CONTEMPORARY RESEARCH IN ARCHITECTURE, PLANNING AND DESIGN

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CONTENT

Healing through Sensory and Interactive Ceramic Art:
An Experiential Study of a Wall Installation in a Pedodontics Clinic*

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ABSTRACT

Design approaches that contribute to healing in healthcare facilities require the creation of multi-layered experience areas that go beyond physical amenities, especially when pediatric users are involved. These approaches provide various benefits, such as reducing stress, promoting emotional balance, and increasing interaction between users through art. Thematic and spatial art applications in interior design are considered both distracting and imagination-stimulating tools, especially for children. Additionally, it has been observed that artistic arrangements in healthcare interiors have the potential to transform user experience and spatial perception.

As with ceramic artworks, it is possible to create a research environment with long-term observable effects that allows for the simultaneous execution of design and implementation processes through multidimensional art products. In this regard, the presented work includes an interior design application designed for all users, with a particular focus on the child age group. It comprehensively outlines how the project, which forms the content of the study, was developed, designed, produced, and implemented for approximately fifteen months. The study includes an artistic ceramic design and application developed through interdisciplinary collaboration between architecture/interior architecture and ceramic departments at the Pedodontics Clinic of Bolu Abant Izzet Baysal University, which supports a multi-part and healing spatial effect.

The research was conducted using qualitative methods, including observation, semi-structured group meetings, creative sketching and form development work, photo and document analysis, and participant interviews. The project process, carried out with the participation of faculty management, pediatric dentistry department faculty members, and project researchers, was developed based on the principle of joint idea development at various stages of the design, from concept determination to decisions on color, shape, and size. The application, consisting of seventeen original pieces shaped around the themes of underground, ground, and sky, aims to enhance users' emotional experience in the space and encourage interaction by stimulating children's imagination. The project presents an exemplary model for the design of healthcare facilities that integrate art with the indoor experience and support healing, offering a holistic approach that can guide similar applications.

Keywords – Healing With Art, Healthcare Facilities, Dental Clinic Interior, Ceramic Artwork, Healing And Interior Design.

INTRODUCTION

Healthcare facilities are multi-layered environments that not only promote physical healing but also consider the psychological and sensory well-being of the individual. In clinics such as dental practices, where children are frequent users, the impression left by the interior atmosphere on the user can be as decisive as the treatment process itself. Recent trends in healthcare architecture have necessitated a reevaluation of treatment environments to ensure they not only meet functional requirements but also address the emotional needs of users.

Approaches that view space as an integral part of treatment are reshaping how art and architecture interact. Artistic interventions, especially within interior environments, help lower users' stress, make waiting more bearable, and support overcoming emotional hurdles like hospital-related fears. Studies on visual art's healing properties reveal that the emotional bond formed between artwork and viewer positively impacts individuals' well-being.

Approaches that explain the healing power of art encompass not only the moment of encountering the work, but also the act of participating in the production process, evaluating each of these processes as a "therapeutic contact" in its own right. Art forms that work with natural materials such as ceramics offer areas of practice that reinforce the unity of body and mind through techniques that require tactile and manual skills. The fact that ceramic production processes require patience, attention, and focus through sequential steps such as shaping, firing, and glazing makes this practice therapeutic. When integrated into the space, numerous studies have shown the positive effects of the work, which connects with the artist and becomes part of the creative process, in terms of stimulating the viewer's sensory perceptions through the surfaces that emerge.

Current research in the global literature shows that art applications are increasingly being used in hospital interiors; it is emphasized that various interventions such as wall panels, lighting installations, and natural landscape integrations increase the satisfaction of patients, their relatives, and staff. These interventions not only create aesthetic value but also offer solutions that comply with health standards due to their applicability in areas with relatively low infection risks. Especially in indoor spaces designed for children, the use of artistic surfaces made from hygienic materials like ceramic not only expands the narrative capacity of the space but also supports a sense of emotional security.

21st-century healthcare facilities are being redesigned with an inclusive spatial approach that considers not only the physical and psychological needs of the individuals being treated, but also those of the professionals working in these environments. This transformation requires the disciplines of architecture, interior architecture and design, and art to

come together to establish a new type of collaborative production platform. Creative contributions to healing spaces are not merely architectural design decisions but also cultural and aesthetic positions. Ceramic panels integrated into wall surfaces in clinical settings both construct spatial identity and establish an intuitive connection with users.

The artistic ceramic application carried out within the scope of the project has been designed as an original production process at both conceptual and formal levels through interdisciplinary collaboration. Therefore, the final output aims not only to add aesthetic value to the space, but also to transform the emotional experience of everyone in the space, patients, caregivers, and staff. In this context, the work is regarded as a unique example of the intersection of architecture and design disciplines with artistic production and contributes to the theory of healing spaces.

A CONCEPTUAL PERSPECTIVE ON ARTISTIC DESIGN APPLICATIONS IN HEALTHCARE FACILITIES

Healthcare facilities differ from other types of buildings in various ways. The difference lies not only in their functionality but also in their profound impact on human health and well-being. Throughout history, there have been significant turning points in terms of the subject matter and spatial approaches. In our country, especially after the 1980s, experts' opinions became popular in the media, and buildings with a healing function took on the mission of guiding society in many areas of daily life, from "healthy living to sexuality, from childcare to education" (Orhan Yılmaz and Mutdoğan, 2022). During this period, the concept of "healthy living" and the associated medical and spatial needs gained prominence in the media, the number of private hospitals began to establish a legal foundation, and the system began to take shape. While this period also influenced the quality of public hospitals, it was among the factors contributing to the temporal transformation of the approach to healthcare spaces.

Today, healthcare facilities are defined as "healing spaces" that go beyond being merely functional buildings, aiming to restore and support the physical, mental, and spiritual health of their users (Day, 2004; Firth et al., 2015; Sabet et al., 2024). The harmony of buildings with their surroundings, respect for the local context, and user participation are transforming the design approach toward creating meaningful and sensitive spaces that go beyond commercial goals, especially in high-social-function areas such as healthcare facilities. The need for approaches that address not only physical but also emotional and mental needs in design processes is growing day by day. As space is an integral part of human life, it directly affects an

individual's emotional state through all senses due to the experience it provides (Tarçın Turgay and Tunçok Sarıberberoğlu, 2022). In this context, healthy living and society require healing spaces that are integrated with nature, serve people, and are designed with an artistic approach. Healthcare facility design has a deep and multifaceted connection with art, and this connection goes beyond mere functionality, creating a transformative impact on human health and well-being (Rossi et al., 2023; Dubose et al., 2018). Considering all this data, it should not be forgotten that design is an important tool that contributes to both individual and social health by reducing stress and promoting harmony (Day, 2004).

In summary, healthcare facilities are environments that actively support the physical, mental, and emotional well-being of users (patients, their relatives, and healthcare personnel), shaped by evidence-based design principles, integrated with the natural environment, and flexible and customizable. These characteristics distinguish them from typical buildings and transform them into spaces for the soul, not just "boxes" (Day, 2004).

1. *Interior Architecture and User Experience in Healthcare Facilities*

Healthcare places were initially designed with a focus on hygiene and efficiency, which created sterile and intimidating environments. However, today's goal is for hospitals to be efficient, hygienic, and at the same time pleasant and stress-relieving, holistic and healing environments. At the core of spatial change lies the impact of the physical environment on patient recovery and the social support provided by families to patients. Architect Ulrich and colleagues (2003) note that the environment has an impact on people's physical and psychological well-being, the recovery process of patients, and the social support provided to their families.

Contemporary healthcare facilities aim to create an experience that goes beyond physical comfort by adopting a user-centered design approach. Due to the nature of the services provided, the user group of healthcare facilities consists of healthcare personnel, patients, and their relatives.

Environmental conditions affecting the well-being of healthcare workers, particularly physicians, have been shown to have a decisive impact on workload, stress levels, and job satisfaction. Art and design have been found to reduce patient stress, pain, and depression, as well as reduce employee burnout and stress and improve mood (Rossi et al., 2023; Dubose et al., 2018).

When evaluating the design requirements for the patient and family user group, it is understood that children are active users of the space but have often been neglected in previous studies, and therefore there is a growing need for studies on children's perception of space (Tarçın Turgay and Tunçok Sarıberberoğlu, 2022). The first impression created by the interior space, spatial integrity, adequacy of guiding elements, and aesthetic qualities directly affect the user's perception of safety in the space. It is

known that designs that do not align with the human scale have negative effects on social life and psychological well-being. Therefore, scale decisions in spaces where children are present are among the design parameters that require particular attention (Karayama and Hekimoğlu, 2022). Designing the scale and details of the space in a way that is appropriate for children's perception levels and comfort needs plays an important role in reducing fear and anxiety levels. Spatial confusion and insufficient visual cues encountered during the orientation process within the clinic are among the main factors that increase anxiety in child users (Dalke et al., 2006). In this regard, color coding, space-to-void ratios, symbolic markings, defined waiting and transition areas, lighting quality, material and color choices, and positive distractions used in interior spaces are considered environmental components that directly affect the user experience (Day et al., 2000; Gaminiesfahani et al., 2020; Marquardt et al., 2014). The integration of art and nature elements in healthcare facilities has the potential to create more humane and healing spaces that support physical, psychological, and social well-being for children and their families. However, certain limiting factors such as hygiene conditions, cost constraints, and cultural diversity must be considered in such applications (Heikkilä et al., 2024).

In particular, the effective use of natural light not only adds openness and liveliness to the space but also becomes an important factor in reducing anxiety levels in children, lowering stress levels in parents, and supporting healthcare personnel in the care process. It is crucial that spaces designed for child users go beyond physical healing to provide an atmosphere that nurtures feelings of trust, peace, and belonging.

Similarly, thematic surfaces that support children's play and discovery should not only serve as distractions but also create a sense of aesthetic unity in the space, enhancing children's interaction with their environment and fostering a more positive experience. The fact that these surfaces are made from easy-to-clean, dust-free, and hygienic materials is both an aesthetic and functional requirement. The choice of materials used in the space should be based on children's safety needs and the level of care required. Surfaces designed to be durable, resistant to breakage, and to reduce spatial load offer benefits in terms of safety and continuity of care.

Additionally, managing sensory stimuli in clinical spaces should consider the different needs of users. Especially in pediatric hospitals or facilities for elderly individuals, responses to visual and auditory stimuli vary; this requires a more comprehensive and user-specific approach to interior architecture and design.

In short, the uncertainty and lack of control over the length of time spent in a healthcare environment, especially for pediatric patients, can transform the meaning of the space and increase children's anxiety levels. Therefore, many design elements must be taken into consideration, such as

the intuitive comprehensibility of the interior space, ease of navigation, and thematic arrangements that encourage interaction with the child. These spatial requirements directly affect not only individual comfort but also the effectiveness of the treatment process and the quality of care.

2. *The Place of Art in the Healing Space Design*

In healthcare facilities where spatial experiences focused on holistic well-being are needed, users are not only connected to life through the treatment process. In the context of healing space design, it is noted that patients tend to prefer spaces that are less institutional and more personal and warmer, and that interior architecture that integrate lighting, acoustics, ergonomics, color, art, and furniture components are perceived more positively (Rossi et al., 2023; Rice et al., 2008). It is emphasized that environments with home-like, cheerful, and soothing qualities help individuals distance themselves from their "patient" identity and contribute positively to their recovery processes. Considering that spatial perception is shaped not only by the physical environment but also by emotional and psychological effects, the integration of art into space should be evaluated as a functional tool that supports user comfort and emotional balance, beyond aesthetic values. Indeed, involving users (especially patients and family members) in the design process fosters a sense of belonging and supports a user-centered design approach, going beyond merely responding to user needs.

In spatial arrangements made to reduce stress and provide mental relaxation in healthcare facilities, the type and quality of sensory stimuli play a decisive role. Numerous studies support the positive effects of visual aesthetics and artistic interventions on healthcare workers and users. Interior architect Valipoor and Bosch (2021) state that elements that support visual perception (e.g., works of art) should be actively used in interior spaces when redesigning environments where healthcare workers perform their duties under high stress.

It states that art-based applications that reduce cognitive load, distract attention, but are not directive, enhance the mindfulness experience. In this context, the presence of art-related elements such as nature-inspired images, handmade surfaces, rhythmic patterns, and organic forms in a space enables users to remain mentally "in the present moment" and increases their emotional connection to the space (Valipoor and Bosch, 2021).

However, although the effects of nature and art on well-being are recognized in design, they are generally not considered as important as other factors such as efficiency, economic goals, or technology (Kellert and Calabrese, 2015). In the history of hospitals, this pursuit of efficiency may have led to the emergence and proliferation of hospitals that did not provide mental support to patients, in addition to hygienic reasons (Ulrich, 1984). Such thinking is considered to have contributed to the perception of a white,

sterile, and even frightening hospital environment. However, there are other reasons for the absence of artworks in healthcare facilities. One such reason is the theft of artworks in some hospitals (Rollins, 2021). While some hospitals ensure their artworks, others reportedly install alarms behind them (Heikkilä et al., 2024).

Art facilitates communication between patients (especially children) and healthcare providers, enabling children to express their feelings, experiences, and perceptions about the hospital environment and staff. It supports children's right to express their opinions (Ullán and Belver, 2021). Furthermore, art plays a leading role in the field of health as a carrier of social meanings and a means of expressing emotional experiences related to health and illness (Camic, 2008; Stuckey and Nobel, 2010).

a. *Ceramic Surface Applications and Interdisciplinary Design Opportunities*

Ceramic surface treatments are defined as interdisciplinary strategies aimed at enhancing both the aesthetic quality and healing properties of clinical interiors. In healthcare facilities, as in other areas of art, ceramic art applications not only create a visual impact but also offer therapeutic benefits on an emotional and psychological level. Additionally, due to the material's tactile quality, its labor-intensive production process, and the narrative potential it carries on its surface, ceramics provide not only aesthetic but also sensory and psychological contributions in healthcare facilities.

Mimar Day (2004) argues that to give buildings a "soul," everyone involved in the construction process should be included in the artistic process. He notes that this situation directly affects the feel and quality of the space. Therefore, the sequential stages of the ceramic production process, such as hand-touching, shaping, glazing, and firing, require attention, patience, and focus from individuals, thereby creating sensory enrichment and mental calmness. By integrating the producer's unique experience into the space, this experience is not only made available to the viewer but also establishes an emotional and perceptual connection with the user through spatial use (Özgen and Biçici Çetinkaya, 2023).

The evidence-based healthcare design approach developed by Ulrich (1999, 2003) bases the impact of the visual environment in healthcare facilities on patients' psychological states on scientific evidence, particularly demonstrating that artistic arrangements reduce anxiety levels and positively influence the recovery process. Ulrich's work argues that art should be integrated into interior spaces not only as an aesthetic contribution but also as a therapeutic tool.

Art projects based on ceramic materials and surface applications function in clinical interiors not only as aesthetic elements but also as strategic interventions that provide sensory interaction, psychological well-

being, and spatial recognition. These interventions strengthen the identity of the space, supporting users' experiences of orientation, belonging, and spatial memory, thereby contributing to the deepening of the connection with the space. Designs developed with an interdisciplinary approach serve both the user and the contextual structures that redefine the space. Artistic ceramic surface works shape not only individual perception but also spatial identity (Özgen and Biçici Çetinkaya, 2023).

There is a multifaceted and dynamic relationship between environmental aesthetics and user psychology in the interiors of healthcare facilities. Valipoor and Bosch's (2021) findings reveal that artistic interventions based on visual harmony, sensory modulation, and spatial clarity can significantly reduce stress factors encountered in clinical environments. Designers can create interiors that support awareness and psychological safety by using various artistic elements such as simple and repetitive patterns, natural images, and emotionally neutral color palettes. In this context, the design of ceramic artworks specifically for the user group is important in terms of meeting both aesthetic and therapeutic needs. The stress-reducing and awareness-enhancing effects of art are evaluated through design components such as sensory stimulus management, visual stability, spatial orientation, psychological safety, and rhythmic simplicity (Table 1).

Table 1: The Role of Art in Reducing Stress and Supporting Mindfulness in Healthcare Environments (Adapted from Valipoor and Bosch, 2021).

Finding	Explanation	Relation to Design and Art
Management of sensory stimuli	Overstimulating environments may increase cognitive load among healthcare staff.	Artistic surfaces should be calming and focusing rather than distracting.
Visual stability and spatial orientation	Spatial disorganization may elevate anxiety levels.	Artworks composed of organic forms and natural colors may facilitate orientation.
Elements that support mindfulness	The ability to "stay in the moment" may be directly related to environmental cues.	Surface installations such as ceramic panels with repetitive motifs may enhance mental flow.
Sense of psychological safety	The visual language of an interior may significantly affect an individual's stress perception.	Artistically framed "safe visual zones" may positively influence the clinical experience.
Simplicity and rhythmic repetition	Simple and easily perceivable forms may help prevent mental fatigue.	Repetition, rhythm, and formal continuity are recommended in artistic arrangements.

In this context, multi-dimensional artworks integrated into the space invite users to establish a more holistic relationship with their surroundings by deepening not only the visual but also the spatial experience. Artistic applications created with materials such as ceramics, which have a high

tactile quality and create a volumetric effect, can break the static perception of the space and offer an interactive surface experience. Developed according to criteria such as hygiene and durability, these ceramic surfaces can create positive psychological effects not only through their visual appeal but also through the connection established through physical proximity and experience.

When it comes to child users particularly, the volumetric language of ceramic art, when combined with themes that stimulate the imagination, supports social interaction and creates a space for communication between children and between parents and children through a shared object of attention. Such spatial arrangements help children feel less alienated in the hospital environment, while also contributing to stronger and more secure relationships with family members.

RESEARCH METHOD

The study, conducted at the Pedodontics Clinic of the Faculty of Dentistry at Bolu Abant İzzet Baysal University, examines an art-based spatial application process within the scope of the project. The project was carried out through interdisciplinary collaboration between the fields of interior architecture and ceramics, combining interior architectural design, ceramic art, and healthcare. It emerged because of approximately 15 months of work under the Scientific Research Project titled "Healing Health Interiors: BAİBU Pediatric Dentistry Clinic Artistic Ceramic Application" and numbered 2024-BDP-6.12.58-0005. The application process is based on a collaborative decision-making approach, trial-and-error shaping, and on-site observation, rather than a one-way design transfer.

The process of determining the concept of the artwork was carried out with the active participation of researchers and clinical and faculty academic staff. The conceptual framework, thematic content, and intended emotional impact to be included in the visual narrative of the artwork were discussed through idea sharing; efforts to develop a common language based on the expectations of different professional groups and their experiences of the space were prioritized. The designed artistic panel has been shaped to respond to the specific conditions of the space, beyond its aesthetic meaning. In this regard, ceramic materials with technical properties that minimize risks such as infection, dust accumulation, and breakage were preferred when determining the form and textures to be used on the surface. Additionally, the ease of cleaning and compliance with hygiene requirements in healthcare facilities were among the fundamental criteria for selecting the materials.

The study is an interdisciplinary applied design research project. Its primary objective is to create an original artistic ceramic application for healing interior designs in healthcare facilities and to systematically document this process in line with user needs, spatial requirements, and production techniques. The research approach was shaped within the framework of qualitative research methods and conducted in line with the principles of design-based research, which focuses on participatory and creative processes. The stages of identifying the design problem, creating alternative solutions, testing feasibility, and evaluating results formed the building blocks of the research. Throughout the research process, information was generated through qualitative data production techniques, including observation, semi-structured group meetings, creative design workshops, sketching and form development stages, photo and document analysis, and participant interviews. This multi-layered process ensured that design decisions were developed in both spatial and user-focused ways; the findings obtained directly guided the implementation process. Therefore, the research not only produced a site-specific artwork but also documented the process and output, offering an exemplary methodological model that could guide similar initiatives in healthcare facilities.

APPLICATION AREA AND PROJECT PROCESS

The application area within the scope of the research is the BAİBU Pedodontics Clinic, which actively serves pediatric patients. The selected location is close to places where children spend the most time, such as the waiting room and passageway, where anxiety levels are high. The artistic ceramic work located inside the clinic is positioned in a transition area with high user circulation. (Figure 1).

Figure 1: Pedodontics clinic entrance area and wall artistic application surface architectural plan (Personal Archive, 2025).

This is the wall surface behind the clinic's patient reception and waiting area, which also has two doors leading to the clinic's academic offices. The surface on which the application was carried out is plasterboard, approximately five meters wide and 280 cm high. Before the application, two-dimensional artistic works consisting of tooth figures were seen on the specified surface (Figure 2).

Figure 2: Pre-project design area as-built (Personal Archive, 2024).

It is argued that art can be used as a tool to transform the experience not only on wall surfaces but also in marginal areas such as ceilings, floors, and passageways; this is particularly emphasized in terms of providing spatial awareness and ease of orientation. It has been observed that artistic elements that direct users' attention to "safe" visual areas reduce stress levels and support the emotional well-being of employees (Valipoor and Bosch, 2021). Within the scope of the study, the project output meets the viewer on a surface that represents an important reception area defined for the clinic.

As Valipoor and Bosch (2021) also point out, great care has been taken to design content that contributes to emotional well-being by reducing the stress associated with receiving treatment at the clinic. In this context, a multi-layered program was followed in the project content, and new methods were continuously developed regarding design narrative and relationships to contribute to user-centered spatial design. Reflecting one of the creative production stages of the design process, the interactive approach in the decision-making and production process specific to the space was documented by the researchers at every stage (Figure 3).

Figure 3: One of the experiments on formal structure and the relationships between units (Personal Archive, 2025).

Prepared to define the procedural steps structuring the production practice and the roles of participants, Table 2 systematically presents how art-based implementation processes are developed within a healthcare-specific interior. The table details an exemplary model encompassing multi-actor and interdisciplinary collaboration, extending from spatial analysis to thematic decision-making, and from pre-implementation technical tests to the installation phase.

Table 2. Art-Based Implementation Process in a Healthcare Interior

Phase	Process Title	Description	Participants / Responsible Parties
1	Project Initiation and Goal Setting	Identification of the clinical space for artistic implementation; definition of project scope and target users. Establishment of a theoretical foundation through literature review and examination of similar studies.	BAP unit, project coordinator, project researcher, Faculty of Dentistry administration
2	Spatial Needs Analysis and Preliminary Meetings	Discussion of user experience, expectations, and spatial needs with participation of clinical staff and researchers	Faculty of Dentistry administration, Department of Pedodontics faculty members, project team
3	Conceptual Discussions and Idea Development	Exploration of conceptual and narrative approaches; development of sketches, formal variations, and surface alternatives based on these ideas	Project team (experts in interior architecture and ceramics)
4	Concept Finalization	In-depth discussions with the Faculty of Dentistry to finalize the visual content; decision on the final concept after multiple evaluations	Project team, Faculty of Dentistry faculty members
5	Concept-Based Design Development	Creation of two- and three-dimensional design alternatives in alignment with the agreed-upon concept	Project team
6	Technical and Material Experimentation	Testing of materials with regard to hygiene, surface durability, weight, and installation suitability in relation to the healthcare interior	Ceramic artists
7	Production Process	Fabrication of the panel components in a modular structure within a workshop environment	Project team
8	Space-Specific Implementation Strategies	Determination of panel weight optimization and installation methods based on the limitations of the plasterboard wall surface	Project researchers, ceramic artists, installation technicians
9	On-Site Wall Application	Completion of the two-dimensional base surface, followed by the permanent installation of the three-dimensional ceramic components	Project team

The location of the artistic ceramic work enhances the visibility of the aesthetic effect and allows for the creation of a surface that can positively direct users' attention during the waiting period. Developed through a multi-part composition, the application aims to create a sense of continuity in the space through the rhythmic placement of ceramic units. The design process was shaped in line with the principles of pedagogical sensitivity and aesthetic integrity, with color, texture, rhythm, and figure selections determined by considering both the perception levels of child users and the professional needs of clinical staff.

The production of the panel components was carried out entirely by hand for both two- and three-dimensional content. Based on technical tests and analyses conducted before installation, special mounting elements that can be securely fastened without damaging the gypsum board surface were used; the lightweight nature of the ceramic pieces was achieved through shaping in small sizes and thin forms. The form, surface texture, and glaze properties of the pieces were determined with consideration for the hygiene conditions specific to the space. The color palette selected for the panels consists of tones such as blue, green, and yellow that evoke nature and harmonize with the neutral tones of the clinical interior. Semi-matte glaze applications soften the interaction of light with the ceramic surfaces while also reducing the potential for dust and stain accumulation.

A total of seventeen original ceramic units were designed and enriched with three dimensional elements (Figure 4). Located between two academic staff rooms, the panel establishes a visual connection between the units through a linear form representing vehicle lanes. The installation height and the relationship between the parts were determined by considering the age-height ratios of children, as well as possible physical behaviors such as holding, pulling, tearing, and hitting.
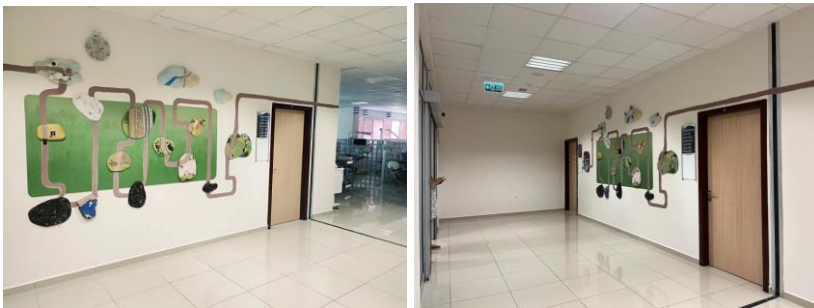

Figure 4: The painted and assembled, finished appearance of the 2D and 3D stages of the artistic application (Personal Archive, 2025).

The entire composition is structured around three fundamental layers related to nature: the underground, the Earth's surface, and the sky. Design decisions were made with the awareness that nature-based designs (colors,

materials, directional qualities) help create a calm, welcoming, and familiar atmosphere, making the hospital and healthcare facility feel more like home and less intimidating (Heikkila et al., 2024). In this context, each unit has been shaped to address the connotations of these layers in different ways, integrating a variety of narratives ranging from underwater atmospheres to snow and skiing themes, from day-night cycles to yellow fields and life cycles, and from lunar phases to imaginary worlds created with clouds (Figure 5).

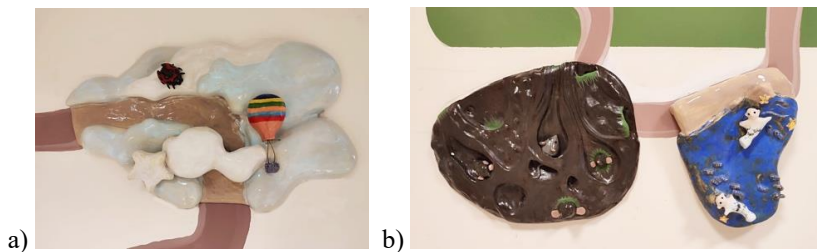a)   b)

Figure 5: a) ceramic piece depicting a story about flying in a balloon in the sky, b) The two ceramic pieces with an underground theme depict the life of moles on the left and underwater life on the right (Personal Archive, 2025).

Despite the diversity of narratives mentioned above, all units are treated as part of a holistic composition in terms of both content and form. Each design is created to convey a unique artistic language, as well as to relate to other units through texture, surface workmanship, color scheme, and formal transitions. The resulting structure spreads across the space as a multi-part art installation yet maintains its visual integrity to create a healing atmosphere. This approach prioritizes not only aesthetic but also conceptual unity; it layers the emotional experience within the interior space and reinforces a sense of spatial continuity.

In addition to aesthetic requirements, the project meets important technical requirements. The fact that the wall on which the artwork will be installed has a plasterboard surface has become a decisive factor in the design process. The limited load-bearing capacity of the gypsum board surface necessitates the investigation of ceramic clay types that can reduce the weight of the panel components. Additionally, detailed studies have been conducted on the installation methods of the panel components, alternative support systems, and solutions that can be secured without damaging the surface (Figure 6).

Figure 6: Photos of ceramic pieces being assembled with smart screws (Personal Archive, 2025).

These site-specific constraints guide not only technical decisions but also the aesthetic language; while the modular structure facilitates transportation, the composition creates a unified surface effect. Throughout this process, practical trials were conducted in collaboration with the research team, and the final application was implemented in a way that meets aesthetic, hygienic, and structural requirements.

1. Material Selection and Surface Application Approach in Ceramic Production

The research is based on an approach that transcends traditional methods based on quantitative data production, focusing on the art production process and prioritizing participatory and on-site decision-making. The integrity of the study is determined not only by the visual outcome of the design but also by the quality of the decision-making process, the trial processes, and the collaboratively developed implementation strategies. The resulting work is not merely a physical wall application; it also offers a unique example of how art can be present in health-conscious interior spaces. Produced in a clinical context, this artwork, whose implementation process is documented, serves as a guiding light for those working on therapeutic interior design applications in healthcare settings.

The panel is considered not only an aesthetic surface but also a tool for constructing a spatial narrative. Consequently, the work transforms into a healing practice where interior architectural design meets art. Positioning the artwork as an interface that communicates with the user and deepens the experience, rather than a non-functional decorative element within the space, stands out as a key outcome of the study.

Artistic ceramic applications integrated into the interior spaces of healthcare buildings require observing multilayered design criteria such as hygiene, durability, safety, and user experience support (Özgen and Çetinkaya Biçici, 2023). These criteria become even more crucial in clinics serving a pediatric user group. In this context, in the application carried out

at the Bolu Abant Izzet Baysal University Pedodontics Clinic, the surface's drywall was considered a key determining factor. The ceramic materials to be used in the application were carefully selected, considering the structural limitations of the wall surface and the spatial interaction of child users. To ensure a safe and long-lasting installation on sensitive surfaces such as drywall, material selections were based on technical parameters such as light weight, high mechanical resistance, hygienic surface quality, and low maintenance requirements.

In this regard, ceramic clays with high temperature resistance, low shrinkage rate, easy moldability, and suitability for thin-walled production have been preferred. The two different clays used have similar technical properties in terms of content but differ in terms of color pigments. The light-toned clay, which is used in high concentrations, offers advantages such as good plasticity, a smooth surface, and ease of shaping. The other clay, with its dark color and natural mineral additives, provides textural richness and enhances visual depth within the composition. Both materials are suitable for firing at temperatures between 1220–1240°C and, thanks to their low porosity, support indoor hygiene conditions by reducing the risk of dust accumulation and infection. These technical qualities contribute not only to aesthetic but also to functional artistic applications.

All these material choices are directly related to criteria such as not containing chemical components harmful to human health, having a cleanable surface texture, having a formal character that will not cause accidents, and having a surface texture that does not retain dust and dirt. In the selection of ceramic materials, technical strength and surface performance were considered in addition to aesthetic and formal qualities. The two different clays used, one light and one dark in tone, differ only in pigment; they have the same chemical composition. The chemical analysis of the light-colored clays used shows that they contain 74.6% silicon dioxide (SiO_2), 19,6% aluminum oxide (Al_2O_3), 2.4% potassium oxide (K_2O), and trace amounts of titanium dioxide (TiO_2), iron oxide (Fe_2O_3), calcium oxide (CaO), and magnesium oxide (MgO). These ratios indicate that the clay provides a suitable structure in terms of high-temperature resistance and surface stability.

The dark-toned ceramic clay used in material selection offers textural diversity on the surface with natural mineral additives and exhibits high durability properties. The pre-firing chemical analysis reveals a composition of 65.5% SiO_2, 21.5% Al_2O_3, and 8.9% Fe_2O_3, which supports both mechanical durability and aesthetic qualities. The pre-firing moisture content is 20%, and the shrinkage rate from wet to dry is 6.8%, values that enhance dimensional stability during the production process.

Both types of ceramic clay used in two different colors have a moisture content of 16.5% prior to firing. The material shrinks by 5.5% during the drying process and shrinks by an additional 3% after firing. This

provides a significant advantage in terms of dimensional stability, enabling the designed pieces to be produced in the specified dimensions. Additionally, the 5.5% water absorption rate supports both sufficient durability for indoor use and a surface texture suitable for glaze and paint applications.

It provides an ideal base for even surface coloring after biscuit firing. The special glazes preferred in the application have been selected from single-application products with a wide firing range of 950°C–1250°C, which enable coloring without the need for an additional glaze layer. This feature increases process control and supports application continuity and color stability. This glaze group is compatible with the conditions in healthcare facilities in terms of color stability and surface durability. Thanks to its ability to offer glossy opaque surface options, it provides both aesthetic diversity and spatial context compatibility, as well as avoiding the dust-attracting effect seen in matte surfaces. After the ceramic units were shaped, 1040°C was chosen for bisque firing and 1220°C for glaze firing (Figure 7). Some pieces were completed with a third firing at 750°C using luster, depending on the artist's preference.

Figure 7: Appearance of light and dark colored mud after baking biscuits (Personal Archive, 2025).

The materials selected for the ceramic allow for a hygienic and durable artistic application suitable for long-term use in healthcare facilities, with a surface quality that enables safe contact for child users. All these features make it possible to evaluate the application not only as an aesthetic but also as a functional and sustainable design output. The results of the research demonstrate the multifaceted contribution of this unique application, developed through interdisciplinary collaboration, to the indoor experience. In this context, the application process and the outcomes obtained provide important data on how art can become an integrative tool in healthcare indoor spaces designed for child users.

CONCLUSION

Artistic applications that enrich the user experience in healthcare facilities have been found to have multidimensional effects, particularly in interior designs that focus on child users. This study reveals how a ceramic-based art application aimed at transforming pediatric users' perceptions and emotional responses to the space can serve as a model in terms of both the design process and physical output. Developed through an interdisciplinary approach, this application simultaneously considers pedagogical sensitivities and aesthetic values; content has been created that triggers children's curiosity, supports their imagination, and increases their potential for socialization through themes.

The project aims to bring together ceramic art and interior architecture in an interdisciplinary collaboration, transforming a clinic wall into a surface that encourages children to use their imagination. Featuring seventeen original pieces inspired by nature, the world, and imaginary worlds, the application offers a narrative space that triggers the viewer's curiosity and activates childlike emotions, with themes ranging from underground, earth, and sky. This thematic diversity, which enables storytelling, adds an emotional layer to the spatial healing experience; it establishes a sensory connection between children's unlimited imagination and the spatial environment.

Throughout the design process, the aim was to create a warm, friendly, and reassuring atmosphere through interaction with child users; to this end, rounded edges, soft transitions, and sympathetic surface geometries were preferred. Formal choices were determined not only by aesthetic concerns but also by a strategy focused on the safety of child users. Surfaces free of sharp edges aim to reduce the potential risks of physical contact during time spent in the space, thereby increasing children's sense of trust in the environment. In addition to the formal decisions, the fact that the application is in Bolu Province, which is in an active seismic zone, directly influences technical decisions regarding the mounting system. In fixing the ceramic panels to the plasterboard surface, advanced fastening systems, special chemical silicones, and reinforced adhesive components such as marble paste were used, going beyond traditional methods. These technical measures were developed not to prevent the direct falling of parts but to address the risk of separation from the plasterboard surface in the event of potential vibrations. This application meets safety requirements while also supporting durability for long-term use.

A lengthy research process was conducted to select the ceramic material; domestic and imported clay types were evaluated comparatively. Ultimately, a shrinkage rate of approximately 3% was observed in the biscuit firing of the clay. It was found to be a material with a smooth surface, suitable surface properties for glazing, high strength, but with a high

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potential for cracking despite being dried thoroughly. During the production process, some pieces were re-produced due to cracks that occurred after firing, while others were repaired and re-evaluated. This experience demonstrates that material knowledge is critical not only for production but also for integration into the space. Despite comprehensive technical studies and trials on clay content, firing parameters, and the installation process for similar applications, there is a risk of encountering unexpected results.

In terms of teamwork within the project, participants advanced through participatory decision-making mechanisms, with many stages (from conceptual discussions to assembly) guided by mutual exchange of ideas within the team. The division of tasks within the team, particularly in production, preparation, and assembly processes, was directed toward team members who had previously been involved in similar applications, which increased work efficiency and accelerated the process. This situation highlights the importance of conducting similar applications with multi-actor structures.

As a result, it has been confirmed once again that art should be considered not only as a complementary element in interior design, but as a key component that focuses on the user. This project offers a practical model of how ceramic art can be incorporated into a space as an interactive and sensory element; it serves as a unique reference example for researchers and practitioners seeking to develop designs that can respond to the needs of healthcare personnel, patients' relatives, and especially child users in healthcare facilities.

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Examining Institutional Identity Through the Interior Design of Faculties

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ABSTRACT

Despite being perceived as a limited and new topic in the public consciousness, corporate identity is a concept with a long history that affects many areas today. The concept of corporate identity emerged during times of war as a way for armies to capture a sense of belonging, solidify their identity, and motivate their troops by expressing their power to the enemy in ways rooted in their origins. The industrial revolution, the globalization of trade, and the rapid development of technology have driven corporate identity into different areas, understandings, and audiences, broadening its perception in society. Going beyond just a shape or symbol, the concept of corporate identity has emerged as a fundamental factor in every area, such as cities, spaces, fashion, and social media. As in all areas of design, corporate identity is taken into consideration in the design process of all kinds of spaces serving different scales and purposes. We can see this in all areas of the private sector, as well as in all areas of public institutions. The integration of corporate identity with interior design has become a sought-after criterion in the design of educational structures, whether private or public. This study aims to examine the impact of corporate identity on contemporary interior design through examples of designs created for educational buildings, specifically faculties. Within the scope of this study, the interior spaces of three different faculties within the same university, which were designed during their physical improvement process, were analyzed spatially using descriptive techniques in the context of corporate identity, accompanied by three-dimensional visuals. The results of the spatial analysis based on visual elements reveal that corporate identity transcends elements such as text, shape, and form, evolving into a concept that establishes a connection with the space.

Keywords – Interior Design, Corporate Identity, Space, Spatial Perception, Design.

INTRODUCTION

People and space are constantly interacting with each other through the sensory elements contained within the space and how people perceive and express their environment. The cyclical relationship between the physical characteristics of spaces and the functional and emotional behaviors of life, regardless of scale, function, or similar factors, demonstrates that space is open to change and always provides new meanings to users (Aydınlı, 2008). Therefore, perception is one of the most fundamental elements in the relationship between humans and space.

Based on this fundamental factor, humans perceive and interpret space through their senses, relate it to other elements, and conceptualize it. While any object acquires meaning through the ability to distinguish data

obtained through the senses, space is perceived by users through all sensory messages. Perception, which is the beginning of the perception process, is the simplified result of the effects of the objective environment on the sensory organs. (Aslan et al., 2015; Erkan Yazıcı and Çakıcı Alp, 2017; Gezer, 2012).

Space constantly surrounds our existence and enables human actions to be carried out throughout its volume. Therefore, when space begins to be occupied, surrounded, shaped, and organized by clustered elements, it becomes integrated with the concept of architecture (Ching, 2002). Space manifests its effect through the creation of a special void within architecture that separates the user from natural life. With this feature, space distinguishes architecture from other construction activities (Kuban, 2018). In line with these definitions, humans first perceive their surroundings and then behave accordingly. This behavior becomes more efficient to the extent that the space can be perceived.

When we consider the arguments that corporate identity, based on perception and space, aims to differentiate itself from its mission through perceptual management and to be memorable, it becomes clear how important the factor of corporate identity is within spatial perception. Corporate identity creates a perspective similar to the act of making space unique and creating selectivity in perception by continuing awareness-raising actions to differentiate itself from other institutions with which it competes (Balmer and Gray, 2000).

The concept of corporate identity, which emerged with the aim of inspiring soldiers with their power, creating a source of motivation in armies during war, and serving as a display of power, has been reflected on the tools and equipment used through traditional and cultural symbols. This situation has been enriched over time with visual designs that have deepened in the graphic field, such as names, logos, and business cards, in commercial companies. Today, the concept of corporate identity has gone beyond the representation of graphic visuals. It has begun to be widely used in the interiors of all commercial, public, and social institutions. Today, the concept of corporate identity, which is not only a symbol of form but also of contemporary understanding, has begun to be used as a tool for creating awareness in all areas such as cities, spaces, fashion, and media (Noraslı, 2016).

In this study, which was conducted based on the influence of corporate identity in interior design, three different faculties within the scope of educational structures were designed according to the user requests, and the spatial analyses of the designs were made according to three-dimensional visuals to reveal the connection established with corporate identity. In this context, it becomes evident that the concept of corporate identity is an integral element of interior architecture and must be considered in interior design.

The Relationship Between Corporate Identity and Spatial Perception

Before establishing the relationship between corporate identity and spatial perception, it is necessary to define the interaction between space and perception, and then discuss the perceptual effect that identity-bearing spaces have on individuals based on the impact of corporate identity on space. The concept of space, which guides human perceptions through design elements, serves as the visual face of corporate identity, and even ranks among the most fundamental elements determining a person's standard of living, is defined by Hasol (2019) as "the void and emptiness that separates humans from their environment to a certain extent and provides them with the opportunity to carry out their actions." Therefore, the concept of space is of great importance from an architectural perspective. Zevi (1990) viewed space as "the leading actor of architecture" and defined architecture as "the art of creating space."

Since space is a concept that has been questioned and pondered by various disciplines throughout history, it has been approached by many scientific fields and theorists with different perspectives. However, when considering the relationship between architecture and space, Kuban (2018) emphasizes that architecture demonstrates its influence by creating a special void that separates the user from natural life, and that this special void, referred to as space, distinguishes architecture from other construction activities, thereby highlighting that the concept of space constitutes an integral value in architecture.

While the literature states that space is an integral value of architecture, Leland (2006) states that the pleasure derived from architecture is found in perception. Therefore, architecture, described as the art of creating space, finds meaning in the perception of individuals. Perception is the process of organizing sensory data to give meaning to objects or events in our environment (Siegel, 2006; Smith, 2002). Perception is part of many cognitive activities such as thinking, imagining, and relating, and varies according to the cognitive structure of the individual (Goldstein, 2010).

Human spatial movement occurs through the formation and evaluation of environmental stimuli in the mind. This formation is a process that involves the acquisition of information from the environment, its differentiation through integration with existing information, and its storage in the mind for future use (Garip, 2009). Perception establishes a connection between humans and their environment, enabling communication with space and giving rise to the concept of spatial perception. Spatial perception is a process related to the memory of space gained through experience within that space (Uysal, 2009).

All elements in the physical environment affect the user's perception with all the data that enters their field of vision. De Botton (2021) explains this effect as the unique qualities that enable an object to evoke positive or negative associations. In the perception of space, while there are cases where

the physical space affects perception, sometimes space and perception are interpreted independently of each other. The perception of space can vary depending on the individual's mental perception process. Accordingly, since the brain can perform many functions at once, when a person perceives space, space is conceptualized in the mind. (Holding, 1994; Regian and Yadrick, 1994; Wang et al., 2007). At this point, unique and identity-bearing spaces designed by professionals are more easily conceptualized by individuals and subsequently stored in memory, making them easier to recall.

Corporate identity, which shapes an organization's communication methods, philosophy, and visual elements, expresses the identity of institutions, businesses, and organizations. The increase in commercial, public, or social entities has led to a rise in similar organizations today. As a result, organizations that fail to understand the concept of corporate identity are not remembered by those who receive their services because they are similar (Süceddinov, 2008).

Information obtained about the concept of corporate identity shows that its emergence dates back to ancient times. Corporate identity emerged to inform the opposing army of its identity and demonstrate its strength. During the era of kingdoms, symbols used to be recognized by allies and to send visual messages to the opposing side emphasized the sense of identity and belonging of armies. Over time, countries created visual perceptions by sending their armies to war in military uniforms that reflected their cultural and social values. Thus, differences between institutions began to be visualized. Symbols, which were initially used to identify armies and distinguish them from those of other countries, began to be used in various fields with the development of transportation. The concept of institutional identity, which has been decisive since the beginning of history, has been applied to ships, passenger carriages, buses, and aircraft (Balta Peltekoğlu, 2022).

Corporate identity can be sustained through actions that create awareness to differentiate an organization from other organizations with which it competes (Balmer and Gray, 2000). Corporate identity is fulfilled when communication, which is the most essential tool for expressing the characteristic features of organizations, and how they express their unique aspects and remain in people's minds are taken into consideration. In line with this function, corporate identity can be seen as a set of understandings that enables an organization to be recognized and for people to define, remember, and describe the organization (Hepkon, 2023).

It would be reductive to describe corporate identity as a concept that is examined within the framework of communication, promotion, or visual elements. The elements that will carry the organization forward in the future must be considered as a whole and designed in accordance with corporate identity so that they can be noticed and remembered by the target audience

(Silsüpür and Erdinç, 2021). The elements of corporate identity are examined under four main headings: corporate philosophy, corporate communication, corporate behavior, and corporate design. Corporate design is examined under three headings: product design, communication design, and environmental design. Interior design, communication design, and environmental design are fundamental topics that are emphasized in the development of corporate identity (Yazıcıoğlu and Meral, 2011; Perry and Wisnom, 2003).

The globalization of the world, the increase in communication tools, and the effort to manage a successful process in every field have brought corporate identity to the forefront in public and private institutions as well as commercial enterprises. Educational institutions are another area where corporate identity has come to the forefront as a decisive factor in a country's development, as it provides prestige to the outside world (Pürlüsoy and Elibol, 2022). In this context, corporate identity studies are widely used in the interior spaces of educational institutions.

Examining Corporate Identity Through Examples of Faculty Interior Design

The fact that both society and education as a process place the individual at the center leads to the emergence of a complex interaction. In this interaction-based on mutual dependence, education brings to the fore the concept of a human and social model at both the macro and micro levels (Akyüz, 2018). Education is the sum of processes that develop an individual's abilities, attitudes, and other behaviors in a positive direction (Tezcan, 2017).

Today, educational institutions at all levels, from primary school to university, represent their institutions by demonstrating communication skills in line with their vision and mission values. One of the most concrete indicators of this institutional identity representation is interior design. Faculties in universities provide vocational education for different purposes. In this context, each faculty has an image that is nourished by its own scientific roots. The interior design seeks to visualize this image in a unique way in the spaces where it is located.

This study aims to explore corporate identity through interior design in different faculties and to concretize it with visuals. Within the scope of this study, interior designs were created for the Faculty of Science, Faculty of Agriculture, and Faculty of Law at Selçuk University with the aim of developing their institutional identities. The dimensions of the spaces selected by the faculty administrations were measured, and three-dimensional drawings were created considering their missions and visions.

Science Faculty Interior Design Example

Within the scope of corporate identity, the vision of the Faculty of Science is defined as "To be an education and training institution that trains scientists who are open to innovation, conducts original research, has international recognition, and utilizes science and technology in light of universal values to train qualified individuals for the future of our country by addressing national and international problems." Its mission is to "Adopt a scientific approach, take reason and science as its guide, produce knowledge and technologies in the field of basic sciences that will enable our country to understand contemporary science, its principles, and its functioning, possessing problem-solving methods, establishing connections between the aforementioned sciences and other areas of life, continuously changing and developing, and taking pride in being members of national and international environments, and who consider it their duty to contribute their experiences to our country and society."

Within the scope of the interior design of Selçuk University Faculty of Science, in line with the requests and discussions of the administrative unit, a corner for those who contributed, a photo shooting area, an announcement panel, a waiting niche, and a mini library in the student corridor have been planned. To ensure that the designs align with the institutional identity, a conceptual study was developed by leveraging the elements of technology, contemporary science, and openness to change and development mentioned in the vision and mission statements, and three-dimensional drawings were created.

The design of the corner dedicated to those who contributed to the Faculty of Science, as shown in Figure 1, aims to express the faculty's long-standing history through corporate design. In this context, the chronology and photographs of the administrators who have served as deans since the faculty's establishment have been included. In addition, the year of establishment and logo of Selçuk University have been indicated on the wall surface. A seating unit has been placed in this area, and the faculty's vision and mission have been written on the vertical surface at the back. Thus, with the design decisions taken, the faculty's deep-rooted history has been emphasized, it has been expressed that the faculty acts in line with its vision and mission, and it has been presented with visual elements that adopt an innovative approach to education through the use of simple and straight lines.

In addition, the photo shoot area has been defined by including Atatürk's mask, the national anthem, the address to the youth, the flag, the logo, and the names of the university and faculty. Considering the standing photos, the mask and writings in the background have been placed higher up to ensure visibility. Linear lines, gray and white surfaces emphasize the innovative approach in terms of materials, while gold vertical surface strips highlight the institution's tradition.

Figure 1: Faculty of Science Corner for Contributors and Photo Display Area

As shown in Figure 2, a notice board and a waiting area for students have been created. A partition has been installed to close the toilet doors, which face directly into the corridor. Metal mesh surfaces have been used as notice boards to give the partition additional functionality. This allows users to keep track of current events. Additionally, a seating niche has been designed on the currently unused wall surface in the student corridor. By incorporating the logo into the background, a surface representing the institutional identity has been created where students can take photos while sitting.

Figure 2: Faculty of Science Notice Board and Waiting Area

As shown in Figure 3, the corridor used by students has been designed as a library. In this empty space, a shelving system has been set up for students to use books donated by faculty members from their archives that are specific to their fields of science. This system is classified by numbers on the front so that each department can identify its own area. Numbers have been placed on the column surfaces to define the layout of the space clearly. Trending books and journals throughout the year, as well as resources recommended by students and faculty members, are also made available for use through a shelving system applied to the wall surfaces. Additionally, a study console has been designed to allow students to study for midterm and final exams, complete short-term assignments, or review the resources they have obtained while enjoying a view of the surroundings. This design has

been integrated into the corridor to enhance the overall functionality of the space.

Figure 3: Faculty of Science Student Corridor Library

Thus, the descriptions of the vision and mission that focus on science in corporate identity criteria, facilitate access to information at every opportunity, and encourage research have been incorporated into the faculty's student corridor through the functionally designed library. Designed with a minimal, clear, understandable, and detail-free selection of materials and colors, the library has been completed with a unique design approach that distances it from chaos.

Agricultural Faculty Interior Design Example

Within the scope of corporate identity, the vision of the Faculty of Agriculture is to "closely follow changes and innovations around the world and work diligently to bring them to the region and the country's agriculture. The academic staff's knowledge and experience are sufficient to solve any problem the country may face. In this context, the faculty produces grain, vegetable seeds, and all kinds of seedlings and saplings that the country needs, and also offers solutions to overcome the challenges faced in alternative livestock breeding systems and animal nutrition." Its mission is to be an educational institution that considers it its duty to train agricultural engineers who are fully equipped with national and spiritual values, who prioritize the interests of the country over their own interests. Additionally, it has made it its responsibility to conduct research, development, and transfer the knowledge and experience it has gained to enhance the well-being of farmers and producers in the region where it is located. It has made it its ideal to demonstrate every kind of sacrifice related to its field of activity and

to cooperate with every institution and organization operating in the agricultural sector in order to achieve the ultimate goal of a strong and prosperous Turkey."

Within the scope of the interior design of Selçuk University's Faculty of Agriculture, a waiting area, a memorial corner, a mini amphitheater, and work areas have been planned by the requests and discussions of the administrative unit. In order for the designs to be in line with the corporate identity, a concept was developed and three-dimensional drawings were made by utilizing the vision and mission statements, such as contributing to the country's agriculture, developing animal husbandry, and supporting production needs.

The images were created by examining the vision and mission statements of the Faculty of Agriculture in line with its corporate identity. As shown in Figure 4, a waiting area has been designed. Based on the goal of contributing to the country's agricultural production mentioned in the vision and mission, three tables have been placed behind the waiting area to highlight agricultural visuals. In addition, plants have been placed on the right and left sides of the seating area to reinforce the identity of the faculty. Furthermore, a memorial corner has been created to display photographs of past administrators. This photo corner is highlighted with regional lighting, and green color has been used on the wall surface to symbolize agriculture and nature. Thus, a design concept aligned with the institution's identity has been achieved through the use of color, lighting, texture.

Figure 4: Faculty of Agriculture Waiting Area and Memorial Corner

As shown in Figure 5, an amphitheater has been designed to both add functionality and gain active space in the wide open corridor areas, where students can chat, read, and hold mini seminars and discussions. In this design, wooden materials have been used in line with the identity statement of the Faculty of Agriculture to provide a warm and natural environment. Additionally, a workspace has been created for students to conduct their studies. This area has been designed to offer a view of the surroundings, with a work console positioned at window level.

Figure 5: Faculty of Agriculture Amphitheater and Work Area

Thus, areas have been created to enable students with the necessary skills to work more comfortably and socialize in shared spaces, with the aim of contributing to the country's agriculture, maximizing the production of agricultural and animal products, and meeting corporate identity criteria. In this context, an interior design project that is in line with the faculty's corporate identity has been completed, taking into account the materials, colors, and lighting used, as well as functional and formal decisions.

Law Faculty Interior Design Example
Within the scope of corporate identity, the vision, mission, and goals of the Faculty of Law are as follows: "Our institution's mission is to educate new generations who are committed to the fundamental values of the Republic of Turkey as a social state governed by the rule of law, who possess a high sense of justice, and who will contribute to the legal culture of our country. As a faculty that encourages its students to develop in a multifaceted manner, the theoretical knowledge taught is supported by practical work and, accordingly, is carried out with broad participation in the mock courtroom located within the institution. We believe that our faculty, with its strong academic staff and strong educational symbol, can look to the future with greater confidence."

Within the scope of the interior design of Selçuk University Faculty of Law, an administrative corridor, a photo corner, and a waiting area have been planned by the requests and discussions of the administrative unit. In order for the designs to be in line with the institutional identity, a concept study was developed and three-dimensional drawings were made by referring to the vision and mission statements, which include laws, regulations, and legal concepts, and by utilizing the statements made by the faculty members regarding their goals and principles, which refer to the fact that many well-equipped students work in high-level positions.

The images were created by examining the statements of the Law Faculty's vision and mission in line with its corporate identity. The administrative corridor area was designed as shown in Figure 6. Since the faculty has a characteristic architectural structure, the interior design was planned with an integrated design approach without making any drastic

changes. In this direction, minimalist paintings were placed on the walls of the administrative corridor, featuring the visual images and mottos of people who have made significant contributions to law. Thus, a design approach appropriate to the identity of the faculty was emphasized. In addition, spotlights were used to highlight the images hung on the walls. The entrance was made more prominent with wooden materials. Thus, the importance and status of the entrances were emphasized. The interior architecture improvement project was completed without interfering with the remaining ceiling, wall, and floor surfaces of the space, thus preserving the integrated design of the building. Several design elements, material selections, and lighting options that are compatible with the existing materials of the building and represent the identity of the institution were incorporated into project.

Figure 6: Law Faculty Administrative Corridor Area

As indicated in Figure 7, a photo corner and waiting areas have been included in line with the faculty's vision, mission, and objectives. In this context, a photo backdrop reflecting the institution's image has been designed, considering photos that can be taken with guests, graduates, or active students representing the institution. This backdrop was designed with linear forms to represent seriousness and legality, surface lighting was provided, and masks and writings were placed considering anthropometric scale. In addition, the national and institutional flags were used to emphasize the institutional theme of the space. On the other hand, the empty space in the same area was evaluated and a waiting unit was placed according to the needs. In this area as well, a minimalist design approach has been adopted, ensuring that the color, lighting, and texture elements harmonize with the integrated atmosphere of the space. Two waiting areas have been placed on either side of the space, with delicate-leaved plants positioned next to the windows. Two paintings featuring visual elements appropriate for a law faculty and supporting the institutional identity have been added to the window sides.

Figure 7: Faculty of Law Photography Area and Waiting Area

Thus, messages that are consistent with corporate identity criteria, compliant with laws and regulations, based on the state and the nation, informed by past experience, and illuminating the future through the faculty's vision, mission, and values have been transformed into a visual element through the interior design of the law faculty. In this context, an interior design project for the faculty that aligns with its corporate identity has been completed, incorporating functional and formal decisions alongside the selection of materials, colors, and lighting options.

RESULTS AND DISCUSSION

Space is one of the most important criteria in human life. In the past, space was used to meet the need for shelter, but today it is used for different purposes and as a fundamental element in emphasizing identity. Therefore, it has become one of the most basic design methods used to highlight the identity of institutions.

Corporate identity is a perception management system with a long history, even though it is perceived as a contemporary issue. Although it used to consist only of elements such as shapes, symbols, and pictograms, corporate identity has now become integrated with the concept of space through corporate design. It has become one of the most important design criteria in the design of spaces.

Thus, regardless of the field in which they operate, organizations have begun to emphasize their awareness and memorability through spatial design. As in every field, corporate identity has become a criterion to be considered in the field of education. The activities, vision, mission, goals, and unique features of educational institutions are established under corporate identity and emphasized through spatial design.

In this way, people who will receive education, staff, or people who know the institution recognize the institution with the identity it has created and internalize it through spatial experiences and perception channels.

With this study, the spatial analysis of interior designs was carried out in the context of corporate identity by considering the visions and missions of three different faculties located in the same university.

In this context, the Faculty of Science has been emphasized with spatial designs that reflect a dynamic, analytical, research-oriented, and well-established university. In the Faculty of Agriculture, designs that highlight the vision and mission of being productive, nature-friendly, and contributing to the country's income have been created within the context of corporate identity.

In the designed Law Faculty, a design was realized that conveys a message by laws, regulations, and legal rules, is nourished by past successes, and highlights criteria aimed at future successes.

As a result, the project process should be completed with the goal of forming an identity in the designed spaces. In this context, concept research plays an important role in interior design. Spaces designed in line with corporate identity goals remain in the memory of users and create awareness. Thus, users are enlightened in line with the identity, their motivation increases, their sense of belonging grows, and the institution's recognition is ensured for many years to come. For this reason, it is recommended that the design process be initiated by considering identity, regardless of function, scale, or location, in interior design.

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Functionality and Aesthetic Balance in Residential Spaces: An Application Based Evaluation

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ABSTRACT

Housing is one of the most basic needs of individuals, and throughout history, housing types have evolved based on various factors, resulting in the emergence of today's residential structures, which consist of living spaces, common areas, and facilities designed for comfort and functionality. In addition to meeting personal needs, ensuring functionality is crucial in residential spaces where individuals carry out their daily lives. The user group personalizes the spaces accordingly and uses them more efficiently. Another factor that balances functionality in this process is aesthetics. From the design of the housing to the end of the implementation process, the designer, user, and implementers carry out the project in line with these criteria. In this context, the aim of the research is to evaluate the effect of the relationship between functionality and aesthetics in housing spaces on the design and implementation processes. First, the design of a residential project in Yalova, built for a group of three users, was carried out. Autocad, 3dsMax, and Photohop applications were used in this process. Subsequently, the final designs reached through mutual discussions were followed in the implementation process and delivered to the residential user group. The research demonstrates that functional and aesthetic balance can be achieved through spatial composition, furnishing, and spatial components. The study reflects the mutual interaction between design and implementation processes, offering a concrete contribution to the harmony between theory and practice in interior architecture.

Keywords – Residential Design, Interior Design, Functionality, Aesthetics, Space.

INTRODUCTION

Individuals' ability to sustain their lives within their natural and artificial environments necessitates the provision of shelter. According to Maslow's hierarchy of needs, shelter, which occupies the lowest rung of the hierarchy, refers to the provision of protection and security within a specific environment (Golirad, 2022:4; Karagülle, 2024:35). Throughout history, humanity's desire to separate itself from the natural environment and live under better conditions gave rise to the idea of architectural formation (Arcan and Evci, 1999:64). Shelter conditions, which originated in caves, evolved in tandem with changing socio-economic conditions, and shelters built with various materials, both temporary and permanent, began to be used. Following the Industrial Revolution, after the 19th century, political and artistic developments influenced the structure of housing, which broke away from its historical process and was reorganized to adapt to current conditions (Arcan and Evci, 1999:64; Golirad, 2022:4; Lang, vd., 1974:53).

Today, housing production continues to evolve in line with current changes and technological capabilities. However, factors such as user identity, cultural structure, economy, and topography play a significant role in the specialization of spaces, and each civilization forms its housing form in terms of spatial relationships (Makinde, 2014:205).

Housing is a physical space that allows individuals to interact with environmental elements such as sunlight and air in accordance with their relationship with the natural environment, while also providing protection against the harmful effects of nature and the built environment (Arcan & Evci, 1999:64). This internal-external relationship is explained by Bachelard in terms of cosmic similarity, and the home is described as our first universe, our cosmos (Bachelard, 2018:34). Individuals create their own safe space in relation to their environment and develop a sense of belonging to this space. Thus, by continuing their actions in this space, they meet their vital needs and find their place in the socio-cultural environment (Edney, 1976:33; Üstün, 2000:5). In line with all these relationships, Lawrance defines the home as "a place with individual and social functions; a place to escape from society and seek refuge, a sign of the individual's position and respect within society" (Lawrance, 1987:13). In this sense, space goes beyond being a geometric form or physical environment and becomes a concept/atmosphere with sensory and psychological qualities for its users (Dikeç, 2013:6). Individuals create the safe environment they need through the designs of the space, thereby establishing a sense of belonging to the space; through the design language of the space, they also convey information about their identity to the social environment in which they find themselves.

The aspect of a space that opens up to the outside through individuals is described as a social reflection. Rapoport refers to this as a cultural indicator, while Gibler and Lee consider it an element that reflects both socio-cultural values and economic conditions (Gibler and Lee, 2005:90; Rapoport, 1969:46). However, this relationship is bidirectional, influencing each other through social developments and the culture experienced (Taşçıoğlu, 2020:30). In this context, housing also evolves and transforms, continuing its existence within an organic relationship.

Actions in the home, which are considered an indicator of the relationship between users and society, take place within the space. At this point, the design of spaces is once again determined by user needs. The design of spaces involves the creation and organization of spatial structures, as well as the design of elements according to specific needs (Ching, 2008:25). During the design process, the orientation of spaces is determined according to functionality, while boundaries are organized, aesthetic criteria are met, and a suitable living environment is provided for users. All these inputs transform the concept of space into a complex phenomenon encompassing both tangible and intangible values (İzgi, 1999:91). The

necessity of resolving this complex process through a systematic set of methods has given rise to the discipline of interior architecture.

The first step in interior design is to thoroughly understand and analyze the individual who will be using the space. The anthropometric conditions of individuals and the actions they will perform in a residence determine the functions within the residence, thereby establishing the framework for the design (Seçer, 2006:44; Uzun, 2006:7). The spatial dimensions required by the action, its relationship with other spaces, and the quality of spatial elements are determined based on these criteria. Residential spaces are categorized into three main sections based on their usage patterns and daily functions. These are the living area, common areas, and sleeping areas (Arcan and Evci, 1999:14). Spaces such as the living room, sitting room, and kitchen are considered more general areas where outward-oriented activities typically occur. Spaces such as bedrooms, children's rooms, or guest rooms are located further away from the living areas due to the need for privacy. Common areas are transition units that connect spaces, such as entrances or halls. Additionally, areas such as bathrooms, toilets, and storage rooms are also included in this category (Figure 1).

LIVING AREA	COMMON AREAS	SLEEPING AREA
Open, general-purpose spaces	Intermediate spaces and service areas connecting sections or spaces	Private spaces closed to the public
● Sitting ● Rest ● Work ● Hobbies and leisure activities ● Eating ● Food preparation activities	● Cleaning ● Maintenance ● Toilet ● Disposal	● Sleep ● Rest

Figure 1: Housing areas and actions, Source:(Arcan and Evci, 1999:14), reorganized by the author.

Following the spatial layout formed by the functional areas in the residence, the furniture layout is determined. User preferences, socioeconomic status, and cultural background influence the selection of furniture. The necessary furniture is added to the space design by its functional characteristics. The implementation of the design process is a multidimensional process that requires the coordination of different tasks within the discipline of interior architecture. In this context, the study aims to evaluate the balance between functionality and aesthetics in residential spaces, examining their impact on the design and implementation processes. In this study, elements such as user needs, spatial organization, material selection, ergonomics, and visual integrity will be examined through an applied example to see how they are reflected in residential design. The

relationship between theoretical knowledge and the practical design process will be explored through a residential project conducted in Yalova.

The objectives of the study are:

• To define and relate the concepts of functionality and aesthetics in housing design at a theoretical level,

• To discuss how these two concepts complement each other and/or sometimes conflict through an application example,

• To explain the functional and aesthetic reasons behind the design decisions in a residential project carried out in Yalova,

• To show how elements such as spatial organization, furniture placement, material, and colour use are addressed in terms of the functional-aesthetic balance,

• To reveal how the application process in the field of interior architecture is integrated with theoretical knowledge using concrete data,

• To develop guidelines for interior architects and designers who carry out similar design processes based on the findings obtained.

Within the scope of the study, the theoretical framework will first be presented, and the concepts of functionality and aesthetics in residential design will be discussed. Subsequently, information about the research area and user group will be provided, and the design and implementation processes, as well as the factors influencing this process, will be presented. Based on the findings obtained, it is expected that a relationship between theory and practice will be established, and that the study will have a guiding effect on professional orientations.

Functionality and Aesthetics in Residential Design

The design of spaces and the evaluation of designs have been one of the tasks of architects for centuries. Vitruvius, who lived in the 1st century BC, was one of these architects. According to Vitruvius, the criteria for evaluation are functionality, beauty, and durability (Vitrivius, 2023:36). Arcan and Evci updated these criteria according to the conditions of their time and expressed them as aesthetics, functionality, and technology (Arcan and Evci, 1999: 15). The common conditions in both studies are seen as aesthetics through functionality and beauty. In this context, the study will examine space design within the framework of aesthetics and functionality.

According to Hasol, function is defined as suitability for purpose in terms of use or operation, or as a type of action related to a specific purpose. Functional is explained as "suitable for this purpose in terms of use or operation" (Hasol, 1979: 226-227). Within the discipline of architecture, function encompasses the concepts of purpose, necessity, and suitability, and designs are made functional within this relationship (Arcan and Evci, 1999:15). At the level of interior architecture, functionality is generally accepted as the primary criterion for evaluating design. The ability of individuals to comfortably perform their actions within a space and fulfill

their tasks is a result of this functionality (Ching, 2008:53). Functional spaces increase the duration of space use by meeting the physical, social, and psychological needs of users.

Space design begins with identifying the requirements of the relevant action. Spatial requirements, user profiles, physical boundaries of the space, and fixed and movable furnishings are other factors involved in the process. At this stage, the arrangements must align with the action defined at the beginning of the design. According to Uzun, the functional requirements of a space are: grouping furnishings according to function, organizing dimensions and distances, ensuring privacy, providing flexibility, and ensuring appropriate technical infrastructure (Uzun, 2006:74). In residential design, these requirements are customized according to sections and, in some cases, are solved together. For example, spaces in the living area may include actions that are interrelated in terms of function. The combined design of the living room and kitchen, the design of a dining area within the kitchen, or the design of optional different actions within the living room are examples of this. However, each space must still be designed in a balanced way to allow for circulation and action. Inadequate circulation negatively impacts the functionality of a residence. The sense of spaciousness within a space is also a crucial factor in enabling the desired functionality to be achieved. In achieving this effect, spatial dimensions, the number of furnishings, the spaces between furnishings, the use of light colors on walls and ceilings, and the use of plain or minimally patterned materials for flooring and fixtures are considered important (Uzun, 2006:82-83). The grouping of furnishings according to activities in the space and the creation of focal points are another dimension of functionality in residential design. Designs implemented in light of all this data will enable residential spaces to respond more functionally to individuals' living needs.

Another important criterion in residential design is what Vitruvius referred to as beauty, which is now generally understood as aesthetics. According to Hasol, the concept of aesthetics is related to the sense of beauty (Hasol, 1979:162). Aydınlı explains this emotional response as a science gained through perceptions, referring to Baumgarten's book "Aesthetica" (Aydınlı, 1993:330). Thus, he emphasizes the mutual relationship between the object and the individual in the phenomenon of aesthetics. Individuals' values also play a role in the transformation of aesthetic perception. The physical environment and spatial boundaries experienced are interpreted by the individual's values, and the act of finding beauty occurs.

The relationship between aesthetics and architecture has always existed throughout history. Individuals have fulfilled their structural needs for action through a balance between functionality and aesthetic quality (Temiz, 2009:66). Under current conditions, this relationship has renewed itself, giving rise to different aesthetic orientations. In this context, the user's

aesthetic perceptions influence the design of a space, while the designer's orientations also play a decisive role; together, these factors guide the design, along with the current aesthetic values of society (Kaymakçı and Aytar Sever, 2025: 191). The same effect has continued in residential design. It is known that different aesthetic perceptions have emerged in response to historical processes and cultural values, and even interior styles have evolved. However, there are also general aesthetic requirements that influence every residential design. Appropriate use of scale, visual groupings, form-ground relationships, composition principles, orientation toward nature or a focal point, and harmony of form, color, and material are among these requirements (Uzun, 2006:83). Thus, the customizable aspect of aesthetic perception in residential design is limited to the extent that it provides the basic aesthetic requirements of design within a general framework. While considering user perception in spaces that move from the general to the specific, the designer also ensures the aesthetic value of the space within these conditions.

Functionality and aesthetics are accepted as evaluation criteria in the literature, but they are also complementary elements in the design process. Functionality provides livable spaces by the planned activities and needs of the user group, while aesthetics ensures that these spaces are perceived as pleasing and beautiful in terms of all their elements. In well-designed residential buildings, a balanced relationship between these two elements is expected.

Method and Materials

The research focuses on the relationship between functionality and aesthetics in interior spaces, aiming to evaluate this balance through design and implementation processes. In this context, the design planning process stages have been adopted as the methodology for the study. Ching explains the design process in general terms as analysis, synthesis, and evaluation (Ching, 2008:48). Arcan and Evci, who examine this in more detail, identify five stages, ranging from planning to implementation (Arcan & Evci, 1999:49) (Figure 2). These stages also served as the basis for the research method, and the study was developed accordingly.
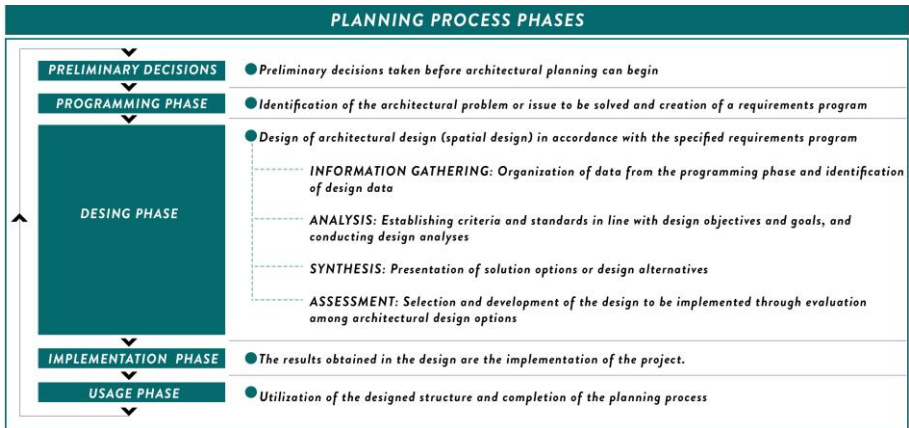
Figure 2: Planning Process Stages, Source: (Arcan and Evci, 1999:49), reorganized by the author

The work began with preliminary decisions. The spaces to be designed in the residence were determined, and their physical conditions were checked. Subsequently, meetings were held with the user group, and a program was prepared in line with their expectations and needs. During the design phase, the information obtained was organized, and two- and three-dimensional drawings were created by the established program. A series of meetings were held with the users. In the final evaluation, the selected design was finalized, and the implementation phase commenced. In this phase, the necessary checks were performed to ensure that the selected designs could be correctly implemented on-site. Finally, the users began using the space, and the space was documented to confirm its compatibility with the design phase.

Two-dimensional drawings were created using AutoCAD software. Three-dimensional visualizations were created using 3ds Max software and rendered in Corona. Photoshop software was also used as an auxiliary tool.

The subject of the study is a residential building located in Kadıköy Mahallesi, Yalova Province, consisting of three floors—basement, ground floor, and first floor—with a total area of 411 m². The project was initiated in June 2022 by the user group for residential purposes, entering the interior design and implementation phase. The residence is designed for a male naval engineer, a female academic, and a young boy in middle school. The spaces included in the design and implementation are the kitchen, living room, hallways, master bedroom, and three bathrooms. The users did not wish for spaces such as the guest room and the second children's room, which were not initially planned for use, to be included in the implementation process. However, it was decided to continue using the existing spaces in the children's room and laundry room. The research, design, and implementation

process will be carried out on the spaces where the process has been completed. In this context, the relevant spaces are shown in Figure 3.
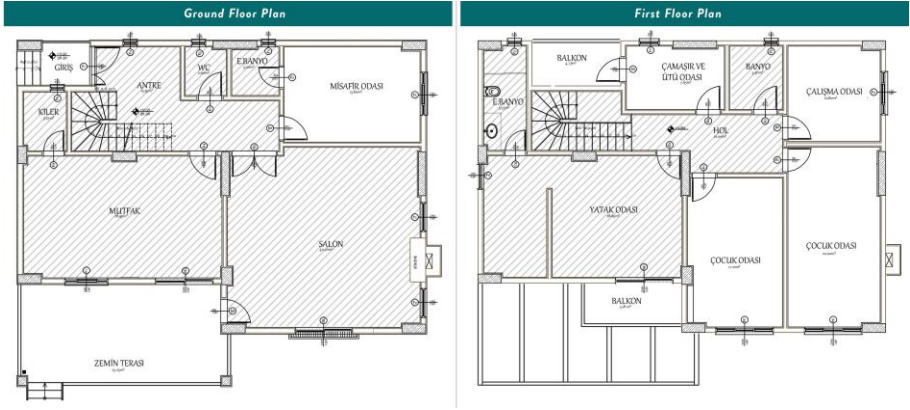
Figure 3: Spaces involved in the design and implementation process

As shown in the figure, all necessary spaces have been designed in the residential area, including the living area with the living room and kitchen, the sleeping area with the bedroom, and the common areas with the hallways and bathrooms.

Residential Interior Design Process

The first step in the residential design process was to create functionally appropriate layouts with different alternatives. The final plans reached through mutual discussions are presented in Figure 4.
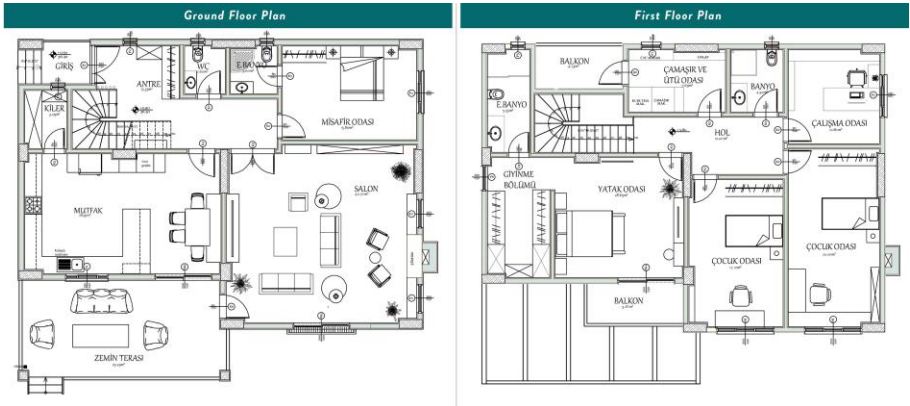
Figure 4: Furnished floor plans

In the residence, the design of the living areas was carried out first. The users wanted the functions of food preparation and eating to be

combined. In addition, they requested that the food preparation counter be long and that a coffee corner be created at the intersection with the dining area. Accordingly, the food preparation area was designed to be large. The dining function has been resolved between the entrance to the space and the exit to the terrace. Thus, the counter serves as a divider between functions, while its appropriate height does not create any restrictions in the space and supports the aesthetic appearance (Figure 5). A ceramic material with light-dark transitions in a 60x120 dimension has been chosen for the floor of the space. Furniture is primarily finished in RAL 9003. Oak-veneered MDF has been used in specific details to add warmth to the space.

Figure 5: Kitchen renderings

The living room design was carried out following the kitchen space. Two focal points were created in the living room. The first focal point is where the television is located. The second focal point is the fireplace. The action area, designed with a triple seating group and coffee tables, was placed in front of the television to accommodate more people. A more private seating area was planned around the fireplace and designed as a relaxation area. Thus, two different seating functions have been placed in opposite directions in the space. The wall where the fireplace is located has been painted dark gray to emphasize it. At the same time, a large bookcase has been designed for the wall where the room's door is located and is planned to be used functionally as a reading corner for the fireplace seating area. The use of wood balances the monochromatic effect created by the furniture and wall choices. The floor features herringbone oak-look ceramic tiles, while the TV backdrop and bookcase doors are finished with oak wood panels (Figure 6).

Figure 6: Living room renderings

The simple design language defined in the living areas has been carried over into the entrance halls, which are common spaces. On the ground floor, the entrance area has been divided into a reception area and a storage area. Two-way storage has been designed according to user needs. Dark gray has been chosen for the cabinet bodies. The material for the doors was chosen to be oak wood, creating a warm atmosphere at the entrance. The stairs leading down to the basement from under the staircase are concealed within the wooden design, accessed through a hidden door. While a light-to-dark gray transition ceramic material was preferred for the floor, a dark gray color was selected for the doors to create a contrast (Figure 7).

Figure 7: Entrence/Hall renderings

There are three bathrooms and one toilet in the common areas of the residence. Three of these, excluding the guest room, have been designed and implemented. The toilet on the entrance floor is for the use of guests, and light colors have been preferred in this space. Since there is no shower in this space, moisture formation will not be observed, and the wall tiles have been finished at a height of 150 cm. The floor is also covered with 60x60 cm ceramic tiles in similar tones. A similar approach has been adopted in the main bathroom and the master bathroom. The small colored ceramic tiles used in the shower cabin have been continued on the upper part of the adjacent wall surface. This separates the washing and cleaning functions while maintaining aesthetic unity. Additionally, the ceramic tiles used on the floor are also used on the other half of the wall, creating a sense of

continuity throughout the space. In all three spaces, oak wood paneling has been chosen for the bathroom cabinets (Figure 8).

Figure 8: Renderings of toilets and bathrooms

Only the master bedroom has been designed and implemented within the sleeping area of the residence. The sleeping and dressing functions have been separated by a wall, with the sleeping area addressed first. The dressing area has then been designed to align with the master bathroom. In the sleeping area, the wall where the headboard is located has been designated as the focal point and painted in Ral 8025. Linear lighting on the wall enhances the aesthetic appearance. In the dressing area, light-colored cabinet doors were chosen to create a bright space. To enhance the warm appearance throughout the space, ceramic tiles with a parquet appearance were used (Figure 9).

Figure 9: Bedroom renderings

The residential design process addressed in this study is based on a holistic approach that balances functional decisions prioritizing user needs with aesthetic preferences. Functionality has been prioritized in the layout of living spaces; common areas such as the kitchen, living room, and entrance hall have been designed according to user requirements. However, these

functional solutions are not limited to spatial organization; they also aim to achieve aesthetic harmony through the selection of materials, colors, and textures. For example, in the kitchen, the countertop's dividing function maintains spatial openness depending on its height, while details such as the coffee corner enrich the aesthetic experience. In the living room, the placement of various functional focal points, such as the fireplace and television, considers both user behavior and visual perception. The use of monochromatic tones balanced with wood throughout the spaces aims to create both visual simplicity and a sense of warmth. In this context, the residential design process embodies a user-centered and holistic approach to interior design, placing equal emphasis on aesthetics and functionality.

Residential Interior Application Process

The construction process in the residential building began with the construction of walls according to the measurements drawn in the project. Subsequently, electrical installations were laid through the walls and prepared for plastering. Before plastering, plumbing installations were carried out on both the walls and floors of the rooms. First, clean and wastewater plumbing systems were installed, followed by the necessary infrastructure for underfloor heating (Figure 10). Following these steps, rough plaster was applied in wet areas, and plasterboard was installed in other rooms.

Figure 10: Wall and floor applications

After completing the specified stages, the spaces were prepared for plastering, and plaster was applied to the entire residence to prepare the necessary infrastructure for floor tiling. At this point, wall tiles were first laid in wet areas. In the bathrooms, the design process initially planned for colored ceramic tiles to be applied horizontally. However, during installation, it was decided that placing them vertically along an axis would create a more aesthetically pleasing appearance, so the tiles were laid in this manner. Following the wall tiles, floor tiles were installed throughout the entire residence, and the ceramic tile work was completed (Figure 11).

Figure 11: Ceramic Applications

At this stage of the application, the exterior doors and windows of the structure have been installed. A hidden shutter system has been chosen for the windows to enhance ease of use and aesthetic appeal. Then, the fireplace has been manufactured. A U-shaped fireplace has been used to enhance the effect of the fireplace in the space. Thus, in addition to its heating function, an aesthetic appearance that will affect the atmosphere of the space has been aimed for (Figure 12).

Figure 12: Door and window installation

After completing the applications on the surfaces of the space, we moved on to furniture manufacturing. Kitchen cabinets, bathroom cabinets, and interior doors were produced in the workshops, transported to the site, and installed on-site. After installing the furniture frames in the kitchen cabinets, the countertop installation was carried out. The material used for the countertop and countertop surface was chosen in a darker shade to enhance contrast during installation. Similarly, the stair treads, which were initially planned to be ceramic, were implemented in wood during installation to create a sense of warmth in the circulation area (Figure 13).

Figure 13: Furniture manufacturing

After the furniture manufacturing in the residence, the final coat of paint was applied to the walls. Light-colored paint was chosen for the walls to enhance the spacious atmosphere of the rooms. Following the painting work, lighting fixtures were installed, and the outlets and switches were mounted. Finally, general checks were performed, and the residence was handed over to the residents (Figure 14-15).

Figure 14: Living and sleeping areas

Figure 15: Common areas

During the implementation of the interior design project in the residence, design decisions were largely preserved, and the designs created at the beginning of the process were adhered to. However, during the implementation phase, some changes were made because of decisions made jointly with the customer based on aesthetic concerns. These developments confirm that the design and implementation processes in interior architecture

are dynamic, and that functional and aesthetic considerations influence residential design from the initial decisions through to the final implementation.

RESULTS AND DISCUSSION

Housing is recognized as one of the most basic human needs and has evolved in response to various factors. In housing design, environmental factors and user profiles are important considerations. Socioeconomic status, cultural level, and social status influence how individuals shape their living spaces. However, the primary purpose of housing is to provide functional spaces that meet basic living needs. As Arcan and Evci mention, housing spaces are divided into three areas: living, sleeping, and common spaces (Arcan & Evci, 1999:14). The relationship between these areas and the design of the spaces is the first factor that affects functionality. Additionally, the aesthetic value of the space has always been important to users throughout history. These two elements, which are among Vitruvius' evaluation criteria, formed the framework of the research. In this direction, the aim of the research was to evaluate the balance between functionality and aesthetics in residential spaces through design and application processes.

The research offers a comprehensive understanding of the unity between function and aesthetics in residential design, as revealed in its findings. In the design phase of the sample residence, basic functions were first determined and spatial needs were identified. In addition, efforts were made to support this functionality in the selection of furnishings and materials. In order to contribute to the aesthetic value of the space, the sensory and psychological preferences of users were taken into account, and care was taken to create a warm atmosphere in the space in line with their requests.

While different functions are spatially separated in living areas, sharp boundaries have not been created to allow for flexible use. With this approach, the spaces are designed to respond to the different needs that may arise in users' daily lives. A similar approach has been continued in the selection of materials and colors in the space. Gray tones are used in spaces designated for specific functions, while wood and other materials are employed to highlight key focal points or functions.

Space design and implementation are sequential processes, and it has been observed that some decisions change or are revised during this process. These developments support the flexible and dynamic nature of the process. Care has been taken to discuss new conditions arising on site with users and

relevant practitioners in order to make the most appropriate decisions. Thus, the functionality of the residence has been maintained at all times to ensure its use for many years to come.

In conclusion, the research demonstrates that a functional and aesthetically balanced design can be achieved in residential spaces through the careful consideration of key components, including spatial layout, furniture selection, color, and materials. This balance will ensure user satisfaction within the space while also demonstrating a sustainable approach to residential design. Additionally, the study revealed that there was interaction between all parties involved in the design and implementation phases. This aspect emphasizes that it is a dynamic process that requires careful execution. With all these findings, the study provides a concrete contribution to the field of interior architecture, offering insights into the balance between design and implementation processes and the harmony between function and aesthetics, alongside theoretical knowledge.

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Urban Legibility and Civic Beauty: Reconnecting Historic Vision with Contemporary Urban Design Paradigms

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ABSTRACT

This paper explores the intersection of two foundational urban design paradigms-the City Beautiful Movement and Kevin Lynch's theory of urban legibility-in relation to emerging contemporary design approaches. While the City Beautiful tradition emphasized monumental aesthetics, symbolic form, and civic order, Lynch reframed the city as a perceptual and cognitive landscape shaped by individual experience and spatial clarity. Through comparative analysis, the paper identifies areas of convergence and divergence between these two frameworks, revealing how each contributes distinct values to the evolution of urban form. Building upon this foundation, the study investigates how contemporary paradigms-such as smart urbanism, placemaking, and ecological design-reconfigure or synthesize these historical visions. It argues that Lynch's concepts of mental mapping, imageability, and legibility are increasingly relevant in digital and participatory contexts, while the City Beautiful legacy continues to inform symbolic place-making and urban identity, albeit through more inclusive and localized forms. By bridging historical theory and contemporary practice, the paper proposes a hybrid urban design model that integrates aesthetic coherence with experiential legibility, and civic meaning with user agency. This integrative framework offers a future-oriented vision for cities that are not only seen and navigated, but also remembered, interpreted, and collectively shaped. Ultimately, the paper positions "urban legibility and civic beauty" not as opposing ideals, but as complementary foundations for a human-centered, expressive, and resilient urbanism.

Keywords - Urban design, city beautiful movement, image of the city

INTRODUCTION

Urban design has long grappled with the dual imperative of creating spaces that are both aesthetically compelling and experientially meaningful. From the monumental visions of the City Beautiful Movement to the user-centered frameworks proposed by Kevin Lynch, the field has witnessed significant shifts in emphasis between formal order and perceptual legibility (Peterson, 2003; Lynch, 1960; Carmona, 2021). These two traditions, though often treated as oppositional, represent enduring concerns of urban form-civic identity, and spatial comprehension.

The theoretical debate around urban aesthetics and cognition can be situated within a broader conceptual framework that spans visual culture

theory (Debord, 1967), the production of space (Lefebvre, 1991), and theories of public space (Habermas, 1962). For instance, Guy Debord's (1967) critique of the "society of spectacle" provides a lens to question how monumental urban forms shape urban experience as passive consumption rather than active participation. Meanwhile, Lefebvre's (1991) notion of space as a social product supports a dynamic understanding of Lynch's imageability - not as a static property but as a negotiated meaning formed through use, power, and symbolic representation.

As cities continue to grow in complexity, density, and diversity, the question of how urban form influences human experience remains central to both theoretical debates and design practice (Gehl, 2011; Madanipour, 1996). Recent empirical research reinforces this connection, showing how residents' spatial image perception of urban green space can significantly shape wayfinding, place attachment, and overall quality of life (Hou et al., 2021). Similarly, studies using urban visual intelligence and AI-based street-level imagery have demonstrated that visual coherence and legibility remain central to perceived safety and navigability in contemporary cities (Zhang et al., 2024).

The City Beautiful Movement, emerging at the turn of the 20th century, sought to restore social order and civic virtue through monumental architecture, axial symmetry, and neoclassical visual codes (Wilson, 1989). Influenced by the Beaux-Arts tradition and the urban restructuring of Haussmann's Paris, it proposed a top-down, aesthetically driven model of city-making that prioritized symbolism and spectacle over everyday functionality (Hall, 2002). This approach not only shaped the visual character of many American cities but also sparked debates about elitism, exclusion, and the limitations of aesthetic determinism (Sitte, 1889; Saint, 1993).

In contrast, Kevin Lynch's mid-20th-century work, particularly The Image of the City (Lynch, 1960), marked a paradigmatic turn in urban thought. Grounded in empirical research and cognitive theory, Lynch's work emphasized the role of individual perception in shaping urban meaning. Through concepts such as imageability, legibility, and mental maps, he offered a framework in which the city is understood not only as a physical object but also as a lived and interpreted space (Lynch, 1960; Golledge, 1997).

Lynch's approach opened new avenues for participatory planning, human-scale design, and psychological urbanism-anticipating many of the principles later associated with New Urbanism, placemaking, and the smart city movement (Carmona, 2021; Batty, 2013).

Building on this foundation, recent advancements in geospatial analytics and participatory mapping have significantly expanded Lynch's framework into digital urbanism. Today, tools that integrate cognitive mapping, AI-based visual analysis, and community-sourced data are increasingly employed to enhance the legibility, inclusivity, and experiential quality of urban environments (Yang et al., 2024; Zhang et al., 2024). These technologies not only operationalize Lynch's perceptual concepts at scale but also allow designers and planners to engage with urban complexity in ways that were previously unattainable.

This paper explores the City Beautiful Movement and Kevin Lynch's perceptual approach not merely as historical milestones in urban design, but as enduring and evolving theoretical frameworks that continue to influence how cities are conceived, represented, and experienced. Through a comparative lens, it interrogates their underlying assumptions, aesthetic logics, and socio-political ramifications, shedding light on the fundamental tension between the city as a monumental spectacle and the city as a cognitively navigable, human-scale environment.

By situating this inquiry within the context of contemporary design paradigms—including digital urbanism, ecological sensitivity, and inclusive planning—this study argues for a more integrative and cross-temporal understanding of urban form. In an age marked by increasing complexity, technological mediation, and spatial fragmentation, the values of aesthetic coherence and perceptual clarity are not mutually exclusive. Rather, they represent complementary dimensions of a more holistic, responsive, and human-centered urbanism—one that embraces both symbolic resonance and everyday legibility (Cuthbert, 2008; Punter, 1999).

HISTORICAL BACKGROUNDS

The City Beautiful Movement

The City Beautiful Movement emerged in the United States during the late 19th and early 20th centuries as a response to the deteriorating physical

and moral conditions of rapidly industrializing cities. Marked by overcrowded slums, decaying infrastructure, and a perceived erosion of civic values, urban centers were seen as in need of aesthetic and moral reordering. The movement sought to address these issues through large-scale urban beautification, emphasizing aesthetic order as a means of promoting civic pride, social harmony, and cultural refinement (Peterson, 2003).

Heavily influenced by European neoclassical design traditions-particularly the Beaux-Arts style taught at the École des Beaux-Arts in Paris-the movement proposed an urban form characterized by grand boulevards, axial symmetry, monumental architecture, and cohesive civic spaces. Its visual inspiration drew from the urban renovations of Baron Haussmann's Paris, yet its ideological motivation was distinctly American: to use beauty as a moral and social corrective in a time of industrial chaos.

A defining moment for the movement was the 1893 World's Columbian Exposition in Chicago, also known as the "White City," designed by Daniel Burnham (1909) and his colleagues. The exposition showcased a unified ensemble of neoclassical buildings, formal landscapes, and modern infrastructure, serving as a powerful model for urban design across the United States. The exposition's success catalyzed similar beautification projects in cities such as Washington D.C. (via the McMillan Plan, 1902), St. Louis, Denver, and Cleveland.

Beyond its architectural legacy, the City Beautiful Movement promoted broader principles of civic improvement through the integration of art, architecture, and planning. Its vision was supported by related initiatives such as the Municipal Art Movement and the development of urban parks led by figures like Frederick Law Olmsted. Together, these efforts aimed to restore dignity and order to the urban environment, reflecting the belief that physical surroundings could shape public behavior and urban identity.

Nevertheless, the movement was not without its critics. Its focus on monumentalism and aesthetic coherence often came at the expense of addressing social and infrastructural needs, such as housing, sanitation, and transportation.

However, critics argue that the movement's emphasis on monumentalism often overlooked urgent urban needs such as affordable housing, sanitation, and transit. Its aesthetic determinism and top-down implementation frequently marginalized disadvantaged communities and

promoted exclusionary forms of civic space. More recent scholarship has reevaluated this legacy through diverse lenses: heritage-led regeneration projects have reinterpreted Beaux-Arts principles in inclusive and adaptive ways (Francisco, 2008), while urban ecology and climate resilience studies critique the movement's disregard for natural systems (Anguelovski, 2021). Technological advancements—such as AI-powered visual analysis—have also revived interest in the movement's visual coherence goals, providing new ways to assess and reinterpret historical design logics (Zhang et al., 2024).

Moreover, its grand visions frequently led to the displacement of marginalized communities, raising questions about inclusivity and equity in urban design. Despite its limitations, the City Beautiful Movement left a lasting imprint on the symbolic and spatial grammar of American cities and continues to serve as a key reference point in debates around the relationship between urban aesthetics, civic identity, and spatial politics.

The Image of the City (Urban Legibility)

In contrast to the monumental and formalistic ideals of the City Beautiful Movement, Kevin Lynch's mid-20th-century theory introduced a radically different perspective on urban design—one rooted in human experience, perceptual clarity, and cognitive engagement. His seminal work The Image of the City (1960) shifted the focus from symbolic spectacle to lived spatial legibility, asking: How do people perceive, understand, and mentally map their cities?

Lynch's empirical studies in Boston, Jersey City, and Los Angeles led him to identify five key elements—paths, edges, districts, nodes, and landmarks—that structure urban perception and influence navigability, emotional attachment, and memory. Central to his framework are the concepts of imageability (the quality that makes a place distinctive and memorable), legibility (the ease with which a city's layout can be understood), and mental maps (individualized spatial representations shaped by experience).

Unlike top-down master plans, Lynch's approach emphasized participatory processes and human-scale design. His theory empowered residents to become active interpreters of urban space, reinforcing the idea that meaning in the city is not imposed but constructed. This phenomenological turn in urban theory laid the foundation for placemaking, wayfinding, and

inclusive design approaches that remain highly relevant today (Carmona, 2021; Bush & Doyon, 2017).

Lynch's theory does not advocate for a single urban form but rather emphasizes the clarity, coherence, and experiential richness of the city as perceived by its inhabitants. His work highlights the active role of the observer in constructing the meaning of urban space, introducing a phenomenological dimension to urban design theory. The significance of Lynch's contributions lies not only in their theoretical originality but also in their practical implications.

Contemporary research continues to expand Lynch's legacy using digital tools. Studies like Hou et al. (2021) show how ecological nodes and visual cues enhance legibility in green infrastructure, while AI-driven visual analysis methods have quantified the role of visual coherence in street-level navigation and safety perception (Zhang et al., 2024). Lynch's influence is also evident in smart city initiatives that use participatory mapping and real-time data to adapt urban environments to users' perceptual and cognitive needs.

His ideas have informed a wide range of contemporary urban design practices, including wayfinding systems, participatory planning, placemaking strategies, and smart city technologies. By foregrounding the human experience, Lynch's legacy continues to guide efforts to make cities more navigable, emotionally resonant, and socially inclusive.

In contrast to the monumental and often idealized visions of early 20th-century planners, Lynch's perspective democratizes urban space. It invites planners and designers to see the city through the eyes of its users, acknowledging that legibility and imageability are not just spatial properties, but also tools for empowerment, identity formation, and urban belonging.

COMPERATIVE ANALYSIS: COMMON GROUND AND CONTRASTS

Although the City Beautiful Movement and Kevin Lynch's theory of urban legibility emerged from different historical, cultural, and methodological contexts, their shared concern for the visual and perceptual experience of urban space reveals a surprising degree of conceptual overlap. This section examines the common ground between the two approaches while

also highlighting their key differences, offering a critical comparative framework for understanding their roles in shaping urban design theory.

Despite arising in different historical epochs and intellectual traditions, the City Beautiful Movement and Kevin Lynch's theory of urban legibility share an underlying concern with the organization, symbolism, and perception of urban form. Yet, they diverge in their methods, ideological orientations, and socio-spatial implications.

Both traditions also acknowledge that urban design is not only a technical exercise, but a cultural act that shapes how people see themselves in relation to their city. The City Beautiful vision frames this relationship through shared civic narratives embodied in monumental spaces, while Lynch's approach grounds it in the intimate, everyday interactions that people have with their surroundings. This means that while one seeks to inspire a collective sense of awe, the other prioritizes individual orientation and familiarity-two qualities that, when combined, can produce urban environments that are both memorable and meaningful.

Shared Foundations: Visual Order and Civic Meaning

At their core, both the City Beautiful Movement and Lynch's urban theory emphasize the role of physical form in shaping urban experience. The City Beautiful planners sought to establish aesthetic order through grand boulevards, monumental structures, and symmetrically organized civic centers. Likewise, Lynch argued for spatial clarity, proposing that cities should be organized in a way that supports cognitive legibility for their inhabitants. Both traditions emphasize the importance of visual coherence in shaping human experience within the urban environment. The City Beautiful Movement pursued aesthetic unity through grand axial layouts, monumental architecture, and formal symmetry, all intended to instill civic pride and moral uplift (Peterson, 2003; Wilson, 1989). The notion of order in the urban fabric was not only physical but deeply symbolic, echoing classical ideals of harmony and authority (Sitte, 1889; Hall, 2002).

Another shared element is the importance of landmarks and focal points. City Beautiful advocates employed monumental buildings, statues, and plazas to anchor the urban landscape and foster symbolic meaning. Lynch's analysis similarly identifies landmarks and nodes as key elements in mental maps, serving as spatial anchors and emotional reference points. Both

approaches recognize that these spatial cues help individuals situate themselves within the urban fabric and derive meaning from their surroundings.

Similarly, Lynch (1960) underscored the role of **legibility** in supporting spatial comprehension and psychological orientation. His work-rooted in **cognitive geography**-demonstrated that well-structured cities improve users' ability to navigate and form emotional attachments to place (Golledge 1997; Carmona, 2021). Elements like landmarks and nodes, central to Lynch's mental maps, parallel the symbolic markers of City Beautiful's monumental spaces. In both cases, form is used as a medium for **meaning-making and identity construction**.

Furthermore, each approach acknowledges the **affective power of urban space**. The Beaux-Arts urbanism of Burnham or Masqueray sought to inspire awe and reverence; Lynch sought to evoke familiarity, comfort, and belonging. Both can be understood as responses to the **alienation of modern urban life**, seeking to restore emotional clarity to the chaotic urban landscape (Cuthbert, 2008; Madanipour, 1996).

In this sense, both traditions share an understanding that successful urban environments are not simply functional arrangements of streets and buildings, but symbolic landscapes that communicate values, histories, and aspirations. While the City Beautiful Movement framed these narratives through monumental composition and civic grandeur, Lynch's framework allowed for more personal and fragmented interpretations, reflecting the multiplicity of urban experiences. This duality suggests that the principles of visual order and civic meaning are not mutually exclusive but can operate in tandem-combining the legible structure that aids orientation with the symbolic richness that fosters attachment and collective identity.

Divergent Approaches: Ideals, Methods, and Audiences

Despite these shared ambitions, fundamental contrasts exist. The City Beautiful Movement represents a **top-down planning ideology**, directed by elites and heavily reliant on classical design principles imported from European traditions (Hall, 2002). It often failed to engage with the **functional and social complexities** of the city, prioritizing symbolic form over lived experience. As a result, many of its projects overlooked essential infrastructure such as affordable housing, transportation, or public health (Peterson, 2003).

Lynch, by contrast, introduced a **bottom-up, empirical method** grounded in the everyday perceptions of ordinary citizens. His use of mental maps, interviews, and field observations exemplifies a **participatory ethos** that anticipated contemporary movements like **collaborative planning** and **placemaking** (Carmona, 2021; Gehl, 2011). While the City Beautiful Movement often catered to national narratives and monumental symbolism, Lynch's approach recognized the city as **plural**, **fragmented**, and **interpretive**-a space where meaning emerges through individual interaction and memory (Lynch, 1976; Punter, 1999).

Another key point of divergence lies in their treatment of **social inclusivity**. While City Beautiful interventions often resulted in displacement or exclusion of marginalized populations (Anguelovski, 2021), Lynch's methodology inherently valued diverse perspectives by engaging directly with residents' spatial perceptions (Hou et al., 2021). Recent studies have demonstrated that participatory mapping and cognitive image research can reveal significant differences in spatial experience between demographic groups, underscoring the need for inclusive design processes that City Beautiful largely overlooked (Hou et al., 2021; Peng et al., 2024).

Furthermore, technological advancements have amplified Lynch's legacy in contemporary practice. Digital tools such as street-level imagery analysis and AI-driven visual quality assessment (Zhang et al., 2024) operationalize concepts of legibility and imageability at unprecedented scales, making them measurable and adaptable in ways that the static, monument-driven City Beautiful paradigm could not anticipate.

TOWARD A SYNTHESIS: CONTEMPORARY RELEVANCE

The current era of urbanism-marked by **hyper-diversity**, **digital connectivity**, and **environmental urgency -** calls for design approaches that integrate both **aesthetic vision** and **experiential clarity**. In this context, the insights of the City Beautiful Movement and Kevin Lynch's cognitive urbanism can be viewed not as oppositional, but as **mutually enriching**.

Hybrid Urban Models: From Form to Experience
Contemporary cities increasingly adopt **hybrid design models** that reflect this synthesis. Cities like **Barcelona** combine the formal regularity of

Ildefons Cerdà's 19th-century grid with vibrant, imageable public spaces anchored by Gaudí's expressive landmarks. Similarly, **Copenhagen's human-centered street design** builds on legibility principles to enhance walkability while preserving strong civic aesthetics (Gehl, 2011). These examples show that the aesthetic clarity of City Beautiful ideals can coexist with Lynchian principles of legibility, resulting in spaces that are both memorable and inclusive.

Projects like the **High Line in New York City** or **Melbourne's laneway revitalization** show how monumental interventions can be reimagined as accessible, community-oriented, and memory-rich spaces (Carmona, 2021). Similar patterns emerge in heritage-led regeneration initiatives such as Lisbon's Baixa district, where civic axes reminiscent of Beaux-Arts planning are paired with participatory mapping to enhance spatial legibility and preserve symbolic meaning (Francisco, 2008). In Beijing, research on residents' spatial image perception of green spaces has shown that embedding clear paths, nodes, and landmarks within ecological networks improves both visual recognition and user satisfaction (Hou et al., 2021), illustrating a Lynchian application in an environmentally conscious framework.

While physical interventions reflect the blend of aesthetic and cognitive intentions, emerging technologies offer additional dimensions for synthesis. The rise of **smart cities** enables the fusion of goals through digital wayfinding, augmented reality layers, and participatory mapping platforms. These tools embody Lynch's emphasis on perceptual clarity and user navigation while enabling customized, emotionally resonant urban experiences (Batty, 2013; Townsend, 2013).

Ethical and Inclusive Urbanism

Importantly, a synthesis of these frameworks offers an avenue toward **ethically responsive design**. While the City Beautiful model has been criticized for reinforcing exclusionary visions of order, its symbolic potential remains valuable when aligned with participatory and inclusive planning (Cuthbert, 2008). Lynch's emphasis on perception provides a corrective lens-encouraging designers to **translate symbolic form into accessible meaning**.

By combining **visual legibility** with **civic storytelling**, cities can address not only the challenges of wayfinding, but also the deeper need

for **belonging**, **memory**, and **equity** in urban life. This reflects a growing consensus in urban design scholarship: that cities must be **narratively rich**, **socially just**, and **experientially coherent** (Carmona, 2021; Punter, 1999; Madanipour, 1996).

Recent studies reinforce this perspective. Hou et al. (2021) demonstrate that urban green spaces in Beijing designed with clear spatial hierarchies-paths, nodes, and distinct districts-enhance accessibility for diverse user groups, including children and the elderly. Similarly, Anguelovski et al. (2021) highlight the need for "just green enough" strategies in park development to prevent green gentrification, ensuring that ecological and aesthetic improvements do not displace vulnerable communities. In Melbourne and Sydney, Bush & Doyon (2017) show that socially inclusive park planning requires embedding community participation from early design phases, aligning Lynchian legibility with the social equity agenda.

Emerging technological tools also contribute to this ethical synthesis. AI-based visual quality assessments of streetscapes (Zhang et al., 2024) can be paired with participatory GIS mapping to ensure that interventions maintain both formal coherence and user-centered accessibility. Such approaches suggest that the reconciliation of City Beautiful's symbolic form with Lynch's perceptual clarity is not only a theoretical ideal but an increasingly achievable practice in contemporary, equity-oriented urban design.

RESULTS AND CONCLUSION

This paper has examined two seminal yet distinct urban design traditions- the City Beautiful Movement and Lynch's Image of the City-revealing how each contributes to a deeper understanding of form, perception, and civic meaning in the urban realm. While the City Beautiful Movements celebrates monumental form as a symbol of civic virtue, Lynch democratizes urban design through perception-based legibility. Their shared emphasis on order, orientation, and identity suggests that they need not be seen as opposites, but as complementary pillars of a more holistic design philosophy.

In envisioning the future of cities, designers can look to this synthesis to balance aesthetics with accessibility, symbolism with usability, and monumentality with memory-crafting urban environments that are not only functional and efficient but also meaningful, navigable, and beautiful.

Contemporary urban experiments already suggest that this balance is achievable. When monumental form is paired with spaces that are easy to navigate and welcoming to diverse communities, cities can simultaneously project a strong identity and foster everyday comfort. This integrated approach moves beyond the false choice between beauty and usability, instead framing them as mutually reinforcing qualities essential for resilient and inclusive urban futures.

Comparative Insights and Theoretical Integration

This study has demonstrated that the City Beautiful Movement and Kevin Lynch's theory of urban legibility, despite their temporal, methodological, and ideological differences, converge around a shared concern: **the human relationship with urban form**. While City Beautiful emphasized the power of monumental design to inspire civic pride and order (Peterson, 2003; Wilson, 1989), Lynch reframed urban space as a field of **personal meaning, mental representation, and experiential navigation** (Lynch, 1960; Golledge, 1997).

The analysis revealed three key intersections:

1. **Visual Structure as Civic Infrastructure**: Both frameworks recognize the symbolic and organizational potential of spatial clarity- be it through axial boulevards or cognitive legibility.
2. **Place Identity and Emotional Engagement**: City Beautiful used architecture as narrative; Lynch emphasized memory and perception. Each sought to forge a **sense of place** and belonging.
3. **Urban Form as a Moral and Psychological Medium**: The aesthetic grandeur of City Beautiful and the functional clarity of Lynch both respond to social disorientation and urban fragmentation, albeit in different ways (Cuthbert, 2008; Madanipour, 1996).

Yet, their **differences** remain critical: while City Beautiful is historically aligned with elitist and centralized planning, Lynch's work laid the foundation for **democratized, participatory, and perception-driven** design methods. In contemporary practice, the seemingly opposing qualities of these two approaches are increasingly applied in tandem. Cities are developing more balanced spatial strategies that draw on the identity-shaping power of symbolic form and the accessibility benefits of legibility. For example, historical axes and monumental squares can be enhanced

through digital wayfinding systems and user-oriented public space design, increasing both the aesthetic and functional value of place. Likewise, AI-based urban visual analysis and participatory mapping initiatives bring Lynch's perceptual framework into today's data-driven planning environment while maintaining the City Beautiful ideal of visual coherence. This demonstrates that theoretical differences can, in practice, coexist as complementary elements in shaping urban environments.

Contemporary Urban Design Paradigms: Integrating the Past and the Future

The relevance of these two frameworks becomes most apparent when examined alongside **contemporary approaches in urban design**, many of which aim to synthesize **aesthetic, functional, social, and ecological** dimensions.

<u>**Contemporary placemaking practices**</u>-such as pop-up parks, community-driven interventions, and cultural programming-draw heavily from **Lynchian principles**: legibility, local identity, and human-scale design (Silberberg et al., 2013; Carmona, 2021). These bottom-up strategies echo Lynch's belief in **mental mapping and user experience** as tools for creating resilient and responsive public spaces. Yet, they are increasingly enriched by **City Beautiful's emphasis on symbolism and civic narrative**-as seen in projects that combine community participation with meaningful form and aesthetic coherence, like the transformation of Times Square or Paris's pedestrianized boulevards.

Newer models such as <u>**Landscape Urbanism**</u> and <u>**Ecological Urbanism**</u> integrate natural systems with spatial design, emphasizing flows, adaptability, and systemic thinking (Waldheim, 2012; Mostafavi & Doherty, 2016). While these models are often critical of traditional monumentality, they resonate with Lynch's attention to **structural legibility** and experiential continuity, especially in terms of **edges**, **nodes**, and **districts** shaped by ecological systems. City Beautiful's legacy, meanwhile, persists in these paradigms' attempts to restore **grandeur and coherence** to increasingly fragmented urban territories-though reinterpreted through sustainable and environmental lenses.

The rise of <u>**smart cities**</u> brings new relevance to Lynch's work. Technologies such as **augmented reality**, **location-based services**,

and **interactive wayfinding platforms** are fundamentally built upon the cognitive mapping strategies Lynch articulated decades ago (Batty, 2013; Townsend, 2013). These systems operationalize **mental maps at a digital scale**, enabling urban environments to be not only navigable but also customizable and context-aware.

However, critics caution that without inclusive governance frameworks, the integration of smart technologies risks reproducing existing spatial inequities or prioritizing efficiency over human experience. In this regard, participatory data collection, community-driven mapping, and transparent algorithmic decision-making become essential complements to both Lynchian legibility and City Beautiful's symbolic coherence. Emerging examples, such as Barcelona's "Decidim" platform or Amsterdam's participatory digital twins, illustrate how technological tools can be deployed not merely for navigation and branding, but as instruments of civic empowerment and collective spatial authorship.

Recent studies also highlight how urban greenery and ecological infrastructure can reinforce both visual coherence and perceptual legibility. For example, Hou et al. (2021) show that residents' spatial image perception of green spaces in Beijing is closely tied to recognizable paths, edges, and landmarks-directly reflecting Lynchian elements. Similarly, Bush and Doyon (2017) argue that inclusive design of urban parks in Australian cities strengthens community identity while maintaining the symbolic and aesthetic appeal of green public realms. Advances in urban visual intelligence, including AI-based analysis of street-level imagery (Zhang et al., 2024), offer new tools for evaluating and enhancing both the beauty and navigability of cities. These developments suggest that the integration of ecological design, participatory planning, and advanced spatial analytics can operationalize the shared values of City Beautiful monumentalism and Lynch's cognitive urbanism in a data-driven, environmentally responsive manner. Such integrative approaches point toward a future urbanism where aesthetic symbolism, ecological resilience, and perceptual clarity operate not in isolation, but as interdependent drivers of equitable, adaptive, and memorable cities.

Toward a Holistic and Human-Centered Urbanism

In synthesizing the principles of the City Beautiful Movement and Kevin Lynch's perceptual urbanism, this study suggests a **hybrid framework** for future urban design: one that unites **symbolic form** with **cognitive accessibility**, and **aesthetic vision** with **everyday usability**.

Such a model would:

- Integrate **legible spatial structures** with **expressive civic form**
- Balance **top-down narrative coherence** with **bottom-up user experience**
- Address the need for **beauty**, **navigability**, and **social inclusion** simultaneously

This integrated approach also opens pathways for innovation, where ecological resilience, technological adaptability, and cultural narratives are deliberately woven into the urban fabric, ensuring that cities remain both meaningful and responsive in the face of uncertainty.

As urban design continues to evolve amidst global challenges-climate change, migration, digitalization, inequality-the lessons of these two traditions provide not a roadmap, but a **language**: one that honors both **the emotional depth** and **functional clarity** of cities.

In the words of Lynch (1981), the city is not just a machine or a composition-it is **a field of possibilities**, shaped as much by the minds of its inhabitants as by the hands of its planners. The legacy of City Beautiful and Lynch together reminds us that **form and feeling**, **structure and symbolism**, must be interwoven in any attempt to design the cities of tomorrow.

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The Effect of Interior Design on Institutional Belonging Among Erasmus Students: A Case Study at Selçuk University

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ABSTRACT

The purpose of this article is to evaluate a project that encompasses the entire process of interior design, project planning, and fine construction applications for the "Faruk Kocaman Erasmus Guest House," a shared-use, relaxation, and meeting space located within the Alaaddin Keykubat campus of Selçuk University. This study provides information about the fine construction and application processes through project and post-application visuals of the space. Additionally, information is provided on the measurement, survey, and work organization processes, which are part of the interior application project. The study also investigates the impact of institutional identity on Erasmus students' cultural differences, adaptation processes, and sense of belonging. Two types of materials were used in the study. The first material consists of publications, thesis studies, lecture notes, architectural and interior architectural printed publications, and internet sources with a focus on theoretical and visual information related to the subject. The information that was scanned and examined was approached from the general to the specific. The second material consists of the analysis of the study application area, the identification stages by the authors, interviews with company officials, Erasmus House common waiting areas, and existing interior photographs. The method followed in the study is observation and identification. Based on research and observations conducted using relevant publications, thesis studies, lecture notes, architectural and interior design printed publications, and internet sources, the interior design and implementation phases within the existing area have been described.

Keywords – Erasmus Mobility, Erasmus House, Interior Design, Organizational Belonging, Application Project.

INTRODUCTION

The Erasmus Student Mobility Program is an exchange program offered by the European Union for students and faculty members in higher education. The program aims to support academic and personal development by providing students with the opportunity to study abroad and experience different cultures. The program is open to undergraduate and graduate students as well as academic staff. Students are expected to study for one or two semesters at a university with an Erasmus agreement. Additionally, the Erasmus Program provides financial support to students studying abroad. The amount of support may vary depending on the destination country and living conditions.

Within the scope of student mobility, students can benefit from the accommodation facilities of universities. This contributes to the coexistence

of students from different cultures and fosters cultural diversity and exchange. At the same time, it plays an important role in increasing students' sense of belonging to their institution. Many universities across our country have facilities known as Erasmus Houses. This positively influences students' decisions when choosing a university. Universities with Erasmus House facilities are listed in Table 1.

Table 1: Universities with Erasmus guesthouses in Turkey

Serial No.	University Name	Serial No.	University Name
1	Akdeniz University	13	Hacettepe University
2	Ankara University	13	İstanbul Technical University
3	Atatürk University	14	Karadeniz Technical University
4	Aydın Adnan Menderes University	15	Kocaeli University
5	Bilkent University	16	Koç University
6	Boğaziçi University	17	Marmara University
7	Çukurova University	18	Middle East Technical University
8	Dokuz Eylül University	19	Pamukkale University
9	Dumlupınar University	20	Sabancı University
10	Ege University	21	Sakarya University
11	Eskişehir Osmangazi University	22	Selçuk University
12	Gazi University	23	Uludağ University
		24	Yeditepe University

Source: Created by the corresponding author.

The relationships users establish with spaces are directly related to interior design. One of the factors influencing the establishment of relationships between people and spaces is the design of those spaces. The concept of belonging is considered a relationship that arises from social, individual, cultural, and institutional relationships. In this sense, it can be described as a relationship that arises from the interaction between people and spaces (Ağaoğlu Çobanlar, 2022). From the perspective of fulfilling the need to belong and be loved, individuals need to develop a sense of belonging toward the spaces in the institutions where they spend their time.

Organizational belonging is seen as one of the types of belonging. However, the definition of organizational belonging varies. The main reason for this is the difference in the fields of study in which the definitions are made. However, the concept of organizational belonging is gaining importance day by day, and researchers are conducting studies on the definition, creation, and maintenance of organizational belonging. According to studies conducted in this direction, organizational belonging is the identification of employees with their organization and their desire to

participate in organizational activities actively. This identification can be defined as a psychological bond and is examined in three separate stages: adaptation, identification, and internalization. From the moment they start working, employees begin to establish a connection with the organization, thereby entering the identification stage. In the final stage of internalization, the individual has internalized the behaviors of the organization they are part of and begins to act by them (Öztop, 2014: 304-305).

In line with this situation, the study investigates the positive or negative contributions of the interior improvement project carried out in the common area of the "Faruk Kocaman Erasmus Guest House" located within the Alaeddin Keykubat Campus of Selçuk University to the sense of belonging, cultures, and other sociological values of students and staff.

Erasmus Mobility and Student Interaction

Although Erasmus Student Mobility is defined as an exchange program offered by the European Union for students and teaching staff in higher education, it can also be defined as cultural mobility. Many universities have annual student mobility agreements with universities in different countries in line with the opportunities offered by their departments. Students' university choices vary according to the geographical location, facilities, reputation, and course content of the relevant departments. Literature studies conducted within the scope of Erasmus mobility have also focused on cultural interaction among students.

Haj-Yehia and Erez (2018) emphasize that the Erasmus Program positively affects students' cultural identity by facilitating interaction with different cultures. The case study highlights the participant's successful interaction with the host country's culture and other international students, despite encountering complex dilemmas regarding their own cultural identity.

Baranova et al. (2020) argue that the Erasmus program significantly improves students' intercultural communication skills, promotes international understanding, and encourages adaptation to different cultures. They highlight participants' valuable experiences that positively influence their foreign language proficiency, career goals, and personal relationships with individuals from different cultural backgrounds.

Hristova and Hristozova (2023) investigate the cultural impact of the Erasmus+ Program on students and emphasize its role in promoting academic and cultural exchange, highlighting that it strengthened European identity and a sense of belonging among participants from Sofia University during the mobility period from 2015 to 2019.

Molü et al. (2023) emphasize that the ERASMUS program promotes cultural exchange among students, thereby increasing respect for diversity, multicultural awareness, and intercultural education. They argue that students gain experiences beyond academic knowledge, encouraging mutual

learning and increasing sensitivity toward different cultures and perspectives.

Pokasić et al. (2019) argue that the Erasmus+ Program significantly increases students' cultural awareness and intercultural learning by enabling participants to learn about the host country's culture and the cultures of other students; this, in turn, enhances their ability to understand and accept diverse cultures, thereby benefiting their personal and professional development.

Göksu (2020) argues in their study that the Erasmus program promotes European identity and increases national identity awareness through social interactions among students. Cultural differences, including stereotypes and prejudices, positively influence this process and support a deeper understanding of both European and national identities among participants.

Bótas and Huisman (2013) argue that the Erasmus Program positively affects students' cultural capital by improving their academic performance and providing opportunities for cultural, social, and linguistic development.

Oborune (2013) suggests that the ERASMUS program promotes a cultural European identity because participants share common cultural values and social similarities. Students who participated in the program reported a stronger sense of belonging to European culture compared to those who did not participate.

Gökten and Emil (2018) argue that the Erasmus Program significantly increases students' cultural intelligence in all dimensions (cognitive, motivational, and behavioral) and that participation promotes understanding and interaction in intercultural contexts, leading to greater cultural awareness and adaptation among students. Based on the literature review conducted on the subject, it is observed that educational mobility for learning purposes also transforms into cultural mobility.

MATERIAL AND METHODS

The study covers the interior improvement project of the common areas of Selçuk University Erasmus Guest House. The semi-structured interview technique used in the social sciences was employed in the study. The spatial program related to the common use function of the Erasmus House was obtained as a result of semi-structured interviews conducted with users and staff working at the facility. The semi-structured interview technique is a qualitative research method consisting of pre-prepared, open-ended questions and a dialogue between the interviewer and the participant (Polat, 2022). In the semi-structured interviews conducted with staff and students,

visuals of the renovated common area interior were shown before the implementation, and they were asked to provide their evaluations before and after the implementation, as well as their overall assessment. The results obtained from the semi-structured interviews were evaluated and will be used in interior improvement projects to be carried out in other areas of the guest house.

The design and implementation integration of the Selçuk University Erasmus Guest House began with the survey of the area located in the Akademi neighborhood of Selçuklu district, Konya province. In the next phase, the architectural plan, floor plan, existing partition walls, and load-bearing systems of the Erasmus House common areas were considered to determine the spatial layout. The implementation phases of the interior design improvement project for the Erasmus House common areas (meeting, education, and relaxation) are presented in Table 2.

Table 2: Project Implementation Stages

Stages	Contents
Planning stage	Determination of the project area. Preparation of a survey plan. Preliminary meetings with the authorities in line with the functions of the space. Determination of the project process.
Data collection stage	Observation of the project area, semi-structured meetings with the users of the space. Determination of the project cost. Initial design work based on observations and opinions.
Design stage	Reviewing current examples related to the subject and conducting literature research. Determining the materials and design elements to be used according to the cost.
Hazırlık aşaması	Developing initial design work by determining the design concept based on the data.
Analysis stage and concept	Finalizing the design by analyzing the design elements determined in line with the concept, cost, and discussions.
Implementation phase	Floor, ceiling, and wall materials and application stages provided during the design period within the framework of the determined concept.

Source: Created by the corresponding author.

By the project implementation stages provided in Table 1, the interior design concept has been shaped based on user requests and suggestions. The architectural plan scheme, measurements, and survey procedures have been prepared for the area. The selection of floor, wall, and ceiling covering materials, measurement calculations, and building surveys have been carried out using the Autodesk-based AutoCAD program to define the areas. The

user requests and necessary fixtures related to the operation have been transferred to two dimensions as shown in Figure 1.
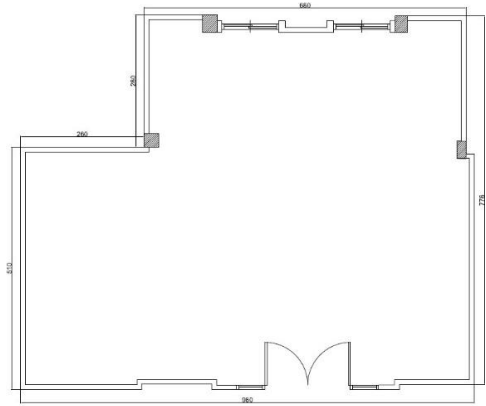
Figure 1: Erasmus House Common Area Plan

Highlighting and conveying institutional identity in designs is one of the most important parts of the interior design process. This is particularly important in terms of helping international students become familiar with the institution and develop a sense of belonging. In addition to the institutional design processes carried out in the space, various information events are organized by the Health and Culture Directorate of Selçuk University to minimize cultural confusion and adaptation problems among students. Semi-structured interviews were conducted with managers, staff, and students staying at the Erasmus House to ensure that the design process is managed correctly in line with all these elements. The question set prepared before the interviews is provided in Table 3.

Table 3: Project Implementation Stages

Demographic Information	Gender:
	Age:
	Occupation:
	Nationality:
	Year you participated in the Erasmus program:

Erasmus Guest House Experience (Students)	Did the guest house facilitate interaction with students from different cultures?
	Did the spatial design of the guest house encourage social interaction?
	Did living in the guest house help you better understand the institutional identity?
	Did the accommodation service provided by the university make you feel valued?
	Did you get to experience the cultural structure of the university in the guest house?
	Did the guest house contribute to shortening the adaptation process?
	How often do you go to the common areas (living room, meeting room, training room)?
	Do you think the Erasmus program contributed to the institutional identity of your university?
	Did the interior design of the Erasmus guest house contribute to your sense of belonging to the institution?
	What was the most important effect of living in the Erasmus guest house for you?

Erasmus Guest House Experience (Staff)	How would you rate the overall design of the guest house?
	Which areas do you think need improvement?
	How would you rate the usability of the common areas?
	Is the equipment in the common areas sufficient?
	What changes would you suggest to the design of the common areas?
	Has the interior design of the Erasmus guest house contributed to a sense of belonging to the institution?
	What are your suggestions for improvements to the Erasmus guest houses?
	What do you think are the most common problems faced by students? (Adapting to the environment, cultural differences, communication, following rules, etc.)

Source: Created by the corresponding author.

The responses obtained from the semi-structured interviews were used as information for the design phase regarding user requests. The list of requirements for the Erasmus guest house common area, compiled based on the data collected, is provided in Table 4.

Table 4: Erasmus House Common Area Needs List

	ACTIONS	ACTIONS	ACTIONS
Sitting Resting	Students sitting together in their free time	Triple, double, and single seating units and soft floor pear-shaped seating areas	Creation of a socialization area for students from different cultures. Soft floor seating areas with different shapes and seating capacities
Meeting and Training Area	Conducting a brief meeting and information session	Multipurpose meeting table, chairs, projector, movable whiteboard	A place for guest students coming under the Erasmus program to get info on regulations and take short-term, multi-purpose training.

Source: Created by the corresponding author.

Based on the personnel, user requests, and student capacity obtained from Table 1, the functional elements of the project area have been determined. Interior architectural projects are examined under two main headings: design and implementation projects. The design phase includes the preliminary design, survey, and the preparation of a furnishing plan based on the function of the space, material selections, and the production of visuals consistent with the design. In this phase, the designer makes design decisions by the user's requirements and the characteristics of the buildings. At this stage, the CAD and 3D drawings of the proposed design to be implemented are finalized. Figure 2 shows the furniture layout plans suitable for the function of the Erasmus House.
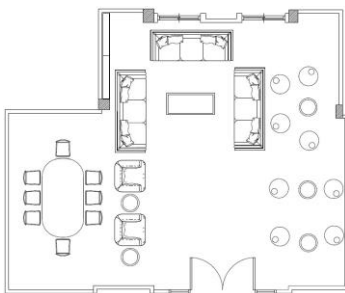
Figure 2: Erasmus House Common Area Plan

Seating units have been planned and placed according to the number of people. Existing seating units have been repurposed and reused. Soft seating units that can be moved along the boundaries of the common area have been added. Since there is one main entrance to the space, the layout plan has been designed with circulation areas in mind. Compact laminate material has been selected for the tables. Compact laminate material is resistant to water, moisture, and sunlight. The table dimensions have been

determined to be 50 cm in diameter to suit their purpose. PVC printing has been applied to the compact laminate on the table, and the institution's logos have been incorporated.

On the right and left walls at the entrance, wallpaper printing was applied, created by the institution to highlight the corporate identity and Erasmus education. This application was carried out using paintable wallpaper with PVC printing. The areas where the wallpaper was applied and the designs used are shown in Figure 3.

Figure 3: Erasmus House Wallpaper Application Areas

The visuals and wallpapers belonging to the institution, published by the Selçuk University Corporate Communications Coordination Office, were used on coffee tables. The work carried out is shown in Figure 4.

Figure 4: Erasmus House Wallpaper Images

During the design process, the existing 40x40 ceramic tile material on the floor was preserved. In wall areas, especially where wallpaper will be applied, a rough plaster and satin plaster finish was applied to ensure a smooth surface. Before application, 3D modeling visuals of the interior space and post-application interior visuals are provided in Table 5.

Table 5: Images before and after application

RESULTS AND DISCUSSION

This study examined the interaction between Erasmus mobility, organizational belonging, and interior design, presenting important findings based on the example of the Faruk Kocaman Erasmus Guest House located on the Alaaddin Keykubat Campus of Selçuk University. The research, conducted using a semi-structured interview method, highlights how Erasmus students' and staff members' spatial experiences shape their feelings of institutional belonging and the role of interior design in this process. The results indicate that interior design is a critical factor in strengthening students' feelings of institutional belonging.

Spaces where students feel a sense of belonging increase social interaction and facilitate the integration of cultural differences. Design that includes functional and aesthetic elements that facilitate students' daily lives is an important factor in strengthening their sense of belonging. In particular, the design of common areas encourages students to come together, socialize, and share their experiences.

The study also concluded that flexibility and diversity in interior design are necessary due to the different cultural backgrounds of Erasmus students. Arranging spaces to meet different cultural needs contributes to the development of institutional belonging. In this context, adopting user-centered approaches in interior design helps students express themselves more freely and increases their commitment to the institution. Based on semi-structured interviews with staff, it is recommended that the interior improvement work be expanded and applied to student rooms, dining halls, and other areas.

In conclusion, the effects of interior design on institutional belonging should be taken into consideration during the Erasmus mobility process. When designing spaces such as Erasmus guest houses, universities should take into account the needs and expectations of students, which will enrich both their academic and social experiences. This study demonstrates that interior design is not merely about creating a physical space but serves as a tool to strengthen students' sense of belonging by addressing their psychological and social needs. Future research offers an important opportunity to explore this interaction in greater depth and expand it through examples from different universities.

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