ABSTRACT

Rooftop spaces are intriguing spaces in the city. Often viewed as a ‘second ground plane’ in the city, their poetic and solitude beauty coupled with potential land value had been a challenge for few architects who took notice of this new frontier.

Since the 1970’s, there had been a renewed investigation of creative use of urban roof areas as planners realised that ‘...together, the roof and the street account for almost 100 per cent of the land area of the city...and yet they are still largely ignored...’¹. Recent trends of ‘sustainable architecture’, ‘realities of crowding in the city’ and ‘a desire to return to nature amidst the urban concrete jungle’ have all sparked off a spontaneous response among buildings’ end-users to cherish rooftop spaces.

This dissertation hopes to trace the development of rooftop usage throughout history and in the cities. Of how these ‘few’ architects and planners had dreamed of or have realised its potential in the city.

However, using research methodology of environmental psychology in human behavioural pattern (specifically "natural observation"), many of these intentionally "designed for" rooftop spaces were found to be 'neglected' by its end-users. On the other hand, some rooftop spaces that were not designed for utilisation thrive spontaneously with human participation. Why is this so? This observation leads us to question ourselves that good utilisation of rooftop space is more than just another "slab of concrete" vast land on the top of buildings.

Objectives of this study:
• To raise the awareness of rooftop space as a precious commodity and good wasted space in our cities
• To assess objectively Singapore's current residential rooftop typologies' success bases on the concept of "territoriality" in human behaviour environmental psychology.
• Using the concept of "territoriality" to gain a systematic understanding of man-environment relationship that will provide a more accurate knowledge about the impacts of architectural environments on daily human lives therefore helping designers to improve design of rooftop spaces.
• To provide guidelines for implementing future residential rooftop developments.

The joy of this dissertation is to be able to embark on a topic that is relevant to our present local context of rapid urban densification. Without any doubt, there are still numerous salient factors yet to be explored with regards to good utilisation of our cities’ good wasted rooftop space. May this dissertation spark off more research and discourse on this specific and relevant subject.