

Abstract

This study shares the experiences and outputs from a two-phase architectural design workshop conducted in the Fall Semester of 2024, highlighting the potential of solving current spatial challenges in urban areas at every level of architectural education. Initially, 12 students who had begun studying architectural design visited the two designated sites in the Beykoz district, documented the phenomenologically experienced physical/social inputs they contained, interacted with residents, and conducted cognitive studies to analyze the district's characteristics and contemporary examples of the designated public program they will design. For the following two weeks, students focused on creating individual design proposals based on these insights. The second workshop phase delved into the nature/city dilemma, investigating the shrinkage of the natural void in Beykoz and its effects on the urban fabric on various scales. The conceptual framework formulated around a current urban problem facilitated a deeper engagement and improved participant communication. Grasped the district holistically, developed an understanding of the interconnectedness between physical and social dimensions, and inspired by the collective space phenomenon, the design proposals of the students reflected their growing sensitivity towards the local context, the natural elements in the urban environments, and the trans-scalar design thinking. The study underscores the benefits of conceptual and trans-scalar design thinking in architectural education, advocating for a curriculum that exposes students to the complexities of urban spatial problems which shed light on the physical (quantitative) and metaphysical (qualitative/social) dimensions of the space phenomenon, and the wide range of services covered in the discipline of architecture.

Keywords: Conceptual framework of the design problem, Trans-scalar design, Collective spaces at the intersection of private and public use, Current urban issues and architectural education

An Educational Experiment on the Positive Effects of Conceptual and Trans-scalar Design Thinking in Architecture - Conserving and Regaining the Natural Voids in Urban Environments: The Natural Void in Beykoz District

Mimarlıkta Kavramsal ve Ölçekler Arası Tasarım Düşüncesinin Pozitif Etkileri Üzerine Bir Eğitim Deneyi - Kentsel Çevrelerdeki Doğal Boşlukların Korunması ve Yeniden Kazanımı: Beykoz İlçesi Doğal Boşluğu

Kezban Ayça Alangoya, ORCID: 0000-0003-0294-0912
İstanbul Bilgi University, Faculty of Architecture/Department of Architecture, İstanbul, Türkiye

Basvuru tarihi/Received: 25.08.2024, Revize tarihi/ Revised: 14.09.2025, Kabul tarihi/Final Acceptance: 12.03.2026

Genişletilmiş Özet

Bu çalışmada kavramsal ve ölçekler arası tasarım düşüncesine odaklanan eğitimsel yöntemler aracılığıyla mimarlık eğitiminin her seviyesinde kentlerin içerdiği güncel mekânsal sorunlara çözümler üretilebileceğine, pedagojik ve eğitimsel kazanımlar edinilebileceğine ışık tutmayı amacıyla iki aşamalı olarak kurgulanmış bir tasarım atölyesindeki deneyimler paylaşılmıştır. 2024 yılının Güz döneminde mimari tasarım edimine yeni başlamış 12 öğrenciyle gerçekleştirilmiş atölye çalışmasının birinci aşamasında atölye yürütücüsü tarafından belirlenmiş Beykoz ilçesinde konumlanan 2 tasarım alanı öğrencilerle gezilmiş, mekânlarının tasarlanması beklenen kamusal programın içeriği açıklanmıştır. Tasarım alanlarının ve yakın çevrelerin içerdiği fiziksel ve sosyal girdileri fenomenolojik olarak deneyimlemiş, gözlemlemiş, belgelemiş ve gündelik yaşamı tanımak amacıyla bölgedeki farklı kullanıcı profillerine yönelttikleri anket soruları hazırlanmış öğrenciler; ilçe hakkında genel bilgi toplamak ve duyurulmuş kamusal kullanımlı mimari programın çağdaş örneklerini analiz etmek amacıyla bilişsel çalışmalar yapmışlardır. Fenomenolojik ve bilişsel çalışmaların akabinde bireysel tasarım önerilerine için iki hafta ayrılmıştır.

Birinci aşamayı kavramsal çerçevesini aynı bölgenin içerdiği güncel bir kentsel sorunun belirlediği ikinci atölye aşaması izlemiştir. Doğa-kent ikilemi merkezinde yapılan genel tartışmaların Beykoz ilçesi özelinde taşındığı ikinci atölye aşamasında öğrenciler ilçedeki doğal boşluğun daralmasının nedenlerini ve sonuçlarını bilişsel çalışmalar aracılığıyla araştırmış, doğal boşluğun daralma sürecini zamansal etaplara bölerek farklı ölçeklerde hazırladıkları haritalar aracılığıyla analiz etmiş, yorumlamış ve ilçeyi tarihsel, fiziksel, sosyal bütünsellikte kavramışlardır. Bölgedeki doğal alanın kaybı sorunu ikinci aşamada gerçekleştirilmiş fenomenolojik çalışmalarının içeriğini derinleştirmiştir. Öğrenciler belirledikleri önemli etaplara temelinde haritalandırdıkları doğal boşluğun sınırlarını fenomenolojik gezilerinde takip etmiş; hazırladıkları anket soruları aracılığıyla sakinlerin anılarında gündelik yaşam-doğa ilişkisinin izini sürmüştür. Kaybolmuş doğal alanın niceliksel değerlerine ve kaybolabilecek doğal alanların niceliksel/niteliksel varlığına tanık olan öğrenciler; ilçedeki farklı kullanıcı profillerinin doğal alanla etkileşimini anlayabilmek amacıyla yeni anketler hazırlamıştır.

Birinci aşamadan farklı olarak ikinci aşamada tasarım alanı seçimleri ve mimari program içeriklerinin oluşturulması kentlerdeki doğal alanların kaybı sorunsalının önemini Beykoz doğal boşluğu bağlamında duysal, duygusal, zihinsel düzlemde deneyimlemiş öğrencilere bırakılmıştır. İncelenen güncel sorun ve bölge bağlamında uygun tasarım alanı seçme ve mimari program oluşturma becerisinin kazanımı amacıyla ikinci aşamada mahremiyet/kamusalılık olgularının tartışılmasına, fiziksel/sosyal bütünleşmelerin gündelik yaşamı nasıl şekillendirdiklerinin irdelemesine olanak sağlayan ve mimari tartışma ortamında ilk kez 20. yüzyılın sonlarında bahsedilmiş kolektif mekân olgusu (De Sola Morales, 1992) tanıtılmıştır. Bina, kent ve doğa ölçekli morfolojik elemanların farklı kullanıcılar arasında etkileşimler yaratabilecek ve çok çeşitli aktiviteleri bir araya getirebilecek fiziksel sahneler olduklarına ışık tutan kolektif mekân olgusu, öğrencilerin farklı ölçeklerdeki kamusal ve özel kullanımlı morfolojik elemanları harmanlayarak gündelik sosyal yaşamın zenginleşmesine katkı sunabilecek, eş zamanlı kamusal, özel ve arası kullanımlar içeren kolektif mekânlar tasarlamalarına ilham vermiştir. Stüdyo yürütücüsü tarafından belirlenmiş bir mimari programın verili alanlara yerleştirildiği birinci atölye aşamasıyla karşılaştırıldığında güncel bir kentsel soruna odaklanılmış ikinci atölye aşamasında bölgeye ve kullanıcılara yarar sağlayacak mekânsal bir çözüm önerisi sunmaya motive olan öğrencilerin bireysel önerilerini ifade etmek için tartışmalara katılmalarıyla atölye katılımcıları arasındaki iletişimin güçlendiği, pedagojik kazanımlar edinildiği, yaratıcı çıktılarının üretilebildiği gözlemlenmiştir. Kavramsal çerçevede formüle edildiğinde ve objektif/sübjektif katmanlı tasarım ediminin ölçekler arası etkidiğini açığa çıkaran eğitim yöntemleri uygulandığında; çağdaş kentin içerdiği açık ve örtük pek çok sorun mekân olgusunun içerdiği fiziksel ve sosyal boyutlara ve mimarlık disiplininin geniş hizmet yelpazesine ışık tutarak mimarlık eğitimine kazanımlar sağlayacaktır.

Eğitimlerinin başında dahi olsalar mimarlık öğrencilerinin çağdaş kentlerin içerdiği güncel mekânsal sorunlara çözüm aramaları konusunda desteklenmelerinin önemini vurgulandığı bu çalışma beş bölümden oluşmaktadır. Çalışmanın birinci bölümünde mimarlık disiplini içindeki güncel tartışmalar ve iki aşamalı olarak kurgulanmış tasarım atölyesinin amaçları aktarılmıştır. İkinci bölümde birinci atölye aşamasında uygulanmış yöntemler ışığında edinilmiş deneyimler ve çıktılar paylaşılmıştır. Üçüncü bölümde kentlerdeki doğal alanların darılması sorunsalı İstanbul ili özelinde incelenmiş ve kolektif mekân olgusu tanıtılmıştır. Beykoz ilçesindeki doğal boşluğa odaklanılmış dördüncü bölümde ikinci atölye aşamasında uygulanmış yöntemler, edinilmiş deneyimler ve üretilmiş yaratıcı öğretiler paylaşılmıştır. İkinci ve dördüncü bölümlerin bitimlerini birinci ve ikinci atölye aşamasının amaçlarını, kaynaklarını, yöntemlerini, araçlarını ve bulgularını özetleyen tablolar eklenmiştir. Sonuç bölümünde birinci ve ikinci aşamalarda uygulanmış farklı eğitim yöntemlerinin sonuçlarına değinilmiştir. Kavramsal çerçevenin güncel bir kent sorunu merkezinde tanımlandığı, objektif ve sübjektif katmanlar içeren mimari tasarım ediminin ölçekler arası niteliğine, mekân olgusunun fizik ve fizik ötesi boyutları bütünleştiren yapısına, özel ve kamusal kullanımların keşiştiği kolektif mekân olgusuna odaklanılmış ikinci atölye aşamasında edinilmiş deneyim ve kazanımlar genel mimarlık eğitimi bağlamında değerlendirilmiştir.

Anahtar Kelimeler: Tasarım edimi ve kavramsal çerçeve, Ölçekler arası tasarım, Özel ve kamusal kullanımın keşiştiği kolektif mekânlar, Güncel kentsel sorunlar ve mimarlık eğitimi

I. Introduction

Since the mid-20th century, the number of new experiments applied in real-life practice and architectural education has increased. Nowadays, defining the discipline of architecture with clear-cut boundaries is more challenging than ever. In contemporary academic discussions on architecture, there is a consensus that architecture's interaction with the social sciences is closely related to urban planning, interior design, and object design. However, the opinions about what and how to teach in architectural education diverge among academics. While some advocate for transgressing the discipline's border to include discussions on philosophy, art, interiors, objects, and cities, others argue for reviving architecture within its traditional boundaries. The latter group associates the negative cultural symptoms of the capitalist societal structure (*such as individualism, competition, sexism, and racism*) with the excessive reliance on the architectural canon, primarily comprised of classical modern buildings. They seek methods to practice and teach architecture that do not rely on the canon and focus solely on the building scale (*D'Aprile, M., 2018*). On the other hand, the undeniable allure of urban life, with its complex social dynamics, phenomena like privacy, publicity, collectivity, and physical scenes shaped by morphological elements at various scales, remains a central focus for academics, professionals, and students in architecture. Academics who value both the building scale and the heterogeneity and anonymity of urban life can observe that there needs to be a greater emphasis on the integrity of social and physical dimensions, as well as trans-scalar design thinking, within the current architectural education.

Aims. While shedding light on the deficits of the educational approach that focuses on assigned sites, programs, and building scales, causing a separation between the analytical phase and the individual design act, this study aims to contribute to the challenges mentioned above. Demonstrating the outcomes of a two-phase design

workshop, the study emphasizes that through educational methods on conceptual and trans-scalar design thinking centering on an urban challenge, students, even embarking on their inaugural design course, can bring individual insights into the values and challenges of urban milieu and develop solution-oriented approaches towards current urban spatial challenges. Engaging with public urban scenes similar to the theater stages (*Mumford, 1961*) within the vibrant tapestry of multi-faceted urban life, and focusing on a current urban challenge at the second phase, the two-staged design workshop aimed to highlight the following scholarly objectives:

- The critical importance of establishing a conceptual framework for the design problem, ensuring a holistic understanding of the design scope and process.
- The acknowledgment of space as an entity composed of both physical and metaphysical aspects, underscored by its multi-scalar nature.
- The exploration of the contextuality, the phenomena of privacy and publicity; the collective space phenomenon, the activities and dynamic relationship of individual/group/society; and the integration of urban morphological elements in building, urban, and nature scales.
- The challenge of crafting spaces harmoniously integrated with a local context.
- The sufficiency of offering spatial solutions to current urban challenges, even at the start of architectural education.
- The recognition of the design act synthesizing objective (cognitive analysis) and subjective (experience/interpretation/preferences/priorities) dimensions.

Methods and Findings. With natural landscapes partially protected to this day, the Beykoz district in Istanbul, which has been at the center of ongoing dialogues surrounding new construction

Figure 1: Districts of Istanbul, Beykoz district. Location, Climate, Population.

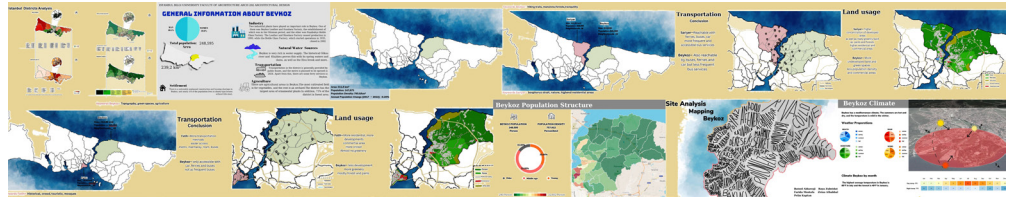


Figure 2: Routes around and in the Beykoz Meadow. Natural/built morphological elements.

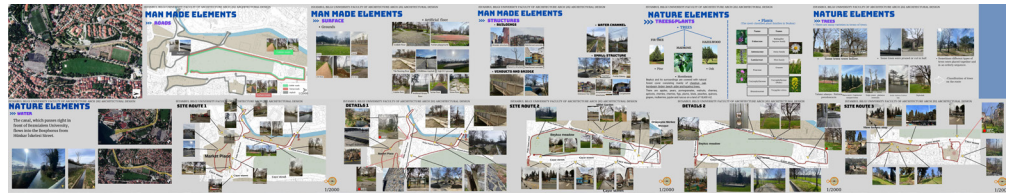


Figure 3: Surveys and interviews. Drawings of the Beykoz Meadow.



plans that threaten parts of this natural environment, served as the locus of this academic endeavor focusing on a current urban challenge. At the onset of the first stage, the 12 students participating in the workshop familiarized themselves with the region's dynamics through phenomenological explorations and cognitive studies. Distilling insights from a comprehensive evaluation of case studies encompassing architectural programs of education, production, exhibition, and from phenomenological explorations in the area, the students, while choosing one of the two predetermined design sites, offered individual design proposals containing open, semi-open, and closed units. In the second stage, the workshop's focal lens shifted towards addressing the conundrum of diminishing natural spaces in urban environments. The analysis of historical maps and aerial views, which makes visible the diminishing of natural spaces within urban environments due to

the urbanization process, highlighted that the architectural design act demands the integration of various scales, which have physical and trans-physical layers. Although they continued to work in the same design area as in the first phase, students in the second phase engaged strongly with the region's intrinsic values and problems, acknowledging the "spirit of the place." The comprehension of Beykoz's urban challenge on various scales, with both social and physical consequences, motivated a collaborative decision-making process that yielded innovative spatial designs, seeking to protect nature and enliven the district's daily life through diverse architectural programs that encompassed both privacy and publicity, and invited new user profiles.

2. Architectural Design Workshop- Phase I: A Center for Education, Production, and Exhibition near the Historic Beykoz Meadow

In the first phase of the workshop conducted in the Fall semester of 2024, the instructor

and 12 novice architectural design students visited the two designated design sites in the Beykoz district, where the instructor briefed the students on the public architectural program requirements for the spaces to be designed and tasked students designing open/semi-open and closed units (*max. 1000 m²*) of their design and situating them within one of two expansive design sites near the Historical Beykoz Meadow. Before formulating individual design proposals, students undertook cognitive analyses to assimilate comprehensive data regarding the history and quantitative/ qualitative attributes of the Beykoz district. Engaging phenomenologically with the environs of the historic Beykoz Meadow, students executed measurements and rendered drawings; documented the daily life through photographs and videos; conducted

interviews and surveys with residents, workers, students, and visitors. (Figure 1., 2., 3.)

The first phase of the workshop facilitated students' engagement in phenomenological inquiries that led to exciting discoveries and meticulous cognitive studies on the regional data and spatial case studies of the given architectural program. The two weeks following the phenomenological and cognitive studies were devoted to developing individual design proposals. However, despite using two- and three-dimensional representation tools that provide precision and accuracy, student motivation and interest decreased significantly during the design process.

Instead of recognizing the characteristic features of the immediate environment,

Figure 4: Beykoz. Open Bazaar and Parking area. Lamar Hamada



Figure 5: Beykoz. Parking area along the creek. Sinan Incel, Bengü Gün, Özlem Kaya.



Table 1: Phase I. Methods. Tools. Findings.

| |
|--|
| <p>Methods</p> <p>a. Phenomenological Investigations:</p> <ul style="list-style-type: none"> - Demonstration of designated design sites in the vicinity of the Historic Beykoz Meadow and explanation of the architectural program during the site excursion; - Conducting surveys/interviews with residents near Beykoz Meadow to understand their needs and challenges; - Exploration of the erstwhile Beykoz Kundura factory, now repurposed as a site for television series and film productions; - Detection/photographic documentation of the natural/built morphological elements within the designated design sites and their proximate environments and measuring the design site's dimensions. <p>b. Cognitive Evaluations:</p> <ul style="list-style-type: none"> - Data collection about the district and preparation of cartographic sources (maps/ariel views/tables) - Presentation on the locality/climatic conditions/demography/historical progress, and the historical/current natural/built morphological elements of the Beykoz district; - Analytical assessment of the predetermined architectural program by examining spatial examples. |
| <p>Tools</p> <ul style="list-style-type: none"> - Drawings (site plans/sections) in 1/2000, encompassing the Historic Beykoz Meadow, proposed design sites, and their immediate environs; - Drawings (site plans/sections) in 1/1000 integrating natural/built elements within the design sites and their immediate surroundings; - Collaborative models in 1/1000; - Drawings (site plans/plans/sections, and axonometric) in 1/500 and 1/200, focusing on individual spaces within design areas, including site plans, elevation views, and axonometric projections; - Individual models in 1/500 and 1/200. |
| <p>Findings</p> <ul style="list-style-type: none"> - During the individual design process, a deficiency in the enthusiasm and communication is witnessed; - Spatial outputs failed to forge connections with the regional natural and built morphological elements and social constituents, - Due to the lack of creative interpretation of the architectural program, the primary and auxiliary spatial units did not foster interactivity among different user profiles and activities; - The layout of open, semi-open, or enclosed spatial units displayed either a fragmented distribution along the design sites or congregated at the center without consideration of dimensions or proximity; - The proposals were oriented around formalistic criteria rather than main ideas and foundational concepts. |

such as the existing natural and built morphological elements and social aspects (Norberg-Schulz, 2000), and taking inspiration from regional 'genius loci', the spatial design proposals lacked consideration for contextual inputs. Reflecting that students could not integrate the assigned architectural program into the existing daily life, and creating interactions among user profiles and activities, the individual design proposals also shed light on disconnections between primary and auxiliary spaces within the architectural program. (Figure 4.-5.)

Whether open, semi-open, or enclosed, the layout of the disconnected primary and auxiliary spatial units of the architectural program either displayed a scattered distribution along the designated design sites or had been congregated at the center, proving that the students could not comprehend the real distances, proximities, and dimensions of the spatial units, and instead had taken the formalistic criteria into account. (Table 1.)

In the subsequent phase of the workshop, the reconceptualized design problem integrated natural voids in urban environments and the collective spaces phenomenon in the case of

the Beykoz district. This approach seeks to:

- bridge the gap between analytical studies and the design methodology;
- reconstitute the fragmented urban and natural contexts into a cohesive narrative that echoes the 'spirit of the place';
- facilitate the creation of private and public used collective spaces, which harmonize the buildings, urban, and nature scales;
- accentuate that the broad service spectrum of architecture can significantly contribute to enriching daily life within and around the Historical Beykoz Meadow.

3. The Collective Space Phenomenon, the Natural Voids in Urban Environments, and Istanbul

In light of the social dynamics in the regions studied in architectural design education, which public/private services are needed and what kind of public/private spaces should be produced should be questioned on various scales. It is evident that streets and expansive squares, as arenas of both minor and substantial social dynamics, facilitate varying degrees of interaction. Public

spaces characterized by social vibrancy cater to diverse user-profiles and foster urban environments that are not assigned to the privatization of daily life activities and culture (Carmona 2018, 2021). Architect de Solà Morales, in the latter part of the 20th century, brought the concept of collective spaces to the forefront and defined them as places distinct from traditional public spaces, which are assumed to be the sole domain of the public. Morales' discourse, however, delineated a departure from the traditional definition of publicity, perceived as exclusively inclusive. Instead, he advocated for environments permitting privacy and publicness simultaneously. He argued that collective spaces encompassing private units diverge from conventional public spaces, enrich urban typology by relating morphological elements, and the sociocultural landscape of daily life in urban environments, allowing diverse users to encounter and participate in each other's activities to the extent they prefer (de Solà Morales, 2018, pp. 184-190). The premise that privacy and private spaces do not need to signify utter seclusion nor a full engagement in public spaces, but should foster individualism and collectivism, propels the debate surrounding collective spaces. From open/semi-open to closed and hidden to visible, the collective spaces cultivate microcosms within macrocosmic contexts (Avermaete et al., 2006) and foster a harmonious confluence between built and natural elements by blending morphological elements on building/urban/nature scales. Therefore, by designing collective spaces, the designer is not only limited to serving a general public but should take into account the relationships between privacy/publicity, public/private activities of various user profiles, and varying scales of urban morphological elements.

Moreover, natural spaces within urban settings play an instrumental role in enhancing city dwellers' day-to-day social and physical well-being, effectively ameliorating their mental and physical health outcomes. These urban natural spaces, epitomized as 'unplanned private and public gardens,' embody a synthesis

of nature and urbanity, offering services and amenities catering to private and public needs. Their characteristics to blend building/urban and nature scale morphologies resonate with the characteristics inherent in collective spaces (Noll & Scupelli, 2009; De Solà Morales, 2018). Distinguished from the surrounding urban fabric, these natural spaces constitute examples of macrocosmic collective spaces where the dichotomies of private/public usage converge, and the body/building/urban/nature scales interact (Alangoya, 2023, 248-277).

Istanbul's natural spaces, distinguished by a rich array of natural-scale morphological elements and topography —ranging from hills, valleys, and plains, the Bosphorus, streams, forests, and groves— emerge as significant research resources for historians, sociologists, artists, planners, architects, and architecture students alike. The sequential phases of transformation observed within Istanbul's natural settings reveal an initial bias for agricultural use, subsequently giving way to industrial and residential development due to urban expansion and population growth. Over time, transitioning to recreational (sports fields, parks) and commercial utilities (markets/parking lots), the extensive urbanization resulted in the complete loss of some natural spaces (Özkuş & Gürel, 2017). The relentless pace of urbanization that persists in contemporary times highlights the critical need for thoughtful urban planning and design that reconciles development demands with preserving natural environments.

4. Architectural Design Workshop- Phase II.: Exploration of Beykoz's Natural Void

Beykoz, celebrated for its fish and gardening products (vegetables and fruits like strawberries/ figs/red mulberries) since the Byzantine era, exemplifies the myriad transformation stages that natural voids undergo, notably within the context of Istanbul's villages near the Bosphorus. Beykoz's shores, embellished with petite palaces and pavilions, garnered admiration from all Ottoman sultans, including Mehmet the Conqueror (Belge, 1994, 220-225, 243-244).

Beykoz's natural landscape, comprising forests, verdant valleys, plains, and a stream flowing into the Bosphorus, was further developed as recreational areas and venues for diverse festivals. The advent of factories manufacturing glass /leather goods from the late 19th century until the Republican era caused Beykoz to transform into a bustling district akin to other Bosphorus villages proximate to the city center and lose its natural spaces significantly (Kuban, 2010).

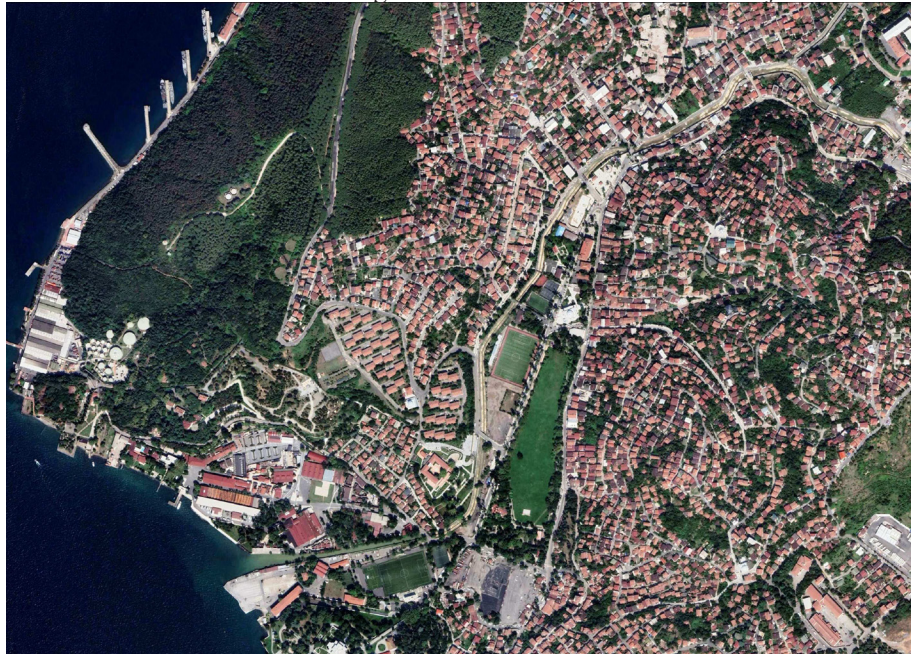
4.1 Analysis of Spatial Units: The Historical Beykoz Meadow and the Beykoz Void

The Historical Beykoz Meadow is a quintessential public space in the center of the Beykoz natural void. The meadow from the Ottoman to the Republican periods served as a natural public square, hosting sporting events, artistic endeavors, and musical festivals. It has facilitated social interaction among Beykoz residents of varying ages, employees and their families from the Beykoz Shoe Factory (operated in 1812-2005), and citizens from neighboring districts (Beykoz Kaymakamlığı, 2018). As a historically protected area covering 96000m², the meadow remains a pivotal natural area within Istanbul's urban structure. Its vast, uninterrupted grassy terrain still underscores its role as a recreational venue. Even though it

transitioned from being the core of a pristine natural area having considerable size to an urban park encircled by constructions, the meadow, still valued by older locals and the employees of the former Kundura factory (Beykoz Kundura, 2023), emerges as the protagonist of a vivid 'urban narrative' (Bowman & Pagano, 2004). Although it did not transform into a deserted 'residual place' (Alanyalı, 2009) or an 'ambiguous area' (De Sola Morales, 1995, 118-123), the Historical Beykoz Meadow needs to be integrated with the surrounding daily life and become a contemporary 'memory container.' Along with the forest area representing a nature-scaled morphological element and the Historical Beykoz Meadow as an urban-scaled, public-used morphological element that is encircled by plane trees over 200 years, some other buildings and urban-scaled morphological elements around the meadow recall the vastness of Beykoz's previous natural void;

- The extensive hard surface to the south of Historical Beykoz Meadow that is functioning as parking lots/open bazaar, and the Beykoz Mecidiye Pavilion integrated seamlessly into nature (Milli Saraylar Başkanlığı, 2023);
- Football fields to the west dating back to 1910, a hard surface adjacent to the stream,

Figure 6: The Beykoz Natural Void and The Historical Beykoz Meadow.



an edifice with a verdant inner courtyard erected during the Selim era for industrial production (Özkan, 2015) now repurposed as a university (Eldem et al., 1999), the green complex of the Beykoz factory (established in 1810 and repurposed as a film production plateau since 2005) — elucidate the quantitative and qualitative transformation of the Beykoz natural void from the 19th to the 21st century. (Figure 6.)

4.2 Architectural Design Workshop- Phase II. Beykoz Natural Void

The emphasis in the second workshop phase moved towards a conceptual framework centered on the nature/city dilemma, a pressing urban issue for the Beykoz district, that required studies and discussions spanning various scales. Through cognitive studies, students investigated the reasons for and consequences of the shrinkage of Beykoz’s natural void. By dividing into temporal periods, the students analyzed and interpreted the shrinkage process through maps prepared at different scales.

They analyzed historical aerial visuals/ maps drafted at scales of 1/5000, 1/2000, and 1/1000, pinpointing the natural borders’ contraction between 1970 and 2023. The analysis was bolstered by engaging with contemporary debates on urban development, precisely, the discussions surrounding the proposition to convert stream bank hard surfaces to construction areas (PUSULA, 2023; Sendika.org., 2023). The cognitive research around a current urban challenge has enabled students to comprehend the region as a holistically integrated whole with historical, physical, and social layers. The demographic spread and the dynamic interplay between solids and voids over time facilitated insights into the area’s urban transformation and spatial usage patterns. (Figure 7-8)

The conceptual framework and the cognitive analysis also advanced the content of phenomenological studies. Students on phenomenological trips followed the borderlines of the natural void in different periods. They became

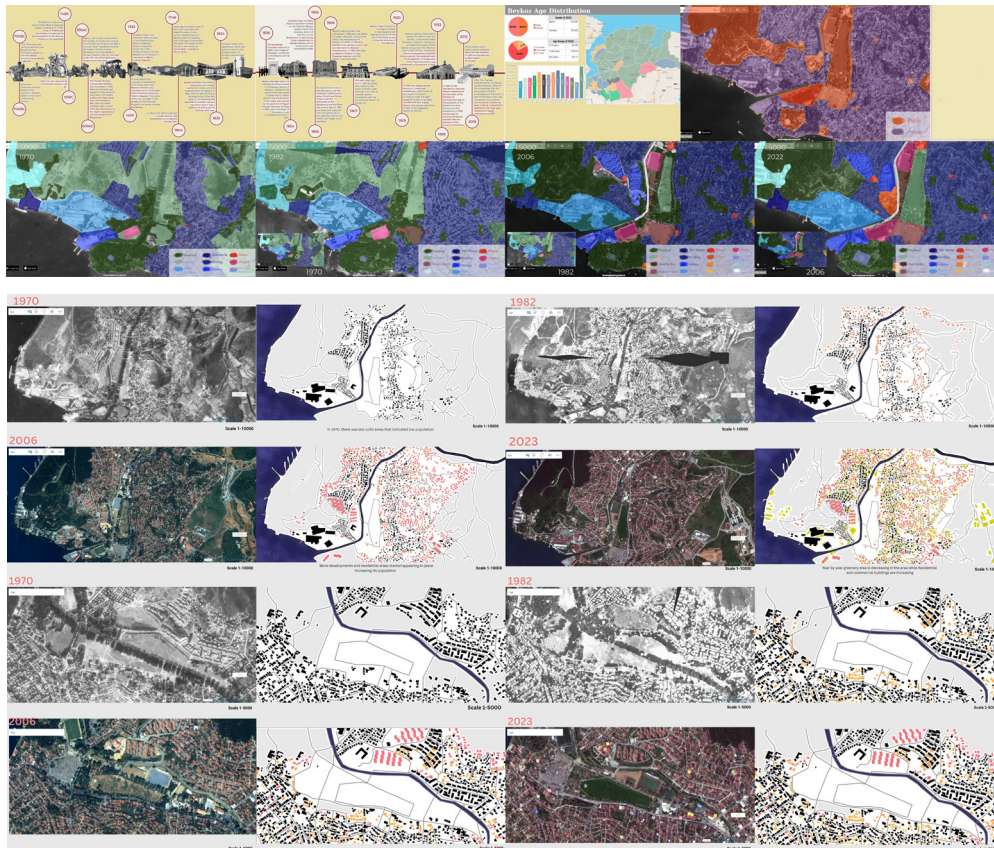


Figure 7: History of Beykoz’s buildings. The transformation of zones of uses.

Figure 8: The transformation phases of Beykoz natural void. The solid-void analysis.

aware of the quantitative amount of the lost natural area and the existence that may be lost. On these phenomenological trips and through survey questions awakening memories of daily life-nature relationships in the residents' memories, they follow the traces of nature. Gained awareness regarding the shrinkage problem of natural areas in urban environments; students who became sensually, emotionally, and mentally conscious were encouraged to choose individual design areas and propose new architectural programs. Subsequently, to support students in choosing suitable design sites and architectural programs, the phenomenon of collective space, which simultaneously serves public and private uses (*De Sola Morales, 1992*), was introduced.

The collective space phenomenon not only highlighted the interconnectedness of physical/social dimensions of space and how the building-, urban-, and nature-scaled morphological elements serve as stages for social interactions/activities but also inspired students to design collective spaces serving simultaneously to public and private uses by applying the method of blending morphological elements at various levels.

The pedagogical approach integrated in this phase encouraged a critical reflection on the outcomes of the first workshop phase, steering discussions towards; a. strategies for the reclamation of diminished natural spaces; b. Adaptive methods for intertwining design interventions with the existing natural/built morphological elements without disrupting local daily routines; c. creation of programs fostering interaction among diverse user groups to enhance communal engagement. This dialogue fostered a collaborative ethos amongst participants, guiding the synthesis of design proposals aligned with a collective vision for the districts' future (*Güneş, 2016, 188-204.*).

The strategic plan for conserving, regaining, and enhancing the effect of the Historic Beykoz Meadow resulted from a collaborative decision encompassed;

- to expand the meadow's grasslands by converting hard surfaces into soft

natural surfaces;

- to position collective spaces along the edges of the newly gained meadow.
- The students aimed to invigorate the region's day-to-day life through interventions without detriment to its essence, such as;
- the continuation of open market activities south of the Historic Beykoz Meadow in lightweight, semi-open market structures compressed on vertical levels;
- the reconfiguration of parking areas by reducing their size around the periphery of the regained natural extension that underscores a collective desire for minimized vehicular intrusion and enhanced pedestrian accessibility.

A vital component of the strategic approach has been the fostering of user (*residents/ academics/students/employees and visitors of all ages*) interaction through:

- new activities incorporating private/ public (temporary accommodation units/ arts and crafts/ agricultural/sportive/ educational activities).
- This objective is decided to be achieved by blending;
- the open/semi-open/closed units of collective spaces with the existing morphological elements in building, urban and nature scaled morphological elements;
- by transient, lightweight structures hosting entertaining/cultural events (fairs/open-air cinemas/concerts/ festivals).
- In the second workshop phase, students aimed to the Historic Beykoz Meadow accrue new memories for its visitors and reinforce its status as a vibrant, public space.

4.3 Outputs of collective scenes integrated into natural and urban life

Urban natural spaces, recognized as macrocosmic environments, encapsulate microcosmic realms of private and public interactions. The method of blending of

building scale (*interiors/courtyards/ gardens*), urban scale (*streets/paths/underpasses/bridges/ ramps, squares, parks/sports fields*), and nature scale (*residuals of natural areas/agricultural fields/topography, creeks*) morphological elements allow the creation of micro- and macrocosmic collective spaces serving simultaneously to private and public uses foster sensory, emotional, and intellectual interaction between diverse user profiles. By reflecting on the blending method, students proposed open, semi-open, and enclosed collective spaces that simultaneously serve private and public uses and harmoniously integrate into the existing morphological elements on building-, urban- and nature scales. Students created architectural programs inspired by residents' memories and observations of physical (*natural/built*) inputs and social needs to foster user interactions and vitalize daily life. (Figure 9.-17.)

a. On the hard surface at the south of the Historical Beykoz Meadow

- “On the road flowing into the meadow.” The designer defined the road descending from the upper topographical levels of the neighborhood as the ‘new parkway’ comprising small kiosks, cafes, and rest areas. The entrances on the 2nd floor of the new bazaar structure lead to semi-open shopping units connected through bridges with private textile workshops. (Figure 9.)
- “Intergenerational friendship club.” In order to integrate different users (shoppers/park walkers/club friends), the designer combined the first floor of the new semi-open bazaar structure with the club’s terrace and defined both a courtyard belonging to the club and a door opening to the park. The club, entered from the neighborhood side, brings elderly residents together, participating in new activities (art/craft/agriculture activities, card games, reading-play activities). Semi-open units located along the street, in the new market, and on the park surface are used to exhibit and

sell products designed in art and craft ateliers or grown in planting gardens. (Figure 10.)

- “A natural square in the new meadow.” The designer creates a natural square surrounding the ancient trees with three wooden units, containing a semi-open bazaar, ateliers producing clothes, and shops. The road reaching from the upper elevations of the neighborhood crosses the newly gained meadow. (Figure 11. a)
- “An agriculture school in memoriam of Beykoz strawberries.” Designing the reclaimed meadow to the west of the historical Beykoz Meadow as a grassy surface unbroken by paths, the designer also offers a strawberry field where residents can harvest crops. An agricultural school for theoretical/ applied agricultural training comprises shops on the street to sell products (canned goods, jams, spices). (Figure 11.b.)
- “..there where the city ends.” The designer equipped the newly gained natural area with a semi-open bazaar structure, a permaculture school, and a clocked education tower, symbolizing the border of the built environment. The tower includes a library/classrooms/ semi-open spice gardens and a cafe. The rest of the gained natural area the designer conceptualized as an urban park with flower beds where locals and visitors could sow/plant. (Figure 12.)

b. On the hard surface along the creek at the south of the Historical Beykoz Meadow

In the initial phase of the workshop, students who had chosen to work on the pre-determined linear site south of the Historic Beykoz Meadow spread the units out along the creek. The second phase illuminated the value of existing and reclaimed natural environments and fostered;

- the re-evaluation of the former positioning of designed units and the methodological approach of touching the natural terrain,

Figure 9: "On the road flowing from the neighborhood to the meadow." Alhabbal, Zeina.



Figure 10: "Intergenerational friendship club." Hamada, Lamar.



Figure 11: a. "A natural square in the new meadow." Mesto, Sariah. b. "An agriculture school in memoriam of Beykoz strawberries." Dicle, Elf İlayda.



Figure 12: "...there where the city ends." Abozgaia, Marva.



- the integration of the design units with existing residential/educational buildings, sports facilities, and natural elements like the creek and meadow.
- "Under the Beykoz Gate": The design envisages a confluence of various generations and disciplines, including sports, bridging the eastern and western precincts. It conceptualizes linking residential areas and academic institutions to the meadow through bridges traversing the creek. Surrounding the big urban gate, the long wooden banks allow spectators to watch various sports activities (basketball/tennis/volleyball). The ground level around and the interior of this metaphorical 'gate,' which connects eastern and western parts of the district and the separated daily life on both sides of the creek, provides various facilities (including changing rooms, retail units, semi-open squares, libraries, and wellness centers), while allowing people to practice and learn the sport and body culture of Eastern and Western civilizations. (Figure 13)
- "Beykoz New Generation Glass and Craft Museum": The designer revitalizes the rich heritage of

Beykoz’s glass industry through a contemporary lens. The partially embedded ateliers under the glass museum are dedicated to the craft of modern glasswork. The display cases within the park setting result from visions of illuminated nocturnal landscapes. The architectural scheme forges connections between disparate urban sectors (residential, educational, green spaces) through an intricate web of terraces/bridges/floors/ramps, weaving a multifaceted urban tapestry that facilitates diverse communal interactions. (Figure 14.)

- “Cine-Beykoz for Everyone”: The

designer addresses the privatized utilization of the historical Kundura factory as a film lot and reconceptualizes a public cinematic space. Seeking to revive the collective memory of outdoor cinema in Beykoz Meadow, the design incorporating workshops, auditoriums, media libraries, and commercial outlets centered around cinematic culture is a collective space where cinephiles, nature enthusiasts, and sports fans can converge through intersecting routes, rekindling the spirit of open-air cinema experiences reminiscent of bygone summers. (Figure 15.)

Figure 13: "Under the Beykoz Gate." Ünal, İlhan Erim.

Figure 14: "Beykoz New Generation Glass and Craft Museum." Gün, Bengü Nür.

Figure 15: "Cine-Beykoz for Everyone." Kaya, Özlem.

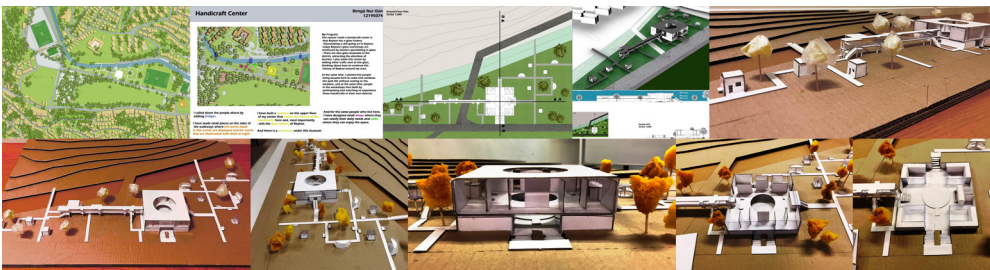
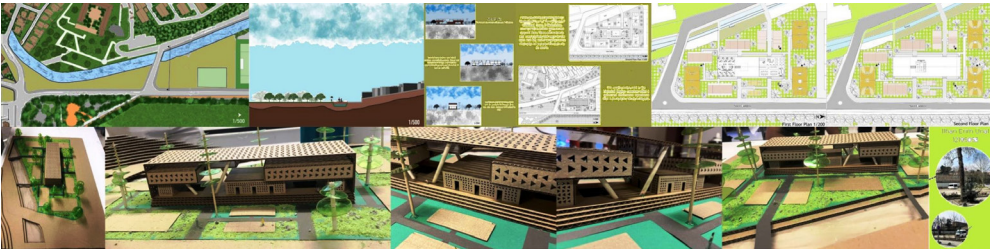


Figure 16: "Take action so the Beykoz void and its people can unite." Dede, Schle.

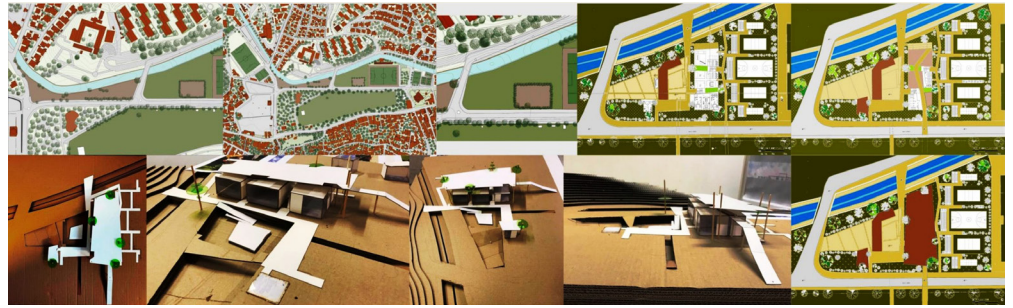


Figure 17: "We are all in Beykoz; we are all from Beykoz." Incel, Sinan.



- "Take action so the Beykoz void and its people can unite." The design envisions a dynamic public realm accommodating a broad spectrum of activities (skateboarding/kite flying/ music/ sports, supplemented by infrastructural facilities such as seminar rooms and workshops. This concept envisages a seamless integration of the built environment with the natural landscape through bridges and underpasses, promoting an interactive and inclusive urban fabric. (Figure 16.)

- "We are all in Beykoz; we are all from Beykoz": The designer articulates a vision for a holistic urban ecosystem that caters to the needs of university students, sports enthusiasts, bibliophiles, and the general public. This design proposition outlines the creation of semi-open/closed study spaces, public libraries, commercial plazas, sports arenas, and leisure zones along the creek, strategically

interconnected with the broader urban matrix through a network of bridges, fostering a vibrant community lifestyle. (Figure 17)

Compared to the first phase, in which the instructor determined the design sites and architectural program, it was observable that the communication between the participants strengthened in the second stage.

Cognitional and phenomenological research on a current urban challenge encouraged students to participate in discussions to express their proposals, aiming to bring a spatial solution by helping the locals. The collective space phenomenon additionally provided students with the importance of interactions between building/city/nature-scaled morphological elements. The workshop's second stage, in which students acquired the ability to propose proper design sites and architectural programs, provided them with pedagogical gains and resulted in creative outputs. If formulated in a conceptual framework and applied educational methods supporting the

Table 2: Phase 2. Methods. Tools. Findings.

| |
|--|
| <p>Methods</p> <p>a. Cognitive Evaluations:</p> <ul style="list-style-type: none"> - Researching the shrinkage process of Beykoz natural void through aerial visuals and solid void maps and interpreting the transformation process on social and physical levels; - Introduction into the phenomenon of collective spaces, the urban morphological elements serving private or public uses; <p>b. Phenomenological investigations:</p> <ul style="list-style-type: none"> - Following the borderlines of Beykoz's natural void identified in cognitive studies; - Detection of building-scale (residences with gardens, repurposed factory campus, educational facilities with courtyards), urban-scale (hard surfaces), nature-scale (forests, meadow) morphological elements recalling the natural void in Beykoz; - Preparation of surveys to recall the memories of older residents on the connection between daily life and nature; - Observing social/physical values in daily life and the dynamics among user profiles - Interviewing different user profiles to identify their needs and problems; - The selection of individual design sites and the creation of architectural programs fostering social interactions between different user profiles and activities. <p>c. Other Methods</p> <ul style="list-style-type: none"> - Formulating the conceptual framework of the design problem; - Determination of collaborative goals and scrutinizing of approaches in the initial workshop phase; - Methods of creating collective spaces by blending the existing morphological elements in building-, urban- and nature scale serving private and public uses and the open, semi-open, and closed units of individual designs; - Comparative analysis of outputs generated in the two phases of the workshop. |
| <p>Tools</p> <ul style="list-style-type: none"> - A range of aerial images/maps in 1/5000, 1/2000, 1/1000, and 1/500 scales to document the chronological transformation of quantitative/qualitative values through solid/void and zone of uses analyses; - Drawings in 1/2000, 1/1000, 1/500, 1/200, and 1/100 scales (site plans/plans/sections inc. the immediate surroundings); - Collaborative models in 1/1000 scale reflecting the morphology in the region, individual models in 1/500 and 1/200 scales showing the trans-scalar interconnections between the morphological elements in building/urban/nature scales and the open/semi-open/enclosed units of individual designs. |
| <p>Findings</p> <ul style="list-style-type: none"> - It is witnessed that natural areas impinged upon by urbanization can be regained and recovered through less invasive interventions; - Observed/discussed the complex interplays between the micro/macroc cosmic collectivities, students began to comprehend that urban life and space comprising diverse dynamics between individual/group/society are created by urban morphological elements in various scales; - Students began comprehending space as a phenomenon integrating physical and social dimensions and the design act as a process integrating objectivity and subjectivity; - The trans-scalar nature of the design process shed light on the integration of analysis and individual design processes; - Spatial proposals created by integrating the existing building-, urban-, and nature-scaled morphological elements with the designed open, semi-open, and closed units that simultaneously serve private and public uses aimed to foster user interactions and vitalize daily life through architectural programs inspired by residents' memories along the observations on physical (natural/built) and social inputs and needs. |

objective/subjective aspects of the design act, contemporary urban life contains many explicit/implicit spatial problems that can benefit architectural education by shedding light on the physical (*quantitative*)/metaphysical (*qualitative/social*) dimensions of the space phenomenon, and the wide range of services included in the discipline of architecture. (Table 2.)

5. Conclusion

This article, discussing a two-phase design workshop, describes educational challenges that lie ahead for the architecture students at the onset of their design education. The first phase of the workshop, exhibiting an educational approach assigning predetermined design sites, programs, and focusing merely on building scale, caused a separation between the analytical phase and the individual design act. The outcomes illuminated how the discipline of architecture extends far beyond the mere

arrangement of specified functions within predefined spatial parameters. Different than the first, the second phase of the workshop, focusing on the shrinkage of natural areas due to the rapid urbanization process, centered the design problem around social and cultural phenomena (Russell, 1995, 34-37) and enabled students to comprehend the region they work on holistically and develop creative solutions for real-world issues (Salama, 1995).

Furthermore, the workshop emphasized the importance of grasping the "spirit of the place" (Norberg-Schulz, 2000) and the collective space phenomenon (De Sola Morales, 2018, 184-190) allowing the trans-scalar design thinking incorporating body/building/urban/nature scale and the integration the phenomena of privacy and publicity enabling encounters between diversive users having various activities, provided to establish a balance of physical (*technical*

knowledge, aesthetic/practical skills) and trans-physical layers (social/psychological/emotional concerns) (Nicol & Pilling, 2000; Ibrahim, Lukman & Utaberta, 2012).

Searching after a solution for an actual urban challenge meanwhile questioning the conditions of a heterogeneous and vibrant daily life, during the second phase encouraged students and educators to collaborate (*reflect/search/analyze/discuss together*) and shifted the paradigm from the educator being the sole source of knowledge to a model where knowledge, goals, and innovative solutions are collectively developed (*Neveu, 2020*). Fostered intense communication, joint decision-making, self-confidence, social awareness, interest, and responsibility (*Önal & Turgut, 2017*), the learning process, alongside valuable social and pedagogical gains, enabled students to hone their design site and program selection skills. (*Table 1, 2.*)

Considering the prevailing perception that architecture students generally steer clear of socio-political matters, including the challenges of natural areas in metropolises (*Crysler, 1995, pp. 208-217*), the significant engagement of the students at the onset of their educational journey towards the shrinking of natural areas in metropolises and the comprehension of space as the unification of social and physical dimensions, provided courage to incorporate current environmental and social challenges into architectural education.

Kaynakça

- Alangoya, K. A. (2023). Mimarlık eğitiminde kolektif mekân tasarımı. *Tasarım+Kuram*, Mimar Sinan Güzel Sanatlar Üniversitesi Mimarlık Fakültesi Dergisi, 19(39), pp. 248-277. <https://doi.org/10.59215/tasarimkuram.393>
- Alanyalı, A. E. (2009). Re-defining leftover space: Value and potentiality for the city. VDM Verlag.
- Avermaete, T., Hoolmeljer, F. ve Schrijver, L. (2006). Urban formation and collective spaces. *OASE Journal for Architecture*, 71. <https://www.oasejournal.nl/en/Issues/71>
- Belge, M. (1994). İstanbul gezi rehberi. Türkiye Ekonomik ve Toplumsal Tarih Vakfı Yayınları, pp. 220-225., pp. 243-244.
- Sendika.org. Beykoz Çayırını millet bahçesine dönüştüren karar, mahkeme tarafından iptal edildi. Retrieved September 10, 2023, from <https://sendika.org/2023/06/beykoz-cayirini-millet-bahcesine-donusturen-karar-mahkeme-tarafindan-iptal-edildi-686652/>
- Beykoz Kaymakamlığı. Retrieved September 10, 2023, from <https://www.beykoz.gov.tr/>
- (2018, January 16).
- Beykoz Kundura. Hafıza. Retrieved September 2, 2023, from <https://www.beykozkundura.com/>
- Bowman, A. ve Pagano, M. (2004). *Terra Incognita: Vacant land and urban strategies*. Washington D.C. University Press, 19.
- Cryslar, C.G. (1995). Critical pedagogy and architectural education. *Journal of Architectural Education*. Taylor & Francis, 48(4), 208–217.
- D'Aprile, M. (2018, June 2). What We Talk About When We Don't Talk About Buildings. *Common Edge*. Retrieved November 20, 2021, from <http://commonedge.org/what-we-talk-about-when-we-dont-talk-about-buildings>
- De SolàMorales, M. (2018). *A matter of things*. NAI Publishers, pp. 184-190.
- De Sola Morales, R. I. (1995). *Terrain vagues, Anyplace*. MIT Press, pp. 118-123.
- Eldem, N., Şahin İ. ve Özkan N. (1998-1999). Beykoz Kışla Binası'nın rölöve, restitüsyon, restorasyon, yeni kullanım ve çevre düzenleme projesi: Çizimler. <https://archives.saltresearch.org/handle/123456789/211362> [Access: 04.03.2023]
- Güneş, F. (2016). Eğitimde sorgulamanın gücü. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 5(2), pp. 188-204.
- Ibrahim, N., Kuman, B. N., & Uterba, N. (n.d.). Learning in architectural design studio. Retrieved September 20, 2022, from https://www.academia.edu/89996100/Learning_in_Architecture_Design_Studio
- Kuban, D. (2010). *Kent ve mimarlık üzerine- İstanbul yazıları*. Yem Yayın.
- Milli Saraylar Başkanlığı. Beykoz Mecidiye Kasrı. Retrieved September 2, 2023, from <https://www.millisaraylar.gov.tr/saray-kosk-ve-kasirlar/beykoz-mecidiye-kasri>
- Mumford, L. (1961/2013). *Tarih boyunca kent-kökenleri, geçirdiği dönüşümler ve geleceği*. Ayrıntı Yayınları, İstanbul.
- Neveu, M. (2020, May 31). Covid 19 & the Future of Architectural Education. *Arch Daily*.
- PUSULA. Retrieved August 15, 2023, from <https://www.pusulahaber.com.tr/tarihi-beykoz-kislasinda-tibbi-calismalar-yapilacak-770233h.htm>
- Retrieved July 15, 2023, from <https://www.archdaily.com/940505/covid-19-and-the-future-of-architectural-education>
- Nicol, D., Pilling, S. (2000). *Architectural education and the profession: preparing for the future- Changing Architectural Education: Towards a New Professionalism*. Spon Pres, NY-London.
- Noll, U., & Scupelli, P. (n.d.). *Urban Void*. Retrieved March 15, 2020, from www.parole.aporee.org
- Norberg-Schulz, C. (2000). *Architecture: Presence, Language, Place*. Skira Editore.
- Önal, G. K., & Turgut, H. (n.d.). Cultural schema and design activity in an architectural design studio. *Frontiers of Architectural Research*. Retrieved July 20, 2023, from <http://www.mimarlikdergisi.com/index.cfm?sayfa=mimarlik&DergiSayi=411&RecID=4265>
- Özkan, D. (2015). *Dünden bugüne İstanbul ansiklopedisi*. Cilt II. 31-39.
- Özkuş, B. Y., & Gürel, N. (n.d.). *Kentsel Mekân. Boşluk ve Yıkım Üzerine: Kuşdili'nde Çayır, Sinema ve Diğer Fragmanlar*. Retrieved September 1, 2023, from <http://www.mimarlikdergisi.com/index.cfm?sayfa=mimarlik&DergiSayi=411&RecID=4265>
- Russell, B. (1995). *Paradigms lost: paradigms regained. Educating Architects*. Academy Editions, pp. 34–37.
- Salama, A. M., (1995). *New Trends in Architectural Education: Designing the Design Studio. Tailored Text & Unlimited Potential Publishers*.