

## OPENING THE FRONTIER CLOSED AREA: A MUTUAL BENEFIT ZONE

*Joshua Bolchover\* and Peter Hasdell\*\**

\*Assistant Professor, The University of Hong Kong, Hong Kong, [jpbarch@hku.hk](mailto:jpbarch@hku.hk)

\*\* Guest Professor, School of Design, Polytechnic University of HK, Kowloon, [peter@hasdell.com](mailto:peter@hasdell.com)

**ABSTRACT:** Opening the Frontier Closed Area is an on-going research and speculative project that critically addresses the future development of the Frontier Closed Area – a borderland buffer zone that was established in 1951 to control illegal migration and black-market trade from mainland China. Over time the Closed Area has evolved its own specific ecosystem becoming an anomaly in one of the most densely inhabited and fastest growing urban regions. It is a zone of immense potentials and contradictions: a radical separation between ideologies, economic and political systems, and social and cultural mores. It is a horizon of dreams and desires and a site of intense exchange. The paper will explore the regional context and massive urbanisation processes that have occurred in the Pearl River Delta over the last thirty years and present a proposition for the Closed Area that uses the Zone’s special status to create an urban strategy that is mutually beneficial to both sides of the border.

**KEYWORDS:** urban transformation, border territory, urban ecology, mutual benefit zone, globalisation, industrialisation

### BORDER

Hong Kong’s border with Shenzhen is incrementally dissolving. By 2047, 50 years after the 1997 handover of Hong Kong the border will no longer exist. This also will mean the dissolution of the economic and political zones of the “One Country Two Systems” policy; significantly the Special Administration Region of Hong Kong and the Special Economic Zone of Shenzhen. As part of the re-integration process serious considerations need to be made concerning the potential impact this will have on the urban development on both sides of the border with respect to cultural, social and economic fluidity in the creation of a Hong Kong-Shenzhen Metropolis.



**Figure 1:** Border dissolution

### DELTA URBANISM

The “One Country, Two Systems” policy of China to deal with awkward anomalies such as Tibet, Taiwan and Hong Kong, has become the key driver of economic and urban transformation in the entire Pearl River Delta region. Specific differences – restricted migration, legal frameworks, and separate currency – have in fact created opportunities for exchange. This tension, through the creation of pressure differentials of exacerbated differences<sup>1</sup>, has created symbiotic, or at least, co-dependent but unequal relationships that have become drivers for rapid urban growth.

<sup>1</sup> See Koolhaas, Rem et al, Great Leap Forward, Project on the City, Taschen 2001, the authors develop their concept of the ‘City of Exacerbated Difference©’ to explain the exceptional urban developments in the region.

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During the early 1980s, Deng Xiaoping foresaw the potential for China to act as fertile territory for the expression of late capitalism in built form. The continued commodification of goods, worldwide consumption, and expanding field of production centres, made possible through globalisation, prioritised affordable and available land, co-operative governmental controls, and an abundance of cheap labour. Deng Xiaoping's opening up policy of 1978 named Shenzhen as one of five Special Economic Zones, (SEZ's). The SEZ's sought to become "Windows on the World"<sup>2</sup> to allow China, previously closed to outside investment since 1949, to permit limited and controlled exchange to the outside world and to generate competitive advantages through deregulated enclaves. Shenzhen provided the outlet for outsourced production and assembly industry with access to land, labour and financial incentives for industrial growth, whilst Hong Kong injected capital and provided a conduit for foreign investment. This is synonymous with the global trend of economic structuring towards decentralised production networks with key nodal cities providing control services from financial and legal sectors.<sup>3</sup> This informational mode of development<sup>4</sup> is apparent in the relation between Hong Kong and the PRD region through the adaptability of the system both in terms of its locational flexibility and the influx of an unending stream of migrant workers.

This heady formula of globalised development resulted in Shenzhen exploding from a simple fishing village of 20,000 in 1978 to 200,000 by 1982 to over 9 million recorded inhabitants in 2009. It is estimated that an additional 4 million people live in Shenzhen as a floating population of temporary workers. This rapid development was further accelerated by Hong Kong's 1997 handover which has led to the potential for closer collaboration with the mainland. This has also had consequences for Hong Kong, most evident in the hollowing out of its former industrial base, but also in the anxieties of having a large, migrant-populated border city next door<sup>5</sup>.

The Pearl River Delta region has become a concentration of varieties of SEZ's that include Hong Kong, Macau, Zhuhai and Shenzhen, and accelerated growth in existing cities such as Guangzhou and in emerging cities such as Dongguan, Longgang and Zhongshan all within a 100km radius. The example of Dongguan, a city North of Shenzhen, demonstrates the ability of cities to compete with others for outside investment by creating incentives of cheaper land and tax breaks. As a result of adapting the SEZ model in the form of Economic Development Zones, several companies relocated their production operations from Shenzhen to Dongguan.

This unbridled urbanisation created an interconnected network of cities within the Pearl River Delta generating the World's Factory - the production centre for global consumer products. Clearly the Special Economic Zone is a type of neo-liberal free market policy, even within the context of being a Chinese Government sanctioned controlled experiment. Whilst some of the competitive advantages of these SEZ's are being scaled back since China joined the World Trade Organisation in 2001, reducing city growth from over 10% to single digit growth, the SEZ remains a strong catalyst for development. As such there are numerous precedents for experimental rapid urbanisation within the region, both successful and unsuccessful. The region is in fact a test bed or laboratory for new forms of urbanity. The various centres of the Pearl River Delta currently operating as competitors for investment may become integrated into a polycentric agglomeration as the region matures. Or alternatively, it may grow into a vast sprawling agglomeration of competing urban nodes, interconnected by industrialised fabric in various states between decay and growth. Currently integration in the region is being considered on an infrastructural and commercial basis allowing for easier access and interconnection and greater exchange of services, goods, and people.

For example the new express train link between Guangzhou and Hong Kong is due for completion by 2015, and the Hong Kong- Zhuhai- Macau bridge, linking all three cities across the mouth of the Delta is due by 2016.

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<sup>2</sup> Windows on the World also refers to a theme-park in Shenzhen, named after Deng Xiaoping's proclamation.

<sup>3</sup> See Sassen, Saskia, *The Global City: New York, London, Tokyo*, Princeton University Press, Princeton, New Jersey 1991.

<sup>4</sup> See Castells, Manuel, *The informational city : information technology, economic restructuring, and the urban-regional process*, Oxford, UK ; Cambridge, Mass., USA : B. Blackwell, 1989

<sup>5</sup> The exodus from Hong Kong in the years prior to the handover is perhaps emblematic of these anxieties, as is the reaction to various outbreaks and pandemics such as the avian flu or SARS

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In the specific case of Hong Kong and Shenzhen this has meant the addition of new border crossings, and the projected connection of public transport networks, an indication that the two cities are reducing duplication and competition for market share or resources. Previously the largely centralised and infrastructure-led planning processes and policies of Hong Kong's policy makers, planners and developers in part conflicted with those of Shenzhen, whose free-market, rapid and speculative developments meant that planning was reactive to already built changes. However, the more recent convergence has allowed for increased co-operation, and clearly this will impact on future development of the border zone, specifically the Frontier Closed Area within Hong Kong.

### **CLOSED AREA**

In 2010 the Hong Kong Special Administrative Region, (HKSAR) will redraw the boundary line of the Frontier Closed Area. The area will shrink in size releasing over 2,000 hectares of land for possible development. Currently this land has no statutory planning status – its future is undecided and contentious. The border between Hong Kong and Shenzhen could not be more extreme: whilst Shenzhen has built high rise towers and dense fabric right up to its edge, Hong Kong's Closed Area has remained frozen in time. The agricultural patchwork of fish farms and rice paddies provide testament to Shenzhen's past landscape. This has become a real estate asset for developers on the Shenzhen side who have built high-rise residential developments at the border's edge to supply the demand for open natural views. Nearby settlements in Hong Kong's New Territories such as Yuen Long turn their back to Shenzhen and remain scattered settlements and vertical satellite suburbs, orientated towards Hong Kong's centres to the south.



**Figure 2:** The closed area looking from Hong Kong towards Shenzhen



**Figure 3:** Looking towards the closed area from Shenzhen to Hong Kong

The Closed Area itself is almost 20km long, running from Deep Bay in the West to Starling Inlet in the East, and is replete with a diverse landscape of wetlands, mudflats, mangroves, woodlands as well as historic village settlements, burial grounds and specific natural habitats such as egrettries, bird migratory wetlands and bat colonies within abandoned lead mines.

In contrast to its eco-scape, the Closed Area has become a vast conduit through which large flows and exchanges of goods, people and economy occur across the border. In 2007, 15.2 million people travelled across the Closed Area border generating \$HK58,894.14 million or approximately 5.8 billion Euro of revenue on the Hong Kong side alone.<sup>6</sup> These exchanges necessitate a growing infrastructure and the number of border control points has enlarged from three in 2005 to six today.

These conflicting pressures on the Closed Area provide a complex mix of competing factors for future development. Additionally if recent developments in Hong Kong are anything to go by, they imply that the FCA could easily become yet another over developed site in which density sacrifices amenity and where existing spatial, cultural and environmental values do not count. An infrastructure-led planning process, a common mode of development in the PRD region, prioritises linear developments operating within the forces of market-driven growth. This model has limited flexibility for dealing with values not defined within its assumed neo-liberal framework. The potential of the FCA is to adopt an alternative approach to planning and one that can not only create mutual economic benefits but also be characterised by ecological, social and cultural exchange.

## **LOOP**

A key site within the Closed Area is the Lok Ma Chau Loop – a one square kilometre area of contaminated ground that was formed through the straightening of the Sham Chun River as a process of consolidating the border and to control flooding. Begun in 1992 and completed in 1997 the straightening of the natural meander left a residual piece of what used to be Shenzhen-owned land within the legal administration of Hong Kong. Due to its ambiguous status its future occupation has been contested by both sides, with each developing their own independent proposals without reaching joint agreement. In 2007 a joint task force was set up “to explore the feasibility of developing the Loop on the basis of mutual benefit”<sup>7</sup>.

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<sup>6</sup> A Statistical Review of Hong Kong Tourism 2007, Hong Kong Tourism Board 2007

<sup>7</sup> <http://www.devb-plb.gov.hk/eng/business/pdf/LegCoPaper080527-1e.pdf>, Legislative Council Panel on Development, Study on Land Use Planning for the Closed Area - Draft Concept Plan, May 2008

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The special status of the Loop can be seen as an opportunity and catalyst for the further transformation of the entire Closed Area.

## LIMINAL BODIES

Both the Closed Area and the Lok Ma Chau Loop constitute what can be termed Liminal Bodies. A Liminal Body<sup>8</sup> is an exceptional zone falling outside of the normal conventions of city development. They are often temporary conditions that establish their autonomy from the surrounding environment and have their own spatial rules and organisational structures. As inter-structural or transitional zones, Liminal Bodies are therefore born out of existing factors present in the dynamics of a city and its environment. Further, Liminal Bodies can be understood as containing conditions that allow for new forms of organisation to occur, as emergent circumstances that embody genotypes or conditions not found in the quotidian or conventional. This concept shares a similar conceptual framework to Ignasi de Solà-Morales concept of 'Terrain Vague' and Keller Easterling's elucidation of the Zone<sup>9</sup>, and can facilitate an understanding of SAR, SEZ's, DMZ's (demilitarized zones) and to No Mans Lands. In fact all enclave type conditions, a typology that could include examples such as tax havens, bonded areas, exclusion zones and closed areas, are in some senses Liminal Bodies that have given rise to exceptional and unusual development.

## STRATEGY

From the above interpretation of the existing conditions, the FCA requires a very different approach to development. It needs firstly to draw from the region's history of experimental urbanity providing an alternative model condition. Secondly it should not follow the existing neo-liberal, linear development model, but instead develop principles for a metabolic and cyclical form of development. Our concept is to spatialise and instrumentalise the border itself as a space that belongs to neither city but co-exists as a Liminal Body: a programmatic planning zone and a three dimensional planning tool that can benefit both sides of the border. The potential is for the unique ecosystem and openness of the Closed Area to be partially maintained whilst intensifying programmes, interconnections and exchange into the FCA. The project considers the role of the Lok Ma Chau Loop as a prototype, a catalyst in the formation of this zone as part of a phasing strategy: an anticipatory urbanism that mediates the different desires of each City.

The proposition is to see the FCA as an urban ecology that enables the continued interdependency yet semi-autonomous relationship between the cities of Shenzhen and Hong Kong<sup>10</sup>.

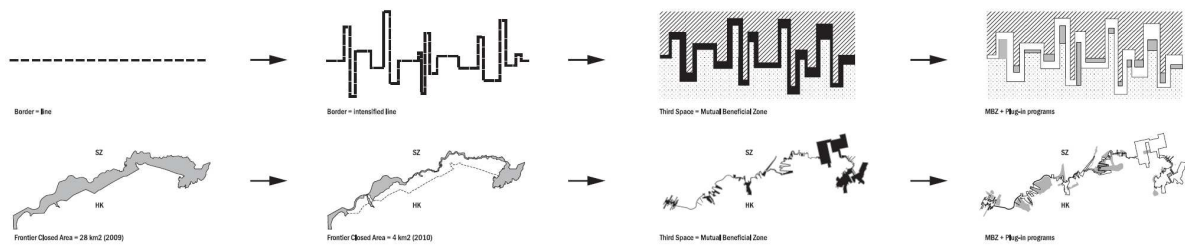
Conceptually the proposal intensifies the border condition through increasing its surface area to create an intensified interface for exchange. Through pulling this border-line apart a new space is created that is neither Hong Kong nor Shenzhen, but a Third Space that can be defined as a Mutual Benefit Zone (MBZ) between the two sides. Secondary programs and industries plug in to the attractive regulatory and programmatic conditions of the zone, initiating points of local exchange in Hong Kong and in Shenzhen. Strategically the idea is not only to intensify programs in limited areas in order to preserve and maintain the open and diversified ecology of the Closed Area, but to expand this fragile ecology into a synthetic ecosystem through the integration of natural and programmatic ecologies. These program hubs also activate the use of partial areas of the Closed Area for leisure or agricultural use. The appropriation and naming of the Zone is intentional. It is cloaked in the operational certitude of its predecessors. By having the appearance of a Zone – and to a degree a similar functional status – it can use its structure towards its own objectives. Towards mutual synergy as opposed to purely economic benefit.

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<sup>8</sup> This is a concept developed by Peter Hasdell in collaboration with Chora Institute of Architecture and Urbanism. It derives from the work of the anthropologist Victor Turner: 'If our basic model of society is that of a 'structure of positions,' we must regard the period of margin or liminality as an interstructural situation... [that] indicates and constitutes transitions between states. By 'state' I mean here 'a relatively fixed or stable condition...' The Forest of Symbols; Aspects of Ndembu Ritual by Victor Turner, p93

<sup>9</sup> For more details on the Zone and its operation with respect to corporate structures see Easterling, Keller, Zone in Urban Transformation, Ilka and Andreas Ruby eds. Ruby Press Berlin, 2008.

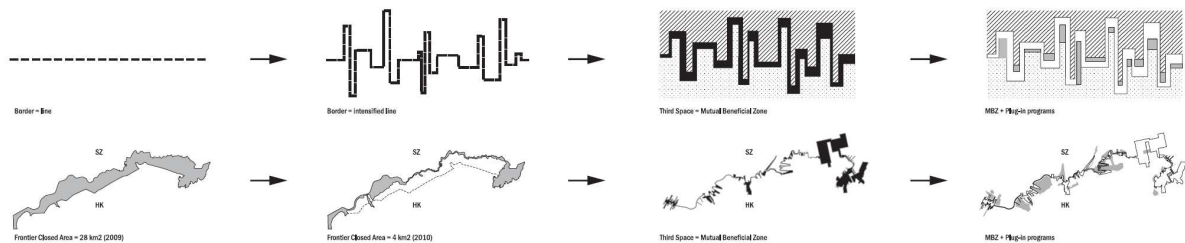
<sup>10</sup> The project was selected for the Hong Kong contribution of the Venice Biennale 2008 and was undertaken as a collaboration between Joshua Bolchover, Peter Hasdell and Esther Lorenz.



**Figure 4:** Concept diagram

This (*non*)-*plan*<sup>11</sup> necessitates a degree of openness and indeterminacy that allows for adaptability and the evolution of the area. Unlike typical planning methods that prioritise complete growth and development, the proposal aims to create a framework for collaborative projects through which the Closed Area can maintain its integrity as an environmental buffer between the two sides. The MBZ is tactically lacking in infrastructure; rather, it uses the existing border crossings as distribution points for the flow of people and goods. The provision of infrastructure also resides within typical planning methods to allow for conventional models of mass development. In terms of development, infrastructure has been shown to not always be a prerequisite for successful growth.<sup>12</sup> The strategy of the MBZ necessitates the limitation of infrastructural development in order to preserve the rich ecology of the Frontier Closed Area.

*Anticipatory Urbanism* sets out the pre-condition for further use through developing a programmatic strategy for the area. This takes into account the existing conditions of the site in terms of terrain, natural limitations, existing settlements and land-use, and the pressures and desires exerted from both sides of the border. The programmatic framework articulates how the land could be used and how it could be transformed over time. The idea is to formulate programmatic entities that are *metabolic*; each is mutually dependent on another whereby the input of one is created from the output of another. This aims to create a landscape of micro-urban ecologies as cycles of exchange to produce an advantageous reciprocation between human economy and natural ecology, establishing cyclical and co-dependent linkages between different types of uses, even if those uses change over time. We term this a Programmatic Ecology, characterised by the variety, adaptability and the interrelated nature of its species of programmes. The use of *ecology* and *ecosystem* describes a plan with numerous components, identities and functions that operate to necessitate the life-cycle of the overall plan. For example: the waste of one component could be used as an energy source for another. Capital itself is part of this ecology with economy acting as a necessary input and driver of change. It is naive to think that a park landscape alone would survive in the financial competitiveness of the HK-SZ context however if this park could demonstrate economic benefits and be self sufficient it would be conceived as a more viable proposition. In this sense we are proposing that the FCA become an active landscape and one that could be as beneficial to HK and SZ as Central Park is to Manhattan.



**Figure 5:** FCA as Central Park

<sup>11</sup> See Price, Cedric “Non-Plan”, AD, May 1969 also “Non-plan: An experiment in Freedom”, Banham, Reyner, Barker, Paul, Hall, Peter and Price, Cedric, in *New Society*, March 20 1969 reprinted in *Shrinking Cities Volume 2: Interventions*, Oswald, Philipp, ed. Hatje Cantz, 2006

<sup>12</sup> See Wiedemer, Rochus, “Illuminated Meadows” in *Shrinking Cities Volume 1 International Research*, Hatje Cantz, 2005

The zone strategy for the Mutual Benefit Zone provides a supportive ecology containing a necessary diversity of educational, economic, commercial, cultural and recreational programs. Over time, as HK and SZ move towards the 2047 reunification, we see the Mutual Benefit Zone as an organic entity that can adapt to and anticipate changes as necessary.

Our proposal establishes a matrix or taxonomy of constituent relationships structured around a variety of edge conditions. The totality of edge conditions defines the perimeter of the Mutual Benefit Zone from either side of the border. These edge conditions have different degrees of permeability according to: thresholds, gradients, porosities, overlaps, temporalities, and regulatory systems, allowing for nuance to replace the existing border conditions. The programmatic ecologies can each have a different relationship to the Mutual Benefit Zone, allowing for a wide range of exchange possibilities, economic opportunities, and a spatial diversity of conditions.

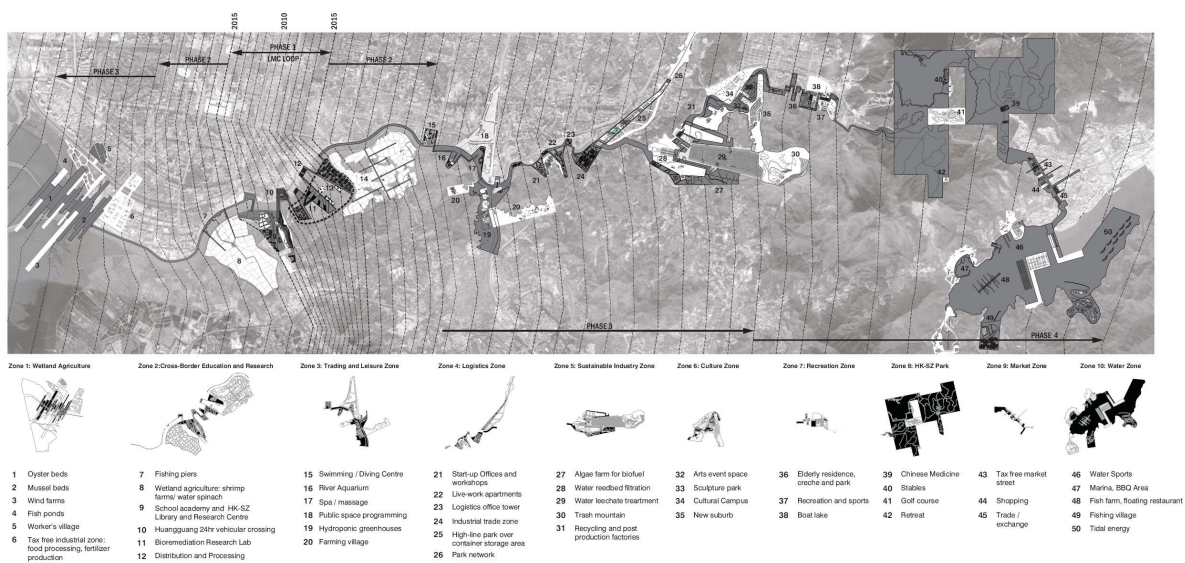


Figure 6: Mutual Benefit Zone

For example: *Zone 2 Cross-Border Education and Research*. The Lok Ma Chau Spur Line Border Control Point opened in 2007 as part of the extension to Hong Kong's metropolitan transport system (MTR). This huge mass of infrastructure is an estranged object in its surrounding wetland environment. The connection of the MTR to the Shenzhen metro has encouraged many Hong Kong families to move to Shenzhen for cheaper and more spacious living conditions and to commute to Hong Kong for work. Their desire to have their children educated in Hong Kong has led to an influx of cross-boundary students. Over 4,500 cross each day with this number steadily increasing. The MBZ supports a primary and secondary school, which utilise the wetland landscape as a site for learning with exterior classrooms, experimental habitats and large play areas in direct contrast to the more regimented educational model of Hong Kong. In addition a HK-SZ library operates as a research centre between the two cities encourages academic exchange and offers book-borrowing facilities for commuters. In the Loop area itself we propose a biotech research facility to conduct bioremediation experiments to deal with the existing contaminated mud. The research lab would also test agricultural techniques that could help regenerate abandoned farmland in the wetland areas. Distribution and processing facilities on the Shenzhen side could post-produce goods grown on the Hong Kong side to sell to markets on the Mainland. Numerous workers living in the densely packed Villages-in-the-City on the Shenzhen side, many of whom could be made redundant due to the recession, could be employed within the MBZ as agricultural workers or in the distribution factories.

This example is one of 10 zones we have characterised within the MBZ that also includes the following:

**Wetland Agricultural Zone:** re-invigorating the historic oyster and clam farms in the estuary, linked to production facilities in the tax-free industrial zone in Shenzhen. The lime of the shells can be ground up to produce fertilizer or be used in building aggregates.

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**Gateway Trading and Leisure Zone:** Lo Wu is the busiest control point in the territory with an estimated 95 million passengers between 2007-8<sup>13</sup>. The control point forms the intersection between transportation links via underground and mainland trains and has developed into a commercial hub with a vast mall like structure selling cheap electronics, handbags and clothes all at knock down prices for Hong Kong day trippers. The phenomenon of super-sized spas providing massage after a hard days shopping completes the experience. This zone incorporates increased leisure facilities through a spa building that is embedded in the wetland landscape as well as “pick-your-own” hydroponic farm.

**Inland Port and Logistics Zone:** North of the Man Kam To Control Point is an existing container logistics area. In order to promote knowledge exchange and high tech innovation combining the expertise of manufacturing techniques in Shenzhen with financial, legal services from Hong Kong, the zone is set up with live-work units and start-up office spaces and workshops.

**Sustainable Industry Zone:** there is a lack of waste management and recycling facilities in Hong Kong with large amounts of waste ending up in land-fill. The zone provides incentives for environmental techniques and experimentation through reed bed water filtration methods and algae production to be used as bio-fuel or as a carbon sump. Post-production and recycling facilities are encouraged to consolidate waste from both cities.

**Cultural Zone:** this zone could situate outposts for tertiary education institutions such as Shenzhen and Hong Kong Universities as well as provide outposts for Mainland and potentially international institutions. The idea is to set up an academic exchange network with an emphasis on cultural development. Potentially this could develop into a publicly accessible campus for cultural production and presentation.

**Recreation Zone:** adjacent to a large residential neighbourhood of Shenzhen the zone provides recreational amenities for this population as well as providing elderly accommodation (particularly for Hong Kong’s aging population) that could be staffed with nursing care from Shenzhen.

**HK-SZ Park:** A joint national park linking the two mountain ranges across the Sham Chun River and activated by activities such as horse riding, hiking and biking trails and the now ubiquitous golf course<sup>14</sup> as well as a retreat for Chinese medicine therapy.

**Market Zone:** Chung Ying Street in the village of Shau Tau Kok is a predecessor of the Third Space concept: one side of the street is in Shenzhen with the opposite side in Hong Kong with no physical boundary in existence. Historically, villagers had the right to move freely between both sides making the street itself a site of commercial exchange, smuggling and black-market trade. The opening up of the Closed area will make visiting this site for HK residents easier encouraging further duty-free shopping potentials.

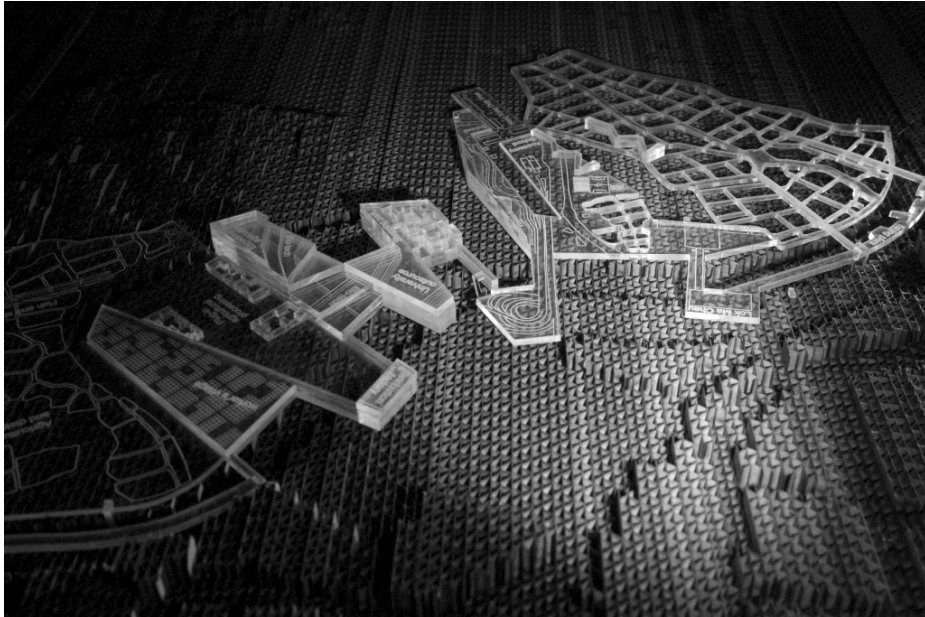
**Water Zone:** Starling Inlet is a water body that is off limits to both Hong Kong and Shenzhen citizens. The zone promotes water activities from more traditional floating fishing structures, fish farms and boating marina’s as well as testing the potential for tidal energy developments.

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<sup>13</sup> [http://www.immd.gov.hk/a\\_report\\_07-08/eng/chapter02/index.htm#b4b](http://www.immd.gov.hk/a_report_07-08/eng/chapter02/index.htm#b4b)

<sup>14</sup> The government ban on golf was only lifted in 1979 and since then golf has endured a renaissance as a status symbol of China’s burgeoning nouveaux riche. See Campanella, Thomas J. *Theme parks and the Landscape of Consumption in The Concrete Dragon: China’s urban revolution and what it means for the world*, Princeton Architectural Press, New York, 2008





**Figure 7:** Cross Border Education Zone



**Figure 8:** Logistics Zone

## **URBAN ECOLOGY**

These Zones become instruments to set up programmatic intentions contributing to the entire operation of the Mutual Benefit Zone across the Closed Area. China has been incredibly proficient in using the device of the Zone to successfully mediate between adverse and contrary scenarios. For instance: the Special Economic Zones mediate between the “One Country, Two Systems Policy” and at a different scale between Communist Party rule and the global, market economy. Unlike the Zone as a regulatory structure that emerges from the increased role of corporations within political governance, the idea of the MBZ is to act as a site of mediation. Rather than provide the conditions for the development of singular, mono-programmatic corporate landscapes, the Zone in this instance operates to initiate diversity and allow for mutation and adaptability. Currently the HKSAR government has selected Ove Arup and Partners Hong Kong to provide

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planning studies and technical evaluations for both the Lok Ma Chau Loop and the Closed Area. Although currently the observations so far seem focused towards maintaining some of the environmental quality of the Closed Area, the approach particularly in respect of the Loop is to parcel up the land into more quantifiable pieces<sup>15</sup>.

This will inevitably lead to a more conventional planning approach that deals with plots as opposed to a wider consideration of the functionality of the entire eco-system: both urban and natural. It also negates the opportunity to engender the co-operation with Shenzhen more fully which could include the planning of areas of Shenzhen to further a more integrated and *stitched* border. The potential of our proposition is to do just this: to provide a regulatory framework defined as a Mutual Benefit Zone that is configured as a planning tool to create an innovative and supportive ecology for both sides.

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<sup>15</sup> <http://www.lmclloop.gov.hk/eng/index.html>