ABSTRACT

In the midst of the rigid forms, hard surfaces and mechanical sounds of the urban environment water displays itself as a fluid, ever-changing, tinkling or gushing element. If the act of building divorces us from nature, both to protect us from the elements and to erect a more rational human realm in its stead, the sensual play of water reconnects us.

Regardless of the particular type of design adopted for a water feature, the primary attraction that water has for city dwellers is its link with nature. As water flows from stream to river and finally into the sea, it represents a link between mountain and ocean and more than any other element is responsible for the form and character of the landscape through which it passes. Although a stream or river may change its disposition many times within its course, it represents a unifying element that gives the identities of vast landscape or topographic regions. Water has the unique ability to evoke natural connections, even if it is used in a relatively ordered and controlled manner.

Historically, water had been part of the settlement out of necessity. The presence of water in the Netherlands had shaped the whole character of the urban setting. The continual battle against the sea and the need to create irrigation projects created a political tradition of localized cooperation and entrepreneurship that allowed Holland to avoid the excesses of feudalism and nationalism. This economic logic evidenced itself in the complex network of dykes and embankments and the labyrinthine appearance of the concentric canals built around the dam that had given Amsterdam its name. The canal systems provided spatial planning to both commercial and residential zones, and provided a spatial structure for town growth. Such was an art of representation which foundation is the response to nature, with the control and use of water being the basis of structural ordering.

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1 The displacement of feudalism in the fifteenth and the sixteenth centuries was reflected in the social structure of the Dutch Republic. For the Dutch, urban planning was the result of the communal approach required to reclaim land from the sea and the necessary to maintain the essential canals, moats and bridges.
Just as the Netherlands needed to overcome the problems of land reclamation and flood control, the unique situation of Singapore as a small island country forces the issue of water to be confronted from all directions. Certainly the planning authorities of Singapore are aware of the significance of water in shaping the future of Singapore as a city with nature. In a visionary statement made by the planning authorities in 1991, an idealized notion of an island city was conceived,

"An island with an increased sense of "islandness" - more beaches, marinas, resorts and possibly entertainment parks as well as better access to an attractive coastline and a city that embraces the waterline more closely as a signal of its island heritage. Singapore will be cloaked in greenery, both manicured by man and protected traits of natural growth and with water-bodies woven into the landscape."  

This statement illustrates the use of natural environment to heighten the sense of island living by inducing a greater interrelationship between land and water. Blue Plan is the major tool to be used in the beautification of Singapore with water. The intention is to shape the environment with waterways to create an image of islands within an island, and other water features can add up to a whole assortment of water landscapes. However, there exists a problematic divide between such visionary notions of "islandness" and their architectural realizations. Among the parks, plazas, malls and water resorts of today are many examples in Singapore which incorporate water. However, the majority do not seem to bring out water's unique appeal, although the same simple element is used. Their water space, or space constructed around the element of water lacks the sensual expression of water, or the spatial arrangement that produced this expression. Water appears only as a senseless simulation of itself, artificially represented as mere features in architecture.

Only when the design of water space has a particular structural pattern does it begin to express water's appeal. To make water thus effective, it is the intention of this dissertation to critically examine ways in which water elements could be used for connections of urban space, and to explore alternative urban models with the use of water in architecture. In other words, the dissertation attempts to define a new paradigm that would heighten our consciousness of island living in Singapore, to find a resolve between the separated elements of water and our built environment, and possibly how architecture and landscape planning can negotiate these polarities and celebrate man's coexistence with nature.

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