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# Home theater design with attitude on Biophilic design

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### ABSTRACT

The nature of the achievement of the best architects of the Lord is often the best source of inspiration for architects was. Nature in many of the strategies leading to architectural creativity affects. Nature is always omnipresent and inevitable and classification as a very powerful tool to inspire is. Its presence in metaphor, imitation, variability of form and materials is obvious architecture. Dependence on space architecture has deep roots. It expresses the need for understanding human social relations, to gain rule over the world of events and event concept and stems. Urban spaces as areas of social life, places for sociality and the official dealing with others undeniably linked with social relations. Space, every aspect of your life, including relationships, patterns and styles of life, identity, how to deal with will take time and it is effective. Holding street performances in public spaces of the city that has always been the basis for the expression of cultural values of each period, Provides citizens the ability to understand the relationship between social interactions and as one of the most important and least expensive ways to achieve social sustainability is cultural. In this study, we tried to discuss the issue of space in architecture and architecture is in harmony with nature. The project aims to demonstrate the importance of setting up street views. Biophilic home theater design approach can provide the right environment to experts in the field to study and further study of ecological sustainability and the strengthening of social capital with human-human interactions and help man and nature and then acquisition of knowledge and experience necessary step in improving their construction and reunification of man with nature.

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## INTRODUCTION

Throughout the history of the human shelter, housing, the environment, workplace or any sort of built space and put into operation, always a matter of principle and basic structure of the natural elements have been for him. The use of natural forms in architecture is a sign of man's works of creation and its effects. On the other hand forms in the past nature of their effective role both in performance and in the beauty, the sacred in cultures of different nations and ethnic groups have enjoyed. Urban spaces as areas of social life, Places for sociality and the official dealing with others undeniably linked with social relations. The main condition is that the public spaces of social interaction and communication can take place, that's why those spaces that do not fit the context of social interaction and communication of citizens cannot be considered urban. Because of space, all walks of life, including relationships, patterns and styles of life, identity, how to deal with the time involved and the impact it well. Even in thinking and how to think, the space involved. Therefore, it is important to address the issue of space in architecture. Holding street performances in public spaces of the city that has always been the basis for the expression of cultural values of each period, Possibility of establishing a mutual relationship, the interaction of citizens and provide social interaction and finally social capital - cultural street as citizens and as one of the most important and the most economical method of achieving socio-cultural sustainability is [1-3].

## **RESEARCH METHODOLOGY**

According to objective criteria of research( committed, functional and fundamental )of the type of qualitative research, to find solutions to various problems and issues with the scientific nature of runs and to provide suggestions for better planning According to the findings. And comparative analytical

method based on the study design and results of past work and because the relationship between the variables studied the correlation and not a science. Because the impact of the independent variable on the dependent variable at a point in time studies and the results obtained for the time of study is correct and may with time and further research in order to gather information about Think Biophilica result of changes in the theory and theoretical foundations of library resources such as articles, books and theses were related. The information related to the project site maps were collected photos. After the layout design software 3D Max, site analysis study done.

## Site analysis and the formation of the building

Due to the fact that certain space can range anywhere from Tehran respectively. The situation is not very broad range, but with sufficient visibility and access from different directions. Where both access and can be mounted and dismounted to allow it to act as the urban landscape.

Public spaces are primarily academic performance, cultural and entertainment not only in Tehran but also in the whole country, it is necessary to West Town is located in the second district of Tehran Municipality, Has great potential for creating such spaces is. Because this area is more residential context tissue that makes up the site in view of the image (1) is shown. West town or city of Ghods, one of the north west of Tehran. City West in the past, foreigners who arrived in Tehran were accommodation.



### Image (1): Range of Site

In general, the reasons for choosing sites include the formation according to the analysis of the site, respecting the green space, the watch tower near the ground, keep the axis of Last, With regard to light spaces to the south, north-south formation, transfer the walk to the site and visible through the wide stairs, Its contact circulation moving from the two sides, north and south through the roof of the building, In addition to the great urban architectural projects as an element of a forgotten element in the city of Tehran. Sunlight and air flow are two factors affecting the orientation of the building. With the placement of these two factors can be avoided and the desirable properties they used their harassment. Of course, numerous other factors such as land, access, visibility and placement of the buildings also have a direct effect. So for more flexibility and enables optimal placement of the building of the factors to acceptable building will be ranked in order of preference. In general, the analysis of existing land use, population density, multiple accesses, the number of clients and the demographic structure in accordance with the scientific, cultural and recreational encapsulated in design to create a home theater. Site analysis includes a review of the following items which are presented below:

1) uses within the site, 2) hierarchy of access, 3) examine a range of sites, 4) The tissue around the site, 5) review of site access, 6) Check the aesthetics North and South America, 7) The buildings overlooking the site



Image (2) applications within the site

Image (3) the hierarchy of access



Image (4) examine a range of site

Image (5) the tissues around the site



Image (6) the access to the site



Image (7) reviews the aesthetics North and





Image (8) the buildings overlooking the site

## Web design

Biophilic a concept that has been chosen for the concept of the project. The city that work with Biophilic great opportunity to leave the house to enjoy nature provides. Biophilic of us to spend more time in the trees, birds and sunlight encourage and sounds of nature as much as the visual experience and visual value. Biophilic on how the concept can be mentioned in the project on the teaching of nature and biodiversity will be many opportunities to join others in learning and enjoying the nature there. In physical and social infrastructure in the vicinity of the city dwellers have a role to nature in this project through the home theater design that took place with preserved natural environment of the site, this approach has paved the way for the experience of home theater, you can also create high economic value to bring balance between urban infrastructure.

The design process consists of four steps that will be discussed in detail to explain: The first step: classify the land in order to obtain the slope of the site design layers



Image (9) classify land based on proportions and slope of the land the residential tissue around the site

Image (10) associated with



Image (11) The axis of the transmission site and walk through the wide stairs

The second step: to preserve the natural environment has been extensively site

In the later part of the construction of the replica, it is trying to protect the environment in addition to the old site, Create see common sense- suitable vegetation in all the site done. Replica designed based on the natural axis on the Image (12) visible.



Image (12): Replica designed based on the natural site

The second step: the production of different spatial variations based on the classification and analysis of the site



## Image (13) open and semi-open and closed spaces defined by gallery

Step four: the production of architectural and design choices favorites Production of architectural form, based on the view of the city from within the space of social networking sites in order to produce the best display mode the collection is based home theater, an examination of the social state as shown by the sketch so that it has produced good form.



Image (14) sketch social communication connect







Image (16) sketch of the sample performance spaces the motor

Image (17) sketch of the interior of

Finally, with regard to the four-step design process designed replica of choice for image (18).



## Image (18) replica selected design Standards

The complex is designed in three plans, plan ground floor with a site plan, floor plan, floor plan of the basement, the plan consists of six main sections in Figure (19) to (22) is visible.



Pictures (22): Plan basement

Image (21): AX Plan

Design recommendations for site design is as follows:

- Libraries should be commensurate with the scope and number of its clients. Room and space should be designed so that children and adults will be encouraged to spend time in this space. It is better to large spaces, expandable and versatile and are organized horizontally, and an entry is also attractive and inviting. Study and work rooms must be easily accessible. Access routes should be controlled and monitored reading rooms and have input and output.

- Other components, is theater. In fact, multi-purpose halls for cinema, theater and lectures. In lecture halls motor routes in the middle of the hall, and it is not transferred to the corners. In the projection room, a space of 1 meter and in addition, the projector acts, 80.2 meters height space with air conditioning and sound insulation in the wall shared with the theater is required. Screen size varies according to the width videos. film width is usually 16 mm, 35 mm and 70 mm. Its distance from the seat height of the screen and the audience should be such that the angle of the front row seats to the middle of the picture is less than 30 degrees.

- Major performance space needed to work in the administrative department employees. Open plan design is considered in this section. In open plan offices, workstations in a specific location and using office furniture and partitions are classified. And other private offices such as room and room management placed in enclosed rooms. The design recommendations for parking, many different ways to provide access to upper floors or ramps down through there parking. The maximum slope of ramps is 15%. In high-traffic routes or top 5% slope of a horizontal direction over more than 5 meters is required.

- For restaurants, the main spaces include a restaurant dining hall, warehouse chairs, cookware, storage containers and container funeral home, warehouses, beverage and food can be. Dining tables fit width between 80-85 cm. Round or hexagonal and octagonal with a diameter of 90 to 120 cm is desirable to eat 4 people.

- Pele as one of the coating materials, the relationship between uneven surfaces and makes possible. Urban Design for the safety and comfort usually a minimum width of 1.5 meters steps to consider. Each flight of stairs should preferably be at least 3 platform. The maximum height of the stairs in public places cities, 150 mm but more appropriate size between 80 and 120 mm.

- Escalators for the movement of people constantly. Out of this as the stairs are not designed for emergency escape. Escalators are designed with angles of 30 and 35 degrees.

- Implementation shortcuts or moving walkways transmitting devices people are horizontal or low angle. It is characteristic that the moveable carriage kids, wheelchairs, carts shops, bike and packages have bad times with low probability risk of accident and paving.

### Structures

Urban communities are facing many challenges in relation to the health of citizens. Biophilic space to create and increase positive impact on reducing pollution and improving the environment and finally apply heat. The green roof and green wall of technologies that are used to reduce pollution [4]. Green garden or roof garden based on the operating system, depending on the depth of planting and the facilities required are divided into three main categories: system-wide, centralized system and modular system or plant boxes. The design features a green roof drainage layer. This layer of planting medium and membranes for water flow, water storage and prevent erosion. Rain by the roof, studs on roofs and discharged water channels and two output channels must be provided or an outlet and a place for overflow. Choose a suitable drainage layer, according to the maximum possible is done rainfall since planting and growing environment supports the drainage layer, its compressive strength must be proportionate. Except for green roof drainage layer design also considered two other layers that include protective layer and the roof structure, Membrane roofing or insulation layer moisture. Protective coatings, including coatings that roofing and insulation system from leaks and water intrusion protection and roof structure, membrane roof or insulation layer dampness, Protects the roof from leaking and dripping. Green roof irrigation is done in two ways. The first artificial irrigation in both manual and automatic (both analog and digital) and the second natural irrigation or rain water is the same water supply to the plant through [2]. As well as other structural wall is green. Green wall or living wall (passive and active) wall that is part of it or all of it with vegetation. A view of green, herbal climbing or rowing, while rooted in the ground (in an earthen bed) will start to climb buildings [4].

Given the current situation in the country in terms of green space, water scarcity, pollution and other environmental problems, It is essential to appropriate solutions to avoid increasing the difficulties and the threat that poses to the health of the nation, have been asked to emulate the experience of countries in the use of Urban Biophilic, A suitable solution to tackle the problem of being away from nature and its negative consequences, it is hoped that this kind of design in the city rise. Finally, with regard to the above renders the internal and external home theater is shown in the following figure.



Image (23): External rendering



Image (24): Interior renderings

### CONCLUSION

Biophilic design concept in the design and construction of nature in the city and its residents settlements that connection with nature. The greatest advantage of the townspeople returns and mental health and the human body according to historical observations are always dealing with nature supply. In this study the importance of setting up home theater with street views ecological sustainability as indicators of developed societies surveyed admitted to depict data. Home theater Msabh a street performance in line with the norms of good urban space designed with attitude and implemented Biophilic and try to bring mental health to society. In this design classifying land cover and extensive roof design and arrangement of information in relation to the volumes together and their relationship through extensive steps to create spaces that will be produced by community and objective preconditions and consequences of social relations, is located. For urban spaces as scenes of social life, Places for sociality and the official dealing with others undeniably linked with social relations. This study is based on Biophilic trying to provide a suitable environment so that experts in the field to study and further study of ecological sustainability outcomes as well as to strengthen social capital and human interactions with man and man with nature help and then acquisition of knowledge and experience necessary step in improving their construction and connection with nature.

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