

Available online at http://UCTjournals.com Iranian Journal of Social Sciences and Humanities Research UCT . J. Soc. Scien. Human. Resear.(UJSSHR) 117-121 (2016)



Green architecture is a path to sustainable architecture with a social approach

Siamak Pordel Maragheh ^{1*}, Mina Lotfi Azar² and Farnaz Alipoor Mollabashi²

1Young Researchers and Elite Club, Islamic Azad University, Ardabil Branch, Ardabil, Iran 2Department of Architecture and Urbanism, Tabriz branch, Islamic Azad University, Tabriz, Iran

Original Article: Received 22 March. 2016 Accepted 08 May. 2016 Published 11 June. 2016

ABSTRACT

Negative effects of modern technology on the environment led to create a new awareness of environmental issues in the individuals. Achieve "sustainable development" involves rational utilization of natural resources, a fundamental shift in attitude and appeal of human nature is serious in production and consumption patterns. "Sustainable Architecture" or "green architecture" phenomenon, which is now in most countries of the world, and by many architects, with different views to be considered. In the global movement towards sustainable development, architecture and definitely one of the key factors will be strategy, because the main buildings, the widest and most lasting changes that humans have created on earth, and as the strengths and weaknesses of a building on the world's ecosystems will have a direct impact, very sensitive task in this regard is their responsibility. In this article we try to choose this theme and examination of projects built, according to the principles of green architecture part of an effort to transform the gray world to green path in the future.

Keyword:

Sustainable Development, Green Architecture, Environment and Energy

^{*} Corresponding author: Siamak Pordel Maragheh

Peer review under responsibility of Iranian Journal of Social Sciences and Humanities Research

Pordel Maragheh et al.,

Iranian Journal of Social Sciences and Humanities Research

INTRODUCTION

The seventies century, can be called the awareness of the environmental crisis and the reaction of those in the world that sustainable development is one of them. With the industrial revolution and technological advances in the field of architecture, vernacular architecture from all over the world with regard to nature and the environment and consistent with the climate of the shape can be elevated into oblivion. Modern architecture, who was born in the context of these developments, the development of architecture ignored. Green architecture and sustainable architecture for sustainable development has been driven by the needs of people today in front of the disadvantages of the world industrial era. Protect and preserve of world's natural resources, protection of air pollution and other environmental pollutants, mental and physical health and the future of humanity in the context of the issues that have been raised. In general, green process stated that all issues related to each other and in all aspects of the decision must be considered, and thus the idea of a separate investigation is in conflict.

Green architecture is known as "sustainability" term; a term that describes the major techniques in architectural design concentrates on environmental attitudes and ideas in line with the respect for nature. Green Architecture, in fact, is not a new trend, because in many ancient civilizations and traditional architecture of traditional architecture Iran if there is fundamental. Nowadays, in the wake of the negative consequences of the industrial world, and protect the world's natural resources is one of the most important concerns of our times has become and for this reason, Green Architecture What a way to minimize the negative impact of buildings on the environment, in fact, an attempt to alignment with nature through increased efficiency and optimization in the consumption of materials, energy and the expansion of space

Conservation of energy

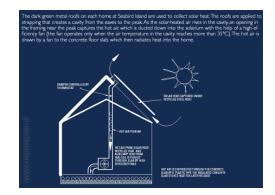
Every building must be designed and constructed in such a way that fossil fuel needed to reach the minimum. Necessity to accept this principle in the evenings without any doubt with regard to the construction, is undeniable, and perhaps only because of the wide diversity of new materials and technologies in the contemporary era, such main building has been forgotten and this time using different materials or different combinations of them, buildings, environment according to the needs of users are changed.



Work with climate

Buildings should be designed to be able to use the local climate and energy sources. Shape and location of the

building and its interior spaces can be promoted in such a way that the comfort level inside the building, at the same time, through proper insulation of buildings, thereby reducing fossil fuel consumption. These two process will inevitably overlapping and common areas are abundant.



The common solution of the present era is the use of air conditioners, only the inadequacy process is in contrast to the climate and at the same time with high consumption of energy, that even when it is cheap and abundant energy because of contamination considered wrong.

Reduce the use of new resources

Each building must be designed to minimize the use of resources at the end of its useful life, to create a resource for other structures. This reuse can be recycled in the course of using recycled materials or spaces take shape. In most cases where access to new resources is minimized discover ways that they can be used for a purpose built building, also used for other purposes.



Respect for Members

All buildings are made by human beings, but the human presence in some structures to be respected, while in others try to deny the human dimension in the manufacturing process can be observed. For a professional architect is necessary to note that the health and safety of building materials and processes to the extent that it is important for workers or users, for the whole human society is also important.



Respect for the site

Australian architect Glenn Murcutt states strange that buildings should touch earth as quiet and light. A building that energy voraciously consuming its pollution and alien to the consumers and users, so do not touch the ground in such a calm and style. Each building cannot be built from the inside out and the conditions of the site before the building was revived again on site.

Holism

All the principles of green architecture requires the participation in the whole process are oriented to the construction of the built environment. Find buildings that are together all the principles of green architecture is not easy, because that green architecture is still not fully understood. A green architecture to be more than a single building to be included and should form part of sustainable urban environment. City, more than a collection of buildings is, in fact, it can be seen as a set of interacting systems, systems for living and recreation, which are made of a body, and a careful look at the systems that we can face the future in our drawing.

Coordination in the use of green space



Kansai Airport Architects: Renzo Piano and Partners Metal tile roof with an asymmetric geometry Use the form of curves to reduce the intensity of air blower



RWE Tower Drasen Architects: Engen Hown, Ovedrik, Cullen Double layer glass facade building the outer shell allows air circulation Provides natural aeration of the joints aligned as possible.



Reichstag Dome Architects: Foster and Partners Light and normal sight transparency and democracy, transparency and easy access space inside Energy savings

Iranian Journal of Social Sciences and Humanities Research



Garden of Eden Architect: Nicholas Grim Shaw Using solar collector and heat Bank



College of Arts and Architecture (Singapore)



School of Nursing and Health Sciences Center, University of Texas, Houston architects NIMB



Conclusion

Still there are a lot of misunderstanding about the word green or sustainable architecture. To be precise guidance for architects and building designers in order to help them understand this. There are many systems and technologies so that probably will not need to create a new system. But

Pordel Maragheh et al.,

Iranian Journal of Social Sciences and Humanities Research

there are few people who have knowledge of how to use these techniques. Therefore, in schools and universities to speak about sustainable architecture and how to use the technique, know each student has to have a high quality of architecture in the future. To have sustainable architecture is not enough just to have a good architecture, but rather respect for the environment and nature and knowledge about ecology, topography and weather conditions is required. Therefore sustainable design is a formal style, and the condition is not temporary impulse, but rather in concrete having a profound concepts that link people, nature and architecture. In fact, all these issues is that people should change their way of life, and the uncontrolled consumption of energy and avoid polluting the water and air. All this means is applied to sustainable architecture. If this matter is regarded, future generations will not face shortage of air pollution and global warming.

Reference

- 1. Asadpour, A 2015. articles sustainable pattern of desert architecture, architecture magazine 39
- 2. Hassanpour, SM 2014. Paper for what actions they should take to achieve sustainable architecture?
- Jong-Jin Kim, Sustainable Architecture Module, Qualities, Use, And Examples Sustainable Buildings Materials
- 4. Mackeuzie , Doroty , Green Design , L.King LTD. Design Services For Sustinable Buildings
- 5. Mahmoudi, M 2012. paper Mbanytrahy sustainable goals of sustainable development
- 6. Nouhi, SH 2013. reflection on architecture, publishing a new step, Tehran
- 7. Our magazine (Architectural Iran) Volume 5, proceedings related to sustainable development
- Soflaee, F 2003. Paper category called Urban Planning and Sustainable Development, Proceedings of the International Conference on optimizing fuel consumption on the premises, Volume 1
- 9. www.ArchNews.com
- 10. www.GreenBuilder.com
- 11. www.Memari.org
- 12. www.SustainableEnergy.org
- 13. www.UAN-Eng.com