Architectural Design Solutions in the Historical Residential Context

Adjacent to the Cultural Landscape of Bamiyan Buddha Statues

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Long Abstract

The historical and cultural landscapes left from the ancients of each country are a symbol of the cultural identity and rich civilization of the inhabitants of that land, and every effort to preserve and represent it is a step towards the preservation of the culture and traditions of that land and strengthening its identity and values of that cultural landscape. At the first "World Heritage Regulations", cultural landscapes are introduced as a symbol of "joint works of nature and man." The World Heritage Committee also classifies the cultural landscape into three sections: Certain landscapes that have been consciously designed and created by humans, such as gardens of aesthetic value or places with historical civilization; 2. An area that is a remnant (fossil) landscape or a continuous and stable landscape, such as sites with archaeological remains or historical agriculture; And 3. The cultural landscape of an association that basically focuses on the intangible heritage of human beings, especially indigenous groups. According to the definitions, the Buddhist statues of Bamiyan and the adjacent historical context as one of the common monuments of nature and mankind, are considered as cultural landscapes and historical attractions, which its protection is very important in terms of world cultural heritage. This valuable physical and cultural landscape is the best sign of urban and civilization identity in Bamiyan, which plays an effective and significant role in identifying the historical physical context of the city (Fig.1). In the point of protection and observance of the privacy of historical monuments and cultural landscapes is one of the most important and sensitive issues related to all historical areas. Design and construction, limitless and regardless of the boundaries of buildings and historical and cultural landscapes, can inflict irreparable damages to the physical context and even remove them from the world monuments' registering list. Therefore, the purpose of this study is to protect the cultural landscape of Buddha statues and the adjacent historical physical context, by providing solutions to design in the adjacent residential physical context.

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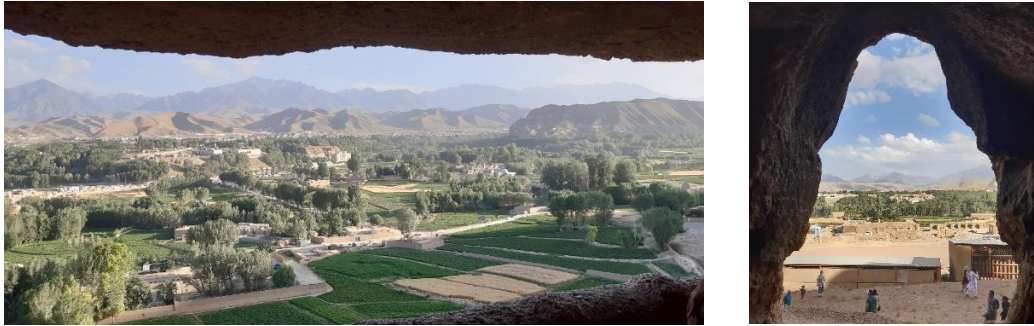
Fig. 1. Historical Residential Context Adjacent to Bamiyan Buddha Statues, Afghanistan (© Tayebeh Nazarian)

For this purpose, in this article, using design approaches in historical contexts and considering the historical features and cultural landscape of the Bamiyan Buddha statues' area and the surrounding historical residential context, architectural design solutions in this historical context are presented. The research's paradigm is qualitative in applied research. The research's method in the field of theoretical, historical and descriptive-analytical literature is through documentary studies and in the field of field studies, the analytical method is through data collection by local observation and field survey. Bamiyan province is located in the foothills of the Hindu Kush and Baba mountains in Afghanistan-northwest Kabul. This ancient city (Bamiyan) was one of the great centres of Moghani and later Buddhism, where you can see all kinds of sculpture, rock-cut architecture and brick architecture. The Buddhist statues of Bamiyan are the artistic and religious works of the people, goes back to the third century AD and the antiquities are about 1700 years. According to studies, there are different methods to respond the presence of new structures in the historical context. Approaches which include a variety of methods such as "contrast, maximum similarity, preservation, decorative display, unifying elements, neutral architecture, unstable, unseen and invisible (mirror), contextual". Extremist views of copying and contradiction can erode the historical context: firstly, by the apparent imitation of existing architectural features and secondly by disregard for the historical context. The problem of agreeing on compatibility or incompatibility with the context always does exist. This problem is especially getting much more complicated by the fact that sometimes the contrast of a building with its surrounding area is desirable. Generally, in any situation, if strong and clear visual relationships are established instead of imitative styles or extreme innovations, it will not cause visual annoyance. Understanding how these visual relationships are formed in the past helps to come up with new solutions for the present and the future. Therefore, one of the aspects of successful design in the historical context adjacent to the cultural landscape of Buddha statues is to understand the existing context and respond appropriately to it. Whereas existing monuments are a response to their cultural, social, historical, political, economic and physical environments; Similarly, new developments in a valuable environment must understand the nature and features of that place and respond it in contemporary ways. Hence, what should be observed as a key principle in the historical context and cultural landscape of Buddha statues is that new constructs should inspire and express the spirit of the present, while their design should be the historical context which they have placed among. According to the field perceptions of the area under study and in order to achieve a design that consistent with the context and cultural landscape of Buddha statues, the main components of design such as location, appropriate scale, historical characteristics of the background, the predominant shape of adjacent buildings, architectural materials and details and observing limitations should be considered. For this purpose, the following solutions can be suggested to

redesign the historical context adjacent to the Buddha statues (Table 1.):

Table 1. Factors influencing architectular design *in the Historical Residential Context Adjacent to the Cultural Landscape of Bamiyan Buddha Statues*

Design Components	Micronutrients	Solutions
Privacy	- Protective privacy - Visual privacy - Applied privacy - Landscape privacy - Environmental privacy	- Preventing historical monuments and Buddha statues from collapse or damage - Determining activities and harmless uses to the historical context - Protecting and promoting visual connection between the both residential physical context and Buddha statues - Preventing any rupture in the landscape - Permute the historical context and the Buddha statues area to an active cultural-excursion centre - Strengthening the adherence and homogeneity of urban functions and historical context - Prevent the construction of sky scrapers in the area of Buddha statues - Prevent the increase or decrease of population density in the historical context adjacent of Buddha statues - Strengthening and preserving the natural environment adjacent of the historic context and Buddha statues - Organizing and creating green spaces in the historical context and Buddha area according to technical and archaeological criteria
Located Location	- Retreat - Orientation - Classification - Spacing - Full and empty space - Vision - Index elements	- Retreat from the determined areas in the historical limitation and the Buddha statues area - Appropriate orientation of buildings towards Buddha statues - Observance of segmentation and division of city plaques in the historical context - Observe the appropriate distance and privacy of cultural landscape and Buddha statues - Observing the ratio of mass and space (full and empty space) in the historical context - Paying attention to the perspective of Buddha statues - Paying attention to the index elements of the historical context and Buddha statues
Scale	-Height -Volume -Density -Proportionally	- Observing the height of the building according to the adjacent historical context in one or two floors - Using simple volumes in proportion to the existing historical context - Observing the relative density in the whole context in order to correlate the volumes on the site - Observing the proportions in all volumes which were used in the historical context
Shape	- Style - Skyline - Compatibility and differentiation - Interface elements - Consistency of volumes - Visual features of facade	- Using traditional architectural styles and patterns in the historical context - Paying attention to the skyline and preventing the format of a monotonous skyline - Creating compatibility and distinction between new buildings and existing historical contexts - Using intermediate elements and spaces to achieve the traditional architectural pattern of the past - Using similar and harmonious volumes in the whole historical context - Observing visual proportions in new and old facades of the historical context
Materials and Details	- Materials' type - Materials' scale - Materials' texture - Materials' composition - Penumbra - Decorations	- Preventing the use of disharmonious and uncoordinated materials in buildings - Paying attention to the dimensions, size and scale of materials used in buildings - Homogeneity of texture of used materials with materials of historical context and range of Buddha statues - Using a combination of native materials available in Bamiyan such as stone, clay, brick - Use of porches or canopies to create penumbra in buildings - Using decorations and executive details according to the traditional and indigenous architectural patterns of Bamiyan
Feature	- Cultural - Social - Economic - Political	- Paying attention to the cultural background of Bamiyan to attract tourists - Creating spaces for gathering and creating social interactions between Bamiyan residents and tourists - Creating commercial uses in the historical context for job creation and economic prosperity of the residents - Paying attention to the tourism policies of Bamiyan region and protecting the cultural landscape of the Buddha statues and the adjacent historical context

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