

Urban Landscape Planning and Design : Creating a Liveable and Sustainable Urban Environment

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Introduction

The cities and towns are usually regarded as comprehensively planned communities, which provide opportunity for people to work and to live in a pleasant built environment. The quality of cityscape and townscape thus needs to be thought of as an important issue in creating a liveable and sustainable urban environment. One way or another, development of an urban structure and setting i.e., its spatial form has a great deal with landscape planning and design.

As far as a liveable and sustainable urban environment is concerned, it requires an integration and manipulation of all urban landscape elements, such as spaces, infrastructure and facilities needed by the dwellers and users. There needs to be a comprehensive drawing in the urban landscape planning and design concept to provide substantial, useful, meaningful and conducive as well as aesthetically pleasing urban environment. Hence, this chapter comes into being, to address a means by which the urban landscape elements can be utilized to establish a more efficient and healthy urban environment for human habitation as well as for future sustainability. It presents an urban landscape planning, design and analysis process, with simple method and ideas in describing urban landscapes and their function.

The Site

In dealing with the issue of urban landscape planning and design, Kajang town is selected for the studio project. The town (2.98'N, 101.77'E), is situated approximately 25 km south of the Kuala Lumpur City centre, in the

Klang Valley are most intensive development area in Malaysia located. It is surrounded by mixed development areas such as residential, industrial and institutional areas. The town was first settled in 1700s, with the mining and agricultural activities in the past (Figure 1).

It is an active and lively town where all the major road and highways meet. There are a number of new and significant old buildings in the town centre as well as scattered urban spaces creating a strong urban fabric and unique cultural essence. The population however has rapidly grown since the last two decades as a result of the development of the government administration city of Putrajaya and major higher educational centres and research in the vicinity. Consequently, Kajang town has some numerous urban issues and the concern of pleasant and greener built environment for tomorrow.



Figure 1: The Kajang Town : Solid and Void drawn by Leng Li Theng (2014)

Site Analysis And Assessment

The urban landscape planning and design is a process that places the urban issues of a city or town at the foreground. As Kajang town was selected for the studio exercise, urban spaces and activities, circulation and traffic, legibility and identity, culture and heritage as well as the environment are the focal issues in the study. Identification of these current urban issues at the beginning of the process was vital as a basis for the site inventory and analysis. These issues however must be prioritized based on the site's context and values for the qualitative result. The potential site's issues were then assessed using an advanced urban landscape assessment such as GIS based approach for a more quantitative result of assessment.

Based on the result, the ideas of urban planning and design were conceptualized in order to solve the identified site's issues. In doing this, we must be aware of possibilities in the creation of the urban landscape for human and environmental well being as sustainability is concerned. The social and cultural interaction, economic stability and environmental protection are fundamental factors in achieving the urban sustainability.

Design Solution

First, "the magnetic" a conceptual idea addressed by Leng Li Thing to provide a significant and lively town of Kajang. The embedded cultural heritage signifies the reimagining of the town as a new physical, social and economic magnet. The focus was on strengthening the character and identity through infrastructure, circulation and activities. Identifying the needs for

nature and greenery to balance the urban environment, the concept of water flow and water ripple inspired by the existing rivers displaying a dynamic and multifunctional urban space. New recreational nodes in a form of conservatory pocket park and river corridor provide landscaped areas to soften the hardscape. Preservation and conservation of heritage elements infiltrated the whole town by linking the architectural heritage and cultural nodes to evoke the sense of place and identity of the town. The enlargement of Sungai Jelok and the development of esplanade were defined by a new cultural centre to enrich the urban identity of Kajang town as a new commercial centre with the unique blend of history and modernity (Figure 3-5).

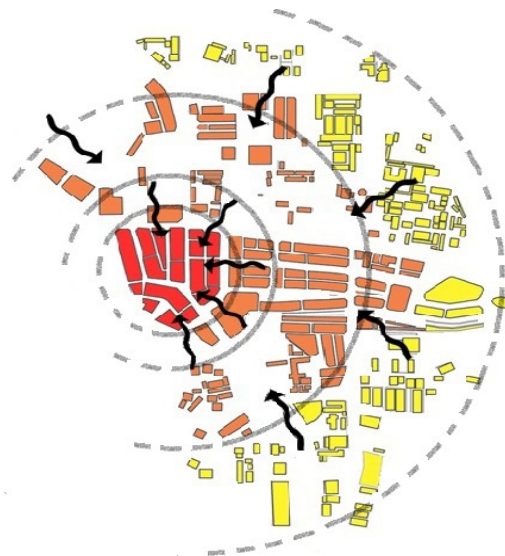


Figure 2: The magnetic concept by focuses on the core of Kajang town



Figure 3: The Kajang landscape plan to strengthen the town's character and identity.



Figure 4: The Sungai Jelok landscape plan enhancing the major node of Kajang



Figure 5: The plaza at Sungai Jelok

Second, the re-generated expressed by Shim Chee Keong reflecting the concept of "Biophilic Cities", elaborated by Timothy Beatley in 2010 which stands on the presence of nature for a sustainable urban future. Introduction of the new green spaces and revitalization of green corridor enhancing the natural character of Kajang town. Integrating the horizontal and vertical greens environments offers a wide range of activities and spatial linkages respectively. This ecological approach of innovative design solution creates opportunity for symbiosis i.e., biological interaction between man-made and natural landscape elements in order to encourage urban biodiversity. The design also takes advantage of the existing river i.e., Sungai Jelok and the adjacent shopping centre to provide a green plaza as one of the towns significant node and landmark as well as a town's ecosystem hub (Figure 6-10).

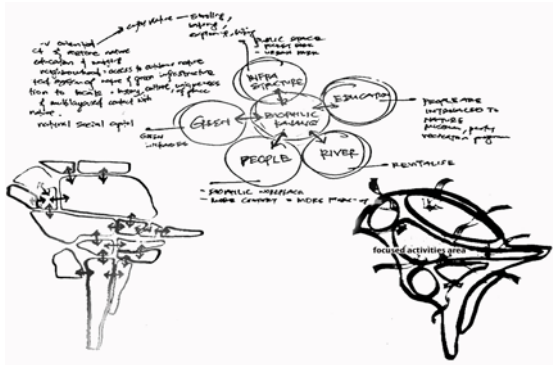


Figure 6: Beatley's Biophilic Cities translated for a conception of an urban landscape planning.



Figure 7: The Kajang landscape plan reflecting the Beatley's Biophilic Cities concept. The 're-generated' expresses the ecological solution to introduce nature in urban area.

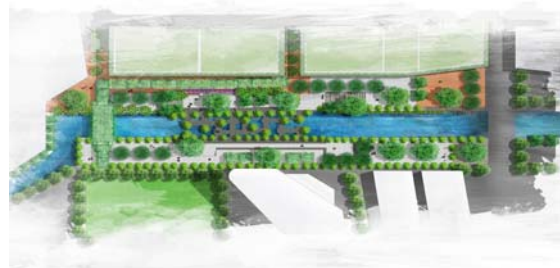


Figure 8: The Sungai Jelok landscape plan creating a town's ecosystem hub



Figure 9: The town plaza



Figure 10: Integrating horizontal and vertical greenery for spatial linkage of new landscape of Kajang

Conclusion

It is fundamental in urban landscape planning and design to maximise the potential of land use decisions and to reconcile the urban landscape elements within the social and environmental constraints. The planning and design exercises presented have a clear development concept as well as comprehensive master plan in providing a spatial form of urban landscape. The integrated urban spaces, green areas, good linkage of commercial centres, institutional, residential and industrial areas result in an overwhelming image of the town for human habitation and future sustainability.

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