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Flexible Cities: A Multisided Spatial Application of Tracking Livability of Urban Environment

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Abstract : The rapidly expanding urban areas of the world constitute a challenge of how we need to make the transition to "the next urbanization", which will be defined by new analytical tools and new sources of data. This paper is about the production of a spatial application, the ‘FUMapp’, where space and its initiative will be available literally, in meters, but also abstractly, at a sensed level. While existing spatial applications typically focus on illustrations of the urban infrastructure, the suggested application goes beyond the existing: It investigates how our environment's perception adapts to the alterations of the built environment through a dataset construction of biophysical measurements (eye-tracking, heart beating), and physical metrics (spatial characteristics, size of stimuli, rhythm of mobility). It explores the intersections between architecture, cognition, and computing where future design can be improved and identifies the flexibility and livability of the ‘available space’ of specific examined urban paths.

Keywords : biophysical data, flexibility of urban, livability, next urbanization, spatial application
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