

Sustainability and Smart Cities Planning in Contrast with City Humanity. Human Scale and City Soul (Neighbourhood Scale)

Authors : Ghadir Hummeid

Abstract : Undoubtedly, our world is leading all the purposes and efforts to achieve sustainable development in life in all respects. Sustainability has been regarded as a solution to many challenges of our world today, materiality and immateriality. With the new consequences and challenges our world today, such as global climate change, the use of non-renewable resources, environmental pollution, the decreasing of urban health, the urban areas' aging, the highly increasing migrations into urban areas linked to many consequences such as highly infrastructure density, social segregation. All of that required new forms of governance, new urban policies, and more efficient efforts and urban applications. Based on the fact that cities are the core of life and it is a fundamental life axis, their development can increase or decrease the life quality of their inhabitants. Architects and planners see themselves today in the need to create new approaches and new sustainable policies to develop urban areas to correspond with the physical and non-physical transformations that cities are nowadays experiencing. To enhance people's lives and provide for their needs in this present without compromising the needs and lives of future generations. The application of sustainability has become an inescapable part of the development and projections of cities' planning. Yet its definition has been indefinable due to the plurality and difference of its applications. As the conceptualizations of technology are arising and have dominated all life aspects today, from smart citizens and smart life rhythms to smart production and smart structures to smart frameworks, it has influenced the sustainability applications as well in the planning and urbanization of cities. The term "smart city" emerged from this influence as one of the possible key solutions to sustainability. The term "smart city" has various perspectives of applications and definitions in the literature and in urban applications. However, after the observation of smart city applications in current cities, this paper defined the smart city as an urban environment that is controlled by technologies yet lacks the physical architectural representation of this smartness as the current smart applications are mostly obscured from the public as they are applied now on a diminutive scale and highly integrated into the built environment. Regardless of the importance of these technologies in improving the quality of people's lives and in facing cities' challenges, it is important not to neglect their architectural and urban presentations will affect the shaping and development of city neighborhoods. By investigating the concept of smart cities and exploring its potential applications on a neighbourhood scale, this paper aims to shed light on understanding the challenges faced by cities and exploring innovative solutions such as smart city applications in urban mobility and how they affect the different aspects of communities. The paper aims to shape better articulations of smart neighborhoods' morphologies on the social, architectural, functional, and material levels. To understand how to create more sustainable and liveable future approaches to developing urban environments inside cities. The findings of this paper will contribute to ongoing discussions and efforts in achieving sustainable urban development.

Keywords : sustainability, urban development, smart city, resilience, sense of belonging

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