## SPACE SYNTAX AND UNDESIGNATED PARKING IN PUBLIC SPACES OF RESIDENTIAL NEIGHBOURHOODS IN NAIROBI

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## **Abstract**

This paper focuses on undesignated parking in public spaces of residential neighbourhoods in Nairobi. In residential neighbourhoods, cars cannot be divorced from pedestrian life as a great deal of pedestrian activity takes place where cars are. Pedestrian safety considerations in public space require that cars be segregated by having them parked in designated lots. Despite this, motorists in Nairobi's residential neighbourhoods have persisted in their tendency to park in undesignated areas. This brings to the fore the question of whether there could be any spatial plan features that motivate this behaviour. Efforts to address the problem have been unsuccessful due to failure to consider insights emanating from the use of space syntax in the study of residential public space environments. This study set forth to establish the influence of characteristics of public spaces in residential neighbourhoods on undesignated parking. Space syntax and structured observation were used to collect data. Multiple regression analysis was used to establish the nature of the relationship between the location of space and undesignated parking. The study established that the deeper or more segregated a public space is in relation to the main access space, the fewer the parking lots and the higher the level of parking in undesignated areas. It also established that the more the buildings are adjacent and permeable to the public space, the higher the level of parking in undesignated areas. The study recommends that deeper and segregated public spaces in residential neighbourhoods should not be ignored in provision of parking lots. Public spaces defined by adjacent and permeable buildings should also be provided with adequate parking lots.

**Key words**: Space syntax, undesignated parking, public space, residential neighbourhood, segregated