Configuration of public space and social sustainability of urban neighborhood: A case study of the city of San Diego at the dawn of the twenty-first century

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Abstract
A socially sustainable city is able to maintain orderly relationship among its diversified residents who are able to meet their hierarchy of needs at the present and in the future. The theoretical foundation of this dissertation is that sound spatial configuration promotes the uses of public spaces and encourages strangers to interact, i.e., the existence of public realm. These, in turn, foster the development of positive tolerance, social integration, sense of community and unity, and public trust among people in the neighborhoods and throughout the city. This is the social capital for community rebuilding and prelude to the building and rebuilding of a more socially sustainable city and community. The western and central areas of downtown San Diego, California, were used as the study site. Spatial configuration was assessed and measured according to Space Syntax methodology in terms of the descriptions of connectivity, integration-3 and intelligibility (R (1.3^ ,,...,)). The uses-of-public-spaces was measured based on the number of the pedestrians on sidewalks at three time intervals in seven selected neighborhoods that have the highest and the lowest values of the descriptions and social sustainability levels. The strength of public realm was measured in terms of the number of genders, age groups and personal physical conditions on the sidewalks. The level of social sustainability was assessed according to the indicators developed by the United Nations and by related literatures and availability of census data. It was found that (1) spatial configuration relates positively to the uses of public spaces and the emergence of public realm; (2) the uses of public spaces and the emergence of public realm relate positively to the level of social sustainability; and (3) spatial configuration relates indirectly and positively to the level of social sustainability (for year 2000) through the uses of public space and the strength of public realm. The study concludes that the spatial configuration should promote mixture of broad and various types of activities by combining different syntactic values of the descriptions if social sustainability is to be attained.

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The aim of the research was to analyze the “design for all” concept as a key strategy for creating social sustainability. The paper attempts to answer the question: how can universal design contribute to the rational development of the city space? The author has taken part in participatory experiments. There have been many studies on the spatial configuration of cities, but few attempts to quantify the difference in building patterns between the old and new parts of cities. This may be partly attributable to lack of suitable study methods. This paper presents a new application of statistical methods for quantifying the geometric difference between different parts of a city using, as a case study, the old (historical) and new parts of the city of Yazd in Iran.