Museum Park of Science and Technology with Focus on Social Interaction Case Study: Babol City

[1]Ali Asghar Esmaeel Pour Roshan and [2]Mozhgan Firoozi
[1]Department of Architecture and Urban Planning, Tehran Branch,
Islamic Azad University, Tehran, Iran
[2]Department of Architecture, Babol Branch, Islamic Azad University, Babol, Iran

Abstract: Development and comprehensive support of policy-makers and officials in the field of developing science and technology parks and incubator, in addition to adopting new management practices all fields should be provide to achieve these goals. Obviously, eliminating the gaps betweenuniversities and other sectors such as industry, agriculture, health, etc. will facilitate the transfer of technology and knowledge through these centers. The parks of science and technology to accelerate the growth and development of the knowledge-based economy. Science and technology parks as research and development units, can remove lots of problems and improvetheir conditions.With an overview of the activities of these units can be realized that the best of these units, however are not known. One of the models proposed to solve these problems, the use of intermediary organizations and institutions in the research cycle to the market through the development of Science and Technology Park can be fulfilled. Science and Technology Park has major role in the development of technology institutions and professional research centers. Meanwhile, research and development units in such an environment make communicate with different people in society possible. This study examines the state of science and technology parks and interaction in society.

Key words: Science and Technology Park, interaction, community, social interaction, society

INTRODUCTION

The issue of the relationship between man and environment and mechanisms of this relationship and activities based on the principles of architectural and design environments were at the center of attention of designers and researchers in the field of architecture and design environment. To search for such a relationship of human cognition and features a living space including natural and man-made and more importantly how the relationship between the two main factors, the designers were (Lang, 2010). Today, in different countries museums show the monuments, an thropology, natural, animals and wildlife and history of that country. Culture and civilization of each nation is known through the museum collected objects and items. One way to understand the past and the way of life of people is visiting the museum which also has educational aspects (Nafisi, 2012). In order to achieve the country's development objectives, the role of universities and research centers in creating social institutions that interact with these centers is very effective. Therefore, management of the centers in which all researchers are without concern in the scientific and economic, seems mandatoryfor society.

PROBLEM STATEMENT

By looking at the museums in the nation, good understanding of the culture of the nation can be achieved. Everyone knows that samples are collected by museums represent the nation's civilization. The museum is not only an educational and recreational place but a place where the unique collection is preserved for posterity. Iran is one of the world's greatest civilizations and cultures and for thousands of years our wise ancestors, culture and civilization has been founded that despite the tremendous damage and harm this country must be heard and known and most importantly of all, known to the public.

Due to historic city of Babol and cultural Mazandaran Province and in addition the long history if the province

Corresponding Author: Ali Asghar Esmaeel Pour Roshan, Department of Architecture and Urban Planning, Tehran Branch,
Islamic Azad University, Tehran, Iran

and city in the field of culture and art of the people of this country, the Museum of Science and Technology can be the city's cultural requirements to take an effective step towards developing the culture and rituals of Babol City and Mazandaran Province as well as communication environment for social interaction.

THEORETICAL FOUNDATIONS RESEARCH

Museum: Museum of Greek root words (Mouseion) means the Muse goddess of art and industry place of life is adapted from ancient Greek mythology. English language taken Museum (myoo-zee-uh m) pronunciation French taken the Musee.

Around the decade of 1290 AH French pronunciation museum has found its way into Farsi. Its history goes back to the Naser Edin Shah Qajar trips to Europe and see the land and his decision to build similar museums in Tehran and the Royal Castle Museum for a (Nafisi, 2012). International Council of Museums ICOM Cultural Organization, the United Nations Educational, Scientific and UNESCO in paragraph 3 and 4 of the constitution of the most comprehensive definition of the museum, says: museum institution of permanent and non-target material that its doors open to everyone and serves the community and it works. The museum remains the search for evidence and the evidence of man and his environment, collect, maintain and use intellectual productivity and communication between these research, especially to demonstrate them to verify and spiritual efficiency (Museum, 2002).

Museum park of science and technology: That is refers to set that by providing and offering land, infrastructure, research laboratories and centralized workshops and legal and community facilities, provide businesses and research institutions in a centralized area.

History museum in the world: In classical times, the word museum applied to the place of the Greek god that was the god of art and ideas where in ancient Greece was the place he began to study science and industry and the name of a hill in Athens that they built a place of worship there (Rajabi, 2011). After World War II (1939-1945 AD) political, economic, social and cultural museums in Western Europe shape completely changed. Fully aware of their educational role of museums in the period sought to provide more education and wider dissemination of the culture within and designee more programs. These programs arenamed "functionalism the museums' and their audiences going to museums progress (Nafisi, 2012).

History of museum in Iran: The history of museum in Iran have stated that the collection and storage of valuables stuffwas for maintaining personal stuffs in Iran and naturally is more private (Rajabi, 2011).

In the 19th century while the existing museums pass its evolution, the number of museums increased rapidly. The institutionalization of museum begins by the establishment a of the Qajar Shah in Golestan Palace Museum. Shah ordered to destruct the Northern part of the palace buildings including the old museum Qajar kings who held the foreign gifts and build museum and Library, and other accessories room (Nafisi, 2012).

Purpose of museums: The aim of the show, without doubt is the most important goal to establishment of the museum. The main task of the museum is to facilitate direct contact between the person and the object. Whether the person is a child or an adult or an instance of an object or an object belonging to a range of natural sciences in the Hall of History of Science and Technology or a work of art it should be noted that.

First, the museum displays objects, not the objects display the museum secondly, what is certain is that the museum is not the only objective means of communication but the basic purpose of inducing the impact of cultural, artistic and visual relationships through direct collision with objects.

The museum plays multiple social roles, such as providing a reflection of the power of the state or religion, portraying the diverse interests of society, provide a cultural foundation in celebration of the city or country and ...

Museums play an even more important role, they are able to awaken the creative spirit that lies within each of us can raise our artistic and intellectual intent (Rajabi, 2011).

Types of museum in content:
- Art museum
- History museums
- Special museums
- Science museums
- Technical and Industrial Museum (Nafisi, 2012)

Social interactions: Social interactions or interaction is the same word in emphasizing the relationship of creatures that need to be in the group or community of their own. The most important of these is the man who no doubt needto have social relations and the scientific level of satisfaction of social interaction. Humans are social creatures andin interaction with other human beings who can continue their social life (Tajbakhsh, 2011).

But since most complex action between human beings created in the same social interactions, the human body embraces all other humans but over time, being community for achieving different experiences cause these belief changing and they allocate filters for their social interactions. Human life would be impossible without interaction and social relations as well as failure to satisfy some needs, such as basic necessities make life hardand unacceptable for him. Social interaction is a relationship between two or more people which leads to a reaction between them and this type of reaction is known to both sides. The relations among the definition are not without meaning. Of course there are other definitions for social interaction for example, social interaction and communication can be a physical issue, a look, a conversation and communication between people which requires the definition of appropriate events and activities and the role of people in environment and their membership in groups and social networks.

Factors affecting social interactions: People based on their interests, formed social relationships and based on expectations, forms their norms and specific roles. The presence of a person in the place with others is strong factor for staying decision in the place. In this regard, people may even look for places where people with similar characteristics in terms of class, ethnicity, religion, economic groups, life style, education, income and race the same way children are educated. However, the homogeneity of the people, incentives, meetings and increased interaction with the physical and socialenvironment and thus promote attachment to the place while the location of the heterogeneous social opportunities to people both rich and free of social interactions. In fact, the experience of public environments with the potential capacity in the first stage of the equal opportunity to establish social actions (even unstable and fragile) are available to all citizens (Akbari, 2009).

Then, after the "coalescence" of social interaction, differences in levels of social, economic and cultural which shaping varied behavioral patterns: predispose shaping stable social interaction (Qanbaran, 2004).

Masoudi (2009) knows the public area place in which the individual express themselves and communicate with others. He attributes this area gathering individuals together and discusses the public interest; this social phenomenon should be available to all citizens.

Lang in the book of theoretical genesis says that if people need to have social contact they provideit in any environment. Social interaction between meeting the human needs of affiliation and sense of place that is a necessity because of the desirability of social interaction.

Therefore, every opportunity to achieve such an order has been assessed. Another reason is that activities such as interacting with others and see the activities of the people by providing social backgrounds and socialization help the growth of the human person.

COLLECTION TOOLS AND METHODS FOR DATA ANALYSIS

The study is designed to investigate and ultimately a cultural association that makes social interaction, the research method essentially based on the study of written relevant sources, data collection based on literature review and by descriptive research methods with qualitative study and comparison of samples and field study will take place. In addition to the written sources to collect information from documents and old books also have been usedto review standards and considered criteria on considered site adesirable and efficient plan offer. Data collection by use of books and written sources and in some cases by way of field shots, convertible and interviews will take place. It also analyzes the data in the form of images, tables, lists and research design principles lead to a cultural monument.

ARCHITECTURE FEATURES COMPATIBLE WITH THE CLIMATE TEMPERATE AND HUMID

The most important characteristic of humid temperate climate is abundant rainfall in all seasons. The precipitation during the warm period is more than cool and precipitation in summer is mainly storm. Other features of this airis high humidity climate. The relative humidity in the area is 80% (Kasmaee, 1975). Moderation of temperature and low temperature difference between night and day and the seasons of the year is cause of high humidity in the area. Because of the high humidity weather and natural drafts and ventilation are requirements and the needs of regions considered mild and humid.

PLAN DRAWINGS OF TEMPERATE AND HUMI D REGIONS

Buildings in the area are open plan and more extensive physical form geometric shapes long and narrow to provide curran weatherand natural ventilation in all parts. Extension and expansion of buildings along the sea (along the East-West) has provided the highest level of the sea breeze. With wide openings to the sea, breeze of the sea to the beach flows inside buildings.

Form structures and humid temperate regions: Because of the high humidity buildings have eccentric form. Walls and fences are short not to prevent air flow. Because of the high humidity not any part of the building is in the basement because surface water in the area is high in addition the basement ventilation is impossible. In connection with the intensity of sunlight and its effect on the form of buildings in these areas there is more freedom because the intensity of sunlight on the walls of different direction (even the walls of Eastern and Western) is more in these areas than the other regions. As a result, in these areas free-form and even cross-shaped building form can be used, although the form of the building must be along the East-West axis elongation.

Openings and humid temperate regions: In this climate the area of the openings is more than any other regions. With regard to the specific circumstances of the region the openings and are installed inall directions and in front of each other till natural ventilation reach to its maximum. South windows are smaller than North windows because exiting caused pressure and intensity of the wind increases.

Covered ceiling and humid temperate regions: Because of the high rainfall ceilings are steep and steep sloped, balconies around the roomare wide and covered to protect from the rain. Theareas usedto work and relax in the many months of the year and in some cases are used for storing agricultural products. Steep covers create by using ceramic materials, Galli and …Steep ceilings continue towards the West near the ground in some areas to prevent the influence of tilting the rain into the building.

Walls materials in temperate and humid: Building materials used in the body and body building walls of lightweight materials with low thermal capacity and low thickness is selected (it is better to use light construction materials in this areas because when the daily temperature fluctuation of air is low, heat storage is not important in addition heavy building materials increasethe impact of air

conditioning and the curran weather that is one of the requirements in these areas wooden materials are mostly used in exterior walls.

However, in some regions and villages of the province mud brick walls used in construction but materials must be selected in addition to its resistance to high humidity to prevent air from flowing into the room.

Selection for placement of buildings: In general, choose to establish structures depends on factors such as the state of nature, the need for privacy, control and reduction of noise and two factors wind, sunlight. In the mild and humid climate is better to established building in the way line perpendicular of the main facade of the building be 17.5° to South East.

THE SITE STUDIED

Analysis site: In this context, the structure and characteristics of the status quo in terms of location and layout of the museum park site in the city of Babylon, region 7, physical characteristics and dimensions of the aesthetics, internal and peripheral functionality are checked.

Site project at the urban scale: Region 7 is one of the relatively new areas of the city of Babol that is located in the Northern part of the city. This area is included of 62 ha and about 4% of the city. District 7 is located geographically in the Northern area of the North of the city Amirkala and the East in region 3 and is limited from the South zone to region 5 and West zone to region 6.

The most important physical characteristics of the region 7 can mention. Its location in the North of the city on the one hand and on the other hand the deployment of uses (sports entertainment) and (administrative services). This area from the North to the boulevard Babol- Babolsar (Amirkala) and from the West to the main belt of the South-Western city of Babyl on and from South to ring centered named Hamza Square in the center of the neighborhood is generally located (Fig. 1).

Cultrual-religious
Pleasure
Commercial
Bank
Sanitary
Contex
Administrative
Educational
Green space
Service

Fig. 1: Uses the project site analysis
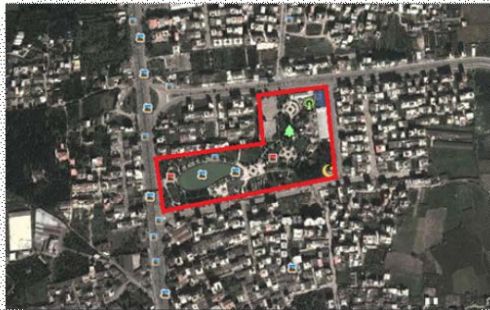
Fig. 2: The project site

Fig. 3: Aerial photograph website

Fig. 4: Northern facade

Site project on a regional scale: Land projects is located in region 7 on the street Noshirvani near the Hamza Kolah square (center of region) and regional access to the site is via the Boulevard Noshirvani in the West, Iran Behzad town in the North, the Streets Basij 21 in the South. Only users with direct, immediate connection with this site is residential neighborhood of the North and East and South (Fig. 2).

Internal review site: In order to investigate the position and location of the proposed area, the internal view of site is shown in Fig. 3. As shown in Fig. 3, the site range and its shape is highlighted by aerial photograph.

Fig. 5: Ground plan

View and perspective: Vision and perspective of the site, mainly to see the r surrounding buildings which is this way: the site mainly landscapes including green area and new trees (Fig. 4). The surrounding landscape in the North and Southeast is to see the adjacent site. Crowded street located in the West which is the main landscape of this site.

IDEA OF DESIGN

About design ideas the matter that can be said is the kind of cultural area and the relationship of people to the cultural area communicate and interact with people in society that areas in the present society is not very suitable for the above purposes. The reasons for the creation of a cultural center with a museum park science and technology for better communicate and promote the cultural style of the people according to the case that his museum park has a modern style as well as elements of vernacular architecture that includes: sloping ceilings, wooden elements, saqanfar, gorbe ro are forces to be applied. About the concept and design relationship with the land it should be noted that the use of written plans for the promotion of mobility project on the use of themes from four directions to sites around the intended design reach central corede sign in fact expresses the idea that from different cultures that connect from four directions to thinking, thinking and unity which is the center of social interaction. The idea of centralcore is taken from idea of the human brain form which is like glob. Which represents the interaction and intellectual people with different customs and culture at this point that makes communication with the surrounding atmosphere and the creation of solidarity and the social interaction.

PLANS

In order to manage the site internal location and space, its ground and first floor plan are shown in Fig. 5 and 6, respectively. Detail dimension of space and its design are provided in the plans. In addition to imagine the proposed area and its design, its perspective view plan is presented in Fig. 7.
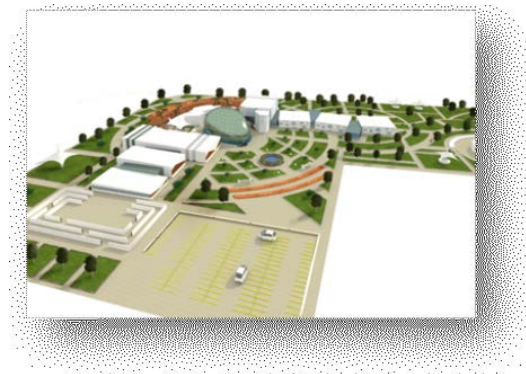
Fig. 6: First floor plan

Fig. 7: Images of the project

CONCLUSION

According to investigations conducted and the results it can be said without doubt one of the main ways of cultural promotion insociety is developing museums and centers of science and technology parks. System and cultural centers are not able as wellto meet the needs of individuals and numerous quantitative and qualitative proceedings should be taken to use today's generation power for the country's future development. Areas and park facilities museums and their relation to the current needs and demands of society are mattersin many cultural centers which are not considered desirable and especially the last topic of interaction, culturalareas for solidarity and social interaction based on the needs and demands of the community are importantthat the effects of neglecting in the executive and professional centers is visible. Obviously the intended idea is modelingon the international level that should be raised at the community level thinking andusing the results of these center's research in our country. In discussing the formation of a cultural center which is the interaction between people there are several factorsthat the present study was to investigate the factors and their work to offer a fundamentaland appropriatedesign of a cultural center. In addition to the above problem, neglecting the public centers including a cultural center which could engage the people seems inevitable and should be considered.

REFERENCES

Akbari, 2009. The role of social capital partnership. Master's Thesis, Tehran University, Tehran.

Kasmaee, M., 1975. Cultural heritage, Tehran, Iran Cultural Heritage Organization. M.A. Thesis, Faculty of Management, Tehran University, Tehran.

Lang, J., 2010. The Creation of Architectural Theory (The Role of Behavioral Science in Environmental Design) Translated by Alireza Eyni Far. Tehran University Press, Tehran, pp: 46-85.

Masoudi, K., 2009. The place of social interaction, Tehran, Iranian municipalities. M.A. Thesis, Tehran University, Tehran.

Museum, N., 2002. Tehran, research organizations and universities textbooks humanities and cultural heritage organization. M.A. Thesis, Tehran University, Tehran.

Nafisi, N.D., 2012. Journa Museum. Vol. 11, Cultural Heritage Organization Press, Tehran, Iran, pp: 38-62.

Qanbaran, A.H., 2004. [Iranian Bazaars in the Change]. Khak Press, Isfahan, pp: 69-103.

Rajabi, Z., 2011. Garlic Andyshh Ha in urban development, Tehran, Utopia. Master's Thesis, Tehran University, Tehran.

Tajbakhsh, 2011. Social capital, Tehran, Shirazeh. Master's Thesis, Tehran University, Tehran.