

# Evaluating Landscape in Archaeological Sites with an Emphasis on Formal Aesthetic Approach: The Case of Bishapour and Tange-Chogan Region, Iran

Golchin Peyman, Irani Behbahani Homa

## Introduction

Nowadays, landscape recounts the land components, elements and components which each alone and together have a key role in building and shaping the natural environment and consequently the natural landscape and eventually the built environment and landscape. Although humans connection with its surrounding is achieved through different senses, but still more than 80% of its connection is achieved by observing. Therefore, landscape observation and its perception by human, plays an important role in environment recognition and perception and also determining whether a landscape is aesthetically appropriate or not.

The aim for assessing visual quality of landscape and environment in archaeological sites are to define and determine certain criteria and factors that can be used for conservation, rehabilitation and renovation of landscapes as well as determining whether a landscape is aesthetically appropriate or not. Through this way, landscapes with aesthetic values are conserved and the rest are amended.

Archaeological sites and their cultural landscapes because of providing information about the past are considered with great importance around the world. These landscapes and sites are historical documents that reflect the diversity of their communities and express their life style and culture and indeed make up the country's cultural heritage.

Due to the expansion and development of construction around ancient region of Bishapour and also considering that the mentioned region is geographically located in a suitable location which is very rich in vegetation and ecological diversity and on the other hand, consists of beautiful and open landscapes, makes it a suitable case study for research. In this research, it is tried to suggest and provide strategies using formal aesthetic approach and check list method in order to extend and develop visual quality of Bishapours landscape and environment and also to identify landscapes with the highest visual quality and special characteristics.

## Materials and methods

The method in this research is a combination of studying and analyzing documents, maps and aerial photographs and also site survey. In the process of site survey, the information required in order to describe and determine visual factors, vegetation type and quality, quality of landscapes and ancient artifacts, natural attractions and their visual characteristics are collected.

In this study, firstly, landscape layers and components of ancient region of Bishapour are identified through interpretation of achieved images and site survey and then general site characteristics including physical, biological and cultural (human made) factors were studied. In each part, the following are studied:

- Physical factors including climate, hydrology, geology and topography.
- Biological factors including flora and fauna.
- Cultural factors including land use, built environment and historical elements.

Zoning of ancient region of Bishapour is fulfilled through the use of aerial photographs, existing condition map and also information obtained from analyzing natural, historical and cultural layers of landscape.

Thereafter, parts of the region with more similarity in vegetation, land use, morphology, historical artifacts, visual qualities and activities were put in one zone and through this, the region was divided into five zones including mountain zone, river zone, historical zone, garden and rural zone and agricultural zone.

Evaluating visual qualities of bishapour landscape and environment was fulfilled through formal aesthetic approach and by using the check list method. All listed variables (Physical, Biological and Cultural/Social) are separately studied and evaluated numerically (from +3 to -3) in each of 4 zones and the results were listed in separate tables. Then the average score for environmental factors and their components in each of the zones were obtained and taken on the graphs. The charts indicate which of the listed variables in

each zone require amendment in order to improve visual quality of them. At the end, suggestions and strategies are provided for each zone in order to improve and promote the factors effective on shaping regions landscape and environment.

#### Results and discussion

In this research, zone number 1 with the highest average score of 1.45 is selected as the best zone compared to other zones, meanwhile, zones 2, 3, and 4 with an average score of 1.12, 1.08 and 0.16 are considered respectively as other zones with the highest landscape and environment quality (Figure 1).

Also, having observed and studied achieved charts, biological variables are considered as the most effective and basic variables in shaping Bishapours ancient landscape and variables such as physical and cultural/social are considered as the next two variables with great influence on Bishapor landscape.

Suggestions and solutions for each of the five zones according to research findings are listed below:

- In zone number 1, biological and cultural variables have the greatest role in shaping the landscape.

What strengthens this zones landscape is improving and strengthening physical variables (such as increasing the presence of water). Considering that natural factors have the highest effect on shaping the landscape, thus, the dominant landscape type in this zone is natural.

- In zone number 2, all three variables have positive role in shaping the landscape of this zone. Due to many undiscovered historical artifacts in this zone, human intervention should be banned. In order to improve visual quality of landscape and environment, conservation is considered as the best way.

- In zone number 3, biological variables have the most influence in shaping the landscape and environment. Unnecessary human intervention should be banned in order to promote the visual quality.

- In zone number 4, human intervention is necessary in order to strengthen physical, biological and cultural variables.

#### Conclusion

In this research, in order to evaluate visual quality of bishapour landscape and environment, formal aesthetic approach and check list method were used. Each of the four zones was evaluated numerically from +3 to -3. According to the findings, these results can be cited:

- zone number 1 with an average sum score of 1.45 is considered as the best zone in term of visual values.

- According to achieved charts, biological variables (flora and fauna) are considered as the most vital and effective variables in shaping the landscape of Bishapour.

In the present article, by applying the suggested strategies and solutions for ancient region of Bishapour, it is possible to provide ecological and aesthetical balance between listed variables (biological, physical and cultural). In total, it can be concluded that landscapes with the best visual quality are shaped through three basic variables which are biological, physical and cultural.

Finally, in order to progress any further studies and complete the study, further research in the following fields are suggested:

- 1- Considering planting design principals and selection of suitable vegetation compatible to the climate of regions.

- 2- Defining and determining cultural landscape zoning in order to provide more conservation for visual characteristics of the regions.

Keywords: Landscape Aesthetic, Visual Quality Evaluation, Formal Aesthetic Approach, Check List Method, Ancient Region of Bishapour