

## Designing the Recreational Cultural Complex of Janoobe Yazd Park with an Emphasis on Preserving the Industrial Heritage Values

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### Abstract

The industrial ruins (or remains) of every country are the activities and historical achievements that follows motivation to identify and its protection. The expansion of heritage requires database and comprehensive documentation of physical factors, so as to incorporate a particular user with economic efficiency to develop revitalization and satisfaction. In this paper, an attempt is made to address approaches for recreating the industrial heritage as an urban space that can be converted into an appropriate base for various welfare cultural and recreational activities. This makes it possible for cultural policies and provides an industrial complex for active participation for all people. The researcher has made an attempt by influencing the economic, social and environmental dimensions that causes the enhancement of urban life, revitalizing and conserving the industrial heritage in the city of Yazd. This is done through an applied theoretical research and a qualitative and quantitative approach. Among the influencing factors in the land use changes are a set of environmental and demographic factors which are independent variables and have effects on other variables. It is important to note that the land use changes of textile industry at South Park involves changes in the type of land use, changes in the way of distribution, and changes in spatial pattern activities and land use, design and integration of necessary land use for other valuable structures.

*Keywords:* Recreational Cultural Complex; Industrial Heritage; Land Use Change; Urban Identity

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## 1. Introduction

The industrial revolution caused a lot of change in the cities. The process of industrialization overwhelmed the shape, nature and landscape of the cities. The advent of industries caused the creation of new spaces within the fringe of cities. Today, these industrial spaces have historical relation with the past of the cities. The historical relation is evident in various dimension of urban life (economic, social, cultural, etc.). The historical memory and sense of belonging to industrial market are institutionalized in the minds of the community (Ghanbari, 2018).

The industrial heritage represents the history of architecture and urbanization shows the industrialization aspects of today's world (Xie, 2015: 142). The close relationship between industrial heritage and local communities has created an attachment to protect them. The attachment is the source of social identity of the citizens of the city. The memory is the factor of cultural continuity, relationship between generations as the only factor (Aghabozorg, 2013: 50).

The initial idea of industrial heritage was in the mid of 20th century. The beginning issue about the values of heritage was a reaction to the demolition of several industrial buildings in England. Later, efforts were made to recognize the effects of industrial architecture heritage. The industrial heritage includes the remnants of culture of the industry which has practical, architectural, social or historical values. The emergence of industry in Iran during the contemporary period and the industrialization of the country since the Qajar period and reached its peak during Pahlavi period which brought about a form of architecture that had no previous records (Hanachi, 2014: 7).

The integrity of cultural identity of historical-industrial cities has been worth preserving this valuable resource. The pioneering countries in conservation have considered protection of industrial heritage as one of the development models and part of cultural landscape. Post-industrial areas, in spite of their unfavorable conditions if correctly recycled can be considered as a development stimulus for their peripheral texture and possibility for renewal of metropolitan city (Farahmand, 2011: 25).

The industrial buildings classified within the industrial architecture heritage framework because of relatively large aggregation, location in specific areas of the city and flexibility of the maps, and modularity of its structure has the high ability for land use change and utilize as public and urban service center (Mahdavinejad and Mansouri Majumerdi, 2015: 22). According to scientific and economic aspects their preservation is important. Investment and reuse of industrial resources (especially cultural use) can be an effective tool for economic and cultural growth and job creation (Florentina-Cristina, George Lauren, Andrea-Loreta and Constantin, 2014: 163).

Industrial heritage is an important part of tourism based on the experience of places and activities, and shows the historical, cultural and natural resources of certain limited region and offers and opportunity for feeling, experience and perception of tradition for particular heritage for exploring the history of people or the country (Khumalo et al, 2014).

In 2003, the international commission for conservation of industrial heritage (TICCIH) in the city of Nizhny Tagil, Russia proposed the industrial heritage conservation prism nomination on the UNESCO World Heritage list (Cho and Shin, 2014). Nizhny Tagil prism approved with the advice of ICOMOS and TICCIH (Romeo et al, 2015: 1306). This prism is currently the most important international achievement for the conservation of industrial heritage. In this charter it emphasis the record and archive of documents and designs of the industries. This charter also references the industrial remnants which have historical, technological, social, architecture and landscape values (Cho and Shin, 2014: 72).

Recreation welfare services and close examination has been a phenomenon that has been since long in humans which is still prevalent with respect to socio-cultural, economic evolution. Iran has

been among the ten important focal points for the formation of human civilization in the world. The first civilization discovered on this land dates back to the 5th Millennium BC (Mahallati, 2001: 270). In this regard, designing some of the requirement of cultural recreation welfare complex using the capabilities of industrial heritage and creation of various platforms, equipment them to improve social interaction, establish sense of place among the audience, optimal use of the existing space, and the design of extensions with respect to structure and construction date of the original building.

In this paper, the researcher seeks to percept the principles and concepts of industrialization from the perspective of preserving the values of historical heritage of Yazd city (such as abandoned spinning factories) to change the land use and revitalize the urban quality indicators in architectural design of Yazd. Also, to design and integrate other structures necessary for recreational welfare service complex to reconcile and align between industrial heritage and preserving the vitality of the city of Yazd and establish the urban identity in the minds of audience and tourist.

## **2. Literature Review**

The heritage of industrial architecture as stated by international institute is something that has been left out from the past and can be used in the future. The best way to understand the past of societies is the architecture of the heritage (Fan and Xu, 2013). If culture is considered as a factor, the changes made in the natural areas and cultural landscapes are the results of this factor (Chen, 2013: 116). With respect to the changes in structure of culture and industry from various aspects and considering effective factors such as changes in society, and economy of society; the industrial spaces must undergo changes to response the needs of new industry or because of not responding to the needs should be abandoned or face damages in worse circumstances (Yanf, 2013: 138). The architecture of industrial heritage are rarely limited to a single location or isolated area, which is usually seen with wide perspective containing a set of sites related to each other and evidence of the factor of production, transfer, organization, and other industrial process (Douet, 2012: 48). The type of value considered for this building should be evaluated completely at macro level and scrutinized at sample level. The heritage of industrial architecture with exception of the fact that the entry of industry in the country in terms of type of architecture is an expression of architectural features of this period especially the manner in which architecture and Iranian architects interaction with important method (Henachi, 2014: 7). Recognizing the values of industrial architecture heritage helps the scientific management of cultural industries, as the integration of industry and culture reflects the new need of development in the cultural industry and as a communication model for interactive development for cultural heritage service (Parvizi et al, 2015). The industrialization path of culture to realize the values of industrial heritage includes economic tourism model, conference and model exhibition, art and creation of economic assembly models and the regeneration of urban culture (Xu and Cao, 2012: 2).

To utilize the industrial heritage and its conversion to a recreational cultural welfare complex must consider the environmental considerations in recreational cultural welfare complexes such as light, roof, windows, edible water and amenities for the use of sanitizer water and well water for shower and sanitary facilities and creating in the preservation and development of green space. Also, considering the recreational cultural welfare complex in the flow of spatial public cultural community so that the audience unconsciously in proximity to the culture and customs of the past historic city of Yazd and to preserve the relationship of young visitors with culture and industrial heritage and customs of this city. To conduct exhibitions as a venue for the presence of people in public space that has led to the introduction of the industrial heritage of Yazd to visitors and increase the interest of preserving and restoring more samples of this heritage among the audience.

An educational environment considered at the exhibition encourages the clients to accept the cultural and industrial heritage as an important part of the city culture. The complex be utilize by different age group audiences and their needs in physical and group activities and entertainment will increase their creativity and experience and other issues that requires adequate knowledge for designing base.

After confrontation with the subject, the main area considered for the formation of theoretical foundation of the design is the type of behavior and establishment of the relationship of researcher with the location of the design. In this regard, the following can be considered as the result of architectural design:

1. The development of building from its background, identification capability of the location of project and its utilization in establishing a logical relationship between the building and base is revealing.

2. Considering the research approach (preserving the values of industrial heritage) and identifying the most important parts of the site and locating the main space of the complex, these elements are considered as positive elements in the composition with the recreational cultural welfare complex.

3. Small and large space combination are considered in design and classification of spaces in the existing areas and proper space interaction among them is effective in creating a balanced composition with the design layout.

4. The orientation of various sections of the complex with respect to visibility, landscape and appropriate skylight gives an opportunity to create an acceptable and quality space.

5. Paying attention to the adjacent neighbor of the design and their impact on the orientation of space in terms of features will be effective in creating a balanced and environmental friendly complex

### **3. Methodology**

The study is an applied theoretical research with qualitative and quantitative methodology. The related data to design the recreational cultural welfare complex has been collected relying on the preservation of the values of the industrial heritage, library resources (books, thesis, publications, article, etc.) and internet resources, survey and documentations. Also by using field method the analyses of the site (textile factory of South Park), recording the observations, photographs, interviews, exchange of expert view. Finally, the obtained information is analyzed to achieve the result and goals.

#### **3.1. Case Study Inside and Outside the Country**

Change in the land use of Volklingen casting industry in West Germany near to French border converted to a museum site. In fact, by converting this industrial historical site to an updated site provided services to people of the region and the tourist. This made it possible to achieve financial benefits along with the preservation of existing facilities. This heritage as a memory and symbol of activities of this region in the last two decades was preserved and transferred to the next generation. This issue of converting the land use into an Iron technology center offered exhibition and educational opportunity.

Another example is the Tate Modern Gallery of London that was initially a power plant factory on the edge of Tata river of London and in 1994 after extensive examination it was converted to museum and gallery. The Citrieon park of France has been built on the remains of three factories of

ammunition factories, bleaching detergent factory and machinery factory. The examples from Iran is the Iqbal factory of Yazd which is the first textile industry factory of Yazd and now renovated as science and Technology Park. The Saadat factory due to its location in the city center and residential area, the machinery was transferred to the industrial complex and the building has been renovated and utilized as handicraft exhibition space and textile production of Yazd. Some other examples are the leather production of Tabriz related to early Pahlavi era and later transferring the equipment out of the city and converted to Art university of Tabriz. The restoration of Pardis complex began from 1997, and the land use of eroded buildings was changed to an amphitheater, administrative building, gymnasium, self-service area and library. The power plant factory and sock weaving Tajaddod built in 1922 was converted in 1997 to a wildlife museum.

#### 4. Study Area (Textile Factory of Janoobe Park of Yazd)

Based on the conducted studies the site to design the recreation cultural welfare complex is the South park textile factory in Yazd which has been the left over heritage from the industrial revolution and memorial to the architecture of Pahlavi era which was built based on the German style of architecture. This factory is located on Kashani Street near the mirror museum opposite Haft-Tir park in Yazd which can be restored as a recreational cultural welfare complex.



**Fig 1** South Park textile factory site on Kashani Street (source: www.googlemap.com)



**Fig 2** Part of interior and exterior of the complex

## 5. Discussion and Conclusion

### 5.1. Design Process

The creation of work of art has particular importance but sometimes how to follow the path and the manner to reach the result is important. Therefore considering all design resulted issues has not been satisfied with initial sketches. The desirable design has been achieved by testing various ways and methods.

### 5.2. Initial Ideas

This is the first step for design process that includes cognitive drawing related to subject without considering the design site location. In these sketches an attempt other than designing the complex was made to conserve the industrial heritage for which ideas related to the design approach was considered such as form, texture, light, skyline of the city of Yazd, positive and negative spaces and some other details such as unity, movement and static efforts of the researcher with a combination of nature with architecture.

The site analysis and studies led the design with two main perpendicular axis and these two axis are the memory of the military architecture of the Pahlavi era. The longitudinal axis of the design is the remembrance of soldiers of the military guard. The first design idea was a systematic structure, preservation of the concept of industrial architecture with respect to the site location with the theme of local and traditional architecture of Yazd. In fact the aim of the concept to identify the position of industrial architecture in combination with green space to help modern and contemporary architecture of Yazd as well as observing the principles of traditional architecture in designing the recreational cultural welfare complex of the South Park of Yazd.

### 5.3. Understanding and Analyzing Design

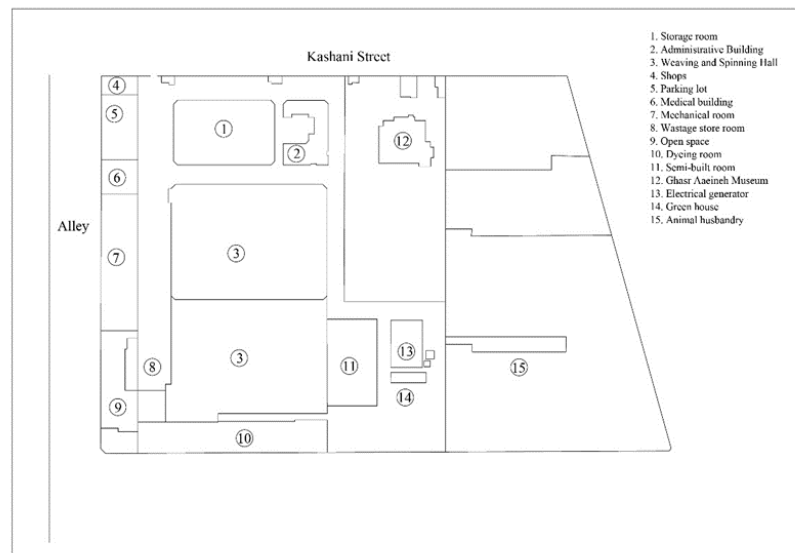
Considering the site location at different scale and examining the facilities, skills and its capabilities has special importance in architectural design. The site location with its features such as neighbors, natural conditions, axes, etc. has effects on the design. The awareness of the designer of these effects and an attempt to better understand the site location has positive influence on the design process and for shaping the design idea.

With the knowledge and analyses of the site, many ideas were derived from the initial design found direction. Identifying some of the capabilities with respect to the cognitive preparedness from previous stage was quicker and easier. The different stages of design are as follows:

*Step1:* In the first step, the hierarchy of reaching the building, location grading the spaces depending on closed, open or semi-open spaces. After alternative sketches given it was concluded that the entry to the complex till the cultural area of the design, a pedestrian and gallery space was considered in the design. The aim to design this section is to allow the audience navigates from the route visit the storage hall and knitting and spinning hall and to reach the designed complex.

The main entrance to the site to attract the visitors is through the existing entrance to the historical monument. There are existing buildings on site which are utilized such as municipality building or buildings with historical values or building that can be used after a bit of restoration work. The parking lot is designed on the street side to prevent the site from intrusive noise. The pedestrian has a deep perspective and after passing through will access the coffee shop on the right. This coffee shop was designed in way that the customer while sitting inside has a good view of the surrounding space so as to prolong the life span of the space. The designed spaces are children play

area, preparation and storage space for food, order counter and sanitary space. On the right of the restaurant is a separate entrance designed for people who prefer to visit the restaurant and finally access the complex.

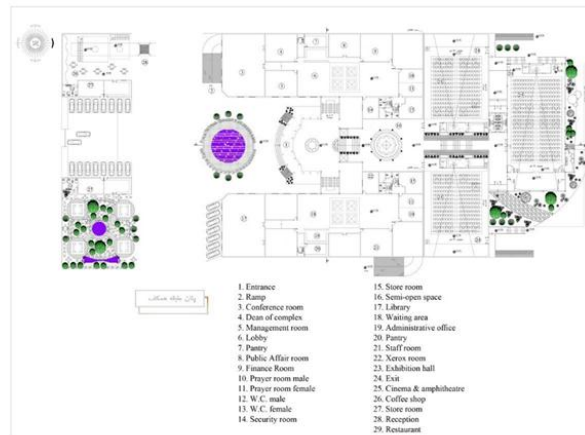


**Fig 3** Existing building hierarchy

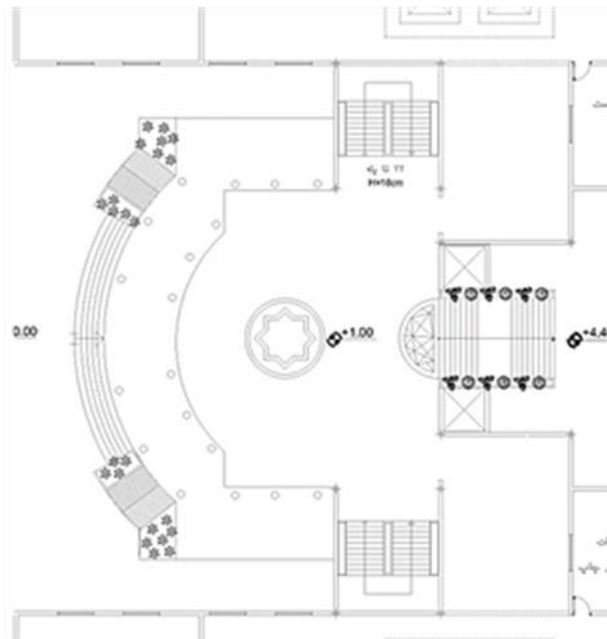


**Fig 4** Proposed design for hatched area

*Step 2:* The concept for the entrance and gateway to the structure has been taken from soldiers of military guards of Qajar and Pahlavi era. The columns at the entrance bear of the entrance.



(a)

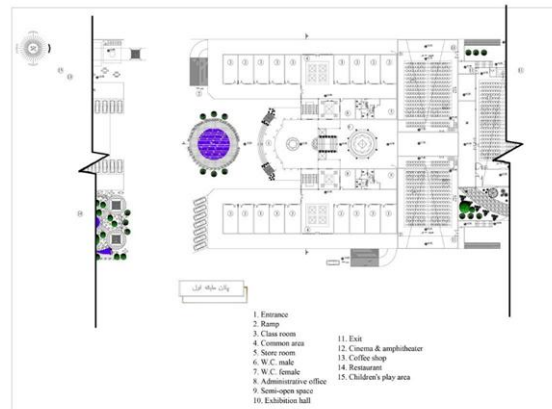


(b)

**Fig 5** (a): Ground floor plan of the complex; (b): Entrance and gateway to the building

*Step 3:* In the next step to preserve the structural system of industrial architecture an attempt has been made that at the turning point to select the area, architectural elements were the design indicators such as central courtyard, stairs, ramp, etc. These indicators were located at the intersection of the two main axis of the central courtyard which is the characteristic of local architecture of hot and dry climate particularly Yazd city.





**Fig 6** Architectural elements on the main axis of the site

After passing the gateway and entrance to the cultural complex, the audience at the intersection point of the main axis of the building can move to several directions. This path provides navigation and determining the route for the audience. The administrative block and educational classes on the upper floors on the two sides and on the opposite side is the amphitheater and multipurpose hall. While passing through the path to the hall the audience other than passing the ticket counter also senses the spatial diversity and later reaches the amphitheater, hall and gathering area. The building has semi-open spaces from where the audience can view the surrounding area.

## 6. Conclusion

The excellent meaning and its origins has kept architecture updated. The work of Iranian architecture which has taken place over the years, but because of the existence of strong principles that are rooted in the Iranian beliefs cannot be separated. A special concept has been considered for designing the recreational cultural welfare complex, developed due to human desire and revival can be achieve continuity stepwise by the designers of the next generation.

The present study, by recognizing the features of industrial architecture and factors such as culture, interaction, education and society and restoring its value in the city of Yazd has led the researcher to the goal. In a comprehensive definition it can prevent the destruction and damage of these structures and to preserve it and to introduce rich and origin of architecture of Yazd in the framework of recreational cultural welfare complex design. Considering that the design is a combination of modern architecture pattern of the past Yazd city and its design is based on the utilizing the industrial architecture along with recreational cultural welfare complex which is a social, cultural institution that can introduce Iran's industrial heritage to everyone. On the other hand, recreational cultural welfare complex with various dimensions of scientific-cultural and recreational educational attraction is of great importance and can show closely the industrial heritage to the visitors and audience of Yazd city.

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