CITIES IN A CHANGING WORLD:
QUESTIONS OF CULTURE, CLIMATE AND DESIGN

• Paper / Proposal Title:
Connecting experiences of balconies for more resilient cities

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• Abstract (300 words):
In urban housing, loggia spaces, such as covered balconies, have been developed by architects and urban planners, through several experiences, identifiable in the historical evolution of the cities.

Citizens in their homes often have obsolete balconies, too narrow, noisy, windy, or unsafe. However, carefully designed loggia spaces have the environmental potential of climate moderation, reducing energy consumption related to cooling and heating of indoor spaces.

Furthermore, in epidemic emergencies, requiring prophylactic isolation, the loggia may provide an outdoor alternative to the public space, contributing to people’s health and well-being.

The environmental performance of the loggia has been studied widely in literature. Much less studied, by contrast, is its social performance integrating changing demands, inherent to current lifestyles of the diversity of users.
Aiming to improve urban resilience to situations of climate change and epidemic emergencies, we focused this study on a preliminary definition of spatial qualities of a private loggia in urban housing, applicable to new and existing buildings.

Qualitative research methods like photo ethnography, participant observation and interviews, have been used in an exploratory approach. Bridging the gap between scientific fields, we interviewed experts in anthropology, environmental psychology, public health, inclusive design, bioclimatic architecture, urban resilience and ecological economics. To increase information diversity, pertinent to approach the complexity of the phenomena under study, we interviewed citizens of different ages and abilities (with and without cognitive, physical or sensory impairments).

The insights gained revealed the need for loggia spaces designed considering local climate, rationally dimensioned, spacious enough to guarantee inclusive use with privacy regulation for physical exercise and social interaction with the neighborhood.

**Author(s) Biography (200 words each):**

Carlos Mourão Pereira is an architecture researcher based in Lisbon, Portugal. Carlos currently works at CiTUA, University of Lisbon - Instituto Superior Técnico and at the group Research[Design, University of Leuven. His work explores preventive health through multisensory architecture. He became blind in 2006 and maintained his architectural activity, in research, teaching and in professional practice. In 2013 he obtained his PhD in Architecture from the University of Lisbon. He was born in Lisbon in 1970 and graduated in Architecture at the University of Lisbon in 1997 and has run his own practice for many years. He worked from 1991 to 2005 in architecture offices, in Lisbon, with Aires Mateus, Carrilho da Graça, Costa Cabral and Gonçalo Byrne, in Zurich, with Toni Geser, and in Genoa, with Renzo Piano. He has academic experience as an Architectural Design Studio lecturer, at IST, University of Lisbon (2003-2008) and University of Beira Interior (2005-2006) also he was a lecturer in intensive programs on inclusive design, in Spain, at the Technical School of Architecture of Vallès – Polytechnic University of Catalonia (2010), in France, at the École Nationale Supérieure d’Architecture de Montpellier (2011) and in Turkey, at Trakya University (2016).

Teresa Heitor obtained a first degree in Architecture (1982, Escola Superior de Belas Artes de Lisboa, PT), a Master degree in Urban Design (1984, Oxford Brooks University, UK); a PhD in Territorial Engineering (1997, Technical University of Lisbon, Instituto Superior Tecnico, Lisbon, PT) and habilitation in Architecture (2007, University of Lisbon, Instituto Superior Tecnico, Lisbon, PT). Currently she is the chair of Architecture at University of Lisbon, Instituto Superior Técnico (IST) and Director of CiTUA (Center for innovation in Territory, Urbanism and Architecture) a new multidisciplinary R&D Unit housed at IST. She has research expertise in the area of spatial analysis, within the theoretical and analytical
framework known as ‘space syntax’, for studying the relationship between people and their built environments. Her research interests are focused on the relationship between space, form and function as well as on self-assessment tools to be applied along the occupancy stage. She has been involved with the OECD Directory of Education in different research and consultancy activities in the field of educational buildings performance and quality. In addition to her teaching and research activity she is regularly invited to disseminate knowledge to policy-makers and the general public.

Ann Heylighen is a design researcher with a background in architecture/engineering. As a research professor in design studies at KU Leuven, Department of Architecture, she teaches design theory, inclusive design, and professional ethics. With Andrew Vande Moere, she initiated and co-chairs Research[x]Design, a multidisciplinary group at the interface of design research and social sciences/humanities. She is curious about how space is designed, how space is experienced, and the relation between both, particularly in the context of inclusive design. Ann studied at KU Leuven and ETH Zürich, holds a PhD from KU Leuven and conducted postdoctoral research at Harvard and UC Berkeley. She received several grants, including a Starting and Proof-of-Concept Grant of the European Research Council. She is a Fellow of the Design Research Society, associate editor of Design Studies, and member of the editorial board of CoDesign and Building Research and Information.