

A quantitative approach for evaluating intervention-value relations: historic mosques of Manisa, Turkey

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Abstract

Purpose – This study aims to propose a systematic way of evaluating the impact of historic and current interventions on cultural asset values of monuments that have preserved their authentic functions so that future interventions can be better guided.

Design/methodology/approach – The study focuses on the Mosque typology. The case studies are chosen from a region that has a rich historic background, but has generally undergone rapid urbanization and faces extensive restorations today. Conventional site survey, archive and historical research and visual analysis are made, but the evaluation process has been designed. As a result, scale and intensity of interventions and disasters and the vulnerability of the monument should be identified for each period of the asset. Variations in the intensity of esthetic or historic qualities and the environmental settings should be credited, rather than the utilitarian necessities.

Findings – Mosques and their environs are most vulnerable in terms of their architectural authenticity and site aesthetics.

Originality/value – The objects studied in the previous studies present a variation, but the majority of the work is carried out with conventional evaluation methods with the emphasis on building scale. However, the mosques are affected by the interventions and disasters, not only as single architectural entities but also as the focal elements of their neighborhoods. So, the intervention-value relations should be understood both for building and site scales. An evaluation process is proposed for understanding the change of values with respect to interventions and disasters throughout history by combining qualitative and quantitative techniques.

Keywords Intervention, Cultural asset value, Mosque

Paper type Research paper

1. Introduction

Interventions to historic monuments together with events such as disasters affect their cultural asset values. When a monument has sustained its function, then only physical interventions regarding its maintenance, rehabilitation and presentation are planned. This study aims to propose a systematic way of evaluating the impact of historic and current interventions on cultural asset values of monuments that have preserved their authentic functions so that their restoration histories are understood and future interventions are better guided. The focus is on the Mosque typology. Sustainable conservation and management of religious heritage is still a challenge (ALTERheritage, 2015). Religious value (ICCROM, 2005) is the basic value ascribed to this heritage type. So, the major aim of a related conservation work is continuity of traditional belief systems and revival of cultural meaning (Stovel, 2005). However, in secular and modernized societies, historic and esthetic contribution of the monument to its environment and the role it plays in the identity of its society are emphasized (Harding, 2018). Within this frame, there are some particularities regarding conservation and management of religious heritage: dealing with change in terms of functional needs and interest in religion; requirements of co-existing belief systems, conservation theory and



museum like presentation of religious places and effect of secularism or a contradictory belief system (Stovel, 2005).

Waqf (the charitable endowment (McChesney, 1991)) originated historic mosques in Turkey are managed by the General Directorate of Pious Foundations (GDPF). Since 2002, there has been an enormous increase in the number of mosque restorations, but the quality of application especially in some regional directorates of the mentioned institution is debatable. Manisa-İzmir directorate, which includes important historic settlements of western Turkey, is one of the most eye-catching regional directorates. Here, it had become a necessity to organize mass opening ceremonies for the historic mosques (Hürriyet Ege, 2017). The mosques from the different locations within Manisa that were restored recently (in between 2009–2014) and dated to different ages were selected as case studies.

Previous studies on the evaluation of intervention-value relations, in the limits of architectural conservation, make use of conventional methods such as historical research, site survey, visual analysis and evaluation (Demel, 1996; Perring, 2009; Şimşek, 2009; Gelengül Ekimci, 2011; Jahić, 2016; Ornelas *et al.*, 2016; Gómez de Cózar *et al.*, 2019; Samadzadehyazdi *et al.*, 2020; De Leão Dornelles *et al.*, 2020). Monumental ruins of archaeological sites (Şimşek, 2009; Gómez de Cózar *et al.*, 2019), monumental ruins in cities affected by war (Perring, 2009; Jahić, 2016), industrial heritage (Samadzadehyazdi *et al.*, 2020), schools, hospitals, baths, etc. that are still in use in contemporary cityscapes, either with their original or new functions (Yüceer, 2005; Gelengül Ekimci, 2011) are studied. How the accumulated value has changed is evaluated with reference to criteria such as transfer, transformation, gain or loss of value. The criteria set presents variations in relation to the type and context of the monument. In some limited studies, qualitative data regarding intervention-value relations are converted into quantitative data. These are valuable experiments since they have the potential for increasing objectivity in the evaluation process (Pastakia *et al.*, 1998; UNESCO, 2012; Yıldırım Esen *et al.*, 2018). In short, the objects studied present a variation, but the majority of the work is carried out with conventional evaluation methods with the emphasis on building scale.

In the preliminary phase of this study; archive and historical research, site survey and visual analysis of each case-study are conducted with conventional techniques such as sketching, photographic documentation, mapping, etc. In addition, an in-depth interview was made with the deputy mufti of Manisa. As this preliminary understanding reveals; the mosques are affected by the interventions and disasters, not only as single architectural entities but also as the focal elements of their neighborhoods. So, the intervention-value relations should be understood both for building and site scales (Figure 1). An evaluation

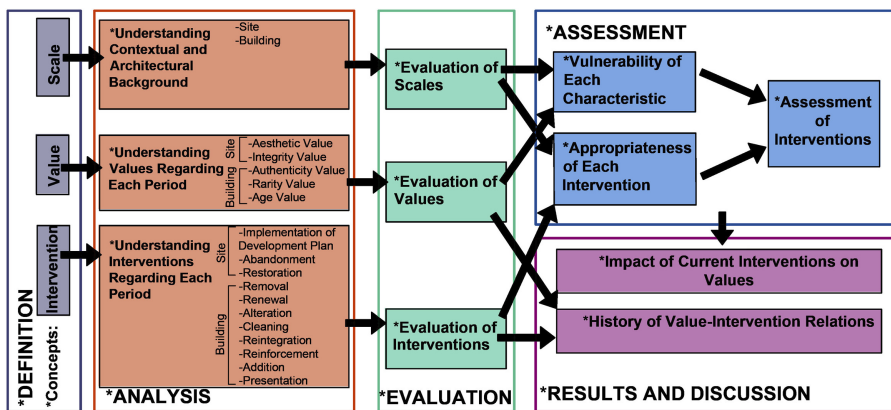


Figure 1. Methodology

2. Historic Background

Manisa was conquered by Turkish tribes in 1310–1314. It was a linear settlement at the skirt of the Spil Mountain in this period (Emecen, 2003). Ottoman Empire dominated the city in 1410 (Acun, 1999). The settlement expanded in east and north. Its economic importance together with its vicinity continued until the 17th century (Emecen, 2003; Uluçay and Gökçen, 1939). Two mosques in the city center (Haki Baba and Göktaşlı) and three in its provinces (Kabasakal, Pazaryeri and Çarşı in Kırkağaç, Gördes and Salihli, respectively) are evaluated as case studies (Figure 2).

Haki Baba Mosque was built firstly as a *zaviye*; a house for secluded religious members, in 1371 (Figure 3a). The *zaviye* was converted into a *masjid*; a small praying space in which Friday prayer is not carried out, in 1650–51 (Gökçen, 1950) (Figure 3b). After the addition of a minaret, a concrete minbar and a *mihrab* niche in 1956, it was regarded as a mosque (Figure 3c; Figure 3d). Its restoration was completed in 2014 (Plate 1).

There was a wooden *masjid* at the center of Göktaşlı Neighborhood (Arseven, 1966) (Figure 4a). Gülfem Hatun Fountain was constructed at its west in 1493 (Uluçay and Gökçen, 1939). A Friday mosque was built in place of the *masjid* in 1630–31 (Figure 4b) (Gökçen, 1946). There was a *mahrasah*; an Islamic training and education institution, in its courtyard in 1859 (OAPM, n.d.). The residential area around the mosque was burnt in 1922 (Emecen, 2003). Its restoration was completed in 2013 (Plate 2).

The first record of a mosque in Sariağa Neighborhood of Kırkağaç, Manisa at the very north of the settlement is dated to the 16th century (Figure 5a). In the 18th century, the Armenian merchants arriving in Kırkağaç settled in Sariağa neighborhood. Thus, the rural site was transformed into an urban site with a gridal layout. A new mosque in place of the ruined old one was built in 1841 (Figure 5b) (RDPF, 2009). This is known as Kabasakal Mosque (Figure 5c). Its restoration was realized in 2014 (Plate 3).

Bazar Masjid was constructed in Mescid-i Bazar neighborhood of Gördes, Manisa in the 14th century. Pazaryeri Mosque is thought to have been constructed in place of Bazar Masjid

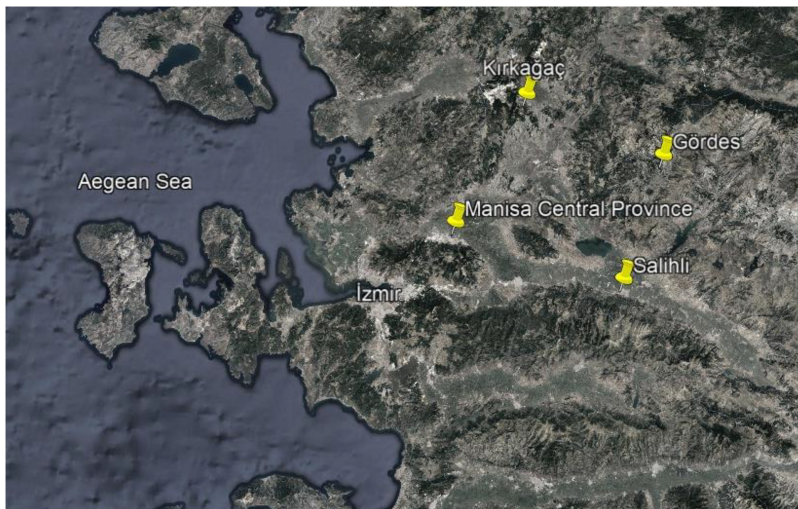


Figure 2.
Locations of case studies

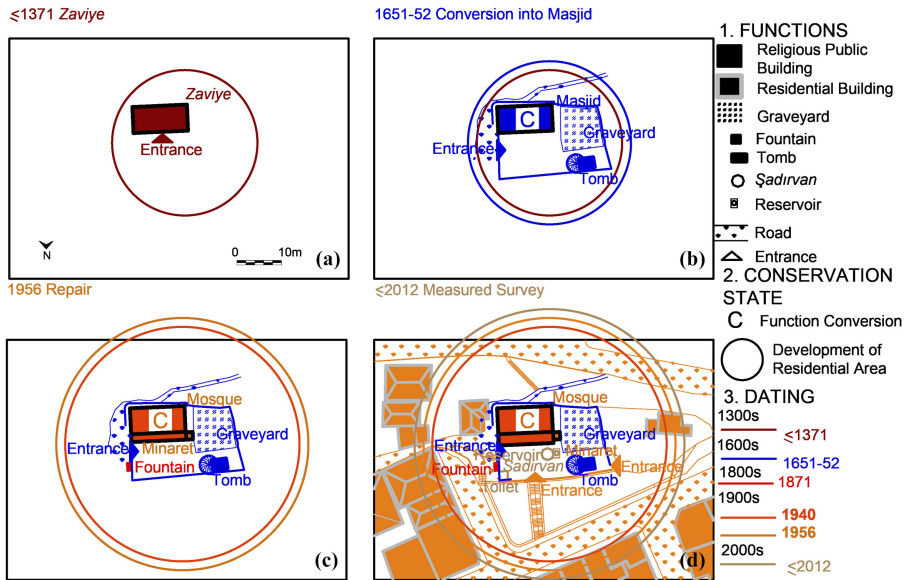


Figure 3.
Site evolution, Haki
Baba Mosque



Plate 1.
Haki Baba Mosque

before 1753 (Figure 6a). After the landslide risk in 1940, the government relocated the inhabitants to a new place and the historic settlement was abandoned. Pazaryeri Mosque is the only building intervened in Gördes (Figure 6d). The restoration was completed in 2013 (Plate 4).

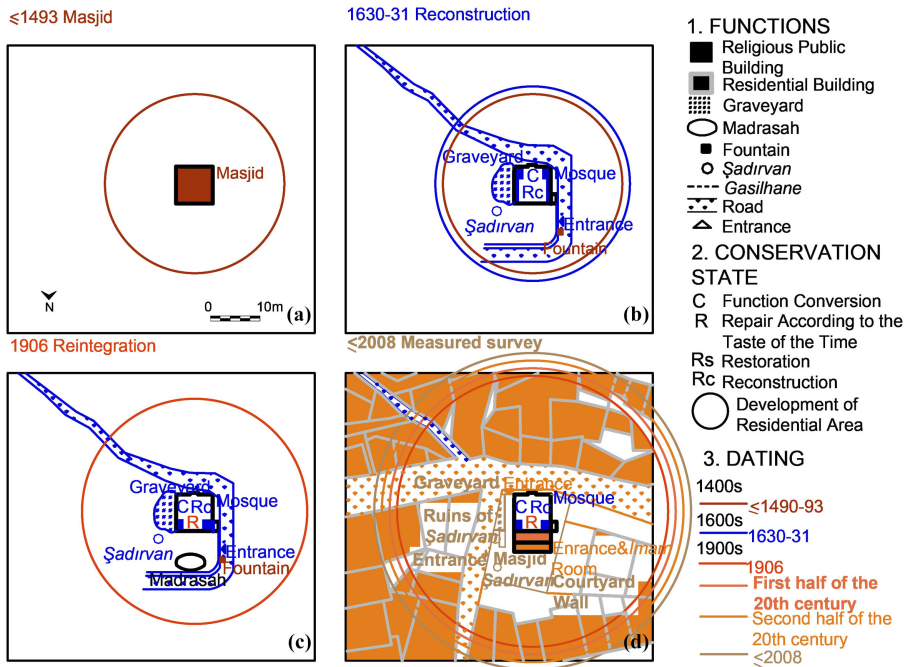


Figure 4. Site evolution, Göktaşlı Mosque

Salihli neighbors the ancient Sardes, the capital of Lydia. After the establishment of a railway station at the site in the second half of the 19th century, the case study Çarşı Mosque (1875) (Figure 7a) and a new commercial zone enriched with new streets were established by Sardes (Baykal, 1990). The mosque was restored in 2014 (Plate 5).

3. Terminology

The related terms regarding interventions and values are defined as the following, within the limits of this study.

Development plan is a plan coming into force for controlling the development of a site (ICOMOS, 1987).

Abandonment is leaving the historic settlement because of a disaster.

Restoration is comprehensive repair of a historic monument (Madran and Özgönül, 2005).

Removal is taking an element or mass away from the monument (Burden, 2004).

Reintegration is completion of material, element or mass portion of the monument (Crocì, 1998; Ahunbay, 2009).

Alteration is changing present material, form and/or construction technique of an element of the monument (ICOMOS, 1999).

Renewal is reconstructing an element of the monument with exactly same material and technique (ICOMOS, 1999; Zakar and Eyüpgiller, 2015).

Cleaning is annihilating the unqualified layers on the surface of the monument (Crocì, 1998).

Addition is juxtaposing new elements (English Heritage, 2013) or masses to the monument (Orbaşlı, 2008).

Reinforcement is supporting the structural system of the monument with additional elements (Feilden, 1994).



Plate 2.
Göktaşlı Mosque

Presentation is exhibition of the monument for the interpretation of the visitors (ICOMOS, 2005).

Appropriate intervention is the intervention sufficient in terms of data transmission (ICOMOS, 2003), design quality (ICOMOS, 2003), physical sustainability (ICOMOS, 1964) and technical requirements (ICOMOS, 1987), consistent in comparison to the other interventions in the same site (ICOMOS, 1999) and qualified in terms of workmanship (ICOMOS New Zealand, 1992).

Landscape value (*L*) is the site esthetic stemming from the integral beauty of the monument and its environs as revealed in sustaining of the original topography, solid-void pattern, scale, silhouette and site elements (ICOMOS, 1972; Teoman, 1987).

Religious value (ICCROM, 2005) is the spiritual wholeness of the monument and its environs as revealed in the respect shown to the holy spirit of the monument by its community in the past (Ortaylı, 2010; Aydoğdu and Tuncer, 2018) and today (ICOMOS, 1964; Feilden and Jokilehto, 1998; ICOMOS, 1994; ICOMOS Australia, 1999; ICOMOS, 2005; UNESCO, 2008; Stubbs, 2009; Ongun, 2015; Koşun, 2018) (Figure 8).

Architectural value (ICOMOS, 2003, article 1.3) is sustaining of virgin architectural characteristics considered at the creation of the monument (Brandi, 1996; Jokilehto, 1999; Stubbs, 2009); together with qualified historical contributions (ICOMOS, 1964).

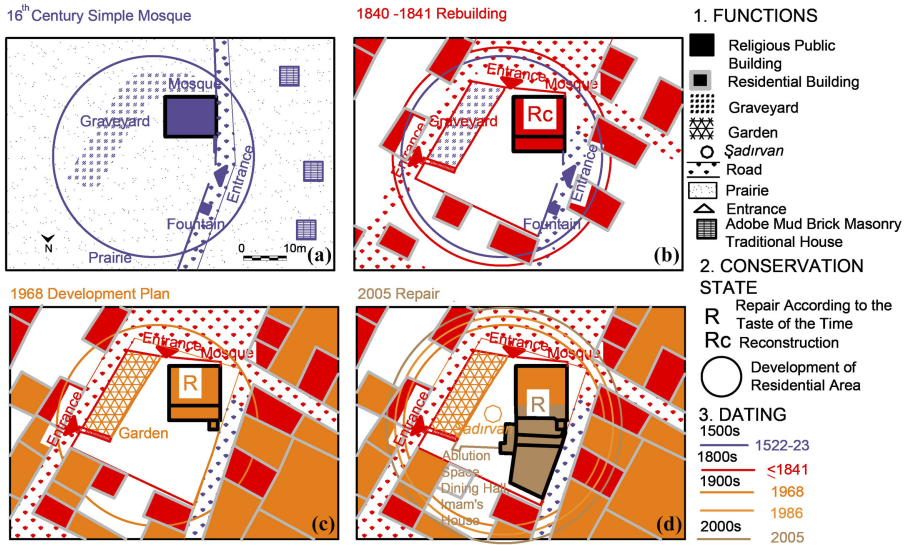


Figure 5.
Site evolution,
Kabasakal Mosque



Plate 3.
Kabasakal Mosque

Rarity value (*R*) is being a rare type of mosque or bearing a rare testimony to a religious tradition within the national context, as appreciated after comparing and contrasting the case study with similar other cases (Feilden and Jokilehto, 1998; Orbaşlı, 2008; Atkinson, 2014).

Age value (*A*) is sustaining of historic characteristics of the monument, which becomes more valuable as the time depth increases (Ruskin, 1849).

Vulnerability (Stovel, 1998; UNESCO, 2010; World Bank Group, 2017) is the total value point of the element with regard to its intrinsic qualities and conservation state; indicating its susceptibility to future disasters and alterations just before it is intervened in the current restoration.

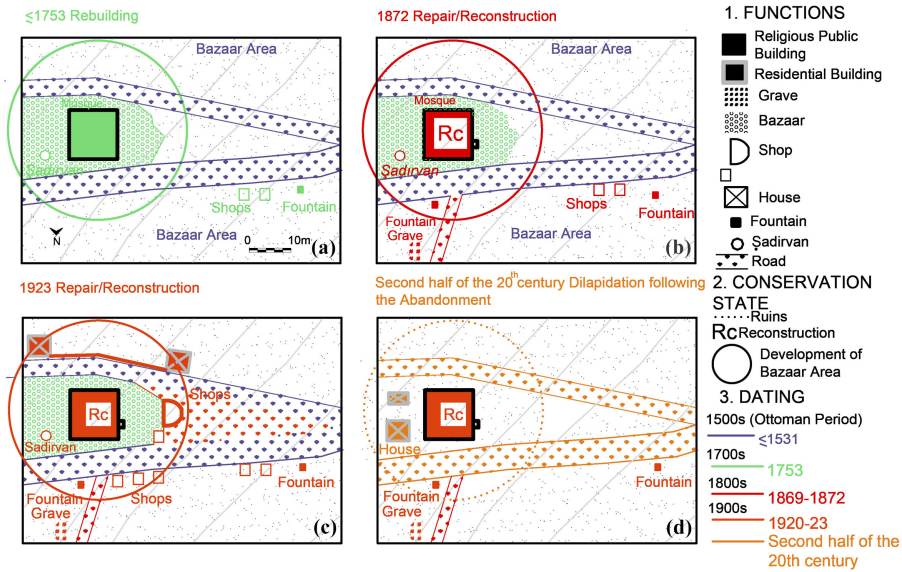


Figure 6.
Site evolution,
Pazaryeri Mosque



Plate 4.
Pazaryeri Mosque

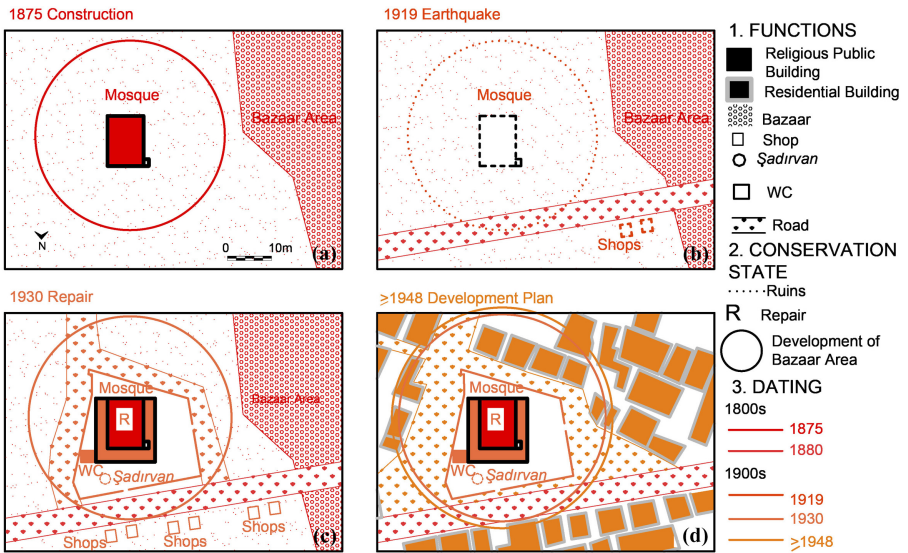


Figure 7.
Site evolution, Çarşı Mosque



Plate 5.
Çarşı Mosque

4. Evaluation process

The values defined for each period are graded in order to assess the variation in their intensities (Table 1). Presence of all qualities listed in the definition of a value is graded with full points (5). Reduction in value diminishes the related grade. If there is re-establishment of a value with interventions, then this increases the related grade (Figure 8, Figure 9).

Afterward, grades for each value type and dates of interventions and disasters regarding the monument are plotted on line graphs (Figure 10).

4.1 Landscape value

For each case, the landscape value is five at the first construction date since each monument integrated harmoniously with its site. Almost complete loss of the integrity of the monument

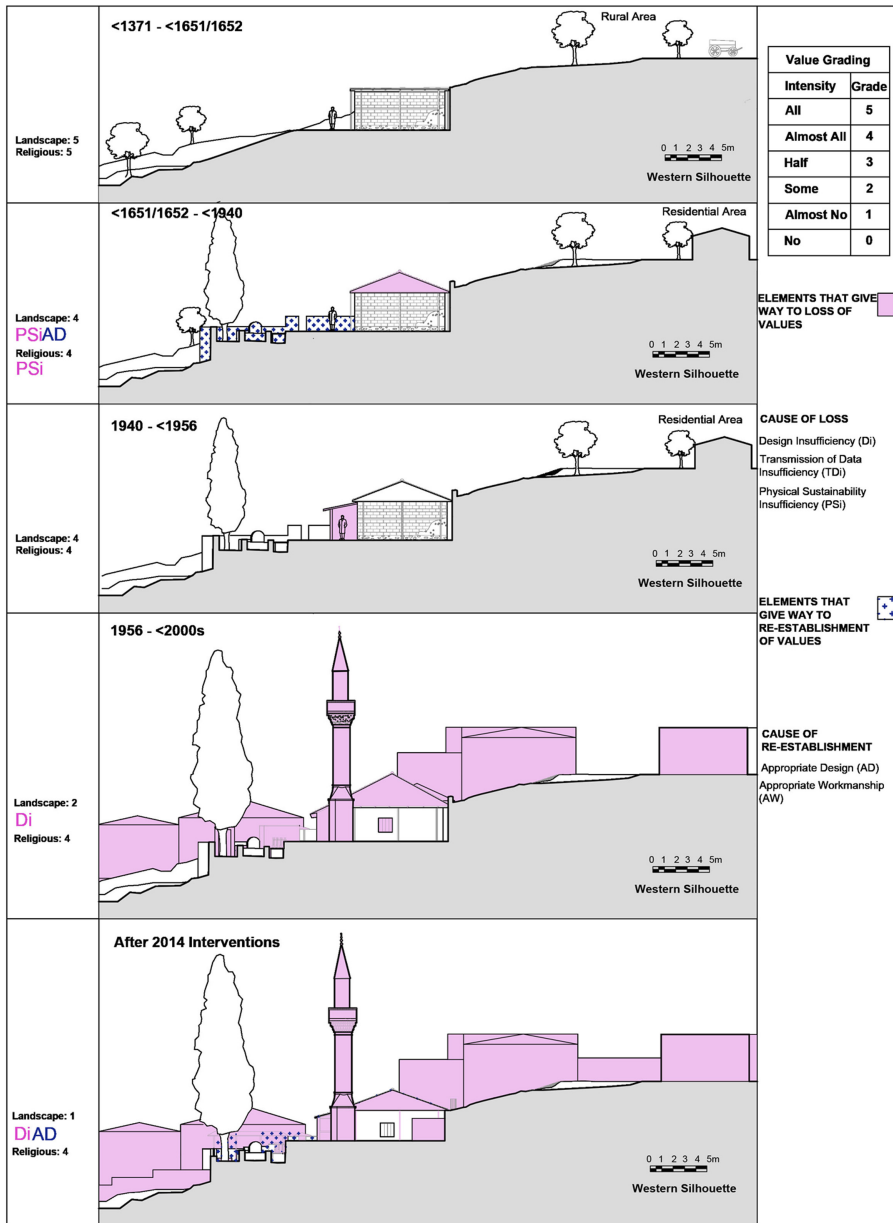


Figure 8. Site scale values, Haki Baba Mosque

with its site and sustaining of only the monument itself is indicated with one point. Loss of the monument together with its site organization is graded with zero point. For intermediate conditions, the extend of alteration at site scale is taken into consideration. The gradual increase in urban density during conversion of a rural site into an urban one during Ottoman era is graded with -0.5 per 100 years (Haki Baba and Kabasakal). If a disaster such as an

Table 1.
Criteria for grading of
change in values
throughout history

| Value grade in points | Intensity of a value (excluding rarity) | Intensity of rarity value |
|-----------------------|--|--|
| 5 Full | Presence of all qualities Re-establishment of all qualities | Presence of all rare qualities Re-establishment of all rare qualities |
| 4 High | Presence of almost all qualities Re-establishment of almost all qualities | Presence of almost all rare qualities Re-establishment of almost all rare qualities |
| 3 Medium | Presence of half of the qualities Re-establishment of half of the qualities | Presence of half of the rare qualities Re-establishment of half of the rare qualities |
| 2 Low | Presence of some of the qualities Re-establishment of some of the qualities | Presence of some of the rare qualities Re-establishment of some of the rare qualities |
| 1 Very Low | Presence of almost no qualities Re-establishment of almost no qualities | Presence of almost no rare qualities Re-establishment of almost no rare qualities |
| 0 No | Presence of no quality Re-establishment of no value | Presence of no rare quality Re-establishment of no rare quality |

earthquake demolishes half of the above mentioned additional structures and re-establishes the rural characteristic (Haki Baba and Kabasakal), 0.5 points are re-gained. If a disaster causes almost complete loss of the authentic urban pattern (Pazaryeri, Göktaşlı), it is graded as -3. Rapid urbanization transforming the site characteristics after the 1960s (Çarşı, Göktaşlı, Haki Baba) is graded as -1 for every 20 years. If the rate of change in urban pattern is less threatening (Kabasakal), then it is graded as -1 for every 60 years.

4.2 Religious value

Religious value is graded with full points in the first erection of all cases: five religious value points. This has been sustained throughout ages in all of them excluding Haki Baba, since the mosques have preserved their spiritual wholeness with their sites. Loss of one point is considered at the time of conversion of the original secluded praying space of Haki Baba into a congregation hall.

4.3 Architectural value

Architectural value is five at the time of creation of each monument. With natural aging, there is minor loss of virgin architectural characteristics: -0.1 point in 300 years. With deliberate alterations such as conversion of the *zaviye* of Haki Baba into a mosque and change of its skyline; and addition of masses almost the same size with the monument itself; authenticity is ruined: one point of architectural value is lost at the time of each alteration. Similarly, inappropriate restorations, give way to further loss of authenticity: two points of architectural value is lost at the date of restoration. On the other hand; comprehensive repairs/restorations, which make qualified contributions, increase architectural value: two points of architectural value is gained at the date of repair. For example; in Göktaşlı 1906 repair reflecting the taste of its period had increased the architectural value 2 points.

4.4 Rarity value

If a monument is a typical representative of its period with its function, mass, plan and architectural elements, then it begins its life with 0 rarity point: Haki Baba, Kabasakal, Pazaryeri and Çarşı. If it has rare architectural characteristics compared to similar monuments of its era, then it begins life with full points for rarity value: five for Göktaşlı. If a monument has become exceptional in terms of its original function because similar examples have not been preserved in general, then it is attributed one rarity point for each event giving

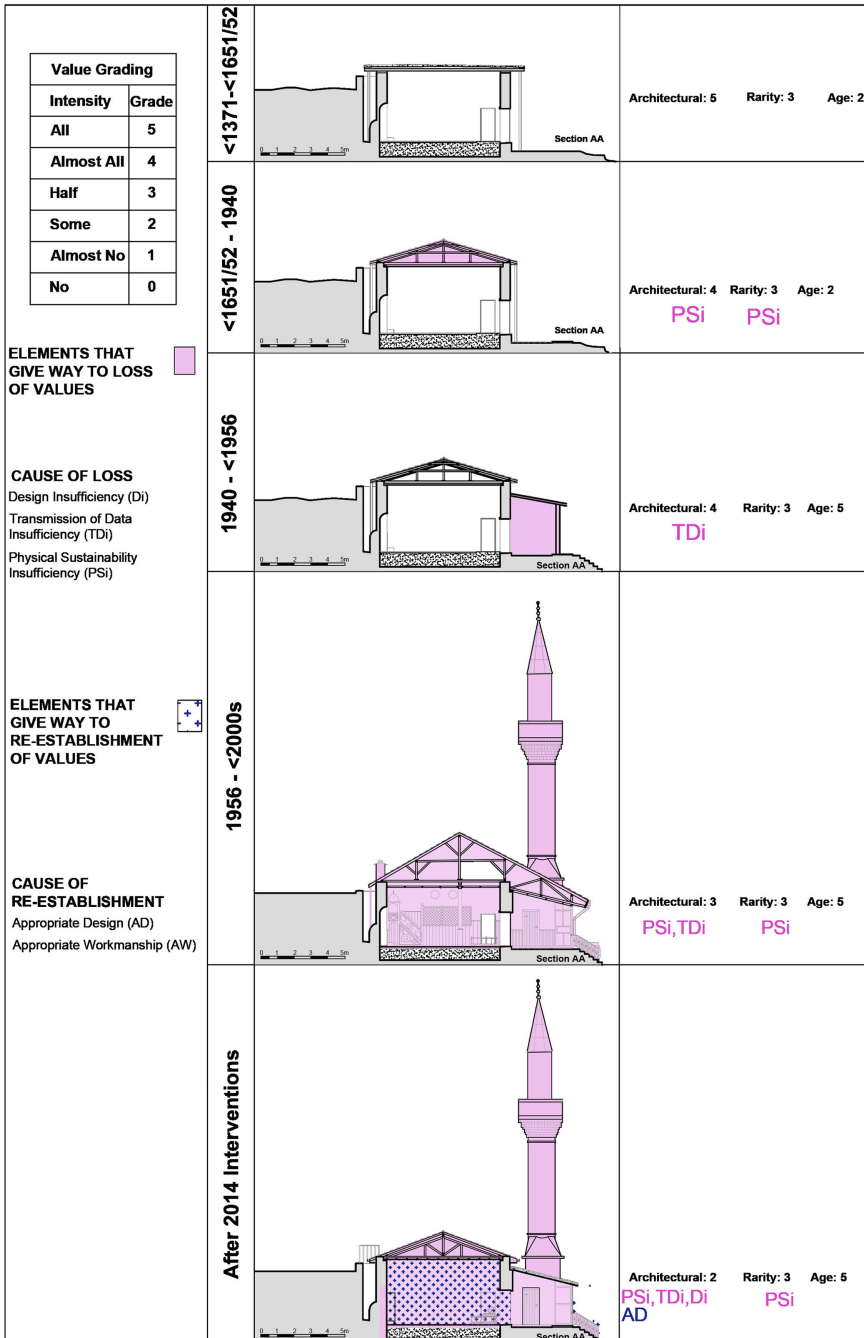


Figure 9.
Building scale values,
Haki Baba Mosque

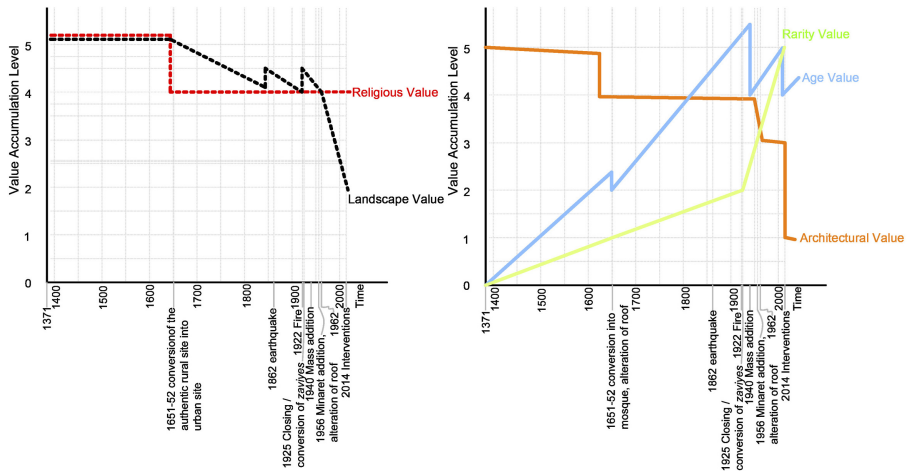


Figure 10. Variation in site (left) and building (right) scale values, Haki Baba Mosque

way to this exception. For example, Haki Baba gains points, as it becomes more and more exceptional with gradual loss of similar religious traditions: one point gain per 250 years. The rate of this point gain increases after historic events giving way to sudden extinction of similar religious traditions; e.g. closing of *zaviyes* in 1925: three points gain per 100 years (Figure 10, right). As a result, five full points may be accumulated either throughout the life span of the monument (Haki Baba) or attributed in the first erection (Göktaşlı). The monuments that were not rare architectural edifices in their first erection or have not gained any outstanding statue in time are graded with zero points.

4.5 Age value

For each monument, age value is zero at its first construction. However, sustaining of the spirit of a place by building the mosque in the position of a previous one is graded with 0.5 age value points. Then, one age point is accumulated in each century. Each monument loses age value points after the loss of an authentic element: e.g. 0.2 points loss after Haki Baba lost its terrace roof in 1651–1652. As a result, the age value of the oldest monument just before its current intervention is five: Haki Baba dating to the 14th century. The others, which are younger, have acquired relatively smaller values just before they were intervened. The age value of Göktaşlı dating to the 17th century, and built in the place of a previous *maşjid* is 3.5. Pazaryeri dating to the 18th century and built in the place of a previous *maşjid* is 2.5. Kabasakal dating to the 19th century and built in the place of a previous mosque is 1.5. Çarşı dating to the 19th century is 1.

Finally, current interventions regarding the case study mosques are graded (Table 2). Interventions made within the immediate environment of the mosque (site) are graded with the highest points since they have a direct impact on the perception of the monument. Interventions made to the building’s mass are perceived in the first place, when the building is visited. Then, interventions in the organization of the interior space are recorded. Element interventions are recorded through detailed observations. Points gained with accumulation of site scale values are grouped into two as low and high; while points for building scale values are grouped into three different levels (Table 2). Appropriateness of intervention is evaluated in six groups ranging from totally appropriate to totally inappropriate. These groupings take into consideration the content of data gathered from the case studies. The impact of each intervention on conservation values is calculated (Table 3) with the following

| Criteria | Weight | Explanation |
|---|--------|--|
| Scale of intervention | 5 | Site |
| | 4 | Mass Mosque mass itself or masses added to the courtyard |
| | 2 | Spatial Spatial organisation of the original interior or the courtyard |
| | 1 | Building Element in the original mosque, or in the courtyard |
| Vulnerability of site with regard to value points | 2 | $6 \leq \text{Value points} \leq 10$ |
| | 1 | $1 \leq \text{Value points} \leq 5$ |
| Vulnerability of building and its lot with regard to value points | 3 | $11 \leq \text{Value points} \leq 15$ |
| | 2 | $6 \leq \text{Value points} \leq 10$ |
| Appropriateness of intervention | 1 | $1 \leq \text{Value points} \leq 5$ |
| | +3 | Restoration approach appropriate in terms of urban context Reversible reintegration with appropriate material, detail and workmanship Compatible addition with appropriate form and material |
| | +2 | Reliable alteration re-establishing artistic unity in terms of material and workmanship |
| | +1 | Conversion of an inappropriate detail of an additional element Reintegration with appropriate workmanship and detail, but with inappropriate material |
| | -1 | Reintegration hiding patina in a reversible way Reintegration unnecessarily applied to an unqualified additional element |
| | -2 | Unreliable alteration carried out with insufficient information |
| | -3 | Removal of an authentic element Renewal of an authentic element Urban development resulting in alteration of authentic solid-void pattern and urban density |

Note(s): Only some of the current interventions documented in the mosques are presented in the above. The authors encourage those calculating the weighted scores to include all interventions for evaluating appropriateness

Table 2. Criteria for calculating the weighted scores for current interventions

formula: Scale of intervention X Vulnerability of the element intervened X Appropriateness of intervention = Intervention Score. The intervention scores for each case study are summarized on tables (Figure 11, Figure 12).

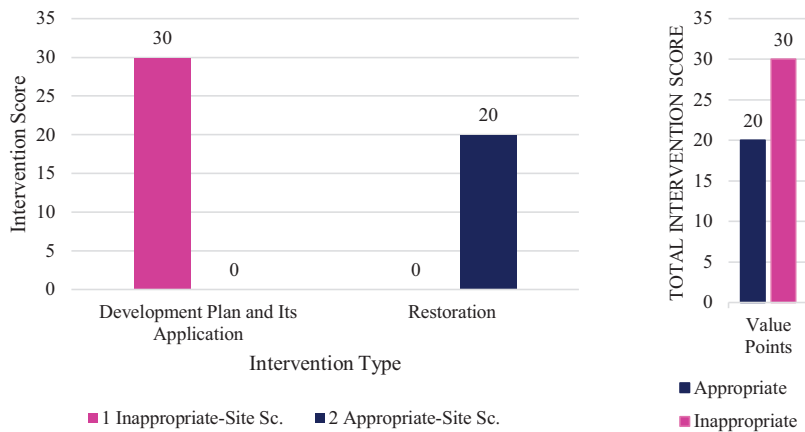
5. Results and discussion

The case studies sustained their landscape values until the modernization period (excluding Kabasakal and Haki Baba). In between 1650 and 1700s, rural sites were gradually converted into traditional neighborhoods (Kabasakal and Haki Baba). In the second half of the 19th century, new urbanization was seen in connection with the change in transportation patterns. Nevertheless, traditional construction methods were sustained until the mid-20th century. Thus, if monuments fell into ruin as a result of fires, earthquakes and landslides, they were re-integrated or re-built within the traditional urban landscape in later years (Göktaşlı, Pazaryeri and Çarşı). So, they had maintained their picturesqueness with minor losses until this time interval (Figure 13).

Table 3.
Impact of some of the current interventions at Haki Baba Mosque on its conservation values

| Intervention type | Intervention scale | Weight of scale | Intervention ID | Intervention description | Weight of vulnerability | Weight of appropriateness of intervention | Intervention score |
|---------------------------|--------------------|-----------------|-----------------|--|-------------------------|---|--------------------|
| Development Plan | Site | 5 | Dp1 | Development plan increasing authentic urban density | 2 | -3 | -30 |
| Restoration | Site | 5 | Res1 | Appropriate restoration approach for the courtyard | 2 | +2 | +20 |
| Removal | Building | 4 | Rm1 | Removal of <i>imam</i> room | 3 | +3 | +36 |
| | Mass Building | 1 | Rm3 | Removal of authentic posts carrying the eave | 3 | -3 | -9 |
| Cleaning | Building | 1 | C1 | Cleaning of dirt layer at the <i>alem</i> | 3 | -1 | -3 |
| Reintegration | Building | 1 | Rm2 | Reintegration of courtyard wall | 3 | +3 | +9 |
| Renewal | Building | 1 | Re2 | Renewal of plasterings at the wall | 3 | +1 | +3 |
| Alteration | Building | 1 | A11 | Removal of the concrete minbar, construction of an unornamented minbar | 3 | +3 | +9 |
| Addition | Building | 2 | Ad5 | Addition of glass screen to the openings at the last corners' hall | 3 | -3 | -18 |
| Reinforcement | Building | 1 | Rf1 | Reinforcement of adobe mud brick masonry walls with wooden posts and lintels | 3 | -3 | -9 |
| Presentation Intervention | Building | 2 | Pr2 | Presentation of the spatial organisation of the lot by slightly referring to its authentic state | 2 | +1 | +4 |

Note(s): Only some of the current interventions documented in Haki Baba mosque are presented in the above. The authors encourage those assessing the conservation values to include all interventions



Intervention-
value relations

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Figure 11.
Intervention scores,
neighborhood of Haki
Baba Mosque

However, development plans of the mid-20th century yielded radical and irreversible changes in the sites (Figure 14). Gördes had gained the qualities of an archaeological site since the residents had moved the building material of their houses to their new settlements. All these interventions affected the landscape values, while the religious values were sustained, unless there was a radical functional transformation threatening the holy atmosphere; e.g. the addition of a huge dining hall to the courtyard of Kabasakal mosque (Figure 15), the abandonment of Pazaryeri mosque together with its neighborhood and addition of service spaces to the courtyard of Çarşı (Figure 14).

Before the First World War, some qualified re-integrations (2 of 5; Göktaşlı and Pazaryeri) and additions (2 of 5; Göktaşlı and Kabasakal) were realized. The limited budget of the post-Independence War period caused interventions not respecting the original configuration or lacking sufficient design effort. Inappropriate functional transformation, abandonment and lack of maintenance were seen (3 of 5; Kabasakal, Pazaryeri and Çarşı). Other tasteless interventions were documented in the second half of the 20th century as in the dining hall of Kabasakal (Figure 15) and service units of Çarşı. Current restorations are often successful in terms of removal of the unqualified mass additions in the courtyards (3 of 5, Haki Baba, Kabasakal and Pazaryeri). However, they are sometimes sustained; e.g. the last comers' hall of Göktaşlı, which has rareness value as a 17th century mosque without a last comers' hall in its original design (Figure 16). The reason behind these mass additions in mosques constructed before the Ottoman modernization period is often desire for provision of a separate praying space for women. This, however, is not present in the original designs. Today, communities of the mosques gather money to convert the semi open last comers' halls into closed spaces or to add last comers' halls just after the legal restoration process is completed (3 of 5; Haki Baba, Göktaşlı and Kabasakal). Lack of sampling excavation (Plate 6) and related presentation efforts in the lots is another problem type recorded (3 of 5; Haki Baba, Göktaşlı and Kabasakal).

In building scale, reconstructions on their previous bases with the style of their times; as in 1631 repair of Göktaşlı 1872 repair of Pazaryeri and ≤1968 repair of Kabasakal; re-established architectural values. 1906 re-integration of Göktaşlı (Plate 7) and 1872 re-integration of Pazaryeri are also evaluated as qualified interventions with positive impact on authenticity. Mass additions made in the 20th century, in order to fulfill the necessities of the growing populations, are generally inconsiderate (4 of 5, excluding Pazaryeri) and reduce the authenticity (Figure 10). Current restorations either sustained these unqualified additions

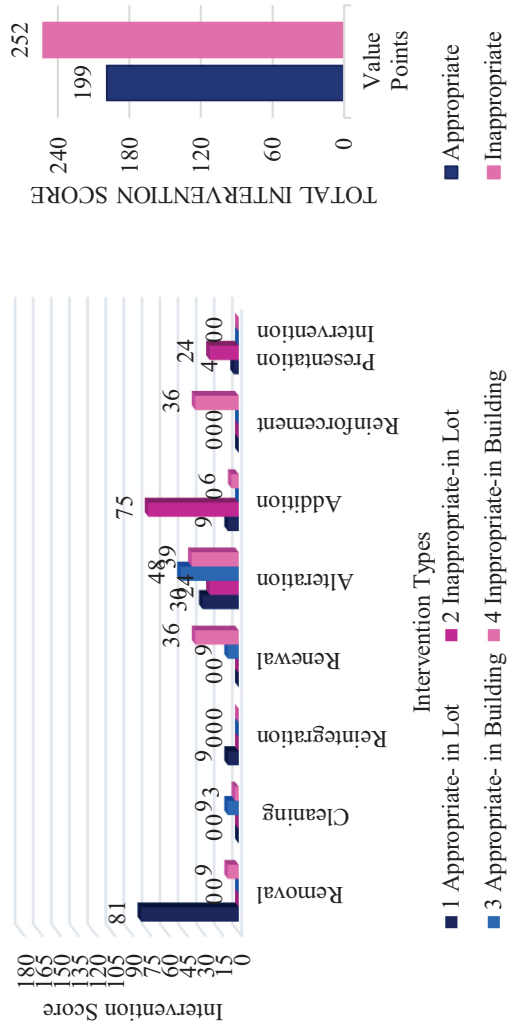


Figure 12.
Intervention scores,
Haki Baba Mosque and
its lot

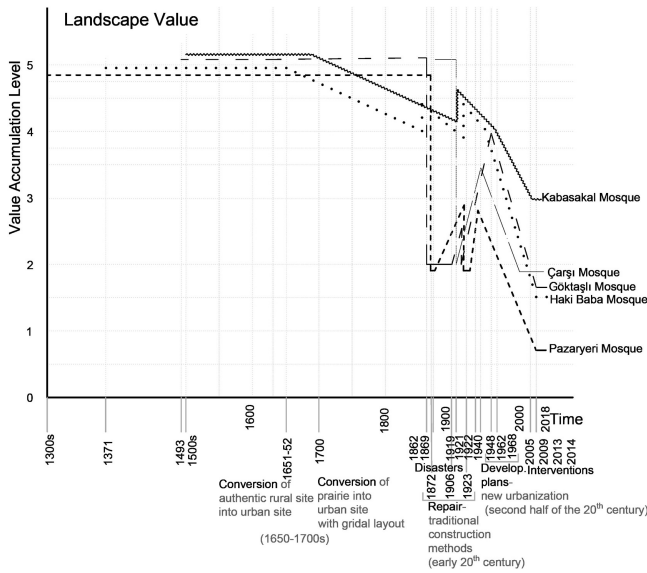


Figure 13.
Landscape values

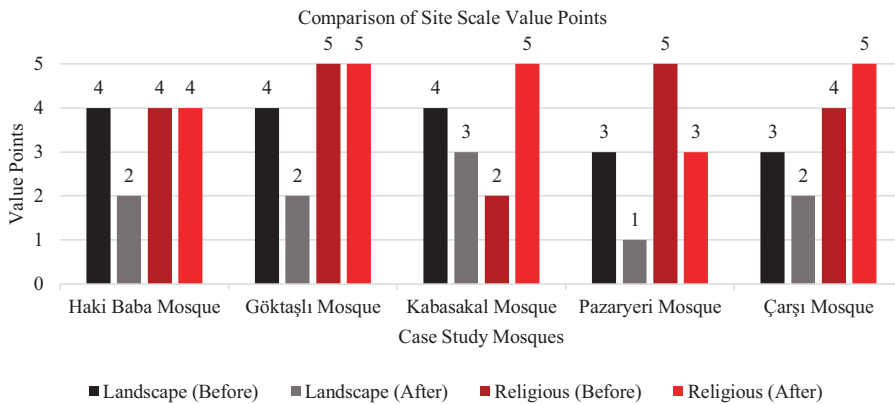


Figure 14.
Site scale value points
in the second half of the
20th century (before)
and today (after)

(2 of 5; Göktaşlı and Haki Baba) or they were removed, but re-made in an illegal way just after the completion of the restoration (1 of 5, Kabasakal).

Disasters have caused partial collapse of mosques (4 of 5, excluding Haki Baba). These were reintegrated as in Kabasakal, Çarşı and Pazaryeri, but they lost their authentic superstructure, plan or façade organization. The reintegration of Göktaşlı in 1906 was qualified. In this context, Haki Baba sustained its rarity value (Figure 10).

The accrued age value, which is proportionate to the oldness of the monument, was hindered with irreversible loss of authentic elements. Renewal of the *külâh*; conical cap, of Göktaşlı Mosque, renewal of authentic posts carrying the eaves of Haki Baba, and alteration of the earthen flat roofs of Haki Baba and Kabasakal with hipped ones are some of the interventions that reduced the age values.

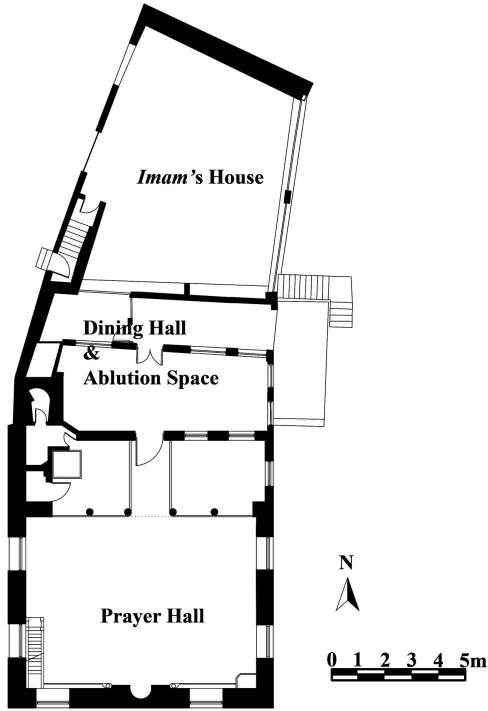


Figure 15.
Additions, plan,
Kabasakal Mosque

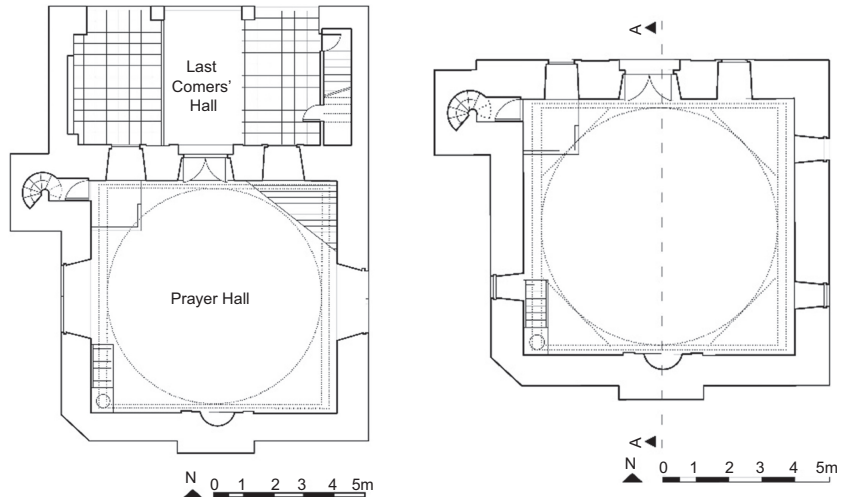


Figure 16.
Plan before the current
restoration (left),
restitution plan (right),
Göktaşlı Mosque



Plate 6.
Courtyard, Göktaşlı
Mosque



Plate 7.
Western wall, Göktaşlı
Mosque

When current interventions are considered, it is seen that the same restoration approach is applied in all mosque restorations: consolidation and reintegration of the mosque and improvement of comfort conditions to fulfill contemporary standards. This may be acceptable for the examples in dense urban sites to some extent, but for a site that was totally abandoned (Pazaryeri in Gördes) (Plate 8), it is discussable (Figure 17).

Cleaning of unqualified finishing and re-establishment of authentic details are appropriate interventions repeated in the current restorations. However, renewal of inconsiderate additions, unqualified finishing and undamaged authentic elements are repeated mistakes in the implementations (Figure 12).

In terms of sustaining historic construction techniques, there are problems stemming from incorrect interpretation of what the original is; e.g. mudbrick masonry walls of Haki Baba were reinforced with timber posts (Figure 12). Insufficiency in terms of sustaining the physical integrity decreased the architectural value. Inconsistency within the same application may be seen; e.g. renewal of unqualified plaster additions to the minaret, while exhibiting the window arches of the first construction period in Göktaşlı (Plate 9).

6. Conclusions

In evaluation of mosque restorations, both the monument itself and also its environs should be considered. The vulnerability of the monument should be evaluated with respect to its accumulated cultural asset values. Comparison of value accumulation processes provides a deep understanding of what makes a monument valuable, and what reduces its value. It also

Plate 8.
Gördes (left), Pazaryeri Mosque (right)

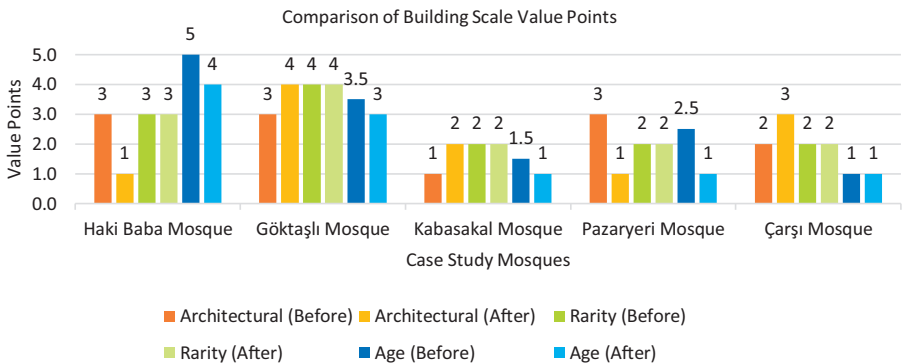


Figure 17.
Building scale value points before and after the current interventions



Plate 9.
Minaret (left), remain of
a window arch (right),
Göktaşlı Mosque

reveals the restoration history of the typology. The potential application of the proposed evaluation system may result in systematic monitoring of the monuments, betterment of value understanding processes, increase in the quality of restoration projects and development plans; minimization of loss of cultural asset values, their possible re-establishment and development of scale specific control mechanisms. The method may be tested on larger scale religious monuments and be calibrated for other monument types in different geographies. It may be useful to discourse the overall management of monuments.

Specific to historic mosque restorations, it is important to avoid mass additions with utilitarian purposes. Design solutions may be provided via architectural design competitions. Multilayered qualities of the mosque should be carefully evaluated. Provision of separators within the main prayer halls for separating men and women during prayer may be considered. Illegal interventions should be avoided. Sufficiency in data transmission, sustainability, fulfilling of technical requirements, consistency of implementation scope throughout the site and qualified design and workmanship should be achieved. Beyond these physical considerations, managerial aspects such as organization of usage hours, preventing overuse of daily life objects and preparation of a management plan for coordinating maintenance and usage necessities should be considered. It should be remembered that the functional capacity of historical mosques is not the same as the functional capacity of new mosques. Therefore, historical mosques should be intervened by considering the balance between conservation and usage.

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