



Mansouri

Yacine

Thesis Title

Influence of Urban Sensory Features on Pedestrian Perception and Walking Comfort

Promoter :

Shady Attia - Mohamed Elhadi Matallah

FSA Research topic:

*Main topic

Multisensory Urban Environments and Pedestrian

*Secondary topic

Microclimate, Soundscape, & Visual Quality

My Profile/ My background :

Nationality

Algerian

Degree:

Master in Architecture and Urban Planning

Previous jobs:

Architect and urban planner

Type of contract :

Doctoral researcher (self-financed)

Academic Collaborations :

UBiskra, UBejaia

Industrial Collaborations :

Municipality of Béjaïa – institutional collaboration

Recruitment route:

Independent doctoral enrollment (self-financed)

Pedagogical Supervision:

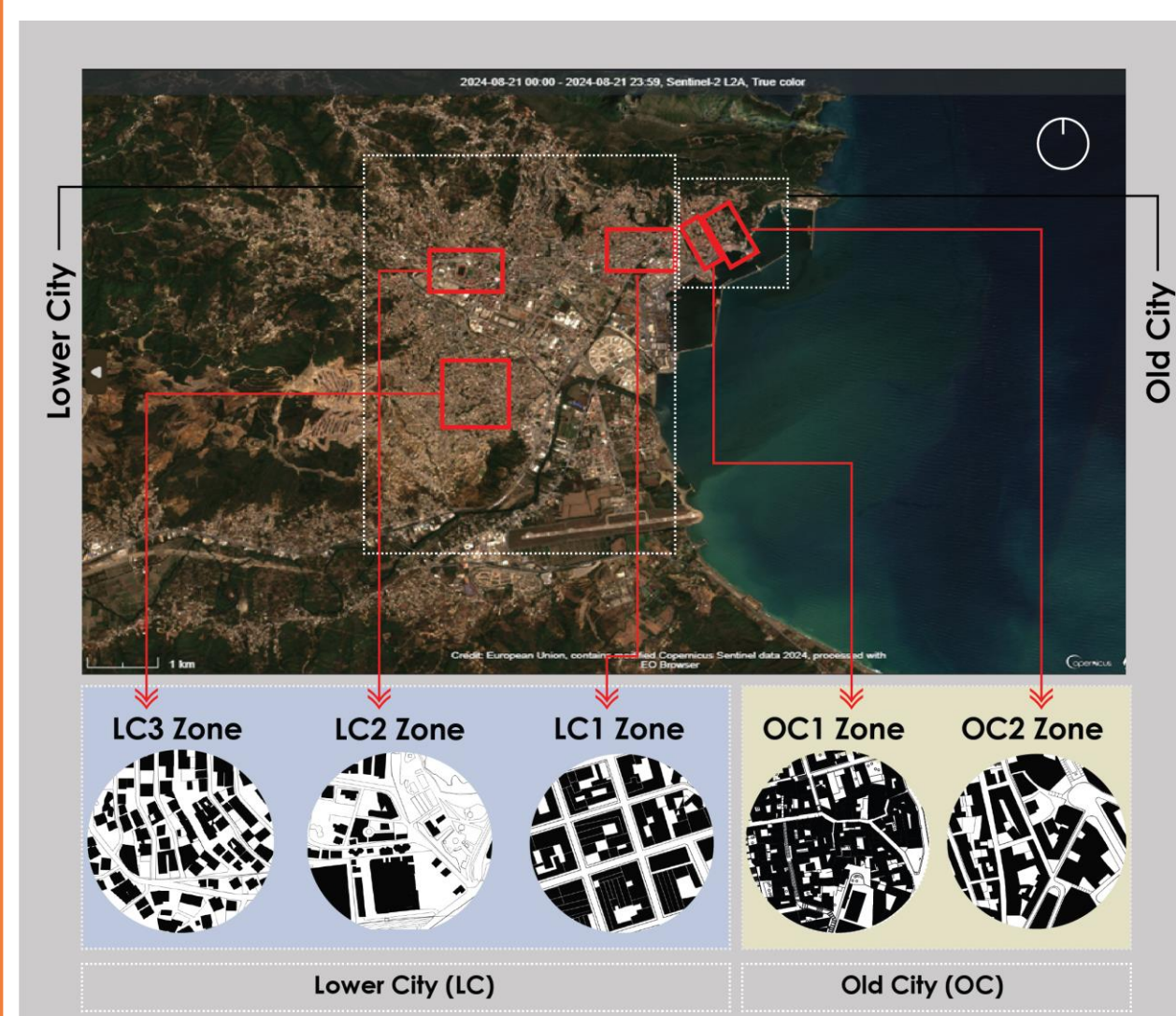
Previous teaching: Architecture Studio

My research (context)

This research investigates how the multisensory attributes of urban environments, namely visual composition, acoustic context, and microclimatic conditions, shape pedestrian perception and walking comfort. Combining environmental observation, perceptual assessment, and spatial configuration analysis, it identifies mechanisms linking sensory quality to experiential outcomes and advances a design oriented framework for cooler, quieter, and more legible public spaces that support walking.

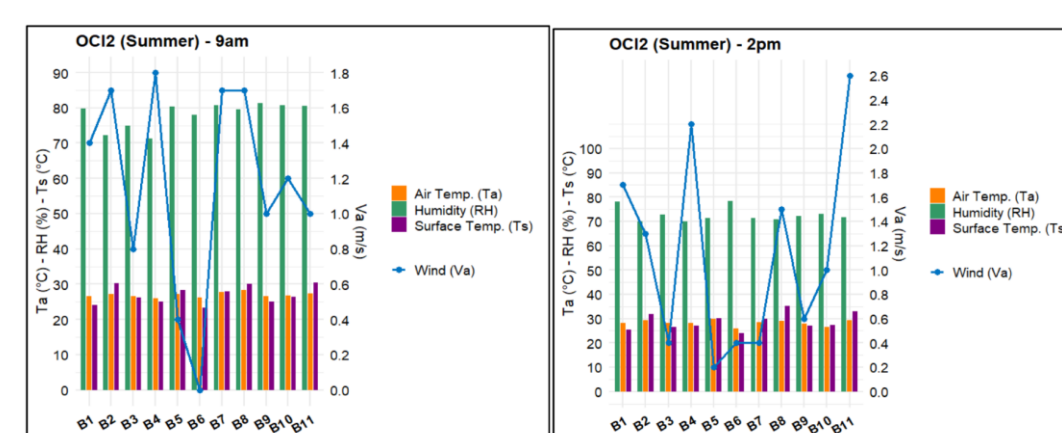
Study area

Five zones in Béjaïa (OC1–OC2 old city, LC1–LC3 lower city).



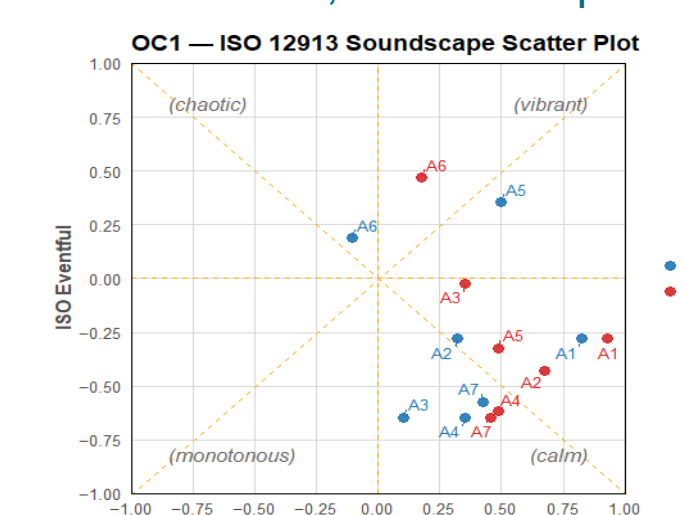
Microclimate study

Walk-alongs + measurements (Ta, RH, Va, Ts)
SVF (RayMan), ISO 7726 / WMO



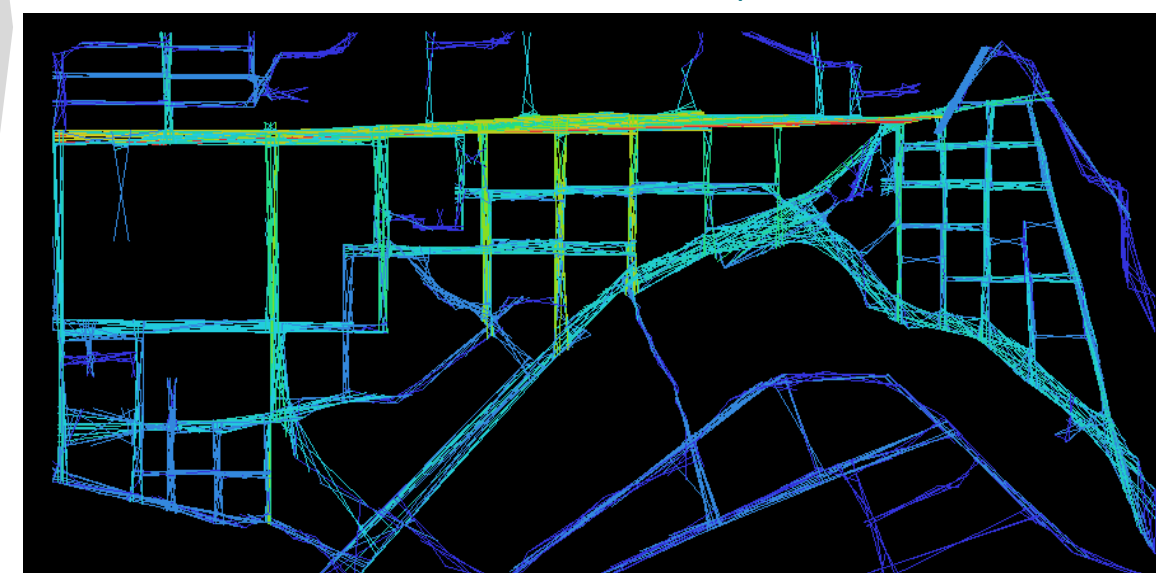
Soundscape study

Soundwalks (ISO 12913), LAeq
Sound diaries, mental maps



Visual & spatial study

Audits, street imagery DepthmapX (axial, segment, VGA, isovists)



Prescriptive framework

Link sensory exposures + perceptual appraisals
Derive design guidelines for walking comfort

PhD Objectives:

Advance an integrated approach that links visual, acoustic, and microclimatic qualities of urban public spaces to pedestrian perception and walking comfort, using mixed methods, to derive mechanisms, thresholds, and transferable design principles.