

Islamic Thoughts and Individuals' Actions in the Built Environment

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Abstract

The way Islamic thought has affected an individual's action based on the effective information in the built environment is a considerable issue. This study argued that Islamic thought in which parts and stages of executing an action is effective. It is an interdisciplinary research with context analysis in order to consider the related psychological and environmental theories and documents derived from the secondary sources. The findings demonstrated that Islamic thought as a determinant factor affects an individual's action in the built environment from two essential directions, including: 1) its effect through environmental information in the built environment; 2) its effect on the perceptual process of people to execute an action. Consequently, although the perception of people from Islamic thought is very effective in executing an individual's action, the developers and planners of the built environments in Islamic societies are able to affect an individual's action by means of design manipulation.

Keywords: Islamic thought; built environment; individual's action; environmental information; perceptual process.

Nomenclature

EI Environmental Information
TBE The Built Environment

Introduction

For Muslims the universe is a manifestation of God. Muslims attempt to be polite and have good conduct and dignity in the kingdom of their lord. They seek for permission and appropriate patterns for having suitable manners in their life. In accordance with Quran, Muslims know themselves fully in the service of God and remember Him in all time (Al-Quran 3: 190-191). They also find their Lord present in every aspect of their lives (The Nobel Qur'an, An Nisa4: 33). They attempt to form their behaviors based on rules issued by Him. Thus, for achieving the right rule and law, they refer to Fiqh and Fiqih. Muslims evaluate the accuracy of their actions and behaviors based on a scale of Halal and Haram. However, it is clear that every issue and aspect of our individual or collective life has its own particular features in every period of time (Aliabadi & Hashemi, 2010). In addition, the space in which a person lives or works is another factor that affects people's relationships (de Oliveira et al., 2009). Some of these spaces are TBE that are used

for specific goals and needs. These spaces include a collection of large-scale civic and social activities as well as individual small-scale activities (Rapoport, 1982).

Islamic thought has flexibility as well as fixed principles and the ability to cope with present day. Also, Islamic Sharia has developed principles through its own resources especially in the field of the built environment to support the social values of Islam. Sharia keeps the view that plan and supervision over the construction of the environment should be based on the Islamic values and social principles, and reflects the concept of a united Islamic nation (Meshkini, Tafakori, Khazaey, & Parhiz, 2014). Many verses of Quran on human environment and aestheticism consider contents, behaviors, and beliefs of humans. In Islamic cities, environmental traits, such as proportion, color, balance, diversity and conflict, help to develop principles such as justice, lack of pride, kindness, peace, and friendship. Thus, it can be shown that all people are the same and only the piety of people empowers them superior or inferior to one another (Zeynalzadeh, 2014). Nowadays, there is no certainty about the compatibility of the Islamic principles with the present requirements due to the current dramatic changes have occurred in the Muslim world (Meshkini et al., 2014). Thus, knowing the effects of Islamic thought on the behavior of human beings in the environment can help designers, planners and researchers in Islamic societies to represent solutions based on Islamic thought. It also plays a significant role in developing Islamic behaviors in societies. The present study attempts to investigate the process of the individual behavior in TBE and represent solutions and suggestions based on Fiqh and Islamic views regarding this process.

Methodology

This is an interdisciplinary study that considers different views to investigate the statement of the problem (Repko, 2011). It should be noted

that such an interdisciplinary method is not a survey, but combines different views to achieve a single goal. This is a qualitative research and the methodology is both descriptive and analytical investigating the issue by considering different theories and views. Also, in order to obtain the required information, library method was employed in this study.

Results And Discussion

The characteristics of an environment, person, and task are effective on an individual's action (de Oliveira et al., 2009). Researchers in various fields have done different studies to clarify the relationship between environment, person and task. This issue has been considered from diverse views related to the human characteristics (e.g. psychological and neural aspects) in different spaces (virtual and physical environments). The current study focused on how an action executes in TBE (physical environment) and how Islamic thought is influential in this regard. To mention this matter, the findings were classified into two main sections including the process of executing an individual's action in TBE, and the role of Islamic thought in the process of executing an individual's action in TBE.

Process of Executing an Individual's Action in the Built Environment

Researchers had different views towards the process of executing an individual's action. Some of them specified a process and the others argued about the factor influencing this process. The results of data analysis are presented in three dimensions including (1) Theory of Affordance, (2) Theory of Norman, and (3) The psychological view.

Theory of Affordance

The Theory of Affordance considers the link between the sources of EI and its impact on people's actions. The followers of this theory believe that individuals are harmonized to the properties of EI in their activities (Gibson, 1979;

Greeno, 1994). Environmental information in TBE includes a large collection of data that human beings can observe through five external senses. The variety of scientific disciplines create data in TBE such as architecture, urban design, civil engineering, electrical and mechanical installations, and all other disciplines that are effective to make data in TBE.

This theory investigates that how information is constructed by people. Based on this theory, the objects in TBE and properties of TBE are the sources to create information. Individuals observe this information through the sensory organs. Then body sensors select sensory information and these selections are organized in a meaningful manner. The last stage of perception is to attach meanings to information. The perceptual process leads to decision before executing an action.

Theory of Norman

Don Norman, (2002) has offered seven stages of doing an action in the world. These stages consist of one stage for goal, three stages for evaluation and three stages for execution. The built environment is a part of the world. Thus, an individual's action in TBE can be explained through a similar seven-stage process. The first stage of executing an action is the perception of TBE because of the analysis and synthesis of knowledge that is derived from the comprehension of information (Ackoff, 1989; Iii, Kessler, & Christensen, 2000). Besides, the information is derived from the raw data by observation (Ackoff, 1989). Finally, data are the symbols that indicate the properties of events, objects and their environments that are the results of observation by human senses (Frické, 2009). Human senses give an appropriate idea of the environment. People use them to analyze the data, get new data, and enhance reasoning with related conditions, instances, and structures of thinking. Thus, when an individual feels unwell, sleepy or tired, the senses are less efficient (Kirby & Goodpaster, 2006). In addition, since the observation of data is the first

level of environmental perception, physical and mental conditions of people directly impact the understanding and executing of people's actions.

Psychological View

Although there are different point of views about the relationship between action and knowledge (Sailot, 2013), the existence of a process between information, knowledge, and action is recognizable. Moreover, understanding as a psychological process is involved in the process of converting information to knowledge and action (Bellinger, Castro, & Mills, 2004). Understanding is obtained from the analysis and synthesis of the knowledge that includes information processed in the human mind (Ackoff, 1989; Barnes, 2002; Davenport & Prusak, 1998). Indeed, this information creates the knowledge of each individual that finally leads to execute an action. Furthermore, various effective factors impact each part of this process. For instance, spirituality derived from faith, courage, and hope affects people's perception (Iii et al., 2000). Likewise, a combination of experience, context, interpretation, and reflection influences the relationship between information and knowledge (Davenport & Prusak, 1998).

The Role of Islamic Thought in the Process of Executing an Individual's Action in TBE

The results of previous section demonstrated that there are several processes about the relationship between EI in TBE and individual's action. However, a common attitude is recognisable in them. This attitude illustrate that an individual's action is executed through a perceptual process based on the observed information in TBE. Also, various factors are effective on the observed information and perceptual process (Understanding), such as mental and physical conditions of individuals, interpretation, reflection, spirituality, and experience. The effective factors within the process of executing an action as well as the stages of this process help the researchers to

find proper solutions based on Islamic thought to affect an individual's action. In order to explain this issue, the functional samples and the suggested solutions, based on Islamic thought in built environments, are considered in two dimensions: first, the effective factors to create EI in TBE; second, the effective factors on the perceptual process of individuals.

Effective Factors to Create EI in TBE

Islamic thought is an approach for living based on high social values. Also, Sharia for lawful manner of a Muslim has considered some criteria, both individually and collectively, as principles that some are in relation to environmental information in the built environment. For instance, Sharia emphasizes on dignity and privacy in Islamic urbanism (Hammudal, 1984). Thus, for recognizing the suggested environmental information and Islamic thought in the built environment, the achieved results are considered in two parts: 1) The elements participating in the formation of environmental information and 2) The principles participating in the formation of EI.

Elements Participating in the Formation of EI

In order to use the potential meaning of the construction elements of TBE, based on the meaning derived from Islamic thought, the most important elements that can be used in the expression of the concepts of Islamic thought are as follows:

Geometry: "Indeed Allah has set a measure for all things In Islamic sciences" (Al-Quran 65: 3). Geometry has a close connection with the concept of measure that is mentioned in Quran. Geometry is a unifying factor in special order, and is one of the important bases of Islamic art (Burckhardt, 2009). Hidden geometry in Islamic architectures is based on an order that illustrates everything as a simulation of the spiritual world (Mahdavinejad, 2004). Thus, geometry and order as tools in the hands of Muslim architects can show the unity between

this world and the other world (Memarian, 2005). Geometrical values including a wide scope and concepts that are often used in the expression of Islamic thought are as follows: symmetry, proportion, order (Bolkhari, 2009; Rastjoo, Fazeli, & Bemanian, 2014; UNESCO, 2011), centrality (Tavasoli, 2005), and hierarchy of space (Kanani & Kanani, 2014; Rastjoo et al., 2014).

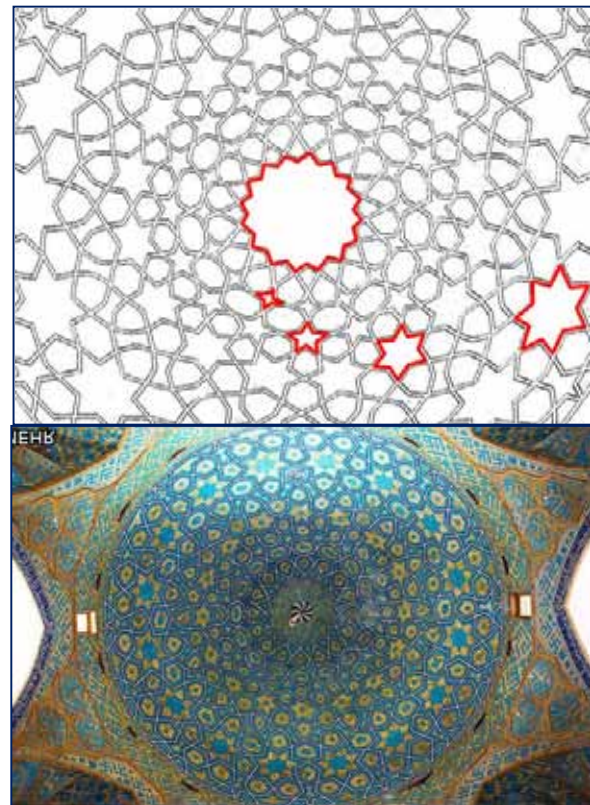


Figure 1: Tiled Geometric Patterns Cover Every Surface in Dome of Jame Mosque, Yazd, Iran (Source: Kasraie, & Norian, 2013; Photo taken by: Masoud Saki, cited in Mehr news agency)

Light: "Allah is the Light of the heavens and the earth" (Al Quran 4: 35). This is the divine light that rescues things from darkness. Light can be a symbol of God presence. In Islamic thought, colorless light is a metaphor of truth (Bolkhari, 2009). Also, the color of light in the built environment is formed by the decomposition of the companion light. Several studies have been done on the issue of light in Islamic architecture. Most of these studies have considered the role of light in religious buildings such as mosques. Indeed, in the Islamic buildings, light has the role of lightening as well as a symbolic role. Researchers have considered light not only in

relation to aestheticism, but also in relation to semantics in these buildings (Esmaili M, 2014). According to Ibn al-Haytham, light and color are able to motivate our sense of aestheticism and even have the potential role to make something look beautiful (Khojasteh Pour, 2009).



Figure 2: Color and Light In Nasir Al Mulk Mosque, Shiraz, Iran
(Photo Taken By: Hamidi, 2010)

Symbol and Sign: In Islamic art, symbols and signs are lucid mirrors that reveal the truth of the universe (Chitsazian, 2007). The holy Quran is also based on symbol and sign. For instance, in verse 89 of An-Nur in Quran, the divine light is introduced as a star lamp shining of olive tree. One of the most beautiful metaphors in Islamic art is related to geometric designs that display both structural and perceptual concepts simultaneously. Structural concept of everything is clearly observable and can be considered from different perspectives. However, perceptual concept is hidden and complicated and affected by many factors such as the culture of a society, traditions, individuals' knowledge and opinions, the environment, and physical features of TBE (Dibaj & Soltanzadeh, 1999). Since art is a reflection of metaphysical realities, it is expressed symbolically. For instance, the square shape derived from Kaaba and the circle derived from the area around Kaaba are regarded as cosmic symbols in Islamic architecture (Nasr, 1987).



Figure 3: Three Islamic Decorative Symbols (Source: Wade, 2006)

Reflection: Through the concept of reflection, a bridge is created between intellectual properties to the body and earthly aspects are given to spiritual features. Using the element of water is a way to use reflection. Stagnant water regarding its mirror surface reflects its environment. The reflection of landscapes and buildings in water extends the space (Kanani & Kanani, 2014). In essence, water by its stillness gives peace to the space and induces a feeling of dynamism, extension, and change due to creating and extended image of the environment (Jones, 1984).



Figure 4: Reflection on the marble floor of a mosque in Malaysia
(Photo taken by: Ghazali, 2012)

Nature: In Islamic culture, nature is a sign of Allah. By speculating in nature signs, human beings can achieve perfection. Many Imams and leaders said that how the close relationships were created between them and Allah when they were in the nature (Al-Daffa, 2007). Thus, using natural elements, such as water, tree, and flower, is useful in creating a speculative environment for human to think about the signs of creation.

Principles of Participating in the Formation of EI

In Quran and Sunnah, there are no especial principles for programming the built environment. However, Sharia has issued some

principles as laws and practical solutions that are based on the features of people's residence (Meshkini et al., 2014). Islam does not allow things that affect the peace of family negatively. It also does not validate any concepts of construction that are not in accordance with Sharia. Thus, designing the house of a Muslim should be based on Islamic values and views. Observing privacy is the most important feature in designing a Muslim's house.

Privacy: Respecting human's privacy and dignity is one of the primary Islamic principles. The Holy Quran has recommended us to respect each other. "o you who believe! Enter not houses other than your own, until you have asked permission and greeted those in them, that is better for you, in order that you may remember. And if you find no one there in, still, enter not until permission has been given. And if you are asked to go back, go back, for it is purer for you, and Allah is All-Knower of what you do" (Al Quran 24:27,28). It is quoted that the prophet Muhammad said to one of his followers named Aba-Saeed –who was standing in front of the prophet's house door in order to ask for the prophet's permission to enter his house: "do not stand in front of the door when you want to ask for host's permission to enter the house" (Karimian & Atarzadeh, 2012).

Based on Islamic thoughts, privacy for protecting of the family foundation can be achieved by separating the individual life from the public eyes. For protecting this privacy, Islamic thought has determined different principles such as dressing and the way of treating other people. Islamic thought also emphasizes on the necessity of maintaining hierarchy in the privacy. Based on the Islamic thought, privacy is considered from two perspectives of visual and auditory privacies (Meshkini et al., 2014).

Visual Privacy

Based on Sharia, whatsoever that allows strangers' look into the home is considered to be incorrect. Physically, entrance door, windows,

and height can create visual privacy.

Principles for Entrance Door: Sharia does not recommend to the entrance doors that are close or in front of each other. Also, the location of the door should be determined based on the function and also the width of the street in which the door opens (Annas, 1905).

Principles for Window: Sharia does not allow a window that dominates over other homes, even if this window is a source of air and light. For instance, the window that dominates the opposite homes or the window that opens in street or alley and is too low which passengers from outside can see indoor spaces easily.

Principles of Height and Structural Details: High elements such as Balcony and roof can cause visual nuisance. Thus, this height is not allowed when it goes beyond the neighbor's home and causes visual nuisance.

Principles of Indoor Space Privacy: Verses 27 to 33 and 58 to 62 of Surah An-Nur emphasize the significance of observing privacy among family members and others. Thus, in indoor space of the home, there must be spaces for hospitality. In addition, spaces such as kitchen and living room that are places for women should be safe of visual trespass. Furthermore, bedrooms are considered as respected places and verse 71 of Surah An-Nur emphasizes the privacy of these rooms.

Auditory Privacy

The holy prophet of Islam considers eavesdropping as a disgusting act. Also, based on Sharia, the voice of women in the home should not go into the public (Meshkini et al., 2014). This issue has caused in designing the Muslim's house, the place and hospitality of men and women be separated. Also, dense materials, thick walls and acoustic Insulation are used for this separation. All of these things are designed to comfort the families and protect them from the external factors as well.

Neighborhood Privacy

According to Islamic Sharia, ownership right should not be nuisance for neighbors. The holy prophet Muhammad states: “those who truly believe in Allah and judgment day should not disturb their neighbors” (Meshkini et al., 2014). Thus, the home should be designed in the way to achieve this condition. For instance, access to light and air is a natural right for all individuals and a residential building should not deprive the neighborhood residents from these heavenly gifts. This issue has been considered in many Hadiths. As the holy prophet Muhammad states: “Are you sure of your neighbors’ right? You should not deprive your neighbor of fresh air by constructing your home; otherwise, you ask for their permission” (Fazlul, 1989). There are also other principles that should be considered in relation to neighbors’ rights: (1) Every kind of damage to the neighbor in the form of noise, smoke, pollution, and leaking water is banned, (2) The area around the home is for public use and it should not be used individually.

The holy prophet Muhammad knows breaking the neighbor’s right as the biggest cruelty. Also, Islamic thought sees the home as a place for the establishment of strong relationships among neighbors and issued various principles for that. These principles consider neighbors’ rights, in every detail. In Islamic thought, the principle of being beneficial to the neighbor is superior to any other principles. The holy prophet Muhammad states: “40 houses around your house are considered as your neighbors and everybody who has problem with his/her neighbor does not deserve heaven” (Meshkini et al., 2014).

Effective Factors on the Perceptual Process of Individuals

The subject of perception and thought is of great significance in Islam. According to Quran, infernal people have lack of contemplation and perception (The Noble Qur’an, Al-Mulk67: 10). In Islamic thought, speculation is an essential

and undeniable right and is considered as the biggest and most valuable worships. Thought and its derivations are used 11 times in 13 Surahs of the holy Quran. Also, the word of thought and its derivations are used 429 times in the holy Quran (Soltani & Aqahosseini, 2014). In a number of verses of Quran, thought is encouraged. For instance, “And they ask you what they ought to spend. Say: That which is beyond your needs. Thus Allah makes clear to you His Laws in order that you may give thought” (The Noble Qur’an, Al-Baqarah 2:219). People who contemplate can make better decision in their lives. Also, contemplation raises some feelings and emotions that lead to an appropriate manner in human beings. In addition, the holy Quran determines particular ways for encouraging to thought and invites people to think about them. According to the Quran, there are three resources for thought: nature, history, and personal pronoun (Soltani & Aqahosseini, 2014).

Nature: Throughout the Holy Quran, there are a number of verses that invite people to contemplation in nature. “Behold all that is in the heavens and the earth, but neither Ayat (proofs, evidences, verses, lessons, signs, revelations, etc.) nor warners benefit those who believe not” (The Noble Qur’an, Yunus 10:101).

History: In the holy Quran, there are many verses that invite human being to read history. Indeed, in the Quran, history is introduced as a source for obtaining science and knowledge. From the Quran perspective, knowing about the history of humanity can be useful for human being. “Many similar ways (and mishaps of life) were faced by nations (believers and disbelievers) that have passed away before you (as you have faced in the battle of Uhud), so travel through the earth, and see what was the end of those who disbelieved” (The Noble Qur’an, Aal-Imran 3:137).

Personal pronoun: In Holy Quran, the personal pronoun is introduced as a special source of thought. “We will show them Our Signs in

the universe, and in their own-selves, until it becomes manifest to them that this (the Qur'an) is the truth" (The Noble Qur'an, Fussilat41: 53).

Obstacles and Errors in Thinking and Understanding: If the society wants to move towards perfection, it should support the freedom of thought. It means that a person and society should not allow dominate discourses in the society to be in a way that deprives the person of hearing other ideas and thoughts. Verses 129 of Surah Al-Araf, 22 of Surah Al-Anfal and 44 of Surah Al-Furqan say that lack of thought causes human degradation. Based on Islamic thought, obstacles of contemplation can be counted as follows:

Ignorance: A person who has no knowledge towards an issue cannot have an appropriate idea regarding that issue. "Follow not that of which you have no knowledge. Verily! The hearing, and the sight, and the heart, of each of those you will be questioned" (The Noble Qur'an, Al-Isra17: 36).

Following the Suspicion, Imagination, and Carnal Desires: Verses 28 of Surah Al-Najm and, 36 and 67 of Surah Yunus emphasize that if you follow the Suspicion, Imagination, and Carnal Desires, you will lose the right track. "If you obey most of those on earth, they will mislead you far away from Allah's Path. They follow nothing but conjectures, and they do nothing but lie" (The Noble Qur'an, Al-Anam 6: 116). If people's manners are based on certainty, the percentage of error will reduce.

Hastiness: Hastiness makes contemplation away from its right track and leads to ignorance. According to the holy Quran, hastiness in contemplation is a reason of degeneration (Motahari, 1979). Every judgment and mind expression requires enough evidence and while there is not enough evidence, every judgment can lead to degenerations.

Blind Imitation: Verses 170 of Surah Al-Baqarah and 21 of Surah Luqman show that

freedom of thought can be achieved away from blind imitation. Traditions, principles, and dominant discourses presented to people as superior ideas or real knowledge can be the main obstacle for contemplation fulfillment. Many people blindly follow an old accepted idea or thought, without any thinking. However, the holy Quran reminds us not to accept old beliefs while they are not evaluated by mind criteria. The Quran advises us to be mentally independent from these old beliefs. "When it is said to them: Follow what Allah has sent down. They say: Nay! We shall follow what we found our fathers following. (Would they do that!) Even though their fathers did not understand anything nor were they guided?" (The Noble Qur'an, Al-Baqarah2: 170).

Following Character: Another factors leading to contemplation decline is to have tendency towards characters. Great historical or contemporary persons can impact the thought, decision and will of others due to the influence that they have on people. The holy Quran invites people to be mentally independent and states that blind imitation leads to an everlasting atrocity. Thus, the Quran says, on behalf of people who have been perverted, "Our Lord! Verily, we obeyed our chiefs and our great ones, and they misled us from the (Right) Way" (The Noble Qur'an, Al-Ahzab 33: 67).

Arrogance and Pride: Arrogance and pride are also among the factors that are regarded as obstacle for contemplation. "Those who dispute about the *Ayat* (proofs, evidences, verses, lessons, signs, revelations, etc.) of Allah, without any authority that has come to them, it is greatly hateful and disgusting to Allah and to those who believe. Thus does Allah seal up the heart of every arrogant, tyrant" (The Noble Qur'an, Ghafir 40: 35). Arrogance and pride or creating a cover on ideas can prevent people from enthusiastic contemplation.

Prejudice and Obstnacy: Allah knows prejudice as an obstacle for thought. He warns human being to avoid of prejudice and blind

imitation of old traditions, ethnics, and cultural customs. If so, human being will be able to transform and move towards perfection. "When those who disbelieve had put in their hearts pride and haughtiness the pride and haughtiness of the time of ignorance, then Allah sent down His Sakinah (calmness and tranquillity) upon His Messenger and upon the believers, and made them stick to the word of piety" (The Noble Qur'an, Al-Fath 48: 26). According to the Quran, the main reasons of pagans' perversion are blind imitation, prejudice, and obstinacy; because these features close the doors of knowledge and understanding on human beings and consequently they deny fact and truth.

Conclusion

The article aimed to consider the process of executing an individual's action in TBE to clarify the role of Islamic thought on this process. This paper demonstrated that Islamic thought is effective on an individual's action from two ways: 1) through the impact on EI in TBE, and 2) through the impact on perceptual process of people. Moreover, it was mentioned that Islamic thought and Sharia have many solutions for both of these effective ways. Hence, it can be concluded that, although perception of people from Islamic thought is very effective on executing an individual's action, the developers and planners of built environments in Islamic societies have the power to affect an individual's action by means of design manipulation.

Glossary

Faqih (pl. fuqaha): jurist, legal scholar
Fiqh: Islamic law
Halal: allowed, legal
Haram: forbidden, illegal
Mahram: a relative (husband, brother, father, etc.)
Sharia: Islamic law
Tafsir: Quranic interpretation
Usul al-fiqh: jurisprudence
Sunnah: the way of life prescribed as normative for Muslims

Hadith: a report of the teachings, deeds and sayings of the Islamic prophet Muhammad
Surah: a chapter of Al-Quran

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