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The Impact Of Disaster On Sustainability Of Civil Cultural Heritage And Authenticity: Case Of Religious Building Sample Of Selami Efendi Tekke In Istanbul

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ABSTRACT

This study seeks the impact of highly destructive earthquakes on the buildings along the historical period beginning from 17th century up to now in the city of Istanbul that had a very rich cultural heritage. The religious buildings like mosques, tekkes and madrasas which are the civil religious foundation complexes of some regions of capital Ottoman city "Istanbul" were researched in the context of originality through reconstruction and restoration along the Ottoman period. The research methodology is primarily focused on determining the original situation of the buildings by researching archives, documentations and literature, afterward evaluation of historical buildings "tekkes" were evaluated in the context of authenticity as one of the main architectural conservation phenomena.

INTRODUCTION

Istanbul is one of the most important cultural heritage city, in which many human made or natural disasters occurred thorough the centuries. The city has been collapsed and rebuilt many times because of the earthquakes, fires, floods, wars, and invasions. Istanbul has hosted many cultures from Roman to Byzantium, from Ottoman to Republic of Turkey, and naturally it was inherited unique cultural heritages of all these civilizations [1].

Figure 1 Istanbul Historical Peninsula [2]

It is still possible to find few layers of civilization in historical peninsula, which is also the center of cultural civilization that was surrounded by historical citadels (Figure 1).

Today latest layer of Istanbul city consists of mostly Ottoman and Byzantium buildings on the ground however under the ground many ancient ruins are embedded and waiting for discovery [3].

ISTANBUL AND DISASTERS

Istanbul city has suffered lots of disasters throughout the ages, especially earthquakes and fires which are two big syndromes at all times. [4]. At least one big earthquake occurred average per 100 years in Istanbul since civilized near the Marmara fault (Figure 2). These earthquakes were very destructive and many buildings were damaged and demolished. On the other hand many people died and injured. Also fires are common in Istanbul, with an average 4-5 big fires occurred every year in the course of ages which are destructive mostly on timber buildings.

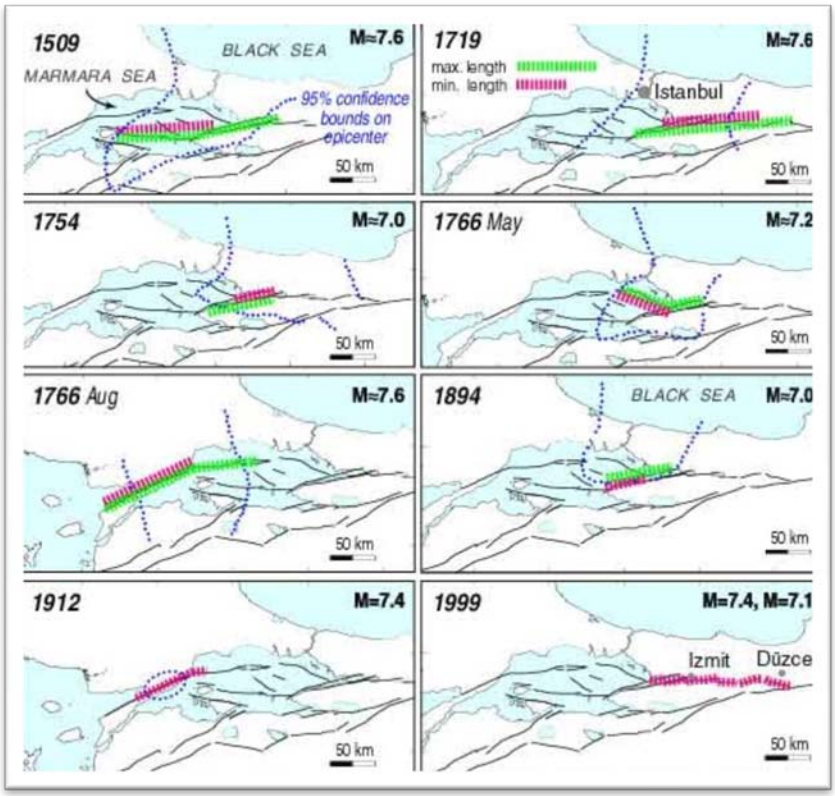

Figure 2 Big Earthquakes through centuries in Marmara Zone [5]

BIG FIRES AND QUAKES IN ISTANBUL

Earthquakes had an impact on masonry buildings. They were usually injured and collapsed or very serious damaged (Figure 3) while the timber buildings are stable (Figure 4) Most of deaths and injuries of people occurred in masonry buildings.

Figure 3 After 1794 Big Earthquake, ruins of stones [8]

Figure 4 Half demolished timber buildings after Düzce Earthquake [3]

Contrarily timber building's had impact on very few people. In Istanbul at the Ottoman period masonry buildings were built mostly by minority or non-Muslim people who were living in Istanbul whereas the timber frame buildings were built by Muslim people. At those ages minorities were rich since they were engaged of trading, banking, ownership of mining.

The minorities also were gaining money free of taxes while the Muslims were poor and engaged with military service, crafting and agriculture. The Muslims were gaining few money and responsible for many taxes. Istanbul was consisted of high comfortable masonry buildings in Balat, Fener, Pera, Galata and Pangaltı regions which were more expensive than timber buildings. Thus rich minority people were living in these regions [6]. Other regions such as Fatih, Zeytinburnu, Eyüp and Eminönü were consisting of mostly timber buildings which where belong to Muslim peoples. Earthquake behaviors of the buildings were differing between masonry and timber buildings because of their resistance and construction system. While the earthquake was destructive on stone buildings, fire was more destructive on timber buildings (Figure 5).

Figure 5 Selami efendi Tekke, the situation of timber structure after fire [11]

Whenever big fire occurred in Istanbul at least one big region was burnt, and hundreds of timber buildings were destroyed. One reason of that was the problems about fire extinguishing struggles: insufficiency of extinguish activity, lack of resistance for fire in

timber materials, closeness of buildings in set and roof by roof connections. Some of big Istanbul fires can be listed as; 1540 Old palace fire, 1569 fire, 1588 and 1590 fire, 1591-92 fire, 1606 fire, 1633 big fire, 1640, 1645 fires, 1719 Gedikpasa fire, 1729 Balat fire, 1740 Babıali fire, 1750 Küçük Pazar fire, 1782 big fire, 1804 and 1807 fire, 1823 Firuzaga fire, 1833 Cibali Fire, 1839 Babiâli Fire and 1918 Sultanselim fire [7].

Most important earthquake was occurred right after conquering Istanbul in 1489 [7]. In this earthquake many domes and minarets of mosques were collapsed or badly damaged. Afterword bigger earthquake were occurred in 1509 which called “little doomsday” (Figure 6)[4]. In this event no stone stayed on other stone. It was effective from Edirne to Corum which is located in medieval Anatolia. Tsunami was occurred as well. The city walls and Galata tower were damaged. 5000 people were died [7]. After the earthquake repairing activities were started urgently.

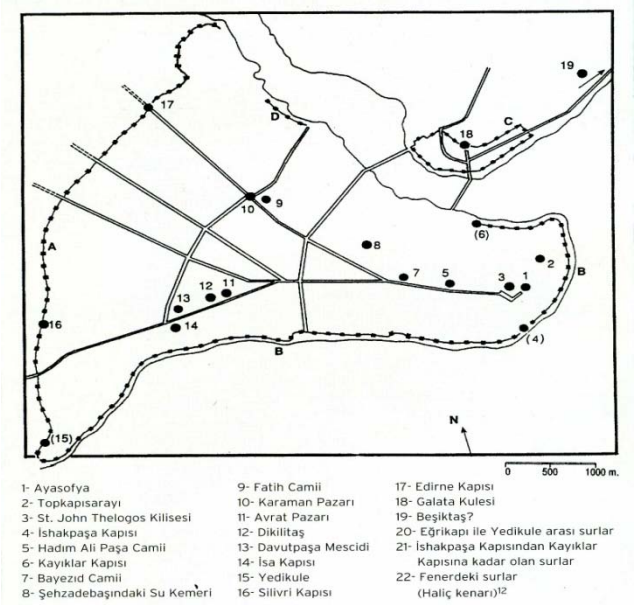

Figure 6 Istanbul Historical Peninsula and damaged buildings from earthquake (1509) [8]

In 1557 a new earthquake occurred. Many monumental buildings were demolished such as Fatih Mosque. 1648 earthquake was another big earthquake in Istanbul. The others 1690, 1719, 1754 were the following big earthquakes. In 1754 earthquake domes of Fatih and Beyazid Mosques and some part of little Hagiasophia, Sekerci Han, Kantarcılar Bazaar, Vezir Palace and some famous baths were badly damaged. There have been so many earthquakes in Istanbul so far, last was 17 August 1999 earthquake. Comparing other historical earthquakes, it was less harmful and less fatal, but it was a big warning and several studies were conducted in both theoretical and application sides.

EARTHQUAKE AND FIRE PROBLEMS IN ARCHITECTURAL CONSERVATION

After every earthquake or fire damage buildings must be repaired or rebuilt to maintain their functions [9]. There is a big difference between masonry and timber frame buildings after disaster in the context of earthquake and fire; Masonry buildings are mostly affected from earthquakes and afterward easily can be repaired and restored according to original fabric, but after fire timber buildings were remain very few as of their original fabric. They mostly were needed to rebuild and rarely were successfully restored [9].

In Istanbul city texture generally 3 type of construction system can be seen for old buildings:

1- Masonry buildings; mostly monumental and public buildings (Mosques, madrasas also can be called as Ottoman collage, schools, hospitals, imarets, armies and tombs)

2- Timber Frame buildings; mostly civilian buildings (Houses, tekkes, basic palaces and lodges)
3- Mixed type buildings; These types of buildings had their basement or ground floor as stone, while upstairs floors were timber frame, or timber frame construction with filled brick or Stone-Hımış Structure; (Mostly houses and hotels) [3].

Architectural conservation and preservation comprehensively has focused and limited on monumental and public buildings. Nowadays there is a gradual change in the field under impression of ICOMOS, UNESCO and EU candidacy of Turkey that conservation and preservation concepts have been rethought according to international conservation and preservation frameworks.

Sometimes it can be thought that monumental buildings like mosques, tombs, madrasas and churchs should be protected, but other buildings like basic old timber houses were not necessary to be protected. Furthermore it should be renewed as soon as possible. From this point of view historical timber buildings are not useful and can be shown as uncomfortable. The main idea under the desire of transformation of these old historic buildings had a basis of high income expectation of land price. Thus for those who are interested in unearned income think that old historic buildings should be collapsed and transform to new high technology buildings. Unconscious conservation is also as harmful as the above mentioned approaches. They are sometime more destructive than disasters. Thus one of the most problematic restoration brunches can be regarded as the false techniques in architectural conservation of timber buildings.

SELAMI EFENDI TEKKE (Figure 7)

Tekkes are known as one group of religious buildings. They are civilian buildings and mostly constructed with timber frame. After Ottoman period in the first years of Republic Turkey, in 1927's, tekkes were closed and their activities were banned by the government. In 1890's in Istanbul there were about 300 activite tekkes [10]. Today they remain only between 20 to 25 on total after restriction and closing. Many of them are in bad situation or badly repaired or restored, even many of them are ruins waiting for the consideration and interest of the experts. The same condition is similar for the other civilian timber frame buildings. Today lots of civil architectural buildings in Istanbul have the same problem of neglecting, bad restoration, and destruction. Some of the buildings were burnt or turned to ruins.

Figure 7 Before the Fire Selami Efendi Tekke [11]

Figure 8 Interior of Selami Efendi Tekke before the Fire [11]

Selami Efendi Tekke (Figure 8) is located in Nazır Ağa Çeşme Street in Eyüp Region, Istanbul. It was built in 1810 by "Arabacızade Ibrahim Nesim" who was statesman of Ottoman Government. He gifted the building to his sheikh "Mustafa Selami Efendi" and named it as Selami Efendi Tekke. Tekke continued its activities till 1927, after closing tekkes law; it was handover to Directorate General of Foundations (Vakıflar Genel Müdürlüğü), in 1985 it was restored by that authority. [12]. New function preschool was carried out until 22 February 2009 fire (Figure 9). Unfortunately today advanced extinguish system of Selami Efendi Tekke totally burnt and became a ruin because of electricity contact problem.

Figure 9 Extinguishing struggle [11]

Obviously we can not always prevent the damage fire injuries in historical timber buildings like in this case (Figure 10). But, it can be pointed out that malicious intends can be seen in this arsons due to build new building or parking area. Eventually Istanbul has lost civil cultural heritage especially timber frame buildings because of normalization of such events as typical and unpredictable ones.

Figure 10 Selami Efendi Tekke right after the fire [11]

DISASTER AND AUTHENTICITY PROBLEM

Authenticity is an important concept of preservation and conservation. There are five components in authenticity according to comprehensive universal scale:

1- Material
2- Form
3- Construction Technique(s)
4- Function
5- Situation of city texture [9]

In many international heritage congresses authenticity has been discussed in detail. Nara conference presents a border of authenticity concept that was drawn by experts and delegates [1]. Essential argument in architectural conservation is authenticity and has 5 components as listed above. Conservation of cultural heritage activities can be resulted with false and wrong actions without consideration of authenticity. After earthquakes cities are mostly accomplished by restoration or rebuilt contrary to fires. In earthquakes, buildings are demolished or half demolished, or damaged which are stonework buildings and when they were repaired; form, material, structure, technique, and state of city texture are stayed in original situation. Opposite to masonry buildings, timber buildings are almost re-eradicated after fire disease and mostly there were not any evidence of original form except people's minds. Today old photographs, old mappings and old drawings are used in restoration works, but at that times there were not any printed document related to basic timber buildings. Even in these circumstances there was one big advantageous process that can be summarized as authentique construction technique and material usage.

All throughout historical period, both timber frame and masonry buildings could be repaired up to original situation, because craftiness, techniques, materials of construction were same, so repairing or restoration was convenient for authentique forms. [9] However it is different neither nowadays that nor today's craftiness, techniques, materials, neither today's architecture has a drastic change. Old construction techniques and materials were not still in use with their old practices. Similar applications are used under conservation techniques with limited successes. How handmade timber material can be supplied for restoration of traditional house? Or how traditional paints can be produced? So we can make just their copies or imitations in our factories or ateliers. So the restored buildings became counterfeit and sometime totally fake. Sometimes Interior constructed as concrete but exterior is extremely traditional (Figure 11). Obviously we may discuss the originality of neglected buildings or ruins when we have related them with the terrible restoration activities.

Figure 11 Insides concrete, exteriors seem traditional timber frame buildings, Eyüp (Istanbul)

CONCLUSION

After earthquake and other disaster, the most important technical problem and issue can be seen as authenticity for all cultural heritage buildings. Post disaster repairing and/or restoration activities of demolished or damaged buildings are to be possessed according to universal conservation techniques. Restoration studies will stay very far away from its mainstream and objective without proper conservation techniques. De-restoration processes will be necessitated after inappropriate restoration, which is more expensive and more destructive than the disaster affects itself. Thus conscious conservation process is extremely important not only humanity and for cultural heritage by means of true conservation process of timber buildings but also by preserving that authentique form to our descendants.

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