. A History of Hong Kong. Hong Kong, Hong Kong University Press, 1982.
11. Fernandes, Walter. "Conflict in North-East: a historical perspective." Economic and Political Weekly (1999): pp.3579-3582.
12. Girard, Greg, Ian Lambot, and Charles Goddard. City of Darkness: Life

in Kowloon Walled City. Watermark, 1999.

13.Ho, Suenn. An Architectural Study on the Kowloon Walled City,  
Sunshine Publishing, 1993.

14.Kani, Hiroaki ed. Grand Panaroma of the Kowloon Walled City  
(Daizukan Kyuryujyou) Tokyo : Iwanami Shoten, 1997.

15. Kwan, Mei-po. "Comment: critical visualization in landscape and  
urban planning: Making the invisible visible Commentary for the  
"Framing Landscape Visualization" Section." Landscape and Urban  
Planning, 142 (2015): 243-244.

16.Kolejka, Jaromír, and Zdeněk Lipský. "Landscape maps in the Czech  
Republic in connection with world and European development."  
Journal of landscape Ecology (2007): pp.54-74.

17.Lai, Lawrence W.C. Zoning and Property Rights: a Hong Kong Case Study.  
Hong Kong: Hong Kong University Press, 1996.

18.Lai, Lawrence WC. "'As planning is everything, it is good for something!'"  
A Coasian economic taxonomy of modes of planning." Planning Theory  
(2014): 1473095214542632.

19.Lai, Lawrence W.C. "'Where to draw the line?' That is a land use  
planning question for the land surveyor and the town planner." Land

Use Policy 42 (2015) pp.619-627.

20.Lai, L.W.C., Chau, K. W. and Lorne, F.T. "Informal land registration under unclear property rights: Witnessing contracts, redevelopment, and conferring property rights." Land Use Policy 50 (2016): pp. 229-238.

21.LeVine, Mark. "Conquest through town planning: the case of Tel Aviv, 1921-48." Journal of Palestine Studies (1998): pp.36-52.

22.Lo, Shiu-Hing "Political culture and participation in Macau." Asian Affairs: An American Review17, no. 3(1990): pp.147-155.

23.Mataga, Jesmael. "Practices of pastness, postwars of the dead, and the power of heritage: museums, monuments and sites in colonial and post-colonial Zimbabwe, 1890-2010." Unpublished PhD thesis, School for African & Gender Studies, Anthropology & Linguistics, University of Cape Town, August 2014.

24.Mazrui, Ali A. "On the concept of "we are all Africans"." American Political Science Review 57, no. 01 (1963): 88-97.

25.Miners, Norman. The Government and Politics of Hong Kong, Oxford University Press, 1981.

26.Popham, Peter. "The city of darkness." Architectural Review 193, No.1161 (1993): pp.71-75.

27. Punter, John V. "The Privatisation of the Public Realm." Planning Practice and Research 5, No.3 (1990): pp.9-16.
28. Ryan, Robert L. "Comparing the attitudes of local residents, planners, and developers about preserving rural character in New England." Landscape and Urban Planning 75, No.1 (2006): pp.5-22.
29. Sinn, Elizabeth. "Kowloon Walled City: Its Origin and Early History". Journal of the Hong Kong Branch of the Royal Asiatic Society 27 (1987): pp.30-31.
30. Stilgoe, John. "Documents in landscape history." Journal of Architectural Education 30, no.1 (1976): pp. 15-18.
31. Swaffield, Simon R., and Wendy J. McWilliam. "Landscape aesthetic experience and ecosystem services." Ecosystem services in New Zealand—conditions and trends. Manaaki Whenua Press, Lincoln, New Zealand, 2014.
32. Waller, Nicholas. Framing Landscapes and the Preservation and Interpretation of Bear Butte. Unpublished Masters Dissertation, International Museum Studies. Göteborg University, 2012.
33. Weir, Rob. "A note of British blockhouses in Hong Kong." Surveying and Built Environment 22, No. 1 (2012): pp. 8-18.

34. Wesley-Smith, Peter. "The Walled City of Kowloon: Historical and Legal Aspects," Hong Kong Law Journal 3 (1973): pp.67-96.
35. Wood, Denis, and John Fels. "Reflection essay: designs on signs: myth and meaning in maps." Classics in Cartography: Reflections on Influential Articles from Cartographica, J. Wiley & Sons, Chichester, West Sussex, UK, 2011: pp. 261-270.
36. Wolfel, Richard L. "The tyranny of the map and modern instability: The ramifications of incongruent political and ethnic boundaries on modern Africa." In Amy Richmond Krakowka, Amy Richmond and Laurel J. Hummel eds. Understanding Africa: A Geographic Approach, United States Military Academy West Point, New York, 2009, pp. 95 - 108.
37. Wong, Cecilia, Mark Baker, Brian Webb, Stephen Hincks, and Andreas Schulze-Baing. "Mapping policies and programmes: the use of GIS to communicate spatial relationships in England." Environment and Planning B: Planning and Design 42, No.6 (2016): pp.1020-1039.
38. Wylie, John. "Landscape, absence and the geographies of love." Transactions of the Institute of British Geographers 34, No.3 (2009): pp.275-289.

