Abstract

Purpose

The Westernization and its reflections could be observed in the architecture, urbanism and social life in Istanbul in 19th century. The Tanzimat Edict (1839), Vienna Protocol (1855) and Islahat Edict (1856) affected the lifestyle of non-Muslims, especially in the administrative, religious and educational sphere. These political, legal and social reforms had also affected the Greek Orthodox community living in the Ottoman lands and their architectural activities about the churches. Therefore, the purpose of this paper is to clarify the restoration works of Galatasaray Panagia Church conducted in the 19th century based on the archival documents.

Design/Methodology/Approach

The archival documents provide a comprehensive understanding of the changes, repairs, architectural implementations and formal procedure

Keywords: Archival documents, Galatasaray Panagia Church, Greek churches, 19th century, restoration

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of the restoration of the Greek Orthodox churches. The methodology of the paper is mainly to analyze the archival documents and do the field survey. The archival documents about the extension of the Galatasaray Panagia Church was analyzed in detail. Then field survey was done. Present-day conditions of the church was observed and compared with the archival documents. Moreover, the analogical research was done to understand the situation before the implementation in 19th century.

**Findings**
The archival documents were the important proofs of the interventions of the conservations, which were applied at the end of the 19th century. They give information about the drawing techniques, characteristics of interventions, construction materials, construction sector, responsible authorities and the process of getting necessary permissions for the restoration and the details of labors. At the end of the 19th century, restoration process of the Greek Orthodox churches was changed with the removal of the restrictions. For example, the new construction materials were used from European countries.

**Research Limitations/Implications**
This study examines the archival documents to provide the information about the church and aims to underline the importance of these documents to understand the history of the church, as well as the conservation methodology and process in the 19th century.

**Practical Implications**
The archival documents are not merely materials to help understand the building better, but they also serve as tangible evidences of past restorations. The technical details that archival documents include, guide the decision process of the future interventions. Moreover, they provide reliable and valuable information about the later additions that must be conserved.

**Social Implications**
The Greek Orthodox community was one of the important non-Muslim groups, had a significant role in the Ottoman Empire. Considering the present-day conditions, most of the Greek Orthodox churches could survive owing to the extensive repairs, restorations or, in some cases, reconstructions. This study made an important contribution to the research on the Greek Orthodox churches, which has a small population today.

**Originality/Value**
Most studies on this subject is based on just classification of the archival documents. However, this study is focused to analyze the documents in detail with the observation on the structure. The originality of this study is both to analyze historical archival documents and to observe present-day conditions together. Thereby while the past restoration process was understood, future implementation are shed light on.

**INTRODUCTION**
The Greek Orthodox community was living in Anatolia since the establishment of the Byzantine Empire (Baskıcı, 2009, 40; Shukurov, 2016, 3-4; Tülüce, 2016, 31-34) Istanbul has been home to many civilizations and communities due to its privileged
location and being the capital of the Byzantine and Ottoman Empires throughout its long history. Istanbul has a remarkable architectural diversity due to various ethnic groups that had lived together. The city was a Christian-Orthodox capital including different ethnic groups since the 4th century (Beihammer, 2017, 52; Cahen, 1968, 64-66; Vryonis, 1975, 57). After the conquest, the sultan of the Ottoman Empire respected the non-Muslim communities in terms of their religion and free worship. So thus, these religious rights were guaranteed by the legal regulations. The Greek Orthodox community, which was one of the important non-Muslim groups, had a significant role in the Ottoman Empire.

The Westernization in the Ottoman Empire, which started with the Tulip Era, was a long process, and resulted in many changes and developments in different fields. These developments had a particular impact on architecture, urbanism and social life in Istanbul. Especially the 19th century witnessed radical changes and reforms in the economic, political and social arenas in the Ottoman Empire. Another specific aspect of the 19th century was the influence of the Tanzimat and Islahat Edicts on the non-Muslim's lifestyle. The changes and reforms within these edicts were reflected in the architectural activity of the churches with respect to the political developments also.

The construction and restoration processes of the Greek Orthodox churches were also affected by the developments as a result of the edicts. There is a significant number of documents in the archives about the Greek Orthodox churches, which were damaged or repaired because of disasters such as fire, earthquake or usage of inappropriate materials during the conservation process. The information about the construction and restoration processes of the Greek Orthodox churches can be provided from especially two main archives. The first one is the state archive entitled ‘The Presidency of the Republic of Turkey Ottoman Archives (BOA)’ and the other one is the archives of the Greek Orthodox communities, which are the archive of the Patriarchate or the archives of the congregations of the churches. The documents recorded in the 19th century indicate the changes in the implementation and legal process of the construction or restoration of the churches. In addition, these documents clarify the construction and restoration history of the churches including the conservation techniques and administrative details. They help to comprehend the implementation’s background and in this way, the probable conflicts about the past interventions are eliminated. This historical information also is being a guide for the future interventions. This article aims to examine the restoration processes of Galatasaray Panagia Church conducted in the 19th century based on the Ottoman Archives.
CONSTRUCTION AND RESTORATION ACTIVITIES OF NON-MUSLIM COMMUNITIES IN THE 19TH CENTURY

The Tanzimat and Islahat Edicts proposed ‘equality’ between the non-Muslim and Muslim communities. The Tanzimat Edict guaranteed equality before the law for all Ottomans, regardless of religion. All rights such as taxation, military service, criminal justice, life safety, honor safety, property right are the same for all communities (İnalçık & Seyitdanlıoğlu, 2006, 3). Therefore, non-Muslim communities procured the opportunity to construct new buildings or restore the existing ones. Even though the government provided legal freedom for these architectural activities, the non-Muslim communities were responsible to find budget, mostly provided by the financial donations or the budget of the foundation of the churches (Alemdar, 2012, 260). Before the 19th century, the churches were simple and independent from their environment, but after the Tanzimat Era and the declarations of the edicts, the interaction between the churches and their environments was highlighted. Furthermore, the churches have turned into a landmark in their neighbourhood, they were architecturally impressive and plan typologies and ornaments were freer and more diverse.

Before the Tanzimat Edict (1839), the churches were neglected for a long time and faced the risk of collapse due to mostly the climatic conditions. Then, they were comprehensively repaired because the congregations of the churches had legal support and permission. In this period, Shayk al-Islam and then Sultan’s permissions were needed for the restoration of the churches (Şenyurt, 2012, 71). In some cases, the political and social facts resulted in delays in the construction and repair of the churches or other structures belonging to the non-Muslim communities. Therefore, the permission about the repair or reconstruction of more than one church is often specified in a single document to meet the patriarchates’ requests (Şenyurt, 2012, 30). According to the documents, the repair permits of non-Muslim structures did not break the workflow of the governmental structures.

Constructing a new church was only possible when the church was ruined due to a fire or if an extensive repair was needed. Nevertheless, adding a new structure or space to the existing church or expanding the building was forbidden in these cases. Moreover, the existing materials were reused in the construction of the churches to reduce the cost (Şenyurt, 2012, 31). As underlined, before the Tanzimat Edict, the regulations about the construction of a new church were more rigid. For example, if a new church was going to be constructed instead of the old one,
all the architectural dimensions had to be the same with the standards determined by the Ottoman administrators. All the façades and spaces were controlled by the responsible authorities, and any windows or doors could not be added to the building if they did not exist before (Şenyurt, 2012, 13).

However, after the Tanzimat Edict, non-Muslims had new rights for the construction of their structures. Previously, there was an inequality between the height of the storeys of Muslim and non-Muslim's buildings. These rules changed after the Tanzimat Edict and all communities became equal in terms of the construction of new buildings. Thus, the new construction methods were started to be implemented on an equal basis (Denel, 1982, 42). The process that began to change after the Tanzimat Edict has become more apparent with the Vienna Protocol in 1855. With this protocol, non-Muslims also gained new rights for the restoration of their buildings and the construction of new places for worship. According to this protocol, non-Muslims could have been able to repair their sanctuaries without permission, and build new churches in the areas where there were many Christian inhabitants. However, in spite of this issue, it was stated that a license should have been obtained from the Sublime Porte for repairing the existing buildings and for new constructions, which was declared in the Hatt-ı Hümayun, dated March 4, 1856. There is a statement in the Islahat Edict regarding the restoration of non-Muslim structures. It expresses that the repair or reconstruction of the churches, schools, hospitals or cemeteries in their original form and condition will be allowed in the cities, towns or neighbourhoods where the entire community belongs to the same religion. Although the Vienna Protocol of 1855 stated that construction of a new building was permitted, it came up in the Islahat Edict that the necessity of getting permission was still valid for the construction of new buildings (Madran, 2002, 33-34). After the Islahat Edict, new churches were constructed in various plan schemes, construction techniques and they had different ornamentations and stylistic features as a result of the remission of the restrictions (Karaca, 1996, 38).

The basic document explaining the conditions and rules about the construction or repair of the non-Muslim buildings belonging to the congregation, such as churches or schools, was the Islahat Edict in the 19th century. The construction activities of the congregation buildings increased in the second half of the 19th century. Thus, the Ottoman Empire tried to keep these activities under control regarding the regulations defined in the edicts. Important details about the construction or the restoration of the building were determined before the construction activities started. These details can be summarized as the location of the
BRIEF INFORMATION ABOUT THE GALATASARAY PANAGIA CHURCH

The Greek community wanted to build a new church in Pera because the Greek-Orthodox churches were far from their neighborhood, especially Galata. So, the church was constructed with the donations of the Greeks in Pera on the Hacopoulos's plot, which was blessed to the name of Hagia Panagia. The first stone of the foundation of the church was placed on June 26, 1804, by Dimitrios Shinas who was the translator of the Sublime Porte, Skarlatos Sevastopoulos, Yordanis Kaplanoglou, Eustratios Petrokokinos (Kalayci, 2014, 495). Galatasaray Panagia Church (Ton Eisdon) had two entrances since it was constructed with the permission of the Ottoman state. One of the entrances was connected to Beyoğlu district whereas the other one was connected to Tepebaşı district, where the Cemetery of Catholics was located (Hovhannesyan, 1996, 38). Today, the church is located in Beyoğlu District, Asmalı Meşrutiyet Neighborhood and it has three entrances (Fig.1). Main entrance is on Emir Nevruz Street and the other entrances are on Meşrutiyet Street and the Han Geçidi Street (Fig.2).
According to the inscription of the church, it was constructed from the foundation on September 18, 1804. In the beginning, the church had a single nave, it was simple and ornament free. However, in 1831, the church was enlarged and the roof was renovated during the reign of Sultan Mahmud II (1808-1839) (Karaca, 2008, 353). According to Karaca, the church was enlarged again towards the south and north directions in 1860. However, the archival research on this issue revealed that the date 1860 is not correct. According to the documents in the Ottoman Archive, the church was enlarged in 1894 upon the request of the Patriarchate in 1893. Additionally, it is known that the church was also restored in 1875, 1890 and 1904. The Greek architect Leon Casanova was responsible for the repair of the church in 1904. This repair was based on the general renovation of the church and restoration of ornaments owing to its centenary. The church was restored in 1946 by the architect Ch. Euthymiades, and the wall paintings and icons were restored by Charilos Xanthopoulos and Russian Nikolaos Perof in the same year. However, the church was damaged during the protests on September 6-7, 1955. Lastly, the structure was restored between 2007 and 2009, after the explosion, in 2003, in the vicinity of the church (Tsilenis, 2010, 449-450). After the explosion, the windows were broken and the main axis of the roof dislocated. In addition, the floor and structural system were damaged due to the water leak from the roof. Therefore, the primary issues were the repair of the roof, the consolidation of the structural system, the renewal of the floor coverings and the renovation of the wall paintings and icons (Kalogeras, Pavlotos, & Tsilenis, 2009, 62). Consequently, the church was reopened in November 2009 (Fig.3).
Today, the church consists of a main naos, a narthex, a bema, a gynaeceum and a bell tower. The church has a five-aisled basilica plan scheme on the east-west axis (Fig. 7). The columns and square shaped piers separate the aisles. The columns are made of oak wood and the thick mortar layer surrounding the wooden core. Therefore, the cross section of columns has become larger. There are two stairs on the east side of the church to reach the gynaeceum section. The bema has three parts, the central apse is in the form of a half round on the east, and the others are straight. The pitched roof covers the naos, but the apse is covered by a flat roof. There is a bell tower on the east side and a bridge on the south side connecting the church to the priest house that is a later addition. The building has masonry structure and all facades are plastered and painted.

THE RESTORATION PROCESS OF THE CHURCH BASED ON THE ARCHIVAL DOCUMENTS

The documents in the Ottoman Archives were firstly reviewed in order to understand the history and characteristics of the Galatasaray Panagia Church’s restoration process. According to the archival records, there were several correspondences about the restoration process of the church between the governmental organizations of the Ottoman Empire in 1893 and 1894. One of these correspondences reveals the administrative process and the institutions involved in the restoration of the church.

The first document about the restoration of the church has five pages. The document dated August 12, 1893 stated the request of the Patriarch Neofitos VIII on behalf of the Patriarchate of the Greek Community (Patrikhâne-i Millet-i Rum) to the Ministry of Justice and Sects (Adliye ve Mezâhip Nezareti). This request is about the need of enlarging the church, because its capacity is

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1 BOA. ŞD. 2626/47. December 27, 1893. Permission about repair of Galatasaray Panagia Church.
not sufficient for the Christian population living in the area. This enlargement would only be allowed without destroying the authenticity of the church during the inclusion of the two porticoes on both sides into the naos. A paper indicating the necessity of the examination on the repair and enlargement of the church was sent from The Secretary of the Municipal Council (Şehremâneti Meclis Kalemi) to the Ministry of Justice and Sects (Adliye ve Mezâhip Nezareti) with regard to the request on October 26, 1893. The Municipality of the 6th District (Altıncı Daire-i Belediye Müdürüyeti) clearly explained what has to be done with the detailed drawings and its cost, 215 Ottoman Liras, as a result of that examination. In addition, the cost estimation was presented including the expenses of that repair. Aleko Frenklink was the contractor of the lump-sum contract for this repair and this contract was supplied and submitted by Vasilaki Efendi and a respectable and loyal deputy of Zahariye Efendi who was the trustee of the church. On November 18, 1893, Rıza Bey, Minister of Justice and Sects, approved the intervention to the church, in the name of the Ministry of Justice and Sects, Directorate of Sects (Adliye ve Mezâhip Nezâreti Mezâhip Müdürülüğü). Additionally, a paper written by the Secretary of the Imperial Council (Divân-ı Hümâyûn Kalemi) on behalf of the Prime Minister (Bâbıâli Dâire-i Sadâret-i Divân-ı Hûmâyûn) also stated that a permit was given for the restoration of the church on December 3, 1893. The second document about the restoration of church consists of four pages; one of them is a plan drawing, the second is cost estimation table and the remaining two are plain texts, bearing the stamps of the members of the Department of Internal Affairs (Fig. 4). These document\(^2\) dated December 27, 1893, stated the approval of the Council of State, the Department of Internal Affairs (Şûrâ-yı Devlet Dâhiliye Dairesi) about the restoration of the church. Finally, the grand vizier and the head clerk of the Sultan approved the restoration of the church on behalf of the Sultan, and this approval was delivered to the Municipality (Şehremâneti), The Ministry of Justice and Sects by the document\(^3\) dated January 30, 1894 (Fig.5). The last document is a registration summary.

According to the information gathered in the Ottoman Archives and Archives of Beyoğlu Greek Orthodox Churches and Schools Foundation, the church had its present-day plan during the restoration works conducted between 1893 and 1894. The characteristics of the interventions, the construction materials and the working groups and schedule of the restoration of the church were revealed in light of the archival documents.


The plan drawings and cost estimation were attached to the document upon the request of the Patriarchate in 1893. The drawings prepared for the church are similar to the intervention sheet in the present-day understanding of conservation projects (Fig.6). These drawings were signed by the church trustee and engineer, thereby they were approved. The scale of the plan drawing is expressed as “Mikyas bir metro için iki santimetre alınmıştır” (the scale is 2 cm for 1 m) and there is a note as “échelle 0,02 par metre” on the drawing. These notes show that the scale of the drawing is 1/50. The drawing is in color and,
includes the following explanation: The walls to be demolished are represented in yellow, whereas the walls and windows to be reconstructed are represented in pink. There will not be any difference in the length and width of the church following the repair. The terminology used for the naming of the spaces is remarkable. For example, while “direk altı (literally beneath the posts)” indicates the semi-open portico, “narteks diye tabir olunan mahal (the space called as narteks)” is used for the narthex. “Kilise derunu (interior of the church)” is used to name the naos. The terms used for naming the spaces in the 19th century are almost the same with the present-day church terminology. Only, the parts that would be intervened are represented in the drawing, and the openings and wings of the doors are not shown. The main door on the west side is called “büyük kapu”, literally meaning the grand gate. Although the windows are drawn in detail to represent the existing situation, the doors and windows, which would be concealed within the walls because of the reconstruction, are not drawn. Only, some parts of the furnishing are represented, but there is no information about the floor coverings. In addition to the drawing, the table attached to the drawing is accepted as the first cost estimation that shows the construction materials and costs (Table 1).

Table 1. Cost estimation for restoration of Galatasaray Panagia Church in Beyoğlu

<table>
<thead>
<tr>
<th>Description</th>
<th>Ottoman Lira</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cost for tearing down the walls and reconstruction of the walls in Marseille stone with a thickness of 45 cm with window openings</td>
<td>150</td>
</tr>
<tr>
<td>Relocation of the iron doors and placement of new Trieste door frames</td>
<td>15</td>
</tr>
<tr>
<td>For fifty new seats (pews)</td>
<td>25</td>
</tr>
<tr>
<td>Relocation of icons</td>
<td>18</td>
</tr>
<tr>
<td>Repair of floor coverings</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>215</strong></td>
</tr>
</tbody>
</table>

There are some differences between the old drawing of the church, dated 1893, and present-day plan. One of the is indicated in yellow on the second axis in both drawings. Archival drawing indicates that the wall is constructed on the second axis (Fig.6), but at the present time, there is no wall on this axis. There is a wall on the first axis, shown in red on the plan (Fig.7). This wall is considered as a part of the original structure with respect to its thickness and the existence of the doorways.
Moreover, the examination on the similar churches having the same plan configuration and the existence of the gynaecium.
(women’s gallery) and the staircase reaching to this space before the exterior naves (which was called as “direk altı” in the drawing of 1893) support the claim that the wall on the first axis is original. Hagios Dimitri Church in Büyükada, constructed in 1856, has the same plan scheme with the first Galatasaray Panagia Church (Fig. 8, Fig. 9). The church of Hagios Menas in Thessaloniki, built in 1852, is a three-aisled, wooden roofed basilica. It has a colonnade and a gynaeceum on three sides and a single, pitched roof (Fig. 10, Fig. 11) (Vamvoukou Kambouri, 1979, 32). All of these examples have semi-open porticoes on north, south and west side. In addition, these similar churches give information about the form of the Galatasaray Panagia Church before its restoration in 1894. It is obvious that west, north and south façades of the church were open spaces before the enlargement of the church. Then these spaces were included to the naos (Fig. 12). The first floor of the wall on north, south and west façades were constructed during the intervention in 1894 (Fig. 13). Therefore, the naos space has expanded and became five-aisled.
Figure 9. Semi-open portico on west facade of Büyükada Hagios Dimitri Church (Sonmez Pulat, 2019).

Figure 10. Thessaloniki Hagios Menas Church plan (Vamvoukou Kambouri, 1979, 15).

Figure 11. West facade of Thessaloniki Hagios Menas Church. (URL1).
Figure 12. Changes of indoor spaces before and after intervention in 1894 (Sönmez Pulat, 2019).
Even though, the plan drawing dated 1893 includes the windows within the newly constructed walls, three of these windows are being used as doors. It is not certain either the intended window openings turned into doors as a result of another intervention after 1893 or a different implementation of the first estimation. There is another difference between the present-day plan and the old drawing, and that is on the wall between the narthex and exterior naves. This observation is shown in blue in the Figure 6. This part was expressed as doors in the drawing dated 1893, but currently, there are windows instead of the doors (See blue part numbered as 3 in the Fig. 7). Lastly, the walls, which are drawn without the windows surrounding the narthex (See, green part numbered as 4, in Fig.7), may not exactly match with the current status depending on the elevation of the plan section. Consequently, the drawing dated 1893 and the table of the cost estimation provide an approximate information about the interventions and the expenses within the restoration process. Obviously, the main intervention is the inclusion of the semi-open sections of the church into the naos. However, there are differences between the present-day plan of the church and the drawing dated 1893. There can be two hypotheses proposed about these differences. One can suppose that this drawing is the first draft or the concept project that underwent some changes during the implementation. The second hypothesis is that the church might have been restored or intervened after 1893. Despite both these hypotheses, the inclusion of the semi-open sections into the naos, can be interpreted as a valuable contribution to the historic evolution of the church. Furthermore, besides the new spaces, construction materials and techniques of 1893 are also an addition of quality to be maintained in future restorations.

Some documents related to the construction of the church were found during the research in the Archives of the Beyoğlu Greek Orthodox Churches and Schools Foundation and they are mostly in Greek, rarely in French (Fig.14). The document seems to be a construction notebook with some missing pages. 48 pages have been found in the archive. These explain the types of the materials including the amount of the usage, where the materials were procured, and the assignment of the working groups involved in the restoration process. As stated by the dispatch
notes and bills, the construction materials were supplied from H.G.Laghos and O. Derounian Company (Fig.15).

According to these documents, the construction materials used in the restoration process in 1893, were clearly presented on the

Figure 14. A page of the construction documents from the Archives of the Beyoğlu Greek Orthodox Churches and Schools Foundation.

Figure 15. The sample bill of Derounian Company and the sample dispatch notes of Laghos Company from the Archives of the Beyoğlu Greek Orthodox Churches and Schools Foundation.
The construction material list gives the information about late 19th century implementation. As conformity to authentic construction materials is the main concern of the later restorations, these archival documents shed light on construction materials to be selected in future restorations.

The Galatasaray Panagia Church.

Table 2. The construction materials used in the restoration process of the Galatasaray Panagia Church.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Type / Production Method</th>
<th>Size / Amount</th>
<th>Production Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone</td>
<td>French Stone</td>
<td>size 0.65 (?)</td>
<td>Marseille (?) / France</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 0.75 (?)</td>
<td>Marseille (?) / France</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 0.90 (?)</td>
<td>Marseille (?) / France</td>
</tr>
<tr>
<td></td>
<td>Trieste Stone</td>
<td>18 parmak (Ottoman’s local unit measurement. It is approximately 56 cm)</td>
<td>Trieste / Italy</td>
</tr>
<tr>
<td></td>
<td>Malta Stone</td>
<td>size 24x24 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 23x23 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 20x20 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 16x32 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 30x30 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 18x36 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 20x40 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td></td>
<td></td>
<td>size 32x32 (?)</td>
<td>Marmara Island</td>
</tr>
<tr>
<td>Brick</td>
<td>3 Holes Bricks</td>
<td>22x10,5x6,5 cm (?)</td>
<td>Mürefte</td>
</tr>
<tr>
<td></td>
<td>6 Holes Bricks</td>
<td></td>
<td>Mürefte</td>
</tr>
<tr>
<td>Cement</td>
<td>Roquefort Cement</td>
<td>Package in 90 kg</td>
<td>Roquefort / France</td>
</tr>
<tr>
<td></td>
<td>English Hollick Cement</td>
<td>Package in 180 kg</td>
<td>London / England</td>
</tr>
<tr>
<td>Lime</td>
<td>Lime (hydraulic)</td>
<td>Sack</td>
<td></td>
</tr>
<tr>
<td>Gypsum</td>
<td>White Gypsum</td>
<td>Sack</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local Mopboard</td>
<td>size 0.10 (?)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red Local Tile</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plasters</td>
<td>size 2.5 arşın (Ottoman’s local unit measurement. It is approximately 188 cm)</td>
<td></td>
</tr>
</tbody>
</table>

The designation of the existence of many products imported from Europe in the restoration of the church demands deeper research in the archives and The Oriental Trade Annuals (Şark Ticaret Yıllıkları), and an examination on the similar
architectural examples and contemporary implementations (Fig. 16). The use of imported materials in the construction or repair during the Ottoman period is not specific to this topic. For example, according to the document from the Archives of the National Palaces, the stones imported from Trieste and limestone, specifically küfekköy, provided from Şile, Büyükdere Kasap Çayı and Bakırköy were used in the construction of the Çırağan Palace between 1863 and 1871 (Yergün, 2002, 135). The garden walls of the Çırağan Palace on the seaside pier are constructed with Marseille stone and Malta stone was used for the floor coverings (Can, 1999, 57). On the other hand, one of the Ottoman archival documents stated that Trieste and Malta stones were used in the construction of the Haydarpaşa Kasrı-ı Hümayun by Sarkis Balyan in 1864 (Ekim, 2018, 312). Similarly, the archival document about the construction of the Ayazağa Kasrı-ı Hümayun, which was constructed by the Balyan family and during the reign of Sultan Abdülaziz, also stated that the Trieste and Malta stones were used in the construction of the building (Ekim, 2018, 104). Another example concerns Yıldız Hamidiye Mosque, constructed between 1881 and 1885, where all the window frames and eaves are in Trieste stone according to the contract of the building (Can, 2014, 60). It is possible to multiply these examples based on the archival documents. For instance, the document dated 1893, stated that the stones for the construction of the buildings of Darülaczeze were provided from Trieste and Marseille instead of the limestone quarry in Bakırköy. In addition, the document in the Ottoman Archive dated 1894, notes the use of the Trieste stone for the floor coverings in the kitchen and laundry of the Beyoğlu Kışla-ı Hümayun.

4 Küfeği: It is a kind of limestone used as a construction material especially in Istanbul and Thrace. Because of obtaining around Bakırköy (Makriköy) in Istanbul, it is named as Bakırköy stone. It is a compact rock, light beige or white in general, fine grained and sandy appearance, high tension and shear strength. Lots of fossils and spaces provide calcite Featured texture. The other important point is high workability and after the air contact, durability increases. It is used not only for wall construction but also floor coverings, arches, portals interior (Sönmez, 1997, 65).

5 BOA. DH.MKT. 124/4. August 31, 1893. In Order To Complete, the Construction of Darülaczeze Buildings, the Necessity of the Stones, Which Cannot Be Obtained from Makriköy Quarries to Be Supplied from Trieste and Marseille Stones.


The use of imported materials such as the Trieste, Marseille and Malta stones in the construction or the repair of the buildings in the last quarter of the 19th century and the official records of...
these materials in the documents in the Ottoman Archives and The Oriental Trade Annuals are quite important to understand the case of the Galatasaray Panagia Church. Obviously, using stones imported from Europe in the construction or restoration of the buildings at the end of the 19th century was not unusual. The book entitled Notes Pratiques et Résumés sur l'art du constructeur en Turquie (Practical Notes on the Art of Building in Turkey and Summary Information) written by the French Architect Alexandre Raymond in 1908, is a very important source dealing with the construction market, material and labor conditions, technical and legal arrangements in the Ottoman Empire at the beginning of the 20th century. Furthermore, the construction materials, their market in Istanbul and the unit prices of the materials are also included in the book. In addition to the local materials, there is a wide range of materials that were brought from Europe in the market of Istanbul (Mazlum, 2013, 503). The construction materials used in the restoration of the church are also included in the list about the construction materials and the cost of labor. Raymond indicates that the London Hollick cement, the Marseille Roquefort cement, and Trieste and Arles stones are stated as the common construction materials used in Istanbul.

There are some unclear parts about the units describing the dimensions of the materials in the archival documents. For example, "size" is used to describe some materials, but there is mostly no specific unit of measurement. However, in some cases, the specific Ottoman units of measurement, such as "arşın" and "parmak" are used. In fact, "gram" as the unit of weight and "meter" as the unit of length were determined as the official units in the governmental institutions upon the regulation issued in 1869 and these units turned into countrywide units after the related regulation was issued in 1874 (Acar, 2004, 85-92). On the other hand, the different measurement units, both old and new, were met in the official documents dated between 1893 and 1894. The documents in the archives of the church had the previous measurement units, but in the Ottoman Archive document the thickness of the reconstructed walls were expressed as 45 cm. Consequently, this period can be considered as a transition period to adapt to the new measurement units.

The detailed material analysis of the church in terms of the kind, origin or peculiarity is not possible because the walls are plastered and painted in the present-day situation. However, it is still possible to identify some materials. For example, the marble floor coverings and red local tiles are clearly visible. These red tiles were used in the lower part of the square-shaped piers that remained from demolished walls (Fig.17). In addition, it is known that the red tiles had to be repaired based on the first cost.
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estimation. Besides, the marble plates were purchased at different times according to the construction document found in the archive of the church foundation and this is related to the repair of the floor coverings. Still, there are different-sized marble plates in the church today (Fig.18).

Beyond the architectural details about the restoration of the church, there is also information about the details of the labor and the daily wages of the workers in the construction document found in the Archives of the Beyoğlu Greek Orthodox Churches and Schools Foundation. The workers and their practices are explained in detail, and these are the masons

Figure 17. The red tiles used in the restoration of the church in 1894 (Sonmez Pulat, 2018).

Figure 18. Plan of the church showing the floor coverings. (Reproduced by the author based on Karaca, 2008, 359).
(duvârcılar/Κτίσται), stonecutters (taşçı/Λιθοξόοι), unskilled worker (düz işçi/Εργάται), plasterers (sıvacılar/Σοβατζίδες), cabinetmaker (ince marangoz /Λεπτουργος), cleaners (temizleyici/Καθαριστής), scrapers (raspacı/Τριπτης), carpenters (marangoz/Μαραγκός) and the secretary (yazman/Γραμματικός). The secretary was responsible for keeping records about the work schedule, attendance, overtime performance of the employees. Therefore, this occupation in the Ottoman period is considered as the tally clerk (puantör) in the present-day.

CONCLUSION

19th century is a specific period in the Ottoman history as well as Europe, and the major characteristics of this period were the developments and reforms in political, social or economic orders and also in art and architecture. Thus, the reflections of these reforms and developments in the Ottoman Empire can be observed in the construction and restoration process of non-Muslim structures. The archival documents, which are the basic evidences of these reforms, are very important because they reveal the specifications of that era. The restoration process of the Galatasaray Panagia Church, which is a worship place of the Greek Orthodox community, started in 1893 upon the request of the Patriarchate and was completed in 1894. The details of this restoration process were tried to be clarified based on archival documents. The basic findings in these documents are related to the drawing techniques, characteristics of interventions, construction materials, construction sector, responsible authorities and the process of getting necessary permissions for the restoration and the details of labors. These archival documents were the important proofs of the interventions, which were applied at the end of the 19th century. The restoration process was rather comprehensive and attentive due to including detailed drawings, construction material list, cost estimations and official permission documents. At the end of the 19th century, the philological restoration approach was prevalent in Europe. While interventions to the church seem to be compatible with this approach at some points, they contradicted at some others. According to the philological restoration, new additions were not necessary if they are not of historical and monumental content. The inclusion of the semi-open spaces to the naos in Galatasaray Panagia Church was mainly due to the increasing number of users and thus can be considered for social requirements. Although in philological restoration the intervention should not damage the authenticity of the building, it has not been the case.
In the Ottoman Empire, only the original materials of the churches were allowed to be used in their restoration. However, it is seen that the European stones were also used in the restoration of the Galatasaray Panagia Church. The restoration decision was basically about the inclusion of the semi-open spaces into the naos. These newly added naves of the church were considered as a later addition specific to the end of 19th century. Afterwards, the authenticity of the space, the materials and construction techniques applied were the focal points of conservation processes of the church after the 19th century. The integrity of the church with its additions specific to the late 19th century has been the main concern of the later restoration processes.

During the last period of the Ottoman Empire, the Greek Orthodox churches were no longer constructed in a simple configuration and did not have plain ornamentations. They became more visible in the cityscape. The scale and the architectural style of the churches also changed along the 19th century. Therefore, this study examines the archival documents to provide the information about the church and aims to underline the importance of these documents to understand the history of the church, as well as the conservation methodology and process in the 19th century. These documents do not only give information about the history, they also can be considered as a guide for the future implementations. The archival documents provide reliable and valuable information about the later additions that must be conserved. Later additions specific to late 19th century were preserved during the restoration conducted after the end of the 19th century. The extension of the church was a necessity for the increasing population of Greek Orthodox community in the area at the end of the 19th century. Although the building continues to be a place of worship, the number of users is quite limited today. Even so, the intervention made in late 19th century is not reversed and all the additions of quality are preserved as a resource of information considering the spatial features, construction techniques and materials. Besides the information given by the building itself, the archival documents are the most important proof to understand the past restoration implementations and shed light on future restoration process with such technical details as construction materials and techniques.
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Restoration of the Greek Orthodox Churches at the End of the 19th Century in Istanbul: Case of Galatasaray Panagia Church


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**Resume**

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