Journal of Engineering and Applied Sciences 11 (2): 256-260, 2016

ISSN: 1816-949X

© Medwell Journals, 2016

## Synesthesia of Isfahan Market and Chehel Sotoun Palace

Houtan Iravani, Mahtab Rajabi, Neda Zamani, Shadi Yazdanmehr, Mohammad Reza Rezvani and Mohammad Masoumizadeh Dehagani Department of Architecture, Ardestan Branch, Islamic Azad University, Ardestan, Iran

Abstract: Synesthesia is the term which means utilizing five senses for better understanding of the space. Using the senses such as sight, taste, smell, etc., we can better understand the surrounding space. In some cases, some senses are used more and some senses are used less. Current research aims at comparing Isfahan Caesarea market and Chehel Sotoun Palace considering the fact that architectural spaces are perceived through five senses. We are going to find which senses are more used in two architectural spaces which are different in terms of usage and why such senses are used. One is a busy and public place as market and the other one is private and specific. How spaces are perceived through our senses? Are all of our senses used or some of them are used? Why some senses are used and in which situations they are more often used? Because various senses are used in understanding different spaces. Presence of these senses helps to have better understanding and perception of the space.

Key words: Synesthesia, Isfahan, Isfahan market, Chehel Sotoun Palace, facade of Caesarea

#### INTRODUCTION

The term Caesarea market is used in Islamic lands and it is applied on the shopping centers where handicrafts are exchanged and produced and there is no facility for night residence. It is a Greek term meaning kingly. This term entered in the culture of Arabic and Iranian lands since the middle ages and it is yet used (Shafaghi, 2011). The term Bazaar in Middle Persian is Vazar and it was used with compounds like Vazarag (marketeer), Vazargan (merchant), Vazarganie (commercial), Vazarbod (head of market) (Soltan, 2012). Appellation of Chehel Sotoun is the number of columns of this place. In Iran, the high number is mostly expressed by the number of forty. However, since randomly the number of columns of Chehel Sotoun Palace is twenty and reflection of the building and columns is clearly evident in the pool, some interpreted it in this way that this palace with its reflection in the water takes concept of Chehel Sotoun (forty columns). It is a field and library study and it was conducted by observation and experiencing the environment and transferring it to the image and photoshop for magnification of the respective points. It was done for investigating perception of these spaces via five senses and exploring differences between two spaces and relationship between senses and perception of these spaces.

### STATEMENT OF PROBLEM

How surrounding environment can be identified through five senses? Do senses act differently in perceiving the spaces? What aspects of the space are perceived through the senses and what is effect of this perception on our behavior with the apace. If we feel vitality and dynamism or more mobility in such space as Isfahan market, is it due to its effect on our senses? With developing these senses in the viewer, usage of the spaces can be controlled?

# METHODOLOGY

It is a field and library study and it was conducted by observation and experiencing the environment and transferring it to the image and photoshop for magnification of the respective points. It was done for investigating perception of these spaces via five senses and exploring differences between two spaces and relationship between senses and perception of these spaces. Using this method, it is attempted to express research concept and investigate and compare spaces by it.

## FACADE OF CAESAREA, ISFAHAN MARKET

Isfahan historical market is extended along the Naqsh Jahan Square to Jameh Mosque of Isfahan. Historic facade at Caesarea and the arc star image on the tile are observed in back sides of the building (struggle between Ahura Mazda and Ahriman and expressions of love). Image of sun on the head and forehead and other designs from one of Shah Abbas wars with Uzbeks are represented. Totally, it is one of the architectural

masterpieces of Safavid era. On both sides of the ancient facade on the roofs of two confectionery market and millinery market, there were two elevated porches. Every morning at sunrise and sunset every evening, kettle drums were beaten from the king little house with a special chant and the king was welcomed with drums and trumpets and cymbals and drum and trumpet. This was a good way which stayed late Majesty's early reign and then it was abandoned many years (Entekhabi *et al.*, 2011). Perhaps armed centaurs played role of guard for merchants and their clients and perhaps they also guarded the treasurer of the kingdom (Fig. 1).

Totality of the market is mostly searched by visual sense. The goods are viewed. We see colors and lights... we see and like at first level. Rhythm of arcs and their regular repetitions due to seeing encourage us to walk and search. Higher height of Caesarea's facade compared to its surrounding and being back to our view invites us to entering the market.

Colors and lights stimulate and encourage us through visual sense. These colors and lights in the background of the market are manifested more.

Although, lights are highly controlled and with caution in the market, they create important element in the

visual sense. Even the highest colour which is used in the market is gold colour which symbolizes luminance and luminous sunlight as if a luminous treasure lies in the dark corridors.

Again it is the strongest sense among five senses which is evident in this garden-palace. Upon entering it via Eastern entrance, one is enchanted by what is observed. It is an exceptional spatial completion. Water Belvidere Sky which multiply magnificence of the space. The solid line in the side of pool and rows of trees encourage the sight toward the palace at the end. As if this scene impresses the viewer by dignity and grandeur intended by the constructor. It takes the viewer. If one moves from the main facade toward the garden, the scene of palace and the image in the water encourage and emphasize the direction of movement. The main focus also specifies direction of movement by the help of the rows of trees in both sides of the middle pool. Thus, a continuous and oriented space towards the main palace is developed and the pool increases spatial optimality of this place (Fig. 2).

Chehel Sotoun Palace was constructed in the time when paintings and images got large and larger sizes and they almost exited book page sizes and were depicted on the larger and more tangible door and walls. Although,

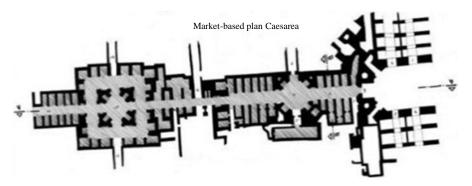


Fig. 1: Map of Isfahan (Isfahan Cultural Heritage Organization)



Fig. 2: Visual sense (soruce of photographs: researchers)

wall painting art has been considered in different periods of Iranian art history, when artists were familiar with the book layout, they have long taken advantage of the modernized image on paper. However, various factors such as effect of wall painting of Western and even Eastern countries, presence of artists from other nations in Iran, order and interests of Safavid kings to making their palaces as similar to paradise and extension of surfaces of the plans caused that it reached to excellence level in Safavid era and it remained a heritage for the subsequent era.

Painting in the eastern side of the building from right to left. It is scene of one of Great Shah Abbas wars with Uzbeks (according to the researcher, this scene represents Marv Taher Abad War between Shah Ismaeil I and Uzbek Shibak Khan).

Nader Shah Afshar war with Hindus in Karnal (extensions after the Safavid reign) and welcome meeting by Shah Abbas II for Nadar Khan, King of Turkestan (this panel is before the panel of Great Shah Abbas banquet) (Fig. 3).

Wooden columns in luxurious and famous forums of Safavid era are situated on stone the foundations. Its example is stone bodies of pair of stone lions at Chehel Sotoun Palace. In addition, winged lions sitting in front of the pool in Chehel Sotoun Palace represents rise of sculpture in this period. Especially, it should be noted that sculptures were means for showing flow of water so that water flew from mouth of lions into the pool. Although, some sculptures are attributed to other buildings, their utilization in Chehel Sotoun Palace represents attention to this building and its decoration. The stone is the most important element in sculpture construction in this building (Fig. 4).

The works are related to those artists of Shah Abbas II reign who were enchanted by European art including Mohammed Zaman, Bahram Sofrehkesh and Ali



Fig. 3: Visual sense-painting (soruce of photographs: researchers)

Quli Jabadar. Panel of Chalduran War which is in Zand and Qajar era's style and "Sadiq Al Va'd" and date 1210 AH is mentioned at the bottom of the panel.

Entrance balcony of Chehel Sotoun Palace, a view of plaster working and internal painting (source of photographs).

**Sense of hearing:** Wind, water slow motion, sound of birds that roost in trees and overall the sounds that we hear often in gardens in addition to weak sounds from surrounding streets are clearly heard in the palace. One of the properties of the palace is its internal and external sameness.

This sense is present upon entering the market, like visual sense. Humming, bargaining, passing by shippers, beats of coppersmith, goldsmith can be felt via just this sense. The first sound which is heard can be regarded as the sound of water fountain in front of the entrance in Caesarea.

Sound of wheel of the carts is familiar and understandable even when it is behind and for caution one should be moved aside.

Sound of prayer in certain times of the day from the mosques in the bazaar can be heard. It is for approximating religion and market. And it is one of the reasons which market men were regarded as religious people. In the old days, sense of hearing was utilized more. Kettle homes transferred important governmental news, night guards transferred news and events in the market using sense of hearing. However, fewer sounds are heard in the today market compared to the old days (Fig. 5).

It starts from the pavement which we feel to goods and dealing with people, distracted carts and even



Fig. 4: Visual sense-sculpture



Fig. 5: Sense of hearing (soruce of photographs: researchers)



Fig. 6: Sense of tactility and touching (soruce of photographs: researchers)

controlled ceiling light with their short moments of heat sensation induces sense of tactility. Or the cool breeze that came from plaza or warehouses is also defined within the sense of touch. The space change from the outdoors to the indoors is somehow associated to sense of tactility.

Seeing the goods also sometimes stimulates sense of tactility. For example, by seeing the cloth one may feel sense of softness, by seeing the metal one may feel coldness, etc., thus it can be said that sense of tactility is accompanied by visual sense (Fig. 6).

Platforms in front of the Caesarea facade are places for sitting and they are regarded as sense of tactility (Fig. 7).

Breeze that touches the face and sometimes the wind, sunlight which shines unobstructed without obstacle. Seeing the water, wet feeling of water, seeing wooden columns and warmth and hardness feelings are senses which are transferred via sense of tactility (Fig. 8).

These senses are experienced simultaneously most of the times. We smell the spice and remember its taste (Fig. 9).

Unfortunately, this sense has no application for perceiving this apace and even the trees of garden do not bear fruits which can be eaten.



Fig. 7: Sense of tactility and touch

The smells which are felt include smell of trees of the garden and smell of colors resulting from art of repair men in the palace (Fig. 10).

Chehel Sotoun Palace: Wide halls of historical Chehel Sotoun Palace is one of the works from the reign of the seventh king of the Safavid, Shah Abbas II and it has been a general place for the king's official reception. Since, date of the building was not found until 1948, thus expressing opinions regarding history of Chehel Sotoun Palace was difficult. However, as a result of attempts in this year, some poems were obtained in the hall front of the palace in two friezes. One of them is shorter on the pink background of the Chehel Sotoun Palace which attributes to Shah Abbas II and its year is determined as 1678. The other one which is longer and its lines are plaster worked on a blue background suggests repairs in Shah Sultan Hussein era.

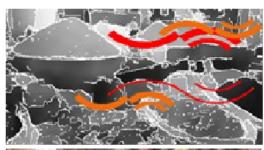




Fig. 8: Sense of smell and taste



Fig. 9: Sense of taste



Fig. 10: Sense of smell

Findings from several research works on Chehel Sotoun Palace denote that design of wide garden of Chehel Sotoun was provided by Great Shah Abbas and a building similar to Pergola with small rooms in the surrounding was constructed in the middle of it. Then, with beginning of Shah Abbas II reign, this building was extended and halls and balconies were added to it (Aghajani, 2013).

## CONCLUSION

All of our senses are utilized in the market and sometimes they are utilized simultaneously. The market is full of life and the senses should be used for touching the life. Indoor corridors, repetitions, stops and sometimes shiny parts of market all suggest stimulating all the senses. Overall, all these senses, the market appears to be safe, from wind, rain and sun. It is a public environment in which people can be easily crowd. The market possesses thousands of color, sound and diversity and to understand all of them all senses are necessary. The market gives sense of security and life while Chehel Sotoun Palace is a magnificent and expositive space where the strongest sense is visual sense. One should use sense of seeing to perceive magnificence of the palace. Seeing tall and high columns represents magnificence of the space. It is palace and it unconsciously suggests its grandeur. Considering the fact that the constructor was ware that strongest sense in the palace is visual sense, colors have been used more cautiously in this environment and even more red colors have been used in the end rooms, even paintings have been painted in bolder manner at the end parts. It suggests highest utilization of visual sense in the space. It seems as if one should be present in this space and it should be seen. Chehel Sotoun Palace instills sense of supernaturalism and grandeur in the viewer.

## REFERENCES

Aghajani, E.H., 2013. Book Wall Painting in Safavid Era in Isfahan. Golden Publication, Tehran, Iran, Pages: 54. Entekhabi, H., M.T. Faramarzy and R. Holoud, 2011. The Role of Urban Planning in Lowering the Vulnerability of the City. Housing Publication, Tehran, Iran, Pages: 23.

Shafaghi, S., 2011. Great Book of Grand Bazaar of Isfahan. Samt Publication, Tehran, Iran, Pages: 98.

Soltan, Z., 2012. Book of City and Urbanization in Iran. Golden Publication, Tehran, Iran, Pages: 264.