



City Narratives

Pursuing Green Agendas

While Singapore is known for its rapid economic rise and stunning transformation into a metropolis, it has also invested in its vegetated and aquatic landscape to create an equatorial paradise. **Prof. Peter G. Rowe**, CLC Visiting Fellow, discusses how a country's verdant aspects can shape its national narrative and what else Singapore could do to extend this.

Nowadays, many accounts of Singapore since it gained independence pay considerable attention to its openness to business, its rapid economic rise, and its strong top-down form of clean government.

Considerable attention is also paid to the scope and character of its highly successful public housing by the Housing and Development Board (HDB), its recent gleaming array of contemporary buildings, its embrace of leisure-time resorts and cultural venues, and, until very recently, its superb transportation infrastructure.

By contrast, far less attention is accorded to Singapore's vegetated and aquatic landscape or so-called "green-blue" elements of its urbanising existence, which also constitutes the "other" natural realm of a city of tropical excellence.

This oversight is perhaps surprising because Singapore is not at all urban in the fashion of other notable cities like Barcelona, Paris or New York. Rather, its overall form is more a case of a "high-rise suburb"—an organic array of building clusters in an otherwise green tropical field.

Although an account of Singapore as being a "high-rise suburb" probably short-changes many admirable features, it is probably closer to the mark than it being a truly urban condition. The oversight is also surprising because it overlooks one of the most significant accomplishments of Singapore in both the creation and conservation of its environment. What the city-state has managed to do with water is probably second to none in the world, for instance.



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With just as much greenery as there are high-rise buildings, Singapore is more a "high-rise suburb".

The Role of Water and Green Spaces in a National Narrative

In fact, the verdant aspect of Singapore has been, and continues to be, called upon and incorporated as a part of the city's underlying narrative and officially-projected identity.

Simply judging from appellations that have been conjured up almost from the beginning of the nation, the idea of Singapore as a "Garden City"; a "City in a Garden" and, most recently, a "City of Gardens and Water" has remained central.

Both functionally and allegorically, it is a strong and politically promoted dimension of Singapore's identity and one that appears to be assuming an expanded role in plan making.

Take for instance, the ABC (Active, Beautiful, Clean) Waters Programme by PUB, Singapore's national water agency. Its aim is to bring people close to water through aesthetically pleasing lifestyle attractions and to improve water quality on the island. In so doing, the programme's contribution to Singapore's narrative further instantiates the strategic significance of water and particularly clean water to the nation's survival. Also, with 32 major rivers and more than 8,000 kilometres of canals and stormwater drains, it points to the ever-present possibility of inundation and potential flooding.

Moreover, the programme shifts the figurative aspect of the allegory towards naturalised streams in lieu of concrete channels and softens the image of living in spite of nature to one of living in harmony with nature.

In addition, matters of biodiversity on the functional side and tropical exoticism on the figurative and symbolic side further combine to make a case in this "other" dimension of Singapore now as an "equatorial paradise".

Creating an "Equatorial Paradise"

One place where Singapore as an "equatorial paradise" begins to come together is the Kallang River at the Bishan-Ang Mo Kio Park towards the center of the island in what has been a successful conversion of a concrete-lined channelised stream into a naturalised water course with bio-engineered edges and site contouring with swales for stormwater detention in times of inundation, as well as spaces for a variety of recreational activities.

Designed by Atelier Dreiseitl Asia in partnership with CH2M Hill for PUB, the park is three kilometres in length and incorporates 62 hectares of tree patches, water-cleansing biotopes and grassy fields, in addition to the meandering stream itself.

Adjacent to the river is a mix of private and public housing in Bishan estate while the other bank is bounded by Ang Mo Kio town. Other constructed features in the park include the Riverside Gallery, several restaurants, and a raised outlook made from recycled materials from the old concrete channel, and several bridges.

Over time the biodiversity within the park has increased by some 30% and recreational opportunities of various kinds have multiplied significantly. Work will soon begin on the extension of the bioengineering and park-like atmosphere along the narrow corridor of the Kallang River moving downstream towards Marina Bay.

Other PUB projects of this ilk can also be found along the Kallang River at Kolam Ayer and the transformed and beautified narrower reaches of the Alexandra Canal, another former utilitarian concrete drainage channel.

Other aspects of the broader functional narrative and allegory of Singapore as an "equatorial paradise" are prominently on display at both the Singapore Botanic Gardens and the recently opened Gardens by the Bay.



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Founded in 1859, the Botanic Gardens, among other aspects, chronicles the transformation from a British tropical colonial garden into a world-class modern botanic center and place of conservation and education.

Located minutes from Singapore's busy shopping district, it occupies a 82-hectare site some 2.5 kilometers in length. Designated as a UNESCO World Heritage site in 2015, it comprises a variety of tropical zones like the Rainforest, the Ginger Garden, the Orchid Garden with the largest species collection in the world, and the soon to be completed Learning Garden focusing on local trees.

In addition to conserving, propagating and displaying significant aspects of a tropical landscape and, therefore, the ingredients of its manifestation in figurative and symbolic aspects of landscapes, work in the Botanic Gardens has also played a significant functional role in Singapore's development. One notable example in the past was to the rubber trade, a key economic activity at one time, by way of pioneering research into plant cultivation. Another was expertise furnished in

the early days of the young nation relating to its promotion as a "Garden City".

The Gardens by the Bay, adjacent to the Marina Bay Sands integrated resort, currently encompasses 54 hectares and was planned by a team lead by Grant Associates, following an international competition.

Among other themes, the Gardens embrace interactive displays of botanical species important to both Singapore and to Southeast Asia more broadly, largely housed in two very big greenhouses providing various thermal and moist environments suitable for plant life from various climatic zones. Prominent on the site are also the "supertrees" that house vertical gardens soaring 25 to 50 metres in height, replete with planting, rainwater collection and photovoltaic generation capacity. The arresting, other-worldly and avatar-like appearance of the supertrees clearly add to the allegorical significance of the Gardens and, in turn, to Singapore, although it can also be seen to refer back to the replicas of the giant clubmosses in the Botanic Gardens.

01 The naturalisation of Kallang River continues downstream, in the Kolam Ayer neighbourhood.

02 The Singapore Botanic Gardens' colonial-style landscape was one of the reasons it became the first and only tropical botanic garden on the UNESCO World Heritage List.

03 "Supertrees" at the Gardens by the Bay house vertical gardens replete with tropical flowering climbers, epiphytes and ferns.





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The Power of Narrative-Making

The kind of narrative-making with regard to the natural circumstances of settlement is amply present elsewhere in the world.

Pastoralism, for example, has often been cited and exploited as a cornerstone of American intellectual and artistic experience, particularly when it comes to location of appropriate grounds for human settlement.

Following the conquest of the frontier wilderness, pastoral developments are seen to arise on the way to further progress, or so the story goes. At root, pastoralism derives from the Greco-Roman tradition

and has been deployed in juxtaposition to the ills, vice and depravity of the city.

Another offshoot of this tradition can be found in Italy and the distinction between *urbs* and *rus*, clearly materialised by a preponderance of hillside towns and surrounding countryside. The sentiments involved there are probably well summed up by Ambrogio Lorenzetti's 14th century allegorical mural titled *The Allegory of the Good and Bad Government*, on display in Siena's Palazzo Pubblico.

There the allegory of good government is encapsulated in a peaceful city that is well organised, commercially prosperous and safe, as well as being nurturing to its citizens. The other message is that such a state of affairs is all due to the virtuous and just rule of Siena's leaders. Equally important is the peaceful countryside depicted by uplifting views of the Tuscan territory replete with villas, castles, ploughed fields and farmers engaged in bucolic pursuits. This aspect of the allegory also extends to the astral forces that govern harvests, ploughing, sowing, stock raising and the like, again pointing in the direction of harmony with nature.

01 & 02 *Allegory of the Good Government and Effects of Good Government on Town and Country*, part of a series of frescoes by Ambrogio Lorenzetti, alluding that good governance will result in a prosperous city, and countryside that is in harmony with nature.

03 The success of the Bishan-Ang Mo Kio Park can be further extended by allowing the water channels to go in between the residential buildings, and linking them to other public spaces.



Expanding the “Equatorial Paradise”

Moving forward, the verdant aspect of Singapore as an “equatorial paradise” can be extended further.

A more pervasive infiltration from set piece landscapes like the Bishan-Ang Mo Kio Park, for example, into surrounding neighbourhoods might be undertaken to create a more fulsome network of public open space, alongside of much further transformation of the narrower corridors alongside streams, canals and channels.

Parks like Bishan could also be revisited, particularly along the park edges outside of the hydrologic and bio-engineered profiles, in order to provide for “gardens within the park”, as it were. This would not only potentially provide for further diversification of specific support and setting for leisure-time uses, but also extend the allegorical landscape of Singapore’s green space undertakings with a stronger East and Southeast Asian focus.

Apart from wilderness sites, some monumental natural features and cultivated agricultural landscapes, the region’s

main contribution has been sophisticated development of gardens and not park landscapes.

Further amplification of private outdoor vegetated space and surfaces associated with buildings should be undertaken, ranging from the literal manner of the exterior of the rising Oasia Downtown by WOHA, to more prosaic opportunities offered by dwellings in HDB estates.

Lastly, further institutional integration may be warranted in order to avoid the piecemeal appearance of projects in the city that seems to be happening. At present this would need to be across the lines that define the PUB, the National Parks Board, and HDB, among other organisations. There is ample precedent elsewhere for creation of specially-tasked groups being formed solely to accomplish projects and then retiring. Nevertheless, Singapore has and continues to make progress on its “other” functional and allegorical transformation towards an “equatorial paradise.” ●

