

Climate responsive urban design from a placemaking perspective

Case study of Lisbon public parks

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Research background. During the last decades climate change began to alter living conditions in urban environments, and therefore changed how we think about placemaking. With this in mind researchers Santos Nouri and Costa (2017) proposed thermal comfort as an additional element of the placemaking scheme. Following the proposal, this research focuses on how can users' satisfaction, with an emphasis on thermal comfort, be addressed through urban design.

Hypothesis. Climate responsive design aims to enhance thermal comfort of citizens and visitors (functionality), it shapes the visual identity of a place (aesthetics) and influences local patterns of use (lived experience). Previous research has shown that thermal comfort is influenced both by physical and psychological factors (perceptions). Referring to those factors, this research investigates the connections between urban design, local culture of using public space, and the interaction of these elements in shaping people's experience of climatic conditions.

Approach. Whereas a large body of previous research approaches the topic using quantitative methods, qualitative method aims to understand thermal comfort not as a separate unit, but rather in relation with other perceptions of the environment, which might be personally or culturally shaped.

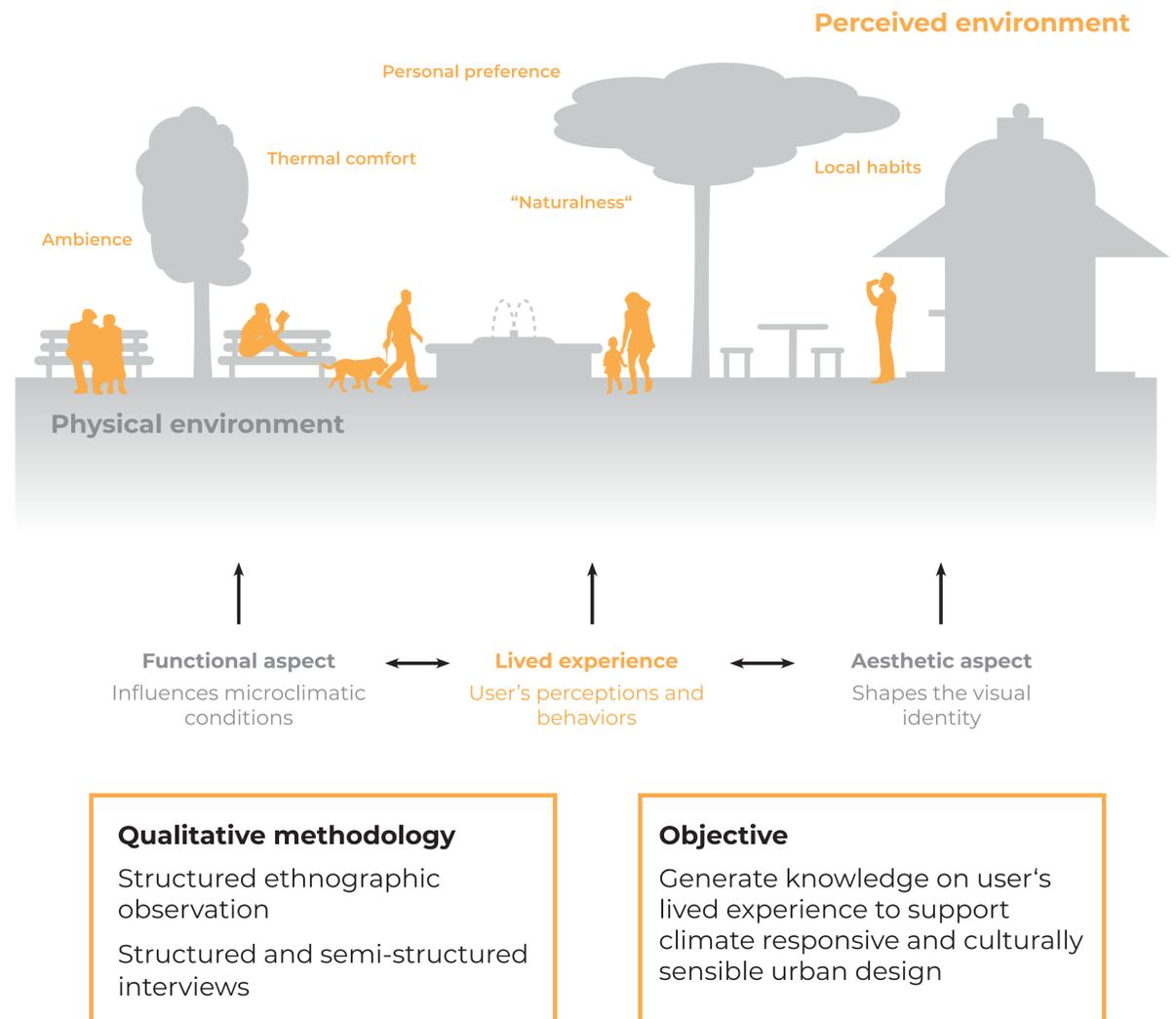


Figure 1. User's lived experience and its relation to different aspects of physical environment. Source: Author's elaboration



Image 1. Jardim da Cerca da Graça. Source: Author's photograph



Image 2. Jardim do Torel. Source: Author's photograph



Image 3. Jardim Avelar Brotero. Source: Author's photograph

Locations. The research takes place in Lisbon public parks which were recently redeveloped or newly built in the city center as part of the city's climate change adaptation agenda (EMAAC2017). The three parks chosen for the research are embedded in densely built historical

neighborhoods. The parks, however, differ in user structure and type of activities. Whereas in Jardim Avelar Brotero one can often see families with children and elderly people, Jardim da Cerca da Graça is a popular spot for remote work, outdoor exercise and art.

References:
Chen, L., & Ng, E. (2012). Outdoor thermal comfort and outdoor activities: A review of research in the past decade. *Cities*, 29(2), 118-125.
Gehl, & Jan. (2011). *Life Between Buildings: Using Public Space*. Island Press.
Nikolopoulou, M., & Lykoudis, S. (2006). Thermal comfort in outdoor urban spaces: Analysis across different European countries. *Building and Environment*, 41(11), 1455-1470.
Nikolopoulou, M., & Lykoudis, S. (2007). Use of outdoor spaces and microclimate in a Mediterranean urban area. *Building and Environment*, 42(10), 3691-3707.
Nikolopoulou, M., & Steemers, K. (2003). Thermal comfort and psychological adaptation as a guide for designing urban spaces. *Energy and Buildings*, 35(1), 95-101.
Project for Public Places. (2018). *Placemaking: What if we built our cities around places?*
Santos, A., Branquinho, C., Gonçalves, P. and Santos Reis, M. (2015) Case Study City Portrait; part of a GREEN SURGE study on urban green infrastructure planning and governance in 20 European cities, in project: GREEN SURGE - Green Infrastructure and Urban Biodiversity for Sustainable Urban Development and the Green Economy.
Santos Nouri, A., & Costa, J. P. (2017). Placemaking and climate change adaptation: new qualitative and quantitative considerations for the "Place Diagram". *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 10(3), 356-382.

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