Impact of Environmental Conditions on the Aspect of Religion Archetype in Urban areas (Case Study: Comparison of Two Cities, Sanandaj and Yazd)

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Abstract

Religion as the most important relationship between mankind and God plays an important role in human mental relaxation. Jung considered religion as one of the most important archetypes of the collective subconscious mind and believed that the archetypes are primarily the result of human generations’ experiences, created like the human instinctive adaptations and affect human behavior and perceptions. Therefore, psychological adaptations, like physical adaptations, are influenced by the environment and different environments will lead to different adaptations. Religion as a mental adaptation has three main components of fear, hope and loving God. The environment plays an important role in the effectiveness and superiority of each of these components over man’s relationship with God; however, how understanding religion, which results from diverse environmental characteristics, is reflected in the religious uses and urban spaces. To investigate this question, the historical context of two cities of ‘Sanandaj and Yazd’ that are very different in terms of environmental conditions are compared using the inductive method and library studies. Finally, it was observed that various environmental conditions cause different understanding of religion and hence caused the superiority of its components on the residents of the two cities. In fact, the merciful and giving environments lead superiority of the element of hope in God, and hazardous environments cause fear of God in man's relationship with God that both perceptions are reflected in the design and site selection for religious uses. Therefore, urban planners should pay special attention to environmental characteristics as the causative agent of psychological adaptations to create spaces harmonious with spirits and historical identity of citizens.

Keywords: Archetype, Religion, Natural Environment, Sanandaj, Yazd

1. Introduction

God is regarded as the strongest and the most effective factor in man’s spirit, and religion brings the same faith and fear or subjection and sincerity that God expects from man (Jung, 2012). As a matter of fact, religion, which is an independent faith from wisdom and sense, and despite sense and wisdom, gives man this ability to understand the transcendental and infinite affair of life (Muller, 1893). Religion acts toward coordinating and integrating man with natural conditions; furthermore, any step man takes with regard to psychological conflict with natural disparities and any intervention he has made acts as his escape from natural algebra. Religious expectations – even what Weber interpreted as the whole materiality and summarized in victory over hostility and health and wealth, or when man lay prostrate because of his inability and prayed to the Lord – are regarded in this domain (Shojaeezand, 2013). Therefore, psychologists believe that religious beliefs and rituals play a role in the mental and physical health of man (Jung, 2012).

Jung, who discussed religion from a psychologist’s point of view, considered God’s image in man’s mind as an archetype. He considered archetypes as a collective unconsciousness of contents, which were manifested in myths, legends, religious rituals, dreams and artworks of different tribes (Jung, 2012). He felt that archetypes, like spiritual instincts, could cause spiritual and mental adaptations of man within his environment. Therefore, different natural conditions of each nation mean that God, as an archetype in man’s mind, has specific characteristics. Naturally, these differences are reflected in all of the man’s works. Among these works, art and especially architecture are the most impressive and superior tools of religion through which the latter manifests its presence and impact; indeed, some argue that architecture has had no supporter better than religion, especially in Islamic cities (Abdolrahim, et al., 2013). Thus, the spiritual and intellectual aspects of Islamic cities’ residents have been reflected through the ideal of the mosque as one of the most basic elements within such cities (pup, 1995).

Urban public space is the scene where people daily visit and is defined in contrast to private living space (Abdolahzadeh Fard and Zare, 2018). How to deal with religious issues and their importance in urban spaces can be seen in direct relation to the perception of each nation about religion and its views on God. Furthermore, the position and importance of religious monuments and their relationship with other parts of a city have a significant impact on the sense of relaxation and the mental security of the residents; if ignored, it would deprive citizens of this essential feeling. Islamic cities, as hometowns of people with an Islamic worldview, are no exception in this regard, and not attending to the residents’ perceptions causes a disordering of their mental relaxation capacities.

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In reality, the problem lies in us ignoring the importance of environmental differences as effective factors that impact on residents’ worldviews and religious understanding when we are designing residential neighbourhoods and urban spaces, and we only take into consideration the name of that religion and residents’ rituals (such as Islam) as a specific worldview; thus, the environmental impacts that cause distinctive perceptions of nations from a specific religion get ignored.

2. Research Method

The research aim is to investigate the impact of natural environmental conditions on the issue of location and the relationship between religious spaces with other uses in urban spaces. To attain this goal, the comparative method has been used and the required information has been obtained through relevant literature and field studies. The results can focus on urban design decision-makers, especially urban designers’ views on their residents’ worldviews and how to reflect this subsequently in urban designs. It brings more harmony into neighbourhoods and urban spaces through the use of residents’ understanding, thus aids their mental security and relaxation.

3. Theoretical Framework

Religion scholars have offered different definitions from religion, as Winston King stated, there are such abundant definitions of religion and it is not possible to offer an incomplete list of religion (King, 1987). However, whatever religion is and wherever it comes from, it is an undeniable need for a man. As Carl Gustave Jung referred “despite what universe thinks about religious experience, a person who has had this experience owns a precious gem i.e. he owns something which is the source of life and beauty and such person benefits from faith and relaxation (Jung, 2012). Therefore, beliefs and religious rituals have considerable importance in mental health and its rituals, which are a symbol of adherence to experience and religious orientation, cause the inhibiting and taming animal instincts on a spiritual and mental basis (Jung, 2012).

Religious orientation is regarded as an essential condition of man’s spirit and has been always created by man’s spirit (Jung, 2012). Actually, religion is regarded as the relationship of man with God. Man has always needed God to reach the mental relaxation (Mazaheri et al, 2010), assuming that the principal purpose of religions (even non-divine religions) is to create a relationship between man and God, using the documented resources such as applying the Quran and hadith texts analyzed 3500 verses and narrations at least in 13 different fields. The relationship between man and God was classified into three aspects of 1-fear of God 2-hope for God and 3-love to God (Mazaheri et al, 2010). Among these aspects, love to God is a result of man’s epistemology toward God (Shirazi, 1990) and the two other aspects are the result of man’s experience in which various personal and behavioural characteristics cause one or a compound of these three aspects to affect man’s understanding of God (Sadeghi et al., 2014). In definitions and studies on religion, two items of fear of God and hope for God, related to the environment, are stressed more. Thus, one can divide the definitions of God in to two parts; the first part is man’s fear of God’s power (Yazdani, 2011, Hick, 2013 and Otto, 1950) and the second part is man’s hope and his step taken toward perfection in which hope for God plays an essential role in it (Shojaeezand, 2013; Thompson et al, 2003, Eliade, 2010).

In any case, both accepting man shortages and man steps toward the whole perfection manifest the principal needs of man toward God. It can be said that three unpleasant factors including uncertainty, shortage and inability force man to adapt to life-changing conditions through resorting to religious justifications (O’dea, 1966). In fact, to transfer the force coming from the lack of awareness and also the inability to control the nature of man needs a power outside of himself to endure this force. The power which in various cultures is called a sacred object or God, we are in contact with God through that. So, many psychologists accept religion as manifestations of man’s spirit and believe that religious beliefs reflect autonomous and independent objective or unconscious actions(Jung, 2012). Freud, referring to the fact that religion has always existed throughout the history of human civilization, believed that civilization has never been empty from religious beliefs (Freud, 1959). Freud asserted religious actions and beliefs provide shelter against daily life troubles and religion exerts its penetration in many social activities of man and even can give man spiritual and mental security, sense of meaningfulness and identity.

Jung, who deals with religion and religious affairs in most of his works, considered God-image in man mind eternal and applied this expression (eternity or archetype) as mental images resulted from frequent experiences our ancestors have had passed (Shamisa, 2004). Jung believed these primitive images exist in human generation unconsciousness and they are reflected as religion, dream, personal illusions and other manifestations in literature and art (Jung, 1993). How to create archetypes and experiences accumulation in different generations as well as their transfer to future generations depends on accepting immaterial traits transfers by heredity. In this regard, Darwin considered natural choice theory applicable both to man physic and for explaining behaviours formation including social behaviours. There are lots of pieces of evidence that show behaviours are no exception from evolution (Buss, 2015) because the biologists believe each trait in a man is inherited and inheritance in man traits is exceptional (Behzad, 1975).

Compatibility, as one of the products of evolution, is a hereditary and growing feature (Buss, 2015), Which create in response to environmental forces. Thus, each hostile force has created definitive adaptive issues that repeat in each generation during the long period of man evolution. Man has been evaluated through these adaptations; those which help man encounter the problems threatened their ancestor’s life. Actually, an evolutionary mental adaptation is designed like the current manner which can solve a given problem concerning
survival or reproduction over and over. That = mechanism and its design are similar to a key built in accordance with a proper key lock (Buss, 2015). Man archetypes are expressed as animal instinct in response to environmental condition and tendency toward solving them. Therefore, religion as an archetype can be considered as an adaptation in responding man inability and no understanding and controlling nature, so believe in God power and religion cause man mental relaxation (Jung, 2012). However, the factors which divest safety and relaxation are not the same in various environments. Thus, the interpretation of religion as an adaptation in different environments would vary. In other words, environmental differences cause various interpretations of God and its resulting mental image definition in societies from definition and. Traditionally, the relationship between religion and nature and their mutual impacts has been taken into consideration by researchers. The first group who focus on nature impact on religion believe that the definition and the mental image of God and religion have been mixed with nature, for example, ancient Greeks worshiped ghosts and nature force and they considered nature as Gods’ home (Noss, 1980). The pastoral and agricultural economy as the life economy of ancient Iran was accorded with nature and climate condition, which caused Gods they worshipped to have a relationship with nature. Gods such as Mitra, Izadi, the symbol of the sun, Gods of rain (Anahita), the child of water (ApamNepath), God of the storm (Vayo), etc. (Qodusifar et al, 2013). Later with the arrival of Buddhist rites and Indian myths and expansion of Zoroastrian religion, the concept Gods with natural manifestations were replaced by two Gods of Good (Ahouramazda) and Evil (Ahriman) (Heidari, 2008). From this view, such relationships can be followed in other nations such as Khmers, Egyptians, and Indians (Qodusifar et al., 2013).

The second perspective is related to the scholars such as Avicenna, IbnArabi, Farabi who believe in the environment impact on man behavior and perception, especially his religious perceptions (Noghrekar et al., 2010). IbnKhaldun believed Bedouins had better mood compared to city dwellers. He regarded the Bedouins of hot and arid deserts more perfect people in terms of physical, mental and ethical health than people of other climates (IbnKhalduin, 1979). He regarded the wealth and welfare of city dwellers in contrast with good ethics. Schultzas serted to introduce the root of many cultural manifestations, which are outcomes of environmental features, as the “spirit of place”. He regarded Islam and all of its manifestations as the descended from the desert spirit. He introduced Christianity and Jewish as outcomes of blissful Palestine where is a mild region (Schulz, 2010). Some researches based religious texts show that Islam has accepted the impact of the environment on ethics (Noghrekar et al, 2010). Territories such as Mecca with a harsh climate where the environmental facilities are low has residents with high capabilities in manifesting precious and perfect religious behaviours. It is mentioned in Najd al- Balagha book that Imam Albelieves living in bad weather for a believer is a way to get him into trouble and it is the best way to correct his ethics (Nahj al-Balagha, Sermon 129). Imam Ali noted in a letter for the people of Basra that your region is near water and far from the sky (Nahj al-Balagha, Sermon, 13). Certainly, the basis for judging these ideas is man deeds and behaviours and all of the ideas agree with this fact that religious perception of man is affected by nature which is reflected in man deeds and behaviours which affect the man–made masterpieces especially art and aesthetics. Many religious principles have entered architecture and urbanism through various methods (Bemianyan and Amini, 2012). These are the arts which create a relationship between material and spiritual universe both materially and symbolically. Actually, the cities as one of the most giant man-made manuscripts reflect believes, culture and world view of the builders and residents. In Rappaport view, a person who investigated the residential complexes through cultural characteristics, the cultural factors and especially the religious beliefs of people have been the foundation of provision to human habitats (Montazaralghaem and Amini, 2010), and among these effective factors on urban morphology, religion has a considerable position. Among the factors that categorize the cities emphasizing the thought forming their structure, Islamic city has a considerable importance and some definitions have been offered for Islamic worldview. Actually, the Islamic city refers to the cities in the territories with culture and beliefs originated from Islam. Have been grown (Pourjafar and Pourjafar, 2013). Congregational (Jame) mosques, bazaars, public baths, and neighborhoods are samples of economical-cultural elements which have considerable role in forming the cities physic. The cities which are centeredbya mosque and this is the same pattern the holy prophet of Islam brought for Muslims (Montazaralghaem &Amini, 2010). These cities are established based on the 3 elements of religion, government, and business (Etezadi, 2000), which among these, the most central factor which led to man settlement is a religion which has given the city physic an especial form. Therefore, the mosques and the spaces depending on the spiritual and mental aspects have formed the Islamic cities (Omidvar and Hatefi, 2013) and have inducted the resident’s worldview as a manifestation of religion in the city.

4. Discussion

All the Islamic city uses, especially the religious uses, reflect their followers’ imagination and religion with all of its components (fear, hope, and love to God) have been manifested in them. However, since the rate of these components impact on followers’ minds is not the same, this difference exists in religious uses. Among these components, the love of God is influenced by man’s knowledge of God, and the most important way to get this knowledge is sacred books. Thus, through the studied samples in the research, chosen among the Islamic cities, it is assumed that knowledge of God sources is the same.
for everyone and this component has been considered the same in the study samples. However, environmental conditions have the main role in the superiority of the other two components of fear and hope. Unfavourable environmental conditions cause the superiority of fear of God and favourable conditions cause the superiority of hope to God. In fact, given that man knows the power of nature from God, so in those environments where this power is in the part of the incidence of natural disasters, due to his frequent experiences, man has more in mind the understanding of the fear of God's punishment and consequently, in order to escape from these disasters, the environments promote humans with more spiritual behaviours; in contrast, in an environment where the power of nature is more perceived in God's mercy and blessing, the component of hope for these blessings becomes more prominent in the human mind and, as a result, these safe environments develop people with more mundane behaviours. And that is why welfare and enjoyment in these environments can be observed more.

In fact, the fear of God increases his reminder in the human mind that eventually raises the appearance of religious behaviours rather than welfare and non-religious behaviours. On the other hand, the hope to God reduces this reminder in humans. In this case, we also see a decrease in purely religious behaviours rather than mundane behaviours in man (Figure 1). However, what we are looking for in this study is how this reminder manifested in urban spaces. Because of this perception of religion and its corresponding behaviour is undoubtedly reflected in urban spaces, especially progressive spaces, which are not the result of systematic planning, as these spaces are created by the residents themselves to meet their physical and spiritual needs over time, so that the citizens’ unconscious was the forming element of these urban spaces. To understand the reflection of the superiority of the two components of fear and hope to God in religious uses, the traditional context of two cities of Sanandaj and Yazd, are compared regarding their different climatic and environmental conditions.

Fig 1. Theoretical model of research

The city of Sanandaj is located in 35° and 20-minutes north latitude and 47° east longitude from Greenwich meridian. Sanandaj is a mountainous city with cold weather with relatively mild summer and cold winter. The city of Yazd is located 31° and 50-minutes north latitude and 54° east longitude. Yazd is a city with warm and dry weather. Therefore, these two cities are very different from each other climatically and environmentally. Based on the information in Table 1, the environmental condition for Sanandaj can be considered as blissful and desirable. Because on the one hand, the environmental hazards of this city are really low and on
the other hand, due to the dependence of life and the safety of its inhabitants' survival on the sky rains, the sky has a significant amount of blessing. This is in contrast to the city of Yazd in terms of environmental hazards, especially rainfalls and water supplies and fertile lands which are in unfavourable conditions (Table 1. In the following, it is explained how these differences are manifested in the religious uses of the historical context of the two cities.

Table 1
Natural and geographical conditions of Sanandaj and Yazd

<table>
<thead>
<tr>
<th></th>
<th>Sanandaj</th>
<th>Yazd</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Climate</td>
<td>Cold mountainous</td>
</tr>
<tr>
<td>2</td>
<td>Agricultural land</td>
<td>36.27</td>
</tr>
<tr>
<td>3</td>
<td>Vegetation condition</td>
<td>Semi-dense pastures</td>
</tr>
<tr>
<td>4</td>
<td>Average precipitation</td>
<td>492 milliliter</td>
</tr>
<tr>
<td>5</td>
<td>Average temperature</td>
<td>12.8</td>
</tr>
<tr>
<td>6</td>
<td>Drought danger</td>
<td>Average</td>
</tr>
<tr>
<td>7</td>
<td>Earthquake danger</td>
<td>Average</td>
</tr>
<tr>
<td>8</td>
<td>Storm danger</td>
<td>Low</td>
</tr>
<tr>
<td>9</td>
<td>Flood danger</td>
<td>Weak</td>
</tr>
<tr>
<td>10</td>
<td>Famine danger</td>
<td>Weak</td>
</tr>
<tr>
<td>11</td>
<td>Erosion crisis</td>
<td>No</td>
</tr>
</tbody>
</table>

Religious uses, like other urban uses, serve the area around them and therefore affect this area. The smaller the affected area is, the more the share of these uses will be and they will have a more influential role. Thus, depending on the number of uses in the city, their influence in urban spaces would vary. From this perspective, there is significant difference between the historical context of the two cities of Sanandaj and Yazd (Table 2), where the share of religious uses in Sanandaj was 1.5% of the total historical texture, reaching 2.5% in Yazd. As a result of this 1% difference, the share of the area under the influence of any religious use is 39000 meters in Sanandaj and 24000 meters in Yazd; that is, every religious use in Sanandaj, on average, covers a larger area of 15000 meters than Yazd. Eventually, this difference has increased the mean distance between religious uses of Sanandaj by 45 meters more than Yazd. This difference in the share of religious uses from the total area of the city has changed the amount of their emphasis and reminder in urban spaces. The high number of these uses and the reduction of the distance between them in the city of Yazd have increased the emphasis and reminder of these uses in Yazd. In contrast, as the scope under their influence is less, their contribution and influence in this range have increased and have had a greater impact on the range. In contrast, in the city of Sanandaj, due to the decrease in the number of religious uses, the share of their service areas has increased and correspondingly, they have a small role in the area and ultimately the entire city. (Figures 2 and 3). It should be noted that the religious buildings of Sanandaj are all mosques but a handful, but in Yazd, the number of holy shrines is significant.

Table 2
The religious centers situation in historical contexture of Sanandaj and Yazd.

<table>
<thead>
<tr>
<th></th>
<th>Sanandaj</th>
<th>Yazd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total area of historical contexture (m²)</td>
<td>2760162.36</td>
<td>6736119.97</td>
</tr>
<tr>
<td>Average of religious places of historical places (m²)</td>
<td>642.4</td>
<td>617.7</td>
</tr>
<tr>
<td>Percentage of religious places of historical contexture (%)</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>The share of dominance in religious area on historical contexture (m²)</td>
<td>39922.7</td>
<td>24056.6</td>
</tr>
<tr>
<td>Average of distance among religious places (m)</td>
<td>198</td>
<td>153</td>
</tr>
</tbody>
</table>

Given that the plurality of religious uses in urban spaces is an appropriate way to emphasize and remind them in urban spaces, this is not the only way to express this emphasis, and this can be expressed and controlled by other ways too. Methods, including the emphasis on the physic of religious buildings, which are in most cases more effective in this purpose, are listed in Table 3 in the two surveyed cities. The table shows that the extent of the contrast and the difference with surrounding monuments determines the amount of emphasis on religious buildings. Depending on this extent, urban spaces are indexed and emphasized in urban space. Figure 4 also shows that most of the religious buildings in the city of Sanandaj have very little difference with surrounding residential
buildings and this similarity is so much that it is difficult to identify some of them from the surrounding residential buildings; In contrast religious buildings in the city of Yazd are highly different from surrounding residential buildings, and these visual differences even allow them to be detected from very far distances. It should be noted that this scope is not just about purely visual perceptions; however, the visibility distance and the emphasis regarding the role of religious spaces on public opinion and the relationship of these buildings with the behavior of citizens, like observers on the behavior of citizens, restrict and control citizens’ behavior. Because every religious structure creates privacy around it, which in every belief and belief this privacy gives rise to behavior, deed and even a special cover for its followers.

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Table 3

<table>
<thead>
<tr>
<th>Physical characteristics of religious buildings.</th>
<th>Sanandaj</th>
<th>Yazd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>About 40% are located on passages corner</td>
<td>About 60% located on passages corner</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td>Both entrance height and building level are the same with neighborhood buildings</td>
<td>Both entrance height and building level is far more than neighborhood buildings</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Contexture form of these building such as residential buildings is cubic</td>
<td>Contexture form of these building is far more different from the residential buildings</td>
</tr>
<tr>
<td><strong>Material and color</strong></td>
<td>These building are very similar surrounding residential building such that it is difficult to distinguish difference</td>
<td>These building are very different surrounding residential building such that it is easy to distinguish difference</td>
</tr>
<tr>
<td><strong>Decoration</strong></td>
<td>Very low usage of decorations especially in entrance</td>
<td>Very high usage of decorations especially in entrance and dome on the nest</td>
</tr>
</tbody>
</table>

Fig. 4. Architecture characteristics of religious buildings of Sanandaj and the differences and similarities with residential building

Fig. 5. Architecture characteristics of religious buildings of Yazd and the differences and similarities with residential building
The emphasis on the religious spaces of Yazd, which has been carried out in different ways, has strengthened spirituality in the city’s public open spaces. This factor has severely limited the range of citizens’ behaviours in these spaces to religious behaviours in such a way that this sense of presence in a religious space is allowed to carry out non-religious interactions to a large extent by citizens, and most of these needs are addressed by citizens in the open spaces of their houses. Perhaps one of the main reasons for the big courtyards in Yazd, as well as the sensitivity of designing and using decorations in them, is the use of these yards to conduct behaviours that do not have a chance to happen in public spaces. In contrast, due to the small extent of the religious uses in Santander, the open spaces of this city do not have a strong sense of religion and the feeling of presence in the religious space is limited to a very small area around these uses. This factor has brought the potential for the formation of non-religious social behaviours for citizens in open spaces, and perhaps because of this, most of the non-religious practices and events are shaped in public open space sand the most of the residential buildings of Sanandaj have relatively small courtyards; the yards where have not been the place for holding social events and social interactions for large groups and only met the needs of a house. In fact, it can be concluded that the religious uses off Yazd with severe extraversion are one of the reasons for the introversion of this city houses, as the introversion of the religious buildings of the city of Sanandaj caused extraversion of the houses of this city (Fig. 6). This conclusion is emphasized by Memarian, who considers the cause of introversion and extraversion of houses as a climatic and religious, moral, and cultural factor (Memarian, 2006). This means that perhaps the climatic factors have been recognized the cause of this introversion and extraversion, but cultural and moral reasons have also led to their survival.

5. Conclusions

Religious spaces, similar to other urban uses, serve the surrounding area and therefore affect this area. Whatever the size of this area is small, the impact of these spaces will be further enhanced. Thus, depending on the number of these spaces in the city, their impact and influence on the whole city will be considerably varied. From this perspective, there is significant difference between the two case studies of the research (Table 2). In Sanandaj, religious spaces include 1.5% of the total area of the old part, while this percentage raised to 2.5% in the historical part of Yazd. As a result of this difference, the catchment area of any religious space is about 39000 m2 in Sanandaj and 24000 m2 in Yazd. It means that, each religious space in Sanandaj, on average, covers a larger area of 15000 m2 than Yazd. Eventually, this has increased the mean spatial distance between religious spaces in Sanandaj by 45 meters more than Yazd. The availability of many religious spaces and less distance among them have increased the impact of these spaces on the citizens in the city of Yazd. Indeed, as the catchment area of these spaces is less than the city of Sanandaj, their impact and influence have increased in the area of their location. On the contrary, in the city of Sanandaj, due to the less number of religious spaces than Yazd, their catchment area increased and correspondingly, they have little impact on the area of their location and the citizens of the city. (Figures 2 and 3). It should be noted that the religious spaces in Sanandaj are mostly mosques, but in Yazd, apart from the mosques, there are many Hosenias and shrines.

As it is remarkable in the religious buildings of cities, especially Islamic cities, they simultaneously include all three components of the human relationship with God, namely, fear, hope and love. Nevertheless, the proportion of religious spaces (in terms of number, form, percentage, etc.) relative to other spaces and their degree of

![Diagram showing the impact of religious building introversion and extraversion on residential characteristics and urban open spaces (left: Yazd, right: Sanandaj)]
domination in the city reflects the extent of God's presence in the city. When this ratio is high, it conveys more the component of the fear of God than other components. It means that any emphasis on the religious buildings, by means of form, scale, contradiction, etc. equally reflect the presence of God, particularly the buildings, by means of form, scale, contradiction, etc. The component of fear is highlighted and, thus, the behaviour of residents will be restricted in the public spaces. This is particularly against the presence of women in the public spaces. The component of fear of God in Yazd has been highlighted by strong character of religious buildings within the city's historical texture. One who is moving along the public thoroughfares of this context will perceive a sense of spirituality was imposed by domination of these religious building. Hence, social and non-religious group activities usually take place more within the domain of private spaces than public spaces. On the contrary, the dominance of the component of hope over the fear of God in the city context of Sanandaj has diminished the presence of religious spaces and, thus, their impacts on the public spaces. Hence, the city's public spaces include social activities for both women and men. This particularly allowed "the possibility of women’s negotiation with public domain more than in other Islamic cultures" (Alizadeh, 2007: 410). Consequently, due to the differences in human environments and the impacts on man’s spiritual adaptations, it is necessary to consider human behavioural and perceptual patterns in the urban planning and design, particularly in the decision-making process of urban development projects.

References

21) Muller, F. M. (1893) Introduction to the science of religion: four lectures delivered at the Royal Institution, in February and May. (1870) Longmans, Green.
22) Nahj al-Balagha. (Sermon 129) translation of Sharif al-Razi, Tehran, University of Tehran
23) Nahj al-Balagha. (Sermon 13) translation of Sharif al-Razi, Tehran, University of Tehran. (In Persian)
Intellectuals' point of view and its Results on Environment Design ', Armanshahr, Volume 3, Issue 5, pp. 79-96 (In Persian)


