

Spatial configuration and vulnerability of residential burglary:

A case study of a city in Taiwan

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Simon C.F.Shu¹ and Jason N.H.Huang²

¹ Feng Chia University, Taiwan

² Changhua County Government, Taiwan

Abstract

Most research on space and crime focuses on factors related to target hardening, such as good quality locks, use of double glazed windows, CCTV, etc, however, very few take the spatial layout patterns against crime into account. Through case studies in one well-off town in northern Taiwan, this research tries to detect whether there exists a significant influence of the spatial configuration on the distribution of residential burglary.

This research focuses on two factors, namely social and spatial ones, which will be carefully cross-examined with regard to their effects on burglary distribution patterns. The research analysis is composed of two parts, i.e. area and detailed studies. First, in the area study, the correlation between spatial configuration and burglary distribution patterns will be examined when the social variable is controlled. In the detailed study, three major elements are considered: the road types, the degree of road accessibility (i.e. the integration measure), and the immediate surroundings of each dwelling.

Our findings show that segregated areas, allowing fewer passers by to enter the areas, turn out to be more vulnerable than integrated ones. This is particularly pronounced in the middle and low-income areas. The road types, the dwellings' front door to front door visibility and the degrees of road accessibility all have a highly measurable influence on burglary distribution. The road accessibility is the most interesting and important feature, which thus confirms that more strangers or passers by in highly accessible areas can be beneficial as crime prevention mechanisms.

Keywords

residential burglary, income level, spatial configuration, space syntax

cfshu@fcu.edu.tw

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