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Cultural Sustainability in Architecture

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ABSTRACT

This paper intends to examine existing studies on cultural sustainability and thus advance this emerging area of research by understanding the linkages between the concepts of culture, architecture and sustainable development. The highlights of the study includes the increasing recognition of culture as powerful and important aspect in fostering economic, social and environmental domains of sustainable development. By understanding culture and built environment relationships, there is a greater scope in generating a greater awareness of the people of a place and understand the beliefs and values they share as a society, and to comprehend the uniqueness and differences that make them and their built environment distinct from one another. When there is a deeper understanding of the things that are important to people, the built environment and their inter-relationships, architects and planners can make decisions about the future to meet the users' social and cultural needs and at the same time, preserve the environment for the next generation through sustainability principles.

Keywords: Architecture; Culture; Sustainability

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CULTURAL SUSTAINABILITY IN ARCHITECTURE

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Abstract

This paper intends to examine existing studies on cultural sustainability and thus advance this emerging area of research by understanding the linkages between the concepts of culture, architecture and sustainable development. The highlights of the study includes the increasing recognition of culture as powerful and important aspect in fostering economic, social and environmental domains of sustainable development. By understanding culture and built environment relationships, there is a greater scope in generating a greater awareness of the people of a place and understand the beliefs and values they share as a society, and to comprehend the uniqueness and differences that make them and their built environment distinct from one another. When there is a deeper understanding of the things that are important to people, the built environment and their inter-relationships, architects and planners can make decisions about the future to meet the users' social and cultural needs and at the same time, preserve the environment for the next generation through sustainability principles.

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1. Introduction

The face of built environment has rapidly undergone significant changes as the result of globalization, when sustainability surfaced to untangle its social, economic and environmental problems. Sustainable design practices began to be adopted across the world in response to the growing environmental awareness to reduce the human impact on the environment. However “cultural irrelevance” was spreading across our built environments in the quest to create and evaluate this new and modern approach to architecture. The terse definition of sustainable development put forward by the World Commission on Environment and Development for the United Nations General Assembly in 1987, states “Meeting the needs of the present without compromising the ability of future generations to meet their own needs”. Architecture was always about bridging the gap between new architectural techniques and older techniques, where this looking back was slowly dying out as a more focus was on the physical aspects of

sustainability than the tangible and intangible values in culture.

2. Culture & Cultural Sustainability

In order to understand cultural sustainability, an understanding of the term ‘culture’ becomes essential. Culture is “a way of life” for a civilization, a “social production and transmission of identities, meanings, knowledge, beliefs, values, aspirations, memories, purposes, attitudes, and understanding” (Hawkes: 2001). There is immense value behind the social expressions divulged through the built form architecture of a place, which makes it essential to understand culture deeply, for practical sustainability. The significance of culture in a sustainable built environment is becoming more evident today, for a healthy and sustained development of our societies. Rapoport asserts that socio-cultural factors are considered primary in shaping built form, whereas climate, construction materials, methods, and technologies secondary (Rapoport: 1969). To maintain the balance

and harmony in the natural environment there is a need to understand sustainability not only through the commonly associated social, economic and environmental issue but also through a cultural perspective. Culture is recognized by Hawkes as the “fourth pillar of sustainability” and it's a key component and drives to achieve a sustainable and healthy society (Hawkes: 2001). Hence the focus of cultural sustainability design is to meet the users' social and cultural needs and preserve the environment for the next generations. Cultural sustainability involves efforts to preserve the tangible and intangible cultural elements of society in ways that promote environmental, economic, and social sustainability (NZMCH 2006; Duxbury 2012). This has paved way to a new approach in the perception of sustainability.

3. Relevance of Cultural Sustainability

Culture is a key parameter in sustainable development as it frames people's relationships and attitudes towards the built and the natural environment. Sustainable development is an integral part of the society and culture; affecting all aspects of operations in the built environment. Research in cultural sustainability is essential for understanding the concerns for cultural continuity, which can be investigated in the traditional dwellings/homes from across the world by identifying existing traditional technology and settlement patterns etc. Studies of ancient cultures reveal that this cultural-sustainable parameter has been fully accounted for in determining a logical synthesis in place making. With modernism the cultural context in the design process started to fade, wherein a universal design methodology which is not in context with the cultural values of a particular society/ place began to be adopted. So starting to look deeper into what once existed and how it came about is crucial to find clues for developing a

sustainable built environment. Scrutiny and analysis of culture will help find solutions that benefit people's strengths and values (Boschi: 2003).

4. Culture in/for Sustainability.

Sustainable architecture is usually approached as an issue of technological and energy performance due to which the discourse surrounding it has remained separate from the broader perspective of architecture as a cultural project. “Current technologically based sustainable architectural approaches and design methodologies often fail to coincide with the cultural values of a particular place or people” (Guy and Farmer 2000: 80), which calls for a need to identify the role of culture in sustainability. “Traditional wisdom and lore in building, using renewable resources and indigenous skills, may still offer wisely managed, economically effective and culturally appropriate solutions to the world's increasing housing needs” (Oliver, 2006) which gives cues that probe into the cultural aspects of a place, would yield design solutions that are responsive to local conditions and those that are economically viable and have withstood the test of time. Indigenous architecture has been inherently sustainable and modern architects have employed those principles in creating architecture that is in relevance to culture and kinder to the environment (Dayaratne: 1999, 2000, 2003, 2007).

Recent researches have demonstrated both the value and logics of learning from vernacular for sustainability where social and cultural values are closely associated with building design style and function. Hence there is a definite connection between architecture and culture which relates to location, and so over time its characteristics become representative of a locality's cultural heritage. And cultural sustainability and the connection with the built environment involve the development

of building forms, materials and construction methods resonant with the local culture and expertise (Williamson et al. 2003).

Keeping the past as reference, buildings are critically important in the domain of cultural sustainability as they are the built reflection of the aspirations of those for whom they are built (as well as for those who design and build them), and collectively they represent the beliefs and priorities of their society through its history (Beynon 2009). A less quantitative, more qualitative perspective on sustainability is crucial in the assessment of architecture in the today's context.

5. Architectural Practices should adopt Cultural Sustainability.

An efficient sustainable built environment that includes economic and socio-cultural sustainability supports local economy (Allen 2009).

The built environment is an integral part of spatial construction, and the history of building is a history of identity and therefore any alterations to buildings, involve elements and forms that relate to particular cultural and societal patterns (Beynon 2010).

Culture is a crucial instrument that will drive sustainable development with broader social, economic and environmental impacts on the society and hence it should be placed at the centre of our development strategies. Today many cities across the world use cultural heritage to encourage sustainable urban communities and cultural heritage and infrastructure can serve as strategic tools for revenue generation. Culture plays an important role as a non-renewable resource that is a vital part of our cities; the adaptive re-using of the historic urban environment adds to the quality of life of their inhabitants by strengthening their sense of

belonging, social cohesion and providing a pleasant environment that mitigates excessive urbanization (UNESCO 2012b), thus fostering cultural sustainability.

Historic towns and the historic parts of cities are of immense worth for their uniqueness and identity (Duxbury 2012). Culture contributes to sustainable built environment through the protection of historic buildings which need to be conserved for economic as well as cultural continuity. Other measures that can be adopted are sustainable urban retrofit schemes and regeneration/urban renewal programmes on an urban scale. Design practices focussing on sustainable architecture and smart/sustainable cities, within the dominion of the societies' identity to protect its continuity, is also very essential. The cultural heritage of a place is a powerful asset for inclusive economic development, since it attracts investment and ensures green, locally-based, stable and decent jobs relating to a wide range of sustainable activities in areas such as conservation, construction and adaptation (Hosagrahar 2013).

Culture, sustainability and sustainable development are complicated concepts wherein a comprehensive framework of study is essential to formulate policies integrating strategies that include the environment, the economy and quality of life. Development measures and schemes should ensure a strong 'cultural flow' in policies and enable a culturally sustainable society after a thorough understanding of the current flaws and difficulties in its application towards development.

6. Difficulties and Threats

With the progress of knowledge about the adequacy and impact of sustainability, its attainability has been explored into different walks of life. Architects and planners, however; are trying to establish their knowledge in four areas: environmental, economic, social and

cultural, popularly termed as the four pillars of sustainability. While a connection between culture and sustainability is under exploration, researchers need to focus on culture as a distinguished aspect with credible methods of assessment for their effectiveness in design. Environmental and economic aspects of sustainability have been deeply researched and practiced in the design of built environment with strong means of assessment of their effectiveness, but social and cultural aspects of sustainability, still lacks reliable and suitable solutions to implement them in design. The domain of cultural sustainability is still emerging, where there should be an opportunity to compare the effects of design interventions.

Another issue which forms a threat to culture is the emergence of globalization, which has brought about rapid social change & urbanization which is at the cost of existing cultures and built environment. Due to this modernization the traditions are vanishing and there is also a irreplaceable loss of knowledge bearers. Damage by tourism and competition with commercial media is adversely affecting the region's original identity, for the sake of technological and economic advancement. Political projects which override common values and lack of financial support to support these sustenance are others threats to their rapid loss and deterioration. These phenomenon have introduced an important number of risks for culture; such as: the loss of regional cultural spaces, of local urban culture, of historical "originals." More often we have seen these aspects disappear; and sometimes they replaced or reproduced as a commoditization of the original cultural heritage (Fithian & Powell: 2009). These combined insights and threats give us make evident that we have to change our present ways of looking at sustainability and incorporate cultural aspects into our values system. Mass produced system of modern architecture to

solve social problems has come to its limits and a new approach to sustainability inclusive of the four pillars needs to be adopted.

7. Discussion and Conclusion.

Of all important factors affecting the society, culture is one essential aspect that should emerges as an independent parameter in the realm of sustainable architecture. It must be a separate, distinct, and integral part of the design policies and strategies of sustainable development. Studies focuses on the sustainability of the culture of a place will lead decision makers to create improved cultural centers and meaningful urban spaces. When such an approach to design is established along with the other physical aspects of sustainable development, a culturally sustainable community will evolve which will have better ability to sustain and build on its own resources. By investigating the concerns and issues discussed in this paper, building a culturally sustained built environment in harmony with the natural and social environment could be realized by designing with the vision and objectives of sustainable architecture. This approach can effectively maintain cultural integrity, continuity and solidarity among the community as well as at the same time to preserve the environment for the next generations.

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