

Designing an institute of history of ancient Iran based on an approach to reinvention of architectural and local values in Kenar Sandal area

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Abstract: Archeology science is to know the facts in past cultures, while their names and their ways of living have not been mentioned or rarely mentioned in the history. Archaeological studies make us familiar with life of the ancient people, while a fundamental base in identification of nations is to recognize their past and their prevalent culture and to investigate their effects in present. The general study of a society includes the study of its architecture, language, dressing, lifestyle, government, wars, and handicrafts. Ancient civilization of Jiroft city indicates that the history of this land benefits from high dating and recent archaeological explorations showed that these historical sites have high architectural values and designing an Institute of Archaeology to do more historical explorations in this region have managed to reinvent more important architectural values and it can introduce a historical site to all Iranians and all the world. The research method of this study was in field and library to investigate the conducted samples and to do a research about positive points or existing deficiencies in the buildings, classification of the conducted researches and investigated examples, extraction of acceptable results and using them in designs and designing in accordance with the principles, standards and extracted basis.

Key words: Research institute; Archeology; Local architecture; Kenar Sandal

1. Introduction

Historical areas benefit from such richness that some places can be made in their neighborhoods that not only contribute to their rehabilitation and survival, but also it allows doing services and activities in an Institute of Archaeology which might be built close to a rich archaeological site in order to realize the purposes and it can work efficiently.

The ancient site of Jiroft is the subject of study in this project, and it is necessary to make an Institute of Archaeology in this city. Archaeological efforts and activities in one side, and the visitors' tendency and visiting these places in other side, have made the need to construct an Institute of Archaeology a necessity.

The theoretical framework of this study consisted of two types of practical and scientific purposes.

The scientific purpose of this study was to access to a comprehensive collection of information in the Institute of Archaeology which present requirements and constraints of designing such a place

The practical purpose of this study was to design spaces which have been proved to be necessary and realize both scientific and more general purposes of this study. These spaces have been designed to have the following capabilities:

1. being able to bring ancient forces existing in the context of the project (ancient hills of Kenar Sandal)

into public view, and providing enough knowledge and information to the visitors.

2. Getting the visitors and tourists' attentions can be done due to these spaces

3. Giving services and facilities to the visitors and professionals who were working on project have been regarded as one the practical purposes of this study

Basically, historians in writing social and political histories may have done three things, or at least they are expected to respond to questions that are related to these three things: 1) they retell some of the events that have been occurred and describe how they have been taken place 2) they try to explain the events that they had described; 3) In many cases, they attempt to clarify the events and their results

2. Generalities

Architecture science: Architecture is regarded as one of the oldest sciences which benefit from an old background. Architecture is a phenomenon which has existed for thousands of years, and some examples of that include numerous monuments and buildings all around the world.

The history of architecture is not limited to the past, but it involves active participation in the promotion of architecture, urban strategies and spaces of future cities. Some people believe that keen interest to the architecture history arises from a sense of responsibility to the present, in a way that

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without enthusiasm to the sublime thought to reform the architecture and the present urban space, not much can be achieved from the past reviews.

3. Approaches to the study of history

A wide variety of approaches in architectural history can be taken into account. Some scholars believe that all these approaches fall into three main categories:

Practical approach, historical approach, aesthetic approach. The objective of practical approach is to ascertain what has been made, when it was established, and who made it. In the historical approach, the reasons of making a building and its relation to social, economic, political, cultural and religious circumstances have been investigated. Besides, aesthetic approach showed visual and stylistic features, and how to change the styles and state the reasons to do that. Mostly, older architectural histories tend to present two practical and aesthetic approaches.

The role of architecture history in today architecture is obvious in a variety of styles that have been applied in the design of recent buildings. Architects and architectural critics, urban planners and investors of constructions have opposite views about the role of architectural history in the present architecture and what is appropriate for today architecture among all the old styles. If the architects want to respond properly to the history, they must understand the history very well and take the common architectural ideas into consideration in a broader historical framework.

3.1. History of Architecture in Iran

Writing history of architecture in Iran is not something new. Previously, many scholars have attempted to write this history partly or in the related issues. But since writing the history of architecture was found in western countries, all architectural history returned to western theoretical basis, unless an author cautiously intended to establish new foundations

3.2. The geographical location of history of ancient Iran

Iranian ethnic groups have lived in a vast and mountainous plateau from ancient times while from the east it ended to high mountains of the Hindu Kush and from the west and southwest to the Zagros mountain range. Salem Mountains separated this plateau from Indus River and the Persian Gulf which is a branch of Indian Ocean and it is located in the south of this region. In the Old Testament, Elburz and the Caspian Sea was the border of medieval Iranian government, but it has not been counted in the border area between ethnic groups and Mesopotamia and Minor Asia in ancient times has

been claimed by the Iran government to be their lands.

Severe weather in Iran plateau where is hot in summer and cold in winter was intolerable, but in the lower places it was milder and in the rivers valley agriculture was possible. Hunting in the forest and desert areas was important. Iran plateau was rich with diverse minerals such as iron, copper, silver, oil and precious colored stones and building stones.



Fig. 1: Map of Iran before the date



Fig. 2: Map of ancient western Asia

3.3. History of Archaeology

Archeology as a system of studies primarily backs to 15 to 16th centuries in Europe, when Renaissance scholars in the humanities looked for the glory of Greece and Rome. Popes, cardinals and Italian nobles of 16th century attempted to collect antiques and subsequently began to dig for older artistic things. Other fans of ancient culture in Northern Europe also did the same as these antique collectors. All these activities, however, in its real sense have not been called archeology yet, but it was really similar to what is called the art collection today (AjourLou, 2011,)

4. Development of archeology in the twentieth century

Twentieth century witnessed a qualitative expansion of archeology outside the Near East, the Mediterranean area and Europe to other parts of the world. At the beginning of the 20th century, the 'Mohenjodaro' and 'Hrapa' explorations in the present Pakistan, reveal a prehistoric civilization before Indus civilization. In the early 20th century, explorations at "Un Yang" in Eastern china showed a

prehistoric Chinese culture before Chinese history, while later it was called "Shanghai" dynasty based on early reports of Chinese history.

Scientific archeology in Iran nearly coincides with a similar event in Europe, but on a smaller scale and with relatively long intervals. However, influence of this action in Iran when archaeology was a component of that, was also started in the Safavid era and have continued to present. Archaeology in Iran appeared in the shadow of the French archaeology, but the events that occurred worldwide over the next few decades, made US famous as a new power in the world. It was predicted that this change effects on other areas of national and international activities.

4.1. Duties of Institute of Archaeology

Archaeology science is to know the past truths and cultures which their names and their way of living have not been mentioned or rarely been used in history. The importance and necessity of teaching this science is that archaeology underlies the history. In order to fulfill the objectives of the "Institute for Cultural Heritage" regarding archeology and fundamental importance of the relationship between archeology and archaeological research in cultural heritage researches, it is needed to establish centers for archaeological researches in nine regions (according to Dr Shahmirzaei view) while in this study the 8th province of Iran (Kerman- Makran - south of Sistan and Baluchistan) have been considered while Jiroft has been the center of attention.

4.2. Groups related to Institute of Archeology

Group of archaeology of plants: Archeological studies on the remains of plant seeds in ancient time which helps to identify and estimate the ancient environment, agriculture, vegetation, land use and farming, and then get knowledge about the economic and social conditions of those eras.

Group of archaeology of animals: Archeological studies on the remains of animal bones to know DNA studies, and diseases on that era.

Anthropological group: Understanding the human situations in terms of quality of life and human relationships.

Urban group and architectural studies: The study of the history of architecture and urbanism in the ancient cities and the ancient building of houses and cities and ancient resorts (Sardouei, 2007)

5. Ancient settlements

Traces of ancient settlements, "from the first signs of the emergence of humans as the best creatures during two billion to five billion year and history of life on the Earth" (Makhdoom, 1992) has been always influenced by various factors which were divided into human factors and natural factors.

Geographers have classified the human culture into four distinct technical stages; collecting food and hunting herding and grazing, agriculture and urbanizing (Hagut, 1996)

5.1. Case studies

Susa (Shush) Castle:

Architect Jacques De Morgan

In 1851 Sir William Kenet Loftus an English man started the first archeological activities in historic site of Susa. Due to expanding the exploration and discovery of precious works and also insecurity, the French board decided to build a place in this historic arena. And finally Jean-Jacques De Morgan's built Shush castle



Fig. 3: Shush castle

5.2. Archeology collection of Maffeiano lapidary

Italy 1977-1982

Architect Arrigo Rudi

This archaeological collection is right in the historic center of Verona's town which is in Bra square adjacent to a wall which belonged to Scaliger and Viscount Periods. Philharmonic domico Cortonis hall was built from 1909 to 1911 and it dominated to this area. At the beginning of the eighteenth century, famous Scipione Maffei got famous to build the first European sample of an archaeological collection.



Fig. 4: Maffeiano lapidary

Site: General Equipments of Site:

6. Studies on Jiroft City

Jiroft is located 700 meters above the sea level, with the temperature of -3 to + 50 °c., the average rainfall of 140 mm, 4 parts, 4 cities, 22 rural districts ,1486 villages, 196 poor villages, 40000 nomads, 11 units of public library, 126 religious centers, 250 kilometers distance from the provincial capital.

Jiroft is a very strange and diverse area, with white, black, Turks, Arabs and Persians people and various plants from tropical and cold types, semi-

tropical and semi-cold types, from Mediterranean climate to mountainous and desert and different types of climate, especially the diversity in plants can be seen more clearly.



Fig. 5: Jiroft map

In Jiroft, the pleasant nature with the farms and fruit, citrus and palm gardens and orange blossom aroma make people inebriated from March to mid-April and "Hail" river shows two winter and summer regions on the side of the desert.

Jiroft average height is 1100 meters above sea level and average rainfall was 173 mm in the last 10 years. The annual evaporation Fig. in Jiroft is 3000 to 2700 mm and a relative humidity is about 56 percent (Safa, 2011).

1. Due to climatic conditions and topography of this region, the flora and vegetation are different types. The common trees and shrubs in this area are tropical which include: Mesquite, lotus, Tamarisk, Milkweed, Calligonum comosum, Asclepias and some small trees like almond tree, and in mountainous areas due to the special conditions of climate and relatively good rainfall, vegetation is better than low-lying areas and vegetation include Pistacia Atlantica, Peanut, Zygophyllum Amygdalus scoparia, Junipers, Astragalus and there are trees and shrubs that grow naturally in these areas (Rafati, 2007)



Fig 6: Ziziphus tree



Fig. 7: Milkweed tree



Fig 8: Tamarix tree



Fig. 9: Prosopis

Background determination and the history of archaeological research is an important step. One of the most essential parts of the process has reviewed findings which in the later stages have been regarded as the main topic of the project.

Some of the findings include:

Residential architectural structures: defensive, religious, funerary and public water

Pottery supplies: pottery figurines, tablets and manuscripts

Stone objects: natural stones and pristine remnants of the past, memorable things, stone dishes, sculptures and slates

Bronze objects: pots, statues, plaques

Bones: The bones of the human body and animal bones

Plant debris: plant pollen grains from the cores of Lake Bottom

Each of these structures that are known as cultural materials, are valid documents to know the society well and be aware of predecessors' ways of living.

6.1. Ancient Jiroft

All historians and geographers and explorers know Jiroft as a vast and fertile region in Kerman province and in the last fifty years it has been known as India of Iran.

The discoveries from ancient civilization of Jiroft were mostly carved stone objects which more sporadically were traded by antique dealers in thirty to forty years ago and the researcher has seen number of objects that before revolution traded rarely but after that thousands of antique pieces which have been sold in domestic and foreign markets were discovered.

According to Dido Roi Arian Salmous is located before Gardeshgard and it is probably in the ruins of present SaeedAbad to Faryab because a lot of destroyed buildings like the other areas in Jiroft can

be seen in this region. According to supervisor Sykes, the ancient village of Salmi was built on Salmous ruins (Safa, 2011).

6.2. The monuments in ancient city of Jiroft

Part of the historic city of Jiroft which has been recognized is as follow:

Decius City (Kolang Behjard): the ruins of the city are in the site of Decius city which is called Daghianous by people

Other monuments include cemetery (tomb of Amir Haider), Esfandaghe castle, Solomon fortress, Samoura Castle, cemetery and Garm Sallar Reza castle, Castle of Koiz which is also called Tough, Tabagh or Shahidan. Dahane Bid and Shah Mansur in castles in Mardehek, Gholam Hossein Khan's fort, castle and market Amir Abad Agha Ahmed, MolkAbad Zakht castle, Sarbyzhan Inn, Sarjaz garden, Zargham castle in Shahsavar Khan Dehno village and it was corrupted by the people and changed to farming lands.

Jiroft civilization that formed at HalilRood bank is twin of Halil River and writer of Hodud al Alam (book) described it and he said it had sixty water mill wheels. However, it is certain that this river existed thousands of years before the author of Hodud al Alam wrote his book.



Fig. 10: Residential area



Fig. 11: Residential area near to the hill

With the beginning of archaeological excavations program at the ancient site of Jiroft Sandal Kenar in 2001 with collaboration of Institute of Conservation and Restoration of historic and cultural monuments – geological and environmental studies have been

started. The purpose of these studies was to identify burnout process of mud architecture monuments and access to appropriate conservation practices and at the end of each chapter these monuments were explored and conserved. Rapid burnout of mud monuments is the major problems of these areas after drilling, excessive scour, creating deep valleys and waterways and efflorescence phenomena in archaeological Cuts.

Way back then, people believed that the human history started from Mesopotamia with the Sumerians race in three thousand BC, but the discovery of ancient civilization in Jiroft rejects all the claims. Today, archaeologists and historians attempt to reconsider their earlier claims and knowledge (Divdel, 2013)



Fig. 13: A combination of human and scorpion on stone bowl (Jiroft Museum)



Fig. 14: Intertwined snakes in battle with an eagle on a rocky cone cup belong to the Earth civilization (Museum of Jiroft)



Fig. 15: A stone statue of an eagle (Jiroft Museum)



Fig 16: A beautiful painting of antelope on ceramic glass



Fig. 17: Pottery (Jiroft Museum)



Fig. 18: stone goblet with the goats which are grazing (Jiroft Museum)

7. Metal discovery and social organization

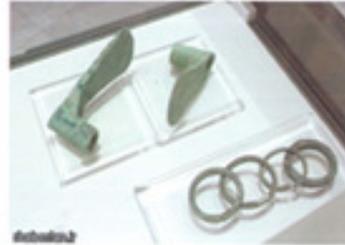


Fig 19: bracelet made of bronze and two bronze ax and a number of bronze tools for Earth period (Jiroft Museum)



Fig 20: A number of bronze tools and pottery belonging to the Earthed civilization (Museum of Jiroft)



Fig 21: Two head bronze ax with a sheath card belong to Earthed civilization (Museum of Jiroft)



Fig. 22: Statue of a man with crossed arms placed on his abdomen



Fig. 23: Doctor Majidzadeh and statues of deities (Jiroft Museum)



Fig. 24: two human stone heads stuck together (Jiroft Museum)



Fig. 25: Kenar Sandal historical hill (Jiroft)



Fig. 26: computer reconstruction of the historic Kenar Sandal hill (Jiroft)



Fig. 27: Different patterns of two Earth priests in stone plaque



Fig. 28: A man head made of marble (Jiroft Museum)



Fig. 29: Some marble works (Jiroft Museum)



Fig. 30: The stone pattern of a romantic and happy couple and the moon and stars pattern



Fig. 31: Emotional pattern of a mother and daughter are spinning on a stone

Jiroft ancient civilization is a dynamic, growing and in progress civilization. Although it was made of different professions, occupations, groups, social strata and classes, the economic, cultural, religious and political structure of this civilization was really powerful since seven thousand years ago.

One of the factors that led to the creation of wealth, honor and art in Jiroot ancient society was that they trained skilled and artistic architects, sculptors, painters and gravers and sent them to communities and other cultural domains with which they had commercial, economic and cultural relationship. This technical, spiritual, artistic and moral heritage has raised dignity of humanity and society in comparison with the last generation and it preserves and transmits this heritage clearly and consciously.



Fig. 32: Stoneseal and its pattern on the day (of the Earth)

8. The reasons of choosing a site

Since these large areas have remained untouched for years and they have been forgetting every day, it was decided that the site of project be chosen near to this valuable area and because it is near to this area, the research operations have to be performed quickly and easily.



Fig 33: The site position over the ancient hills

Some elements of the proposed structures of the collection

8.1. Color in space

Since the climate in this area is hot and semi-humid, use of bright colors is recommended to make the spaces larger

8.2. The research spaces

The color of walls should be white or a very pale cream or light green colors.

The table colors in spaces should be matte, if you want glossy tables do not interfere in research.

Floor shouldn't be smooth and it should be washable.

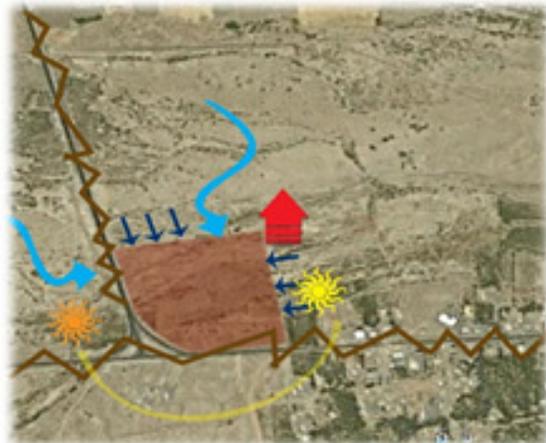


Fig 34: Major axis and how to separate the site to design each collection, topographic form of the hills which is the remnants of a stepped structure



Fig. 35: Topographic form of ancient hills

8.3. Light in Space

Light scattered in the corner and it is gathered in pervasive darkness, contrasts sharply with the direct light. Over the time, two lights and space are combined and enrich it. It is better that the highest level of ceiling and wall can be used to achieve the highest level of light reflection. The proper designing of light and using reflection of surrounding levels,

decrease 25% of the lights. In the architecture studio, light should be seen both naturally and artificially.

9. Technical maps of the collection

1. Use of curved lines of HalilRood river
2. Use of stepped style of KenarSandal hills
3. Ramp idea from ziggurats

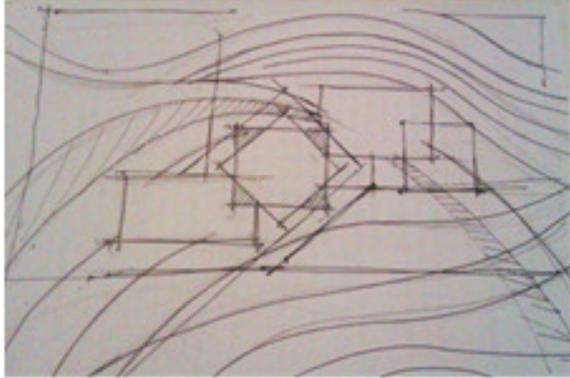


Fig. 38: Etude

References

- Ajorlou, B., (2009), Archaeology, Tehran Publications
- Divdel, M.A., (2013), Earth ancient civilization and Jiroft, Kerman Cultural Services of Publications
- Rafati, H., (2007), Jiroft in the mirror of history, Kermanology publication
- Sardouy, M., (2002), Masudi Guide-Abbas, Archaeological Center
- Safa A., (2011), Jiroft and Kahnouj history, Kermanology publication
- Ghadimi, Z. (2008), Great Dariush, Art publication
- Bidhendi Qayoumi, M., (2011), Discourses on the fundamentals of art and architecture history, Cultural and scientific publications
- Conway, Hazel, Ronish, Ravein, (2008), What is architectural history?, translated by Khoei, HR, published by Samt publication
- Gombrich, E (2001), History of Art, translated by A, R, Tehran, Tehran Publications
- Yadollahi, S., Yaloukh ey., A. (2008), An overview to archaeology and its position in Iran
- Halphen, L.(2002), History of science, Markaz Publications
- Fernie, E. (1996), Art History and its Methods, London