

Repositório ISCTE-IUL

Deposited in *Repositório ISCTE-IUL*:

2022-06-23

Deposited version:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Guerreiro, M. & Barroso, J. (2014). The effects of space configuration in pedestrian behavior and the life of public spaces. In Olivia Bina, Luis Balula and Andrea Ricci (Ed.), *Urban Futures - Squaring Circles: Europe, China and the World in 2050*, Conference Proceedings. Lisboa: Institute of Social Sciences.

Further information on publisher's website:

[10.13140/RG.2.1.1484.6482](https://doi.org/10.13140/RG.2.1.1484.6482)

Publisher's copyright statement:

This is the peer reviewed version of the following article: Guerreiro, M. & Barroso, J. (2014). The effects of space configuration in pedestrian behavior and the life of public spaces. In Olivia Bina, Luis Balula and Andrea Ricci (Ed.), *Urban Futures - Squaring Circles: Europe, China and the World in 2050*, Conference Proceedings. Lisboa: Institute of Social Sciences., which has been published in final form at <https://dx.doi.org/10.13140/RG.2.1.1484.6482>. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.



GUERREIRO Maria,¹ **BARROSO** Miguel²

¹ ISCTE-IUL - Department of Architecture and Urbanism, Portugal

² CIES - IUL, Portugal

The Effects of Space Configuration in Pedestrian Behavior and the Life of Public Spaces

City life conceptualizations becomes a key role in the planning of the cities because it is now realized how people are an important aspect for achieving more lively, safe, sustainable and healthy cities, (Gehl, 2010). Deep understanding of what people need for space is necessary to create urban places where social life can be stimulated.

In this paper we will examine space affordances and pedestrian behavior in several plazas of Lisbon city. Through descriptive analyses and quantification it would be discussed how space layout can contribute to the urban life. Moreover, it would be analyzed how the design of the plazas can support not only the formal, but also the informal processes that make a place.

The research combines the configurational analysis with the study of social patterns in order to understand how physical structures influence human behavior. Space Syntax techniques will be used to describe and analyze spatial configurations in relation to social patterns, (Hillier and Hanson, 1984). The model involves a nonmetric understanding of space and suggests that the presence of pedestrian in a network can be explained by topology. At the same time, direct observation of pedestrian behavior was attempted to quantifiably isolate what elements of the space made it effective or, conversely, ineffective (Whyte, 1980).

The aim of this paper is to understand the underlying behavior and spatial patterns responsible for the creation of successful public spaces. Exploring the nature of the relationship between spatial patterns,

spatial life and social life, the study seeks to find regularities of public embodied space that can be qualified and quantified in an analytical and systematic way. The results suggest how designers and policy-makers can manipulate space in order to contribute to the urban life and socialization of the city.