

# The shape of things to come, Hong Kong's infrastructural city fabric: 1989-2020

Nathalie Roseau

#### ▶ To cite this version:

Nathalie Roseau. The shape of things to come, Hong Kong's infrastructural city fabric: 1989-2020. Planning Perspectives, 2021, 31p. 10.1080/02665433.2021.2001363. hal-03443025v1

## HAL Id: hal-03443025 https://enpc.hal.science/hal-03443025v1

Submitted on 21 Jul 2024 (v1), last revised 23 Jul 2024 (v2)

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Version postprint de Nathalie Roseau (2021), « The shape of things to come, Hong Kong's infrastructural city fabric, 1989-2020", *Planning Perspectives*, Routledge, Vol 37:2, pp. 369-399. doi.org/10.1080/02665433.2021.2001363

## The shape of things to come, Hong Kong's infrastructural city fabric: 1989-2020

Nathalie Roseau<sup>1</sup> École nationale des ponts et chaussées LATTS (CNRS, ENPC, Université Gustave Eiffel)

#### **ABSTRACT**

In revisiting the metamorphosis of Hong Kong's air infrastructure, this article explores the transition over the past thirty years that has seen the City-State transformed by a multi-faceted process. This has been the instrument of its metropolization within the context of its handover to China and its 'integration' within the Pearl River Delta Megalopolis. Given the political backdrop, the history of its formation is fraught with controversy concerning the urban development challenges inherent in the archipelago's future. This essay sheds light on these through an analysis of the infrastructure-based reform discourse that underpinned it and its effects on the production of the city. While infrastructure was changing the urban geography, it was simultaneously being shaped according to its context; as the city colonised it, the two merged into a single *whole* whose boundaries shifted and recomposed over time as the infrastructure was rolled out. This article tells the story of this trajectory and what it says about the role of infrastructure in metropolitan transformation processes, just as questions were being raised over the future of Hong Kong as a global city.

**KEYWORDS**: Hong Kong Metropolis, Pearl River Delta Megalopolis, Region, City-State, planning, infrastructure, airport, narratives, urbanism, megastructure.

Forces of change [...] seem to be inevitable, because they are the background against which we have to plan. In other words, it is useless for us to try to plan for a scene which does not take these forces into account.

Graham Barnes, Hong Kong Secretary for Planning, Environment and Lands, "The shape of Hong Kong after Port and Airport Development Strategy", 20th November 1989, 3-5

In late 1989, when Graham Barnes was relaying the decision of the Governor of Hong Kong to build the City-State's new airport, the Secretary for Planning was not just describing the enormous building site that would soon transform the present city. 'The shape of things to come<sup>2</sup>' has echoes of Herbert George Wells as the government declared that the future should be a vector for change and help forge the 'city of tomorrow'. One of the most astonishing acts in this narrative occurred on the night of 5 July 1998 when Hong Kong airport moved to its new location on the artificial island of Chek Lap Kok, 34 kilometres from the hypercentre. The event had geopolitical significance as it helped reposition Hong Kong as a global city at the mouth of the Pearl River Delta. The decision to build the new airport came ten years after Deng Xiao Ping set up the Shenzhen and Zhuhai Special Economic Zones in late 1978, and just a few years before the British colony was handed over to China. The sheer ambition of this massive

<sup>&</sup>lt;sup>1</sup> Nathalie Roseau is Professor of urbanism at École nationale des ponts et chaussées and Director of Laboratory Technics, Territories and Societies (CNRS, ENPC, Université Gustave Eiffel) Nathalie.roseau@enpc.fr

<sup>&</sup>lt;sup>2</sup> Cited in Hong Kong Government, Port and Airport Development Strategy [1991], 67.

undertaking can also be gauged by its close ties to urban planning and the push for major redevelopment that went way beyond infrastructure in its strict sense. It was not just a new airport that was being built: the port was being made bigger, new motorway and rail networks were being deployed and vast land reclamation projects were launched to house urban development programmes. In a relatively short time – less than ten years – a vast and multifaceted infrastructure would be deployed that radically modernized the city.

The infrastructural metamorphosis of Hong Kong did not end with the opening of the new airport. From metropolis to megacity, the process continued as part of the regional expansion of the Pearl River Delta in China – or 'the mainland' as Hongkongers attached to their island status still call it. This uninterrupted movement received extensive coverage in the media and generated a substantial corpus of material for analysing the discourse and highlighting how the infra-urban apparatus deployed in the Hong Kong archipelago actually came about. This article tells the story of this trajectory and what it says about the role of infrastructure in metropolitan transformation processes.

#### Introduction: infrastructure as nexus of socio-spatial dynamics

Since the opening of Hong Kong's new airport, urban studies research literature has produced extensive analyses from different disciplines – architecture, urbanism, planning, etc. – highlighting the unprecedented scope of the metropolitan process that has taken place<sup>3</sup>. All of these essays revisit its seminal nature and political dimension, marked by reforms sponsored at the very highest levels. However, this unprecedented transformation cannot mask the contradictory dynamics at work. What counterpoints and flaws lie behind the powerful rhetoric and spectacular showcase? We also need to pay attention to the controversies and objections that occurred throughout, together with the practices and uses that lend it material substance and provide another way of looking at the different dimensions of a city.

As a technical, urban and political object, the airport infrastructure shaped this transformation at the same time as it was itself transformed by contact with its environment, forming a nexus with the archipelago's socio-spatial dynamics. We need to take the time here to define 'infrastructure' if we wish, as the historian Bernard Lepetit urges, 'to avoid the twin symmetrical risks of an opacifying complexity and losing sight of the object<sup>4</sup>'. Its elusiveness stems from its own capacity of assimilation within space. When it achieves its objective of irrigating, equipping and developing, infrastructure blends into the *milieu* that it transforms and this relative invisibility highlights the process of hybridation through which it is built. Our understanding and definition of the term infrastructure touches on three registers. As a material *stratum*, infrastructure comprises different kinds of – ordinary or extraordinary – structures and channels measured in terms of their expansion capacity and the range of social actors they affect either directly or indirectly. It is also an interactional *dispositif* in which uses and actions, institutions and practices come together to drive it forward at the same time as it influences behaviour. Lastly, it is the product of the *imaginary*, of abstract thought nurtured by values and desires, translated into doctrine and knowledge, which in turn influence its future<sup>5</sup>.

<sup>&</sup>lt;sup>3</sup> Ng, "Strategic Planning in Hong Kong"; Matsuda, "Hong Kong's Future as an 'Airport City'"; Orsay-Lam, "Un aéroport et une ville nouvelle"; McNeill, "Airports and territorial restructuring".

<sup>&</sup>lt;sup>4</sup> Lepetit, "La ville, cadre, objet, sujet, » 9.

<sup>&</sup>lt;sup>5</sup> Roseau, "Pouvoirs des infrastructures".

The sociologist Susan Leigh Star, who described infrastructure as the 'Cinderella' of urban studies, stressed that the question was not so much *what* an infrastructure is, but rather *when* we are actually dealing with an infrastructure. She ultimately described it as part of a relationship that transforms the spaces it connects: 'something people [...] act toward and with. Its materiality derives from action, not from a sense of prefabricated stuff or "thing"-ness<sup>6</sup>'. Understanding these various relational arrangements allows us to analyse the dynamics of the city and the ways in which urban space takes form. In the same vein as Star, in their book *Splintering Urbanism* (2001), geographers Stephen Graham and Simon Marvin called for the black box of infrastructure to be opened, their socio-political reading underlining the processes of social and urban fragmentation of which infrastructures form one of the nodes in the context of the globalisation and digitalisation of society. In the meantime, similar accelerated development movements occurring in a number of 'XXL metropolises' have highlighted the enormous integrating power of infrastructures, which, in the words of Dominique Lorrain, act as 'systems of coherence' that foster the emergence of higher-level 'legitimate powers'<sup>7</sup>.

Throughout the history of Hong Kong, infrastructure has been a repeated opportunity to rewrite the modern narrative, first of the colony and then of the autonomous region. By adopting an infrastructural perspective, we propose a framework for considering the large metropolitan scale of the city and identifying the social, spatial and political issues of its recent metamorphoses. This perspective forms part of the prolific field of critical scholarship in urban infrastructure that has developed over the past two decades within Science and Technology Studies. 'Infrastructure functions as a lens through which to understand socio-spatial and political governance dynamics and as technologies that catalyze and crystallize their dynamics': in a summary article published in 2020, Jean-Paul Addie *et alii* made a plea to 'regionalize the infrastructural turn' to understand 'the implications of the current infrastructure moment for metropolitan spaces worldwide'<sup>8</sup>. Through analysing the motives and effects of the infrastructure-based reform discourse on the Hong Kong urban and regional fabric, this study sheds light on the conditions in which the city has been modernised through its infrastructure renewal and how the two merged into a single *whole* whose boundaries shifted and recomposed over time

#### Rendering the coming future visible

The 'Infrastructure imagination and Hong Kong Futures' exhibition, which opened at the Hong Kong City Gallery in March 2018, presented some remarkable photos of major engineering and industrial projects in Hong Kong from 1972 to 1988 by the British photographer Heather Coulson. Photos of the maritime tunnel that opened in April 1972, linking Hong Kong to Kowloon, appeared alongside others of the metro system built in the 1980s, which extended Hong Kong into the New Territories. Wandering through the City Gallery's permanent collection, one could enjoy views of the high-speed train line that recently linked Hong Kong to Guangzhou in under an hour. The airport infrastructure initiated at the very beginning of the 1990s also had pride of place. [Figure 1]

<sup>&</sup>lt;sup>6</sup> Star, "This is not a boundary object," 603.

<sup>&</sup>lt;sup>7</sup> Lorrain, *Métropoles XXL*.

<sup>&</sup>lt;sup>8</sup> Addie *et alii*, "Regionalizing the infrastructure turn," 16.



Exhibition at City Gallery, 3 Edinburgh Place, Central, Hong Kong (Free admission) 展覽於香港中環愛丁堡廣場3號展城館(免費參觀)

Public Symposium 公開研討會 24. 3. 2018 10am - 12:30pm Community Workshop 工作坊 7. 4. 2018 10am - 1pm



**Figure 1.** Infrastructure Imagination, Hong Kong City Futures, Hong Kong City Gallery, 2018. Source: Hong Kong University, Department of Architecture.

#### Territorial reforms: the realm of the possible

Relocating the airport had long been a nagging issue on Hong Kong's planning agenda and was already being mooted shortly after the Second World War. Expanding the existing Kai Tak Airport on the Kowloon peninsula was hampered from an early stage by the surrounding densely-populated environment. The strong growth in urbanisation, fuelled by successive waves of immigration from mainland China, led to the preparation of a first development plan in 1948 by Patrick Abercrombie, author of the Greater London Plan. It proposed creating infrastructure, reclaiming land and developing new towns in the New Territories – vast tracts of agricultural lands ceded to Great Britain by China in 1898 to facilitate the colony's expansion<sup>9</sup>. While Kai Tak Airport was being upgraded at the beginning of the 1960s, with the extension of the runway into the bay and new facilities, the authorities began considering alternative sites that could accommodate a major platform free from any existing constraints. In 1973, this reflection culminated in a comprehensive study which selected thirteen sites, including Chek Lap Kok, which was the focus of particular attention. This was a virgin territory, located to the southwest of Hong Kong Island and Kowloon in the Pearl River Delta, opposite the mountainous island of Lantau which at this time could only be accessed by boat, while offering extensive possibilities for urbanisation to keep pace with the city's growth<sup>10</sup>.

However, the oil price shocks cooled the ambitions of the Hong Kong authorities. There was also uncertainty over the political future of the archipelago as the end of the British mandate drew near while China embarked on a policy of greater economic openness with the creation of Special Economic Zones in 1978. The choice of Shenzhen some twenty kilometres away, to which Hong Kong could relocate its manufacturing activities, accelerated the city's economic transition. The Open Door Policy signalled a geopolitical statement that was to seal the fate of the British colony. On 19 December 1984, Prime Ministers Margaret Thatcher and Zhao Ziyang signed the joint handover agreement. Beginning from 1 July 1997 – the official handover date – the declaration conferred Special Administrative Region status on Hong Kong along with relative political and economic autonomy. The Territorial Development Strategy – approved at the same time – outlined the archipelago's future planning strategy. It contained two proposals for the airport's location: keeping it at the existing Kai Tak site, or moving it to Chek Lap Kok<sup>11</sup>. A third alternative was advanced in autumn 1986 by Gordon Wu, Chairman of the island's biggest public works contractor, Hopewell Holdings Limited, involving an airport in the southwest port area to be built by a private consortium.

#### Political object and project

Political decisions and territorial development strategies went hand in hand and Wu's privately-funded project ran counter to government interests. It encroached upon a significant chunk of port territory belonging to the British Crown at a time when land was both scarce and expensive. As both a land and maritime property owner, the Hong Kong government administered land as a strategic asset that generated significant revenues and limited the fiscal burden. Moreover, to ensure wiggle room for public finances after 1997, China capped lease transfer volumes at 50 hectares per year through to the handover deadline, driving up land values still further.

<sup>&</sup>lt;sup>9</sup> Between 1945 and 1950, the population of Hong Kong ballooned from 750,000 to 2.2 million people and this relentless growth continued unabated into the 1980s with the addition of one million new inhabitants every ten years. The archipelago currently has a population of 7.5 million (2019). Pryor, Pau, "The growth of the city, a historical review". Concerning the history of Kai Tak, see Pigott, *Kai Tak* 

<sup>&</sup>lt;sup>10</sup> Parsons and alii, "Hong Kong Air Transport System," 22, 42.

<sup>&</sup>lt;sup>11</sup> "Hong Kong Territorial Development Strategy" [1984].

'In land-starved Hong Kong, finding such a site proved to be impossible and the solution, therefore, was to reclaim [...]<sup>12</sup>.' The space needed to expand the airport became a major strategic challenge, as the airport authority subsequently recounted in the 'foundation' of the airport. The Chek Lap Kok site now appeared to be the most promising as it would increase the city's territorial resources by focusing expansion out towards the Delta. The final decision was taken on 11 October 1989 at the opening session of the Legislative Council (LegCo), when the British Governor David Wilson proposed the creation of the new airport. This session coincided with the Tiananmen Square Massacre of 3 and 4 June, which left several hundred people dead and thousands injured and brutally arrested, putting paid to any hope of political normalisation in China. With its strong attachment to public freedom, the Hong Kong population was deeply traumatized by the massacre. At the highest levels, the tension between the British and Chinese authorities was palpable and meetings planned in the summer to discuss the conditions for the handover were cancelled at the initiative of Margaret Thatcher.

'Images are often created by events beyond our control [...]. We must, above all, tell the world what we are doing ourselves to build for our future'<sup>13</sup>. In his address to the Assembly, the Governor of Hong Kong tried to move beyond these bleak images to reassert control over the future. His general policy speech combined statement and intent to outline the City's future strategy, of which the new airport was to form the cornerstone. 'Building the airport itself, enormous though that project will be, is only part of the story'. <sup>14</sup> The airport would spearhead the 'physical infrastructure' but was far from being the only project envisaged to transform the city's structure: there was also a high-speed metro line and highway to serve the airport, a nearby new town, extension of territory into the sea, and redevelopment of the old Kai Tak site. As the Governor himself said, it was the biggest works programme ever undertaken by the City, turning its 'vision' into a future reality.

We have a clear vision of what we are trying to achieve. It is a vision that I hope will sustain Hong Kong during the present period of uncertainty and give us all confidence in our ability to overcome whatever problems confront us. [...] In the year 2000, Hong Kong will be a Special Administrative Region of the People's Republic of China. It will have a wholly elected legislature and [...] a high degree of autonomy. [...] Physically, Hong Kong will have changed almost beyond recognition<sup>15</sup>.

Other similar speeches followed. At one conference, Secretary for Planning, Environment and Lands, Graham Barnes gave a speech entitled 'The shape of Hong Kong after Port and Airport Development Strategy'. He placed the decision within the historical context of major development plans and then talked of the city to come, describing the complete transformation that the metropolitan landscape would undergo, before concluding in a deliberate tone: 'We who live here and who have always been accustomed to continuous physical changes, will want more, and we will certainly get them' 16. Two months later, the final project was published in a comprehensive 250 page report and while the three alternatives were still there, the document clearly plumped for Chek Lap Kok.

#### The Airport controversy

<sup>&</sup>lt;sup>12</sup> Hong Kong Airport Authority, *Hong Kong International Airport* [2001].

<sup>&</sup>lt;sup>13</sup> "Hong Kong's image in the world," in Hong Kong Government Policy Address [1989], par. 37.

<sup>&</sup>lt;sup>14</sup> "The Airport," *Ibid*, par. 81.

<sup>&</sup>lt;sup>15</sup> "A Vision of the Future," *Ibid*, par. 99, 101, 102, 106.

<sup>&</sup>lt;sup>16</sup> Barnes, "The shape of Hong Kong," 7; Hong Kong Government, Port and Airport Development Strategy [1989].

However, not everyone was happy with the government's decision and there was loud criticism from a number of powerful and influential quarters. There were political reservations from China over a project decided without its approval and which, in its view, risked encumbering Hong Kong's finances well beyond 1997 when Britain would have left. And economic criticism too, with private sector representatives rallying around Gordon Wu to denounce a programme they considered expensive and to counter the growing power of the public authorities. 'We do have the choice!' argued Wu, who appeared at public forums along with his allies to lobby for an alternative project. The criticism was directed as much at the strategy as at the accompanying land creation proposals, which property groups feared would distort the land and property market. State involvement in reconquering the city fuelled resentment, resulting in tactical manoeuvring in favour of the mighty Chinese neighbour, whose stated economic liberalism appealed to these advocates of smaller government. 'Perhaps it is ironic that the world's most populous communist State favors privatization while Hong Kong, the last bastion of capitalism, favors nationalization in the PADS implementation. Perhaps the bottom line consideration is the one that matters<sup>17</sup>.'

And lastly, public criticism as the 1997 deadline had led to the creation of groups who resented the government for having unilaterally negotiated the conditions of the handover. The violent outcome at Tiananmen Square changed the way Hongkongers viewed the upcoming transition, especially when Jiang Zemin 'warned' them not to interfere in Chinese politics when a million people marched through the city streets in support of demonstrators and to protest against the Chinese government. The Airport controversy reflected this climate of mistrust. While the project was initially well received by those who saw it as an opportunity for the city's emancipation, it subsequently became the focus of strong criticism, targeting the 'bureaucrats' who were developing it behind closed doors<sup>18</sup>.

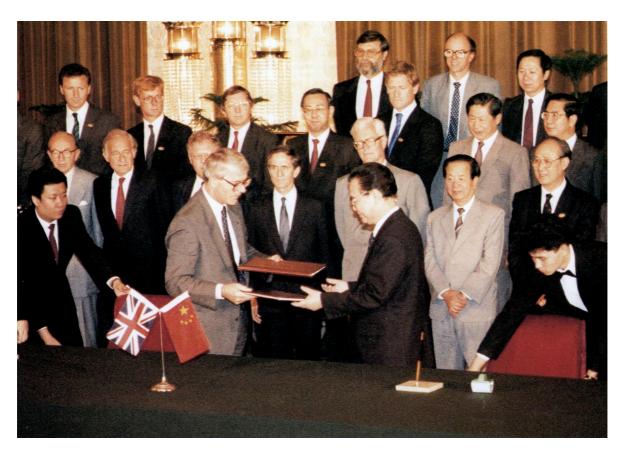
The decision by Hong Kong's Governor to take the City's destiny in hand was announced at a time of icv diplomatic relations between Great Britain and China and may be viewed in the context of a stand-off between the rival authorities amidst an increasingly vocal civil society. Indeed, a more democratic process for appointing representatives to the Assembly had already begun, reflecting the commitment to the principle of 'One Country, Two Systems' enshrined in the Sino-British agreement. For Hong Kong, the airport plan was another means of asserting its independence. As difficult talks were beginning between Great Britain and China, the first stages of the project were getting under way with the construction of the Lantau Bridge, taking the Chinese authorities by surprise and leading to increasingly threatening language. After several rounds of negotiations, a compromise was finally reached in the summer of 1991 and approved on 3 September by Prime Ministers John Major and Li Peng, who agreed on a sharing of risks between the Hong Kong and Chinese governments<sup>19</sup>. John Major became the first western prime minister to agree to travel to Beijing since the events of Tiananmen. This conclusion did nothing to reassure Hongkongers who had not been consulted and viewed the agreement as a concession to China, giving it excessive power over the City's finances post-1997. [Figure 2]

-

<sup>&</sup>lt;sup>17</sup> Wu, "Airport alternatives," 2, 12.

<sup>&</sup>lt;sup>18</sup> Ng, "PADS in Hong Kong," 5; Loh, "Ports, airports and bureaucrats".

<sup>&</sup>lt;sup>19</sup> "Memorandum of Understanding".



**Figure 2**. Signature of the Airport Memorandum of Understanding by John Major et Li Peng, 3<sup>rd</sup> September 1991. Source: South China Morning Post, Photo Reuters

#### **Building new territorialities**

The controversy threw up a number of protagonists in an intrigue that played out in several acts: government authorities, private entrepreneurs, citizen groups, experts and professionals, against the backdrop of negotiations between China and Great Britain – all receiving extensive coverage in the media. Between autumn 1989, when the new airport project was officially announced, and the summer of 1998 when it opened, the archives of the *South China Morning Post* – the region's most widely read English-language daily newspaper – attest to tens of thousands of references to this topic.

#### **Coalitions**

'Future Horizons': the upshot of this hectic period in which the arguments of opposing forces shifted the contours of the project was the new version of the Port and Airport Development Strategy (PADS), published in 1991 and sub-titled 'A foundation for growth'. This second edition revisited Hong Kong's urban history and presented the strategy to be deployed by the coalition that had been forged around the government and the business community. 'Over that time, both the Hong Kong Government and the private sector have clearly demonstrated that the community as a whole has the necessary resourcefulness energy, institutional structures and

professional capabilities to turn visions into viable projects which, in turn, will create another platform for growth'<sup>20</sup>.

This strategy was deployed on a number of different levels. First, it reasserted Hong Kong's regional and global position: the airport was to be the centrepiece of Hong Kong's development, consolidating its position not just in the Pearl River Delta but in South China as well. As part of this regional expansion process, the government sought to avoid ruffling the feathers of its large PRC neighbour in whose service it placed its project: 'The substantial, long-term development prospects of South China, supported by China's pragmatic "open door" policy will gain considerably from the vital contribution which the various PADS projects can make'21. In the face of criticism targeting the exclusively infrastructural dimension of the project to the detriment of economic and urban issues, the Hong Kong government finally consolidated the territorial development foundations of the project.

The first step in this foundation was to bring urban plans into line with infrastructure programmes. The agreement that sealed negotiations between Great Britain and China heralded the launch of the new Airport Core Programme. Estimated at a cost of HK\$ 200 billion, it provided for the construction of a series of major works comprising the future port and airport infrastructures as well as servicing the adjacent new territories that would be the focus of future metropolitan development. The new updated 1988 version of the Territorial Development Strategy set out the regional and territorial guidelines for this programme, while the Metroplan, a blueprint that had been in the pipeline since 1987, was approved in September 1991. With both a strategic and a legal focus, this document planned to improve access to the city by expanding public transport networks and easing pressure by reclaiming land from the sea. The cohesion of this whole planning apparatus, which constantly sought to keep strategies in phase with plans and programmes, would be maintained throughout construction work, as stipulated in the introduction to the new 1993 edition of Territorial Development Strategy, which states that 'The working assumptions used in the [TDS] Reviews are similar to those employed for the formulation of the Metroplan and the PADS in order to maintain consistency between the various studies'22. [Figure 3]

#### Creating a territory

While the political actors were still on stage, the theatre of operations was ramping up with the arrival of the builders. The second act began in 1992 with the preparation of the ground for the future airport. 'Coming to Chek Lap Kok was a little like going into a desert environment where you take over an area and mould it to meet your needs'<sup>23</sup>. The recollections of the Director of Works of the provisional airport authority highlight the spectacular nature of the airport construction site.

The island of Chek Lap Kok was entirely razed, enlarged and joined to the mountainous island of Lam Chau – which was also levelled – giving a territory that measured 1,250 hectares. The soil used for backfilling had been recovered from the destruction of landforms and consolidated by deep-sea dredging. Other major work was being undertaken at the same time in accordance with the programme announced by the government. Three new motorways were built in

<sup>&</sup>lt;sup>20</sup> Hong Kong Government, Port and Airport Development Strategy [1991], 87.

<sup>21</sup> Ihid

<sup>&</sup>lt;sup>22</sup> "Hong Kong Territorial Development Strategy" [1993], 5.

<sup>&</sup>lt;sup>23</sup> Hong Kong Airport Authority, *Vision to reality*, 123.

addition to a mile-long tunnel under the port. There were also two suspension bridges and a viaduct spanning 2,200 metres for crossing the western part of the bay – all three of which could take either rail or road traffic.



**Figure 3**. 'Hong Kong's Port and Airport Development Strategy', 1991, photography of the model. Source: Planning Department, The Government of the Hong Kong Special Administrative Region.

'The world of Chek Lap Kok': there were not enough superlatives to describe the sheer enormousness of the site, said to be the largest in the world. First, entire mountains were razed and earthworks involved moving astonishing volumes: a figure of ten tonnes of material per second was often mentioned at the height of the construction work. "The statistics are impressive and they convey the enormity of what has been accomplished [...]<sup>24</sup>. People attempted to draw parallels with existing references to make sense of the scale. The Asian edition of *Newsweek* reported that 'At one point, marine operations moved the equivalent of an Empire State Building every five days'. Or, to hammer home the extraordinary nature of the whole undertaking: 'Work on the Chek Lap Kok airport, the world's largest construction project, began by moving a mountain. Since then, airport authorities have been bulldozing world records aside at a steady pace. The terminal building will be the world's largest, built in a total of 13 million man-days'<sup>25</sup>. [Figure 4]

The enormous financial outlay for the Airport Core Programme is often trotted out as a reminder of the other amazing achievement: all the projects were completed on time and on budget. An account of the construction site reads like a technological and human epic tale. A mere 36 months were needed to complete the airport terminal, comparable in size to '35 football fields' and eight times larger than Kai Tak. Designed by the British architecture firm of Norman Foster, the air terminal would be one of the largest buildings in the world. The construction site itself

-

<sup>&</sup>lt;sup>24</sup> "The New Hong Kong international airport," 7.

<sup>&</sup>lt;sup>25</sup> Elliot, "Hard times in Hong Kong," 13; Graham, "Chek Lap Kok".

was compared to a city, a huge beehive which, at its height, brought together nearly 20,000 people speaking many different tongues, like a modern-day 'Tower of Babel under construction' 26.



**Figure 4.** Aerial views and photography of the progression of the airport building site, published in Vision to reality, 1998.

#### Airport back into the city

The construction of the new airport was accompanied by another major project, the Airport Express Line, a 34-kilometre-long rapid transit city-airport link with several downtown stations, including Central in the hypercentre on Hong Kong Island, and Kowloon on the Chinese peninsula, where two transport hubs would be built, each with their own 'In town' terminal. These would allow air passengers to complete check-in formalities "In town" before travelling out to the airport to board their plane; checked-in luggage would be brought out in special reserved Airport Express Line wagons. Passenger forecasts were highly ambitious: according to the government, almost half of all air passengers would use this rapid transit line, which would take them from the city centre to the airport 'in just 23 minutes' [Figure 5]

The project initiator was MTRC (Mass Transit Railway Corporation), the Hong Kong metro company. It owned the concession for the lands along the future train line and its stations and financed their construction by densification programmes in the adjacent neighbourhoods being planned by Metroplan. Since its creation in 1979, this for-profit public company had benefited from urban planning policies that focused on rail as one of the main vectors of urbanisation, making it a powerful player in the metropolitan coalition. The Airport Express Line marked another important stage in this increasing influence<sup>28</sup>.

<sup>&</sup>lt;sup>26</sup> Hong Kong Airport Authority, *Vision to reality*, 127.

<sup>&</sup>lt;sup>27</sup> "MTRC Airport Railway," 5. Ultimately, the Airport Express Line would only be used by 15% of passengers. Source Hirsh, *Airport Urbanism*, 4. It doubles up as a commuter service – the Tung Chung Line – to Hong Kong's ninth new town, Tung Chung, which was being built near the airport.

<sup>&</sup>lt;sup>28</sup> Aveline-Dubach, Blandeau, "The political economy of transit value capture"; Tiry, "Hong Kong, un avenir urbain modelé par les transports ferroviaires ».



Figure 5. Airport Railway, MTRC, 1993.

A new controversy concerning the future of the bay grew up alongside this project. It focused on land newly-reclaimed from the sea, representing over one thousand hectares. A fierce debate pitted those who wanted to use this reclaimed land to free up new development land, and those who wanted to protect the urban and natural heritage of the bay – from the waterfront to the

marine environment. The latter set up the Society for the Protection of the Harbour (SPH) in 1995 and began lobbying to 'Save our Harbour'.

'Let's protect our harbour. No more reclamation'. The movement was led by Christine Loh, a committed activist who would be elected to Parliament in 1998. After collecting 170,000 signatures, the SPH achieved its first success in 1996 when it forced the government to back down over a 190-hectare reclamation project. Thanks to broad popular support, the Protection of the Harbour Ordinance Act was passed by LegCo in 1997. As construction work gathered pace off Chek Lap Kok, protests continued unabated until they achieved a fresh victory in 1998 when initial projects were withdrawn and replaced by more measured proposals. While opponents welcomed the decision, they noted the deep differences that remained: 'It is, however, frightening that without the "Save our harbour" campaign, Hong Kong might have lost its harbour. The need to fight to preserve Victoria Harbour has identified a fundamental flaw in the present system of strategic planning'<sup>29</sup>.

The Airport Core Programme helped forge both coalitions and oppositions on the Hong Kong political stage. This 'theatre of controversy' gave extensive media coverage to demands for a more consensual urban planning process with more active citizen participation and calls for less land reclamation projects and more parks and public spaces. Christine Loh included these demands in an Alternative Policy Address published when the Legislative Council reconvened for the 1994 session, appealing for 'an open, intelligent and enlightened form of government, [which] should give prominence to public debate on policy issues<sup>30</sup>'.

#### Publicizing the event

'Today, if you want an airport to be a gateway to a city, it has to make a statement, to act as a symbol and it has to work'<sup>31</sup>. The opening of the airport in the summer of 1998 was covered extensively in the media – the third and apparently final act in the saga of the Hong Kong airport as it played out in the press. As if to symbolically mark the birth of the new airport in the city, it was Hong Kong's 'In town' terminal that opened first, on 21 June, after four years of building work. The inauguration, under the auspices of the MTRC, was a lavish affair and its President reaffirmed the power of his corporation, which had become one of the city's key urban players. On July 2, it was the turn of the new airport to be inaugurated by the Chinese President Jiang Zemin who invited the US President Bill Clinton along for the occasion. Lastly, on July 6, the airport's official opening day, the Airport Express Line opened for business. These concomitant dates were no coincidence. For the authorities, the three had to begin operating at the same time, heralding a new era in the city's airport infrastructure.

During the summer of 1998 the intensity of the discourse reached a new peak: articles lauding the building feats, retrospective accounts of the epic narrative, political speeches reframing the event as part of the regional turning point being experienced by Hong Kong. '10 projects that changed the shape and size of Hong Kong', 'Vision to reality, In total harmony': the documents put out by the airport authority related the achievements, focusing on the sheer scale of the project and stressing once again the decisive role of the coalition that made the whole thing possible. 'Hong Kong's latest feat of construction [...] has altered the geography of the land

<sup>&</sup>lt;sup>29</sup> Letter from the Society for the Protection of the Harbour to the *South China Morning Post*. Loh, "The Once and Future Victoria Harbour". Ng, Crook, "Reclamation".

<sup>&</sup>lt;sup>30</sup> Loh, "Hong Kong: An alternative policy address".

<sup>&</sup>lt;sup>31</sup> Winston Shu, Works Director for the firm of Norman Foster, cited in Hong Kong Airport Authority, Vision to Reality, 73.

itself. [...] The mix of Airport Authority works, private sector and Government works was huge and required a cohesive programme of management and coordination never before seen in Hong Kong, or possibly anywhere in the world'<sup>32</sup>.

But behind the triumph the reality was a little less rosy, as related in an article published in the Asia edition of *Newsweek* magazine, which devoted its July 13 cover to the inauguration, illustrating it with a photo of a visibly exhausted construction worker. 'Hard times in Hong Kong after the handover; a bright new airport and a stalled economy': while this massive building site which was to transform Hong Kong was in full flow, the Asian crisis had hit the region hard and the gargantuan works programmes that had just been completed appeared out of step with the difficulties being experienced by the local economy. Newsweek contrasted the two images: the flamboyant showcase projects and the economic crisis bearing down on the region. 'To survive hard times, the city will have to invent other ways to prove its worth.' As the modernity of the infrastructure needed passengers in sufficient numbers ('Will there be enough passengers to justify this huge expense?'), previous criticism over the risk of overinvesting in inflexible infrastructure flared up once more: 'For decades, Hong Kong's laissezfaire government stubbornly refused to invest in technology and research'<sup>33</sup>. The opening of the airport marked the start of a period in which the city would have to handle unprecedented scales and the project, which had been just a fiction up to this point, came face to face with reality. [Figures 6 and 7]

#### The narcissistic city: the mirror and its double

The territorial apparatus deployed by the Airport Core Programme lent material form to the new infrastructure that would turn the city into a global hub. The change in scale was perfectly captured in the massive photo-montage projected onto a large panel that masked the building site of the future International Finance Center (IFC) and was photographed in 2000 by the Map Office firm of architects. 'The new Airport in Central' montage was composed of a triptych: on the left, an oblique view of the model of the new airport opened two years previously; on the right, a frontal view of the future 'superblock', topped off by two skyscrapers that would be home to the first 'In town' terminal; and in the centre, a view of the rapid transit train floating in mid-air<sup>34</sup>. [Figure 8]

#### Microcosm versus macrocosm

The decision to build the IFC was only taken at the very end of 1994, after hard bargaining between the Chinese and British governments. The project was overseen by MTRC and construction entrusted to a group of investors. Work was completed in 2003. The superblock was built on six hectares of reclaimed land facing the Kowloon peninsula. It comprises an eightmetre high podium topped by two towers, one of which is the highest on the island. The podium, forming a base the size of several blocks, is a constituent component of Hong Kong urbanism. The 'In town' terminal it houses has a façade overlooking an esplanade, accessible by car or bus via a dedicated lane, or by metro via the underground hub.

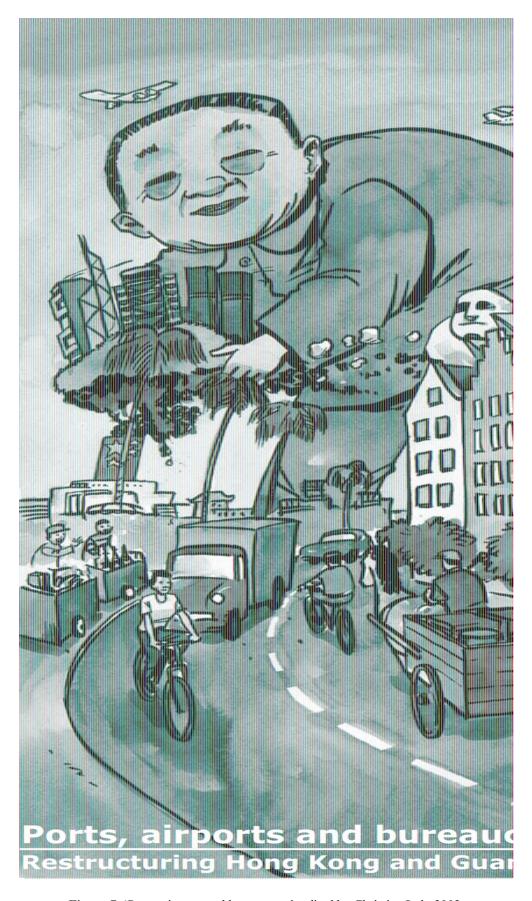
<sup>&</sup>lt;sup>32</sup> Hong Kong Port Authority, Vision to reality, 31, 113. "Hong Kong International Airport, Opening Ceremony".

<sup>&</sup>lt;sup>33</sup> Elliot, "Hard times in Hong Kong," 3, 15

<sup>&</sup>lt;sup>34</sup> "Airport Express-Central Station", in Map Office, Guttierez, Portefaix, *Mapping HK*, 38.



Figure 6. 'Hard times in Hong Kong', Newsweek, Edition Asia, 13th july 1998.



**Figure 7.** 'Ports, airports and bureaucrats', edited by Christine Loh, 2002.

The complex provides access to a wide variety of local, regional and international destinations from the hypercentre of Hong Kong in a fully-controlled environment. The mix of functions – from luxury hotel to offices, shopping mall to conference centre, metro station to terminal, esplanade access to bay-side promenade – makes it a total urban space that Rocco Yim, who designed the transport station, describes as 'a complex matrix of transport, public and commercial functions that is in itself a mini-city within a city '35. Greg Pearce, an architect with the engineering firm Arup, used a more homely analogy when he described the station as a 'bedroom' that would function as one of the city's vital lungs, 'a large, multi-storey room, which in its context stands its ground and commands the entire site' 36. [Figure 9 and 10]



Figure 8. Map Office (Laurent Guttierez, Valérie Portefaix), 'The new Airport in Central', 2000. Source: Map Office.

Just opposite, a new even more imposing superblock looms over Kowloon Peninsula: West Kowloon, home to the second 'In town' terminal whose shape and dimensions are even larger than the first. It was completed in 2010 on a fourteen-hectare site and is known as the International Commerce Center (ICC). It consists of an eighteen-metre high podium, topped with a slab on which stand sixteen towers of residential housing, hotels and offices with outdoor spaces, gardens and water features reserved for residents. The tallest tower is even higher than the IFC tower opposite on Hong Kong Island, with which it forms two columns of an imaginary gateway framing the entrance to the bay.

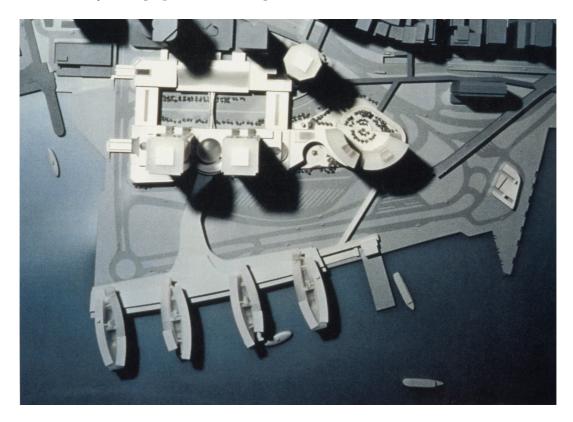
The UK firm Terry Farrell & Partners was prime contractor and MTRC the project owner. The operation beat all previous records for buildings in Hong Kong. The site on which it was built is part of Hong Kong's largest ever land creation project, '[increasing] the size of the Kowloon peninsula by about one-third, or enough land for 700 soccer pitches<sup>37</sup>'. Inside the complex is

<sup>36</sup> Pearce, "Hong Kong Station," 6, 10.

<sup>35</sup> Rocco, "Hong Kong Station".

<sup>&</sup>lt;sup>37</sup> "Airport Core Program projects in West Kowloon," 3.

the 220,000 sq.m. transport hub and the highway connecting the airport and Lantau Island to the city runs all along the superblock. A park, residential areas and a museum complex are to be built on the bay side. [Figures 11 and 12]



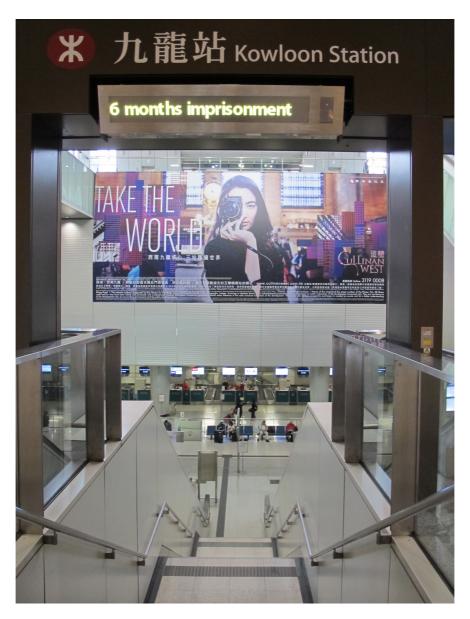
**Figure 9.** International Finance Center, Hong Kong Central, Model. Source: Hugh Collis, Transport, Engineering and Architecture, 2003.



**Figure 10**. International Finance Center, Hong Kong Central, View of the two skyscrapers skyline and the access to the 'In Town' terminal. Photographies Nathalie Roseau, 2005, 2017.

#### Megastructure versus infrastructure

The frequent references to Japanese Metabolism by researchers and architects working on the Hong Kong cityscape remind us of Fumihiko Maki's 1964 definition of a megastructure: 'A frame in which all the functions of a city or part of a city are housed. It has been made possible by present day technology. In a sense it is a man-made feature of the landscape [...]'38. 'Transport Super City' was the title of the work published by Farrell architects to mark the inauguration of the Airport Express Line and presenting the West Kowloon supercomplex. 'In effect, we have brought our new airport back to the city.' Immediately after the preface written by the Chairman of MTRC, we learn that Terry Farrell clearly intended to 'urbanise the airport'39.



**Figure 11.** International Commerce Center, West Kowloon, Interior of the 'In Town' terminal. Photography Nathalie Roseau, 2017.

<sup>&</sup>lt;sup>38</sup> Maki, *Investigation in collective forms*, cited in Xue, Zhai, Roberts, "An urban island floating on the MTR station," 194.

<sup>&</sup>lt;sup>39</sup> Smith, Farrell, Kowloon Transport Super City, 7, 8.

The architects of Hong Kong Station had sought to mitigate the risk of isolation through enlargement, by carefully working on the relationship between the different urban ground levels in which their structure is anchored, and by turning the station into the 'heart' of the city, worked by 'generators' and 'receivers' as described by Greg Pearce. Conversely, the self-contained city of West Kowloon seems at ease with its private and insular character and public use is limited to the shoppers and strollers visiting it as a showcase business and commercial district. There are no freely-accessible open-air spaces here, unlike the roof of the IFC, which allows people – mainly Filipino workers – access to much-needed space and sociability and to urban 'lounges' with spectacular views onto the bay. In West Kowloon either you are just passing through or you are a paying customer. So, has the airport been urbanised or has the city been 'airportized'? The place gives a confused impression of an airport without planes, whose codes are perceptible – from signs and materials, shops and counters, via access roads – but which empty the environment of its substance and condemn its 'passengers' to immobility without any possibility of getting away.



**Figure 12.** International Commerce Center, West Kowloon, Model. Source: Terry Farrell, Kowloon Transport Super-city, 1998.

Ultimately, it is the image of another city that emerges, blurring the distinction between reality and spectacle. Through the images framed from the tracks, the Airport Express Line offers a view of the city to come in a single cinematic movement. This travelling shot reveals the city's mountainous, maritime, port and urban skyline. On the ground, the line deploys continuity in architectural layout. The airport assumes the identity of the city while the city centre rail stations belong to the airport space, as Greg Pearce points out: 'To bridge the gap between this distant airport and the city center, it would be necessary to create the perception – and better, the reality

– of swift and reliable access'<sup>40</sup>. Interiority is a leitmotif running through all of the architectural works of the Airport Core Programme.

In the panorama it presents, in the active sequence it brings to life, and in the forms it describes, infrastructure makes the city part of a narrative, turning the whole airport apparatus into a city, while the city feels more like an airport. This is exactly what Naonori Matsuda highlighted in one of the first analytical essays on the 'airport city' then being built in Hong Kong, published in 1997 in *Space Design*. 'If the boundary between the city and the airport were dissolved, the entire city may then be regarded as an airport itself [while] the new transport infrastructure integrates the existing city into an airport'<sup>41</sup>. A space suspended between several different worlds, irrigated by inter-linked high-speed networks: as the airport becomes a megastructure, the city is simultaneously turning into an infrastructure.

#### Image versus usage

Scripted urban fiction has come face to face with actual urban practice: the friction between speed – of flows and traffic – and immobility – of crowd and place; and the large metropolitan dimensions in which city dwellers move, with faster means of transport, associated with an increasing volume of complex transit operations. This gap between idealised fiction and real life experience is apparent on a number of levels.

First, on a temporal scale. Time does not have the same value when it appears in slogans as when actually practised by travellers. The airport time (23 mins) is theoretical, experienced between two points on a transit line where no one lives, whereas urban time is real: between one and one and a half hours to get home for example. Here, shortened time distances on the map covered by the networks must be set against greater internal metric distances within the city's different components, such as those encountered at Hong Kong Station or West Kowloon Station, where making a connection is a trip in itself.

Next, on the scale of habitability. The city planned here is a city of the elite where few people live. The 'airport city' – the horizontal city, linking the airport to the hypercentre, or the vertical city of the superblocks – is a city for the well-off and for tourists, where the global world of the affluent meets that of the less well-off who keep it running without ever consuming the fruits of this globalisation. Despite the comprehensive statement of project components that make it a city on paper, a journey through the city that has taken shape at the tip of Kowloon produces a strange feeling of urban emptiness.

Finally, on the scale of use. The projected city ultimately serves up an illusion of self-sufficiency, showing off its wealth and letting everyone see it – though they cannot access it. Beyond the new direction initiated by the City authorities and aimed at the happy few of globalisation, what about the bulk of the population, from the middle classes to the poorest, who are just as much a part of globalisation? Every year, hundreds of thousands of Filipino and Indonesian workers – many of them women – fly back home to see their families. But few go to the places we have just described. 'Everybody can fly now': along with the plethora of low cost airlines that have sprung up in South East Asia, a system of low cost land links has developed in Hong Kong – witness the fleets of shuttle buses carrying people out to the airport

-

<sup>&</sup>lt;sup>40</sup> Pearce, "Hong Kong Station," 6.

<sup>&</sup>lt;sup>41</sup> Matsuda, "Hong Kong's Future," 77, 81.

for five times less than the Airport Express Line. These practices that appear at the margins differ in so many ways from the showcase infrastructure touted by the city.

#### The city of infrastructure: From emancipation to integration?

The tributes that accompanied the completion of the Airport Core Programme made the achievements part of the accelerated transition being experienced by Hong Kong. The historical narrative in these documents is prospective as well as retrospective. 'Mapping the future': as the Chairman of the Airport Authority Wong Po-Yan stated in 1998, the future is still at work, either to express its own history or to renew the initial project<sup>42</sup>. The building work had barely finished and talk was already of development on the regional scale of the Pearl River Delta. This speech echoes the 'megalopolitan' speech given by LegCo member David Li Kwok Po two years earlier in 1996 and picked up by an article in the *South China Morning Post*. It was illustrated by a child-drawn map – 'Pearl City, Here we come' – representing an enlarged urban scale, with shortened time distances around key locations: transport hubs, amusement parks, communication centres, etc. [Figure 13]

Imagine, it is the year 2006. Pearl City: one of the largest, richest urban areas in the world. Including its suburbs, it spans more than 160 km from north to south. Pearl City has a population of more than 40 million. [...]. Pearl City's infrastructure is the envy of the world. Mass transit rail systems and a network of highways, bridges and tunnels enable residents to travel from Stanley Market [in Hong Kong] to Guangzhou city centre in less than 90 minutes<sup>43</sup>.

#### From metropolitan to regional scale: the infrastructure race

This prophecy has since come true. The LegCo member's mention of the new time-distance linking one end of the region to the other is a reference to the opening of the Guangshen Expressway on 1 January 1997. Since this period, once the economic crisis was over, networks have been densified even further, shortening the length of journeys on the map and overcoming natural obstacles. The airport infrastructure project was just one of many that have transformed the Delta whose population was around 66 million in 2017. The series of international airports built between 1995 and 2004 (Shenzhen, Zhuhai, Macau, Hong Kong and Guangzhou) has been rounded out by a land and sea transport infrastructure linking the largest cities in the Delta. Competing facilities are constantly being added to and adjusted in relation to what is needed. The regional authorities have coined the term "Coopetition" to describe this unstable equilibrium that has reigned over the Delta and its infrastructure for the past thirty years<sup>44</sup>.

'10 major projects: Infrastructure to create a quality city': at the beginning of the 2007 parliamentary session, Chief Executive Donald Tsang used his general policy speech to outline an ambitious programme to give planning yet another boost. It was structured around mostly new projects and intended to form the main plank of future metropolitan planning strategy. However, the similarity with the Airport Core Programme which so marked the 1990s, should not disguise the objective of this new infrastructure, which reflected a complete change in

<sup>43</sup> Li, "Pearl City, Here we come". Wallis, "Projects stich Hong Kong into the fabric of Pearl Delta".

<sup>&</sup>lt;sup>42</sup> Hong Kong Airport Authority, Vision to reality, 173.

<sup>&</sup>lt;sup>44</sup> Shen, "Assessing inter-city relations". The 2000 study by Rem Koolhaas, "Great Leap Forward" already gave some idea of the palpable transformation at work in "Pearl City". Chung, Inaba, Koolhaas, Leong, *Project on the city 1*.

dimension. The aim now was to make Hong Kong part of the development of the Pearl River Delta 'Megalopolis' 45.

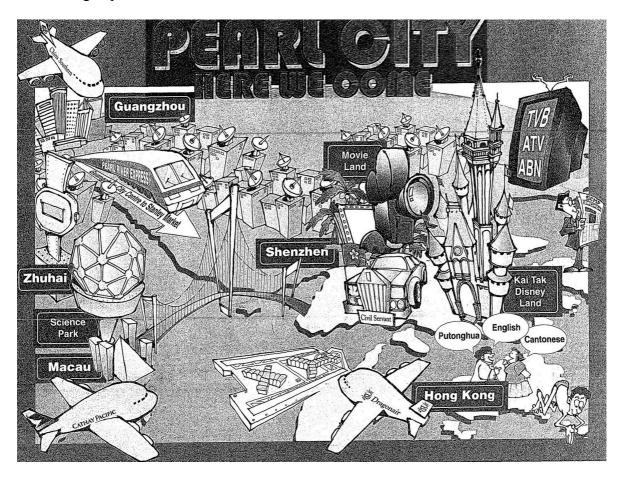


Figure 13. 'Pearl City, Here we come', South China Morning Post, 6th july 1996.

Most of the projects set out in this programme have now been completed. The Hopewell real estate group - still headed up by Gordon Wu - helped build the gigantic 55-kilometre long motorway bridge which has linked the metropolises on both sides of the Delta – i.e., Hong Kong to Zhuhai and Macau – since 2018. The first high-speed rail link between Hong Kong and mainland China now connects Hong Kong to Guangzhou in 48 minutes, and to Shenzhen in just 12 minutes. Indeed, express trains to the east bank of the delta now leave from West Kowloon station. Plans are afoot to extend Chek Lap Kok Airport out into the sea with the addition of a third runway, a highly controversial project due to the threat it poses to the marine ecosystem. Lastly, Hong Kong and Shenzhen airports are finally set to get a direct rail link.

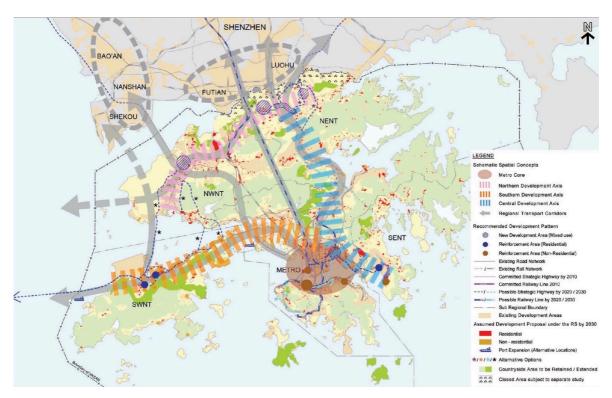
#### Post-2047: the dual city

Our economic integration with the Mainland is an irreversible trend. In the course of integration, our work can be divided into two major levels [...]: jointly developing a world class metropolis with Shenzhen and cooperation with Guangdong.

"A new direction for Hong Kong", Government policy address, 2007, 19, 47

<sup>45</sup> Hong Kong Government Policy Address [2007]. Lam, "The new era of Infrastructure development".

Impressive as it may seem, the range of projected infrastructure at 'megalopolitan' delta level cannot by itself resolve the question of the urban future of Hong Kong and its surrounding region. 'Vision without action is a daydream. Action without vision is a nightmare.' This Japanese proverb is the opening sentence of the *Hong Kong 2030, Planning vision and strategy* report published in 2007, which set out Hong Kong's new urban and national planning strategy for the Greater Pearl River Delta. *Building a Hong Kong-Shenzhen Metropolis*: the very same year, another report was published by the Bauhinia Foundation Research Center. [Figure 14]



**Figure 14**. 'Hong Kong 2030, Recommended patterns', Hong Kong 2030, Planning vision and strategy, 2007. Source: Planning Department, The Government of the Hong Kong Special Administrative Region.

Both documents deal extensively with the relationship between the cities of Shenzhen and Hong Kong and highlight an initial problem, that of putting a name on what is actually happening. Shenzhen has metamorphosed from a small fishing village barely forty years ago into one of Southern China's metropolitan juggernauts, endowed with infrastructure that has turned it into a key player. The city has overtaken Hong Kong in terms of population and industry, both forming a bicephalous region of more than fifteen million people, separated by a border whose urbanisation exacerbates political, circulatory and social complexities. Published narratives in quest of appropriate language resort to hyperbole in an attempt to put a name on this new ensemble – 'Metropolis', 'Megalopolis', 'Megacity' – in a vain effort to define a viable timeline. The metropolitan concept is not merely a result of the urban form that underpins these two cities. It is also bound up with the identity-driven dimension that underpins the importance of their association. 'Interface', 'Integration', 'Assimilation': each of these notions harks back to Hong Kong's political future.

The infrastructure projects initiated by Hong Kong actually trace out different scenarios that reinforce its desire for emancipation while simultaneously reflecting the ambiguity of its political and territorial status. Whether to form a large metropolis with Shenzhen by densifying its high-speed land links? Or build a bridge and open up to the other side of the Delta? Or

develop endogenously, either out to sea with sprawling reclamation projects, or on land by building both up and down with superimposed 200-metre high urban development projects<sup>46</sup>?

#### Projects at a standstill and narrative deadlock

While roads and networks continue to be built, urban spaces are struggling to emerge, in particular because the headlong pursuit of mega real estate projects tends to inflame an increasingly well-structured public opposition. The Society for Protection of the Harbour targets these projects one after another to lobby for limited development out into the bay and to defend the public use of spaces<sup>47</sup>. In West Kowloon, the high-speed train station has just opened several years late. The delays, due to the lengthy construction period, can be explained as much by urban challenges and financial overruns as by the conflict between the Special Administrative Region and China over the alleged violation of sovereignty agreements represented by the Trojan horse of Chinese immigration officers in the heart of Hong Kong<sup>48</sup>.

Another project, the forty-hectare West Kowloon Cultural District (WKCD), would have been the development most likely to rekindle the infra-urban cross-fertilisation that has been such a feature of the city's urban planning. It also generated the most column inches: because of its size, it was not merely a new development, but rather a cluster of mega-projects; because of its commercial ideology, under the guise of cultural promotion; because of the developers behind it – real estate groups and government operators whose interests were close to the growth coalition and a long way from voices calling for public participation. According to Chief Executive Tung Chee Hwa, it would enable Hong Kong to 'develop as the Asian capital of arts and culture'<sup>49</sup>. The project was unveiled at the start of the autumn 1998 legislative session and an architectural competition culminated in 2002 with the appointment of Norman Foster as prime contractor. The architect suggested creating a giant canopy over an area of 22 hectares housing theatres, museums, concert halls and public squares. 'Encapsulating Hong Kong in one iconic image'<sup>50</sup>: the project's main architectural feature – a giant roof – would strike a counterpoint to the West Kowloon superblock, a favourite haunt for Chinese tourists.

Despite Hongkongers' affection for the British architect, there were mixed feelings over the project's power to transcend the free-market logic driving the city's mega-projects. 'Isn't largescale modernism outdated? Why should the quality of heterogeneity of the city be sacrificed?'51 There were a number of protests in favour of a large public park – an idea supported by the population as a whole. Calling for people to 'think outside the box', the Hong Kong Alternatives group pointed to the examples of London's Hyde Park, New York's Central Park and Chicago's Millenium Park. 'West Kowloon Cultural District is the last frontier of the port of Hong Kong. Let's not make it another example of real estate hegemony; let it be on the contrary a legacy of the city entrusted to future generations'52. A new project consultation process was launched in 2011 which was again awarded to Foster, this time for a 'City park' concept. It has since been renamed 'Art park' and the public space has become a 'quality green

<sup>&</sup>lt;sup>46</sup> Ellwart, Vivre en plein ciel.

<sup>&</sup>lt;sup>47</sup> Concerning claims made in respect of Tamar, Central and Wanchai, see the letters of Chu and Loh on behalf of the SPH.

<sup>&</sup>lt;sup>48</sup> Bostra, "Un cheval de Troie chinois, » 8.

<sup>&</sup>lt;sup>49</sup> Hwa, « Speech to Legco, » Par. 2.

<sup>&</sup>lt;sup>50</sup> « The West Kowloon Cultural District » [2004].

<sup>51</sup> WKCD Joint Conference, "A paper submitted" [2005].
52 Hong Kong Alternatives, "Is WKCD a cultural or a property project in disguise?" [2011]. Read Lui, "City branding without content". Zhou, Choi, "West Kowloon Cultural District".

open space'. It opened in the summer of 2019. The whole megaproject still continues to generate controversy due to persistent delays and cost overruns. [Figure 15]



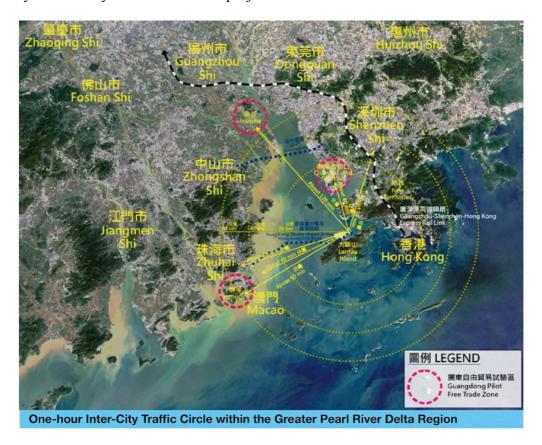
**Figure 15**. West Kowloon Cultural District, 'City park', Architects Norman Foster and Partners, 2011. Source: Website Foster and Partners.

Deadlocked urban projects and metropolitan narratives need to be tackled together. On the one hand, the temptation to spread out and grow, so apparent in the infrastructure race, is part of what drives an integrated mega-region that counteracts Hong Kong's desire for independence. But on the other hand, fear of contamination leads Hong Kong to withdraw into itself by reasserting its insularity as a global city. In the most recent development blueprint, *Hong Kong 2030*+, published in 2016, Secretary for Development Paul Chan wrote about the city's paradoxical destiny, between its sense of being part of the Chinese 'Megalopolis' and its unique position as a global city: 'Mega-City regions are the nexus of economic growth. Hong Kong together with the PRD Region will be a mega-city region to tap into the growth potential of the Asia-Pacific'<sup>53</sup>. This integration process continues inexorably. On 1 July 2017, twenty years after the handover, an agreement was signed between Guangdong Province and the Hong Kong and Macau Special Regions that frames the principles of increased cooperation that will underpin the continued concerted development of the Greater Bay Area. Infrastructure 'connectivity' was one of the key issues here, designed to create within a region envisaged as a 'cluster of cities', an 'integrated' and 'efficient' 'one-hour transport circle', which will generate

-

<sup>&</sup>lt;sup>53</sup> Hong Kong 2030+, 3. Yang et Li, "Transformation of cross-boundary governance". Shen, "Not quite a twin-city".

thousands of kilometres of new motorways and railways once it has been completed<sup>54</sup>. [Figure 16] Onwards and upwards! As the horizon appears to be clouding over, the forms of metropolization being projected for Hong Kong highlight — through fragmented destinies – all the frailty of the 'City of infrastructure' project.



**Figure 16.** 'One hour Inter-city Traffic Circle within the Greater Pearl River Delta Region', Hong Kong 2030+, Towards a planning vision and strategy transcending 2030, 2016. Source: Planning Department, The Government of the Hong Kong Special Administrative Region.

### Conclusion: The future of Hong Kong as a global city

The infrastructure-driven transformation of Hong Kong owed much to the pending handover, a determinate and indefinite future which led the authorities to assert the independence of the City-State through a transformative project spearheaded by the new airport. In a relatively short time, the airport-city was built as fiction, reform, emblem, a world in itself, showcase and prototype, harking back to the figures of the 'aerial city' that have forged the history of airports<sup>55</sup>. The desire for emancipation is embodied in a major works programme that helps to enlarge the city's domain – out towards the periphery, towards the delta, towards the continent. This deployment involves a dual movement: the centripetal movement produced by relocating the airport, balanced by a centrifugal one, which leads to the project being reappropriated by the city.

27

<sup>&</sup>lt;sup>54</sup> "Jewel in the crown." 4-5.

<sup>55</sup> Roseau, Aerocity.

This history was forged by political decisions and urban events acting in concert. The allconquering narrative is fuelled by superlatives, metaphors and parallels as well as speeches, inaugurations and extensive media coverage. To embed itself in urban reality, it feeds off controversies, oppositions and twists. Whether it was the location of the new airport, its building programme, the metro express line, or the size of new claims, the project of extending the realm of the possible was shaped – and driven on – by the resolution of battles pitting arguments and actors against one other. In Hong Kong's liberal and autocratic system, opponents could be won over and turned into partisans. Thence, the airport-city became a stage and the gradually increasing cast is reflected in the prolific semantics that hybridise the two words in 'The new Airport in Central', 'City as airport vs Airport as city', 'Bringing the new airport back to the city' - and are present in expressions like 'Mini-city within a city', 'A great room in the city' or 'Self-contained island'. The project's effectiveness is not measured solely in terms of what was actually built versus what was promised in the construction-based discourse. It is also analysed in the interstices that appear between discourse and practice, in these folds that highlight the reasons and actions that resulted in the airport-event transforming the city at the same time as it helped to shape it.

This process harnessed a coalition of urban stakeholders, political authorities and interests to produce an infrastructural metropolis whose expectations were transformed through the prism of the issues dear to each, at the risk of masking other major concerns of people who found it more difficult to have their voices heard. The image of a hypermobile metropolis won out over the more multi-faceted and contrasting reality of the city. Faced with a timeline with no end, the relationship between a city and its infrastructure became blurred, in a confusion between ends and means. The future of the Hong Kong infrastructure crisis must be understood in the context of the urban-political situation reigning in the city for the past few decades, culminating in a dramatic turning point in 2020 when the "national security" law was forced through. Since the beginning of the riots in March 2019, which have been violently put down throughout, emblematic locations have witnessed massive occupations, such as Central, which is regularly occupied by hundreds of thousands of demonstrators, or the MTR metro network, which has been the scene of violent repression followed by acts of vandalism targeting the operator as a sign of disapproval of its policy, perceived as pro-Chinese<sup>56</sup>. Chek Lap Kok airport was occupied on a number of occasions without any disruption to air traffic as what demonstrators really wanted was to highlight their democratic struggle to the outside world. While it affirms the alternative possibilities for appropriating infrastructure, harnessing these places of urban reform to citizens' demands reasserts the eminently political dimension of the infrastructure of the global city.

#### Disclosure statement

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

#### **Notes on contributor**

Nathalie Roseau is Professor of Urbanism at École nationale des ponts et chaussées and Director of Laboratory Technics, Territories and Societies (CNRS, ENPC, Université Gustave Eiffel).

-

<sup>&</sup>lt;sup>56</sup> Berti, "Hong Kong protests". Zhang, "De Tian'anmen à Central".

#### **Bibliography**

Addie, J.-P.D., M.R. Glass, and J. Nelles. "Regionalizing the infrastructure turn: a research agenda", *Regional Studies, Regional Science*, Vol.7, n°1, 2020, 10-26.

"Airport Core Program projects in West Kowloon", 1993, Source HKUL.

Aveline-Dubach, N., and G. Blandeau. "The political economy of transit value capture: The changing business model of the MTRC in Hong Kong", *Urban Studies*, Vol 56, n°16, 2019, 3415-3431.

Barnes G. « The shape of Hong Kong after Port and Airport Development Strategy », 20th November 1989, Hong Kong Convention Center, Source HKUL.

Bauhinia Foundation Research Center. Building a Hong Kong-Shenzhen Metropolis, Executive Summary, 2007.

Berti A. "Hong Kong protests: how has the MTR been affected?", Railway Technology, Newsletter, 14th April 2020.

Bostra R. "Un cheval de Troie chinois s'apprête à entrer en gare de Hong Kong", *Libération*, 24th January 2018, 8.

Chung C.J., J. Inaba, R. Koolhaas, and S.T. Leong. *Project on the city 1: Great Leap Forward, Harvard Design School Project on the City*, Taschen, 2001.

Elliot D. "Hard times in Hong Kong a year after the handover: a bright new airport and a stalled economy", *Newsweek*, 13<sup>th</sup> July 1998, 12-15.

Ellwart B., and T. Ellwart. Vivre en plein ciel, ZDF, 2006, 43 min.

Graham M. « Chek Lap Kok: Touchdown in Hong Kong », South China Morning Post, Asia Magazine, 15-17th may 1998, 9-12.

Graham S., and S. Marvin. Splintering Urbanism, Networked Infrastructures, Technological Mobilities and the Urban Condition, London: Routledge, 2001.

Hirsh M. Airport Urbanism, Infrastructures and mobility in Asia, Minesota Press, 2016.

Hong Kong Alternatives. « Is WKCD a cultural or a property project in disguise? An appeal for a totally integrated cultural green park WITHOUT property development on West Kowloon Cultural District", September 2011, Source HKUL.

"Hong Kong Territorial Development Strategy, A Land-Use-Transport Strategy for the Growth of Hong Kong in the 1990s - Preliminary Submission", May 1984, Source HKUL.

Hong Kong Government Policy Address, « The Governor's Annual Address to the Legislative Council on 11 October 1989 », Source HKUL.

Hong Kong Government, Secretariat of Lands and Works. *Port and Airport Development Strategy, Final Report* [Compiled by E.G. Pryor and M.K. Ng], December 1989.

Hong Kong Government Planning, Environment and Lands Branch Strategic Planning Unit. *Metroplan, The selected strategy*, September 1991, Source HKUL.

Hong Kong Government. The Airport Core Programme, 1991.

Hong Kong Government. *Port and Airport Development Strategy, A foundation for growth* [Compiled by E.G. Pryor], October 1991.

"Hong Kong Territorial Development Strategy Review foundation report, executive summary", July 1993, Source HKUL.

Hong Kong Airport Authority. Hong Kong International Airport, Vision to Reality, In total harmony, 1998.

« Hong Kong International Airport, Opening Ceremony », 2<sup>nd</sup> July 1998, Source HKUL.

Hong Kong Government. *The Airport Core Programme: 10 Projects that Changed the Shape and Size of Hong Kong*, Hong Kong Information Services Department, 1999.

Hong Kong Airport Authority. Hong Kong International Airport, An introduction, 2001, Source HKUL.

Hong Kong Government Policy Address, "A new direction for Hong Kong", 2007.

Hong Kong Planning Department. Hong Kong 2030, Planning vision and strategy, Final Report, 2007.

Hong Kong Government, Secretariat for development. Hong Kong 2030+; Towards a Planning Vision and Strategy Transcending 2030, October 2016.

Hwa T.C. « Speech to Legco on the West Kowloon Cultural District Project », 2004, Source HKUL

"Jewel in the crown, The Pearl River Delta, Special Report", *The Economist*, 8th april 2017.

Lam C., Secretary for Development. "The new era of Infrastructure development", 30th September 2010, Source HKUL.

Letter from the Society for the Protection of the Harbour, to the *South China Morning Post*, 18<sup>th</sup> September 1999, Source HKUL.

Letter from W.K.W. Chu, Chairman of SPH, to the attention of LegCo, 3<sup>rd</sup> May 2002, Source HKUL.

Letter from C. Loh, Chairperson of SPH, to the attention of Hong Kong Town Planning Board, 26<sup>th</sup> august 2004, Source HKUL.

Letter from W.K.S. Chu, Adviser for SPH, to the attention of Mrs Carrie Lam, Secretary for development, January 2010, Source HKUL.

Lepetit B. « La ville, cadre, objet, sujet : Vingt ans de recherches françaises en histoire urbaine. », *Enquête*, 4, « La ville des sciences sociales », 1996, 2-16.

Li D. « Pearl City Here we Come, Forget the border and the crowds at Lowu. In 10 years'time the area stretching from Hong Kong to Guangzhou might well be the most dynamic piece of land in the world », *South China Morning Post*, 6<sup>th</sup> July 1996.

Loh C. « Hong Kong: An alternative policy address », 3<sup>rd</sup> October 1994, Source HKUL.

Loh C. « The Once and Future Victoria Harbour Saved from the Brink », in « Hong Kong: defining the edge », *Harvard Design School*, 2001, 71-77.

Loh C. « Ports, airports and bureaucrats, restructuring Hong Kong and Guangdong », CLSA, 2002, Source HKUL. Lorrain D. (Eds) *Métropoles XXL en pays émergents*, Paris, Les Presses de Sciences Po, 2011.

Lui T.L. "City branding without content, Hong Kong's aborted West Kowloon mega-projet, 1998-2006", *IDDR*, 30(3), 2008, 215-226.

Map Office, L. Guttierez, and V. Portefaix. Mapping HK, Map Book Publishers, 2000.

McNeill D. « Airports and territorial restructuring, The case of Hong Kong », *Urban Studies*, Vol 51, n°14, 2014, 2996-3010

Matsuda N. « Hong Kong's Future as an « Airport City », Blueprint for the 21st century Hong Kong », *Space Design*, n°394, 1997, 61-83.

« Memorandum of Understanding concerning the construction of the new airport in Hong Kong and related questions », project, 4<sup>th</sup> July 1991, Source HKUL.

« MTRC Airport Railway », 1993, Source HKUL.

Ng M.K. « Strategic Planning in Hong Kong: Lessons from TDS (Territorial Development Strategy) and PADS (Port and Airport Development Strategy) », *The Town Planning Review*, Vol. 64, n°3, July 1993, 287-311.

Ng M.K. « PADS in Hong Kong », *Planner's Casebook*, The American Planning Association, October 1993, 1-8. Ng M.K., and A. Crook. "Reclamation: an urban development strategy under fire", *Land Use Policy*, Vol 14, n°1, 1997, 5-23.

Orsay-Lam M.-H. « Un aéroport et une ville nouvelle. La transformation progressive de Hong Kong au gré des enjeux globaux et locaux » in *La refondation mégapolitaine : une nouvelle phase de l'histoire urbaine ? Tome 1 : L'Eurasie post-communiste. Moscou, Shanghai, Hong Kong*, Edited by P. Haeringer, Techniques, territoires et sociétés, n°36, October 2002, 263-273.

Parsons R.M. Company in association with A. D. Litter, Inc., and W. Smith and Associates, inc. « Hong Kong Air Transport System Long Term Planning Investigation System Development Plan, Final Report », Executive summary, 15<sup>th</sup> january 1975.

Pearce G. « Hong Kong station: Bringing the airport in the city », *Arup, Hong Kong Station*, Edition Axel Menges, 2001, 6-20.

Pigott P. Kai Tak, A history of aviation in Hong Kong, Hong Kong, 1989.

Pryor E.G., and S.H. Pau. "The Growth of the city, A historical review", in *Hong Kong Architecture, The Aesthetics of density*, Edited by V. Lampugnani, Prestel, 1993, 97-139.

Rocco Design Limited. « Hong Kong Station and Development » in *The City in architecture, Recent works of Rocco Design*, Images Publishing, 2002, 120-137.

Roseau N. Aerocity, Quand l'avion fait la ville, Marseille, Éditions Parenthèses, 2012.

Roseau N. « Pouvoirs des infrastructures », Histoire Urbaine, n°45, 2016, 5-16.

Shen J. « Assessing inter-city relations between Hong Kong and Shenzhen: the case of airport competition or cooperation », *Progress in Planning*, n°73, 2010, 55-73.

Shen J. "Not quite a twin-city: cross-boundary integration in Hong Kong and Shenzhen", *Habitat International*, n°42, 2014, 138-146.

Smith S., T. Farrell and Partners. *Kowloon Transport Super City*, Hong Kong: Pace Publishing limited, 112p., 1998.

Star S.L., "This is not a boundary object: Reflections on the origin of a concept", *Science, Technology&Human values*, Vol35, n°5, September 2010, pp.601-617

"The New Hong Kong international airport", Special Issue, China Trend Building Press, 1998

Tiry C. "Hong Kong, un avenir urbain modelé par les transports ferroviaires", *Perspectives chinoises*, n°78, July-August 2003, 25-38.

Yang C., and L. Si-Ming. "Transformation of cross-boundary governance in the Greater Pearl River Delta China: Contested geopolitics and emerging conflicts", *Habitat International*, n°40, 2013, 25-34.

Wallis K. "Projects stich Hong Kong into the fabric of Pearl Delta. It's not over yet – today's monuments to civil engineering will be dwarfed by the bridges and roads that are on the drawing board », *South China Morning Post*, 1st July 1997.

« The West Kowloon Cultural District, A Cultural Vision for Hong Kong », Dynamic Star International Limited, 2004, Source HKUL.

West Kowloon Cultural District Joint Conference, "A paper submitted to Meeting of Planning, Lands and Work Panel LegCo Chamber, on West Kowloon Cultural District", 31th January 2005, Source HKUL.

Wu G. "Airport alternatives: We do have a choice!", Public seminar, organized by the Study Group for Infrastructure Development, 25<sup>th</sup> may 1991, Hotel Conrad, Source HKUL.

Xue C., H. Zhai, and J. Roberts. "An urban island floating on the MTR station: a case study of the West Kowloon development in Hong Kong", *Urban Design International*, Vol.15, n°4, 2010, 191-207.

Zhang L. « De Tian'anmen à Central : différentes batailles, un même combat », Socio, n°4, 2015, 265-276.

Zhou Y., and D. Choi. "West Kowloon Cultural District" in *The Grand Projet, Understanding the making and impact of urban megaprojects*, Edited by K. Christiansee, A. Gasco, N.C. Hanakata (Eds), NAI010 publishers, 2019, 149-198.