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Conservation Problems of Traditional Housing with Continued Original Function and Recommended Solutions: Safranbolu "Eski Çarşı District"

Özgün İşlevini Sürdüren Geleneksel Konutlarda Koruma Sorunları ve Çözüm Önerileri; Safranbolu Eski Çarşı Bölgesi

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ABSTRACT

This paper aims to evaluate the problems of traditional housing which have continued original function and to develop solution recommendations. Within Safranbolu Eski Çarşı District, 826 registered structures have been classified according to their type of utilization. The current condition of these structures along with their various treatments, land surveys and official registration documents have been analyzed. Thus, the structures used as housing have been compared and evaluated against the current condition of other structures in terms of their modification/authenticity and their project situations.

ÖZET

Bu makalenin amacı özgün işlevini sürdüren geleneksel konutlarda ortaya çıkan koruma sorunlarını araştırmak ve çözüm önerileri geliştirmektir. Bu doğrultuda Safranbolu Eski Çarşı Bölgesinde bulunan 826 tescilli yapı, kullanım türlerine göre sınıflanmıştır. Bu yapıların mevcut durumu ile geçmişten bu güne kadar görmüş olduğu uygulamalar arazi çalışmaları ve bu yapılara ilişkin kurum kayıtları dökülerek incelenmiştir. Böylece konut olarak kullanılan yapılar ile diğer yapıların mevcut durumları, bozulmuşluk/özgünlük durumları, proje durumları karşılaştırmalı olarak değerlendirilmiştir.

Introduction

Found among the World Heritage Sites, Safranbolu with its preserved urban fabric and inventory of structures requiring conservation is one of Turkey's most unique areas. In recent years, this settlement has steadily attracted both domestic and foreign tourists, leading to the significant matter of maintaining and repairing registered structures and enabling the sustainability of traditional fabric. This study focusses on the use of housing that is substantial for both social and cultural sustainability of the traditional fabric as well as the long-term sustainability of tourism.

This paper also evaluates registered and conserved structures that are currently being used for housing in comparison with other types of usage, existent plans, current condition, deterioration and problems.

The conservation board resolutions regarding the structures registered and conserved in the Safranbolu Eski Çarşı District have been obtained from the Karabük Cultural Heritage Board Directorate archives and the decisions have been listed under indicative headings.

By analysing the decisions regarding these structures, the existence of documentation drawings, res-

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titution and restoration/reconstruction projects and approved project changes have been explored and evaluated.

The results will indicate how continued housing use in traditional residences differs from other registered structures in conservation applications.

In addition to institutional data, field studies have also yielded data concerning the current usage, structural status and distorted status of the identified 826 registered structures.

Both sets of data (obtained through institutions and field studies) were correlated with the related literature resulting in evaluations and possible suggestions. In traditional residences continuing their original function, suggestions enabling the future preservation of this usage, together with the preservation of the traditional fabric and structure characteristics will be emphasised.

Conserving Urban Fabric and Residential Use

The necessity of conserving cultural heritage has generally been accepted for a number of various reasons such as to ensure cultural continuity, to maintain local identity, to preserve distinctness and diversity, to create habitable spaces. (Beatley&Manning, 1997; Nasser, 2003; Du Cros, 2001).

The previous conservation approach that predominantly focussed on the conservation of monuments progressed towards conserving the urban/rural setting with the Venice Charter (CATHM, 1964). The same charter emphasised "conserving monuments no less as works of art than as historical evidence" (CATHM, 1964). The approach ensuring cultural continuity was reflected in the Declaration of Amsterdam where designs and applications should "ensure that, where possible, [they do] not necessitate a major change in the social composition of the residents" (CoE, 1975). While the Washington Charter indicated the necessity of promoting the preservation of residences, the Valletta Principles held that an effort should be made to preserve rural heritage and traditional settlement patterns and that it was important to control the gentrification process and deterioration of housing (ICOMOS, 1987; ICOMOS, 2011).

When the historical fabric and sustainability of the structures is the matter of discussion, the existence of host communities and the fact they are using these structures is highly important. In re-utilizing historical structures the balance between host communities and visitors as well as between the cultural significance of the buildings and economic sustainability must be established (Pearson&Sullivan, 1995; Murtagh, 2006; Yung&Chan, 2012; Yung, Langston&Chan, 2014).

Safranbolu's Traditional Urban Fabric

The traditional urban fabric of the settlement of Safranbolu not only consists of monumental structures such as mansions, mosques, Turkish baths, and water

Figure 1. General view of Safranbolu.

fountains but also harmoniously complements the physical formation with natural structures composed of a diverse topography, canyons and water sources (Figure 1).

Safranbolu, with its 3000 year historical past and location on the caravan route, provided the growth of commercial activity in the city. The reflection of this prosperity seen in structures such as caravanserais, Turkish baths, mosques, water fountains and bridges (Koçan, 2012), and in about 2000 traditional Turkish houses reflecting the Turkish architectural style built in the 18th and 19th centuries and early 20th century (Günay, 1998) form vital fragments of the urban fabric.

In the mid 70's, during the initial phases of conservation studies in Turkey, Safranbolu gathered the attention of conservationists; and in 1994 UNESCO included Safranbolu as one of the World Heritage Sites.

There are three urban settlements in Safranbolu forming the traditional fabric, and their conservation areas are separated from each other by natural/topographic thresholds. These three areas consist of (1) the *"Eski Çarşı"* district where crafts and production activities crucial to the urban economy are condensed along with the surrounding residences; (2) the *"Kıranköy"* district where a dense Greek minority populated the area during the Ottoman Empire period; and (3) the *"Bağlar"* district housing residential areas used heavily during the summer months (Figure 2). This paper will focus on the Eski Çarşı region where a concentration of both registered buildings and residential use are found.

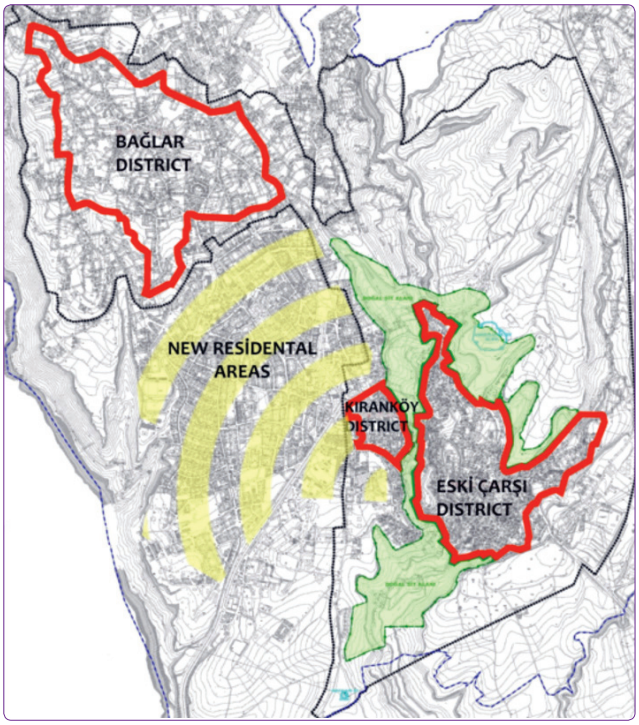

Figure 2. Conservation areas forming the traditional urban fabric.

Traditional Houses Maintaining their Original Use in the Eski Çarşı District

According to the institutional research results, 638 out of 826 registered structures were originally used for housing in the Eski Çarşı district. Today, however, only 411 (64%) of these structures have maintained their original use. Within this building group, 152 units (24%) are vacant, 56 units (9%) are being used for accommodation purposes, and the remaining 19 units (3%) have been allocated for commercial and public use.

The current physical conditions of the registered structures were empirically evaluated[1] and classified according to types of use (Figure 3). As a result of this evaluation, the physical condition of registered structures with residential use has been observed to be moderate (85%) to a great extent. The number of structures in good condition is exceedingly low.

In order to conserve registered structures and to accurately transfer information to future generations, it is vital that documentation drawings along with restitution and restoration projects regarding these structures are accurately prepared and that future applications concerning these structures are carried out with reference to these projects.

While approximately 29% of the registered structures within the study area have documentation drawings, this percentage drops to 11% in registered structures used for housing. This difference is also evident in the percentage of restitution and restoration projects (Table 1).

[1] The **"Regulation Regarding the Structure Principles of Conservation of Immovable Cultural Heritage and Auditing:"** encompasses ***"Maintenance and repairs:*** *Aiming to ensure continuity of structure lifespans; a) As per article 21 of the Zoning Law (dated 3/5/1985 and numbered 3194) the following are not subject to a licence: jointing, interior and exterior plaster, paint, whitewashing, gutter, stream, woodworking, paving as well as features that do not carry speciality in terms of architectural elements and art history; such as, ceiling coverings, electric and plumbing maintenance as well as roof repairs and tile transfers and interferences that do not affect the load-bearing system indicated in the building bylaws prepared by municipalities according to the region's properties, b) During the interferences indicated in clause (a) decayed or deteriorated architectural elements such as wood, metal, terra-cotta, stone may be changed with the same materials in accordance with their authentic forms, deteriorated interior and exterior plaster, coverings, may be renewed in accordance with their authentic forms provided that they are compatable in terms of colour and materials,* ***Essential repairs:*** *applications that are exclusive of maintenance and repairs and are based on documented drawings, restitution and restoration projects prepared in accordance with scientific data."* Heading out from these definitions, structures that did not require maintenance and repair to continue its physical integrity were considered to be in a good condition, whereas those that required maintenance and repair were considered average. Structures requiring essential repairs, however, were deemed to be in bad shape.

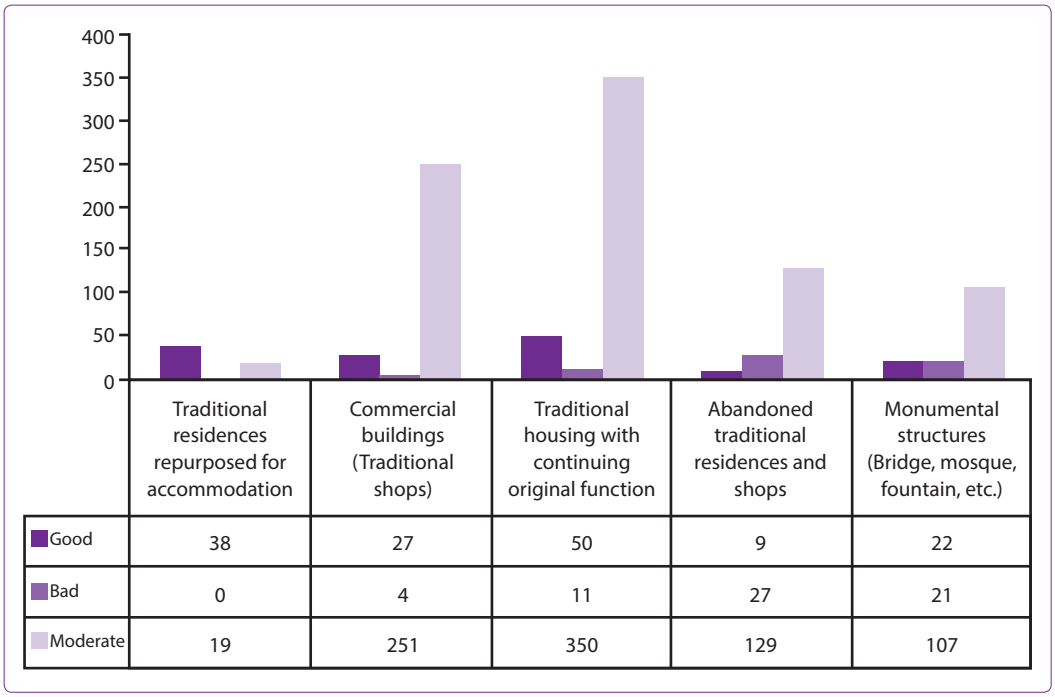

Figure 3. Current physical condition of registered structures (according to number of units).

Table 1. Conservation board approved projects in registered structures

			Project status									
Current Use	**Registered structures**	**Number of units [2]**	**Documentation drawings**	**%**	**Restoration planned**	**%**	**Restitution planned**	**%**	**Reconstruction planned**	**%**	**Repair planned**	**%**
Traditional residences repurposed for accommodation	57	57	39	71	36	65	17	31	2	4	12	22
Commercial buildings (Traditional shops)	51	282	133	47	133	47	24	9	0	0	2	0
Traditional housing with continuing original function	411	411	45	11	43	10	34	8	1	2	0	0
Abandoned traditional residences and shops	157	165	43	26	41	25	31	19	0	0	1	6
Monumental Structures (Bridge, mosque, fountain, etc.)	150	150	52	35	51	34	30	20	0	0	4	3
Total	826	1065	312	29	304	29	136	13	3	0.3	19	2

Alternatively, one of the evaluations stemming from the fieldwork is the classification of the authenticity status of registered structures used for housing and the modifications/deteriorations observed in these structures. This evaluation has been obtained through surveying the structures façade, documenting (photographing), and classifying the problems. Interior modifications have not been included in this study. Yet, some problems reflected in the façade are directly related with changes in the types of interior usage. The modifications identified empirically have been classified under the headings below:

[2] As numerously varying plots and structures harboured in Ottoman Bazaars, etc. have only one registration regarding usage and due to single registration applications applied for blocks specifically in the commercial area, the number of registered structures and units have been handled separately. Because it would allow for a more detailed evaluation, the study focussed on individual units.

1. *Inconsistent extension to the structure*
2. *Inconsistent addition to garden/courtyard*
3. *Changes in the structure's material*
4. *Plaster, paint and façade coating*
5. *Modifications of window, door, gliste, bay window and showcases*
6. *Shading, air conditioner, antenna, solar energy, signboard, etc.*

The modification types mentioned were not found within the traditional urban fabric where the registered structures may be qualified as substantially authentic. Yet registered structures containing one or more modification types have also been frequently encountered.

The registered structures used for housing within the study area have been classified according to the modification/deterioration types indicated above. In addition to this classification, *structures substantially maintaining authenticity and structures harbouring more than one modification/deterioration type* have also been included as separate groups in this evaluation. The risks and potentials these conditions carry and the necessary precautions that need to be taken have been summarised.

Structures substantially maintaining authenticity

Structures sharing similar façade features such as building systems, building materials, schematics, doors, windows, etc. may differ in terms of detail, size, situation and additions styled according to the street, all reveal the rich variety of the urban fabric (Figure 4a, b).

Among the 411 traditional housing structures maintaining their original function, only 84 units (20%) reveal either none or limited signs of modification/deterioration. Compared to the overall percentage of registered structures that are authentic or show limited signs of modification/deterioration (33%), this ratio is exceedingly low. The low rate of this ratio is an important risk. Also, the interior of some of these buildings have been exposed to modification/deterioration.

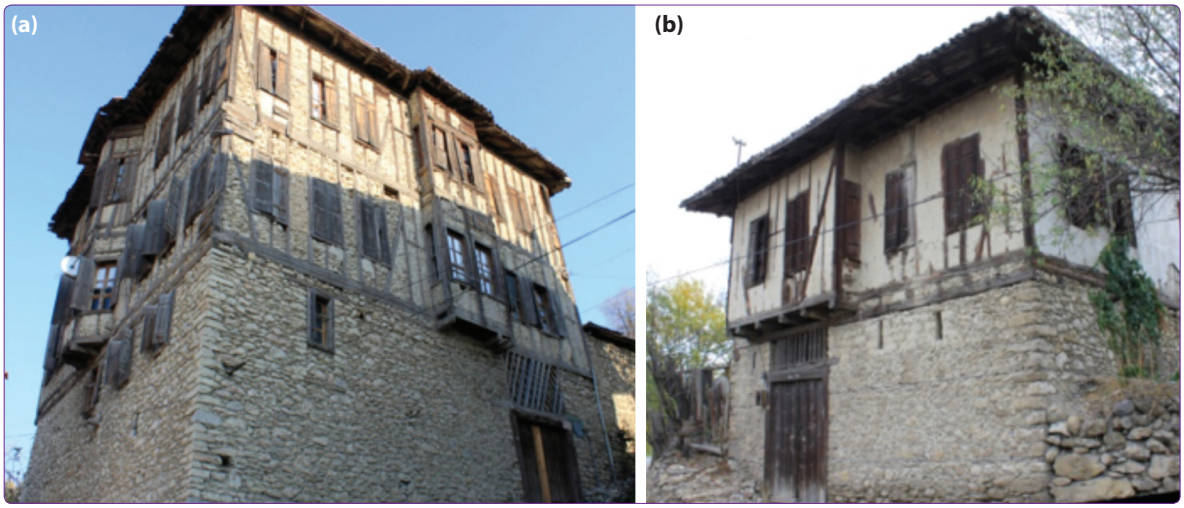

Figure 4. (a, b) Structures substantially maintaining authenticity.

Figure 5. (a, b) Buildings with inconsistently renewed wet places.

Figure 6. Additional structure adjacent to housing structure.

The existence of structures with these qualities is a significant potential. It is crucial, therefore, that the documentation drawings of these structures be given priority. It is possible to develop typology studies and obtain detail projects regarding authentic components from this building inventory.

Inconsistent extensions to the structure

This group generally consists of extensions made due to renewal/expansions of wet areas. In addition to which extensions such as staircases, terraces, etc. are included enabling different floors to work as independent areas (Figure 5a, b).

Among the 411 traditional housing structures maintaining their original function, 65 units (16%) have inconsistent extensions. This ratio is 10% higher than the overall percentage observed in registered structures. The incompatibility of these extensions regarding the use of materials, technical and façade properties negatively affect the characteristics of registered structures visually disrupting the urban fabric. These inconsistent extensions bear the risk of information loss regarding authentic spaces (especially wet spaces).

Original wet areas, specifically in traditional housing structures, are not compatible with today's conditions; thus the need for modifications. However, extensive studies must be carried out where solutions may be suggested on how to meet today's requirements without damaging the traditional fabric.

Inconsistent addition to garden/courtyard

According to other deterioration types these additions are found less, or perceived less due to courtyard/ garden walls. They take the form of storage units, car parks, arbours, etc. in dwellings and winter gardens, arbours, heating plants, service areas, etc. in accommodation purposed structures (Figure 6).

Among the 411 traditional housing structures maintaining their original function, 11 units (3%) have inconsistent garden/courtyard extensions. This ratio is 2% higher than the overall percentage observed in registered structures. Unsanctioned and proliferating cases cause deterioration in the dwelling-garden relationship and traditional fabric properties triggering a crucial risk.

Social and cultural changes have also affected garden use practices. Solutions must be generated providing a balance between traditional landscaping and new needs. In order to ensure the health of traditional residences, the extensions should be reversible, and situated in a way that would not affect/ weaken the original structure's appearance.

Changes in the structure's material

The traditional building structure incorporates a wooden frame filled with adobe on upper floors. However, the difficulties in the maintenance and repair of

Figure 7. (a, b) Structures with changed materials.

adobe material and the proliferation of new material production that is cheaper and easier to obtain inevitably leads to new material use in repairing weakened sections (Figure 7a, b).

Among the 411 traditional housing structures maintaining their original function, 95 units (23%) have changes in the structure's material. This ratio is 15% higher than the overall percentage observed in registered structures. The traditional wooden frameworks are either left unplastered or plastered around the wooden frame leaving it bare; therefore, changes in the materials used generally disrupt the perception of the fabric negatively.

Solutions regarding material endurance and traditional material access must be generated, master builder training should be taken into account, and the public should be supported in traditional material use.

Plaster, paint and façade coating

The wooden frame, a distinctive feature of Safranbolu's traditional fabric, forms the building's structure and reveals a decorative façade; however, difficulties in maintaining adobe material strengthens the tendency to either change the material or cover it with plaster and paint (Figure 8a, b).

Among the 411 traditional housing structures maintaining their original function, 268 units (65%) have in-

Şekil 8. (a, b) Two Photos of the Same Area (Figure 8a: The photo, date unknown taken from the Safranbolu Municipality Archives, indicates a plethora of plastered buildings that leave the unplastered/wooden frame bare. In comparison, the contemporary photo reveals the increased tendency of covering these wooden frames with plaster.)

Figure 9. (a, b) Renewed windows.

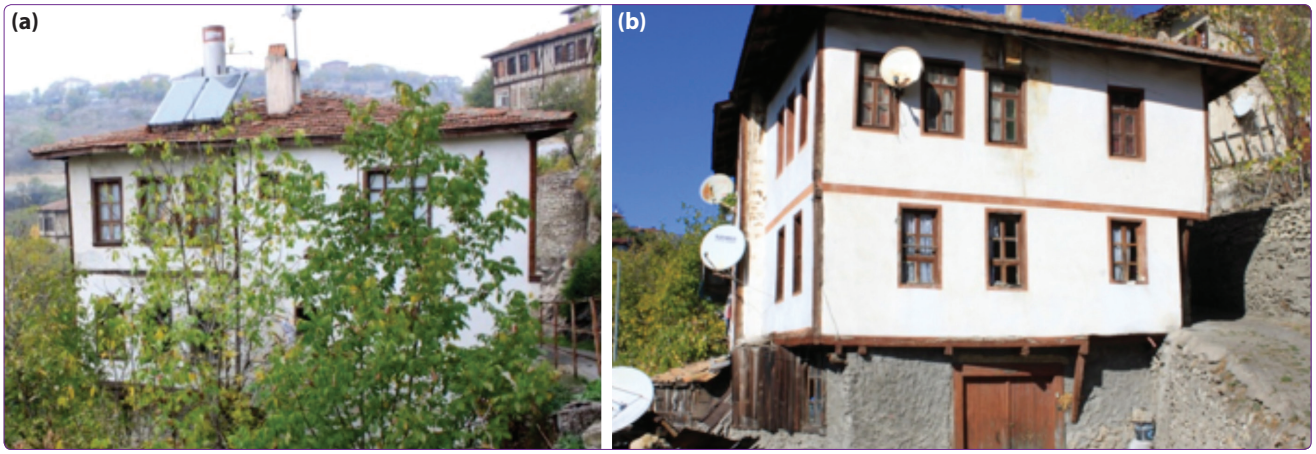

Figure 10. (a, b) View of solar energy panels and dish antennas.

consistent plaster, paint and façade coatings. This ratio is 48% higher than the overall percentage observed in registered structures. The gradually increasing tendency of plastering and painting buildings with unconventional plaster techniques and materials carries a great risk in terms of the general perception of the urban fabric. Unfortunately, in many buildings repaired with restoration projects, contemporary materials have been used to fill the frame after which they have been covered up with plaster and paint.

Structures maintaining authenticity to a great extent should use traditional materials and traditional plastering techniques during maintenance and repairs.

Modifications of window, door, gliste, bay window and showcases

The tendency of renewing important façade elements such as windows, doors, glistes, and bay windows inconsistent with the traditional fabric in terms of style, dimension and materials emerges as a significant problem (Figure 9a, b).

Among the 411 traditional housing structures maintaining their original function, 181 units (44%) have window, door, gliste, bay window, and showcase modifications. This ratio is 35% higher than the overall percentage observed in registered structures. Boarded up windows, widened windows, use of PVC joinery is seen mainly in residential structures but all other types of buildings also have these modifications. Additionally, in projects that modify the function of spaces, authentic façade features also slightly change (i.e. the widening of gliste gaps due to reorganisation of windows of newly added wet areas, ground floor kitchens, living areas, etc.).

Supervision, advising, easy and cheap access to traditional materials will reduce these problems.

Shading, air conditioner, antenna, solar energy panels, signboards, etc.

This modification type, effects of which are relatively limited to structures, negatively affect the traditional fabric as they are widespread. As a result of contempo-

Figure 11. (a, b) Structures harbouring more than one type of modification.

rary living requirements, heating/cooling equipment, satellite dishes, solar energy panels, signs with different colours, shapes and sizes, street coverings in commercial areas all cause visual pollution (Figure 10a, b).

Among the 411 traditional housing structures maintaining their original function, 40 units (10%) have shading, air conditioner, antenna, solar energy panels, signboards, etc. modifications. This ratio is 22% lower than the overall percentage observed in registered structures. Solutions developed spontaneously, with individual preferences disregarding the traditional fabric undesirably affect the traditional fabric. The chaos created with signs, shade coverings, etc. specifically in areas with dense commercial structures make it difficult to perceive the structures and urban fabric.

The integration of contemporary living requirements into the fabric is a necessity for the sustainability of life in these regions. The effects of these additions to the fabric should be minimalized, standardised, and realised through a common language that needs to be generated through plans and designs.

Structures harbouring more than one modification/deterioration type

In a significant segment of registered structures, more than one modification type classified above is found simultaneously.

Among the 411 traditional housing structures maintaining their original function, 222 units (54%) harbour two or more modification types simultaneously. This ratio is 41% higher than the overall percentage observed in registered structures. Buildings that have seen extensive disturbances lose traces of originality making project designs difficult. Especially with the loss of distinctive features, projects designed according to common period features generally lead to standardization (Figure 11a, b).

Conclusion

According to the results of this study where the current conditions, project situations, modifications were compared in registered structures regarding types of use, the physical conditions of buildings used for housing carry more crucial problems than other types of usage.

In housing purposed structures when compared with other uses, the following points have been observed:

- **The ratio of physically good structures is low.** In order to ensure the sustainability of the structure's physical endurance, maintenance and repairs may be carried out *"with the permission and audit of administrations that harbour KUDEB*[3] *under the General Directorate of Foundations or, in cases where KUDEB does not exist within the body of the related administration, under the conservation regional board, in accordance with the authentic style and materials"* on average quality structures which form the majority. Yet, a great majority of these structures have inconsistent applications and the above-mentioned modification types necessitating documentation drawings, restitution and restoration projects in order to restore the structure's authenticity.
- **The ratio of structures with documentation drawings along with restitution and restoration**

[3] KUDEB is the acronym for Koruma Uygulama ve Denetim Büroları (Conservation, Application and Auditing Offices).

projects is low. Projects are generally carried out when the structure is unable to stand on its own with maintenance and repairs, and also when there is a change in function. When project costs are considered, it is natural that users refrain from bearing these costs unless it is imperative. However, considering that deterioration and modification processes constantly continue, retaining and transferring information concerning the building through documentation drawings should be seen as a public responsibility. Independent of the property owner's demand, tools should be developed for the production of this information.

- **The ratio of structures preserving their originality to a great extent is low.** When all registered structures are evaluated, the most prevalent deterioration/modification types have been observed to occur in plaster, paint and façade coating as well as window, door, gliste, bay window and showcases. The most striking result found as a result of classifying these deterioration types according to functions was that residential use was above the average in almost all deterioration types.
- **Different types of modifications are significantly higher than other usage types.** However, modifications made to adapt traditional structures to new functions are more radical when compared with partial and retractable renovations done/planned to ensure necessary well-being and required comfort conditions for contemporary living in traditional structures continuing their functional values. These radical changes cause structures to lose their authentic qualities. Therefore, in traditional structures adapted to new functions, critical problems emerge in transferring past information to future generations.

All of these properties indicate that residential use harbours critical problems regarding the conservation of registered structures. Residential use, however, is significant in terms of the continued existence of real users and/or authentic use and a complete preservation comprehension rather than protecting the fabric and only physical properties of structures.

As many conservationists have indicated, the aim in protecting traditional urban fabric not only includes the protection/sustainability of structures/built environment, but also encompasses the protection of the culture that shapes, continues to shape the settlement lending it a special/different character (Nasser, 2003, Orbaslı 2006).

Listed among the World Cultural Heritage sites and one of Turkey's important protected areas on an urban scale, the settlement of Safranbolu, with its inconsistent applications and deteriorations of registered structures to such a great extent, reveals the inadequacies of auditing. A control mechanism that would curb these deteriorations needs to be developed.

On the other hand, the continued residential use of original housing structures is important in terms of sustaining the urban culture woven into the fabric. Therefore, drawing project designs for residential buildings and providing funds, materials and technical support for maintenance carry great import. It is also vital that public resources are shifted to the project designs, maintenance and repairs of structures continuing residential use in the region.

Solutions meeting contemporary living requirements without harming the traditional fabric and structures need to be generated. Applications carried out in this direction should be designed so that the authenticity is not disrupted, the modifications are retractable, certain standards and a common language is used, indicative that it was newly added and in a form where the authenticity is easily read. Solutions enabling building owners to easily access traditional materials must be generated, training users and master builders should be prioritised, and the public should be supported in traditional material use.

The existence of residential use in the region is vital for the protection of the traditional urban fabric as a whole, social and cultural continuity and long term sustainability of cultural tourism. The continued use of housing may only be established with the existence of good management and a planning system both of which are versatile, multilateral, holistic, and stable.

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Key words: Traditional housing; urban conservation; Safranbolu.

Anahtar sözcükler: Geleneksel konut; kentsel koruma; Safranbolu.