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RESEARCH ARTICLE

Panagiotissa through the layers of time: The Archive's memory of repairs and the present condition of the structure (1691-todate)

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Abstract Panagiotissa (Panagia Muhliotissa) Church is Istanbul's only Byzantine church that has maintained its original function without interruption for over a millennium. Despite this unique status, the monument faces critical conservation challenges arising from its complex multi-layered history and ongoing material deterioration. This study examines the church's architectural and historical evolution, focusing on how successive Byzantine, Palaiologan, and Ottoman interventions have shaped its current physical state. To address this, the research employs numerous archival sources—including Ottoman imperial decrees, Patriarchate records, and institutional documents from 1691 to the present—combined with surveys by contemporary documentation techniques (terrestrial laser scanning and UAV surveys). The data generated include precise mappings of current deterioration (moisture damage, biological growth, unqualified repairs, and fresco decay), reconstitution drawings, and a preliminary science-based restoration proposal. The conclusions derived from these findings indicate that Panagiotissa requires a holistic conservation approach that integrates structural consolidation, removal of inappropriate additions, and material conservation, while respecting all historical layers equally rather than privileging a single period.

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1. Introduction

This study examines the Panagiotissa (Panagia Muhliotissa) Church, located in the Fener neighborhood of Istanbul's Fatih district, a structure distinguished as the only Byzantine church in the city that has continuously preserved its original function for more than ten centuries. This exceptional continuity renders the building significant not only within the scope of architectural history but also in terms of the persistence of urban identity and the enduring spatial presence of non-Muslim communities within the city's collective memory (Fig. 1). Despite its remarkable historical and cultural value, however, the structure has received comparatively limited scholarly attention when measured against other Byzantine monuments of similar importance.

Originally dating to the 11th century, within the Middle Byzantine Period, the church was revitalized in the 13th century under the patronage of the Byzantine princess Maria Palaiologina. Following the Ottoman conquest, it retained its ecclesiastical function and was not converted into a mosque, owing to a decree issued by Mehmed II (1451–1481) to Khristodoulos (Atik Sinan), the architect of the Fatih Mosque complex. Commonly known as the "Bloody Church," the building has been repeatedly affected by the fires that devastated the Fener (Phanar) district, as well as by earthquakes that struck the city over time. In response to both physical damage to the structure and the evolving needs of its congregation, successive additions and interventions altered its original "four-leaf clover" (tetraconch) plan, resulting in only a partial preservation of its initial scheme. Consequently, the structure has evolved into a multilayered architectural organism shaped by cycles of destruction, repair, and adaptation.

The aim of this study is to establish a scientifically grounded conservation framework for the Panagia Muhliotissa Church that responds to its rare historical continuity and multilayered architectural character while addressing the urgent physical threats it currently faces. To achieve this aim, the study pursues the following objectives:

- To document the current physical condition of the Panagia Muhliotissa Church.
- To investigate the historical repair processes, interventions, and administrative decisions that have shaped the building over time.
- To identify the material characteristics and deterioration problems affecting the structure.
- To reconstruct the historical development of the church and determine the relationship between its original fabric and later additions.
- To develop conservation and restoration proposals that ensure the protection of the building's cultural significance, authenticity, and physical integrity.

2. Theoretical framework, literature review, and research methodology

2.1. Theoretical framework

This study is grounded in a theoretical framework that integrates established principles of architectural conservation with concepts of memory, materiality, spatial transformation, and the architectural palimpsest. Since the research aims to present a conservation approach, it is essential to define its conceptual tools and situate them within internationally recognized theory. The framework draws on Jokilehto's *A History of Architectural Conservation* (1999), as well as key documents such as the Venice Charter (ICOMOS, 1964), the Nara Document on Authenticity (ICOMOS, 1994), and the Principles for the Analysis, Conservation, and Structural Restoration of Architectural Heritage (ICOMOS, 2003).

The concept of the archive's memory is understood as an active, interpretative system rather than a passive repository. Archival sources—repair decrees, surveys, financial records—construct a historically mediated understanding of the building. Concurrently, the building itself is approached as a material archive, where traces of



Fig. 1 Muhliotissa in the southern Golden Horn shoreline skyline (Altunışık, 2024).

interventions, damages, and transformations form a physical record of time. This dual reading enables a layered interpretation of the monument's history (Jokilehto, 1999). Within this framework, conservation is defined as a comprehensive, active process safeguarding cultural significance while allowing continued existence. As emphasized in the Venice Charter, conservation involves maintenance and, where necessary, scientifically grounded interventions (ICOMOS, 1964). Following Jokilehto (1999), conservation is understood not as a fixed methodology but as a historically evolving practice shaped by cultural values. Accordingly, this study adopts an approach based on minimum intervention, reversibility, and respect for historical authenticity.

The multilayered architectural character of a building refers to the coexistence of spatial, structural, and material elements from different historical periods. Rather than privileging an "original" phase, contemporary theory recognizes all historical layers as carriers of value; the building is interpreted as an architectural palimpsest. As Van Ooijen (2020, p. 2) defines it, the term palimpsest—derived from the Greek palimpsestos meaning "scraped clean again"—originally referred to parchment manuscripts from which old text had been washed or scraped to prepare the surface for new content, with traces of the earlier writing sometimes remaining visible underneath. In architecture, this metaphor describes buildings that physically show different stages and layers resulting from adaptations, transformations, and reuse over time (Van Ooijen, 2020, p. 2). Tran (2011, p. 8) elaborates that an architectural palimpsest can be interpreted to have at least three meanings: the prior meaning, the new meaning, and the hybrid creation when reading the prior with the new. As past remnants appear partially through the new work, the new work becomes an overlay of the old, making a simultaneous reading of both the old and new work possible.

The architectural palimpsest is not merely a metaphorical device but a material reality. As Van Ooijen (2020, p. 3) notes, "layering in a palimpsest is the result of a physical process, which is visibly discernible and materially tangible." Similarly, Ren (2021, p. 1) emphasizes that "as the architectural heritage can be understood as accumulation of layers, thus palimpsest could effectively modify the interpretation of it." However, this capacity for modification carries both potential and risk. Ren (2021, p. 1) warns that "the architectural palimpsest could cause double damages to the heritage, one is the irreversible destruction of authentic historical information, another one is blurring the way that people interpret the history and cultural identity." This aligns with the Nara Document, which emphasizes the cultural relativity of authenticity and the importance of context (ICOMOS, 1994). Material characteristics—masonry, mortars, plasters, decorative elements—are essential for understanding both historical development and current deterioration. Material authenticity, as expanded by the Nara Document, extends beyond original fabric to include historically significant transformations (ICOMOS, 1994). Authenticity is thus understood as a layered condition, where each material phase contributes to the building's overall significance.

Restoration is defined as a critical, interpretative process safeguarding legibility and integrity without falsifying

historical evidence; restoration must stop where conjecture begins (ICOMOS, 1964). The broader concept of intervention includes all physical actions, from cleaning and consolidation to removal of incompatible additions. Interventions must be reversible where possible and clearly distinguishable from original fabric (ICOMOS, 2003). Tran (2011, p. 13) further argues that "the layering of new over old, rather than the wholesale obliteration of vestiges of previous materials, details, spaces, and uses, allows for a deeper and richer architecture and continuity through architecture with the past." Configuration refers to spatial organization and structural logic, including plan typology and volumetric composition. Changes in configuration—additions, removals, functional adaptations—are interpreted as responses to evolving conditions. Drawing on Jokilehto, such transformations are not viewed as degradations but as part of the building's continuous life (Jokilehto, 1999); spatial change is therefore considered an inherent and valuable aspect of architectural heritage.

The palimpsest also raises important questions about how we read and interpret historical buildings. Van Ooijen (2020, p. 8) notes that "the visual contrast between the layers only appears to be a clash when regarded from a stylistic viewpoint. In fact, they are interconnected in a logical way when seen as the diachronic result of the development of the building." This perspective moves beyond seeing overlapping styles as aesthetic incongruities and instead recognizes them as material evidence of continuous use, adaptation, and changing needs over time. Similarly, Ren (2021, p. 2) observes that "by physically expressing the passage of time, architectural palimpsests explicitly raise questions about the historicity of buildings." These questions concern cultural heritage studies and architectural historiography, and reverberate in conservation projects and design interventions.

Based on these definitions, this study proposes an integrated conservation approach combining archival research, material analysis, and spatial interpretation within a unified framework, explicitly adopting the palimpsest as an analytical lens. This approach is guided by recognition of the building as a multilayered historical entity and as an architectural palimpsest where no single phase can be isolated as the "authentic" or "original" version; equal evaluation of all periods without privileging a single phase; respect for material authenticity and historical evidence; implementation of scientifically grounded, reversible interventions; and critical awareness of how layers have been added, removed, or obscured over time. Conservation is thus understood not as recovery of an original state, but as the careful management of change—managing the palimpsest rather than erasing it. This ensures that the complex historical, material, and spatial values of the Panagiotissa Church are preserved and made legible for future generations.

2.2. Literature review on the Church

The Panagia Muhliotissa Church has attracted scholarly attention across different disciplines, including architectural history, art history, and Byzantine studies. However, existing research remains with a notable absence of a

conservation-oriented synthesis. A critical review of the literature reveals the contributions of previous studies.

Early work, of [Van Millingen \(1912\)](#), represents one of the first systematic attempts to document Byzantine churches in Constantinople. His study provides valuable descriptive and historical information, establishing a baseline for subsequent research. However, it remains largely limited to typological description. Early 20th-century scholarship of [Brunov \(1927–1928\)](#), contributes important visual and observational documentation of the monument. Brunov's photographic evidence, for instance, plays a crucial role in identifying structural elements such as columns and spatial organization. Art-historical approaches, such as that of [Bettini \(1940\)](#), focus on specific aspects of the monument. More detailed historical interpretations are found in the work of [Kougeas \(1949\)](#), which examines textual sources related to the monument, including issues of dating and patronage. These contributions are valuable in clarifying historical ambiguities.

A major advancement in the architectural understanding of the monument is provided by [Bouras \(2005\)](#), whose study offers the most comprehensive analysis of the building's architectural form, typology, and spatial configuration. Bouras identifies the church as a rare example of a tetra-conch domed structure and reconstructs its original form through detailed examination of measured drawings and comparative analysis. Importantly, he demonstrates that the current state of the building is the result of extensive historical transformations, including the demolition of original elements, later additions, and repeated repair campaigns that have significantly altered both the interior and exterior. Bouras also emphasizes that thick plaster layers and successive interventions obscure the original architectural features, making direct observation and interpretation particularly challenging. This insight is critical, as it underscores the necessity of interpretative reconstruction in the study of heavily altered monuments.

From a different perspective, [Ryder \(2010\)](#) examines the monument within its historical and socio-political context, focusing on the patronage of Maria Palaiologina and the role of the church in late Byzantine Constantinople. Ryder's study contributes significantly to understanding the cultural and political dimensions of the building, emphasizing its historical agency and transformation over time. A more recent and conservation-oriented contribution is provided by [Altunışık \(2024\)](#), whose study focuses on the current condition of the Panagia Muhliotissa Church and proposes conservation strategies. This work represents a significant step forward in documenting structural problems, material deterioration, and the impact of past interventions. It also introduces practical recommendations for conservation, including cleaning, consolidation, and the removal of incompatible additions.

This paper aims to integrate architectural analysis, archival research, and material investigation within a unified theoretical framework. Therefore it tries to develop a holistic, methodologically coherent, and theoretically grounded conservation approach. In doing so, the research contributes to a more comprehensive understanding of the Panagia Muhliotissa Church as a dynamic and multilayered heritage structure.

2.3. Research methodology

The methodological approach adopted in this study aligns with contemporary best practices in cultural heritage documentation, which emphasize the integration of multi-scalar and multi-temporal data acquisition strategies ([Hassani, 2015](#); [Diker and Esmer, 2021](#)). As [Hassani \(2015, p. 1\)](#) notes, "the fundamental need of any conservation project is understanding the object and gathering data about its physical condition prior to any action and intervention that might change the object." Accordingly, this study employs a multi-phased and interdisciplinary methodology organized into three sequential stages: archival investigation, architectural documentation, and analytical assessment leading to conservation proposals.

The first phase consists of extensive archival investigation conducted in a range of institutional repositories, including the Phanar (Fener) Greek Patriarchate, the Fatih Municipality Cultural Heritage Conservation Directorate, the Presidency of the Republic of Türkiye Directorate of State Archives (Ottoman Archives), the Istanbul 4th Regional Board for the Conservation of Cultural Heritage, and the Istanbul Archaeology Museum. The archival materials examined—comprising post-fire assessment reports, architectural surveys, financial records, and testimonies—provide valuable insight not only into the physical transformation of the building but also into the legal, economic, and administrative challenges faced by the community responsible for its maintenance. This dual reading of the building as both a physical structure and a material archive follows what [Van Ooijen \(2020, p. 2\)](#) describes as the essence of the architectural palimpsest: "buildings that physically show different stages and layers resulting from adaptations," where each layer of the building's history is understood as part of a continuous, diachronic process.

The second phase involves architectural documentation using contemporary technologies, recognizing that "digital technologies can considerably ease and expedite the documentation process, while ensuring a precise result and an accurate output for establishing the conservation phase" ([Hassani, 2015, p. 2](#)). A FARO FocusS 150 terrestrial laser scanner (TLS) was employed, operating within a range of 0.6–150 m and capable of capturing up to 976,000 measurement points per second with a distance accuracy of ± 1 mm. The scanner's HDR imaging capability further allows for the production of high-resolution color data of up to 165 megapixels. As [Diker and Esmer \(2021, p. 66\)](#) emphasize in their survey of Hagia Sophia's subterranean structures, TLS technology enables the visualization of complex spatial units with high precision, producing point cloud data that can be used to generate overlapping plans and multiple cross-sections. Alongside terrestrial scanning, a DJI Phantom 4 RTK unmanned aerial vehicle (UAV) was used, equipped with a one-inch, 20 MP CMOS sensor and an integrated RTK module enabling photogrammetric data collection with centimeter-level accuracy. The RTK system enhances positional precision through GNSS-based corrections, ensuring reliable georeferencing of the captured data. The use of UAVs in cultural heritage documentation, as [Hassani \(2015, p. 4\)](#) observes, provides "real-time

capability, fast image acquisition, and short interruption times,” as well as the opportunity “to survey inaccessible and/or dangerous areas which cannot be accessed directly using other systems.” Additionally, a Geonav R10 GNSS receiver was utilized for the accurate measurement of ground control points, supporting multiple satellite systems and providing high-precision RTK positioning.

The data obtained from these technologies were processed via software such as Faro Scene and Agisoft Metapose Pro to generate point cloud models. Later, rectified orthophotographs were produced from the point cloud models, forming the basis for detailed survey drawings including site plans, floor plans, sections, and façade representations (Figs. 2–10). This integration of TLS and UAV data follows what Hassani (2015, p. 6) describes as a “hybrid approach,” which “if the allocated budget allows, is the best possible method for documenting cultural heritage,” as it overcomes the limitations of any single technique. The generation of orthophotographs from point cloud data also addresses the need for accurate metric documentation, which, as Beck (2013, p. 2) argues, is essential for “tracking the efficacy of treatments over time” and allowing “comparison between a previous state and the current state of an object, illuminating the rate of deterioration.”

In the third phase, comprehensive material assessments and damage analyses were conducted. All identified deterioration types—including water- and moisture-related damage, dense vegetation on façades, unqualified repair

interventions, and significant damage to frescoes—were systematically mapped onto the drawings using explanatory legends. Building upon these findings, reconstitution studies were carried out to interpret the historical evolution of the structure by comparing the current survey with archival records and historical depictions. This comparative approach is central to understanding the building as a palimpsest, where, as Van Ooijen (2020, p. 8) explains, “the visual contrast between the layers only appears to be a clash when regarded from a stylistic viewpoint. In fact, they are interconnected in a logical way when seen as the diachronic result of the development of the building.” Finally, a restoration proposal was developed, outlining targeted interventions aimed at mitigating existing deterioration while preserving the architectural and historical integrity of the building. The proposal is guided by the principle that, as Hassani (2015, p. 1) states, “cultural heritage is threatened by various factors such as natural hazards, vandalism, development of cities, and aging, which in a pragmatic view, one cannot guarantee their eternity and each moment there is the possibility of their loss. Thus, we should make sure that they are well documented.” It must be noted, however, that precise conservation and restoration strategies can only be definitively established following the detailed examination of the thick plaster layers currently covering the wall surfaces.

The methodological framework adopted in this study also reflects the interdisciplinary network. As Bentkowska-



Fig. 2 Muhliotissa, current survey, plan (Altunışık, 2024).

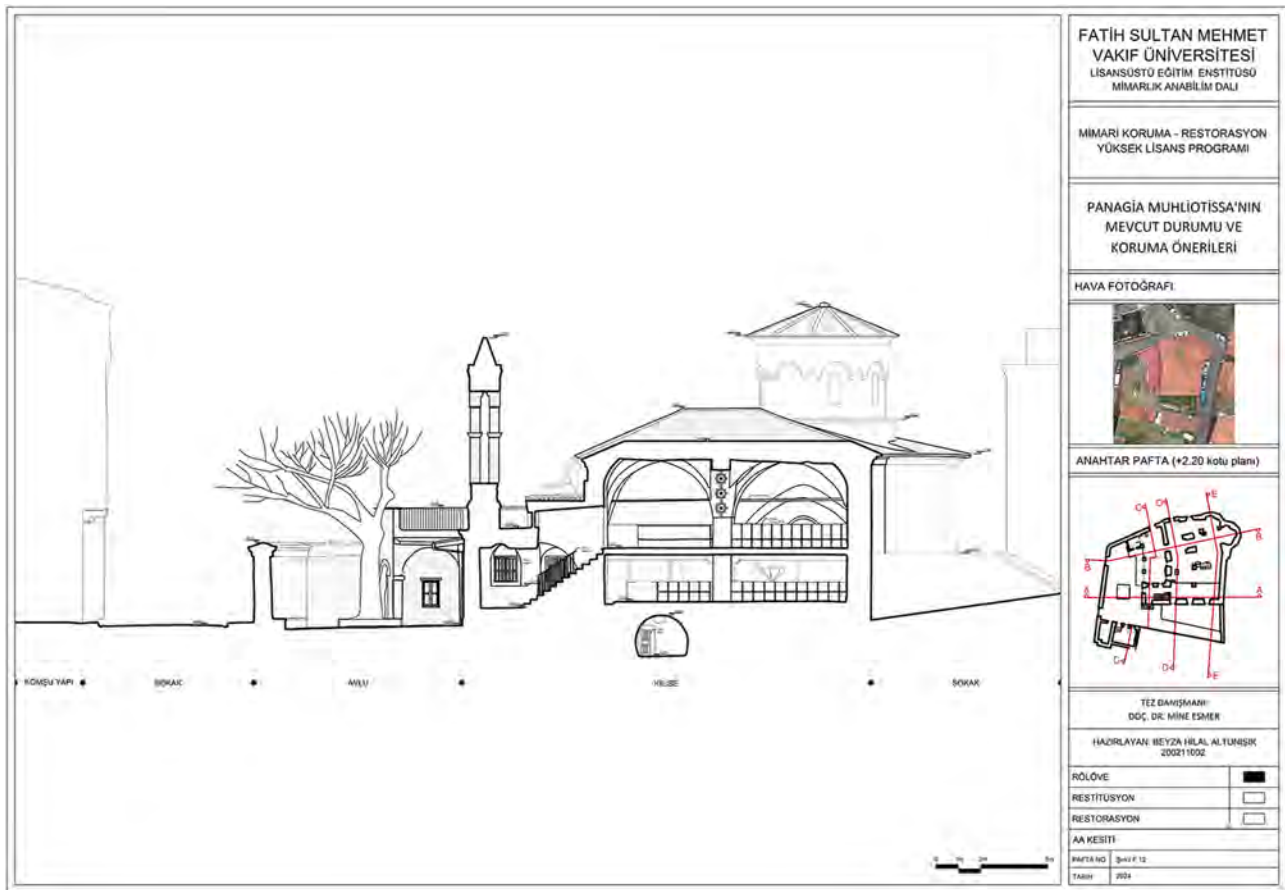


Fig. 3 Muhliotissa, current survey, Section A-A (Altunışık, 2024).

Kafel and MacDonald (2017, p. xli) observes, successful heritage documentation requires “a combination of different research methods that enhances the critical evaluation of the chosen approach, often bringing a better understanding of the data under investigation and, ultimately, new insights into the subject of study.” Furthermore, the transparent documentation of recording parameters—including equipment specifications, processing workflows, and uncertainty assessments—follows the emphasis on reproducibility and the critical importance of metadata and paradata (Bentkowska-Kafel and MacDonald, 2017, p. xliiv). This transparency ensures that the digital data produced in this study can serve not only immediate conservation needs but also future research and comparative analyses.

3. Panagiotissa (Panagia Muhliotissa) church: location, historical background, and architecture

The Panagiotissa or the Panagia Muhliotissa (Moukhliotissa) Church is situated in the Fener neighborhood of Istanbul’s Fatih district, within an area historically referred to by the Greek community as “Muhlio” (Bouras, 2005, p. 38) (Figs. 11–12). In Ottoman manuscripts, the same locality has also been identified as the “Kiremid quarter.” The structure has been dated to the Middle Byzantine Period,

specifically to the 11th century (Mathews, 1976, pp. 366–367). Within its courtyard, in addition to the church itself, are the Agias Annis hagiasma, a bell tower, and various ancillary buildings (Figs. 13–14). Beneath the naos lies the Kimiseos tis Theotoku hagiasma. Architecturally, the eastern and northern façades of the church are directly adjacent to the courtyard walls, while to the east stands the Red School (Μεγάλη του Γένους Σχολή), an institution of particular significance among Greek educational establishments.

The Panagia Muhliotissa Church has been part of a monastery, which had fallen into disuse during the Latin Occupation. The monastery was reactivated in the 13th century by Maria Palaiologina, the daughter of the Byzantine Emperor Michael VIII and the wife of the Mongol ruler Abaqa Khan (Massavetas, 2013, p. 173). During this period, the complex became known as the “Monastery of the Virgin of the Mongols/Η Μονή της Παναγίας της Μουχλιώτισσας (ή των Μογγολίων/Μουγουλίων):” (Van Millingen, 1912, p. 272). Following the Ottoman conquest, the building was granted by a decree of Mehmed II to Khristodoulos, the architect of the Fatih Mosque, in recognition of his services (Massavetas, 2013, p. 175). Owing to this imperial decree, the structure—despite attempts during the reigns of Selim I and Ahmed III—has not been converted into a mosque and has continued to function in accordance with its original purpose. Although it ceased to operate as a monastery after the conquest, it has remained in active use as a parish

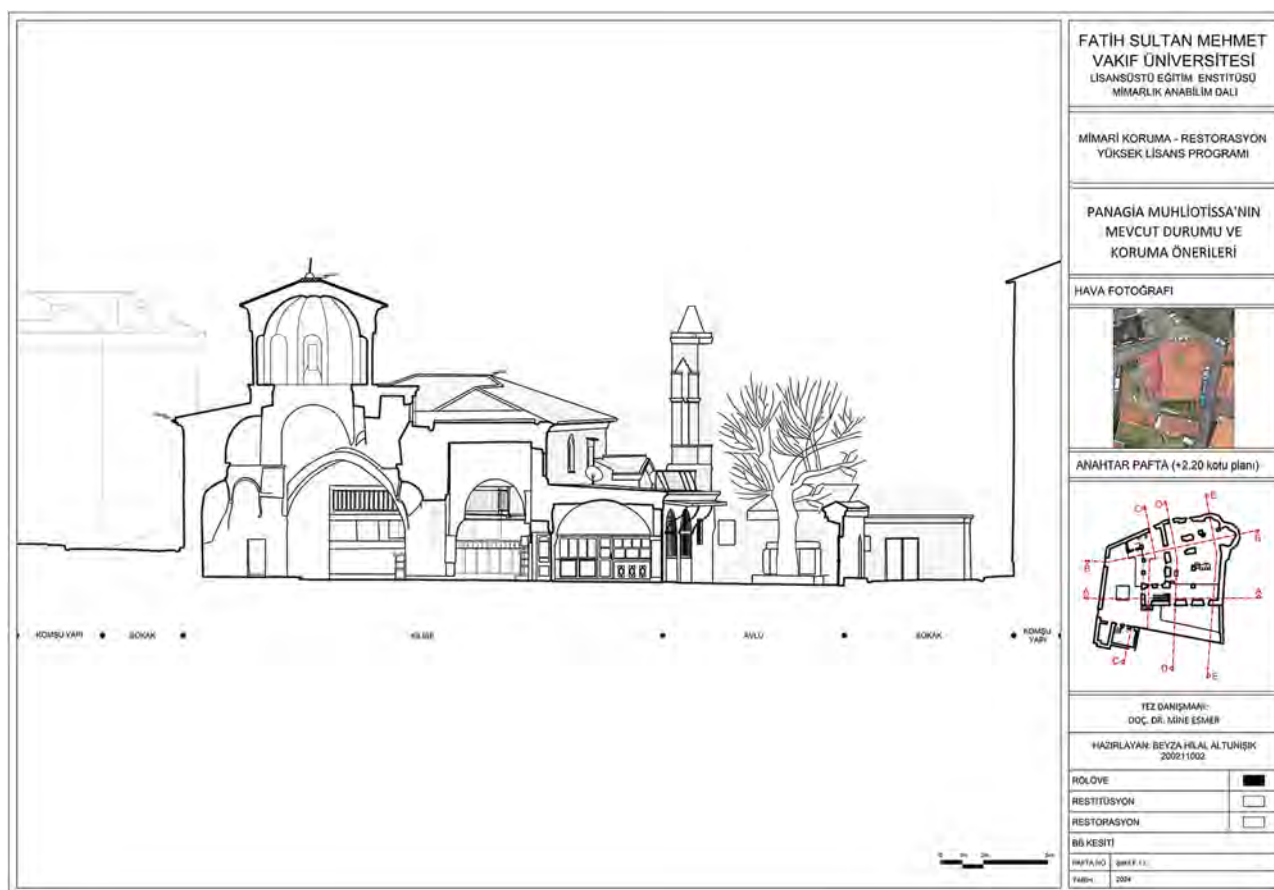


Fig. 4 Muhliotissa, current survey, Section B-B (Altunışık, 2024).

church serving the Greek Orthodox community of Istanbul (Melvani, 2025).

Over the centuries, the church has been repeatedly affected by major urban disasters, including the Fener fires of 1633, 1640, and 1729, as well as significant earthquakes that have struck Istanbul. In the modern period, it has also sustained damage during the Septemvriana events of 6–7 September 1955. Archival records preserved in the “Committee Archive”¹ indicate that the building was officially registered on August 8, 1955 during the Republican period (Table 1) (Fig. 15). This registration was most likely undertaken in anticipation of the Byzantine Congress planned for that same year.

3.1. Reconsidering the dating of the structure and the role of Maria Palaiologina

For a considerable period, it has been widely accepted that the church had been constructed by Maria Palaiologina in 1266–1267 (Van Millingen, 1912, p. 275; Bettini, 1940, p.

31). This assumption has been primarily based on a note from the “Souda,” first examined by Fr. Dölger in 1936 and later interpreted by Kougias (1949). According to this interpretation, the note has been understood to state that “Mary of the Mongols had the building constructed in its present form between 1266 and 1267.” However, this long-standing view has been fundamentally challenged by R. Schreiner’s re-examination of the document in 1998, which has demonstrated that the earlier reading had been mistaken (Bouras, 2005, p. 37). It has subsequently become clear that the structure referenced in the note was not Moukhliotissa, but rather Agia Marina. In parallel with this reassessment, Khrilambos Bouras has argued that the core of the existing building should be dated not to the 13th century, but to the early 11th century (Bouras, 2005, p. 37).

Further evidence supporting this revised dating has been provided by a patriarchal document dated to 1351, which attests that the Monastery of Panagiotou, also known as Panagiotissa, had already been established at the same site since the beginning of the 11th century. Additional insight has been offered by the account of Georgios Acropolites, a high-ranking Byzantine official whose position may be likened to that of a modern minister. According to his testimony, the monastery was later reorganized by Maria Palaiologina. In the patriarchal document, she has been described as the “new founder” and has been noted to have “converted” the church of Panagiotissa (Bouras, 2005, p. 49). This terminology suggests not the construction of an

¹ The documents of the Permanent Committee for the Preservation of Ancient Artifacts (Muhâfaza-i Âsâr-ı Atîka Encümeni-Dâimîsi), founded in 1917, as well as the “Committee Archive” (Encümen Arşivi) created between 1936 and 1963, are currently kept in the Istanbul Regional Board 4th for the Protection of Cultural Heritage Directorate archive.

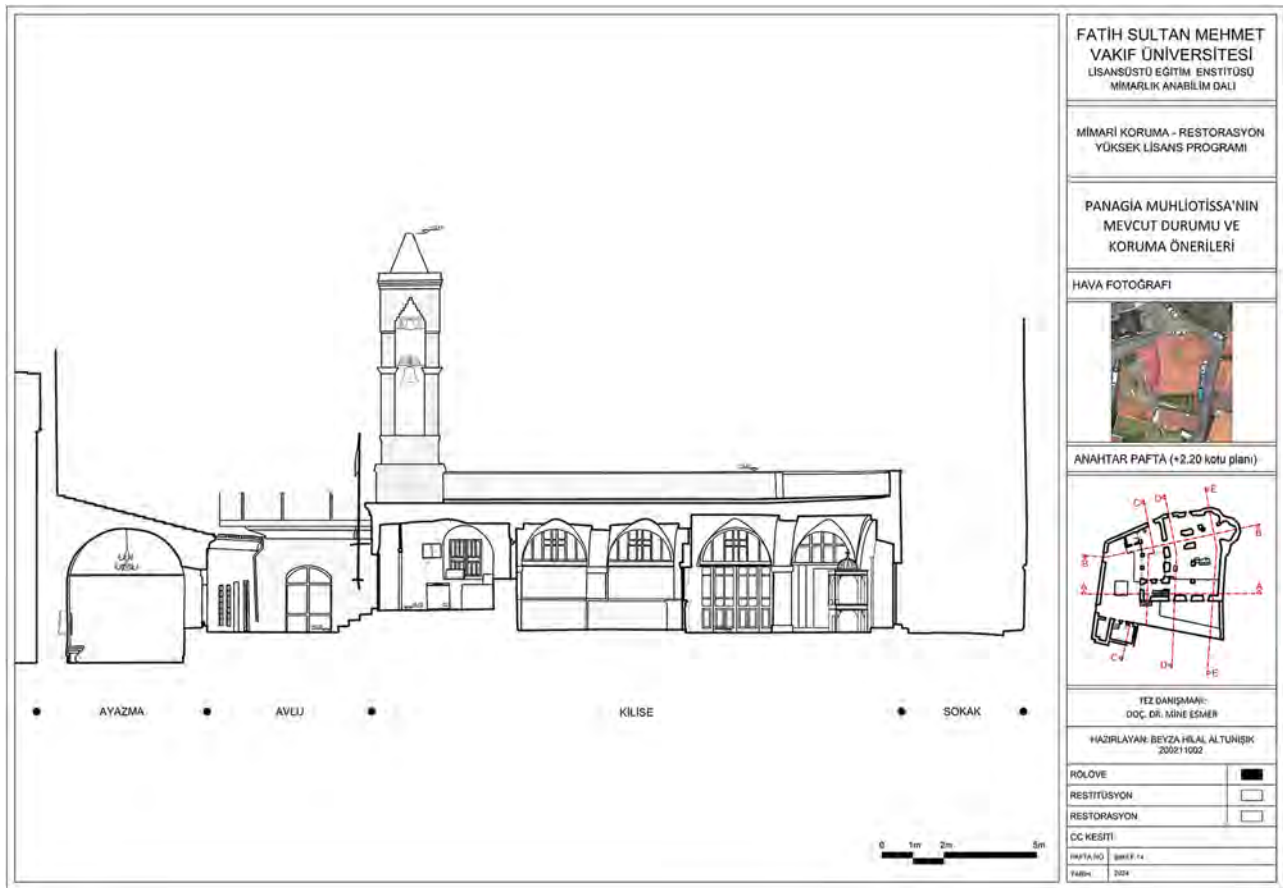


Fig. 5 Muhliotissa, current survey, Section C-C (Altunışık, 2024).

entirely new structure, but rather the appropriation, repair, and adaptation of an existing one.

It is therefore understood that Maria Palaiologina's intervention has consisted of refunctionalizing the pre-existing church, most likely in connection with the foundation of a nunnery. This transformation may have been facilitated by her acquisition of the church and an adjacent bathhouse following her return to Constantinople after 1282 (Ryder, 2010, p. 76). In light of these findings, it can be concluded that the core of the Moukhliotissa Church dates to the early 11th century, while the interventions of Maria Palaiologina in the late 13th century have involved the adaptation, expansion, and continued use of the existing building rather than its initial construction.

3.2. Architectural characteristics and conservation issues

The church is designed according to a central-plan tetraconch scheme (four-leaf clover/four-niches), organized around a central dome supported by semi-domed niches opening toward the four principal directions (Fig. 16). Within the context of Byzantine architecture in Istanbul, this plan type represents an exceptionally rare example. Reconstitution drawings, together with a photograph taken by Brunov prior to 1928 (Brunov, 1927–1928), indicate that the original interior configuration differed significantly from its present state. The central dome was originally

supported by four marble columns positioned at the corners of the central space. The capitals of these columns consist of spolia elements in a simplified Corinthian style dating to the 5th century. This structural arrangement generated a spatial effect resembling a "ciborium" (altar canopy) within the interior (Bouras, 2005, p. 42). In subsequent periods, however, these columns were removed and replaced by piers, altering both the structural system and the spatial perception.

One of the most distinctive features contributing to the building's rarity is the presence of secondary, smaller niches carved within the thickness of the walls of the main niches. This intervention, understood primarily as an aesthetic choice rather than a functional requirement, introduces a rhythmic articulation and a pronounced sense of depth within the interior, resulting in a total of twelve niches. Despite the apparent simplicity of its overall plan, this layered configuration produces a remarkably dynamic spatial experience (Bouras, 2005, p. 47).

The dome is articulated into eight segments on the interior, extending from the apex of the hemispherical vault down to the base of the drum (Fig. 17). This feature reflects a characteristic element of the architectural tradition associated with the capital, commonly referred to as the "Constantinople school" (Bouras, 2005, p. 48). In this respect, the structure exhibits notable parallels with buildings such as Myrelaion (Bodrum Mosque) and Pam-makaristos (Fethiye Mosque). Externally, the drum

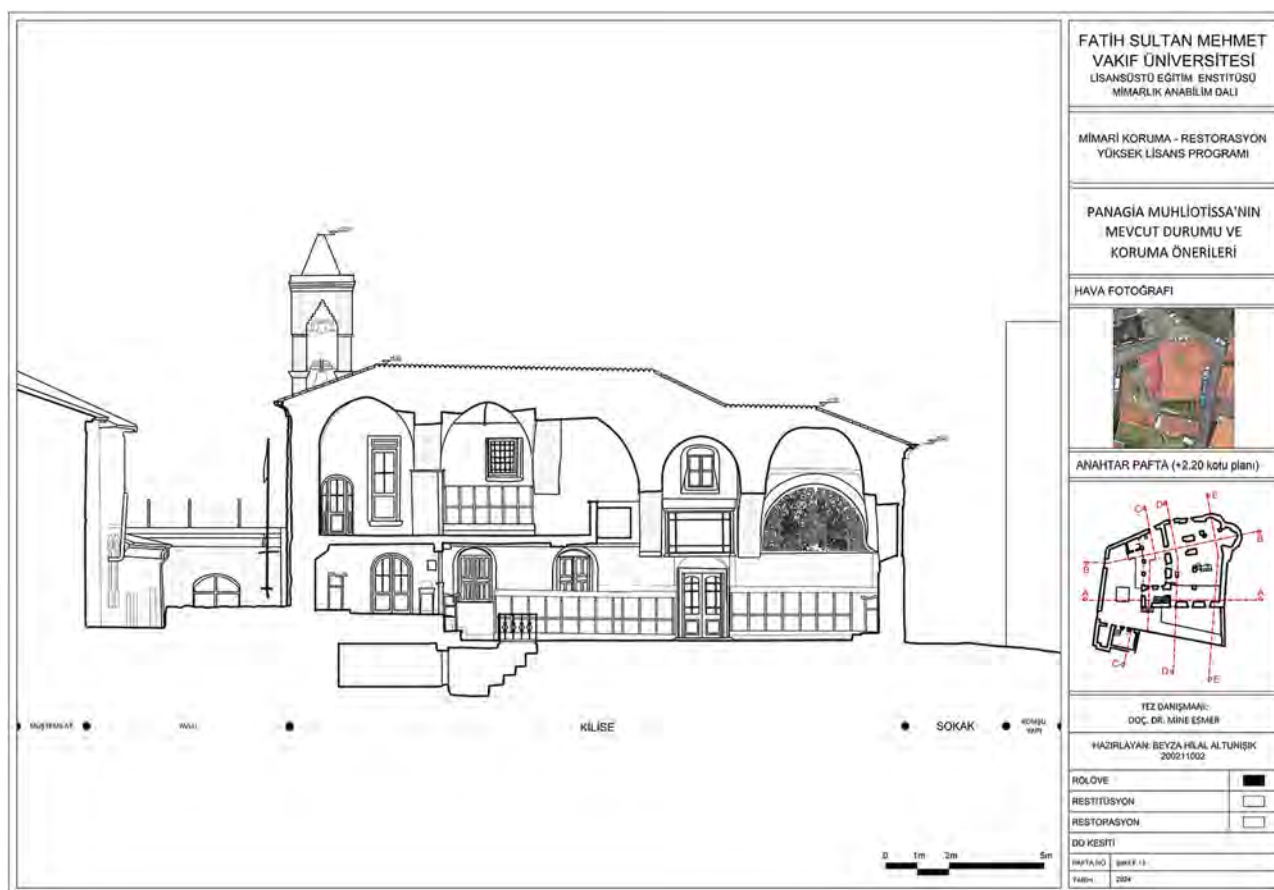


Fig. 6 Muhliotissa, current survey, Section D-D (Altunışık, 2024).

presents a circular form (Fig. 18), distinguished by an alternating sequence of wide arches framing the eight windows and narrower blind arches positioned between them. This compositional approach constitutes a distinctive design within Istanbul. Moreover, the arrangement closely resembles that of the katholikon (main church) of the Vatopedi Monastery on Mount Athos (Ryder, 2010, p. 79), providing significant comparative evidence supporting the attribution of the building to the early 11th century.

It is widely accepted that the narthex does not belong to the original construction phase (Ryder, 2010, p. 80). The removal of the lower portion of the western niche in order to establish a passage between the naos and the narthex suggests that these two components were not conceived as part of a unified design. Accordingly, it is highly probable that the narthex was added during the late 13th century, in the context of the refoundation activities associated with Maria Palaiologina.

3.2.1. Construction techniques and decorative elements
Despite the presence of thick plaster layers covering much of the structure, certain aspects of the original building fabric can still be identified. At present, the primary evidence of the original masonry is observable only on the north wall of the basement (Kimiseos tis Theotokou Hagiasma), located in the southwest part of the church (Bouras, 2005, p. 44) (Fig. 19). In this area, the characteristic Middle

Byzantine “concealed brick technique” is evident, consisting of five courses of brick interspersed with layers of irregular stone. This method, in which bricks are partially embedded within thick mortar joints, reflects both an aesthetic preference and a structural practice typical of the architectural tradition of the capital.

The decorative program of the church, although largely lost or obscured, is partially known through surviving fragments and historical records. A relief depicting Christ Emmanuel, dated to the 14th century and believed to have originated from the church, supports the hypothesis that the narthex may have been added in a later phase, possibly in connection with funerary use. Additionally, a late 13th-century mosaic of the Virgin and Child, thought to have been removed from the building, is currently preserved in the Ecumenical Patriarchate (Bettini, 1940). A portable icon of the Virgin Mary, also housed in the Patriarchate, is similarly considered to have belonged to the church.

Wall paintings constitute another important, albeit heavily damaged, component of the building’s decorative heritage. Frescoes representing the Second Coming, discovered in 1899, have survived only in a severely deteriorated state and are believed to have been located on the eastern wall of the church’s extension (Bouras, 2005, p. 48). Furthermore, frescoes dating to the Ottoman period—also identified in 1899—were subsequently destroyed during repair works carried out prior to 1948 (Fig. 20) (Bouras, 2005, p. 48).

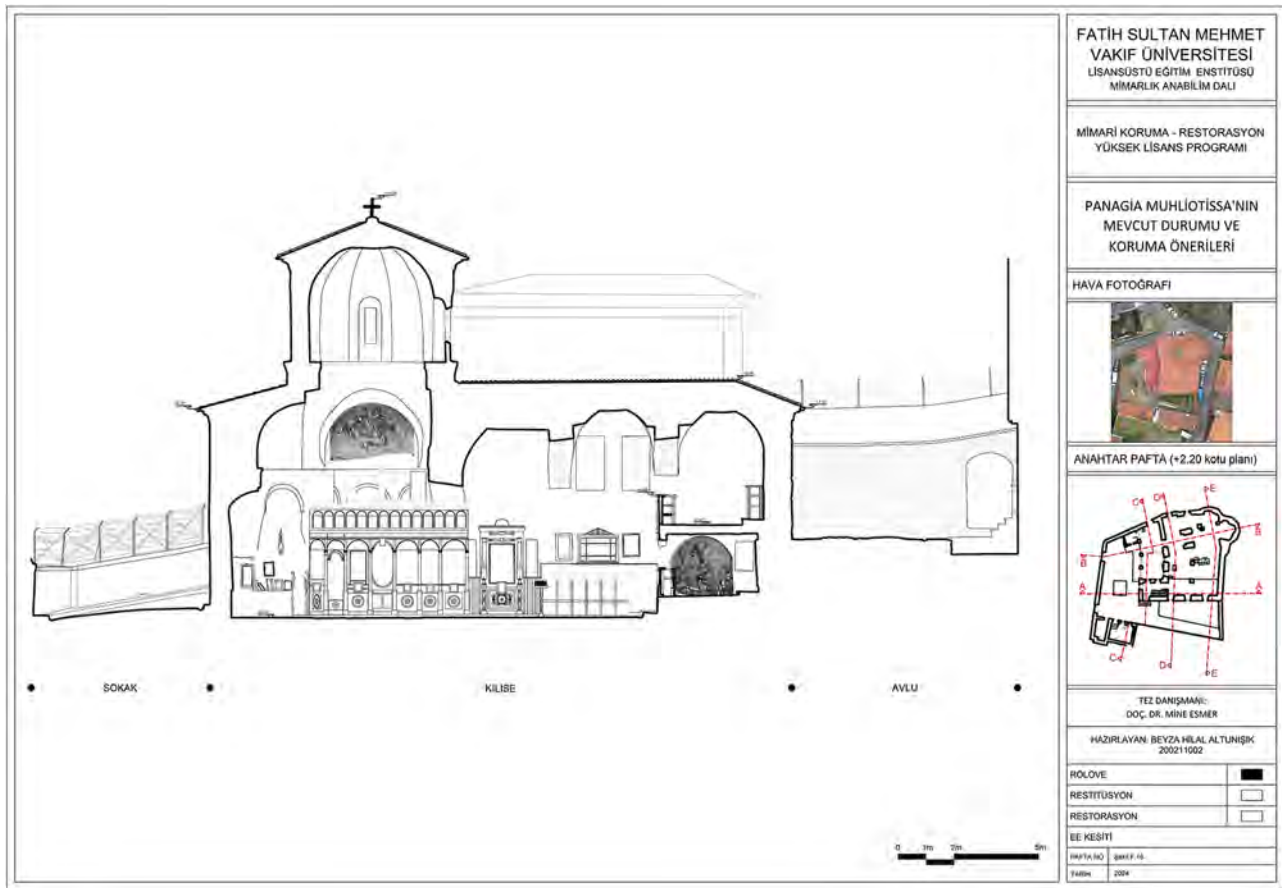


Fig. 7 Muhliotissa, current survey, Section E-E (Altunışık, 2024).

3.2.2. Transformations and the present condition of the structure

Throughout its long history, the Panagiotissa Church has not undergone complete destruction followed by reconstruction; rather, it has evolved through the gradual addition of new spaces built around its original core (Table 2). This process of incremental growth has resulted in a complex architectural stratification, where successive interventions have been integrated into the existing fabric rather than replacing it (Figs. 21–22).

The building as perceived today embodies this layered character. On the one hand, it preserves a central core that reflects the rare tetraconch tradition of Byzantine architecture; on the other, it represents a cumulative assemblage shaped by centuries of changing functional requirements, repairs, and spatial adaptations (Fig. 23). As a result of these continuous interventions, the original architectural configuration of the church has become largely obscured, rendering its initial form difficult to fully discern without careful analytical reconstruction.

3.2.3. Assessment of the current condition and identified problems

The analytical surveys and detailed on-site observations conducted within the scope of this study have revealed a range of significant deterioration issues affecting the structure, many of which require urgent and carefully planned intervention (Figs. 24–25) (Table 3).

3.2.4. Reconstitution and restoration proposals

3.2.4.1. Reconstitution phases. As a result of the detailed investigations carried out on the structure, the architectural development of the church has been analyzed under four principal phases, and reconstitution proposals corresponding to each period have been formulated (Bouras, 2005, p. 41). These phases collectively illustrate the transformation of the building from its original configuration to its present form.

The first phase represents the initial construction of the church. In this period, the building was designed according to a central-plan tetraconch scheme, characterized by a “four-leaf clover” arrangement. The spatial organization was both simple and well-balanced, with no additional volumes projecting from the main mass. In the second phase, shortly after the original construction, a narthex was added to the western façade. This intervention appears to have been motivated by liturgical requirements, serving to define the entrance sequence and to establish a transitional space between the exterior and the principal worship area. During the third phase, in response to evolving functional needs, the narthex was incorporated into the naos, resulting in an expansion of the interior space. Concurrently, the building was extended toward the south, leading to a gradual departure from the original centralized composition and introducing a more complex spatial organization. In the fourth and final phase, a new narthex was constructed, once again redefining the entrance

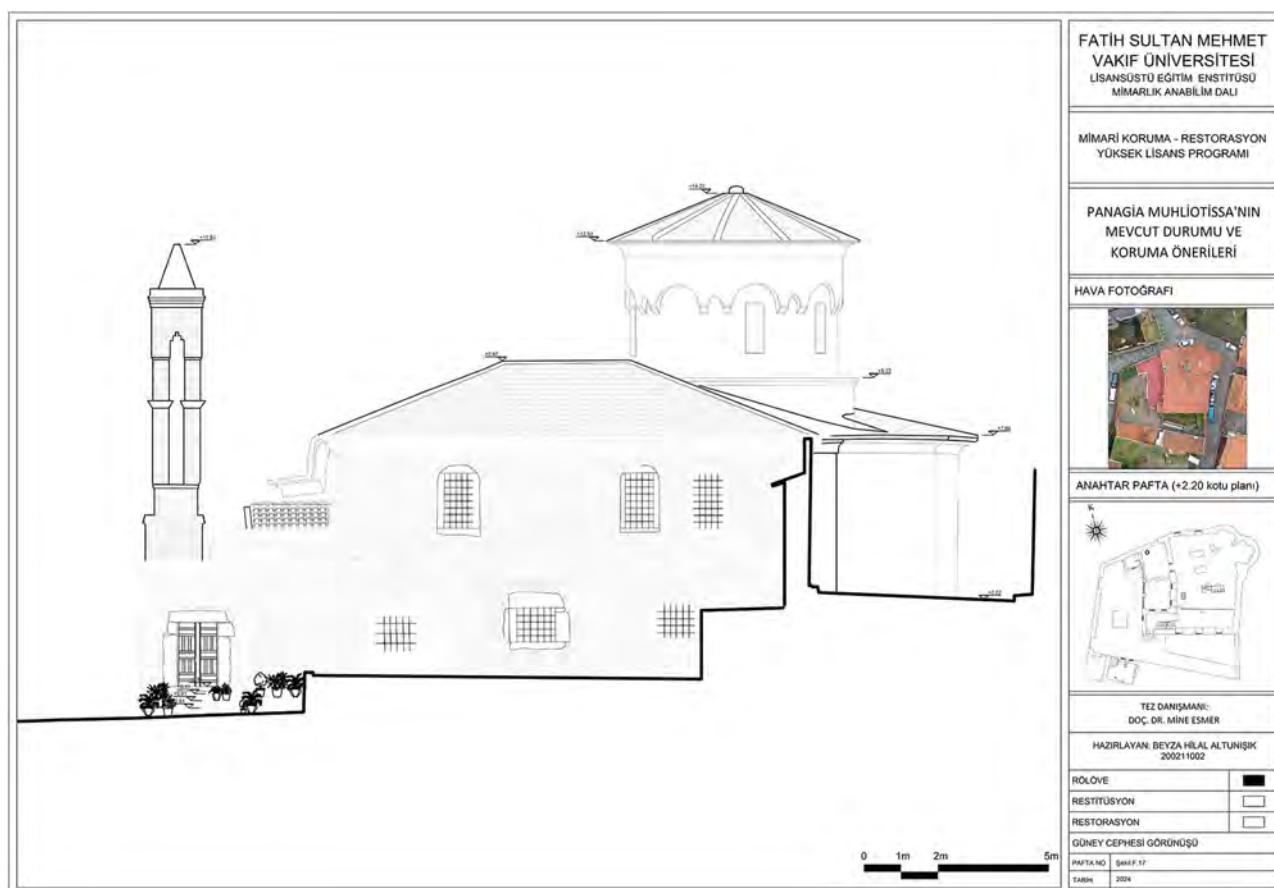


Fig. 8 Muhliotissa, current survey, south façade (Altunışık, 2024).

arrangement. This intervention brought the building to a configuration closely resembling its present-day plan. As such, this phase represents the culmination of the structural and spatial transformations undergone by the church and forms the basis of its current architectural condition.

3.2.4.2. Outline of the restoration project. In response to the problems identified in the building, comprehensive intervention proposals have been developed, grounded in the principles of material preservation and respect for traditional construction techniques (Fig. 26). These proposals are structured under three main categories: cleaning, conservation–repair, and continuous maintenance–management.

Within the scope of cleaning interventions, particular emphasis is placed on the careful removal of plaster layers under expert supervision, especially on critical surfaces such as the apse, in order to reveal potential underlying decorative elements and the original material texture. Biological formations, including vegetation and moss observed on the façades, should be thoroughly removed together with their root systems, and preventive measures—such as appropriate herbicide applications—should be implemented to inhibit regrowth. To ensure proper water discharge, a chain should be attached to the gargoyle on the north façade, allowing controlled drainage. Furthermore, accumulated dirt layers and graffiti should be cleaned using methods that do not damage the original

fabric, such as micro-sandblasting or the application of suitable chemical gels.

During the conservation and repair phase, priority should be given to the removal of later additions that compromise the building's authenticity. Interventions such as cement-based mortars on the roof, partial onduline coverings, exposed cables, and antennas should be eliminated. The roof covering should be renewed using traditional Turkish-style tiles compatible with the original character of the structure, accompanied by the implementation of effective waterproofing measures. To mitigate the effects of ground moisture, a drainage system should be installed around the building perimeter. Fragile frescoes at risk of detachment should be consolidated by qualified conservators, followed by careful surface cleaning and, where necessary, minimal and reversible retouching carried out in accordance with scientific conservation standards (Fig. 27). Additionally, deteriorated wooden seating elements and sheet metal-clad doors should be repaired, while existing metal tie rods should undergo appropriate conservation treatment to prevent corrosion.

In order to ensure the long-term effectiveness of these interventions, the preparation of a regular and systematic maintenance program is essential following the completion of restoration works. Moreover, an emergency and risk management plan should be established to address potential hazards such as earthquakes, fires, and similar disasters. In line with international conservation principles,



Fig. 9 Muhliotissa, current survey, street silhouette from the north (Altunışık, 2024).

opportunities for collaboration with organizations such as ICOMOS and UNESCO should also be considered to support the sustainable preservation of the structure. This comprehensive and integrated approach aims to safeguard the historical, architectural, and artistic values of the building, ensuring their transmission to future generations.

4. Archival research

Research conducted in the Ottoman archives and the records of the Patriarchate reveals that the documents relating to the Panagiotissa Church—also known as the Virgin Mary Church or Kanlı Kilise—cover repair and maintenance activities from 1691 to the present. These sources provide insight into both the architectural responses to disasters, such as fires and earthquakes, and the financial challenges faced by the community in sustaining the building over time.

The archival materials offer detailed accounts of the church's architectural dimensions, the stages of construction for additions such as the narthex and bell tower, and the damage sustained during the events of 6–7 September 1955. Of particular significance are the 18th-century survey reports, which include repair permits issued on the condition that the original boundaries of the building be preserved, along with precise measurement data. Finally, it is understood that the building reached its current state

through comprehensive repair works carried out in 1997 with the support of benefactors.

4.1. Ottoman archive manuscripts (1691–1867)

A number of manuscripts dated between 1691 and 1876 have been identified in the Ottoman archives. These documents provide valuable insight into the repair, maintenance, and administrative history of the Panagiotissa Church during the Ottoman period. For clarity and ease of reference, brief summaries of the manuscripts consulted in this study are presented in Table 4 (Fig. 28).

4.1.1. Document dated 1691

This document (No. BOA A. {DVNSMHM.d/102–320–November 12, 1691}) is an imperial edict (ferman) issued in response to a repair request submitted by the community of Kanlı Kilise (Virgin Mary Church) in Fener. The petition highlighted that worship had become difficult due to damage to the roof tiles and windows, as well as the appearance of cracks in certain walls.

The imperial edict (ferman) granted permission for a limited scope of interventions, including the replacement of broken tiles and windows, and the repair of cracked walls with mortar. Importantly, this authorization was issued only after obtaining a legal opinion (fetva) through canonical procedures and conducting a formal survey of the

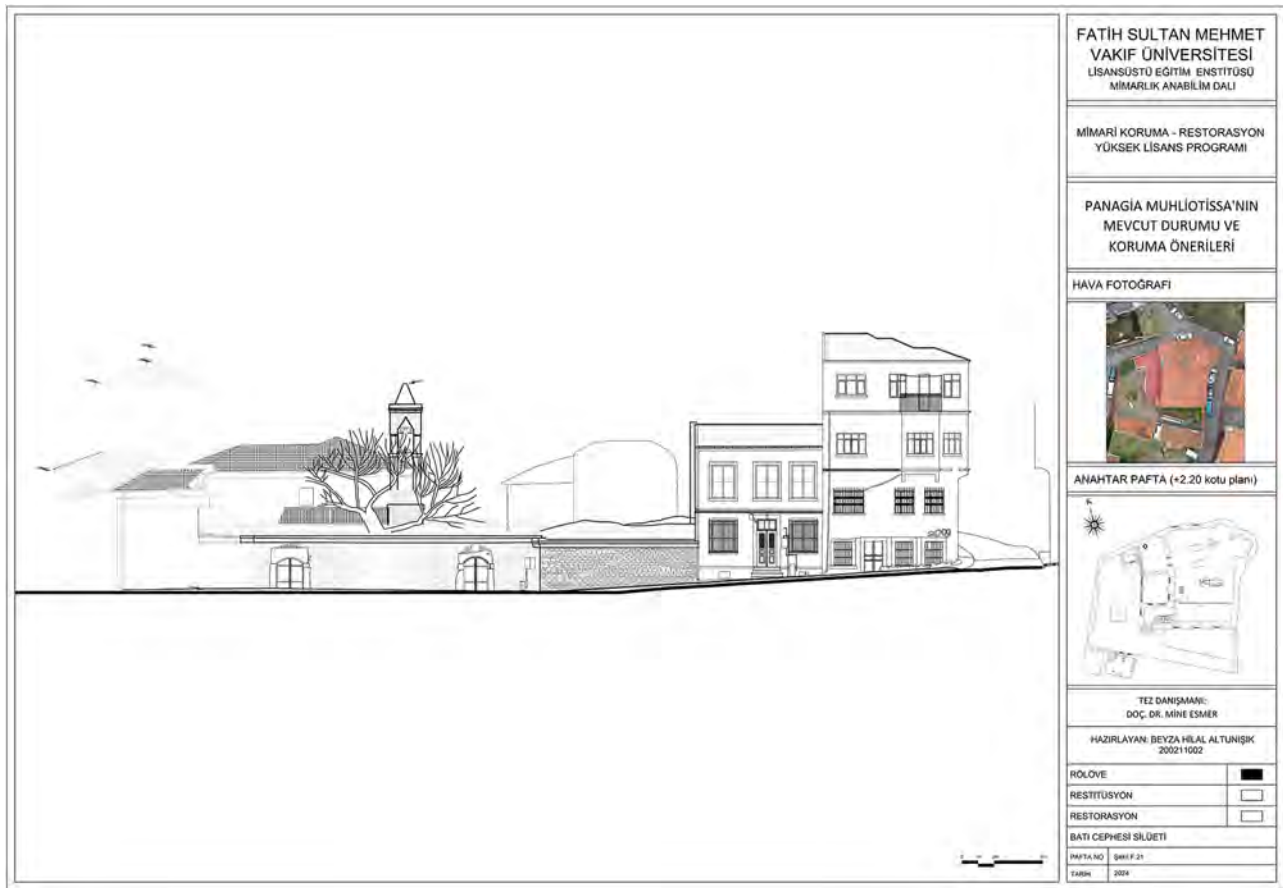


Fig. 10 Muhliotissa, current survey, west silhouette (Altunışık, 2024).



Fig. 11 An aerial photograph of the parcel of Muhliotissa (Altunışık, 2024).

building. The edict explicitly emphasized that all repairs must adhere to the principle of “according to the ancient prohibition” (men-i kadim); no additions or alterations

were permitted, and the work was strictly conditional on preserving the existing state of the structure.

Furthermore, the document stipulated that the church must continue to function exclusively as a place of worship after the repairs. This imperial edict thus illustrates the Ottoman administration’s cautious, supervised, and traditionally circumscribed approach to the maintenance and repair of non-Muslim religious buildings, reflecting both legal oversight and respect for established architectural forms.

4.1.2. Document dated 1730

Approximately forty years after the 1691 ferman, the Kanlı Kilise (Virgin Mary Church) was severely affected by a major fire, necessitating a new and comprehensive intervention. Document No. BOA A. {DVNSMHM.d/137–474}, dated June 16, 1730, is an official survey prepared to assess the church’s condition in detail following the fire and to ensure that subsequent repairs remained strictly within the ancient dimensions of the building.

The document reflects a thorough administrative and legal audit process, illustrating the meticulous oversight exercised by the Ottoman State. The survey was conducted under the chairmanship of the Istanbul Judge (Kadi), Mehmed Reşid, and technically carried out by the architect’s assistants (kalfa) from the Imperial Corps of Architects, El-Hac Mehmed Halife and El-Hac Mustafa Halife, with the scribe Salih documenting the proceedings. A



Fig. 12 The location of the building is indicated with a red dot on the Google Earth map (Esmer, 2026).

notable feature of the process is the inclusion of forty-two Muslim residents from the Tevki-i Cafer, Tahta Minare, and Cafer Subaşı quarters as sworn witnesses (Table 5). This practice represents a well-established Ottoman legal mechanism designed to ensure impartial verification that repairs did not exceed the legally recognized boundaries of the building.

Within the survey, detailed records were kept of dimensional differences and reductions between the church's pre-fire and post-fire states, firmly establishing fidelity to the original plan as a guiding principle for reconstruction. This approach demonstrates the strict legal framework applied to the maintenance of non-Muslim religious buildings, which combined oversight by state officials with community-level social control.

The protective statement concluding the document, specifying that the building "should not be disturbed again," further indicates that the central administration assumed not only a supervisory role but also a protective one, safeguarding the community's rights against local pressures. In this respect, the survey provides a compelling example of how legal legitimacy in Ottoman urban governance was intertwined with social consensus, transparency, and central authority (Table 6).

4.2. 19th century

Archive manuscripts from the nineteenth century point to a new phase of activity at the Panagiotissa Church, shaped by the administrative reforms of the Tanzimat period. Records from this period go beyond simple repair practices,

revealing new construction activities for social purposes and the financial complexities that arose in parallel. These manuscripts clearly demonstrate that the community now expressed its needs through official and institutionalized bureaucratic channels.

4.2.1. Document dated 1856

Document No. BOA HR.MKT./161–46, dated October 1, 1856, records the approval of a request submitted by the Greek Patriarch for the expansion and reconstruction of the girls' school in the Cibali district of Dersaadet. The proposed intervention involved the addition of an adjacent small plot of land, prompted by the school's dilapidated condition and its insufficient capacity to meet the community's educational needs. The same document also notes that the rooms belonging to the Virgin Mary Church in the Kiremit Neighborhood, which were allocated for the use of the church clergy, had become "müserref harap olmuş" (completely ruined). Accordingly, a permit was granted for the repair of these spaces.

These requests were submitted to the higher authority and, with the sanction of the exalted Padishah—the protector of the world—were approved. The document emphasizes that all repairs and interventions were to be carried out in full compliance with the requirements of the sacred imperial edict (ferman). Notably, the permitting process was conducted through the Ministry of Commerce (Ticaret Nezareti), reflecting the 19th-century bureaucratic framework in which matters related to public buildings and repairs were also managed by this ministry. This demonstrates that interventions affecting non-Muslim religious



Fig. 13 Muhliotissa, current survey, site plan (Altunışık, 2024).



Fig. 14 Muhliotissa, annex building (Esmer, 2017).

and community structures were firmly embedded within institutionalized administrative channels, in accordance with the formal rules and oversight mechanisms of the period.

4.2.2. Document dated 1862

This document (No. BOA İ.HR./193-108516–1862) provides a clear illustration of the principles and control mechanisms governing requests for construction or additions to non-

Muslim religious buildings in Ottoman administrative practice during the Tanzimat period. The petition in question proposed the construction of a two-story building (ground and upper floors) with four rooms within the interior of the Virgin Mary Church in Fener, intended to provide housing for poor families.

The decision on this request was not made at the local level; instead, it was transmitted to the central administration via the Ministry of Commerce and submitted for imperial approval. This process demonstrates that any spatial intervention within a non-Muslim religious building was subject to strict oversight by the central authorities. Notably, the document references “precedent” practices in justifying the request. This indicates that the proposed construction was not considered an exceptional privilege but was instead legitimized on the basis of similar permits granted previously. Such references reveal the Ottoman bureaucracy’s effort to establish consistent and codified procedures for regulating non-Muslim religious buildings, emphasizing administrative continuity rather than arbitrariness.

Another important factor influencing the approval of this request was that the new spaces were intended for social rather than liturgical purposes, specifically to house poor families. This demonstrates that church buildings were not solely conceived as places of worship but also served as spaces fulfilling the social needs of the community. The document confirms that, by authorizing the construction of

Table 1 Information in the first registration record for Muhliotissa dated August 05, 1955 found in the Committee (Encümen) Archive.

Item	Information
Record no. and date	644–August 05, 1955
Recognized name of the building	Theotokos tis Panagiotissa (Kanlı Kilise/Marie Des Mougoliotissa)
Location (province/district/sub-district)	Istanbul, Fatih district, Fener sub-district
Construction date	1261
Architect and founder	Architect: Unknown; founder: Isaac Doucas (relative of Emperor VIII. Mikhail Palaiologos)
Original and current use	Original: Church; today: Church
Ownership information	Greek community
Explanation	The building was commissioned by Isaak Doukas in 1261 and elevated in 1266. The view that the church was dedicated to the Ilkhanid ruler Hülagû Khan as a form of aid organization against the Ottoman Turks was put forward in later periods. Likewise, the story that princess Maria Palaiologina, the illegitimate daughter of Emperor VIII. Mikhail, had this church built when she returned to Istanbul after her husband's death was also fabricated later. It is possible that the princess endowed this church; however, she is not the founder of the building. The origin of the name "Kanlı Kilise" (Bloody church) is attributed to a bloody clash between Turkish soldiers and Byzantine forces at Sancaktar Hill near the church after the conquest, and the martyrdom of a flag bearer (sancaktar) there.
Architectural features and state of destruction	It is a quatrefoil structure with a central dome resting on four semi-domes. It is the only building constructed in this form in Istanbul. It was enlarged in 1266 and underwent many subsequent alterations. The marble cladding on the original walls was later removed, and only the left part of the narthex has survived. The southern part was added to the structure later. There is no destruction, and it is open for worship.
Source	Schneider, Alfons Maria. <i>Byzanz, Mamboury, Ernest. İstanbul touristique</i> , Janin, Raymond. <i>Les églises et les monastères de Constantinople</i> , Paspatis, Alexandre G. <i>Byzantinai Meletai</i>

four rooms for charitable use, the church assumed a social solidarity function. However, because these rooms were located within the church's interior (derun), the proposed intervention was treated with particular sensitivity and required the sanction of an imperial edict, even for a socially oriented purpose.

In conclusion, this 1862 document illustrates that mid-19th-century Ottoman administration exercised centralized oversight over new construction within non-Muslim religious buildings, regardless of their intended function. The careful documentation of precedent decisions, bureaucratic correspondence, and administrative approvals provides valuable historical and spatial insight into how the Ottoman state negotiated the balance between legal legitimacy and the social needs of its communities.

4.2.3. Document dated 1867

This document (No. BOA MVL/524-17–February 13, 1867) records a petition concerning a lawsuit filed by Abacı Hacı Hars and other interested parties against the lumber merchant Gurbelasko, arising from a debt related to Kanlı Kilise in Kiremit Neighborhood. It indicates that the dispute was formally submitted to the authorities as part of a petition and was treated as a legal claim. More broadly, the case illustrates that in 19th-century Ottoman urban life, non-Muslim religious buildings functioned not only as places of worship and communal gathering, but

also as centers of economic and legal interaction. The involvement of Kanlı Kilise in a debt dispute suggests that activities such as construction, repair, and the procurement of materials generated financial obligations among individuals.

The 1867 document sheds direct light on this economic dimension. It details the legal conflict between Gurbelasko and Abacı Hacı Hars with other concerned parties, demonstrating that disputes over the supply, cost, and payment of construction materials were brought before official judicial bodies. While the case offers indirect yet compelling evidence for ongoing construction or repair work at the church, it also points to the financial strain such processes could impose on the community. The fact that the matter was recorded as a petition is particularly significant, as it shows that both individuals and groups were able to bring financial issues related to communal structures directly into the state's administrative and legal framework. This reflects the functioning of legal channels in the post-Tanzimat period and highlights the recognized legal standing of non-Muslim religious institutions. At the same time, it reveals that the maintenance and repair of church buildings operated within a complex urban economy shaped by the interactions of both Muslim and non-Muslim actors. As such, the document provides valuable insight into the intertwined economic, legal, and social roles of church buildings within the Ottoman city.

No.					
Sıra No.	Kayıt tarihi	Asarı atıkenin bulunduğu vilayet, kaza ve yer	Yapıldığı tarih	Minarı ve kaidi	Tamir tarihi
646	5/8/1955	İstanbul, Fatih kazası, Fener mülhiesi	1261	Kilise; mihrabı dağlı bâzisi İmparatoriye VIII. dağlıca - İsaas Doucas	
Binaın tamamı adı		Akından ne olduğu	Bu gün için kullanıldığı	Kilisenin mah olduğu ve nasıl ele geçirildiği	
Theotokos tî Panagiotissa (Fatih Kilise) eskiden bu bina ya da başka bir olmuştu. Şimdi bu bina ve bina görsel ve işlevsel olarak kullanılıyor.		Kilise	Kilise	Bina cemaati	
Üzerindeki yazı ve tarihlerin kopyası					
Yazı: 1266 da bîyûtlükü sonradan da bir çok tîzîlîm uşîrîştîr. Kilise tarafından yapıldığı ve binaın tîzîlîm uşîrîştîr.					
Fotoğraflar serbesttir. Plân Prof. Schneider'in Bîyânce adlı eserinden kopya edilmiştir. Kilise dört minar küreye istinat eden bir merkezî kubbe ile kaplıdır. ve çukukta durur. İstanbul'da bu şekilde inşa edilmiş yegane bina dır. Kilise minarlar ve tîzîlîm uşîrîştîr. İlk kîlîsînî devrîlîrî serbestle kîlîsî dîr. Fatih bînîlîr sonradan kîlîsîlîrîştîr. Kîlîsînî sonradan kîlîsîlîrîştîr.					
Bibliyografya: Schneider- Bîyânce, Hî-ebury İstanbul Touristique (Kîlîsîs et monastîres de Constantinople) Pîspatî-Bîz. Vîletelî;					

Fig. 15 Muhliotissa, first registration record dated August 05, 1955 (Committee Archive).

In conclusion, the manuscripts concerning Kanlı Kilise demonstrate that non-Muslim religious structures in the Ottoman urban context were not static or exclusively devotional spaces. Rather, they were dynamic institutions embedded within overlapping legal, administrative, social, and economic networks. The transformation from a 17th-century conservation approach centered on “men-i kadim” (ancient prohibition) to a more intricate 19th-century framework—where social functions and financial concerns became increasingly prominent—offers an important historical perspective. It underscores an Ottoman administrative approach that balanced continuity with adaptation, providing a rich context for understanding the evolving role of such institutions in urban life.

4.3. Patriarchate Synodal Archive documents (1875–1955) and the 1997 restoration inscription

The final quarter of the nineteenth century, as reflected in the archival records of the Fener (Phanar) Greek Patriarchate, stands out as a period marked by both deep crisis and notable communal resilience for the congregation of the Panagiotissa (Virgin Mary) Church. Unlike official state-issued decrees and permits preserved in Ottoman archives, the Patriarchate documents present a more internal and immediate perspective on the community's experiences (Fig. 29). They reveal a congregation striving to preserve a church that was steadily

deteriorating and at risk of collapse—mobilizing all available financial resources, incurring debt, and acting with a strong sense of urgency.

Manuscripts dated between 1875 and 1891 indicate that the need for a comprehensive restoration was becoming increasingly critical. During this time, the community identified serious structural damage, particularly in the wooden gallery floor, the dome, the roof above the hagiasma, and the priest's quarters. These records highlight both the scale of the required repairs and the insufficiency of available funds, while also documenting difficult but necessary decisions such as borrowing money and organizing donations to prevent the building from falling into complete ruin.

Two key individuals emerge in this process. A figure named Gogos, acting as the community's representative, voiced the concerns and demands of the congregation during meetings. To assess the extent of the required interventions, the architect Dimitrios Mihailidis was commissioned; his preliminary survey and cost estimate were submitted to the Patriarchate in order to initiate the official permit process.

The year 1892 proved to be particularly critical. A Patriarchate document dated April 29, 1892 records the collapse of the church's narthex, clearly demonstrating the severity of the situation. This incident marked a turning point, prompting immediate fundraising efforts. However, the reconstruction process encountered significant

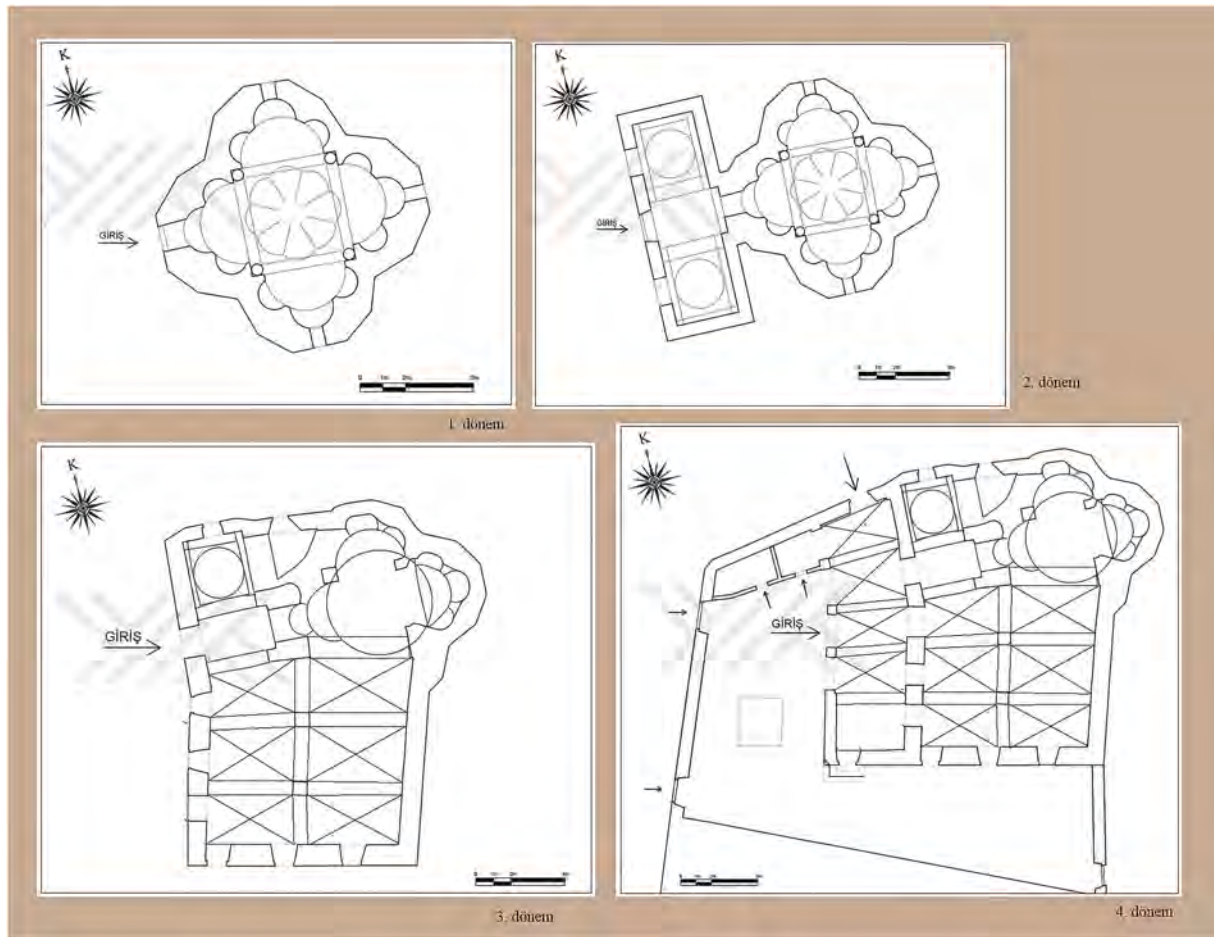


Fig. 16 Muhliotissa, reconstitution proposals of four different periods (Altunışık, 2024).

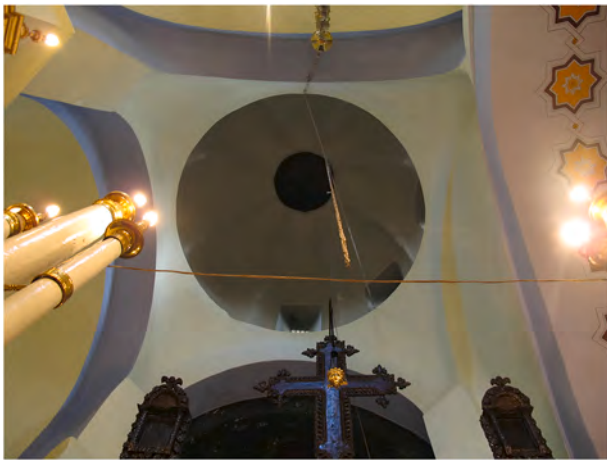


Fig. 17 Muhliotissa, main dome (Esmer, 2017).

obstacles. A bilingual document dated June 3, 1892, written in Ottoman Turkish and Greek, shows that the Ministry of Justice and Sects ordered the suspension of construction on the church's bell tower. The justification was that the rebuilt tower exceeded its previously permitted height (Fig. 30). This intervention demonstrates that even repair-oriented building activities were subject to close state supervision and strict regulatory limits.

These struggles at the end of the nineteenth century extended into the twentieth century, accompanied by new challenges and solution strategies. Documents from this later period, set against the backdrop of Istanbul's major political and social transformations, reflect the community's persistent efforts to secure the long-term survival of the church. They reveal both forward-looking initiatives and the lasting impact of disruptive historical events.

A document dated July 5, 1906, submitted to Patriarch Joachim III, outlines a deliberate strategy aimed at financial sustainability. The community planned to construct a new building on a plot adjacent to the church in order to generate rental income. This income was intended both to meet ongoing needs and to fund the repair of the long-neglected priest's quarters. This initiative demonstrates a pragmatic approach to overcoming chronic financial difficulties.

However, this vision for long-term stability was ultimately disrupted not by structural or financial limitations, but by broader historical events that affected Istanbul roughly half a century later. The final document in the Patriarchate archive concerning the church is a report assessing the damage caused during the events of September 6–7, 1955. It confirms that the Panagia Muhliotissa Church was among the buildings affected and provides a detailed account of the destroyed materials along with their estimated value. In doing so, it offers concrete



Fig. 18 Muhliotissa from Tevkii Cafer Mektebi street (Esmer, 2017).

evidence of a traumatic episode that left lasting marks on the city's history.

The most recent major restoration of the church is documented not in archival records, but through an inscription located within the building itself (Fig. 31). According to this inscription, the church was restored in 1997 during the time of Patriarch Bartholomew, with the support of the benefactor Gerasimos Vasilopoulos.² This final record completes the documentary narrative of the Panagiotissa Church and provides a basis for a comprehensive evaluation of all available data (Table 7).

² On the inscription, it reads: "ΕΝ Ω ΜΟΥΧΛΙΩΤΙΣΣΗΣ ΔΟΜΩ ΙΕΡΩ ΑΦΘΙΤΟΣ ΑΧΡΙ ΤΟΥ ΝΥΝ ΠΡΟΣΑΓΕΤΑΙ Η ΠΡΟΣ ΤΗΝ ΠΑΡΘΕΝΟΝ ΥΜΝΟΛΟΓΙΑ ΒΑΡΘΟΛΟΜΑΙΟΥ ΠΑΤΡΙΑΡΧΟΥΝΤΟΣ ΘΥΜΗΡΗΣ ΠΑΡΕΣΤΙΝ ΚΑΙ Η ΤΟΥ ΓΕΝΟΥΣ ΕΜΠΙΝΟΥΣ ΤΕ ΚΑΙ ΕΜΠΙΡΑΚΤΟΣ ΠΑΡΟΥΣΙΑ ΜΗΤΡΟΠΟΛΙΤΟΥ ΤΟΙΝΥΝ ΚΑΙ ΕΠΙΟΠΤΟΥ ΔΑΟΔΙΚΕΙΑΣ ΙΑΚΩΒΟΥ ΒΟΥΑΗ ΤΕ ΜΕΡΙΜΝΗΠΩΤΟΒΟΥΛΩ ΥΠΑΡΧΟΝΤΟΣ ΕΥΓΕΝΕΤΟΥ ΔΟΤΗΡΟΣ ΓΕΡΑΣΙΜΟΥ ΒΑΣΙΛΟΠΟΥΛΟΥ ΤΩΔΕ ΤΩ ΝΕΟΥΡΓΗΘΕΝΤΙ ΣΕΜΝΕΙΩ ΤΗΣ ΟΡΘΟΔΟΞΙΑΣ ΔΑΨΙΛΩΣ ΕΚΦΑΝΘΕΙΣΑ ΩΣ ΠΡΟΤΕΡΟΥ ΚΛΕΟΥΣ ΚΑΙ ΝΟΗΜΑΤΩΝ ΑΡΧΕΓΟΝΩΝ ΧΡΕΟΣ ΤΕ ΚΑΙ ΟΦΔΗΜΑ ΜΑΙΟΥ ΚΔ ΕΤΕΙ ΣΩΤΗΡΙΩ ΑΨΖ". Its translation is "This is a structure dedicated to the holy and eternal Virgin Mary, to whom the hymnody from the time of the Patriarchate of Bartholomew is offered unceasingly; it is a structure where the inspired and practical presence of this people is also manifest. Furthermore, it is a debt and obligation that this new and venerable edifice of Orthodoxy, created with the contributions of Jacob, the Metropolitan and Overseer of Laodicea, and the benevolent donor Gerasimos Vasilopoulos, continues to shine forth abundantly in these days, in light of its former glory and foundational principles. In the year of salvation 1997, May 24." (Transliteration and translation: Mine Esmer).



Fig. 19 Muhliotissa, Kimiseos tis Theotokou hagiaσμα, recessed brick technique (Esmer, 2017).



Fig. 20 Photograph of the main dome by N. Artamonov (Nicholas V. Artamonoff Collection, 1930–1947, Image Collections and Fieldwork Archives (ICFA), Dumbarton Oaks Research Library and Collection).

5. Findings: new evidence from the field and the archive

The on-site surveys revealed that the church is currently suffering from a range of urgent material problems. Moisture-related damage is pervasive, including plaster blistering, efflorescence on facades, and water ingress from both the roof and the ground. Biological growth has taken hold, with dense vegetation and moss covering the north facade and plants sprouting between roof tiles. Material decay is equally severe: frescoes—especially those at the narthex entrance—are disintegrating, window jambs show surface erosion, and the wooden doors are rotting beneath their sheet-metal cladding. Compounding these issues are unqualified modern interventions, such as

Table 2 Main changes that occurred in Muhliotissa.

Intervention type	Description
Demolition and expansion	The original niches to the south and west were demolished for the southern addition made around 1730. Only the lower part of the western niche was demolished (Fig. 21).
Additions	A trapezoidal-planned section with Ottoman-style pointed arches and cross vaults was added to the south. The southern part of this addition was turned into a women's gallery (gynaikonitis) with a wooden intermediate floor. A lower-level pentagonal exonarthex was built to the west (Figs. 22 and 23).
Closure of windows	Five of the eight original windows in the dome were walled up and closed.
Removal of columns	The four original marble columns supporting the central space were removed, and replaced by piers.
Surface coverings	All interior and exterior surfaces were covered with a thick layer of plaster, hiding the original masonry, cornices, and possible decorations. This situation is associated with the fire of 1784 or major repairs in the 18th century, based on a lithograph by Paspatis.

**Fig. 21** Muhliotissa, view of the iconostasis from the north (Esmer, 2017).

Marseille-type roof tiles instead of traditional Turkish tiles, onduline waterproofing, cement residues, and the inappropriate use of spaces like the gallery being converted into storage.

The archival investigation uncovered a long administrative and social trajectory that had not been previously articulated. In 1691, an imperial edict limited repairs to broken tiles, windows, and cracked walls under the strict

**Fig. 22** Narthex with cross-vaulting (Esmer, 2017).**Fig. 23** Muhliotissa, gynaikeion (women's gallery) (Esmer, 2017).**Fig. 24** Moisture problem in the main dome (Altunışık, 2024).



Fig. 25 Moisture problem on the east façade of Muhliotissa (Altunışık, 2024).

principle of “ancient prohibition” (*men-i kadim*), allowing no additions whatsoever. After the great fire of 1729, a post-fire survey from 1730 documented the church’s dimensions with remarkable rigor, involving 42 Muslim witnesses and imperial architects to ensure that no expansion beyond the original boundaries could take place. By the mid-19th century, however, the archival records show a clear shift: between 1856 and 1867, permits were granted for social functions such as schools and housing for poor families, and even debt disputes involving the church appeared in official records. In 1892, a Patriarchate document recorded the dramatic collapse of the narthex, followed by the halt of bell tower construction for exceeding its permitted height. A 1955 damage report later confirmed the destruction suffered during the September 6–7 incidents, providing a detailed inventory of material losses. Finally, a 1997 inscription marks the last major restoration, carried out under Patriarch Bartholomew with the support of benefactor Gerasimos Vasilopoulos.

Taken together, these findings lead to a fundamental rethinking of how the church should be conserved. The

building is not a pure original state waiting to be uncovered but rather a palimpsest—a cumulative organism shaped by centuries of disasters, repairs, and functional adaptations. No single period can be privileged over another; the Byzantine core, the Palaiologan modifications, the Ottoman additions, and even the modern repairs all carry historical value. Therefore, any conservation intervention must reject single-period restoration in favor of an approach grounded in minimum intervention, reversibility, and respect for material authenticity, ensuring that all layers of the building’s long and complex life remain legible for future generations.

6. Discussion: a comparison with previous archival research

The archival findings of this study both complement and diverge from five previous studies that examined Ottoman repair and construction practices on historical buildings. Mazlum (2001), in her doctoral thesis on the 1766 Istanbul earthquake, demonstrated that 18th-century repairs followed the principle of “*vaz-ı kadim üzere* (without alteration to its original configuration)” in building techniques, providing invaluable data on period materials and administrative mechanisms involving the Hassa Chief Architect. Sönmez Pulat (2020), surveying 96 Greek Orthodox churches with a focus on the post-Tanzimat period (1856–1914), and Yaşar (2020), analyzing repair documents across multiple churches and schools, both emphasized the legal and bureaucratic mechanisms governing non-Muslim repairs, including detailed construction material lists and the principle of “*heyet-i asliyesi* (original fabric)”. Kahraman and Kâhya (2016), in their study on the Fenari İsa Mosque, demonstrated how archival repair books can be cross-

Table 3 Problems identified in Muhliotissa.

Problem category	Identified damages and deteriorations
Problems caused by water and moisture	• Water ingress from the roof and ground. • Plaster blistering, cracks, and peeling due to moisture on the narthex ceiling, north interior wall, and dome drum.
Biological deteriorations	• Efflorescence on plastered exterior facades (apse, dome drum) (Figs. 24–25). • Intense vegetation and moss, especially on the north exterior facade. This is exacerbated by water flowing directly onto the wall from a gutter without a chain at its end.
Material and surface deteriorations	• Plant growth between roof tiles. • Color fading, surface losses, hairline cracks, and layer separation in frescoes. The fresco at the narthex entrance is in particularly bad condition. • Atmospheric pollution and graffiti on exterior facades. • Deformation of sheet metal covering wooden doors and rotting of the wood underneath.
Poor-quality interventions	• Surface erosion on window jambs. • Use of Marseille-type tiles instead of original Turkish-style tiles on the roof. • Onduline covering on the terrace floor for waterproofing. • Cement residues on roof ridges. • Use of spaces like the gallery floor as storage, incompatible with the church’s function.

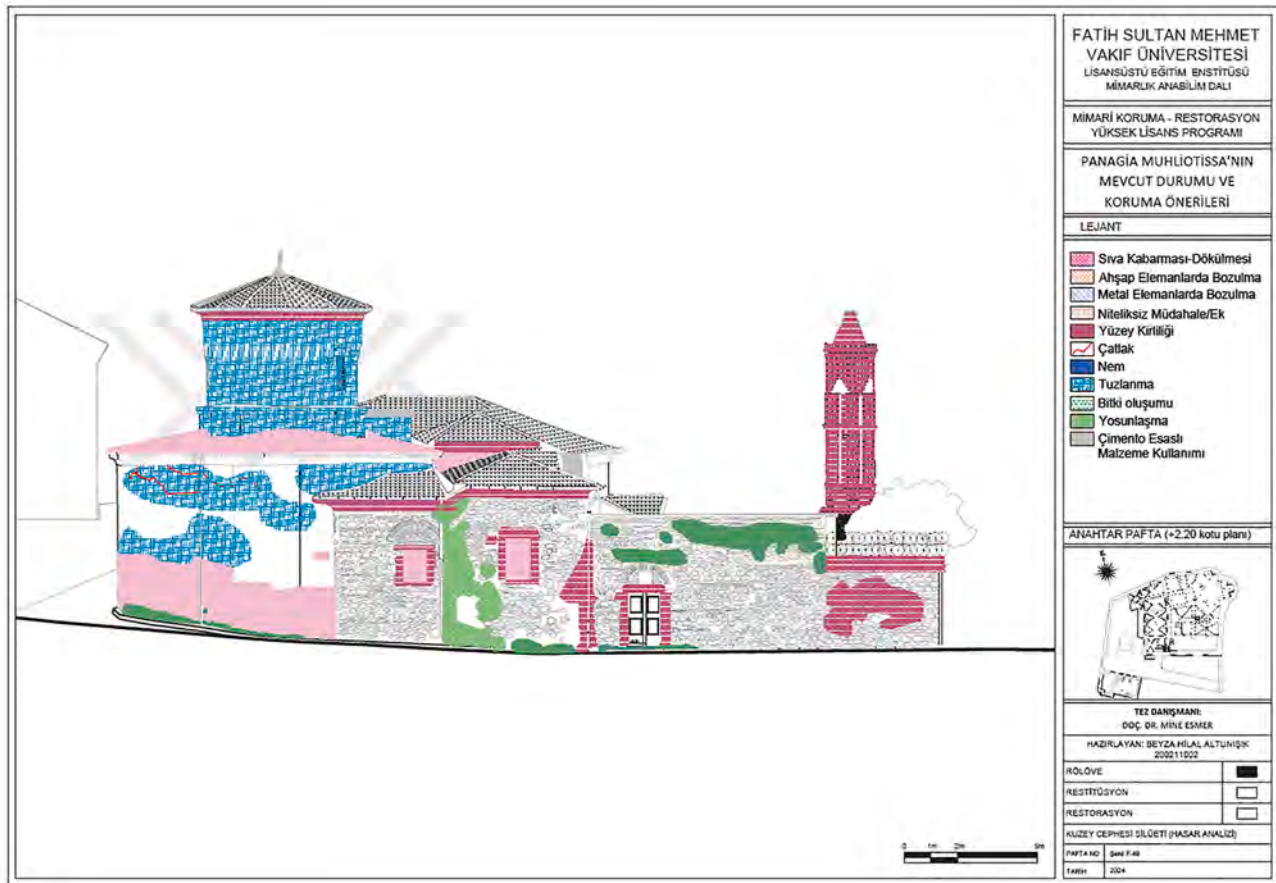


Fig. 26 Muhliotissa, current survey, north silhouette, damage analysis (Altunışık, 2024).



Fig. 27 Fresco from the 13th century (Esmer, 2017).

referenced with architectural drawings and historical photographs to reconstruct a building's 19th-century configuration. Bozer and Sunay (2013), analyzing a permit request for a new church in Kula, revealed the bureaucratic tensions between the Ministry of Justice and Sects (favoring permission based on the Islahat Edict) and the Şura-yı Devlet (opposing on the grounds of existing churches).

The present study offers an alternative perspective in three significant ways. First, while previous studies focus on specific events or the 19th century, the present study offers a longer temporal arc, examining documents from 1691 to 1955 on a single monument, Panagia Muhliotissa. The 1691 document provides an early known repair permit demonstrating the "men-i kadim" principle. Second, the 1730 post-fire survey with 42 Muslim witnesses reveals a sophisticated mechanism of social control that combines legal, technical, and communal oversight, complicating simplistic narratives of Ottoman tolerance versus intolerance. This finding seems to fall outside the scope of the administrative schemas employed in the five comparative studies. Third, the present study uniquely incorporates Patriarchate Synodal Archive sources documenting the 1892 narthex collapse and the 1955 material loss inventory—documents outside the scope of all previous studies. Unlike Bozer and Sunay (2013), who analyze a failed permit request, the present study documents successful repairs approved despite similar bureaucratic hurdles. Consequently, while Mazlum (2001) highlights the continuity of traditional repair practices in the 18th century, and Sönmez Pulat (2020) and Yaşar (2020) provide broad perspectives across multiple churches, the present study adopts a more focused approach on a single monument. This allows for a closer examination of how social accountability mechanisms

Table 4 Panagiotissa Church: Summary of BOA (Prime Ministry Ottoman Archive Manuscripts).

Date	Document No.	Neighborhood name	Damage/ Intervention reason	Document summary	Spatial/Legal meaning
November 02, 1691	BOA a. {DVNSMHM.d/ 102–287	Atik Nişancı Cafer Çelebi	—	To the Istanbul district governor (kaymakam) and judge (kadi): Repairing the roof tiles of Kanlı Kilise in Atik Nişancı Cafer Çelebi neighborhood within Phanar (Fener) Gate, Istanbul.	Shows that the church's ancient status is recognized and maintenance-repair is subject to state permission.
November 12, 1691	BOA a. {DVNSMHM.d/ 102–320	Atik Nişancı Cafer Çelebi Mahallesi	Damage to roof tiles and windows, cracks in walls	To the Istanbul district governor (kaymakam) and judge (kadi): Not to obstruct the repair of the cracked walls of Kanlı Kilise in Nişancı Cafer Çelebi neighborhood at Fenerkapısı, Istanbul, with filler mortar, and the replacement of broken glass and tiles.	Reveals that non-Muslim religious buildings can only be repaired in a way that preserves their existing state.
July 15, 1730	BOA a. {DVNSMHM.d/ 137–474	Tevkii Cafer	Severe damage and dimensional losses after the 1729 fire	To Mevlâna Mehmed Raşid, judge of Istanbul: Not to cause discomfort to the Rum community residing in Tevkii Cafer neighborhood in Istanbul under the pretext of a new survey, as the Virgin Mary church or Kanlı Kilise, which they have used since the conquest, has been surveyed for repair in accordance with its original state after the fire. As a result of measuring the current situation after the fire, the dimensions of the naos, gynaikonitis, canopy, and door are given, mentioning the sworn statements of 42 Muslim witnesses.	Shows through Ottoman social control + technical survey that spatial boundaries were preserved.
September 30, 1856	BOA HR.MKT./ 161/46	Kiremit Mahallesi	Complete ruin of annexes	Constructing an additional building for the school for girls in the Cibali locality of Dersaadet, granting permission for the repair of the servant rooms belonging to the Virgin Mary church in Kiremit neighborhood.	Shows that the social functions of church buildings were officially recognized during the Tanzimat period.
May 26, 1862	BOA İ.HR./193-10851	Fener	Social needs	Request to build four two-story rooms inside	Shows that the use of the church as a non- (continued on next page)

Table 4 (continued)

Date	Document No.	Neighborhood name	Damage/ Intervention reason	Document summary	Spatial/Legal meaning
February 13, 1867	BOA MVL/524 –17	Kiremit Mahallesi	Debt and payment dispute	the inner courtyard of the Virgin Mary church in the Fener district of Istanbul, to house poor families. Petition of Abacı Hacı Hars et al. Regarding their debt claim against lumber merchant Gurbelasko concerning Kanlı Kilise in Kiremit neighborhood. The document shows a dispute between the church administration and suppliers regarding material procurement, serving as indirect evidence of ongoing repairs.	worship social space became institutionalized. Reveals that church buildings were part of the urban economic and legal network.

operated alongside technical repairs, and how disaster memory was preserved in both state and ecclesiastical archives over nearly three centuries.

7. Conclusion and evaluation

This study set out to develop a scientifically grounded conservation framework for the Panagia Muhliotissa Church, addressing both its exceptional historical continuity and its multilayered architectural character, while responding to pressing structural concerns. Within this scope, four interrelated objectives were defined: to document the current condition through advanced survey techniques, including terrestrial laser scanning and UAV-based recording; to identify material properties and patterns of deterioration through systematic on-site observation; to reconstruct the original configuration alongside subsequent interventions; and to formulate a restoration proposal that seeks to remove incompatible additions, ensure structural stability, and conserve original materials in accordance with internationally recognized principles. These objectives have been comprehensively achieved.

The laser scanning and UAV surveys documented the church with millimeter-level precision, producing a detailed record of its current condition and revealing extensive material deterioration. The exterior facades, dome drum, and narthex ceiling exhibit clear signs of moisture ingress, plaster blistering, and efflorescence. Dense vegetation along the north façade, as well as plant growth between roof tiles, indicates ongoing maintenance

deficiencies. The frescoes—particularly at the narthex entrance—display color fading, surface losses, cracking, and stratigraphic separation. In addition, several unqualified interventions were identified, including the use of Marseille-type roof tiles instead of traditional Turkish tiles, onduline waterproofing layers, residual cement applications, and the use of the gallery as a storage area. These findings were further corroborated and refined through systematic on-site observations, which enabled the identification of specific deterioration patterns.

Reconstitution studies have identified four principal construction phases, thereby clarifying the building's chronological development and transformation. On this basis, a restoration proposal has been formulated in line with international conservation principles (ICOMOS, 1964; 2003). The results further emphasize the need to establish a continuous maintenance program, implement an emergency preparedness plan addressing risks such as earthquakes and fires, and strengthen institutional collaboration with ICOMOS and UNESCO.

The proposed conservation approach is grounded in the theoretical framework established at the outset. Interpreting Panagiotissa as a multilayered architectural entity—an evolving palimpsest—precludes privileging any single phase as the sole “authentic” state and aligns with contemporary conservation theory (ICOMOS, 1994; Jokilehto, 1999; Van Ooijen, 2020). Archival research, understood as an extension of the building's memory, frames past interventions as cumulative and interrelated processes, reinforcing the notion that “the layering of new over old ... allows for a deeper and richer architecture” (Tran, 2011, p. 13). Within this perspective, material

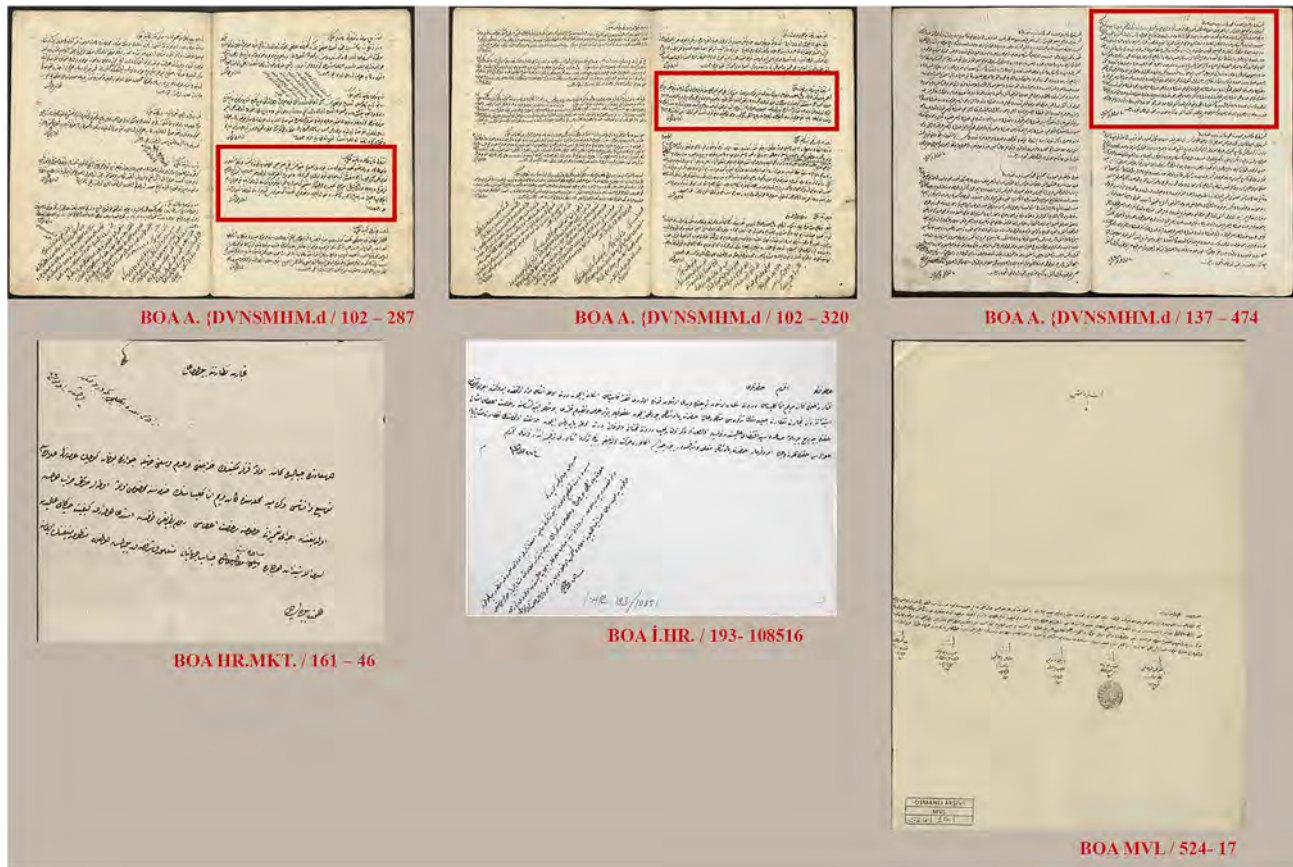


Fig. 28 Manuscripts found in the Ottoman Archives (Layout: Esmer, 2026).

Table 5 Officials and witnesses named in the document numbered A. DVNSMHM.d/137–474.

No	Title/Rank	Name	Duty/Role	Description
1	Judge (Kadi)	Mevlana Mehmed Reşid	Judge (Kadi) of Istanbul	Addressee of the imperial order and responsible for the survey process.
2	Mübaşir (official supervisor)	İbrahim	Usher (Mübaşir)	Responsible for carrying out the survey procedures and keeping records.
3	Chief imperial architect (Sermimar-ı Hassa)	Mehmed	Palace chief architect	Technical supervisor of the survey committee.
4	Master architect (Halife)	El-Hac Mehmed Halife	Architect's assistant	Assistant to the chief architect and member of the survey team.
5	Master architect (Halife)	El-Hac Mustafa Halife	Architect's assistant	Assistant to the chief architect and member of the survey team.
6	Scribe (Kâtip)	Salih	Scribe	Official who wrote the survey report.
7	Chief trusted witness (Başmutemed)	Halil	Chief trusted witness	Trusted person witnessing the accuracy of the survey.
8	Muslim community (Cemaat-i Müslimin)	42 individuals	Witnesses	Muslim residents selected from Tahta Minare and Cafer Subaşı neighborhoods.

Table 6 Comparison of the church's ancient (original) and current (1730) dimensions.

Building section	Ancient (original) dimension	Current dimension (1730)	Unit	Description
Main structure (Length/ Width)	24.5	24.5	Zira	Same dimensions, no increase.
Main structure (Length/ Width) – Missing part	24.5	23.5	Zira	1 zira short of the original length.
Women's gallery (Length/Width)	17	14.5	Zira	2.5 zira short of the original length.
Women's gallery (Width)	7.5	6	Zira	1.5 zira short of the original width.
Canopy roof over door (Length/Width)	24.5	21.5 + 6 parmak	Zira + Finger	3 zira 6 parmak short of the original length.
Canopy roof over door (Width)	9.5	6.5	Zira	3 zira short of the original width.
Number of doors	3	2	—	1 door missing.
Other interior and exterior annexes	According to ancient state	Could not be measured	—	Could not be determined due to fire and collapse.

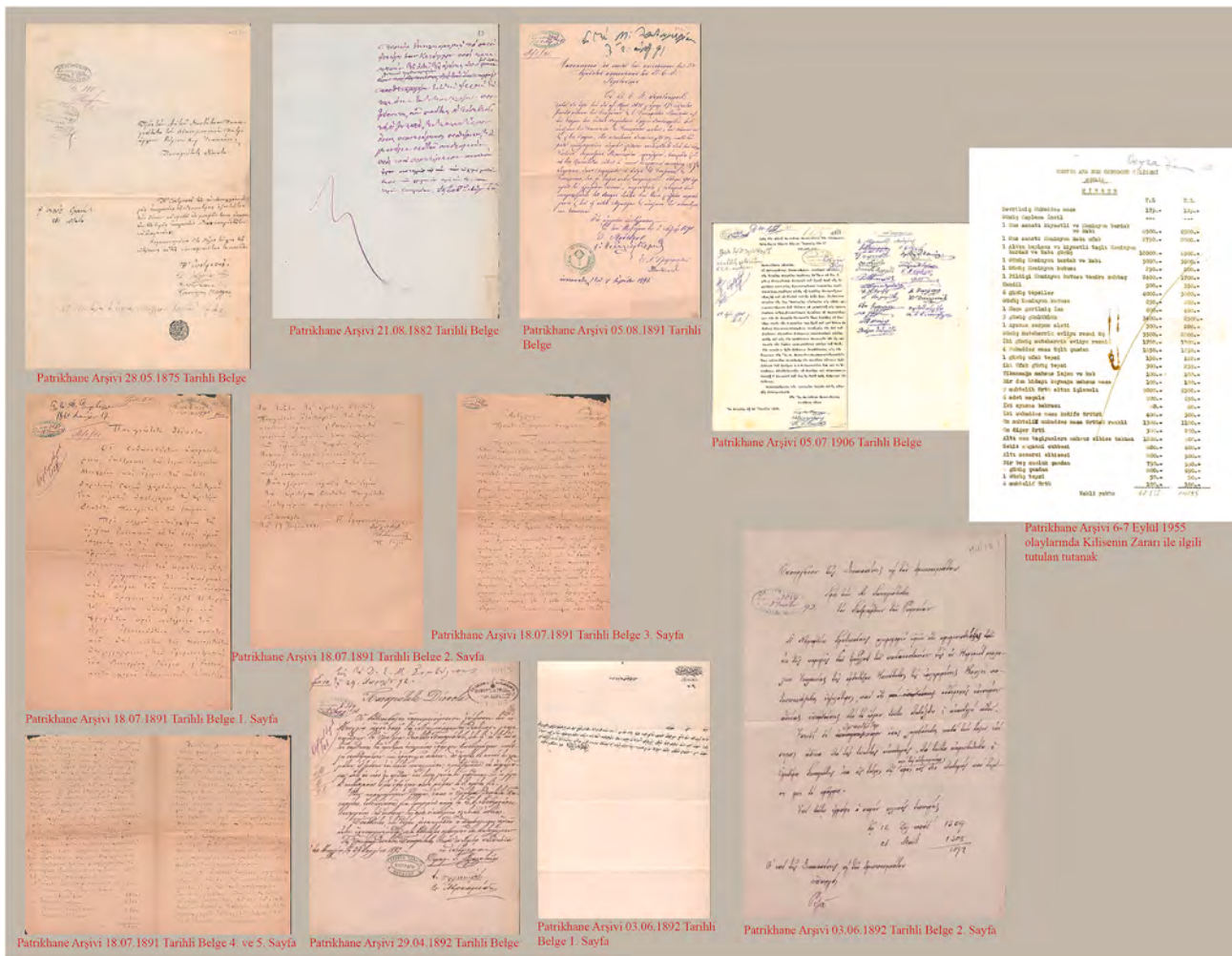
**Fig. 29** Documents found in the Patriarchate Archives (Layout: Esmer, 2026).



Fig. 30 The date 1892 is visible on the inscription of the bell tower of Muhliotissa (Esmer, 2017).



Fig. 31 Inscription belonging to the 1997 restoration of Muhliotissa (Esmer, 2017).

authenticity is defined not only by original fabric but also by historically significant transformations (ICOMOS, 1994), thereby prioritizing the preservation of meaningful layers over the reconstruction of a hypothetical original state.

Accordingly, the proposed interventions adhere to the principles of minimum intervention and reversibility (ICOMOS, 1964). Recognizing change as intrinsic to the building's historical trajectory, the approach calls for the critical evaluation—rather than wholesale removal—of

later additions, aiming to manage the architectural palimpsest in a balanced and informed manner. Conservation is thus framed as a process of sustaining continuity, rather than restoring a singular, original condition.

The Panagia Muhliotissa Church occupies a unique position as the only Byzantine church in Istanbul to have remained continuously open for Christian worship since the Conquest. Its main structure, dated to the 11th century, represents a rare example of a tetraconch plan in Middle Byzantine architecture. The interventions undertaken by Maria Palaiologina in the 13th century significantly reshaped and reinterpreted the existing structure. Consequently, the church cannot be understood solely within the framework of the Middle Byzantine period; rather, it should be considered as a multilayered historical entity shaped by Palaiologan modifications, Ottoman-period additions in the 18th century, and subsequent repairs in the 19th and 20th centuries.

Despite the cumulative impact of fires, earthquakes, and successive interventions, the building continues to preserve, in a legible manner, key characteristics of post-early Byzantine capital city architecture—particularly in its plan configuration and dome system—thus serving as a tangible record of transformation within continuity. In this respect, Panagia Muhliotissa stands out as a significant monument within Istanbul's architectural heritage, not only due to its historical privilege but also because of the continuity and readability of its layered structure (Fig. 32).

Architectural evidence suggests an original construction date in the first quarter of the 11th century. The tetraconch layout, the sequence of twelve niches articulated through secondary recesses, and the dome system—originally supported by four marble columns creating a canopy-like spatial effect—point to a refined Constantinopolitan design. The division of the dome into eight segments further situates the building within the architectural tradition of the capital, comparable to examples such as Myrelaion (Bodrum Mosque) and Pammakaristos (Fethiye Mosque). Similarly, the resemblance of the exterior drum to that of the katholikon of Vatopedi Monastery supports this early dating. These architectural observations are corroborated by written sources, confirming the building's Middle Byzantine origins.

The intervention of Maria Palaiologina at the end of the 13th century constitutes a second major phase in the building's history. The designation “new founder” (neaktitorissa) reflects not a complete rebuilding, but a reorganization of the existing monastic complex. Additions such as the narthex and the transformation of the western niche demonstrate how the liturgical requirements of the Palaiologan period were superimposed upon the Middle Byzantine core, resulting in a structure that embodies both continuity and transformation.

During the Ottoman period, the church's physical evolution was shaped by natural disasters, administrative control, and regulated repair practices. Documents from 1691 to 1730 emphasize the principle that non-Muslim places of worship should be repaired in accordance with

Table 7 Panagiotissa (Virgin Mary) Church—19th–20th century Patriarchate documents.

Date/Period	Document/Event	Summary (In Today's Turkish—Summary)
1875–1891	Comprehensive restoration attempts	Documents from the Fener Greek Patriarchate reveal serious and dangerous structural deteriorations in the church's balcony, dome, hagiaσμα roof, and priest's rooms. Despite insufficient financial means, the community collected donations, took on debt, and launched a comprehensive repair campaign to prevent the building's collapse.
1875–1891	Community representatives and technical assessment	A representative named Gogos speaking on behalf of the community and the architect Dimitrios Mihailidis, who identified the need for repair, stand out in the documents. A preliminary survey and cost estimate prepared by Mihailidis were submitted to the Patriarchate, initiating the official permission process.
April 29, 1892	Collapse of the narthex	A document dated this day records the collapse of the church's narthex section; this event was a breaking point requiring urgent intervention for the community. Subsequently, fundraising and repair efforts accelerated.
June 03, 1892	Halt of bell tower construction	In a bilingual document prepared in Ottoman and Greek, the ministry of Justice and Sects ordered the construction of the bell tower to be halted on the grounds that it exceeded the permitted old height. This indicates that even repair activities were subject to strict administrative control.
July 05, 1906	Proposal for income-generating building	The community proposed constructing a building on the land adjacent to the church to be rented out. The aim was to generate regular income to meet the community's needs and finance the repair of the dilapidated priest's rooms.
September, 6–7, 1955	Pogrom and destruction	The last document in the Patriarchate archive confirms that the church was damaged during the September 6–7 incidents; it records in detail the destroyed building elements and their material value.
1997	Last major restoration	An inscription inside the church documents that the building was restored in 1997 during the time of Patriarch Bartholomew, with contributions from the benefactor Gerasimos Vasilopoulos.

**Fig. 32** Muhliotissa, courtyard and west façade of the narthex (Esmer, 2017).

their prior condition. In practice, however, notable changes occurred. The removal of the southern niche in the 18th century and its replacement with an addition reflecting Ottoman architectural character, along with the construction of an outer narthex on the western side, significantly altered the original tetraconch configuration. While these interventions partially obscured the Byzantine core, they also contributed to the continued functional use of the building. By the 19th century, the church had also become embedded within administrative and financial systems, where survey reports, debts, and official permits played a crucial role in its maintenance and survival.

Today, a significant portion of the building's original Byzantine character remains concealed beneath layers of plaster and later additions. The concealed brick technique observable in the southwest basement constitutes one of the few surviving physical traces of the earliest phase. The preservation of the 13th-century Virgin Mary mosaic and portable icons attests to cultural continuity, while frescoes identified in the 19th century but lost in the 20th century

point to missing layers within the building's historical stratigraphy.

In conclusion, Panagia Muhliotissa should be understood not as a monument belonging to a single period, but as an architectural palimpsest shaped by successive Middle Byzantine, Palaiologan, Ottoman, and Republican phases. Its significance lies not only in its rare tetraconch plan, but also in the clarity with which its transformations over time can still be interpreted. Accordingly, conservation approaches should move beyond the objective of isolating and revealing an "original" Byzantine core, and instead adopt a holistic perspective that documents, preserves, and renders legible all historical layers. The value of Panagiotissa resides precisely in this accumulated and stratified historical memory. The conservation framework proposed in this study—grounded in minimum intervention, reversibility, material authenticity, the balanced consideration of all periods, and the necessity of continuous maintenance—offers a model for the conservation of similarly multilayered heritage structures.

Fieldwork permissions

Research and documentation at Panagia Muhliotissa Church were conducted with the permission of the Fener Greek Patriarchate.

Data statement

Research data are archived at Fatih Sultan Mehmet Vakıf University and are available upon request.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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