

**THE IMPACT OF SPATIAL CONFIGURATION
ON PERCEIVED COMFORT IN URBAN ALLEYWAYS
WITH REFERENCE TO KANDY GRID CITY**

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Degree of Master of Science in Urban Design

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Thesis/Dissertation submitted in partial fulfilment of the requirements for the Master
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DECLARATION

This dissertation is submitted in partial fulfilment of the requirements for the Master of Science in Urban Design, Department of Architecture, University of Moratuwa.

Candidate's Declaration

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Abstract

Urban public spaces often grapple with neglect and underutilization due to user discomfort and perceived lack of comfort. In this context, urban alleyways emerge as critical spaces offering both physical and psychological comfort to city dwellers. The spatial configuration of urban contexts becomes pivotal in optimizing the use of these alleyways, yet empirical evidence supporting effective spatial design is often insufficient due to limitations in human perception measurements. This research addresses these gaps by identifying a core set of "Spatial Configuration" variables, and their impact measured across a diverse sample of urban alleyways in the historical grid city of Kandy. The study delves into the association between perceived comfort and spatial articulation, identification of configurational variables influencing user comfort, and analysing the impact of different spatial configurations on comfort levels. Utilizing a mixed-method analysis, the research aims to develop and validate an assessment criterion tailored to the specific context, providing valuable insights for urban planning practitioners. The multifaceted objectives include identifying and analyzing variables within spatial configurations impacting perceived comfort, assessing the influence of various spatial configurations on comfort, and evaluating the impact of spatial configurations on perceived comfort in the urban alleyways of Kandy Grid City. This study is poised to contribute nuanced understanding to urban planning, guiding the prioritization of design guidelines that enhance the comfort of urban users within the unique heritage context of Kandy Grid City and similar heritage settings.

Keywords: Spatial Configuration, Perceived Comfort, Urban Alleyways, Scale, Width, Height, Ratio

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