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CONCEPT-FUNCTION HARMONY IN RE-DESIGNED BUILDINGS: ADAPTATION OF HISTORICAL BUILDINGS AND GALLERY SPACE

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ABSTRACT

Historical areas should be protected as a part of cultural heritage, buildings should be kept alive by preserving their original textures and transferred to future generations. Since reuse is considered an integral part of conservation, it is very important to preserve the social and cultural characteristics of the building. Indicators; It is a communication tool that technology provides us. The new function given to the buildings in order to preserve and keep alive the vitality of the historical buildings is generally the space that provides an environment for mutual communication between individuals. It is important to reshape the building in a way that preserves its traditional position, composition and balance without disturbing its connection with the environment. However, while doing this, the harmony of the new concept and the building may not overlap. The incompatibility of some unchangeable equipment of the historical building or the materials belonging to the period and today's contemporary preferences can create a handicap. In this research, two sample buildings are used to test how modern and dynamic display concepts can be combined with historical buildings. For this reason, the Tate Modern and Orsay Museum examples were chosen because they are similar in scale and have been recently renovated.

Keywords: Re-functioning, Art Galleries, Spatial Analysis, Architectural Sustainability, Architectural Restoration.

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YENİDEN TASARLANAN BİNALARDA KONSEPT-FONKSİYON UYUMU: TARİHİ YAPILAR VE GALERİ MEKANI ADAPTASYONU

ÖZET

Tarihi alanlar kültürel mirasın bir parçası olarak korunmalı, yapılar özgün dokularını koruyarak yaşatılmalı ve gelecek nesillere aktarılmalıdır. Yeniden kullanım, korumanın ayrılmaz bir parçası olarak kabul edildiğinden, yapının sosyal ve kültürel özelliklerinin korunabilmesi oldukça önemlidir. Göstergeler; teknolojinin bize sağladığı bir iletişim aracıdır. Tarihi yapıların canlılığını korumak ve yaşatmak için yapılara verilen yeni işlev, genellikle bireyler arasında karşılıklı iletişim için bir ortam sağlayan mekandır. Binanın çevre ile olan bağlantısını bozmadan geleneksel konumunu, kompozisyonunu ve dengesini koruyacak şekilde yeniden şekillendirilmesi önemlidir. Ancak bunu yaparken yeni konsept ile yapının uyumu örtüşmeyebilir. Tarihi yapının değişemez bazı donanımları ya da döneme ait malzemeler ile günümüz çağdaş tercihlerin uymayışı handikap oluşturabilmektedir. Bu araştırmada, modern ve dinamik sergileme kavramlarının tarihi yapılarla nasıl birleştirilebileceğini test etmek için iki örnek bina kullanılmıştır. Bu nedenle Tate Modern ve Orsay Müzesi örnekleri, ölçek olarak benzer oldukları ve yakın zamanda yenilenmiş oldukları için seçilmiştir.

Anahtar Kelimeler: Yeniden İşlevlendirme, Sanat Galerileri, Mekan Analizi, Mimari Sürdürülebilirlik, Mimari Restorasyon

INTRODUCTION

Until a few years ago, the idea for the exhibition involved examining works placed on a wall or on a pedestal. Ignoring elements such as lighting, surfaces and textures, we were content with what the space offered us. Compared to today, it can be said that it is far from exhibition in its meaning. As a result of the changes in social culture, the development of science and art and the change in social habits brought us to an exhibition period that can be defined as active and participatory. Today, based on the understanding of postmodernism and pop art, the exhibition style has been removed from its shell, and more bold and original exhibitions have begun to be produced. Thanks to the principle of providing linguistic unity, objects have been started to be placed according to their visible differences rather than their hidden similarities. In this way, the exhibited works can be arranged as part of a series instead of the whole. Therefore, after the editing in the space, the grouping of objects is presented in a systematic way and these groupings together begin to form a meaningful whole for observation and

perception. In short, the concept of exhibition has become areas that become dynamic and move with the audience day by day.

In addition to this situation, due to the fact that historical buildings are quite large and divisible areas such as hangars, caravanserais, stations, it is seen that these areas are transformed into exhibition spaces or museums when they need to be re-functioned. However, integrating the new function by preserving the existing shape, not by rebuilding the building, can make it difficult to present the current systems in an old building. In order to develop this part of the study, first of all, what should be in the concept of exhibition was emphasized, and the analyzes of the selected samples were made in the following sections, and at the last stage, comparison schemes were presented.

1.Spatial Formations According To Exhibition Systems

In the 19th century, the format and system of exhibitions witnessed a revolutionary development. Especially after the awareness of contemporary art became widespread, the diversification of exhibitions, three-dimensional works, video art, applied arts and industrial products related to fine arts inevitably reveal differences in exhibitions. At the same time, it is necessary to organize a "personal space" suitable for them in order to conduct extensive exhibitions in different areas. The result of these developments is the change in exhibition methods in order to adapt to the changing expectations of galleries, like all institutions in society. This change is inevitably reflected in the concept of space and display technology. Today's galleries have adapted to these developments without making the audience find it strange (Dönmezoğlu, 2013, p.11-13).

In the 20th century, art centers with their public faces began to be remembered intensely, the modernist focus of the building and the interaction in the exhibition arrangement came to the fore. With the continuous development of technology and the change of aesthetic concepts, not only the methods of displaying works of art, but also the methods of including expressions about objects have diversified. Outside the scope of the exhibition, lighting, exhibition furniture, colors, textures, use of graphic expression and technical communication tools, physical and fictional elements have begun to design (Dönmezoğlu, 2013, p.11-13).

Another important factor is that the museum has to replace the interior elements partially or completely at certain intervals. A reasonable, logical and up-to-date solution must be formulated to meet this demand. E.g; If technology permits,

panels can be added and removed, various lightings can be added, a cycle can be created according to the exhibition object and the stand, and solutions like these can be replicated. Instead of self-limiting and repetitive areas such as fixed, unchangeable organizations, portable productions, repositionable and removable solutions that make it easier for the exhibition area to keep up with the current exhibition style provide convenience for these areas (Erbay, 2011).

In short, the effect of the works exhibited in the gallery is closely related to the theme of the exhibition and the spatial arrangement of the exhibition space. The factors affecting the design of the exhibition space, and therefore the reason for the change of the exhibition, are unnecessary or some conceptual requirements (Madran, 1999: Atasoy, 1993).

Some changes due to various reasons are as follows:

1.1.Change of Functional Factors

In the concept of design, "function" is defined as "fit for purpose or useful in terms of function". It specifies the function of the exhibition structure, the purpose, shape and related requirements of the exhibition structure. Purpose and requirements determine the form, size and materials to be used in the exhibition design. Here, the purpose of use of the exhibition hall expresses the meaning of the type of exhibition, the necessary conditions, the way and method of exhibition (Atasoy, 1993).

1.2.Spatial Data

Especially in existing buildings with certain foundations and conditions, it is important whether the spatial data of the building meet the exhibition function and other necessary functional requirements and whether they are sufficient. The space's ability to respond to its current functions depends on meeting the following standards;

- Whether the venue is sufficient in terms of the quality and capacity of the works displayed,
- Whether the space is sufficient in terms of the designed exhibition scheme,
-The adequacy of the space in terms of the circulation plan is an important part of the exhibition layout.

1.3.Purpose of Usage

Exhibition design; its location in the exhibition space is very important in terms of embodying the concept. For this reason, the design of the exhibition space should be done by classifying the exhibition and taking into account other standards that will affect the design.

1.4.Orientation in Exhibition

When we examine the elements to be considered while planning the orientation scheme of the exhibition;

-Conformity to the general structure of the exhibition space

-Conformity to the architectural form of the exhibition space

- Compliance with the nature of the materials exhibited

- Compliance with the information conveyed to the visitors during the fair

Observations show that the viewer spends a lot of time at the beginning of his visit. If it is towards this output, it results in less time wasted than necessary. This distribution of time in a good exhibition layout depends on the ability of the audience to maintain their interest until the end of the visit without getting bored (Deniz, 2008).

If the halls continue to be connected, the layout of each hall must first be maintained with good circulation and visibility. Later, while the halls are added to each other, the halls should be arranged according to the structure of the target visitors.

For example, whether the target visitor group is teenagers or adults is very important in the layout of the hall. The times when people can watch without getting tired will change. This period is longer among adults, but shorter for younger visitors. For this reason, a resting area or similar area should be created as long as the venue allows, so that the audience can visit it without getting bored before the end of the exhibition. The next classification, research, collection and display takes place through the acquisition of concepts. The first demonstration works, which were completed without creating any system and without considering the relationship and integrity between objects, are the infancy steps of the exhibition. Today, concepts and research related to its development have opened up a broad perspective for the exhibition.

We can cite the Science Museum of London (Image 1) and the Venice Architecture Biennale (Image 2) to express the latest views on the display system and the use of changing materials.

Image 1. Venice Architecture Biennale, exterior cladding materials section

Image 2. London Science Museum

In these examples with a contemporary understanding, both the lighting elements of the new system and the use of modern spaces attract the attention of the audience.

METHOD

In the study, it is aimed to draw attention to the importance of architectural and spatial integration in conservation by maintaining the concept of exhibition, which is pushing its limits today, in an existing historical building. For this, two steps were followed: determining the space requirements and testing the suitability of the building for the new function.

In the first stage of the research, which was carried out using descriptive scanning models, a literature search was made on the space requirements of museum functions and a functional plan was created for the museum. In the second stage, the features of the existing structure and its coordination with its new function were examined. In this process, the suitability of the environmental and spatial characteristics of the building for the new function was also examined. These analyzes were made within the framework of the coordination between the environmental characteristics such as size, height, shape, spatial arrangement and architectural features of the buildings with new functions. In order to evaluate the potential of a function such as exhibition spaces, the floor plans and sections of the buildings were accessed. As a result of these, analyzes such as lighting, spatial organization, building materials, architecture and spatial parameters have been put forward.

- Within the scope of the adaptability analysis of the new functions in terms of environmental features, it was questioned whether the environment of the city where the building is located is compatible with the new functions. For this, it has been examined whether it is at a level to respond to functions such as pedestrians and vehicles, parking lots, green areas, sales areas.
- In terms of new functional suitability analyzes for the spatial setup plan, it has been questioned whether the structure is in a position to provide this within the scope of adaptability analysis of new functions such as the applicability of circulation schemes. Qualitative considerations were used to limit the scope of the analysis, as the size of the area used for museum buildings will vary with the inventory. Finally, by examining the architectural styles of the structures examined, their universal, periodical and socio-cultural characteristics were revealed.

2.Tate Modern- London, England

Image 3. Tate Modern Facade

2.1.History and Importance

The Tate Modern Building (Image 3) is located in the Bankside district of Southwark, the capital of the United Kingdom, London. It is located south of the Thames, opposite St Paul's Church, within walking distance of London Bridge. Its location is considered an important historical landmark, as the Tate Modern's location in front of the Millennium Bridge allows it to establish a link between Bankside, known as Old London, and new London. This steel suspension bridge over the Thames was opened in 2000 and is for pedestrian use only. It welcomes people like an entrance door that carries the meaning of a historical region, and brings them to a new and contemporary structure (Mendilcioğlu, 2008, p.6-8).

Bankside Power Station was designed by Sir Giles Gilbert Scott and was built in two phases between 1947 and 1963. With the closure of Bankside Energy Sta-

tion, which was built after World War II, the building became unusable and the power plant was closed in 1981. The idea of re-operating the coastal power station, the largest building in the region; It was based on the idea of redeveloping Southwark, where the government had many unused warehouses. In this way, the area is protected. Southwark Council supported the idea of transforming this underrated area into a cultural center (Dean, C., Donnellan, C., & Pratt, A. C., 2010).

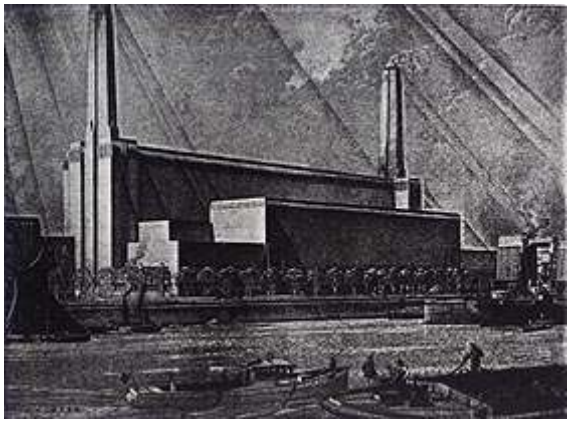


Image 4. Appearance of the station before its reuse

With the abundance of Tate Gallery collections in the late 1990s, a space shortage began to emerge. For this reason, it was decided to separate the galleries and place them in the new building. For this reason, the museum was moved to this empty building in 1981 (Image 4). A competition was held to redesign the building. Following an architectural project competition organized by the government in 1994, the conversion of the bank's riverside power plant into a museum was awarded to a company called Herzong & de Meuron (Jacques Herzong and Pierre de Meuron) among 148 participants. Respecting the history and architectural quality of the building, he realized a new design based on this phenomenon in the "Tate Modern" project. The construction of the museum was done by a construction company called Carillion. The architects, who designed the original museum building and won the Prritzke Architecture Prize, designed a sloping brick facade to match the facade of the building in the original building, when the pyramid-shaped glass structure they first proposed was not accepted (Stratton, 2000, p.164).

In 1889, Henry Tate made a fortune as a sugar merchant. This industrialist showed his art collection to England, and that's where the name "Tate" comes from.

2.2.Architectural Formation and Relationship with the City

The Tate Modern was built in the Art Deco style with linearity and geometric shapes, and is a seven-storey building with an interior space of 34,500 square meters and opened in May 2000. During the renovation of the building, the outer shell was not affected in any way, and the brick balcony and chimney remained intact. In this way, it was prevented from conflicting with the texture of the city. building, St. It has a 99 meter high tower built in St. Louis. It was built according to its rules, no higher than St. Paul's Cathedral. The Herzong & de Meuron team used 5,000 tons of steel and 7,200 copper sheets for the new design of Tate Modern. The outer wall of the building was also made of 4.2 million bricks (Stratton, 2000, p.165).

In the interior design, the concept of "The Story of Modernism in Art", which contrasts sharply with the appearance, is discussed. As a result, the complex modernist story has become a very sharp turn with many linear effects different from the strict appearance of the exterior. A conceptual orientation was adopted in the renovation of buildings, which is rarely seen but very compatible with the purpose of the building.

For example, escalators and elevators have been added to the structure consisting of six floors. Cafes, restaurants, washrooms and resting areas have been built to meet all needs besides the gallery on the floor.

The lighting systems designed in addition to the exterior, on the other hand, make the building look very ostentatious in the evenings (http://lebriz.com/).

2.3.Building Materials

Due to the historical and architectural significance of the Tate Modern Museum, interventions have been kept to a minimum. In addition to the use of old materials and technologies, the use of new materials and modern technologies is also prominent. This is often seen as a balcony window was added to the building later on. Terrace windows are built on an old but solid structure and can be seen from the front. The windows are made of 524 glass panels, so that natural light enters the hall and the entrance. From the front, the ultra-modernist terrace windows show the artistic quality of the building and add to the building's history and modernity. The purpose of this glass building is not to spoil the old look by adding buildings, but to harmonize the new gallery with different works of art to show where new and old buildings begin and end. In linear windows built after 1950, the three windows in the front, the rear and the side window were preserved unchanged, allowing natural light to be captured in a controlled manner, just like in an art gallery. The brick walls, which still form the main structure of the

building, have been preserved, even the old ones have been restored, and their surfaces have been covered with a transparent matte epoxy protective layer.

The most important change made on the exterior of the building was in the roof section. Daylight can be used very effectively as there are 524 glass panels covering the top of the hall with a length of 155 m, a width of 23 m and a height of 35 m (Image 5). The horizontal 'beam of light' on the ceiling contrasts with the steepness of the great brick tower (Dean, C. et al, 2010)

Image 5. Tribune Hall

The deaf wall to the right of the main entrance is exposed concrete, painted with white epoxy paint and supported by black steel beams. For this reason, the old and strong side of the building is symbolized. Instead, glass and steel were used on the left side of the entrance, where the corridor floor is located, unlike the opposite wall.

The turbine section at the end of the hall is separated by a glass door and covered with a concrete floor reminiscent of the building's past function, contrasting sharply with the artwork in the gallery. Although the floor of the gallery, which is divided according to the art movement, shows structural differences according to the previously mentioned concept, the walls of all rooms are painted with white paint and untreated wood is used on the floor. The walls of the gallery are designed to be animated with some niches in the walls and mixed lighting (http://www.archdaily.com/).

The crack in the concrete floor at the entrance supports the plan as well as expressing the story of the modernist zigzag. The thin, vertical and linear window placed on the entrance door helps to create a dramatic light on the facade of the building (http://www.wallpaper.com/).

2.4.Function

The building marks the new public space, entering through the long ramp at the west end of the building, taking visitors like a covered street into the great turbine hall. The forum hall forms the ground floor and is one of the areas where the overall structure remains unchanged. The hall can lead to the gallery and other areas and can be used as a closed road. The large bookshop and benches here are other natural elements that support the street atmosphere.

Home to different art galleries, Tate Modern visits this brick and tiled building by approximately 5 million people every year. Since this figure was higher than expected, 215 million TL was spent in 2012 and the building was expanded (Image 6). The two underground fuel tanks of the museum, which have not been used since 1981, have also been turned into an art gallery (http://www.artfund.org/).

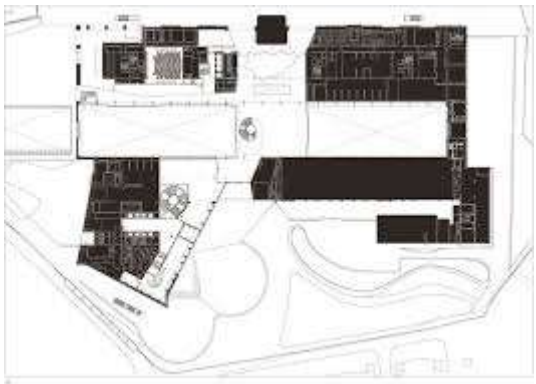


Image 6. Tate Modern Extension

Using modern glass pyramids and fuel tanks, these new galleries have become venues for display installations, films, various performances and discussions. Thanks to this expansion; 70% of the display space has been added to the Tate Modern collection (Dean, C et al., 2010).

Looking at the floor plan of the exhibition area; The Tate Modern appears to provide a star-shaped positioning for visitors. Looking at the floor plan; The bookstore in the lobby of the tribune is the city's most comprehensive art bookstore, with more than 10,000 volumes. There is an information desk and gift shop on the first floor. There is a self-service cafe on the second floor overlooking the garden. The main theme exhibitions are held on the 3rd and 5th floors, and temporary exhibitions are held on the 4th floor. There is also an "Espresse Bar"

overlooking the river. Restaurants on the 6th and 7th floors have beautiful views of the Thames (Dean, C et al., 2010).

2.5.Suggestions and Criticisms

As a result of all this, Tate Modern, in harmony with the new urban project, has become the symbolic face of the new riverbank, which was considered a completely unusable structure in the suburbs of the city in the region, and had a positive impact on the new urban project. Art, culture and tourism are all in the environment. Another reason why the museum is so popular is that the ground floor exhibition space is free. In addition, this transformation has set an example for the reshaping of many old industrial structures around the world, including Istanbul Modern and Santral Istanbul.

3.Musée D'orsay- Paris, France

3.1.History and Importance

In the 19th century, two large train stations, Gare de Lyon and Gare d'Orsay, were built in Paris (Figure 7). Orsay Train Station is located on the banks of the Seine, opposite the Louvre Museum. At the end of the 19th century, the Paris-Orias private railway company established the Orioles depot on the banks of the Seine. The aim was to bring passengers from Bordeaux, Toulouse and Nantes to a more central and prestigious location.

Image 7. Orsay Station, before it was turned into a museum yet, 1910

Architect Victor Laloux has identified two starting points for the Station project. The first is to welcome visitors in a stylish neighborhood in the center of Paris, opposite the Louvre, just five minutes from the Champs-Elysées, and secondly, to dress the taste and understanding of the 19th century in the form of stone fa-

cades outside the massive metal frame, prepared by the Paris Orleans company. In the 19th century, under the impetus of industrial mechanization, people thought it was a product of wealth. However, the steam train, which formed the basis of the design of the Gar, could not last for a long time, so the platform arranged accordingly could not meet the needs of the electric trains forming long trains. With the cancellation of the main line service in 1939, the station was now used only for commuter trains (Sert, 2018:271).

The station whose importance is gradually decreasing; neglected and sloppy image has gained a poetic appearance. Orson Welles used these poetic station images in the movie "The Trial." The station was abandoned and partially continued its other functions; It was put up for sale in 1961 according to the decision of the French National Railway Company (SNCF). Various suggestions have been made for the area and surrounding buildings. In fact, a project competition was opened for the Congress Palace and a hotel with 870 rooms in the region. Le Corbusier is one of the 13 participants in the competition. The joint project of Architect Guillaume Gillet and Architect Rene Coulon was chosen as the first international hotel project to emerge in the Gar area.

3.2.Architectural Formation and Relationship with the City

Abandoned since 1961, the train station was reused in 1978 by President Giscard d'Estaing. Architect Eugene Henard, who was interviewed for the first time for the project, wanted to use industrial materials on the exterior of the building facing the Louvre, but these ideas were opposed. Compaigne d'Orleans decided to hold a competition and Laloux's project won with its metal and stone mix project. As a result, it was decided to build a hall 140 meters long, 40 meters wide and 32 meters high. The size of the building is 175 meters long and 75 meters wide. Approximately 12,000 tons of metal was used in Gare d'Orsay, even exceeding the amount of metal used in the Eiffel Tower (Sert, 2018:272).

Image 8. The view of the Orsay Museum from the Seine River

Victor Laloux won the competition. Italian architect Gae Aulenti helped French architects turn the station into a museum. Its construction was carried out between 1983 and 1986 by the French architects Renaud Bardon, Pierre Colboc and Jean-Paul Philippon. The façade design stands out in the building, as well as sculptural ornaments and elegant stone carvings (Image 8). It was designed in the Art Nouveau style dominated by decorative ornaments.

3.3.Building Materials

Victor Laloux's historical iron pillars and stone wall coverings were coordinated and renewed, thanks to the masterful work done on the interior and exterior of the building under the guidance of Italian architect Gae Aulenti and delivered to Act Architecture Group. Interior decoration is rich in design; Architect Gae Aulenti transformed the garage into a cathedral, preserving the glass roof and ornate ceiling. The Musée d'Orsay was restored in 1987 and gained a new space designed by architect Gae Aulenti, demonstrating how modern museological concepts fit into historical spaces.

The width of the museum is 75 meters, the height of the sunshade is 188 meters. The central aisle is 40 meters wide, 138 meters long and 32 meters high. The width is provided by the steel vault. The exterior of the museum is made entirely of steel and then clad in stone. Sun shading panels are used on the facade and entrance eaves. Rococo style details, far from modernism, stand out in the reception area and restaurant designed in gold and pastel tones (Uysal, 2013, p.86)

Since the place is not flat, the middle corridor is accessed by stairs. The ramp is designed for the disabled. Access to the side gallery is through openings left in the wall. Some time before the opening, painter Detaille about the station (Image

9); "The train station is magnificent; it resembles a Palace of Fine Arts. Since the Palace of Fine Arts has also become reminiscent of a train station, I would recommend Laloux, the architect of the station, to change the functions of the second one while there is time," he said. Eighty-six years later, Detaille's prediction came true and the Station was turned into a museum. One of the most popular museums in Paris with many sculptures and paintings; It was opened with the Paris World Exhibition on 14 July 1900, the anniversary of the French Revolution (http://www.musee-orsay.fr/).

3.4.Function

The building, which has 145 galleries and covers an area of 51,000 square meters, has been converted into a museum. The exhibition area is 45,000 square meters. The building has a progressive architecture and also has a mezzanine. It consists of a total of 7 floors, a basement and a ground floor. Nearly 1,000 other important cultural artifacts such as approximately 2,300 paintings, approximately 1,500 sculptures, photographs and furniture from the 19th and 20th centuries are exhibited in the gallery (http://www.musee-orsay.fr/).

In addition to showing the Orsay collection to the audience, there are also small works of some artists in the warehouse of the museum. In particular, the collection of 19th century art in this museum and the reorganization of art in France means rebirth. Orsay, consisting of a main space with a large steel vault, a medium-sized hall and exhibition halls on both sides, bears the characteristics of the city. These auditoriums provide comb-shaped orientation for visitors.

Image 9. The exhibition area of the Orsay Museum

The area created by raising a few steps in the middle was used to divide the space into more than one part so that these areas can be perceived more easily (Image 9). Backgrounds in very plain and soft colors were created for the items to be exhibited, and the details of historical places were not blocked. The square courtyard at the entrance of the building is an urban space used for various shows. The bronze statues lined up on the sides of the courtyard also form a kind of border.

At the bottom is the opera house and other buildings. From this point, there is a direct access to the top floor. Due to the natural lighting, a gallery with impressionist paintings is placed here. There are also works by late Impressionist painters such as Van Gogh, Surat and Gauguin on this floor.

There is a domed hall on the mezzanine level of the Seine river. Paintings of the Third Republic period, foreign schools, symbolists, Rodin sculptures and international art nouveau styles are exhibited here. In addition, seven halls are regularly devoted to developing themes or events in an interdisciplinary way. The building, which can be seen from the Seine River, also has a cozy dining room for visitors bored with the exhibition in the central tower behind the city clock (Uysal, 2013). In a gallery, the model plan of the city is placed so that it can be viewed through the glass floor.

3.5.Suggestions and Criticisms

The museum, which has great historical and architectural value, was created by re-functioning from a train station. Although it gives a labyrinth feel inside, it provides the opportunity to move freely in general. Although the interior of the building is quite modern, it also attracts the attention of people with an old exterior structure.

RESULTS

According to the results of the examination of the selected samples, an analysis table was created and the similarities and differences of the architectural structure of the museum were determined. These examples are evaluated under the headings of historical process of each example, its location in the city scale and its

architectural form, building materials and the application of their functions. In order to give advice to researchers and practitioners, the common and non-common features of the examined museum in terms of architectural design and space usage were determined.

Table 1. Comparative Analysis of Examined Building Examples

YAPININ ADI		TATE MODERN	ORSAY MÜZESİ
TASARIM YILI		1947- 1963	1898-1900
AÇILIŞ YILI		2000	1986
KENT/ ÜLKE		Londra/ İngiltere	Paris/ Fransa
MİMARI		Sir Giles Gilbert Scott	Victor Laloux
MİMARİ YAKLAŞIM	Arsa Alanı	51 000 m²	51 000 m²
	Topografya	Düz	Düz
	Konumu	Merkeze yakın, Milenyum Köprüsü karşısında	Merkeze yakın, Henry Montherlant Caddesi üzerinde
	Vaziyet Planı		
	Ulaşım	*Bankside Bölgesi'nde yer almaktadır. Otobüs, metro, tren ve deniz taşıtıyla ulaşım sağlanmaktadır.	*Louvre Müzesi'nin karşısında yer almaktadır. Otobüs ve metro ile ulaşım sağlanmaktadır.

Table 2. Architectural Styles of Examined Building Samples

YAPININ ADI		TATE MODERN	ORSAY MÜZESİ
MİMARİ ÜSLUP	Cephe	  • Yalın • Simetrik • Eski yeni sentezi • Nehir yönü tasarımına ağırlık verilmesi- Biçimsellik	  • Ritmik • Simetrik • Heykel süslemeleri • Nehir yönü tasarımına ağırlık verilmesi- Biçimsellik
	İç Mekân	 • Kübik mekânlar • Eski yeni sentezi • Eksenden dağılım	 • Kübik mekânlar • Eski yeni sentezi • Eksenden dağılım

Table 3. Architectural Formation of Examined Building Examples

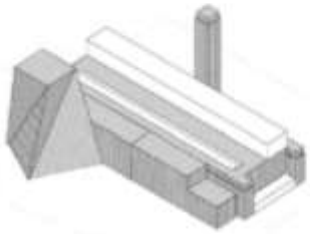
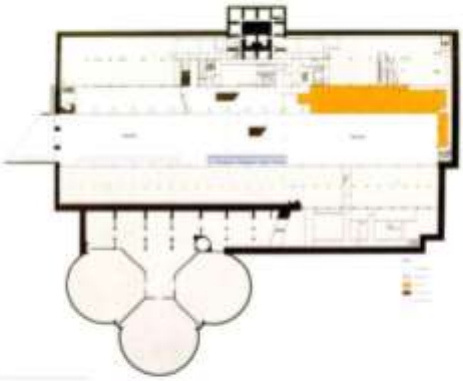
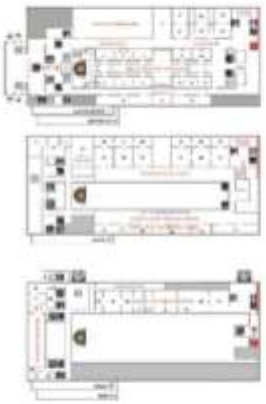
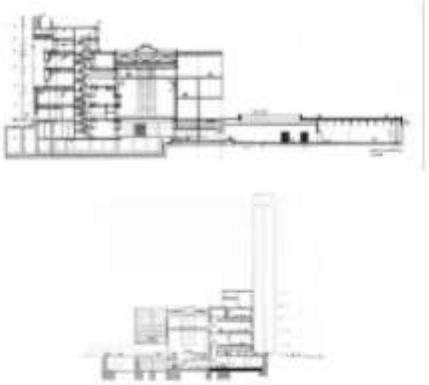
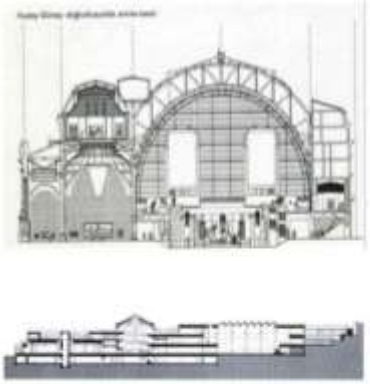
YAPININ ADI		TATE MODERN	ORSAY MÜZESİ
MİMARİ BİÇİMLENME	Kütle		
	Plan		
	Kesit		
	Kat Sayısı	Zemin+6 (7 kat)	Bodrum+ Zemin+5 (7 kat)

Table 4. Functional and Spatial Characteristics of Examined Building Samples

	YAPININ ADI	TATE MODERN	ORSAY MÜZESİ
İŞLEV	Giriş Holü	●	●
	Fuaye	●	●
	Çok Amaçlı Salon		
	Kütüphane		
	Restoran	●	●
	İdari Mekânlar		
	Teknik Mekânlar	●	●
	Sinema		
	Danışma	●	●
	Eğitim Alanı/ Atölye	●	
	Kalıcı Sergi	●	●
	Geçici Sergi	●	●
	Müze Mağazası	●	● (Kitap satış)
MEKÂNSAL ÖZELLİKLERİ	Vestiyer	●	●
	Güvenlik	●	●
	İklimleme	●	●
	Işıklandırma	●	●
	Bilgilendirme Panoları	●	●
	Merdiven	●	●
	Asansör	●	●
	Rampalar	●	●
	Dinlenme Üniteleri	●	●
	Engelli Tuvaleti	●	●
	Otopark	●	

Educational and cultural activity venues such as movie theaters, reception halls, workshops and libraries are added to some museums as places where culture, art and education continue. In addition to the exhibition function, museums are also places where many educational and cultural events are organized to increase participation. For this reason, such places should be given importance.

Table 5. Spatial Organizations of Examined Building Samples

YAPININ ADI		TATE MODERN		ORSAY MÜZESİ
MEKANSAL ORGANİZASYON	Bodrum Kat Planı	• Yok		• Oditoryum
	Zemin Kat Planı	• Danışma • Vestiyer • Kitap Mağazası • Sergileme alanı • Atölye • Resepsiyon		• Danışma • Vestiyer • Kitap Mağazası • 2 tane geçici sergileme alanı • 23 tane kalıcı sergileme alanı
	1. Kat Plan	• Oditoryum • Konferans salonu • Kitap Mağazası • Sergileme alanları • Müze mağazası • Atölye • Mutfak • Teknik oda		• Asma Kat
	2. Kat Plan	• Sergileme alanları		• 10 tane kalıcı sergileme alanı • Geeçici sergileme alanı • Amount Pavilion Özel Salonu • 2 tane dekoratif sanatlar sergisi • Restoran
	3. Kat Plan	• Sergileme alanları • Müze mağazası		• Asma Kat
	4. Kat Plan	• Sergileme alanları		• Asma Kat
	5. Kat Plan	• Üyeler odası • Atölye • Konferans salonu		• 17 tane kalıcı sergileme alanı • Geçici sergileme alanı • Restoran
	6. Kat Plan	• Restoran		Yok

In the spatial arrangement of the museums, there is an area in the entrance hall where the lobby, which is described as a meeting place, is located. It is seen that this area is designed as an atrium in most of the museums examined, or gallery spaces and atriums where different levels can be read together in the interior exhibition setup. By creating an atrium, integrity can be achieved in visual perception. The interaction of visitors with objects and with each other can be strengthened. An impressive space image can be created at the entrances of the

museum, where visitors will be impressed and a large part of the space will be perceived.

Table 6. Construction Materials of Examined Building Samples

YAPININ ADI		TATE MODERN	ORSAY MÜZESİ
YAPI MALZEMELERİ	Çatı	• Çelik profiller • Cam çatı	• Alüminyum • Eğimli çatı • Çelik profiller
	Cephe	• Tuğla kaplama • Cam detaylar • Cam teras ek giydirme Terastaki ışıklık sayesinde gün ışığından verimli bir biçimde yararlanılmaktadır. Binanın dış cephesindeki eski yeni dengesi de cam malzeme sayesinde sağlanmaktadır.	• Taş kaplama • Heykel süslemeleri • Güneş kırıcı paneller Güneş kırıcı paneller sayesinde ziyaretçiler daha komforlu gezebilirler. İstenilen gölgelendirme de bu sistemle sağlanabilir.
	İç Mekân	• Granit, laminant kaplama döşeme • Beyaz renkte duvar boyası • Alçı asma tavan • Atriyum alanı beton kaplama Açık renk mekanın büyük ve ferah görünmesine yardımcı olur. Sergilemedeki hareketliliği bu sayede dengelemek mümkündür.	• Parlak granit, laminant kaplama döşeme • Açık renk duvar boyası • İşlemeli tavan • Cam giydirme asansörler İşlemeli tavan, sergileme mekânlarında algıyı bozan öğelerden biridir ancak tarihi yapıyı bozmamak için korunmuştur. Bu denge açık renk duvar boyasıyla sağlanmıştır.
	Çevre	• Meydanda beton kaplama yürüyüş alanları	• Meydanda bronz heykeller • Yürüyüş alanları

There are squares and landscaping at the entrance of most museums. If there is no such space, it is necessary to use courtyard solutions to organize open spaces. These areas can also be recreation and entertainment areas. An area that is used effectively for art and social events is very important for the museum in terms of being a center of attraction. The use of museums should be supported by squares, courtyards or gardens. There is a lack of such areas at the entrance of these

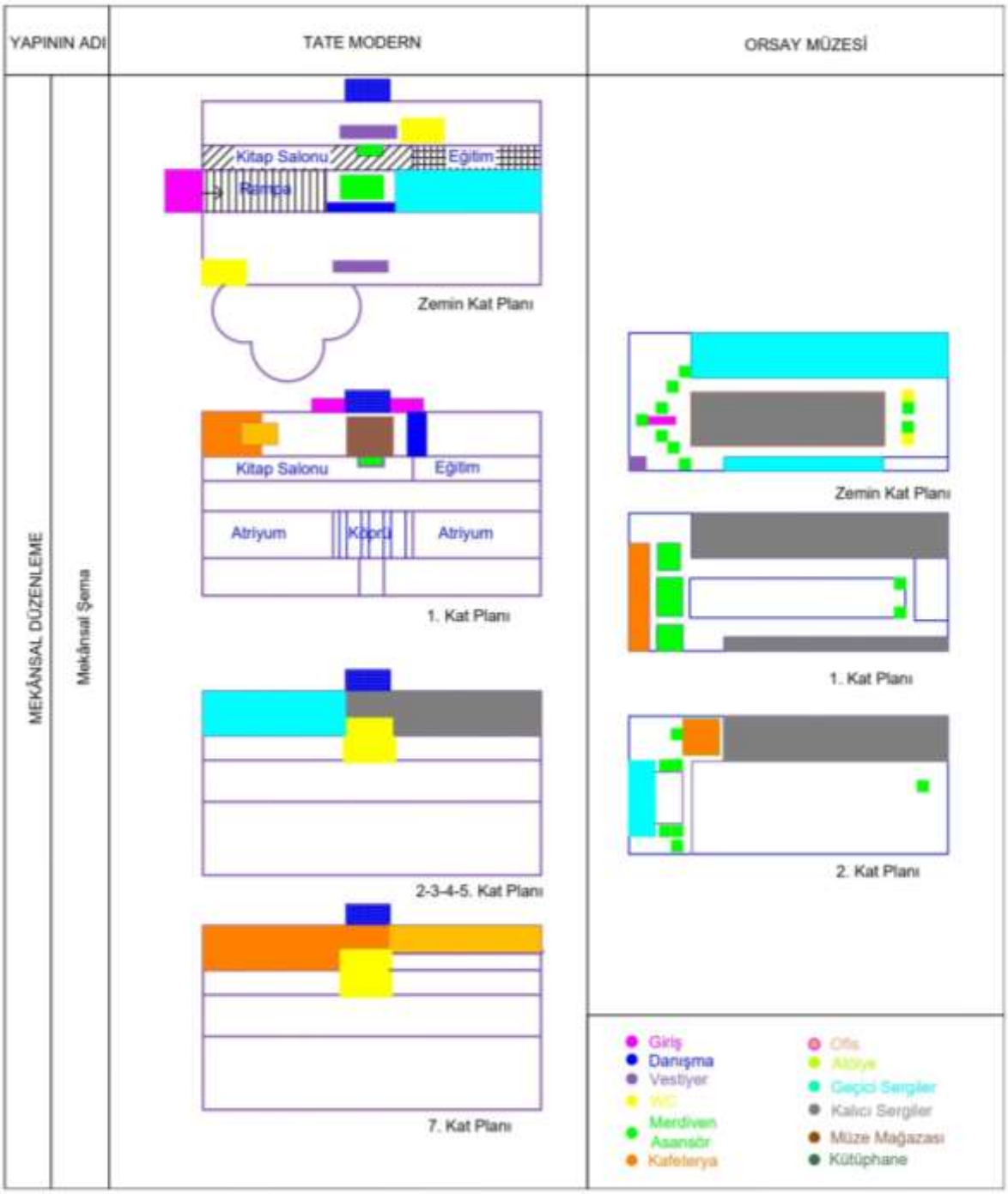
structures. However, it is generally integrated into the terrace floor from the floors inside the building.

Table 7. Universal, Periodic and Socio-Cultural Characteristics of Examined Building Samples

	YAPININ ADI	TATE MODERN	ORSAY MÜZESİ
SOSYO- KÜLTÜREL ÖZELLİKLERİ	Yapıların sağlıklaştırılmasında kentin ekonomik ve sosyo- kültürel özellikleri ile yapı teknolojisi paraleldir.	●	●
	İleri teknoloji gerektiren yapı sistemleri	●	●
	Kullanılan malzemelerin ekonomik olması	●	●
	Yapının Yalın ve Sade Olması	●	
	Yapının Anıtsal Olması	●	●
	Yapının Simgesel Olması	●	●
	Yapının Cephesinde Heykel Kullanımı		●
DÖNEMSEL ÖZELLİKLERİ	Yapıların sağlıklaştırıldığı dönemdeki mimari akımlar ve mimaride oluşan değişimler yapının mimarisini etkilemektedir.	●	●
	Neo Klasik		
	Art Deco	●	
	Eklektisizm		●
	Rus Klasizmi		
	Post Modern	●	●
EVRENSEL VE GELENEKSEL ÖZELLİKLERİ	Yapıların sağlıklaştırıldığı dönemdeki ihtiyaçlar evrensel ve geleneksel gereksinimler neticesinde hazırlanır.	●	●
	Özgün Mimari	●	●
	Yenilikçi	●	●
	Teknolojik Malzeme Kullanımı	●	●
	Ulaşılabilirlik	●	●
	Eğitim	●	●
	Katılımı Arttırmaya Yönelik Mekânlar	●	●
	Satış Alanları	●	●
	Dış Mekân Düzenlemeleri	●	●

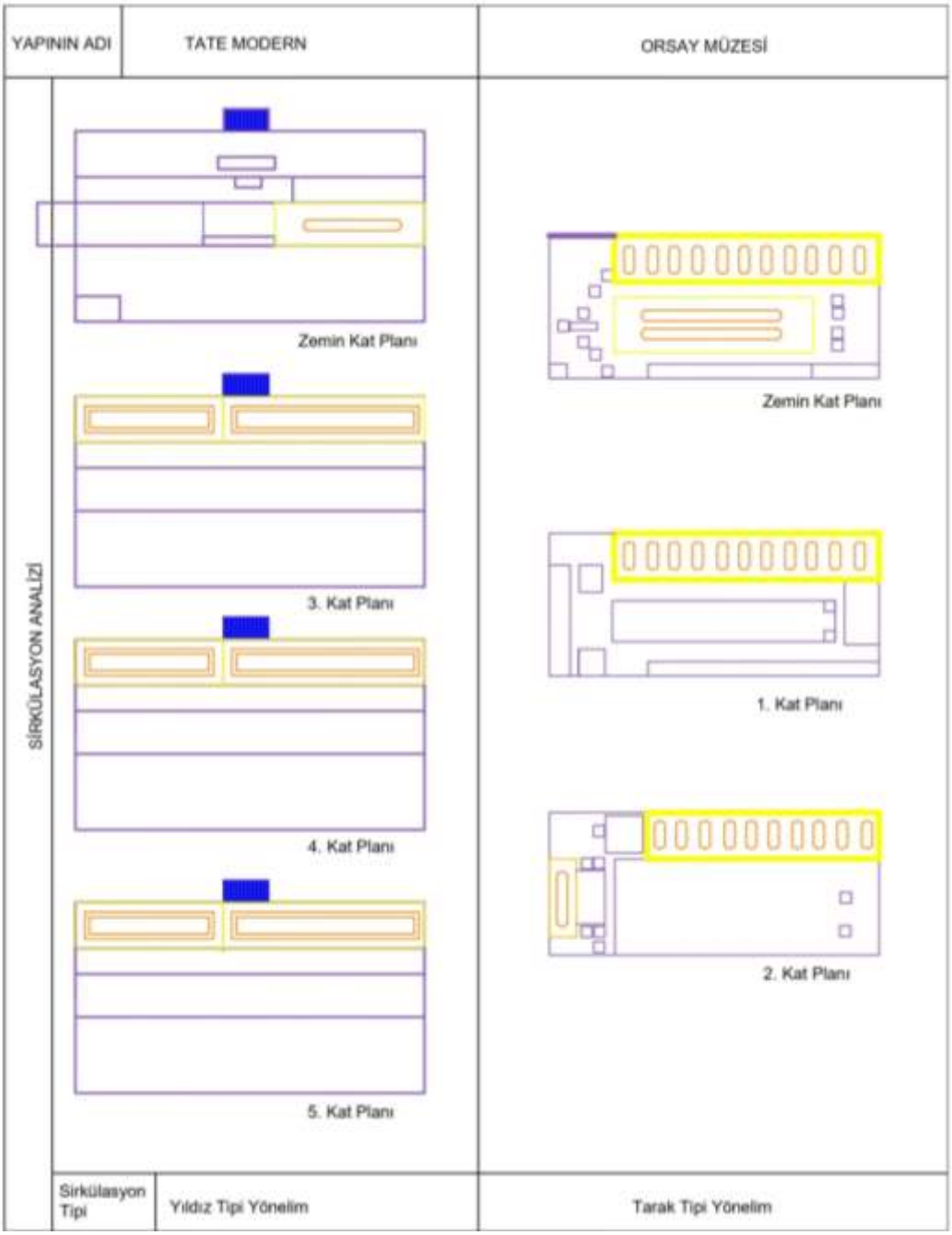
As seen in these structures examined, it is seen that in order to increase the interaction of cities, society and other countries, it is necessary to establish museum development, promotion, sales departments that will contribute to the city economy, and to establish bookstores and museum shops as tools in museums.

Table 8. Spatial Arrangements of Examined Building Samples



In addition to exhibition halls, restaurants, cafes, receptions and private meetings can also be created, and museums can become an indispensable part of city life. Museums can be integrated into daily life by creating an environment where people can spend time and participate in art activities. In these structures examined, this function was placed in a very strategic plan.

Table 9. Circulation Analysis of Examined Building Samples



Units with educational functions such as workshops, libraries, movie theaters and museums, which are places where museums continue their education, can be transformed into places where auditory education can be given in addition to visual education on history and contemporary art.

Table 10. Lighting Analysis of Examined Building Samples

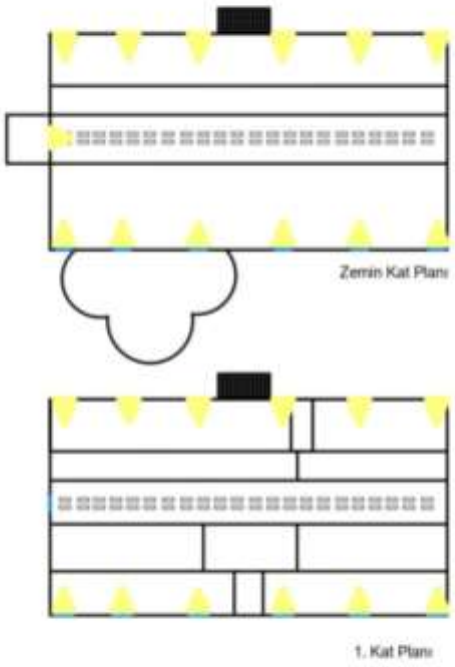
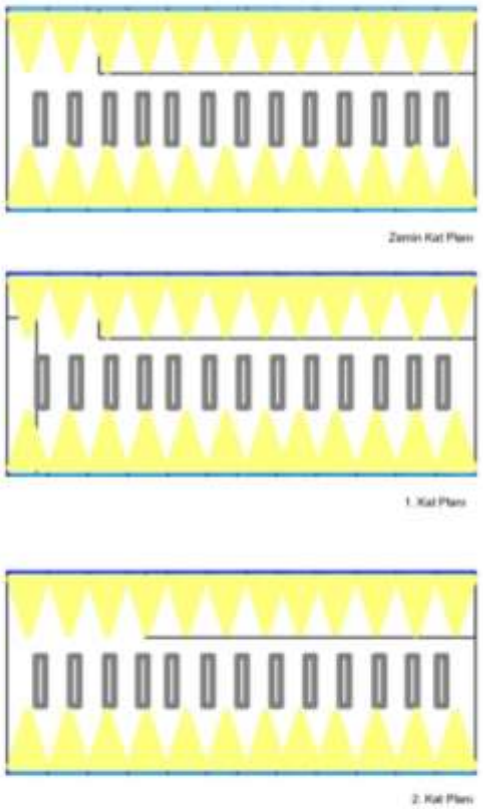
YAPININ ADI	TATE MODERN	ORSAY MÜZESİ
AYDINLATMA ANALİZİ		
	Işıklık sistemi ve cephelerdeki dar uzun pencereler ile doğal ışıklandırma yapının avlusunu aydınlatmaktadır. Galeri alanları tamamen yapay ışıklandırmayla aydınlatılmaktadır.	Ana boşluk ışıklık ve cephe pencereleriyle aydınlatılmaktadır. Galeriler için ek led ve spot aydınlatmaları ile destek verilmiştir.

Table 11. Examination of Architectural and Spatial Parameters of Examined Building Examples

YAPININ ADI			TATE MODERN	ORSAY MÜZESİ
MİMARİ VE MEKÂNSAL PARAMETRELER	Mimari Mekân Verileri	• Görsel süreklilik	Galerilerin dar uzun şekilleri izleyiciye merak algısı uyandırarak sürekliliği sağlanmıştır.	Plan şemasına göre dar ve uzun bir yapıda olması ve yüksek tavanlı olması sergilerin belli bir süreklilikte izlenmesine olanak tanımaktadır.
		• Mekânsal süreklilik	Çağdaş anlayışla tasarlanmış yapı iç içe geçen tasarımı sayesinde mekansal sürekliliği sağlamaktadır.	Odalara bölünen sergileme sistemi izleyicide merak uyandırmaktadır.
		• Mekânsal dönüşüme uygunluk	3 kat tamamen sergilemeye ayrıldığından farklı bölümlerde farklı sergilemeler yapılabilmektedir.	Ana yapı bozulmadan dönüşüm sağlanmıştır ve yapı etkili bir biçimde şekillendirilmiştir.
		• Sergileme çeşitliliği açısından mekânın yeterliliği	Yapı farklı galeriler barındırdığı için sergileme çeşitliline olanak tanımaktadır.	Mekânın müze olarak hizmet vermesi nedeniyle sabit eserlerin izlenmesi sürekli sergilerin tek bir yerde sunulmasına neden olmaktadır.
	Sergilemede Yönelim	•Algılama mesafesinin yeterliliği	Birbirine bağlanan salonlar sayesinde, rahat dolaşım ve görüş sağlanmaktadır.	İnce uzun alanların odalara bölünmesi algıyı daraltmaktadır.
		• Sergilenecek eserlerin niteliği ve kapasitesi açısından mekânın yeterliliği	Büyük ölçekteki eserlerin de sergilenebildiği ve rahatlıkla izlenebildiği mekânlara sahiptir.	Yapının müze olarak kullanılması, sergilenecek eserlerin değişimine olanak vermemektedir.
		•Sergi düzenlemesinde sirkülasyon planı açısından mekânın yeterliliği	Yapının sürekli ziyaretçisinin olması, sirkülasyonun devamlılığını sağlamaktadır. Alanda her türlü ziyaretçi ihtiyacı göz önünde bulundurulduğundan sirkülasyon yeterli gelmektedir.	Yapının sürekli ziyaretçisinin olması, sirkülasyonun devamlılığını sağlamaktadır. Alanda her türlü ziyaretçi ihtiyacı göz önünde bulundurulduğundan sirkülasyon yeterli gelmektedir.
		•Sergilemede ziyaretçiye verilmek istenilen mesaja uygunluk	Yapının müze olarak hizmet vermesinden dolayı eserlerin sabit düzende sergilenmesiyle kentin ve yapının tarihsel sunumu devam ettirilmektedir.	Yapının müze olarak hizmet vermesinden dolayı eserlerin sabit düzende sergilenmesiyle kentin ve yapının tarihsel sunumu devam ettirilmektedir.
		• Sergilenen materyalin niteliğine uygunluk	Tarihsel dokusu bozulmadan müzeye dönüştürülen mekânda sergilenen eserlerin odalara bölünerek yerleştirilmesi materyalin çeşitlenmesini sağlamaktadır.	Tarihsel dokusu bozulmadan müzeye dönüştürülen mekânda sergilenen eserlerin odalara bölünerek yerleştirilmesi materyalin çeşitlenmesini sağlamaktadır.

The museum should have a sensitive and consistent understanding of the architectural space and beautify the environment so that it can be easily accessible to people with disabilities. It should serve unhindered access. In addition to the spatial arrangement, there should be some structures that attract attention with their architectural originality. In addition, it should use its unique features as an example instead of imitating it. It should have a structure that reflects the skills and knowledge appropriate for the age group. It should be original and universal exemplary structures, not only with the objects they exhibit, but also with their architecture as well as the objects. For these two structures examined;

- Common spaces or areas:
- Gathering places: Entrance halls, cafe.
- Places to increase participation: Cafe, restaurant, multi-purpose hall.
- Educational venues: Conference hall, auditorium.
- Artistic event venues: Permanent and temporary exhibition halls, auditorium.
- Outdoor use: Garden or courtyard, square.

Common architectural approaches:

- Use of technological materials: The use of high-tech materials and the application of high-tech construction techniques.
- Original architectural approach: Giving importance to design, designing all or part of the building by world-renowned designers.
- Innovative approach: Organizing competitions for spaces to be added or redesigned, presenting different space and material experiences.
- Design approach for the disabled: Providing an obstacle-free circulation with disabled WC, disabled elevators, ramp arrangements.
- Designing it by transforming it from a structure.

Non-common spaces or areas:

- Educational spaces: library or reading room, workshop.
- Artistic and cultural event venues: Cinema hall, reception hall
- Sales places: Book store, museum store.
- Gathering places: Atrium

Uncommon architectural details and features:

- Making a large landscape or square arrangement by not allowing vehicles in and around the museum garden and constructing a closed parking lot.
- Flexible, functional gallery space, movable walls.
- Obtained by the competition project.

CONCLUSIONS AND RECOMMENDATIONS

Cities are “trying to reevaluate their cultural assets from the past to the present, to acquire new identities with brand value and to transform the acquired identities into capital” (Eldek Güner, 2017: 84). Since the changes in living spaces during this effort are parallel to the changes in lifestyles and needs, these spaces need to be reused with modern needs. In this direction, reuse is an important method in the preservation of historical buildings, providing economic benefits as well as ensuring cultural and historical continuity. Moreover, it is often given

priority in contemporary conservation consciousness. However, when the coordination between the new function and the existing space is at the highest level, it is possible to create a healthy reuse method. Thus, the building will be revitalized by meeting the needs of the users, will be matched with new functions, will be able to live undamaged and sustainable protection will be provided. Spatial analyzes in this context are important in ensuring the harmony of function and space.

In the study, the two buildings, which were re-functionalized and transformed into exhibition spaces, were examined architecturally and the function was evaluated in the context of space harmony. These assessments were carried out through spatial analysis, comparison and observation. All the comparisons made showed that for both museums, the building has been re-functionalized and preserved its original identity according to the conservation principle, together with user satisfaction and meeting the space requirements of the new function.

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Image 1. Venedik Mimarlık Bienali, dış cephe kaplama malzemeleri bölümü, (2014). Kişisel Arşiv

Image 2. Londra Bilim Müzesi,https://www.ensonhaber.com/galeri/londra-bilim-muzesinde-winton-galerisi-acildi, Erişim tarihi: 07.04.2021.

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