Reference for contextual design

Franky Liauw*
Architecture Department, Faculty of Engineering
Universitas Tarumanagara

* frankyl@ft.untar.ac.id

Abstract. The aim of contextual design is often understood as design of new building which compatible with its surrounding. The architect has to take some values from the existing environment, and use these as a reference for his design. It’s not an easy task to choose the right reference from so many elements exist in certain environment. This paper is developed through desk study and comparison of several opinions about contextual design, and the study about urban planning and character of everyday life in urban context. Every built and natural environment has its unique character, local wisdom, and spirit. These values are important, and need to be preserved, but not in static way. All elements in the environment have dynamic nature. From this point of view, contextual design has to be based on a reference, taken from the existing environment that has local wisdom and local spirit, and used dynamically in the design process.

1. Introduction

Contextual design in architecture is an approach to achieve harmonious built environment. New buildings have to be compatible with its existing surroundings. Burden in Illustrated Dictionary of Architecture explained that contextual is “any doctrine emphasizing the importance of the context in establishing the meaning of terms, such as the setting into which a building is placed, its site, its natural environment, or its neighborhood”. And contextualism is defined as “an approach to urban planning that consider the city in its totality, the view that the experience of a city is greater than the sum of its part. According to proponents, all architecture must fit into, respond to, and mediate its immediate surroundings” [1]. Compatibility the new building with the existing surrounding is the key point from Burden definition. Amirshekari stated that new design and development in certain place need to be connected with its context. Usually contexts is defined in various scale compatible with the scope of architectural design. Contexts can be topography, vegetations, urban condition including building density, street, sidewalks, and the relations of each other, types and arrangement of materials, buildings distances, regional geography condition, urban traffic density, population, and so on [2]. Amirshekari also mention about compatible, but added some detail of elements that can be considered as context.

From another point of view, Thomas [3] said that architecture needs to be placed in an environment with historical and cultural contexts, and architecture also needs to combine the past and the present, and to predict about the future. Good architecture is the one that represent our ideas about the world and the place where we live, which appreciate human being and the environment. Marcantonio stated that new design need to compatible with local architecture style [4]. Thomas mention about appreciation to the existing environment, which
is more or less the same with compatibility, but he added the time aspect which connects to dynamic nature of the environment and architecture. Marcantonio agreed with the compatibility aspect.

Contextual design approach has a positive side because it considers the existing environment, thus we can hope new building and the existing maybe blend into a harmonious environment. Although the contextual design can be in contrast with the existing, mostly it is compatible with the existing built environment, and usually produces a similar visual form of built environment. Is this the right way of contextual design?

2. Method

Method used in this paper is desk study, with comparison and analysis of various views about contextual design. This paper tries to look from the other angles, to get more insight, more understanding, and more advantageous from the contextual design.

3. Results and discussion

The existing environment, built or natural, may constitutes various conditions. First, it may consists an ideal condition, more homogenous character, with rich and clear local wisdom and uniqueness. In this condition, it is more easier to decide which environmental elements to be use as reference for contextual design.

Second, the existing environment may contain various condition, heterogenous community and built environment, partly in ideal condition, partly is not ideal. This condition needs a selection phase to choose the right reference among various existing elements. The selection process needs a certain criteria which refer to local wisdom, local culture, dan the unique character of the local environment.

The last condition is the poor one, with no positive value at all, for example: slum area, area affected by disasters, or other poor condition. In this kind of area, the contextual design of a new building has to be set as reference for the next design, or revitalisation of the existing. This new contextual design has to have ideal values of local wisdom dan culture.

Architecture is the art of built environment development that organized spaces for human activities and living. Architecture also compromised built environment and the natural environment. Architecture has a dynamic nature, along with the constant changes of human needs and life style [5]. Although not mentioning about contextual directly, Poca did state there is a need to design compatible with the surrounding.

So, contextual design has to be an architectural product that is not only compatible with the surrounding, but also taking into account the changes need to be made when develop a new building in certain place.

Building materials produced by modern technologies and architectural expression have great impact to the local architecture, even local culture [6], and of course affect the genius loci and perception of a place too. The uniqueness of the spirit in that place can also change or even disappear, replace by the new characters. Architecture affect the character of a place not only
on visual aspect, but also the spirit aspect. While most architects often create new form of architecture, symbols, material and traditional architecture vocabulary is less integrated to represent local culture.

Whole region of the city always change, and the interaction between architecture and society also the same. All city’s elements change and the interaction between architecture and the society also change. [5].

The dynamic nature of architecture open the possibility to intrepret local wisdom, culture, and local elements in different ways, even with global nature approaches, and change in line with time. Architecture has to give advantages for the environment where it located, also give appreciation to local ecosystem, and give positive impact to the users and people nearby [7].

Modern architecture, for example social housing di Kuala Lumpur, Malaysia, raises several problems, one of them is thermal comfort, because the development of social housing is not compatible with the living patterns of Malaysian society [8].

Contextual design that compatible with local environment, in fact strengthen the identity of the place. Place identity must be taken into consideration in modern architecture design, that develop later. Local culture is one of the many aspects that shape the identity, and has to be preserved dan developed [9].

![Figure 1. Contextual design process diagram](image)

### 4. Conclusion and recommendation

Contextual design needs references from the surrounding in order to appreciate local wisdom values, so that the new building compatible and in harmony with the existing environment.
The determination of the references needs a clear criteria of ideal values that is appropriately followed in certain place. Local wisdom and culture evolve and change continuously. In addition to compatible with the surrounding, contextual design has to able to anticipate the possibility of changes in the future.

5. References

[1] Burden, Ernest, 2012, Illustrated Dictionary of Architecture, 3rd ed. (New York: McGraw Hill).

[2] Amirshekari, Sara, Hasanali Pourmand, 2014, The Aspect of Biological Culture Recreating and Its Relationship with the Approach of Contextual Architecture, European Online Journal of Natural and Social Science vol. 3, no. 4.

[3] Thomas, Randall, Trevor Garnham, 2007, The Environments of Architecture. Environmental Design in Context, London: Taylor & Francis.

[4] Marcantonio, 2010, The Simple Truth About Context, http://blog.marcantonioarchitects.com/thesimple-truth-about-context/24062016, 22.20.

[5] Poca, Ilze Rukmane, Janis Krastins, 2011, Contemporary Urban Space in the Context of Formal Currents of Architecture, Scientific Journal of Riga Technical University, vol. 5. 58-64.

[6] Kong, Yawei, Yun Xia, Lina Wang, 2011, Poetic Perception in Built Environment, Applied Mechanics and Materials, Vols. 99-100, 38-41.

[7] Dickinson, Elizabeth Evitts, Architecture, Big-A and Little-a, Architect, the Journal of the American Institute of Architects, vol. 104, number 2, February 2015, 40-42.

[8] Sahabuddin, Mohd Firrdhaus Mohd, Cristina Gonzalez-Longo, 2015, Traditional Values and Their Adaptation in Social Housing Design: Toward a New Typology and Establishment of Air Hours Standard in Malaysia, Archnet-IJAR, International Journal of Architectural Research, 31-44.

[9] Choi, Hee Sun (Sunny), 2011, Place Identity in 21st Century Architecture in South Korea, Archnet-IJAR, International Journal of Architectural Research, 116-133.