KESİT AKADEMİ DERGİSİ
ISSN: 2149-9225
The Journal of Kesit Academy
Doi: 10.29228/kesit.86787
Research Article

Urban and Architectural Design Approaches in the Spatial Regeneration of Ambarlı Köyiçi

Ambarlı Köyiçi'nin Mekânsal Dönüşümünde Kentsel ve Mimari Tasarım Yaklaşımları

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Geliş: 07.08.2025 | Kabul: 23.09.2025

Abstract: This study aims to evaluate the strategies for the spatial improvement of Ambarlı Köyiçi, located in the Avcılar district of Istanbul, through architecture graduation projects. The research analyzes nine selected student projects developed during the 2025 spring semester studio, chosen based on specific academic criteria. Methodologically, a qualitative analysis was conducted using six evaluation criteria derived from relevant literature and precedent projects: multi-scalar analysis, continuity of public space, identity and cultural integration, social space configuration, climate- and environment-responsive design, and building mass and street relationship. The findings indicate that graduation studio projects serve not only as academic design exercises but also as valuable tools for generating applicable and strategic ideas for local governments. The projects demonstrated particularly strong performance in the areas of multi-scalar analysis and public space continuity, while climate and environmental sensitivity emerged as a relatively weaker aspect. The study also acknowledges the methodological limitations, such as potential selection bias and reliance on instructor's observational evaluations, and proposes the use of multi-evaluator frameworks for future research. Ultimately, this study offers a model that contributes to sustainable urban transformation policies through architectural education outputs and provides a practice-oriented reference framework by integrating theoretical foundations with design-based processes for local authorities.
Keywords: Ambarlı Köyiçi, urban design, spatial regeneration, cultural identity, sustainability.
Öz: Bu çalışma, İstanbul'un Avcılar ilçesinde yer alan Ambarlı Köyiçi yerleşiminin mekânsal iyileştirilmesine yönelik stratejilerin, mimarlık bölümü diploma projeleri üzerinden değerlendirilmesini amaçlamaktadır. Araştırmada, 2025 bahar döneminde yürütülen diploma stüdyosundaki projelerden, belirli kriterlere göre seçilen dokuz proje analiz edilmiştir. Yöntem olarak, mevcut literatür ve benzer ölçekli projelerden türetilen altı değerlendirme kriteri doğrultusunda (çok ölçekli analiz, kamusal alan sürekliliği, kimlik ve kültürel uyum, sosyal mekân kurgusu, iklim ve çevreye duyarlı tasarım, bina kütlesi ve sokak ilişkisi) gözlemsel değerlendirmeye dayalı nitel bir analiz gerçekleştirilmiştir. Bulgular, diploma stüdyosu projelerinin yalnızca bir akademik tasarım süreci olmadığını, aynı zamanda yerel yönetimlerin mekânsal politika geliştirme süreçlerine yön verebilecek somut ve uygulanabilir stratejiler ürettiğini göstermektedir. Özellikle kamusal alan sürekliliği ve çok ölçekli planlama kriterlerinde yüksek başarı düzeyine ulaşılmış, buna karşın iklim ve çevresel duyarlılık kriterinde göreli bir zayıflık gözlenmiştir. Çalışma ayrıca, danışman gözlemlerine dayalı değerlendirmenin getirdiği sınırlılıkları tartışmakta ve gelecekteki çalışmalarda çoklu değerlendirme yaklaşımlarının kullanılmasına yönelik öneriler sunmaktadır. Sonuç olarak, bu araştırma, mimarlık eğitiminden elde edilen çıktılar aracılığıyla sürdürülebilir dönüşüm politikalarına katkı sağlayabilecek bir model önermekte; kuramsal çerçeveyi, pratik

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Citation: Yıldırım, S. G. (2025). Urban and architectural design approaches in the spatial regeneration of Ambarlı Köyiçi. *Kesit Akademi Dergisi*, 11 (44), 43-73.
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tasarım süreciyle bütünleştirerek yerel yönetimler için uygulanabilir bir referans seti ortaya koymaktadır.
Anahtar Kelimeler: Ambarlı Köyiçi, kentsel tasarım, mekânsal iyileştirme, kültürel kimlik, sürdürülebilirlik.

1. INTRODUCTION

Architectural education comprises a multilayered pedagogical structure that aims not only to develop design skills but also to foster sensitivity toward social, spatial, and cultural issues (Salama & Patil, 2025). Within this educational framework, architectural design studios stand out as fundamental learning environments that enable students to analyze complex urban problems and generate creative solutions sensitive to the local context (AIAS, 2002). This studio-based approach not only enhances students' creative thinking, analytical problem-solving, and spatial awareness skills but also prepares them for professional practice by confronting them with real-world challenges (Cal Poly CRP, 2024).

In this context, architecture studios have evolved from being purely theoretical spaces to becoming idea generation laboratories that can contribute to municipal planning processes. Collaborations between university architecture departments and local governments have laid the groundwork for developing innovative and pluralistic approaches to strategic decision-making for urban transformation (Küçükyazıcı et al., 2022). These partnerships facilitate the integration of academic knowledge into public policy-making processes, and student-generated concept projects are increasingly being considered as viable solution proposals in real urban contexts (Burda & Dymnicka, 2019; Caldieron, Vermisso & Thitisawat, 2014).

Moreover, the outcomes of architecture studios often promote civic engagement. Student projects go beyond being mere academic exercises and evolve into strategic tools that enrich public debate and support participatory planning processes (Hemmersam et al., 2022; Küçükyazıcı et al., 2022). As such, design studios gain prominence as platforms that produce inclusive, pluralistic, and creative solutions, benefiting both education and public interest.

In this framework, partnerships between academic architecture studios and local governments hold significant potential for developing spatial interventions and strategic planning tools at various scales. Research conducted in Türkiye demonstrates that this potential can be translated into concrete outcomes. For example, Fışgın Korkmaz (2020) emphasizes that design-based collaborations with public institutions provide mutual benefits for both students and municipalities. Similarly, in the Kapıdağ–Erdek project led by Ateş Akdeniz and Öz (2018), student-generated proposals, grounded in ethnographic research, were shared with the public and presented as actionable strategies to the municipality.

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Özden (2023) shows that in a practice-based studio conducted in İzmir, student projects supported by digital participation tools offered data-driven input to municipal decision-making processes and contributed to sustainable approaches shaped by citizen experiences.

The international literature supports this trend through comparable examples. Caldieron, Vermisso, and Thitisawat (2014) note that projects developed by Florida Atlantic University students for an informal settlement in Puerto Rico were reviewed by the San Juan Municipality and considered for integration into social housing policies. In Poland, Burda and Dymnicka (2019) highlight how student competitions conducted through collaboration between Gdańsk University of Technology and the Kołobrzeg Municipality provided analysis and visions that contributed directly to municipal planning. In Norway, Hemmersam et al. (2022) report that design studio projects in refugee-dense neighborhoods were incorporated into Oslo Municipality's Community Heritage Report, forming a basis for strategic decisions in the area.

All these examples demonstrate that student projects developed within architectural education are not only pedagogical exercises but also hold public value; these projects can serve as strategic tools in planning and decision-making processes for local governments.

In contemporary urbanization processes, the preservation and revitalization of historic settlements have increasingly become central to planning and design policies. In particular, historic coastal areas function as carriers of urban memory through their unique spatial forms and cultural identities (Avcıoğlu & Akın, 2017). In Istanbul, areas historically referred to as "köyiçi" (village cores) are now enveloped by the metropolitan center. These areas are undergoing transformation due to both development pressures and natural disaster risks (Ilık-Saltık, 2022). Such transformation processes demand an integrated approach—one that considers not only physical interventions but also the historical identity, its connection to local memory, and resilience to disasters.

Located on the western coast of Istanbul along the Sea of Marmara, Ambarlı Köyiçi is one of the few historic settlements in Avcılar District that embodies these qualities (Figure 1). The settlement has undergone significant changes in both its socio-cultural and spatial structure (Avcılar Municipality, 2023). Until the early 20th century, Ambarlı was a small fishing village. Following the 1924 population exchange, it acquired a new identity through the settlement of families from Thessaloniki and Kayalar Ömberiya. During the Republican era, the area became increasingly attractive due to its proximity to central Istanbul and coastal amenities. Although some of the original masonry houses with gardens were preserved, the overall building density increased (Yücel & Laçin, 2019; Yücel, 2018).



Figure 1. The Ambarlı Köyiçi area (on the left, Area 1) and the adjacent landslide zone (on the left, Area 2); on the right, the organic street pattern and settlement layout of Ambarlı Köyiçi.

One of the major turning points in the spatial structure of Ambarlı was the establishment of a thermal power plant in the 1960s, followed by industrial investments and increasing housing demand, which led to the development of agricultural land (Avcılar Municipality, 2023). Since the 1970s, seasonal houses have been replaced by permanent residences, causing significant morphological degradation in the settlement. Today, Ambarlı Köyiçi occupies an area of approximately 3.37 hectares, characterized by 4–5.5-meter-wide organic streets, an average slope of 11%, and garden plots. However, the increasing prevalence of apartment buildings incompatible with the traditional pattern threatens spatial continuity (Yücel, 2018).

Similar deterioration is observed in terms of green space continuity. Except for the conversion of a cemetery into a park, most inner green voids have disappeared. Some of the approximately 100 buildings remain abandoned. While traditional masonry structures preserve traces of the historic pattern, their roof and facade materials have often been replaced. The organic street pattern, village square, and a few registered historic structures form the core elements of Ambarlı Köyiçi's spatial identity (Figure 2). A master plan approved in 2006 designated the area as a "special project area," leading to limited facade improvements and height restrictions (6.5 meters). However, these interventions lacked a comprehensive strategy to reinforce the area's authentic spatial character (Yücel, 2018).

In addition to its historical and spatial values, Ambarlı Köyiçi is critically exposed to disaster risk. Its proximity to the North Anatolian Fault renders the area highly vulnerable to earthquakes. Historical disasters such as the 1894 Istanbul Earthquake and the 1999 Marmara Earthquake have caused structural damage in the settlement. Post-1999 assessments in the Avcılar district revealed that out of 505 buildings surveyed, 16.59% were damaged. The majority of damage occurred in 4–6 story reinforced concrete buildings,

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whereas lower-rise buildings were less affected, highlighting the role of both uncontrolled construction and geophysical conditions in exacerbating risk (Khatrush & Yücel, 2023).



Figure 2. Ambarlı Köyiçi square (left) (Avcılar Municipality 1), Ambarlı Population Exchange Memorial House (center) (Avcılar Municipality 2), and an aerial view of the urban pattern (right) (Avcılar Municipality 3).

Recent projections estimate that in the event of a major earthquake, 32% of Ambarlı Köyiçi's building stock will suffer low-level, 17.6% moderate, and 4.6% high-level damage. This necessitates not only structural interventions but also a reconsideration of spatial integrity and planning strategies (Khatrush & Yücel, 2023). An adjacent zone to the west of the site, officially declared a "landslide area," remains off-limits to development but holds significant potential as a public open space.

Previous studies on Ambarlı Köyiçi have generally focused on engineering-based analyses related to disaster risk and building stock. However, a comprehensive design approach aimed at enhancing spatial quality while preserving cultural identity has not been developed. Therefore, the central research question of this study is: "How can a unique historic settlement undergo spatial transformation while preserving its existing socio-spatial values?"

The hypothesis of this study is as follows: Concept projects developed within architectural diploma studios can play a guiding role in formulating spatial improvement strategies and informing municipal decision-making processes for unique urban areas such as Ambarlı Köyiçi.

This study aims to bridge the gap between the theoretical framework of architectural education and the practical design outputs developed in a local context by examining how architecture studio projects can contribute to the spatial planning and implementation processes of local governments, using the Ambarlı Köyiçi settlement in Istanbul's Avcılar district as a case study. Accordingly:

- The historical development and spatial characteristics of the settlement were analyzed through literature and planning documents.

• Selected student projects were evaluated at both urban (e.g., public space continuity, street pattern) and building scales (e.g., typology, structure, material).

• The findings were interpreted in terms of spatial improvement principles and contributions to local policy-making.

The dataset consists of nine student projects selected through observational evaluation by the studio instructor during a diploma design studio conducted in the Spring 2025 semester. This introduces limitations such as selection bias and subjective evaluation, both of which are explicitly acknowledged in the scope of the study.

2. MATERIALS & METHODS

This study employs an evaluative and design-oriented research approach to explore how architectural studio projects—developed within the framework of undergraduate work—can contribute to the spatial regeneration of historically and culturally significant urban areas. It aims to formulate a concrete reference set for local governments by integrating theoretical insights from architectural education with practical, student-generated design strategies. The Ambarlı Köyiçi settlement in Istanbul's Avcılar district serves as the case study for applying this hybrid methodology. The research process was carried out in three main stages:

(i) Contextual Analysis; In the first stage, the historical development, spatial structure, and current challenges of the Ambarlı Köyiçi settlement were examined. This contextual analysis was informed by an extensive review of academic studies, planning documents, and urban reports. Key references included Yücel's (2018) research on morphological transformation and conservation strategies, and Khatrush and Yücel's (2023) study on earthquake risk and the structural vulnerability of the built environment. In addition, up-to-date zoning plans, planning notes, site observations, and satellite images provided by Avcılar Municipality and the Istanbul Metropolitan Municipality enriched the contextual data set. This phase established a comprehensive understanding of the site's socio-spatial dynamics, which formed the foundation for subsequent evaluation.

(ii) Literature-Based Parameter Development; The second stage extended the scope of the literature review to national and international examples of urban regeneration, participatory design practices, and student–municipality collaborations. Notable cases included the works of Burda & Dymnicka (2019), Caldieron, Vermisso & Thitisawat (2014), and Hemmersam et al. (2022), among others. These references were reviewed not only to provide comparative insights into similar spatial contexts but also to inform the construction of a methodological and analytical framework tailored to the goals of this study.

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Crucially, this stage focused on deriving a set of evaluation parameters that would later be applied to the student projects. The literature helped identify key themes such as contextual sensitivity, typological innovation, structural feasibility, and contribution to public interest. These themes were consolidated into a preliminary set of assessment criteria, forming the basis of the evaluative lens used in the third stage.

(iii) Selection and Analysis of Student Projects; In the third stage, a selection of undergraduate capstone projects—developed during the Spring 2025 semester at Istanbul Gelişim University's Department of Architecture—was analyzed. The projects were produced within one of the four design studio groups, supervised by the author. Among the 21 students in the group, only those whose final project grade was 65 (CB) or above were included in the analysis. This grading threshold ensured a sample set that was academically robust while reflecting a diversity of design approaches.

The selected projects were evaluated through their visual documentation (plans, diagrams, model photographs) and accompanying project reports. Each proposal was assessed using the parameters identified in the previous stage. Evaluation criteria included contextual responsiveness, architectural creativity, spatial continuity, material and typological articulation, and potential relevance to local governance and community needs. The final step involved synthesizing the findings into a set of spatial recommendations, positioning the student proposals as applicable and actionable references for local governments' future planning and decision-making processes.

3. LITERATURE REVIEW

This section examines previous academic studies on Ambarlı Köyiçi as well as comparable projects and competitions conducted in similar settlement areas. The purpose of this review is twofold: to provide a comprehensive understanding of the existing context and to inform the development of the methodological framework within the scope of the design studio.

One of the most significant studies on Ambarlı Köyiçi is by Yücel (2018), which focuses on the spatial characteristics of the area and its potential for sustainable conservation. The study provides a detailed analysis of the traditional urban pattern, which consists of narrow streets, garden parcels, and masonry stone houses. It also includes typological examinations of building façades to reveal the architectural identity of the area (Figure 3). However, the study emphasizes that an integrated approach to spatial regeneration has yet to be developed.



Figure 3. Architectural characteristics of existing building façades (Photographs by Zahraa Taha).

Another key contribution is the work by Khatrush and Yücel (2023), which addresses the earthquake vulnerability of Ambarlı Neighborhood and its building stock. Their study analyzes post-disaster damage data following the 1999 Marmara Earthquake and develops risk scenarios using fuzzy logic methodology. The findings demonstrate that current planning decisions and the existing building stock are inadequate in the face of high seismic risk.

Although these two studies provide a comprehensive understanding of Ambarlı Köyiçi's historical and spatial values, as well as its disaster-related vulnerabilities, they do not offer a methodology focused on spatial regeneration or implementation-oriented planning strategies. This gap forms the foundation for the research problem and methodological framework of the current study.

3.1 Relevant Precedents

The design studio developed for the spatial regeneration of Ambarlı Köyiçi was shaped not only by the unique characteristics of the settlement itself but also by methods and design approaches employed in comparable transformation projects at both national and international scales. In this context, the analysis of projects developed in various settings has been critically important in formulating both spatial solutions and a methodological framework.

These analyses focused particularly on parameters such as public space continuity, sustainability, social integration, identity preservation, and organic urban pattern. The selected reference projects provide valuable examples in terms of both design principles and implementation strategies that may inform the Ambarlı Köyiçi study. Below, national and international case studies selected within this framework are examined and discussed.

- **"3 Villages, 3 Squares, 3 Universities" Project – Beylikdüzü**

The "3 Villages, 3 Squares, 3 Universities – Beylikdüzü" project aims to integrate the traditional identity of the village centers Gürpınar, Kavaklı, and Yakuplu—located within the Beylikdüzü district—into contemporary urban life, while preserving their unique

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characteristics. The primary objective of the project is to revitalize neighborhood life, enhance the quality of public spaces, and promote social sustainability. Within this scope, developing a spatial solution that balances the traditional pattern with contemporary needs was adopted as a core design principle (Beylikdüzü Municipality, 2016).

The project was structured around a methodological framework based on Henri Lefebvre's theory of spatial production. Analyses were carried out at macro (district), mezzo (neighborhood), and micro (street and square) scales. Fieldwork was conducted to gather social and spatial data. The process was supported by workshops involving three different universities and interviews with local residents. Public participation was integrated into the design process as a key component (Beylikdüzü Municipality, 2016).

The overall approach focused on ensuring public space continuity, prioritizing pedestrian and bicycle mobility, and preserving local identity. Squares were conceptualized as focal points of neighborhood life, while street and square typologies were redesigned. Façade designs and building typologies were developed in harmony with the local architectural character, emphasizing the use of local materials. This comprehensive approach demonstrates a holistic design understanding that integrates spatial regeneration with its social dimension (Beylikdüzü Municipality, 2016).

- **"7 Climates 7 Regions" – National Architectural and Urban Design Competition for Neighborhoods**

The "7 Climates 7 Regions – National Architectural and Urban Design Competition for Neighborhoods" aimed to revive the rapidly disappearing neighborhood culture in Turkey and to develop sustainable urban spaces that meet contemporary living needs (TOKİ, 2017). The core theme of the competition was to place the neighborhood scale at the center of planning and design while preserving local identity and integrating it with new urbanism principles. In this regard, design principles that are human-centered and aligned with aesthetic and ecological values were prioritized.

The competition was structured around an interdisciplinary approach. Participation was contingent upon including architects, urban planners, and landscape architects in each team, while involving professionals from other fields—such as sociologists—was also encouraged. Participants were expected to produce comprehensive proposals, including conceptual schemes at the macro scale, 1:10,000 master plans, and urban design proposals at the 1:1,000 scale for designated regions. The design process emphasized revitalizing social life, strengthening neighborhood relations, integrating commercial units, ensuring continuity of open and green spaces, and incorporating climatic data (TOKİ, 2017).

The overarching approach focused on redefining the neighborhood as a fundamental unit of urban life. The submitted proposals addressed pedestrian-oriented mobility,

open and green space continuity, and the contemporary interpretation of local architectural elements in a holistic manner. Spatial configurations and lifestyle scenarios that support social integration were integral components of the proposed projects (TOKİ, 2017).

•Küçükçekmece Square Surroundings and Urban Design Project

The Küçükçekmece Square Surroundings and Urban Design Project proposes a design approach aimed at reestablishing human scale within a dense urban pattern while enhancing the quality of public spaces. Designed by Sepin Architecture, the project reinterprets the traditional concept of a square, striving to establish a balanced spatial continuity between open spaces and built masses (Biçer, 2012).

One of the most notable features of the project is the formation of an organic street pattern through the clustering of distinct buildings of varying sizes and forms, instead of large monolithic building blocks. This approach fosters permeability and visual diversity, resulting in inviting public spaces at the pedestrian scale. The configuration of the building clusters integrates with a permeable street network that supports public life in the surrounding areas of the square, thereby enabling smooth circulation and continuity between different functions (Arkiv).

In the urban design strategy, the square is conceived not merely as an empty void but as a social focal point in constant interaction with its surrounding buildings. The strategic placement of commercial units and social amenities at ground level is emphasized to ensure the square remains vibrant and active throughout the day (Arkiv).

• Bo01 Project, Malmö, Sweden

The Bo01 Project was implemented as part of the 2001 European Housing Expo with the aim of transforming Malmö's former industrial harbor area into a sustainable urban settlement. The primary objective of the project was to create a carbon-neutral living environment by integrating environmental sustainability with innovative architectural solutions (Kuitenbrouwer, 2018; Özmen & Kayacan, 2021).

Developed within the framework of a comprehensive strategic plan, the project adopted a multi-layered approach guided by sustainability principles (Austin, 2013). Key strategies included energy efficiency, the use of renewable energy, water management, and prioritization of pedestrian and bicycle transportation. Multiple architects were involved in the design process, supporting architectural diversity. In addition, the project was financed and implemented through a public-private partnership model, demonstrating a strong collaboration between local government and the private sector (Verchou, 2005).

The overall design strategy was rooted in sustainability. A coastal promenade that ensured continuity of public space, along with open green areas, bicycle lanes, and public

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transport connections, played a central role in the spatial organization of the project. The urban landscape was supported by planting schemes compatible with the local ecosystem and by water cycle management. Furthermore, the use of diverse architectural typologies promoted social diversity (Anderberg, 2015).

- **Vauban – Freiburg, Germany**

Vauban is a redevelopment project that transformed a former military base in the southern part of Freiburg into a primarily residential neighborhood in the late 1990s, based on principles of sustainability (Coates, 2013). The main objective of the project was to create an urban pattern that was environmentally conscious, socially inclusive, and offered a high quality of life (Ramos, 2010). In this regard, Vauban is recognized as one of the pioneering eco-districts in Europe and is notable for its participatory planning model (Coates, 2013).

The transformation process was led by the Municipality of Freiburg with active involvement from local civil initiatives and housing cooperatives (Coates, 2013). The planning approach was structured around key criteria such as energy efficiency, reduced car usage, green mobility systems, and continuity of public spaces. The land was parceled in a flexible manner to accommodate a variety of housing typologies, and the construction process incorporated contributions from multiple architects, resulting in a heterogeneous and vibrant urban environment (Scheurer & Newman, 2009).

Instead of a rigid grid system, Vauban features curvilinear, pedestrian-prioritized streets and a continuous network of open public spaces. Vehicular traffic within the neighborhood has been minimized, with a strong emphasis placed on bicycle and public transportation use (Schroepfer & Hee, 2008). The residential typologies are diverse, consisting primarily of low-rise, energy-efficient buildings integrated with shared gardens and social amenities. Furthermore, ecological infrastructure such as rainwater management systems and green roofs, along with renewable energy applications, have been widely implemented throughout the district (Scheurer & Newman, 2009).

3.2 Methodological Insights and Contributions

The five reference projects analyzed in this study offer significant contributions to the studio work carried out for the spatial regeneration of Ambarlı Köyiçi, both in terms of methodology and design parameters. The common ground among these studies is the emphasis on multi-scalar analysis, identity preservation, continuity of public spaces, sustainability, and participatory planning principles in the spatial improvement process.

The 3 Villages, 3 Squares, 3 Universities – Beylikdüzü Project demonstrates the applicability of a multi-scalar approach for Ambarlı. The analyses conducted at macro, mezzo, and micro levels provide a methodological reference for the development of public

space strategies at the neighborhood scale. The project's emphasis on the continuity of open spaces and public squares presents a strategic approach that could enhance social interaction in Ambarlı. Moreover, the inclusion of public participation in the planning process stands out as a method that improves both the social acceptance and the implementability of the design proposals (Beylikdüzü Municipality, 2016).

Similarly, the 7 Climates 7 Regions – National Architectural and Urban Design Ideas Competition offers important contributions with its neighborhood-centered planning perspective and climate-responsive design principles. The continuity of open and green spaces, pedestrian-friendly circulation, and contemporary interpretations of local architectural elements constitute the core components of design strategies that could be developed for Ambarlı. The competition's multi-layered design approach—from conceptual schemes to urban design proposals—offers an applicable framework for a diploma studio context (TOKİ, 2017).

The Küçükçekmece Square and Urban Design Project is particularly noteworthy for its fragmented massing strategy and reinterpretation of organic street networks. Instead of large, monolithic building blocks, the project proposes a composition of diverse scales and typologies, forming a street pattern that aligns well with Ambarlı Köyiçi's existing morphology. This approach provides significant advantages in terms of spatial permeability and pedestrian-scale livability (Arkiv).

The Bo01 Project in Malmö serves as an inspiring example, especially regarding the transformation of coastal areas and the continuity of public spaces. The integration of the waterfront promenade with green infrastructure can serve as a reference for enhancing the connection between the Ambarlı coastline and the village core. Furthermore, principles such as water management, energy efficiency, and ecological landscape design offer strategies to mitigate environmental risks and improve quality of life in the area. The implementation process, based on a public-private partnership model, presents a viable framework for local governments (Kuitenbrouwer, 2018).

The Vauban Project in Freiburg provides valuable lessons for Ambarlı through its integration of an organic street pattern and a variety of housing typologies. As in Vauban, the integration of small-scale squares and shared green areas that ensure public space continuity can be considered an effective strategy to promote social interaction. Moreover, transportation policies that reduce car usage and sustainability principles based on ecological infrastructure could contribute to enhancing environmental quality in Ambarlı's transformation process (Coates, 2013).

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Table 1. Summary of reference projects and their methodological contributions (Table created by the author)

Project	Project Type	Contributing Aspects
3 Villages, 3 Squares, 3 Universities – Beylikdüzü	National	Multi-scalar analysis, public space continuity, community participation, identity preservation
7 Climates, 7 Regions – Neighborhood Design Competition	National	Climate-responsive design, open space continuity, social integration, multi-scalar approach
Küçükçekmece Square and Urban Design Project	National	Fragmented massing approach, organic street pattern, square-centered configuration, functional diversity
Bo01 – Malmö, Sweden	International	Coastal area regeneration, sustainability, organic street network, public-private partnership
Vauban – Freiburg, Germany	International	Organic street layout, diverse housing typologies, green infrastructure, reduction of car dependency

Table 1 summarizes the five reference projects examined within the scope of the diploma project and outlines their methodological contributions. The nationally selected projects—3 Villages, 3 Squares, 3 Universities – Beylikdüzü and 7 Climates 7 Regions—stand out for their multi-scalar analysis, participatory planning, and climate-responsive design parameters. The Küçükçekmece Square project provides a noteworthy example with its fragmented massing, organic street network, square-centered configuration, and functional diversity. The international projects Bo01 (Malmö) and Vauban (Freiburg) contribute applicable strategies to the Ambarlı context in terms of sustainability, coastal planning, organic street morphology, and the integration of diverse housing typologies.

The shared methodological principles derived from these projects form the foundation for the design strategies to be developed for Ambarlı Köyiçi (see Table 2). First, the multi-scalar analysis approach enables a holistic evaluation of spatial relationships at macro, mezzo, and micro scales. Continuity of public space prioritizes the integration of squares, open spaces, and green networks in the design process. Identity and cultural coherence refer to the adaptation of local architectural elements to contemporary needs. Participatory planning aims to strengthen social acceptance through active involvement of residents and stakeholders. Climate- and environment-sensitive design involves the

integration of ecological data and sustainability principles into the design parameters. Finally, the relationship between building mass and street aims to maintain or reinterpret human-scaled environments through fragmented masses and context-sensitive organic street networks. These principles will serve as the methodological basis for the diploma studio designs and guide the spatial analysis process.

Table 2. Common Methodological Principles for Spatial Improvement (Table created by the author).

Parameter	Explanation
- Multi-Scalar Analysis	Evaluation of spatial relationships at macro, meso, and micro scales
- Continuity of Public Space	Prioritization of squares, open spaces, and green networks in the design process
- Identity and Cultural Integration	Integration of local architectural elements with contemporary needs
-Social Space Configuration	Designing public spaces to enhance social interaction potential
-Climate- and Environmentally-Responsive Design	Incorporation of ecological data and environmental parameters into the design process
-Building Mass and Street Relationship	Preservation of human scale through fragmented masses and a context-sensitive street network

4. CASE STUDY: SPATIAL EVALUATION OF DESIGN PROPOSALS FOR AMBARLI KÖYİÇİ

The diploma project analyzed in this study was conducted during the Spring 2025 semester at the Department of Architecture, Istanbul Gelisim University. Following preliminary consultations with the Avcılar Municipality prior to the start of the studio course, Ambarlı Köyiçi was designated as the study area. Within the scope of the diploma project, students were divided into four groups, each developing design proposals in accordance with the defined methods and thematic frameworks. This article focuses on selected projects developed within the group supervised by the author.

Among the 21 students in this group, only the projects that received a final grade of 65 (CB) or higher were included in the evaluation. This selection allowed for the analysis of projects that not only reflect diverse design approaches but also have a high representational value in terms of spatial improvement objectives. The student projects supervised by the author are coded from P1 to P9 in the analyses and throughout this article.

The studio process followed a multi-layered methodology, encompassing analysis, concept development, and design stages. The work began with an examination of the site's

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spatial and social characteristics, followed by the generation of conceptual scenarios and comprehensive design solutions ranging from urban to architectural scale. Students were expected to develop multi-scalar projects beginning with conceptual diagrams at a 1/5000 scale, continuing with urban design proposals at 1/1000 scale, and concluding with architectural arrangements at 1/500 scale. The production process incorporated digital modeling, 2D–3D visualization, and hand-drawing techniques, resulting in a design process that was both technically robust and visually enriched.

4.1. Multi-Scalar Analysis Approach

The studio work was conducted with reference to the multi-scalar planning framework emphasized in the literature review. Students were asked to develop conceptual diagrams at the macro scale (1/5000), analyzing the project site's position within the urban context, its transportation networks, and its connections with surrounding neighborhoods. At this stage, the overall planning decisions of Avcılar district, the current condition of the coastal zone, and the topographic features of Ambarlı Köyiçi were taken into account. Macro-scale studies enabled the village core to be considered not only within its own boundaries but also in an integrated perspective with its surrounding context (Figure 4).

In this framework, the connection potential between the commercial center of Avcılar and the project site was evaluated. The continuity of the coastal zone and its relationship with the project area were analyzed, with a particular focus on the spatial axes provided by Fevzi Çakmak Street and Cumhuriyet Street. Strengthening spatial continuity through these connections was proposed as a strategy to enhance interaction between the project site and neighboring districts. Additionally, integrating pedestrian accessibility with commercial corridors was addressed as another key design criterion for improving spatial quality.

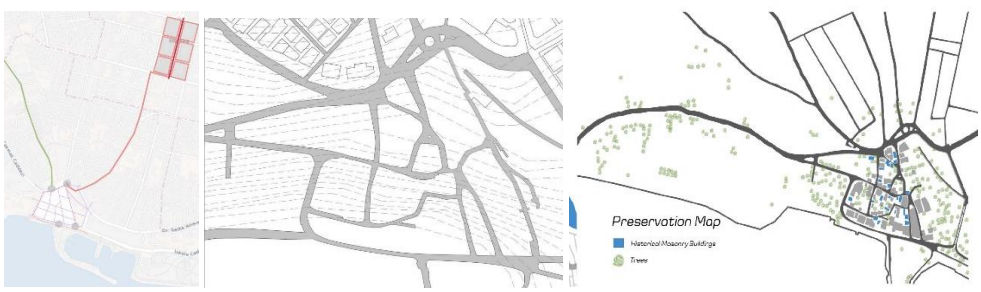


Figure 4. Example of a 1/5000-scale analysis approach (Excerpted from Project P6).

At the mezzo scale (1/1000), the focus shifted to the reorganization of neighborhood structure, street networks, and open space systems. At this level, the locations and preservation requirements of listed buildings were analyzed. Key identity elements such as the village square and the Population Exchange Memorial were observed in situ and incorporated into the design process. Within the studio, alternative approaches were discussed, including the adaptation of the existing organic street pattern to contemporary needs or the redesign of certain spatial and cultural components. Preservation of heritage buildings, enhancement of the social potential of the village square, pedestrian-oriented planning, maintenance of human scale, and continuity of open spaces were adopted as fundamental principles.

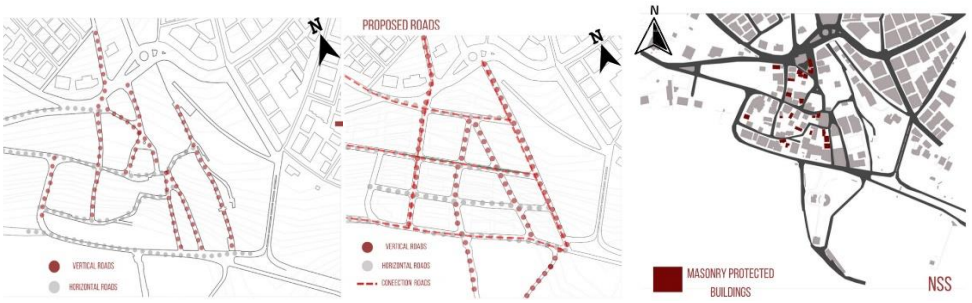
Table 3a illustrates the relationship between the commercial core of Avcılar and the project site, along with topographic features and the existing road network. Table 3b presents a comparative analysis between the current road system and the proposed street layout. In Table 3c, the proposed circulation network is supplemented with the locations of listed buildings.

Table 3. Examples of 1/1000 and 1/2000-scale analysis approaches: (a) left image from Project P1, center from Project P5, right from Project P6; (b) all images from Project P1; (c) all images excerpted from Project P7.

Analysis of Environmental Context, Slope Conditions, Existing Structures, Registered Buildings, and Road Network
a) 
b) 

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c)



At the micro scale (1/500), the focus was on building-parcel relationships, residential typologies, and façade articulation. In most student projects, low-rise housing typologies (2–3 stories) were proposed, while in some cases, mixed-use (residential + commercial) scenarios were developed. Ground-floor commercial units integrated with street level and small-scale public spaces emerged as key design components that foster social interaction. This multi-scalar approach ensured that the proposed designs for Ambarlı Köyiçi were both contextually sensitive and functionally detailed (Figure 5).

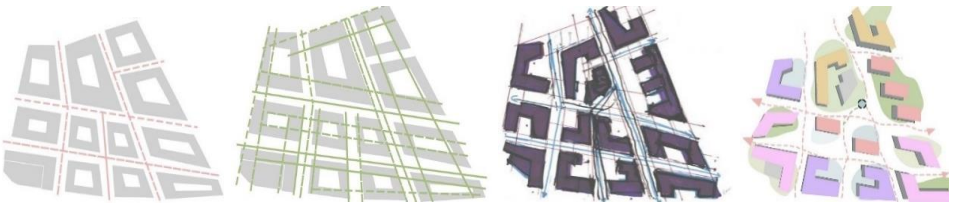


Figure 5. Illustration of the spatial analysis approach at 1/500 scale (Excerpted from Project P1).

4.2. Continuity of Public Spaces

The continuity of public spaces was addressed as one of the primary design parameters in the studio projects aimed at the spatial enhancement of Ambarlı Köyiçi. As in the reference projects examined in the literature, squares and open areas were not considered merely as physical voids, but as public spaces that strengthen social interaction. Accordingly, student projects aimed to establish spatial connections between the coastal zone and the village interior, designed in ways that support the continuity of social life.

In the majority of the projects, the coastal area was redefined through a seaside promenade and landscape interventions, and this zone was integrated with the open space network within the village (Figure 6). In some cases, linear green corridors were designed to connect the coast with the village interior. These corridors were intended not only as physical passages but also as ecological and social connectors. Along these axes, various social activities, rest areas, and cultural focal points were proposed to enrich the user experience.

Within the village pattern, plot reorganizations were introduced to ensure continuity between squares, small-scale open spaces, and transitional areas. In most projects, the existing organic street layout was either preserved or reinterpreted to create an integrated open space network. Squares were positioned as social focal points, surrounded by commercial units, social facilities, and functions that support public use. This approach enabled open spaces to function not merely as aesthetic elements, but as urban environments that provide both functional and social coherence.

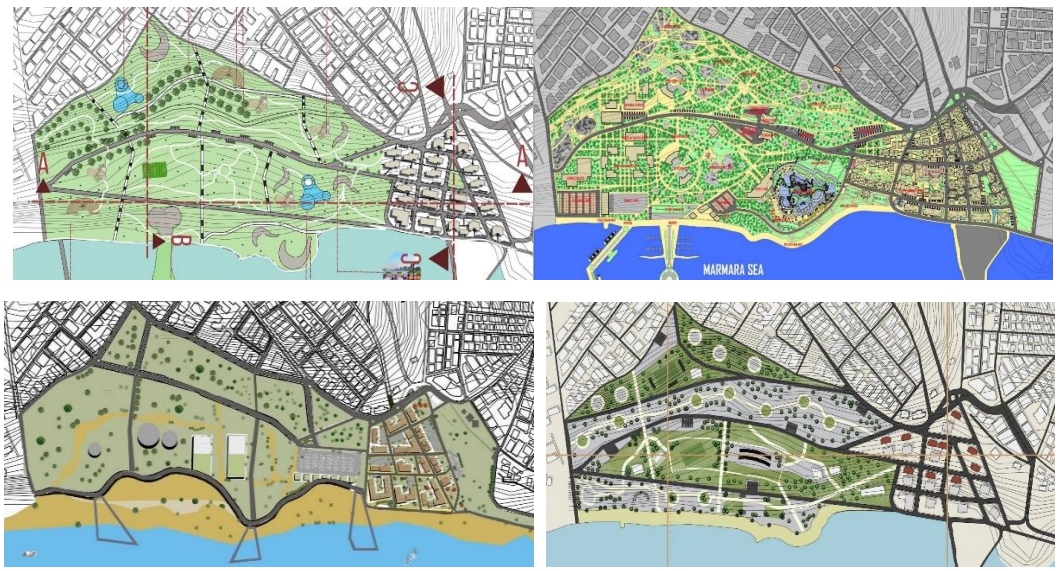


Figure 6. Ensuring landscape and public space continuity between Ambarlı Köyiçi (Area 1) and the landslide zone (Area 2) (Top: left image excerpted from Project P7, right image from Project P4; Bottom: left image from Project P3, right image excerpted from Project P2)

4.3. Identity and Cultural Integration

In the transformation of Ambarlı Köyiçi, identity and cultural cohesion were treated as one of the primary design principles within the studio studies. The presence of registered (heritage-listed) buildings, the village square, and the Population Exchange Memorial were regarded as key elements that shape the cultural layers and spatial memory of the settlement. The design approach prioritized adapting and redeveloping the existing urban pattern while preserving traces of the traditional village structure. Within this framework, maintaining or reinterpreting the organic street layout was a determining factor in integrating the original identity with contemporary spatial configurations.

In the student projects, low-rise and density-controlled residential typologies were generally preferred. In façade designs, local materials and authentic color palettes were

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combined with contemporary interpretations to establish a balance between modern architecture and regional identity. Some projects proposed the use of local materials such as stone and wood for façade cladding, thereby creating a strong link between aesthetic continuity and spatial belonging.

Additionally, preserving the traditional street scale and positioning commercial units in support of this scale was a common objective across projects. Even in designs adopting a modern architectural language, horizontal massing and permeable façades were employed to ensure visual and functional continuity with open spaces. This approach prevents the loss of local identity in the transformation process and presents a modernization strategy aligned with regional values.



Figure 7. Reflections of the existing urban pattern and architectural character in the proposed design projects (top row: left image from Project P6, center from Project P4, right from Project P6; bottom row: all images excerpted from Project P6).

Figure 7 highlights the heritage buildings marked in red; new design proposals were developed with a spatial arrangement that prioritizes the preservation of these structures. The organic settlement pattern was established as a primary design principle, guiding the spatial organization. Strategies to ensure architectural harmony with local identity at both the neighborhood scale and building façade level were also visualized.

Figure 8 presents sample proposals for the urban silhouette of the project area. These designs emphasize low-rise buildings, façades inspired by local architectural elements, building placements that respond to the sloped topography, and the organization of open spaces. Together, these strategies aim to preserve spatial identity and ensure cultural continuity.



Figure 8. Proposed urban silhouette examples for the project site (top image from Project P6, middle from Project P2, and bottom excerpted from Project P1).

4.4. Social Space Configuration

In the student projects developed for Ambarlı Köyiçi, the configuration of social spaces was approached not only as a matter of physical design but also as a strategy to enhance social sustainability. In this context, public spaces were envisioned not merely as circulation areas but as focal points that foster social interaction and neighborhood life.

In most of the proposals, squares were positioned as key nodes integrating the coastal area with the village core. Around these squares, commercial units, cafés, and multipurpose social spaces were planned, while open and semi-open seating areas were designed to encourage social relationships at the neighborhood scale. In some projects, the inclusion of children's playgrounds, sports fields, and open-air event spaces further enriched the diversity of social amenities.

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Another notable approach in the design of social spaces was the integration of public areas into everyday life. Pedestrian-prioritized streets were reinforced by placing commercial units at the ground level, thereby activating the street fronts and aiming to establish a vibrant public realm. This strategy reflects a spatial design understanding that enhances both safety and socialization within the neighborhood context (Figure 9).

In Figure 9, the left image illustrates open spaces situated between buildings, representing a modern interpretation of the traditional village square layout. The right image shows interior courtyards formed by row housing blocks positioned at varying elevations on sloped terrain, serving both as a response to topographical conditions and as a spatial component that enhances opportunities for social interaction.



Figure 9. Project examples illustrating the creation of social spaces through building placement (Images excerpted from Project P3).

4.5. Climate and Environmentally Responsive Design

In the studio projects, climate and environmental responsiveness were addressed as one of the primary parameters guiding the design process. In line with the methodological principles derived from the reviewed reference projects, sustainability criteria were integrated into the students' spatial decisions. In this context, energy efficiency, access to natural lighting, and natural ventilation were common design concerns across the projects.

Topography was considered a key design factor. Site-sensitive settlement patterns minimizing excavation and disruption to the natural slope were encouraged. Fragmented building masses were highlighted as an effective strategy, both for terrain adaptation and for maximizing daylight and air circulation. Moreover, the preservation of existing registered buildings was treated as a criterion for reducing environmental impact while reinforcing cultural continuity within the design approach (Figure 10).



Figure 10. Building placement adapted to site topography (top; excerpted from Project P1); preservation of existing registered structures (bottom left; excerpted from Project P6); relationship between landslide zone and design area in terms of landscape planning and building layout (bottom center excerpted from Project P9; bottom right excerpted from Project P4).

In some proposals, building orientation was determined based on prevailing wind directions and solar exposure, aiming to enhance natural ventilation and passive thermal comfort. Additionally, ecological design components such as green roof systems, rainwater harvesting infrastructures, and permeable surfaces were integrated into the proposals. At the urban scale, ecological corridors were proposed to extend toward the landslide-prone Area 2, aiming to support biodiversity. Accordingly, the proposed green promenades along the coastline were not only conceived as recreational spaces but also as ecological connectors integrated with the landscape interventions of the landslide zone. In this way, the proposed designs for Ambarlı Köyiçi aim to enhance not only spatial and functional qualities, but also meet critical environmental sustainability objectives.

4.6 Building Mass and Street Relationship

In the student projects developed for Ambarlı Köyiçi, the fragmented mass approach and organic street morphology were treated as critical design principles—aimed at preserving spatial identity and creating a livable human-scale environment. This approach aligns with the experiences observed in reference projects such as the Küçükçekmece Square Surroundings Project. Instead of monolithic, uniform building blocks, a more permeable, flexible, and dynamic urban pattern was proposed, composed of structures with varying sizes and typologies (Figure 11).

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The preference for fragmented building masses helped to balance density while enhancing the continuity of open spaces. This strategy strengthened the functionality of public areas and enabled the design of socially engaging plazas and semi-public spaces. The organic street network, inspired by the existing village layout, was reinterpreted to integrate original spatial elements into contemporary design solutions.

Moreover, this fragmented mass strategy facilitated typological diversity and mixed-use functions in housing, preventing monotonous development and offering flexible, functional solutions aligned with users' needs. In this context, the fragmented building mass and organic street morphology are considered fundamental design parameters for ensuring a distinctive, adaptable, and sustainable transformation of Ambarlı Köyiçi.



Figure 11. Examples of building masses and their interaction with the street (first two images excerpted from Project P3; third from Project P8; fourth from Project P7).

5. FINDINGS

This section presents the outcomes of an evaluative analysis conducted on nine undergraduate capstone projects. These projects were assessed using a 5-point Likert scale, based on a set of six interrelated evaluation criteria derived from a comprehensive literature review and reference project analysis. The purpose of the evaluation was to understand how well each project addressed key dimensions of spatial regeneration within the context of Ambarlı Köyiçi.

The evaluation was carried out by the studio instructor, who closely supervised the development of each project throughout the semester. The selected criteria reflect the studio's multi-dimensional objectives, including design quality, contextual responsiveness, and policy relevance. These include: (i) the ability to perform multi-scalar spatial analysis, (ii) continuity and connectivity of public space systems, (iii) integration of identity and cultural references, (iv) effectiveness of social space configuration, (v) responsiveness to climate and environmental conditions, and (vi) spatial articulation between building mass

and surrounding street networks. Each aspect was scored from 1 (very weak) to 5 (very strong), depending on the depth and coherence of its implementation.

Table 4. Evaluation table based on a 5-point Likert scale, reflecting the instructor's observational assessments (Table created by the author).

	Evaluation Criteria	P1	P2	P3	P4	P5	P6	P7	P8	P9
1	Multi-Scalar Analysis	5	5	5	5	5	5	5	5	5
2	Continuity of Public Space	5	5	5	5	4	4	5	4	4
3	Identity and Cultural Integration	4	5	4	3	4	5	3	4	3
4	Social Space Configuration	5	4	4	5	4	4	3	4	4
5	Climate- and Environ.-Respon. Design	4	4	3	4	4	4	4	4	3
6	Building Mass and Street Relationship	5	5	5	5	4	5	3	4	3

5.1 Exemplary and Contrasting Projects

To enrich the findings and provide deeper insight into the student proposals, this section highlights specific projects that exemplify either particularly successful or underdeveloped design strategies in relation to the evaluation criteria.

In terms of multi-scalar analysis, Project 1 and Project 4 demonstrated a sophisticated understanding of spatial transitions between the macro-level urban context and micro-level design strategies. Both incorporated topographic continuity, coastal access, and pedestrian integration with clarity and depth.

For public space continuity, Project 3 excelled by establishing a green pedestrian corridor linking inland zones to the coastal edge. This strategy was articulated through active urban nodes and plazas. In contrast, Project 9 struggled with spatial fragmentation and lacked clarity in transitions between private and public domains.

Regarding identity and cultural integration, Project 2 and Project 6 thoughtfully reinterpreted vernacular elements like pitched roofs and timber façades through a contemporary lens. Meanwhile, Project 4 and Project 9 presented more generic architectural languages with minimal reference to local cultural narratives.

In terms of social space configuration, Project 1 integrated rich public programming such as a market, amphitheater, and community kitchen, enhancing civic engagement. Project 4 also proposed inclusive hybrid spaces. Conversely, Project 7 lacked sufficient social programming and prioritized housing density over public life.

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For climate- and environment-responsive design, Project 5 stood out with topography-sensitive terracing, passive solar orientation, and sustainable systems such as green roofs and rainwater harvesting. Project 3 and Project 9 included only general references to sustainability, without coherent spatial strategies.

Regarding the building mass and street relationship, Project 2 and Project 3 provided strong pedestrian-scaled massing, incorporating façade articulation and active edges. Project 7 and Project 9, however, showed less integration, resulting in inactive frontages and reduced spatial permeability.

5.2 Thematic Evaluation and Interpretation of Results

To better interpret the findings, Table 5 presents the average score of each evaluation criterion across all nine projects. The distribution of scores reveals both strengths and weaknesses in the design outputs.

The highest score (5.00) was in multi-scalar analysis, reflecting a consistent effort to address spatial continuity from the urban to architectural scale. This demonstrated students' ability to contextualize their proposals within broader planning systems.

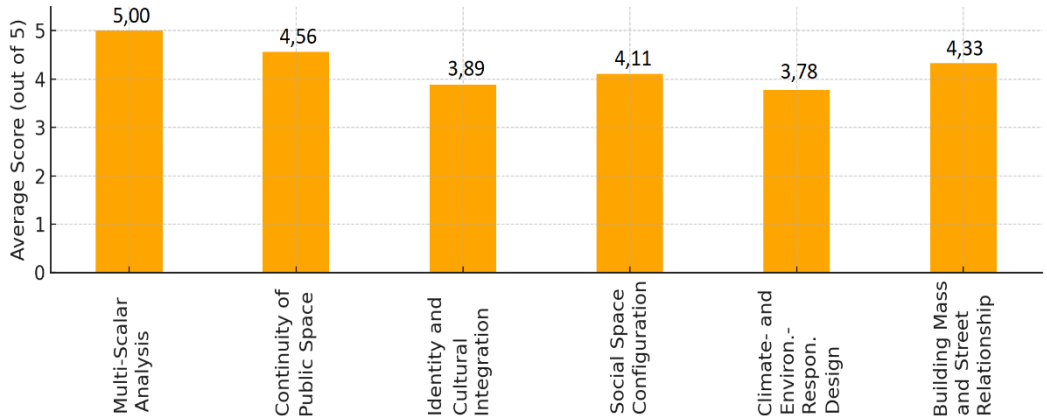
The second-highest score (4.56) was in public space continuity, revealing effective spatial integration between open spaces, the coastal axis, and community hubs. This was achieved through linear green systems and networked plazas.

Building mass and street relationship (4.33) and social space configuration (4.11) also scored well, indicating that many projects considered human scale, permeability, and active public interfaces. Projects tended to move beyond simple circulation, offering civic functions that encouraged social interaction.

Identity and cultural integration received a moderate average (3.89). Although most students acknowledged the historical character of the area, the interpretation and integration of cultural elements varied widely. This calls for deeper engagement with local heritage in future studios.

The lowest scoring criterion was climate- and environment-responsive design (3.78). Despite an overall awareness of sustainability, spatial implementations—such as solar strategies, ecological infrastructure, or material reuse—were often underdeveloped or superficially applied.

Table 5. Average scores by evaluation criteria (Table created by the author).



In sum, the findings suggest strong student capacity in spatial structuring and urban continuity, while revealing critical areas for improvement—especially regarding environmental performance and cultural integration. The results point to a growing potential for student-led proposals to inform municipal planning agendas, especially when reinforced by guidelines in sustainability and heritage-sensitive design.

5.3 Limitations

Despite its contributions, this study is subject to several methodological limitations. The dataset consists of only nine student projects, all developed within a single studio group supervised by the author. Moreover, only projects that received a final grade of 65 (CB) or higher were selected. While this ensured a baseline of academic quality, it introduces potential selection bias, as lower-performing or unconventional ideas were excluded from analysis.

In addition, the evaluation was conducted solely by the instructor, relying on observational assessments. Although this provided in-depth understanding of each project's development, it introduced subjectivity. The lack of external reviewers limits the objectivity and inter-rater reliability of the analysis.

To mitigate these issues, future studies could adopt a multi-evaluator approach, involving peer faculty, external critics, or municipal planners. This would allow triangulation of perspectives and align the evaluation process with collaborative and participatory values emphasized in architectural education and urban governance.

6. CONCLUSION

This study evaluated the spatial regeneration potential of the Ambarlı Köyiçi settlement through a set of undergraduate architecture capstone projects, using a design-

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oriented and literature-informed methodology. By integrating national and international case studies with spatial design theory and local context analysis, the research identified six key criteria to assess the projects: multi-scalar planning, public space continuity, cultural and identity integration, social space configuration, climate and environmental responsiveness, and the relationship between building mass and street networks.

The results demonstrate that graduation studio projects are not merely academic outputs, but can function as strategic tools for local governments seeking context-sensitive, sustainable urban transformation models. Projects exhibited particular strength in multi-scalar analysis and continuity of public space, indicating a mature understanding among students of how local-scale interventions relate to broader urban systems. These efforts supported the integration of the project area with regional infrastructure, pedestrian networks, and topographic features—establishing a coherent framework for layered spatial design.

Findings also revealed promising design strategies related to environmental sensitivity and social sustainability. Many students proposed green corridors, pedestrian-focused street layouts, and spatial sequences that linked the village core to the waterfront. These strategies aimed to enhance both ecological quality and community life. The use of fragmented building forms and organically structured streets helped to preserve human scale and spatial diversity, avoiding monotonous, large-block developments and supporting a nuanced response to the existing urban pattern.

Based on this analysis, several design and planning strategies emerge as particularly critical for guiding transformation in Ambarlı Köyiçi:

- At the macro scale, planning must ensure connectivity with district-wide transportation systems and the coastal band.
- At the meso scale, street networks, green spaces, and public nodes should be reorganized into cohesive spatial systems.
- At the micro scale, design attention must be given to parcel-building relationships, façade articulation, and typological variety, ensuring adaptability to local context.

In parallel, the continuity of public space must be reinforced through an interconnected system of plazas, parks, and walkways that foster pedestrian movement and active social life. These spaces should serve not only functional needs but also symbolic and cultural roles in reinforcing neighborhood identity.

Cultural integration, as one of the weaker dimensions identified, requires deliberate effort. Preservation of traditional street hierarchies, reinterpretation of local materials and textures, and the protection of parcel patterns can help strengthen spatial belonging

while responding to contemporary design demands. These moves are essential in resisting generic urbanization trends and cultivating identity-based transformation.

The diversification of social programs—such as community kitchens, cultural venues, and neighborhood-scale markets—can further enhance social sustainability. These should be embedded into the ground-floor pattern of the settlement, activating streets and fostering daily interaction.

Equally, climate and environmental responsiveness must be mainstreamed across all scales of design. Topography-sensitive layouts, passive design strategies, renewable energy integration, and ecological infrastructure—such as rainwater harvesting and green roofs—should be considered essential design components rather than optional features.

Ultimately, maintaining and reinterpreting the fragmented, fine-grained morphology of Ambarlı Köyiçi offers a spatial language that supports resilience, identity, and diversity. Rather than imposing homogenous urban blocks, regeneration efforts should prioritize a permeable, human-scaled urban pattern made of diverse architectural typologies—one that adapts to both environmental and social demands.

In conclusion, the student-generated proposals analyzed in this study point to a replicable model that bridges architectural education and local governance. Their conceptual depth, spatial sensibility, and policy relevance suggest that academic design outputs can inform municipal strategies—particularly in areas like Ambarlı Köyiçi that face the dual challenge of heritage preservation and sustainable development. The study contributes to both the academic discourse on studio-based research and the practical agenda of municipalities seeking innovative, locally grounded urban transformation models.

Acknowledgements

The author would like to express sincere gratitude to Architect Burak Demir (MSc.) from the Directorate of Public Works of Avcılar Municipality for his support in the implementation of this research.

The author served as the studio advisor for a group within the Architectural Design Graduation (Capstone) Project course during the Spring 2025 semester. Selected projects from this group are referenced throughout the article and are coded from P1 to P9. The coding of these projects (P1–P9) follows the same order as the list of student names herein, establishing a direct correspondence between each student and their respective project. The author would like to thank the students he advised - Zahraa Taha, Rana Abu Alatah, Mahmoud Alkadimi, Hakan Yaman, Nada Ali, Shaden Al-Hamadi, Naira Sakr, Zahra Tajouk, and Lana Elgak - for their contributions through the graduation projects that formed the foundation of this research.

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REFERENCES

AIAS. (2002). *The redesign of studio culture; A report of the AIAS studio culture task force*. The American Institute of Architecture Students.

Anderberg, S. (2015). Western harbor in malmö. The 51th ISOCARP Congress, Netherlands, Belgium and Germany, 19-23 OctoberIsocarp Review, 11, 210-227.

Arkiv. (t.y.). *Küçükçekmece meydanı çevresi kentsel tasarım projesi*. Erişim tarihi: 01 Mart 2025, https://www.arkiv.com.tr/proje/kucukcekmece-meydani-cevresi-kentsel-tasarim-projesi/1302

Ateş Akdeniz, A., & Öz, G. (2018). *Üniversite, halk ve yerel yönetim iş birliğinde toplumsal tasarım yaklaşımı: "Üretimin yerelliği: Kapıdağ – Erdek"*. UTAK 2018 National Design Research Conference. Erişim tarihi: 03 Temmuz 2025, https://open.metu.edu.tr/handle/11511/97391

Austin, G. (2013). Case study and sustainability assessment of Bo01, Malmö, Sweden. *Journal of Green Building, 8*(3), 34-50.

Avcılar Belediyesi 1. (t.y.). *Ambarlı köyiçi meydanı*. Erişim tarihi: 01 Mart 2025, https://www.avcilar.bel.tr/proje/ambarli-koyici-meydani-cok-guzel-oldu

Avcılar Belediyesi 2. (t.y.). *Ambarlı mübadele anı evi*. Erişim tarihi: 01 Mart 2025, https://www.avcilar.bel.tr/proje/ambarli-mubadele-ani-evi

Avcılar Belediyesi 3. (t.y.). *Ambarlı köyiçi meydanı* [Video]. YouTube. Erişim tarihi: 01 Mart 2025, https://www.youtube.com/watch?v=qKYMK-76WC4

Avcılar Belediyesi. (2023). *Avcıları'n dilinden; bir yerel tarih araştırması*. Avcılar Belediyesi Yayını.

Avcıoğlu, S. S., & Akın, O. (2017). Kolektif bellek ve kentsel mekan algısı bağlamında İstanbul Tuzla köyiçi koruma bölgesi'nin mekansal değişiminin irdelenmesi. *İdealkent, 8*(22), 423-450.

Beylikdüzü Belediyesi. (2016). *3 köy, 3 meydan, 3 üniversite fikir projesi*. Beylikdüzü Belediyesi Kültür Yayınları.

Biçer, S. (2012). *Küçükçekmece meydanı çevresi kentsel tasarım projesi*. Arkitera. Erişim tarihi: 01 Mart 2025, https://www.arkitera.com/proje/kucukcekmece-meydani-cevresi-kentsel-tasarim-projesi/

Burda, I., & Dymnicka, M. (2019). Student competitions as a socio-spatial tool for planning urban structures. *World Transactions on Engineering and Technology Education, 17*(4), 465-470.

Cal Poly CRP. (2024). *Studio projects; Highlights from CRP studios*. California Polytechnic State University, San Luis Obispo. Erişim tarihi: 03 Temmuz 2025, https://planning.calpoly.edu/studio-projects

Caldieron, J. M., Vermisso, E., & Thitisawat, M. (2014). *Intercessions among American architecture students and a Puerto Rican informal settlement*. The 2014 ARCC/EAAE Architectural Research Conference hosted by the University of Hawaii at Manoa.

Coates, G. J. (2013). The sustainable urban district of Vauban in Freiburg, Germany. *International Journal of Design & Nature and Ecodynamics, 8*(4), 265–286.

Fışgın Korkmaz, S. (2020). *Tasarım eğitim kurumları ve yerel yönetimler arasındaki iş birliklerinin incelenmesi* [Yayımlanmamış doktora tezi]. İstanbul Teknik Üniversitesi.

Hemmersam, P., Chopra, D., Dar, A., Breivik-Khan, H., Selmer Olsen, T., Ip, M., Lappi, T.-R., te Lintelo, D., Mull, R., & Adjoubei, X. (2022). Displacement and placemaking in design studios. *Architecture_MPS, 21*(1), 4.

Ilık Saltık, Ö. (2022). Changing/transformation of function in historical environments: An evaluation of the Beşiktaş-Köyiçi, Kartal (Eagle) Statue and its surroundings. *Journal of Architecture and Life, 7*(2), 589-615.

Khatrush, S., & Yücel, G. (2023). Seismic damage prediction of buildings using fuzzy logic; The case of Ambarlı neigbourghood at Avcılar. *Resilience Journal, 7*(2), 253-268.

Kuitenbrouwer, P. (2018). Bo01 City of Tomorrow Malmö: Klas Tham et al. *DASH | Delft Architectural Studies on Housing, 5*(9), 154–161. https://journals.open.tudelft.nl/dash/article/view/4889

Küçükyazıcı, U., Oskay, B., Töre, E., Gökşin, Z. A., Erkan Yazıcı, Y., Iavarone, A. H., & Şen, Ş. (2022). Bahçelievler millet bahçesi katılımcı tasarım uygulamasında bir aktör olarak üniversite: Katılım merdiveni üzerinden bir değerlendirme. *Planning, 32*(2), 312-328.

Özden, P. (2023). *Citizen design science in the context of crowd-creative design practices: Case of Izmir* [Yayımlanmamış doktora tezi]. İzmir Kâtip Çelebi Üniversitesi.

Özmen, E., & Kayacan, T. (2021). Possible relations of urban regeneration and urban stress notions. *European Journal of Science and Technology, 25*, 657-664.

Ramos, A. (2010). *Freiburg, Germany: Vauban sustainable urban district*. UCLG committee, Inclusive Cities Observatory. Erişim tarihi: 01 Nisan 2025, https://www.uclg-cisdp.org/sites/default/files/Freiburg_2010_en_final.pdf

Salama, A. M., & Patil, M. P. (2025). The socius in architectural pedagogy: Transformative design studio teaching models. *Architecture, 5*(3), 61.

Scheurer, J., & Newman, P. (2009). *Vauban: A European model bridging the green and brown agendas*. Case study prepared for the Global Report on Human Settlements 2009. Erişim tarihi: 01 Nisan 2025, https://mirror.unhabitat.org/downloads/docs/GRHS2009CaseStudyChapter06Vauban.pdf

Schroepfer, T., & Hee, L. (2008). Emerging forms of sustainable urbanism: case studies of Vauban Freiburg and solarCity Linz. *Journal of Green Building, 3*(2), 65-76.

TOKİ. (2017). Ulusal mimari kentsel tasarım fikir yarışması; 7 iklim 7 bölge-mahalle*. Erişim tarihi: 01 Mart 2025, https://i.toki.gov.tr/AppResources/UserFiles/files/7-iklim-final.pdf

Verchou, A. K. (2005). Green roofs, storm water management, and biodiversity in Malmö, Sweden. *WIT Transactions on Ecology and the Environment, 81*, 171-179.

Yücel, G. (2018). *The assessment of historical Ambarlı village in Istanbul within the scope of disaster and sustainable conservation*. 10th International Masonry Conference, Milan, Italy, July 9-11, 2018.

Yücel, G., & Laçin, A. (2019). İstanbul Avcılar ilçesi Marmara sahilinde bir dönemin iki tanığı: Motel Baler ve İETT kampı. *Mimarist, 66*, 73-78.

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Ethics Committee Approval: Ethics committee approval is not required for this article.

Declaration of Conflicting Interests: No conflicts of interest were reported for this article.

Financial Support: It has been reported that this study did not receive financial support from any person/institution or organization during the research and writing phase.

Statement of Support and Acknowledgment:

Double-Blind Peer Review: External-independent