

neuroCities

PSYCHOLOGICAL IMPACT OF ACTUAL
BUILT ENVIRONMENTS

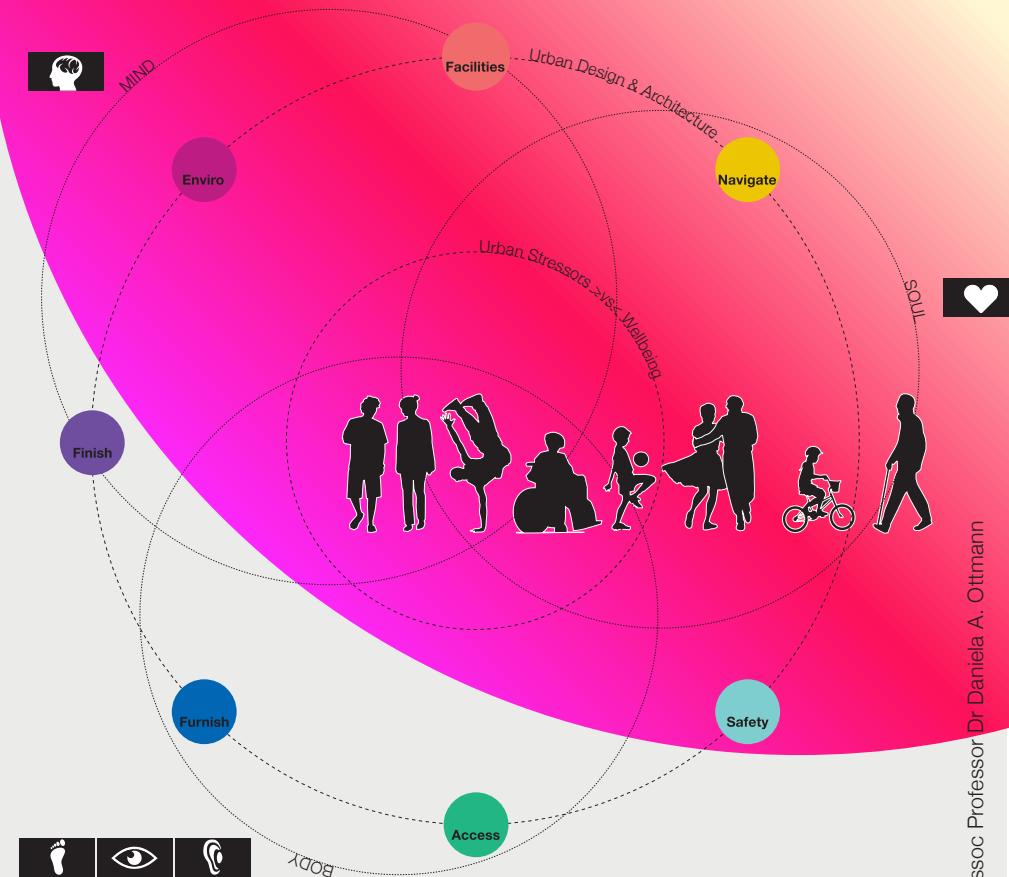
Several studies have explored the relationship between natural and built environments and their effect on mood, stress, and cognition (Moore, 1981; Ulrich et al., 1991). However bio-climatic impacts as well as spatial configurations on physiological perception lack investigation in the actual environment.

NeuroCities is experimenting in the actual urban environment and measures the aggregate entropy of a select number of urban areas in the Gold Coast Council area and relate those to empirical measures of psychological wellbeing obtained by human subjects in those areas. Psychological wellbeing will be measured via objective (i.e. heart-rate variability, cortisol levels and electrodermal skin conductivity) as well as subjective measures (i.e. quantitative and qualitative self-reports). Once we have established the functional relationship between our bio-climatic and spatial environmental measures and the measures of psychological wellbeing, it will be possible to use our method to predict the anticipated psychological impact of draft urban designs before they are implemented. This method could provide a valuable additional source of scientific information that can be applied in the decision-making process alongside other relevant variables for healthful cities.

Research Period September 2019 - ongoing

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