



UNIVERSITI PUTRA MALAYSIA

SUSTAINABILITY OF STREET FURNITURE DESIGN IN URBAN MALAYSIA

ARNIS BINTI AZIZ

FRSB 2013 2



SUSTAINABILITY OF STREET FURNITURE DESIGN IN URBAN MALAYSIA

By

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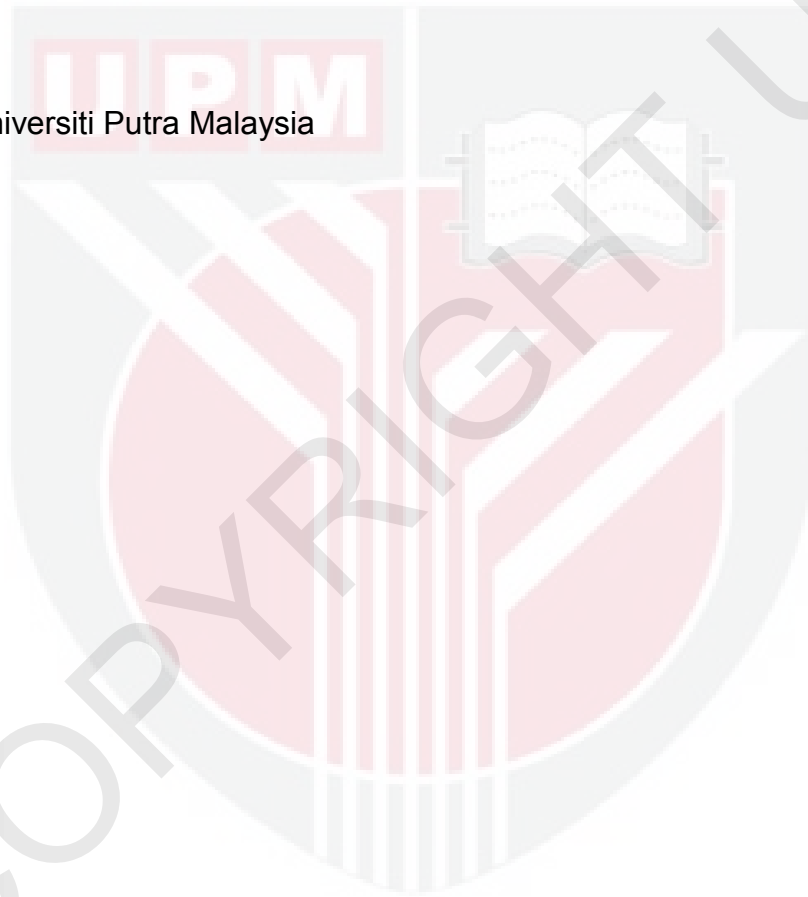
**Thesis Submitted to the School of Graduate Studies,
Universiti Putra Malaysia, in Fulfilment of the
Requirements for the Degree of Master of Science.**

September 2013

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master Science.

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By

ARNIS BINTI AZIZ

September 2013

Chair : Associate Professor LAr. Osman Mohd Tahir, PhD

Faculty : Design and Architecture

Today, urban spaces are one of the major elements that define the city's unique and attractive points. Although comparatively small in scale, street furniture is an element that can play an essential role in developing the quality of urban spaces and add value in representing city identity. Street furniture refers to the objects or facilities that provide various services and functions to the public in the area of urban public spaces. It is a structural element of environment that normally varies depending on the social and cultural features of a city or a country. It helps in contributing to human activities and to surrounding. This research seeks study is to implement the criteria of sustainable design in street furniture.

Thus, in this research it is imperative that the sustainable criteria for street furniture design in Malaysia should be assessed. In providing a comprehensive data and background information, a literature search and document analysis was done. The major findings of this research proposed sustainable design criteria based on the literature search and document analysis. This was used to measure each sets of the data collection gathered. Furthermore, interviews with professionals formed part of the author's in depth method. Data collection of these methods was analysed via the qualitative approach. Links were made between the sustainable street furniture design practised in Malaysia and the practised experiences in the other countries. The question of what is roles street furniture plays and what sustainable design is, are discussed. The criteria for sustainable design were examined and sustainability issues and problems of street furniture design in Malaysia were also analysed.

Finally, the study explored the importance and possibilities of adopting sustainable design criteria for street furniture in Malaysia. It is hoped that this study will contribute towards creating awareness of the importance of sustainable design in street furniture

in the country which in turn will help in the sustainable development of the urban areas and cities, besides improving the environment and urban living.

Keywords: *Sustainable Design, Street Furniture, Malaysia Urban*



Abstrak tesis yang di kemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains.

KELESTARIAN REKA BENTUK PERABOT JALANAN DI BANDARAN MALAYSIA

Oleh

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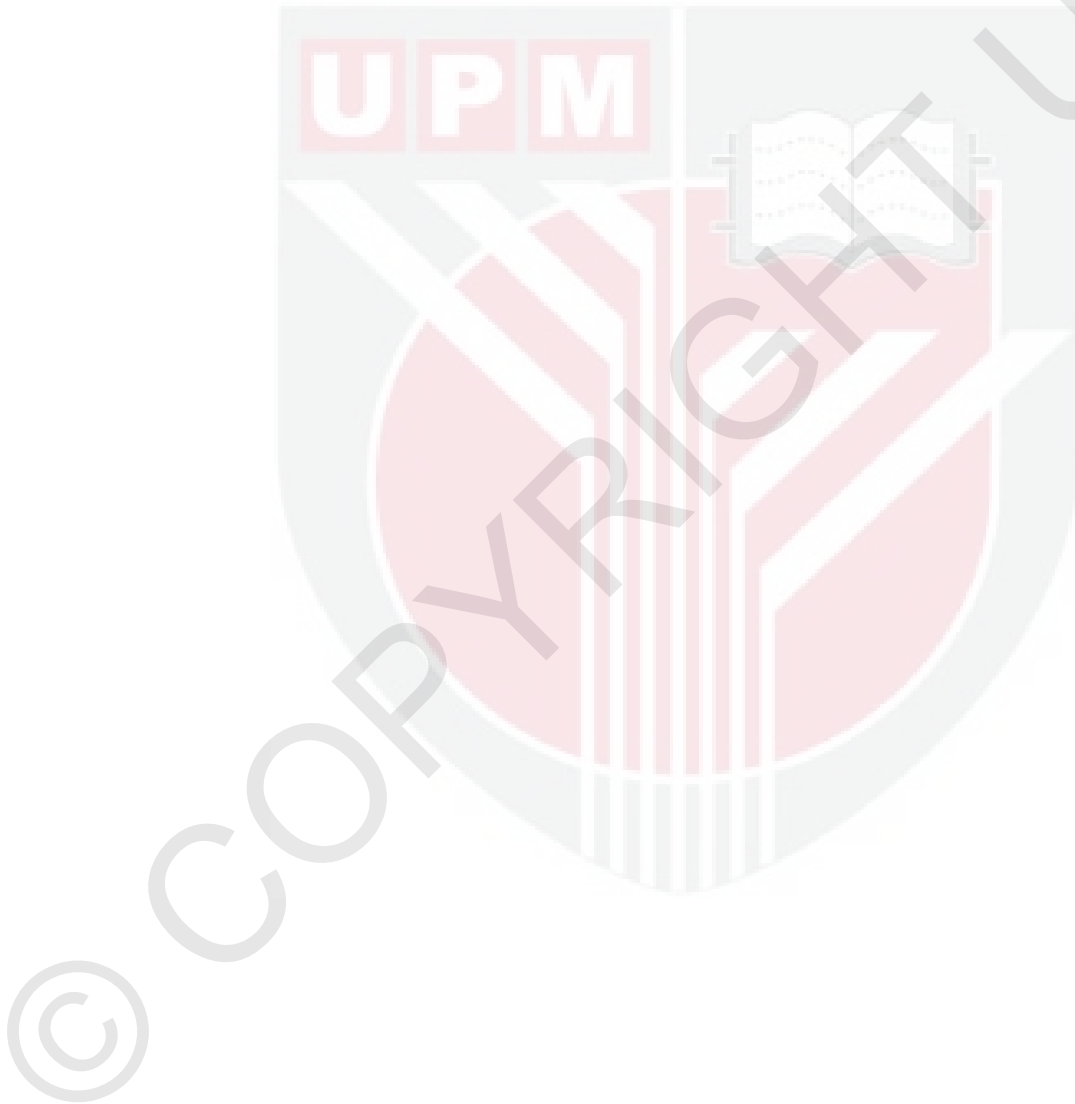
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Hari ini, ruang urbanisasi adalah salah satu unsur penting yang menegaskan keunikan dan tarikan utama sesebuah bandar. Walaupun berskala kecil, perabot jalanan merupakan elemen yang mampu memainkan peranan yang penting dalam proses pengubahan kualiti ruang urbanisasi dan penambahan nilai bagi menggambarkan identiti sesebuah bandar. Perabot jalanan adalah merujuk kepada objek atau kemudahan yang disediakan dari pelbagai perkhidmatan dan bertindak sebagai kemudahan utama bagi penggunaan di ruang urbanisasi. Ia adalah struktur unsur kepada persekitaran yang kebiasaannya bergantung kepada kehidupan sosial dan kebudayaan sesebuah bandar atau pun negara tersebut. Ia membantu dalam menyumbang aktiviti harian manusia dan persekitaran. Kajian ini mencari ruang untuk mengaplikasi reka bentuk lestari di dalam perabot jalanan.

Oleh itu, di dalam kajian ini, adalah penting untuk menilai kelestarian kriteria bagi reka bentuk perabot di Malaysia. Bagi menghasilkan data yang komprehensif berserta informasi latar belakang yang lengkap, kajian literatur dan analisis dokumen dibuat. Penemuan awal kajian adalah seperti kelestarian kriteria yang di cadangkan di dalam kajian literatur dan kajian dokumentasi. Cadangan kriteria ini akan menjadi ukuran di dalam setiap data yang di kumpul. Selain itu, temuramah bersama pakar pereka juga digunakan di dalam menjalankan kajian ini. Kajian literatur dan analisis dokumen yang telah di jalankan akan memberi maklumat yang lengkap bagi keseluruhan kajian selain dari informasi latar belakang kajian. Hubungan adalah berdasarkan pada kegunaan reka bentuk di bandaran urbanisasi Malaysia dan kegunaan reka bentuk di negara luar. Soalan berkenaan apa itu peranan perabot jalanan dan kelestarian reka bentuknya di bincangkan. Kriteria kelestarian reka bentuk di kaji dan isu serta masalah reka bentuk perabot jalanan di bandaran urbanisasi Malaysia juga di analisis.

Akhirnya, kajian bertujuan untuk menyelidik kepentingan dan kemungkinan menggunakan kriteria kelestarian reka bentuk bagi perabot jalanan di bandaran urbanisasi Malaysia. Harapan agar kajian ini mampu menyumbang atau membentuk kesedaran mengenai kepentingan kelestarian di dalam reka bentuk perabot jalanan di dalam negara yang membangun selain daripada meningkatkan keadaan persekitaran dan kehidupan urbanisasi.

Kata Kunci: *Reka Bentuk Lestari, Perabot Jalanan, Bandaran Urbanisasi Malaysia*



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I certify that a Thesis Examination Committee has met on 12 September 2013 to conduct the final examination of Arnis binti Aziz on her thesis entitled "Sustainability of Street Furniture Design in Urban Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1988. The Committee recommends that the student be awarded the Master of Science.

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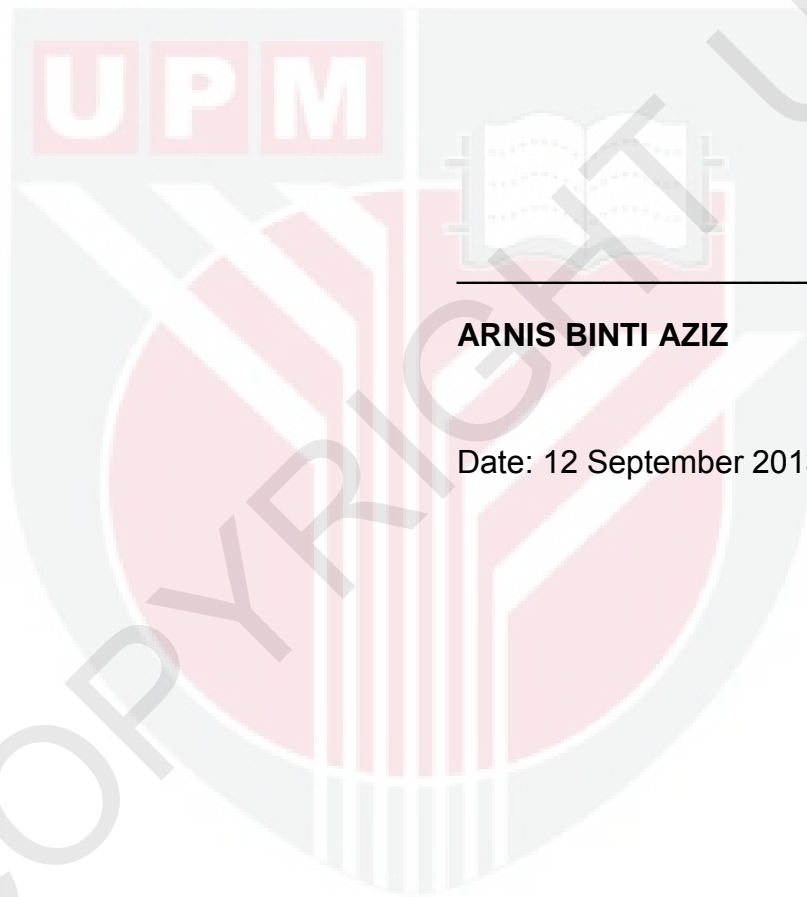
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DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.



ARNIS BINTI AZIZ

Date: 12 September 2013



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