



Advanced Engineering Days

aed.mersin.edu.tr



Restitution suggestion for Mardin TatlıDede Mansion

Lale Karataş¹, Aydın Alptekin², Murat Yakar³

¹Mardin Artuklu University, Department of Architecture and Urban Planning, Türkiye, karataslale@gmail.com

²Mersin University, Geological Engineering Department, Türkiye, aydinalptekin@mersin.edu.tr

³Mersin University, Geomatics Engineering Department, Türkiye, myakar@mersin.edu.tr

Cite this study: Karataş, L., Alptekin, A., & Yakar, M. (Year). Restitution suggestion for Mardin TatlıDede Mansion. 4th Advanced Engineering Days, 61-63

Keywords

Cultural Heritage
Historical Buildings
Restitution
Sustainability
Mardin

Abstract

TatlıDede Mansion is a traditional masonry building, which is located within Mardin's urban archaeological site and of which is important to maintain its sustainability due to the fact that it reflects the characteristics of the traditional housings of the geographic context it is located in, in terms of the architectural characteristics. However, although today the house maintains its original status, partial interventions have been carried out on the building. The stages undergone by Mardin TatlıDede Mansion, which is a historical building, and its historical background must be revealed and documented, in order to ensure the sustainability of building's original state. Within this context, the aim of this study is to investigate the stages undergone by Mardin TatlıDede Mansion, which is a traditional masonry house, and its historical background and to present a restitution suggestion intended for its original state. Methods of literature review, complementing with the information received from the building, of which the location, trace, and material is clear, complementing as a result of comparative studies, and complementing as a result of architectural requirement were used in order to obtain the drawings regarding the original state of the building. As a result of the investigations carried out under the study, it was concluded that numerous sections must be completed in order to restore the building to its original state. With reference to this result, the building must undergo a general maintenance and repair process as soon as possible.

Introduction

Conservation intervention, which has to be applied for a monument or a historical building, requires particularly the diagnosis of the causes of building's material deteriorations correctly. The second important stage is the requirement of investigation stages undergone by the building and its historical background well. The next stage is the documentation of building's current status, thus the status investigation. All of these are the subjects required to be researched in the first stage in order to develop a conservation strategy. The final stage is to determine the type of deterioration and develop the conservation interventions accordingly [1].

The historical Mardin TatlıDede Mansion, which is located in Artuklu County, Ulucami Neighbourhood of Mardin, reflects the characteristics of the traditional houses of Mardin, in terms of the architectural characteristics and adornments [2, 3]. However, although today the house maintains its original status, partial interventions have been carried out on the building. The stages undergone by Mardin TatlıDede Mansion, which is a historical building, and its historical background must be revealed and documented, in order to ensure the sustainability of building's original state. Within this context, the aim of this study is to investigate the stages undergone by Mardin TatlıDede Mansion, which is a traditional masonry house, and its historical background and to present a restitution suggestion intended for its original state.

Location and Architectural Characteristics of the Building

The historical house, which is located in Artuklu County, Ulucami Neighbourhood of Mardin is consisted of ground, first, second, and mezzanine floors. Although the building maintains its original status, partial interventions have been carried out. Facade of the building maintains its original status. Iwans, original stone motives, original hand-drawn, stone columns and stone arches with motives are present in the building. Attached

walls are present in some parts of the buildings, which have been built later due to the need. Entrance to the building is provided from the east and north frontages.

Material and Method

Methods of literature review, complementing with the information received from the building, of which the location, trace, and material is clear, complementing as a result of comparative studies, and complementing as a result of architectural requirement were used in order to obtain the drawings regarding the original state of the building. In recent years, photogrammetry and point cloud technology has been used in cultural heritage studies [4-15].

Results

As a result of the Ground Floor Plan examination, areas, of which its location, trace and materials are clear and completed with the information from the building, were determined as the arcaded areas, floor covering, niche, and feeder. There are wooden doors and windows known as a result of the comparative studies. There are stone stairs and iron railings completed as a result of the architectural requirement (Fig. 1). As a result of examination of the first floor plan there are parapet, walls, ground flooring, and stone wall, of which the location, trace and materials are clear and are completed with the information from the building. There are wooden doors and windows known as a result of the comparative studies (Fig. 2). As a result of second floor examination, there are parapet wall, ground flooring, stone wall, groined vault and stone arch, of which its location, trace and materials are clear and completed with the information from the building. There are wooden doors and windows known as a result of the comparative studies (Fig. 3). As a result of mezzanine floor examination, there is ground flooring, of which its location, trace and materials are clear and completed with the information from the building. There are wooden doors and windows known as a result of the comparative studies (Fig. 4) (Fig. 5).



Figure 1. Plan of ground floor



Figure 2. Plan of the first floor



Figure 3. Plan of the second floor



Figure 4. Plan of mezzanine floor

| RESTİTÜSYON ANALİZ LEJANDI | |
|---|--|
|  | Mevcut özgün doku |
|  | Yeri, izi, boyutu ve malzemesi belli olup, yapıdan gelen bilgilerle tamamlananlar. (1. dereceden güvenilir.) |
|  | Arşiv araştırmaları sonucu elde edilen veriler. (1. dereceden güvenilir.) |
|  | Karşılaştırmalı çalışma sonucu tamamlananlar. (2. dereceden güvenilir.) |
|  | Mimari gereklilik sonucu tamamlananlar. |

Figure 5. Restitution suggestion regarding the floor plans

North Frontage; Stone column and rubble stone wall are present, of which the location, trace, and material are clear and which are completed with the information from the building. There are wooden doors and windows known as a result of the comparative studies. There are stone stairs and iron railings completed as a result of the architectural requirement. East Frontage; Stone column and rubble stone wall are present, of which the location, trace, and material are clear and which are completed with the information from the building. There are wooden doors and windows known as a result of the comparative studies.

Conclusion

Within the scope of the study, the architectural characteristics of Mardin Tatlıdede Mansion, which is located within Mardin's urban archaeological site and of which its conservation constitutes a great importance for the region, were investigated within the context of maintaining the sustainability of the original status of the building, a restitution suggestion was presented regarding the building. As a result of the studies conducted within the scope of the study, it is concluded that numerous sections must be completed in the building, in order to restore the building to its original state. With reference to this result, the building must undergo a general maintenance and repair process as soon as possible.

References

1. Charola, A.E. (2017). Stone deterioration characterization for its conservation. *Geonomos*. <https://doi.org/10.18285/geonomos.v24i2.836>.
2. Alioğlu, F. (2000). Texture of Mardin City and Houses. Publication of Turkish Economic and Social History Foundation, İstanbul.
3. Dalkılıç, N. (1999). Typology of Plan, Frontage and Construction Elements in Traditional Diyarbakır Houses, Unpublished Master Thesis, Gazi University, Institute of Science, Ankara.
4. Karataş, L., Alptekin, A., Kanun, E., & Yakar, M. (2022). Tarihi kârgir yapılarda taş malzeme bozulmalarının İHA fotogrametrisi kullanarak tespiti ve belgelenmesi: Mersin Kanlıdivane ören yeri vaka çalışması. *İçel Dergisi*, 2(2), 41-49.
5. Alptekin, A., & Yakar, M. (2021). 3D model of Üçayak Ruins obtained from point clouds. *Mersin Photogrammetry Journal*, 3(2), 37-40.
6. Kanun, E., Alptekin, A., & Yakar, M. (2021). Cultural heritage modelling using UAV photogrammetric methods: a case study of Kanlıdivane archeological site. *Advanced UAV*, 1(1), 24-33.
7. Doğan, Y., & Yakar, M. (2018). GIS and three-dimensional modeling for cultural heritages. *International Journal of Engineering and Geosciences*, 3(2), 50-55.
8. Mirdan, O., & Yakar, M. (2017). Tarihi eserlerin İnsansız Hava Aracı ile modellenmesinde karşılaşılan sorunlar. *Geomatik*, 2(3), 118-125.
9. Alptekin, A., Çelik, M. Ö., & Yakar, M. (2019). Anıtmezarın yersel lazer tarayıcı kullanarak 3B modellenmesi. *Türkiye Lidar Dergisi*, 1(1), 1-4.
10. Alptekin, A., Fidan, Ş., Karabacak, A., Çelik, M. Ö., & Yakar, M. (2019). Üçayak Örenyeri'nin yersel lazer tarayıcı kullanılarak modellenmesi. *Türkiye Lidar Dergisi*, 1(1), 16-20.
11. Alyılmaz, C., Yakar, M., & Yılmaz, H. M. (2010). Drawing of petroglyphs in Mongolia by close range photogrammetry. *Scientific Research and Essays*, 5(11), 1216-1222.
12. Yakar, M., & Doğan, Y. (2017). Silifke Aşağı Dünya Obruğunun İHA Kullanılarak Üç Boyutlu Modellenmesi. *Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi*, 17(4), 94-101.
13. Şasi, A., & Yakar, M. (2017). Photogrammetric modelling of sakahane masjed using an unmanned aerial vehicle. *Turkish Journal of Engineering*, 1(2), 82-87.
14. Kanun, E., Alptekin, A., & Yakar, M. (2021). Documentation of cultural heritage by photogrammetric methods: a case study of Aba's Monumental Tomb. *Intercontinental Geoinformation Days*, 3, 168-171.
15. Yılmaz, H. M., Karabork, H., Yakar, M. (2000). Yersel Fotogrametrinin Kullanım Alanları, Niğde Üniversitesi Mühendislik Bilimleri Dergisi, 4(1), 18-28