Preface

As one of the world's most densely populated cities, Hong Kong suffers from a limited supply of land for its main urban areas. However, some open spaces are often criticized for being inconvenient to users and therefore not well used. How to improve the performance of open spaces is therefore a critical issue facing urban planners and designers. As the conventional accessibility model, which is mainly described in terms of maximum walking distance or service radius, is not sufficient to address the issue, a new theoretical model is required for both research and operational purposes. The study therefore proposes an alternative approach, seeking an explanation in terms of urban morphology and the way it conditions pedestrian movement patterns. By investigating the relationship between urban morphology, pedestrian movement and the accessibility and use of open spaces in Wanchai district of Hong Kong, the study attempts to examine whether there is a consistent relationship across different grids. Based on such an understanding, it is hoped that a theoretical accessibility model can be formulated to guide design practice.

The morphological analysis of the accessibility of open spaces in Wanchai District has revealed several important findings. First, different morphological variables have different influences on the accessibility and use of open spaces, especially on their mean number of users. The influence also varies between different layout patterns. Among these characteristics, it is their "strategic location" within the overall layout that plays a consistent role in their level of use. In contrast, visual accessibility is shown to be irrelevant for the use of spaces in the sample layout patterns. The surrounding density of pedestrian movement, however, is shown to have a significant effect on the density of use within spaces, but only in certain layout patterns where the distribution of pedestrian movement is more likely to be a function of configurational variables. On the other hand, in areas with diffuse movement patterns, the relationship between urban morphology, pedestrian movement, accessibility and open space use tends to be lost.

The above analysis confirms that open spaces should not be considered as isolated elements within the city. Their location within the overall spatial layout and the way in which they relate to the surrounding pedestrian network or buildings have a significant influence on their level of accessibility and use. In addition, the accessibility model formulated in this study has proven to be effective. Firstly, the concept of accessibility defined in the model has comprehensively described the relationship between open space and surrounding morphologies and human activities. As a result, the model is more realistic and can be used to assess or address accessibility issues more accurately and systematically. Secondly, when the model was used to investigate the accessibility and use of sample spaces in the Wanchai District of Hong Kong, it revealed a number of information that cannot be reflected by the conventional models. Compared to previous accessibility studies, the significance of this study lies in the fact that it not only helps to improve the performance of existing open spaces, but also provides guidance for future practice so that the environmental and social values of open spaces in the high-density urban environment can be maximized.