# Sustainable Cities:
# The Need for Regenerative Urban Design

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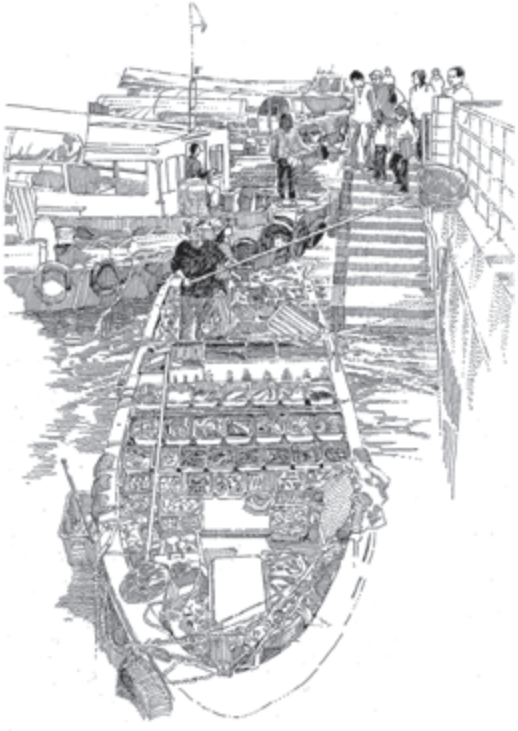
Designed Integration of Historic Places
Kowloon



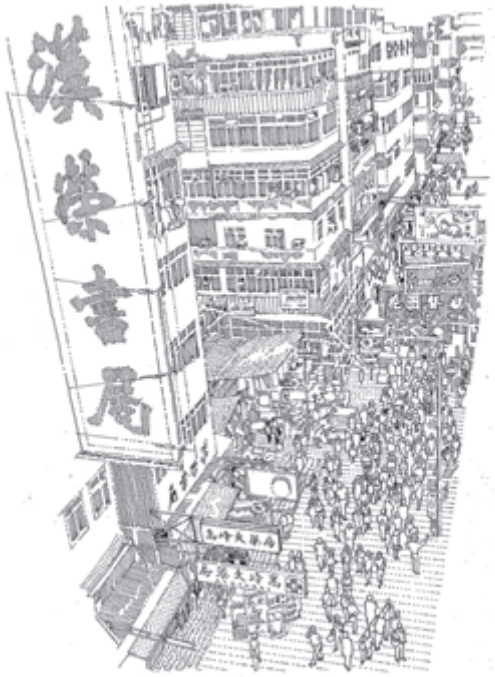
Functional Animation of Urban Edges
Sai Kung

In a broad sense 'sustainability' is about maintaining and enhancing the quality of life while respecting the carrying capacity of the biosphere, the supporting eco-system and resource base. At a more detailed and specific level, spatial planning and urban design need to be set within the urban and city planning context of natural resource conservation and the achievement of environmental quality. As part of this process urban design must be concerned with the careful stewardship of the resources of the built environment in the creation and maintenance of the public realm.

Efforts to improve the environmental performance of cities is possibly the most pressing issue to be addressed in the 21st century, and global initiatives reflecting sustainable concerns for the planet have, in recent years, helped to develop a clear ecological dimension for strategic and local planning.

In Asia this really comes down to what sort of cities we want and the priorities we set. The term 'City' is derived from the root word for civilisation, meaning 'befitting a citizen', and in general cities are the result of people's persis-

Conservation of Street Fabric
Macau



Weekend Street Closure
Kowloon

tent pursuit of a more liveable environment. Wherever they are, this is indispensable to the development of society. Edward Glaeser in 'Triumph of the City' stated that studying cities is so engrossing because it poses fascinating but often troubling questions, but he also raised the question 'why do so many smart people enact so many foolish urban policies? So this subject is very pertinent. Any design model for a Liveable City must focus on the long-term well-being of its citizens, and policies must be well thought out, they must be implementable, and must be acceptable to stakeholders.

This touches on many issues – identity and belonging, and the future of the city that is not just about redevelopment of inner districts but about the edges, the boundaries, the connections, the ecology and the urban design. And where the citizen is at its very centre.

Incorporation of Distinctive Amenities
Bird Market, Mong Kok

What we must transcend in asian cities, is the perennial laissez-faire linked system of speculative accumulation, narrow economic focus, the power of large development interests, and the concept of the city as simply a matrix of opportunity, because what this leads to in practice is increasing inequality and polarisation of society. We need to bring together policy making areas that are directly related to regeneration of the city, and which are now often segregated into silos. This includes urban planning, urban renewal, infrastructure, highways, transport and the environment. And we might add another – new technologies to drive the creation of a new kind of city – liveable, connected, global and sustainable.

As Jonathan Barnett, the American urban design commentator has observed, while the forms of most world cities might be unintentional, they are not accidental. They are the products of innumerable decisions made over varying periods of time, for single and separate purposes – but where the combined consequences of all these decisions are unpredictable. When you look at this we are bound to agree that it could never have been intentional. Great urban design is unlikely to happen purely by chance, but an almost constant process of change is inherent in the way cities function – physically socially and economically.

Incorporation of Pocket Parks
Tsuen Wan

Our historically great cities come down to their endowment of physical capital, their hard infrastructure of buildings and spaces coupled with the more elusive qualities of place and history, which in many Asian cities is now strikingly absent. Healthy communities need healthy urban places. But the modern city must look to the future and add another dimension – that of responsiveness to the challenges of growing urbanisation, eco-awareness, urban efficiency, and resilience to climate change. In this sense, urban performance no longer depends purely on physical capital but on social and knowledge capital.

For the most part the primate cities far exceed other national cities in terms of population, business investment and industrial production. Around 60 percent of national GDP in Asia is now produced within mega-urban regions that are tending to double their populations every 15 years. The metropolitan regions of Bangkok, Manila, Jakarta and Tokyo generate anything between 35 and 60 percent of their national GDP. On top of that, development corridors are expanding beyond metropolitan boundaries, emphasising the regional or mega-city dimensions of the urbanisation process whose parts are interdependent but still evolving such as the Greater Bay Area in Southern China with a population of some 70 million in its integral

cities. Asian countries contain 60 percent of the global population, and the asian city has for some years been on the rise. The steady stream of influences on its cities is now being superceded by a surge of commonalities generated through the dominant forces of globalisation and competition for international investment.

The massive programme of urbanisation itself requires some understanding of historical, cultural and political dynamics that have created the physical conditions, the changing value systems and the contested identities of the modern asian city, and that is contributing to a spatial, social and economic transformation which is giving rise to expanded urban footprints.

Nanjing Road Upgrading
Shanghai

At the end of World War II only 17 percent of Asian populations lived in cities. By 2020 this has grown to more than 50 percent, one of the main influences being the pre-eminence of primate cities which in certain situations have evolved into mega-urban regions as a result of concentrated economic development and investment. The latter situation includes densely populated rural enclaves on the peri-urban fringe which have been drawn into the city ambit through industrialisation while also embracing lingering rural characteristics. This has created on one hand a requirement for mass housing at relatively high densities, at a time when civil society is asserting changing social and economic agendas.

In most asian countries the state assumes a major role in transforming urban space and delineating its symbolic qualities. The expedient process of redevelopment over regeneration obliterates the technically inefficient or uneconomic at the expense of heritage, or at best juxtaposes it with the evident prerequisites of modern cities – the traffic artery and the superblock. In the process city making and renewal procedures have become more absolutist and expedient.

The goals behind the Sustainable City, the Liveable City, the Smart City and even the Resilient

Street Market as part of Neighbourhood Upgrading
Tianjin

City are not mutually exclusive, but the future urban emphasis must be on quality, not merely quantity. This touches on many issues – identity and belonging, boundaries and connections, the ecology and urban design. We must however resolve the central issue of Contestation. This represents a realm of uncertainty brought about by conflicting priorities related to aspects such as conservation, maximisation of land value and heritage tourism, housing tenure and public engagement, and requires careful moderation as to the rate of economic change.

Asian cities do not necessarily have the formalist configuration of spaces and the highly defined public realm bequeathed to Western cities. Instead the asian street, the progenitor of asian city form, tends to reflect a heterogeneous assembly of types that display a range of complex interactions, including an emphasis on social rituals, ceremonial uses and market trading that relate more to patterns of activity than conceived physical form. These need to be acknowledged and retained within city regeneration exercises.

The sense of dissonance common to the traditional city still remains – interaction and encounter, the complex and indeterminate, the bazaar economy that has traditionally evolved around market places and mobile vendors, specialised trades and products associated with active streets and indigenous cultural institutions. These create opportunities to retain ad-hoc aspects of place with distinctive forms of expression that relate to the underlying grain, and help to break down uniformity.

Effective Re-use of Heritage Structures
Singapore

In areas that do not have to meet increasingly high operational specifications, persistences carry through - the sacred places, gathering spaces, palace compounds, speciality markets and bazaars together with indigenous mixed use quarters – the 'locales of complexity' that characterise many older neighbourhoods. These remain according to their capacity to adjust to conditions within the new contested urbanism, where different interest groups compete for priority and space, and where the 'high' and 'low order' components often experience a less-than-stable relationship, usually existing together in informal allegiances through layering and overlap.

**Contested Forms of Urban Expression**

UNESCO World Heritage extended conservation and preservation activities to Asia in the 1970s at almost the precise time that many cities were undergoing modernisation. Attempts to reconcile these different forces tend to differ considerably. On one hand cities need tangible and symbolic forms of expression related to identity, memory and continuity. On the other hand there might be a tendency to obliterate traces of 'alien' colonial intervention? The fundamental issue is the cultural value and understanding put on places of historic character by local populations. ICOMOS – the International Council on Monuments and Sites, an advisory body to World Heritage, now accepts "intangible heritage" in Asia as having an equal and possibly even greater cultural relevance than physical traces in transmitting authentic urban value.

Upgrading of Characteristic Areas as Visitor Destinations
Singapore

## Contested Forms of Tenure

The concept of private property and urbanisation are inextricably linked. Access to urban land is through one of four means: through family relations; administrative means (public housing); the real estate market or illegal occupation. This implies that to regularise the situation, all land must be properly registered. In some situations urban populations are made up of different ethnic or economic groups, with disparities in land tenure. Both occupation of public land and rental of lots on private land make tenants vulnerable in the face of urban redevelopment and urban expansion.

## Contested Space

Open space for the most part has traditionally functioned as layered networks of 'unofficial' economic transactions or exchange through mobile traders. This informal sector and the varied entrepreneurial skills associated with it form part of an informal labour market that is necessary for economic survival. As the asian city undergoes both physical expansion and changes in economic direction, the informal sector is likely to grow in parallel. In some South Asian cities the pasar malam forms a traditional means of equating temporary food stalls with local employment and social interaction. Street vendors occupy space at a specifically

Placement of Prominent Buildings as District Landmarks
Singapore

agreed time, while specially demarcated outdoor areas are set aside for vendors under hygienic conditions.

**Urban Regeneration**

Urban regeneration must be a key focus for public policy geared towards city betterment. The key to its sustainability is the approach taken by an amalgam of participants: local authorities, developers, investors and other stakeholders in the community that should reflect the current tools and metrics used by public, private and NGO sectors. Wherever it occurs, this requires a comprehensive and integrated vision aimed at achieving lasting improvement to both the private and public realms, with an effective interface between them. It is best implemented through small one-off projects that are meaningful to the community and consolidate local identity. The complexity of Asian cities coupled with their increasing land values, indicate that improvements need to be carried out in an adaptive way to provide for continuity of urban character. Successful regeneration must therefore have a long-term strategic purpose, and should represent all stakeholders who have a legitimate interest in the city.

Successful examples have to a large extent centred around physical revitalisation, improve-

ment, upgrading and 'walkability' initiatives, commensurate with new 'liveability' agendas. This has tended to produce an enhanced city image with direct, indirect and induced effects through increased cultural and symbolic values, and in the process has helped to promote inward investment. Such measures also tend to induce further environmental action including landscape improvement of the public realm, refurbishment of older buildings, walkability and environmental management. It might also include such aspects as revitalisation of historic centres. A transition towards urban regeneration needs to reflect a means to tackle problems associated with a long-term strategic purpose of urban betterment. It must therefore be simultaneously aimed at physical fabric, social structures, the economic base and environmental conditions. This calls for integrated strategies that deal with the resolution of problems in a balanced and comprehensive manner, but at the same time ensure that programmes of implementation are developed which make a positive contribution to the city as a whole.

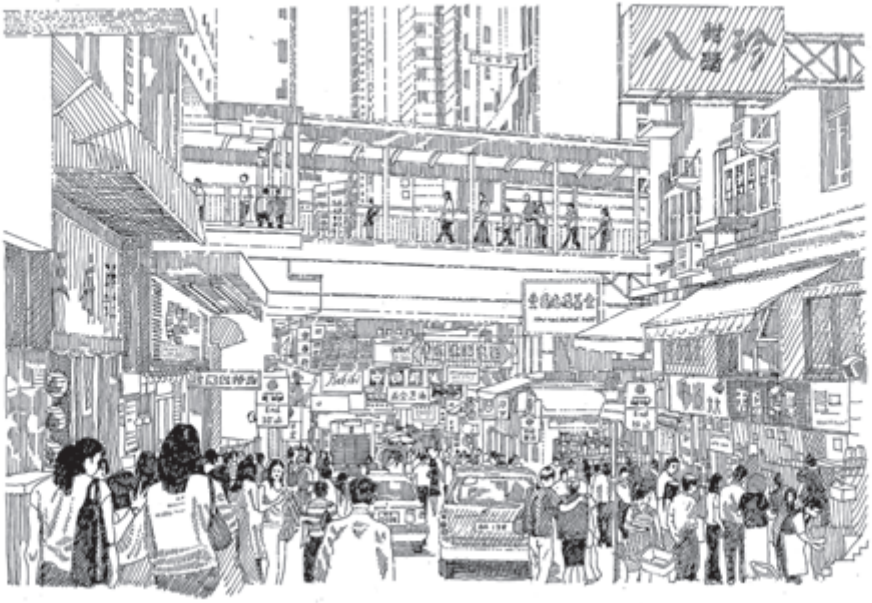
Street Closure
Nanjing

In terms of urban design and its relationship to planning and regeneration we can set out a number of aspects that are attuned to city betterment, ecological issues, social traditions and the resolution of economic polarisation.

Clearly we cannot resolve these problems at the same time, but we need to recognise them and possibly prioritise them.

We need to:
-assimilate what is characteristically embodied in the local morphology – the essential values of the street, city block, sacred place and space configurations, and how these can be translated into typologies that satisfy changing community structures and ambitions, and that extend cultural definition to urban form. In the process this needs to establish or consolidate around a more cosmopolitan type of urban regime.

-use available planning mechanisms with vision and creativity, that can effectively regener-



Insertion of Connective Pedestrian Structures
Hong Kong

ate the city through incrementalism and adjustment by opening up urban development and expansion possibilities while retaining cultural and intangible heritage. Without this urban renewal processes are skewed towards perpetual redevelopment, resulting in massive displacement and undifferentiated urban quarters.

-ensure that land economics, ownership patterns, commercial and servicing requirements do not dictate a course-grained structure of new urban layouts across the city. We must protect and reinforce the older more fine-grained environments in multi-ownership with their commensurate ability to informally adjust their ownership and use mix, and in the process produce an integrative urbanism.

## Strengths we can build on

### Complexity and Correspondence

Despite economic imperatives that often drive planning programmes towards segregation and separateness, the asian street and place functions in several dimensions (social rituals, ceremonial, informal and transactional) that intensify both levels of use and opportunities for economic exchange.

We need to encourage an urbanism of

high adaptability embedded in the complex framework of everyday life, even if the price to pay is disjointed image.

### Intangible Associations

There is often an adverse relationship between the advent of city planning departments and the use of development control and management mechanisms which make cities increasingly efficient and functional but at the expense of liveability and communality. Memory of the city is embedded not merely in its solid fabric but in its responsiveness to change, and a co-existence of cultural types, imprints, overlays and interactions.

We need to respect the advantages of use mix rather than segregation of single use enclaves through rigid zoning.

### Articulated Margins

A central tenet of the asian street is its versatility, combining the functions of meeting place and market place. The street margin tends to act as a transitional 'threshold' rather than a rigid demarcation, and invites

Weekend Street Closure
Central, Hong Kong

Regeneration of Older 'Clan' Neighbourhoods
Guangzhou

a reciprocity between different interests and rituals. These engage users through overlays of use and display, that dissolve the boundaries between private and public space.

We need to encourage aspects of improvisation and adjustment that stem from discernable and practical values.

### Temporal Transitions

Temporal transitions reflect a relationship between the passage of time and the programmatic change of uses throughout the day and evening. This generally involves different sets of users who inhabit public space, often quite intensively at different times for different purposes, sometimes with a high degree of overlap. Locations are shared on a time basis rather than being used intensively but intermittently by one particular interest group.

Environmental Upgrading and Street Closure
Nanjing

We need to respect the necessary qualities of change, mutation and invention as measures of use, variety and diversity.

### Urban Markers and Delineations

A number of aspects contribute to identity and legibility in the asian city that emphasise transition, convergence and foci rather than spatial demarcation in a compositional sense. For example pailou and torri gateways that delineate approaches to sacred places and processional routes.

We need to recognise the importance of incorporating traditional socio-cultural elements as reference points within the connective framework of the city.

### Workable Typologies

The relationship of traditional city-making elements such as adaptable Chinese t'ang lau and shophouse typologies, open to sub-division and constant re-fitting, has been fundamental to the long-standing absorption of high population densities and intensive patterns of economic activity in many cities. This acts as both a cultural and social model with an important street making and economic dimension, representing dominant street typologies with a variety of interpretations in terms of form and style.

Environmental Gain from Upgraded Threshold Space
Singapore

Comprehensive Regeneration and Upgrading
Xintiandi, Shanghai

We need to preserve and conserve these elements as both historical markers and as city-making contributors to contemporary urbanism, in particular street formation.

**Environmentally Sound Technologies**

The condensed nature of city cores together with increased levels of private vehicle use and road-based transport has severely compromised the liveability of cities and a time when urban populations are increasing. The strides that are being made in electric vehicle technology, autonomous transport, create the medium-term potential for urban energy efficiency and cleaner emissions, which have significant ramifications for urban planning. This in turn creates increased opportunities for restrictions on private car use and a more people-centred urban design. This can entail extended patterns of pedestrian movement and connectivity with integration of cycle-tracks and forms of people movers appropriate to effective city planning.
We need to increasingly match changes in transport and traffic technology, with improved pedestrian connectivity, comfort and access in our condensed and compact urban cores.

Upgrading of Sacred Places as Distinctive Places of Visitation

## The Sacred Place

Spiritual heritage necessitates a reciprocity between different interests and customs, and also between complementary forces which echo philosophical theories of social organisation and geomantic diagnosis.

The asian sacred place and its urban 'fit' is the antithesis of the absolutist position. Instead of dominating the street, the temple normally establishes a low-key presence. Sacred places therefore become incorporated into city fabric as part of daily life and cultural ritual rather than merely acting as sites of veneration.

We need to respect the relaxed co-existence between ceremonial space and social gathering space, and the spiritual quality this exerts on the public realm.

## Dr. Peter Cookson Smith's Biography

Dr Peter Cookson Smith is an architect, planner and urban designer. He has been resident in Hong Kong since 1977 when he founded URBIS Limited one of the first specialist, planning, urban design and landscape consultancies in South-east Asia. Over the past 43 years the company has carried out more than 3,000 projects in Hong Kong, Mainland China and throughout Asia, winning more than 250 local and international awards. He was among the first urban planners from the West to carry out studies for the PRC government in the early 1980s following the 'Open Door Policy'. For several years he was Professor at the University of Hong Kong Faculty of Architecture, and is an Adjunct Professor at the Chinese University of Hong Kong. He has also been a Visiting Scholar at the HKU Centre for Asian Studies, and has sat on a number of government commissions on strategic development. He is a Past-President of both the Hong Kong Institute of Planners (2011-2013) and the Hong Kong Institute of Urban Design (2014-16), and is the author of six books on Urban Design.