# **UNIVERSITI TEKNOLOGI MARA**

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# EXPLORING THE RELATIONSHIP BETWEEN RESIDENTIAL SPATIAL CONFIGURATION AND BURGLARY CRIME LOCATION IN URBAN RESIDENTIAL

## FAZZAMI BIN OTHMAN

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### ABSTRACT

The crime rate of burglary at residential area gives concern to the people in terms of their safety and property. People do not understand the real causes that led to this incident and now less convinced to leave their homes in a long time period for fear of a potential burglary problem. Not just property, but life also may be a target when the crime occurred. Increased population in Klang Valley led to a growing number of housing developments. However, criteria to build the layout have been issued. This is because; the researchers began to understand that the housing layout may be among the contributors to this immoral phenomenon. According to Professor Bill Hillier (1999), a cause of growth this crime suggested came from the various aspects such as accessibility of housing layouts and space. Thus, this study examines the relationship between spatial configurations of the urban housing layout and spatial distribution of residential burglary, based on crime report provided by the Royale Malaysian Police (PDRM). The main focus is specifically to residential areas and in comparative studies of three housing estates, in the Klang Valley. In this study, theoretical and empirical elements are used to see the relationship. A total of 1000 people for each housing estate were chosen as the respondent in this study. In addition, the interview session was made between researcher and the authorities to improve the understanding and method of this study. The use of space syntax and Geographical Information Systems (GIS) for carrying out the analysis proved many benefits, especially to test the variables of spatial configuration that affect burglary; such as global integration, grid layout, topological rate, constitudeness and spatial categories. GIS may also help in terms of observation by conducting mapping and analysis, such as hotspot map, crime rate, and time analyst thus it is useful for the general public beside to locate the place which risk of burglary. The results of this study indicate there is existed a relationship between variables in terms of the spatial configuration and crime statistic. Study areas in Taman Petaling, Taman OUG and Damansara Height showed a significant result in a regression analysis towards the degree of global integration, topological depth, constitudeness and street types while the spatial variability of a grid layout is not significant. It has proved that the burglary incident was actually associated with the natural surveillance; when there is poor natural surveillance, the burglary incident is easier to commit. While focusing on site specific and situational features of places, the output of the research will offer empirical evidence for Scepticism on the idea of configuration accessibility by Bill Hillier, theory of how people relate to space in building environments. The positive features will cut the possibility of high risk residential burglary and vice versa.

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# CHAPTER ONE BACKGROUND OF THE RESEARCH

### **1.1 INTRODUCTION**

As an introduction to spatial configuration and crime, this section provides the explanation of both variable and its relationship to study area. The explanations help to enhance the understanding about the concept and giving the idea of this study. It has also helped to relate to the current situation. On the other hand, the latter part of this section giving the detail on every definition about spatial configuration and crime thus create excellent comprehension towards the study. Unravel the relationship between both variable in this chapter will make it more interesting to share and understand.

#### 1.2 CRIME ACTIVITY IN MALAYSIA

Crime is a dynamic event. It is hard to predict and difficult to avoid, but not impossible to be reduced. Most of crime happened is caused by the weakness of the person to control themselves from the high desire towards something that leads to a negative impact. Thus, it is finally causing the abnormal behaviour which is referred as criminal behaviour (Montaldo, 2015). A crime occurs when someone breaks the law by an overt act, omission or neglect that can result in punishment (Montaldo, 2015). There are two main categories of crime which are property and violent. Property crime is committed when someone has destroyed, damage or carry away the property of someone else, such as housebreaking and car theft while violent crime happen when someone which is the offender threatens force upon a victim.

Property crime is a major contributor to crime statistics in Malaysia. Burglary, motorcycle thefts and car thefts are recorded high in crime statistic for recent year (PDRM, 2014). The police have tried to settle this crime, but it is difficult. Various challenges they faced, especially the lack of collaboration from various parties. The problem of crime is not the only thing for the police to resolve. To deal with it, contribution from the other parts is needed such as government and other agencies. The police can only act on the information given and limit to the responsibility they

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