Subjective Mapping Methodologies: Mapping Local Perceptions with Geographic Information Systems

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Abstract : Participatory GIS (geographic information systems) are designed for community mapping exercises in order to produce spatial representations of local knowledge. Ideally, participatory GIS caters to public participation through the use of spatial data in order to increase community-led policy-and decision-making. Having defined a spatial object, such as a neighborhood, subjective mapping involves attaining a description of the spatial, physical, social and psychological characteristics of that spatial object. This paper highlights an emerging appreciation of the subjective component, particularly in spatial analyses. The beliefs, feelings, and behaviors associated with an urban area reflect its sense of place for an individual or a group. It is important therefore to understand what types of beliefs, emotions, and behavioral patterns are relevant to particular resident, groups and urban scales. In this sense, resident's emotional attachment to their urban areas motivates civic engagement and facilitates awareness of its strengths and its problems. Similarly, subjective perceptions act in complex ways to influence the formation and maintenance of social identity and quality of life. This paper reports on findings from a case study of immigrant population in Norwegian cities, their residential conditions and their relationship to quality of urban life. Cognitive mapping methodologies are used in this study to understand local perceptions of urban qualities. Thus, measures to alleviate disadvantages and improve quality of urban life are more likely to be effective when they are informed by an understanding of a place as constructed by those who live in it, meaning their subjective perceptions about it.

Keywords: mapping methodologies, participatory GIS, perceptual maps, public participation, spatial analysis, subjective perceptions

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