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INTRODUCTION
Architecture is a challenge to create. Challenges are won supported by knowledge. Creating an architectural design is solving a problem with multiple variables. Everyone who tackles the problem can offer a different solution. A successful solution is functional, aesthetical, unique, and contemporary simultaneously. An architect should know about the past to contribute to the accumulated knowledge and understand the present time to serve it. This is what renders architectural education rich but, at the same time, burdens it with a lot of responsibilities.

2022 marks the 10th year of Bilkent University Department of Architecture (BUDA). In 2012 we set out knowing how broad our responsibilities are. We aim to offer architectural education that merges historical knowledge with contemporary theories and old-school techniques with state-of-the-art technologies. With the dynamism of being a young department, we encompassed many areas within architecture with the same enthusiasm in 10 years. Thus, looking back, there is a good accumulation of intellectual property comprising texts, projects, debates, discussions, and theses.

This book is a homage to all the faculty and students who took part in creating this enormous and valuable repertoire. The works and ideas in this book introduce a slice of the accumulated results.
Over the course of its first ten years BUDA has been a diverse environment. We enjoyed the contributions of academics and students from different parts of the world with different academic and professional backgrounds. Every member of the faculty and every student contributed to BUDA with their own cultural and professional backgrounds, their own worldviews, hopes, aspirations and enthusiasm. Only through such diversity it was possible to make BUDA a rich and internationally competitive environment.
GRADUATES
The concrete proof of how well BUDA performs is, of course, traced in our graduates. We are proud of each and every one of our graduates. We do not cut our ties with our graduates after they graduate, but follow them throughout their career journeys. The tendencies of our alumni in pursuing an academic track versus a professional track have been in equilibrium so far. It is good to see that our graduates pursue their career journeys both at national and international levels. In that sense, we believe that our attitude in connection with the global architectural dynamics, theories, and ideas pays off in rendering our graduates capable of working/studying further anywhere on the globe.
What did graduates do after graduation? The graph is based on the responses to graduate surveys conducted in 2022. As of June 2022 BUDA has over 400 graduates including the class of ’22.
On the academic track, our graduates pursue their education in institutions in Turkey and abroad. We are fond of our graduates since almost all get accepted by the national and international institutions to which they apply. We are also proud of our graduates, who have academic positions in prestigious institutions worldwide and in BUDA after completing their graduate studies.
On the professional track, our graduates choose to work in governmental institutions and private companies. Some of our graduates are working in construction companies, while some others work in private architectural offices. A notable number of our graduates have initiated their own architectural firms and produce projects on national and international levels.
Distribution of our graduates based on employment sector and countries
As BUDA, we are celebrating our 10th anniversary with a series of events. In our “Back in Town” series, a part of these events, we proudly welcome back our graduates as our colleagues. The “Back in Town” series has been structured as separate and sequential meetings with our graduates to be the initiator and continuation of our anniversary celebrations. Each event is hosted by one of our faculty members. Besides creating a dialogue among our community, these talks also aim to provide inspirational motives for future colleagues. We have had 3 Back in Town meetings thus far.
Our very first event “Back in Town 01: Practicing Architects” was reserved to host a group of our graduates who are actively practicing architecture at different positions. This event is hosted by our faculty member Dr. Özge Selen Duran welcoming five of our graduates with inspiring career journeys;

Atahan Topçu (BUDA ‘17, Architectural Association ‘19, Founder at Topçu Architecture),

Esin Erk (BUD Ae ‘21, Technical Designer at Gensler Washington DC Lifestyle Flex Studio),

Sara Mandou (BUDA ‘20, Site Architect Coordinator at EHTERAF Real Estate),

Candan Budak (BUDA ‘18, TU Eindhoven ‘21),

Kaan Dökmeci (BUDA ‘18, METU ‘21, Junior Architect at Bora Temelkuran Architecture PLLC),
In “Back in Town 2: Beyond Architecture”, we proudly welcomed back our graduates who have chosen to pursue their professional lives in fields outside architecture. This event is hosted by our faculty member Dr. Segah Sak welcoming five of our graduates with alternative mind-opening career journeys:

Tunahan Mert Topuz (BUDA ’18, Founding Partner & Chief Editor at Mercado),

Elif Ara (BUDA ’18, Bournemouth University - M.F.A. in Graphic Design ’21, Freelance Graphic Designer),

Furkan Yücel (BUDA ’19, METU - Multimedia Informatics/Game Technologies ’22, Senior Game Developer at Bytetyper),

Aziz Barış Ateş (BUDA ’20, Anadolu University - Radio and Television Program Production ’22, Executive Producer at TRT Çocuk),

İdil Dursun (BUDA ’20, CGI Artist at ivaBOX, Curator of Architecture World at Foundation NFT Platform).
The third edition of our alumni panels, we had in honor of a faculty member that had a great impact in Bilkent Architecture’s design agenda. In “Back in Town 3: Tribute to Mark Paul Frederickson”, we proudly welcomed back our graduates who have worked with professor Frederickson in the past and continued to pursue their own career journeys:

Ayşe Eda Tarakçı (BUDA ‘19, M.Arch SCI-Arc 22’, M.Arch II - Southern California Institute of Architecture, JHB Studio, Atelier Manferdini, Teaching Assistant at SCI-Arc),

Bilkay Begüm Peker (BUDA ’16, AA School of Architecture - Sustainable Environmental Design (SED) ’19, Co-founder of Studio Resilia, Part-time Faculty at Bilkent University),

Burak Çelik (BUDA ’18, Fulbright Master’s Degree Scholar ’19, M.Arch II, SCI-Arc, The Gehry Prize ‘21, Assoc. AIA, Design Coordinator at HDR Architecture Inc. Los Angeles, CA),

Naz Kaplan (BUDA ‘20, UNI International Design Awards (People’s Choice), UNI Martian Hub Competition (People’s Choice), Architectural Assistant Part 1 at Foster + Partners ‘22),

Oğulcan Suluçay (BUDA ’16, AA School of Architecture - Design Research Laboratory (DRL) ’19, AA School of Architecture - DRL - Teaching Assistant, Architectural Assistant Part 2 at Foster and Partners).
Over the course of years, BUDA hosted many lectures and exhibitions by acclaimed academics and professionals in the field. The expanded education environment that exceeds the formal education in studios and other courses has allowed our students to widen their horizons. For the purpose of the book, we have made a small selection of some of the most significant events in BUDA.
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<td>Kathryn H. Anthony</td>
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<td>Architecture as resistance against Nazism: The challenge of Hans Scharoun, Aola Ardizzola</td>
<td>Architecture as resistance against Nazism: The challenge of Hans Scharoun, Aola Ardizzola</td>
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<td>Architectural Education: Stylistic, Philosophical, and Pedagogical Challenges</td>
<td>Mohammad Kashef</td>
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<td>2015</td>
<td>The Age of a New City</td>
<td>Annemarie Strihan</td>
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<td>New Modes of Mass Integration: Exploring the Notion of Algocracy in Architecture</td>
<td>Basem Eid M.</td>
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<td>Portfolio Lectures, Mark Frederickson</td>
<td>2016: A Journey to Utzon’s China, Chiu Chen-Yu</td>
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<td>The Architectural Odyssey of Modernity: How 19th-Century Persian Travelers Perceived European Space</td>
<td>Vahid Vahdat</td>
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<td>Designing in and for an Archaeological Context</td>
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<td>Multi Scale Procedures for the Structural Identification of Masonry Structures: The Case of Venetian Bell Towers</td>
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<td>If Walls Could Talk - Perception of Ruins, Suna Güven</td>
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Experience being one of the critical aspects of architecture, BUDA was honored to welcome Juhani Pallasmaa for his speech “Architecture as Experience” – embodied and existential meaning in architecture in November 2019 as part of the Department of Architecture Lectures: Architecture for People. The internationally acclaimed architect, educator, and writer Juhani Pallasmaa has authored sixty books on the multisensory and existential dimensions of experiencing art and architecture. Pallasmaa is the former Rector of the Institute of Design, Helsinki, Dean of the Faculty of Architecture at the Helsinki University of Technology, and Director of the Museum of Finnish Architecture, Helsinki.

Architectural theory, education, and practice have regarded architecture as formal, visually aestheticized material structures and spaces. Yet, in 1934, John Dewey argued that art and architecture are constituted in human experience, not physical objects. The phenomenological view is now shifting our emphasis to the experience and the complex interactions of perception, memory, imagination, emotion, and empathic identification. At the same time, the interest is turning from form and geometry to formless and immaterial “quasi-things,” such as atmosphere, feeling, resonance and attunement. The emphasis on experience also questions the hegemony of the focused vision and points to the central significance of embracing Omnidirectional senses. The experiences of the world and architecture are fundamentally tactile, embodied, and existential. Our most crucial architectural sense may be the existential sense of being and self.
ARCHITECTURE AS EXPERIENCE: Embodied and Existential Meaning in Architecture

SPEAKER | Juhani Pallasmaa | Professor Emeritus, Architect, SIAM, Hon. RIBA, P.Ethnea

BIOGRAPHY
The internationally acclaimed architect, educator, and writer Juhani Pallasmaa has authored sixty books, many of them relating to the multidisciplinary and existential dimensions of experiencing art and architecture. He is the former Rector of the Institute of Design, Helsinki, Dean of the Faculty of Architecture at the Helsinki University of Technology, and Director of the Museum of Finnish Architecture, Helsinki. He has held visiting professorships at a number of US universities, and lectures and conducts workshops in numerous universities in Europe, North Central and South America, Africa, Asia and Australia.

ABSTRACT
Architectural theory, education and practice have regarded architecture as formal, visually aesthetic material structures and spaces. Yet, already in 1924 John Dewey argued that art and architecture are constituted in human experience, not in the physical object. The phenomenological view is now shifting our emphasis to the experience and the complex interactions of perception, memory, imagination, emotion and empathic identification. At the same time, the interest is turning from form and assembly to formless and irreducible "quasi-things", such as atmosphere, feeling, resonance and attunement. The emphasis on experience is also questioning the hegemony of the focused vision and pointing at the central significance of the embracing and omni-directional senses. The experiences of the world and architecture are fundamentally embodied and existential. Our most important architecture sense may well prove to be the existential sense of being and spirit.

LIVING WITH SKY, WATER AND MOUNTAIN: A Path Towards Freedom

SPEAKER | HUANG Sheng-Yuan | Architect

BIOGRAPHY
Huang Sheng-yuan, born in Taipei in 1943, holds a bachelor's degree in architecture from Tsinghua University in Taiwan, and a master's degree in architecture from UCLA in the United States. In the 90s he worked in Eric Owen Moss Architects as a Project Associate, and before returning to Taiwan, he taught at North Carolina State University. He firmly believes in the root of architecture that lies deeply within life itself, and life's true form is not one of static and tangible qualities, but of dynamic and ephemeral, constantly in change. As a result, such an acute perception itself has led a direction that is neither conventional and universal in nature, making Huang and his later established firm, Shengyuan Architects, one of the leading architects in the architecture realm.

ABSTRACT
Youth can always be found in the landscape. Over 25 years, Fieldoffice Architects has rooted in Yilan. For making architecture patronage and story, they have tried to learn from the rivers, mountains, sea and folk, with their deep reflections on natural and cultural landscape. Recently, they have few opportunities to work outside Yilan and experience the differences between places in northern Taiwan, as well as happily struggle against the bureaucracy. With their belief in making friends with time, they found them in Japan, Europe, and East Asia. While celebrating their life with friendship, they should never forget their promise - nature, equality and being together in their journey toward freedom.
Italian Design and Sustainability

One of the highly valued aspects of architectural design that is taught in BUDA is sustainability. Sustainability is a central issue in design when the aim is to organize an environment able to suit short as well as long-term human needs. Yet the artificial surrounding we live in today represents a negative template both in social and environmental terms. Social and environmental sustainability are in fact the two key concepts to question and evaluate the contribution of contemporary design in different sectors.

For the subject of Italian Design and Sustainability, on 28 February 2018 BUDA welcomed Prof. Carlo Branzaglia, who deals with design education and strategic design. He is the scientific advisor of the Postgraduate Program at IED in Milan. He also teaches at the Academy of Fine Arts in Bologna, where he is the head of the Applied Art Department. He gave many lectures, and conferences and ran workshops at different Universities.

The lecture in particular focuses on the field of packaging design where different strategies (from re-use to recycling) are tested in the attempt to cope with a context characterized by an unnecessary expansion of consumption. Eventually, it investigates how the design of packaging in terms of the container, storage element, and communication device, may address on different levels the issues of social and environmental sustainability.
Sustainability is a central issue in design when the aim is to organize an environment able to suit short as well as long-term human needs. Yet the artificial surrounding where we live today represents a very negative template both in social and environmental terms. Social and environmental sustainability are in fact the two key concepts to question and evaluate the contribution of contemporary design in different sectors. The lecture in particular focuses on the field of packaging design where different strategies (from reuse to recycling) are tested in the attempt to cope with a context characterized by an unnecessary expansion of consumption. Eventually it investigates how the design of a packaging in terms of container, storage, element, and communication device, may address on different levels the issues of social and environmental sustainability.
Medium Design inverts the typical focus on object over field, to work on the medium—the matrix space between objects, events and ideological declarations. And it disrupts some habitual modern approaches to the world’s intractable dilemmas—from climate cataclysm to inequality to concentrations of authoritarian power. In a series of case studies dealing with everything from automation and migration to explosive urban growth and atmospheric changes, Medium Design offers spatial tools for innovation and global decision-making to challenge the authority of more familiar legal or economic declarations. From this perspective, solutions are mistakes and ideologies are unreliable markers. Rather than the modern desire for the new, designers find more sophisticated relationships between emergent and incumbent technologies. Encouraging entanglement, the medium design does not try to eliminate problems but rather put them together in productive combinations. It offers some special activist tools for outwitting political superbugs and modulating power and temperament in organizations of all kinds.
Medium Design by Dr. Keller Easterling
On April 22, 2021, BUDA welcomed Dr. Keller Easterling - a designer, writer, and professor at Yale. Dr. Easterling dwells upon the subject of Medium Design.
In Spring 2019 BUDA organized a series of academic workshop seminars on Educational Buildings, under the auspices of the Bilkent University Board of Trustees.

For 5 months in a row, we invited renowned architects/architectural firms in a line-up, who has worked and/or currently working on educational buildings (comprising pre/primary/high schools and university buildings and complexes). The series comprised of a lecture and discussions with colleagues, researchers, and scholars in that field, and sometimes an accompanying exhibition. The guests were:

Laura Negrini (Institute of European Design) 20 March 2019

Nicola Panzini (Politecnico di Bari, Italy) 5 April 2019

Mikko Heikkinen (Heikkinen-Komonen Architects) 16 April 2019

Isabelle Taylor (Turnberry Consulting, Great Britain, co-author of University Planning and Architecture; University Trends: Contemporary Campus Design) 2 May 2019

Aser Gimenez Ortega (MVRDV Architectural Office, Netherlands) 20 May 2019
BILKENT SEMINAR SERIES on EDUCATIONAL BUILDINGS

LAURA NEGRINI
HEAD of IAD ROME

Dr. NICOLA PANZINI
POLITECNOCO di BARI

Prof. MIKKO HEIKKINEN
HEIKKINEN + KOMONEN ARCHITECTS

ISABELLE TAYLOR
HEAD of RESEARCH and PUBLICATIONS at TURNBERRY CONSULTING

ASER GIMÈNEZ-ORTEGA
ASSOCIATE DIRECTOR at MVRDV
At BUDA, we always look for opportunities to go beyond the boundaries of the school. İstanbul Design Biennial allows us to share our students’ works and expose them to the international design community.

Curated by Beatriz Colomina and Mark Wigley, the third biennial in 2016 was titled Are We Human? The Design of the Species: 2 seconds, two days, two years, 200 years, 200,000 years. In line with the questions that the curators posed, our students from different levels produced works under the title of “Are We Human(e)?”, and the selected outputs were exhibited in Taşkışla, İstanbul, within the academic program.

A School of Schools, the 4th İstanbul Design Biennial in 2018, curated by Jan Boelen, offered flexibility in academic contributions. Taking advantage of this freedom, a selected group of students and alumni produced a performative presentation named “Minority Spaces as a School” based on the theme of the Architecture and Society course’s final projects of the previous year.
I am a MINORITY space

ABSTRACT

This work builds up on the projects that were developed within the Architecture and Society course with an emphasis on the strong relationship of space and people. For the project, we worked to develop a perspective on the notion of "minority", and to come up with different cases for minorities - either social minorities or architectural minorities. Now, we are here to continue our learning process.

Keep in mind how easy it is to "become" a "minority" in an "other" space.

Bu çalışma, alan ve insan arasındaki güçlü ilişkiye vurgulanmak üzere, Mimarlık ve Toplum dersi kapsamında geliştirilen projeler üzerine inşa edilmiştir. Proje için, "azınlık" kavramı üzerinden farklı bakış açıları geliştirilmek için çalışılmış, ve sosyal ve mimari farklı azınlıklar üzerine çalışmalar yatırımmıştır.

Şimdi, öğrenme sürecimize devam etmek için buradayız.

"Diger" bir alanda "azınlık" haline gelmenin ne kadar kolay olduğunu unutmaz.
COLLABORATIONS
In a world that is getting increasingly interconnected and constantly changing, international collaboration practices assume a radical role in strengthening and making both competitive learning and education experience.

Collaboration opportunities usually originate from a partnership with institutions, universities, companies, and local governments. The benefits from such networks vary significantly in numbers and values (from research projects and consortia to advisory projects and strategic consulting). Yet, if we consider the positive repercussion on student experience, the best outcome of international collaboration is the possibility of organizing international workshops and establishing study abroad programs. Both these programs expand and enrich the chance to differentiate the educational offer. By this point of view, they are unique and memorable experiences.

Moreover, they enable us to experience a sort of diffuse campus, a fluid, collaborative environment where it is possible to engage with new partners and benefit from the availability of new spaces and contexts to develop different educational settings. A vital point here is the extracurricular fashion of their contents, which turns them into the reverse of usual educational settings. The very essence of such programs lies in their unique atmosphere imposing a radical set of changes every time. Eventually, the workshop and abroad study program format could be defined as the other side of architectural education.
The workshop format for example rests on a threshold between the experience of traditional education methods and the immersion into a more experimental modality. Characterized by an intensive program, a short timetable, and an international environment, the workshop experience determines a radical displacement of design methods from the long-term analysis and multi-step architectural train of usual design studios to a more agile set of strategies and solutions. It is no longer a one-way relationship (passage of information and notions from teacher to students) but a collective experience where both knowledge and doubts, information and questions, contribute eventually to produce a shared design process. Finally, the international fashion of the format demands a substantial change in the relational habits, bringing students to experience cultural integration, dialogue, and mutual confidence.
LO SPAZIO DOMESTICO E DWELLING SPACE AND THE CHARACTER OF PLACES
I CARATTERI DEI LUOGHI

L’area dell’Abbazia di San Vito a Polignano a Mare
The Saint Vito Abbey area in Polignano a Mare

Fondazione Museo Pino Pascali, 28 - 31 luglio 2016
Catalogo della Mostra “Lo spazio domestico e i caratteri dei luoghi”
Catalog of Exhibition “Dwelling space and the character of places”

International Workshop of Architectural Construction "Dwelling Space and the Character of Places". Politecnico di Bari/Bilkent University, Bari June 2016:
Cover of the book edited by Vitangelo Ardito and Giorgio Gasco
International Workshop of Architectural Construction. Dwelling Space and the Character of Places. Politecnico di Bari/Bilkent University. Bari June 2016: Bilkent students at the exhibition of final design works
The Architectural Design Workshop “Multiplicity vs Eclecticism” was an international program based on the partnership between the Department of Architecture of Bilkent University and the Department of Architecture, Built Environment and Construction Engineering of Milano Politecnico that was held in Ankara between September 2 - September 7, 2019. The Workshop, co-directed by Giorgio Gasco (ARCH Bilkent) and Cristina Pallini (ABC Milano Politecnico), was open to graduate students and would explore different modalities to articulate architectural design proposals within the historical core of Ulus district. In particular, the proposed approach identified the multiplicity of language as a strategy to contrast the ambiguous eclectic/historicistic language that today ravages everywhere. The idea of multiplicity originates from the complex structure of the context, yet doesn’t seek to put together fragments of a specific period, on the contrary attempts to integrate elements from different periods. The new and the modern because of their essential efficiency, with the old and the traditional because of their topical essence.

**Coordinators:**

Cristina Pallini is an Associate professor at the Department of Architecture and Built Environment (ABC), Politecnico di Milano

Aleksa Koroliija is an Assistant Professor at the Department of Architecture and Built Environment (ABC), Politecnico di Milano.

Derya Erdim is a Ph.D. candidate in the Department of Architecture, Built Environment, and Construction Engineering, Politecnico Di Milano

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The Architectural Design Workshop "Multiplicity vs Eclecticism" is an international program based on the partnership between the Department of Architecture of Bilkent University and the Department of Architecture, Built Environment and Construction Engineering of Politecnico di Milano. The Workshop, co-directed by Giorgio Grasso (ABCH Bilkent) and Cristina Pallini (ABCH Milano Politecnico), will explore different modalities in artistic and architectural design within a historical context. In particular, the proposed approach identifies the multiplicity of language as a strategy to contrast the ambivalent condition of a flexible historicist language that today embraces eclecticism. The idea of multiplicity originates from the complex structure of the context: it doesn’t seek to put together fragments of a specific period, on the contrary attempts to integrate elements from different periods. The new and the modern become of their essential affinity with those and the traditional because of their topical essence.

02-07/09 '19
ANKARA
study abroad

A Study Abroad program is designed to offer students the possibility to spend a short period of a learning experience abroad, in another setting, and in another way. A study abroad program provides the perfect location for students to interact with and understand local culture and experience other countries’ history, art, and architecture. Thanks to the establishment of a network of collaborations between Bilkent University and Italian Institutions (Bari Politecnico, Roma La Sapienza, Milano Politecnico, Italian Embassy in Turkey), this kind of program in the last years offered a diverse and engaging set of activities: guest lectures, field trips, and site visits, conferences and seminars, study groups, and workshops.

In today’s global economy, nothing can replace the experience of students who have learned to view the world from a different perspective. The reasons why a student should consider studying abroad as an alternative curriculum option include but are not limited to the following opportunities: Study abroad helps students to develop skills and gives them experiences that a classroom setting will never provide; Study abroad offers students a broader view; Study abroad allows students to break out of their academic routine; Study abroad enhances the value of student’s degree and employment opportunities; Study abroad is the chance to travel and allows students to get to know another culture first-hand.
Study Abroad Program “ARCH 302 The Revitalization of Flaminio District” (Study trip, seminar/Lectures, data collecting, short term workshop). Rome Sapienza University/Bilkent University. Rome January 2020: ARCH 302 group photo
Study Abroad Program “ARCH 302 The Revitalization of Flaminio District” (Study trip, seminar/Lectures, data collecting, short term workshop). Rome Sapienza University/Bilkent University. Rome January 2020: Students taking notes and making sketches on Milvio Bridge
Study Abroad Program “ARCH 302 The Revitalization of Flaminio District” (Study trip, seminar/Lectures, data collecting, short term workshop). Rome Sapienza University/Bilkent University. Rome January 2020: Giorgio Gasco, Özge Selen Duran and Glenn Kukkola during a review session of the short-term workshop organized in Sapienza University
"I have seen with my own eyes and measured with my own hands the fragments of many ancient buildings."

- Andrea Palladio

Study Architecture in Rome this Summer
18-27 June 2021
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SYLLABUS
ISAR Summer school 2021: Horrea Agrippiana, ROMAN FORUM, Rome, Italy
OZU Course names: Global Studies in Architecture and Design/Urban Morphology
OZU Course codes: ARCH 460A/ARCH 452A
Summer semester: 18-27 June 2021

ISAR International Summer School in Architecture and Archaeology, Rome June 2021: Program brochure
ISAR International Summer School in Architecture and Archaeology, Rome June 2021: Giuseppe Resta and Giorgio Gasco (Tutors) with Melek Kaynar, Ezgi Nur Güngör, Elif Leblebici, Göksu Erkoç, İlkınr Erdoğan
STUDIOS
Design studios are the undeniable core of architecture education. As BUDA, our aim is not only to realize integrated design studios, but also to devote individual level studios to topics such as sustainability, heritage, architectural technologies. Whereas it is essential that we learn by doing in the design studios, our commitment to scholarly research, precedent analyses and reliance on history and theory render our studios expansive yet elaborated. We value the design process as much as the design outcomes both in terms of pedagogy and learning outcomes. With the shared intelligence and participatory atmosphere, we like to think of our design studios as small scale models for an ideal society that we envision.
FA 101 & 102

Basic Design I&2 at Bilkent University is conducted collaboratively by the Departments of Architecture; Urban Design and Landscape Architecture, and Interior Architecture and Environmental Design. FA 101 Basic Design 1 introduces students to design and design thinking fundamentals. The students work on abstract design problems by processing systems and geometrical manipulations. FA 102 Basic Design 2 continues to establish the fundamentals of design and design thinking introduced in FA101. The students work on multiple design problems with a particular emphasis on spatial design.
The second and final stage of the FA102 Basic Design course at Bilkent University aims to prepare students for the complexity of the spatial design. To achieve that, there were four workshops planned to be fulfilled during the Spring 2021 semester: Anthropometry, structure, topography & light, and shadow. The project that introduced us to practice the necessary skills in spatial design was the DAS Place. The problem was to design a place for the Design and Architecture Society (DAS), on the predetermined site located on the university campus.

My initial response was to collect data about the context and understand the content better. I analyzed factors such as weather conditions, existing access elements, landscape elements, spaces’ functions, the relationship of spaces, the users, etc. This step was essential for the design to work because designing is not only the act of creating something aesthetically pleasing, but it is creating a product that functions as a system that improves the existing circumstances and simultaneously belongs to its context. After the analysis, I determined a concept as a design idea that helped me make confident decisions. I derived many different responses during this process. The first one was determining the functions of the spaces and their social and physical attributes. Then I decided on the organization system according to the relationship of the individual volumes. The privacy of the space was the primary concern at that stage. After these trials, I started to search for a form for the complex while keeping the social & physical attributes of the spaces and the system of organization constant. Once I reached the point where I designed a system that works, the problem was finding ways to enrich the design. To do that, I played with some elements so that they would instead improve the three-dimensional relationship between the spaces or the experience within the spaces for the users. The variables, such as the view and the water element, were elements that I used to enhance the experience. The last step of my design method was a control step. As my main concerns were the four subjects we studied in workshops, I had a final look at those points. Besides the interventions I made in the topography, I used some landscape elements to connect the design with its context and develop it furthermore.

The architectural studios which followed the basic design courses made me understand how important this project was for the following studios and professional life. In my experience, I took in the core of spatial designing in this studio, and I used the same problem-solving method for my later designs because the process is the same. The only thing that changes is the naming; the planar elements we use evolve into walls, or the transparent elements turn into fenestration.

DAS Place
Alize Tuncel
Spaces:

1. Exhibition - public - semi-open
2. Gathering - common - open
3. Working - common - closed
4. Resting - common - closed
5. Storage - private - closed
Two Rooms of Their Own, Mustafa Çağlık
“Art Residency Project” was developed in the 2nd Basic Design studio. The given scenario required two spaces for selected students to work on projects of their choice. These spaces will also be used as exhibition spaces for a month for the produced projects for 11 months. I narrowed the scenario by assuming that the spaces would be used for art production. The spaces were to be designed in two different sites, one being an urban site between FA-V buildings and the other in the woodland.

I started to research and think about the context. The solution had to be based on a common design idea and the two plots had different conditions. As the first step, research about the users and content was conducted. The users were going to be youngsters from Gen-Z and Gen Alpha, who are more outspoken and bolder than previous generations. Considering the program, art is a practice of making statements with different mediums and tones which cannot be canceled, taken back, or censored. That’s why the design was based on boldness as a common point. My concern was to create a metaphoric relationship between exhibition areas in art galleries and the spaces on campus because I believe art not only instills values and experiences but also is a crucial tool in measuring cultural development. Therefore, I aimed to design so that the spaces not only engorge themselves with the campus’ diversity but also exhibit the boldness of products and the production process. The method behind it was to offer new paths and fictionalize the spaces accordingly since the exhibition act consists of the viewers and the exhibited. The spaces are formed on the interactions of the paths, and the open/semi-open spaces behave almost like urban furniture. Therefore, one can say that the project endeavors to enhance the existing life from various aspects, as architecture should.
Two Rooms of Their Own, Mustafa Çağlak

Not considering path, landscape and architecture as distinct concepts. The unity of form is such meaningful.
ARCH 201 & 202

The sophomore year studios in BUDA introduce fundamentals of architectural design such as; architectural program, context, structure, and construction. In Arch 201 and 202, students are expected to integrate their newly acquired construction knowledge into the design problem. The ARCH 201 Architectural Design Studio I explores the potential of architectural tectonics by studying small-scale buildings. Typically, Arch 201 studios focus on the design of a house. Most of the time, the design of the house is coupled with a current theme, such as working from home, peer-to-peer renting, or craft production in a domestic setting. The coupling of work and domesticity in 201 studios allows for introducing fundamental concepts of architecture, such as degrees of privacy and program interpretation.

ARCH 202 Architectural Design Studio II aims to integrate basic urban concepts into the architectural design process. The course covers social, cultural, historical, environmental, and aesthetic aspects of understanding and making a sustainable urban environment. Within this framework, the studio encompasses the ‘reading’ of the existing urban environment in relation to the given site for an enhanced architectural interpretation.
Between Transient and Permanent: A Guesthouse for an Artist

Bilkay Begüm Peker

This project aimed to design a guesthouse for a visiting artist. It is intended to be a temporary residence for a visitor to have a comfortable stay where the number of users may vary. The site is on the property of the Florya Atatürk Marine Mansion (1935), designed by the famous Turkish architect Seyfi Arkan. The mansion stands on steel piles driven into the seabed, having a broad view of the sea and landscape.

An essential factor to consider when designing was the flexibility to choose a suitable site neighboring the historically significant example of modern architecture. I had a design decision where the guesthouse should not overrule the Atatürk Marine Mansion, that it should be light, flowing, and maybe even transparent in some parts, on the condition that the uniqueness and individuality of the mansion should be conserved.

The design method was initiated by having a solid rectangular mass across the shore. As “transient” and “permanence” were key concepts, public and private functions needed to be suitably integrated. The massing was divided so that the artist would have a gallery and workspace on one end, which flows into a transient space towards the entrance, which can then flow into the private space on the opposing end. The longitudinal massing maximizes views and natural light facing southwest orientation. Apart from the entrance, no openings were designed to face the northeast orientation. This was done to prevent the strong winds and cool temperatures during winter. The corridor acts as a buffer zone, while all the living spaces face the southwest orientation. Benefiting from the topography, the entrance is accessed by land, where you are guided to a raised single level. The living spaces open up, celebrate the waterfront, and create uninterrupted sea views.

Set on a raised platform, the steel frames and beams support the structure. The exposed beams on the façade surround the building, emphasizing the public and private zones as it divides the functional spaces accordingly.

Upon completing further education and gaining work experience, reformed reflections could be iterated on the overall design and approach. Such passive design strategies have already been used during the design stage. However, critical climate conditions could be considered where passive heating and cooling systems could be applied conversely, such as integrating adaptable shading systems into the design, which could be used for the southwest orientation.

This project influenced employing a holistic perception and focusing it on a specific context. Integrating passive design strategies during the early stages of projects remains a viable approach to any, if not all, new undertakings.
The guesthouse is standing up one meter above the ground by the help of steel frames and beams. The system is mostly made up of I-beams, which is located under the building, and around it too. The beams on the façade surround the building, emphasizing many things. Mostly, the public and private space is emphasized by the beams, as it divides the building in sections. Another important aspect is that the beams show an emphasis on the entrance. I showed this by density; placing more beams close to the entrance and less beams away from the entrance. Also I used the placing of straight beams and angled beams; this is seen as a pattern with relation to how the public and private space is divided. The façade of the building that is facing the sea is completely open, whereas the opposite façade is closed for privacy.

The material I chose for the façade that is closed is marble. In the detail of the marble, fossils of marine life are visible, giving a close relation to where the building is close to, the sea. The interior consists of a travertine flooring, where the deep textures emphasize the material. The frames and beams are steel. The roof is a material called polyester membrane, which is water impermeable. I chose these materials, thinking about every condition of the landscape, for example a stormy weather, due to its environmental location.
The Community Center was the second year spring semester studio project in 2016. The project aimed to revitalize an area located in Eskişehir next to the Porsuk River. It was necessary to consider the city’s needs and design a facility that could adapt to the current climatic conditions. The site was previously used as a bus station. The new design of the area included a masterplan stage for lecture spaces, a library, computer center, restaurants, cafes, shops, a fair area, an amphitheater, and a community center designed in detail in further detail stages of the project.

Triangular geometry was the main design idea, and the shape of the buildings was created according to contextual references. Due to the sloped topography, there was a need to create a design with level differences. Using the in-situ level differences, a series of green areas and a playground for children were introduced. Closed, semi-closed, and open spaces were distributed equally throughout the site. Another design element was the vertical strips; with the help of these linear elements, people were guided through the existing urban axis to the building.

The idea of level differences and decorative linear elements for the community center was introduced to attract attention. The final massing of the building emerged by rotating the primary shape that results from the site geometry around a pivot point. Since the main wind breeze was coming from the north side, the pointed facade of the building was positioned on the north side to break the wind.

The building included an exhibition area, kitchen and gastronomic facilities, library area, multipurpose meeting room, foyer area, and administrative areas for private functions. Each of these functions was a point of attraction for the students, a critical population within the city. On the interior, the main gallery space has a public staircase-auditorium on which the visitors can watch the piano concerts and the exhibition area while sitting.

The facade was improved by adding rain screen cladding to the exterior wall of the building to protect the materials that would otherwise be exposed to environmental factors. In this way, expensive repair costs in the future can be avoided, and the life of the building can be extended. Also, the panels can be easily removed when required. If a situation involves maintenance of the building, the structure can be monitored easily. Aluminum panels were chosen since using lightweight materials for the meetings means minimal additional load applied to the existing structure. Also, less energy is used during the construction of the system. The rain screen system improved the appearance of the building by adding new skin. Moreover, it improved the acoustic performance, so the noises from outside are less likely to disturb the interiors.
Community Center in Eskişehir
Net Zero City Archive

Elif Polat

The “Net Zero City Archive” was designed in the 2nd year of design studio in 2017 Spring with Dr. Burcu Şenyapılı Özcan. The project offered a city archive complex located in Ulus, Ankara. Ankara is a significant place that started developing in the 1920s and contains many prominent architectural examples designed by the Republican Period’s influential architects. The Republican Period’s important architecture still affects the general outlook of Ulus. Therefore, one of the main concerns of the design process was to interpret the challenging site of the project as a multi-layered urban context.

The daily users of Ulus are generally people who work in Ulus, in governmental institutions, banks, etc. Although there are universities in the immediate surroundings, Ulus is not a place anymore for young population. The project aims to attract a diverse population to Ulus. The city archive sought to be a research center and a place that could create new possibilities and environments for unique user experiences.

Despite the highly urban characteristic of the site, ecology was still considered a primary component of the design problem. As a result, the building was designed as a net-zero structure that respects green physically and philosophically.

Since Ankara is the capital city of Turkey, the archive concept is not only significant in terms of the physical entity, but it is essential to represent Ankara’s historical background comprehensively. Existing urban references informed the initial massing. Placing two simple overlapping boxes parallel to the street and the existing building layout was the starting point for the design. By exploding, splitting, and shifting these boxes, open, semi-open, and closed spaces were created.

The archive building aimed to provide different experiences inside. The functions inside include foyer and exhibition, conference, archive and storages, libraries, study spaces, laboratories, and offices. All these functions were analyzed and divided into subspaces to create spatial flexibility. Also, passive environmental design approaches were integrated into the design process. Passive heating and cooling systems were introduced in accordance with the climatic conditions. Façades were designed with slanted solar screens and canopies according to the spaces’ environmental needs and particular uses. Environmental factors were simulated with Diva, an environmental plug-in of Grasshopper. LEED criteria and ecological, economic, socio-cultural, functional, and aesthetic aspects of sustainability were considered throughout the design process.
1. SOLAR SCREENS DESIGN
Solar screens designed according to energy, natural light and functional needs. Timber shades tilted at different angles by considering seasons and daily sun angle.

2. ACOUSTICAL DESIGN
For the acoustical performance of building, interior wall finishes designed with recycled absorber textures and floor material selected according to the needs of spaces as reflective or absorber.

3. RAIN WATER COLLECTION SYSTEM
Rainwater collected by the pipes located on ceiling will be used for vegetation in courtyard and stored at the basement for passive cooling and fresh air distribution to the building.

4. DOUBLE FAÇADE SYSTEM
At some parts of south façade, double skin strategy applied. This strategy provides both thermal and air quality. The skin also used as an exterior element.

5. AIR CIRCULATION SYSTEM
By the positive-negative air pressure and cross ventilation strategies qualified air circulation designed. The hub that used both for circulation and ventilation will be used as air shaft for fresh air make-up.
CONCEPT IDEA

SECTION AA

SECTION BB

SOUTHELEVATION

4 FLOOR (Administration/Fourth)
- Open Office
- 3 Offices
- Secretary Room
- Managing Office
- Store
- WC

3 FLOOR (Laboratory/Third)
- Art Laboratory
- Helipad/Laboratory
- Mac Laboratory
- Demography Laboratory
- Temporary Storage Room
- Storage
- WC

2 FLOOR (Library/Second)
- Reference Library
- User Library
- Information/Video
- Flexible Study Rooms
- Bridge to Reception Building
- WC

GROUNDFLOOR
- foyer
- 3 Conference Rooms
- IF Room
- Kitchen & Cafe
- Main Depository
- Parking
- WC
In my second-year project, I took the challenge of reviving the social values of Karadeniz Region’s vernacular architecture and introducing technological solutions into the existing building culture. The project was located in Çamlıhemşin, Rize, a very prominent location in terms of its environmental value and biodiversity. The foundation of the design was based on a research study on the potential of Çamlıhemşin’s land for the cultivation of kiwi fruit. The introduction of kiwi as an alternative product to tea was expected to be a new lead for agricultural research and development in the region, allowing us to think about three piers of sustainability: environmental, social, and economical.

A people-centric concept was developed for the compact center whilst acknowledging resilience and the integrity of the ecosystem. To be a part of the Black Sea region’s ecosystem, the building was placed on top of a hill with a less topographical impact which enabled the use of sustainable components while providing the potential for gathering various social groups together in a social mix. The rotation of grids on top of each other on both the plan and façade system allowed a rhythmic experience while pointing out the importance of rain gardens which was a crucial part of the sustainability discourse of the project. With an adequate slope, the rain garden was situated at the center with particular vegetation of Rudbeckia Goldturm. To infiltrate and remove pollutants from the runoff, the advantage from the fragmentation of the roof system was designed with the necessary calculations for the adequate slope to allow for directing the rainwater collection. A ground-source heat pump system was implemented under the rain garden courtyard, which provided a more energy-efficient building that benefited from the richness of the topography. In the interior, a modern translation of the vernacular architecture of the Black Sea Region was introduced, where the feeling of the living space, hayat, was established, which promoted social interaction all day long. The soil extracted from the embedded research unit of the center was used directly to fill up the topography beneath the living unit. This enabled hindering of the formation of possible dead spaces with the help of retaining walls on necessary points. To materialize the journey for the study of kiwi cultivation, a walking path was proposed with a minimized disturbance of natural topography and various lookout points.

This project holds a special place in my heart as it taught me the incredible value of nature and how each architectural decision fits within a more extensive system of natural beings. KIWI: A New ‘Lead’ for Agricultural Research and Development Center became the first step in my search for sustainable architecture that is based on the intricate relationship between ecology, economy, and society.
The Oasis

Arch202 | Spring 2021 | Bilkent University
Instructor: Ahmet Güvenen
Rheaça Sorgülür
Irma denim

88 | STUDIOS
Oasis is a music school for students who want to specialize in musical composition. Its location is next to Ankara Beşevler metro station. Since the site is located in a dense urban environment, considering the privacy that students may demand, the elevation has been raised from the street level, reducing the visual and auditory connection with the environment. This project’s main concern was creating an atmosphere that could inspire students through architectural design.

Since the project is a conservatory, I worked on how to express music architecturally and started thinking about connecting the two subjects. I believe the best way to represent music with architecture is through movement. Movement in architecture is similar to music since both relate to time and change. So, my concept for the project started to appear. As a concept, I created an analogy between architecture and a symphony. In this analogy, each architectural element used in the project represents elements in a symphony, such as a rhythm, harmony, balance, and flow. Therefore, a form and space relationship that students can be inspired by while composing symphonies was introduced.

As time goes by, my perception of my own projects constantly changes. In 2020 while designing this project, I was just learning about what space is and how I can connect with it on a human scale. I was also trying to understand spatial quality. Even though I was just learning the real meaning of these terms back then – and I am still learning, if I achieved the slightest of these meanings in this project, it is rather instinctive. Because perceiving beauty is not something logical, it is something emotional. For example, in a fraction of a second, we can feel the beauty of a space. We think it but do not understand. I wasn’t aware of any of these in my second year, but I was designing with my instincts. I think it is a phase that all architecture students must pass to learn that architecture is not all about aesthetics. Architecture needs reasoning. Therefore, we cannot just pursue aesthetics but must look for ways of integrating aesthetic sensibilities into rational decision-making processes. Through this project, I understood the importance of grounding aesthetic decisions.
The Oasis
Scan the code to view the project’s animation
ARCH 301 & 302

The junior year studios in BUDA build on the already developed skills of the students by introducing advanced problems related to context, society, and the environment.

ARCH 301 is a thematic studio that promotes a fundamental inquiry into the core of the architectural discipline, focusing on the design of a housing complex. In particular, Arch 301 fosters experiments with functional complexity, spatial variety, and aesthetic and technological components of buildings.

ARCH 302 aims to develop a comprehensive understanding of architectural design, particularly fostering an investigation of functional complexity, spatial variety, and aesthetic and technological components of buildings. In particular, Arch 302 is a collaborative studio that seeks integration of topics and problems among the design approach developed in the studio and the set of environmental systems and techniques discussed in ARCH 342, Environmental Technology.
Co-housing in Sancak District
Co-housing in Sancak District
Atahan Topcu, Ezgi Tümer, Öykü Şener

The architectural design studio for third-year students, ARCH301 of Fall 2015, asked for the design of a co-housing development for the Sancak District in Ankara. The generic block-type city planning of the Sancak District leads to dull, static, and non-contextual building environment. With this project, we proposed a co-housing mixed-use residential development for the area devoted to artists, and our proposal aims to question the existing urban fabric while creating a vibrant community. In this regard, four main goals are considered from the early stages of the design process. These are:

1) Keeping residential units isolated from the high traffic noise.
2) Utilising the inclined terrain of the site to provide a decent view for its users.
3) Generating a vibrant co-housing community.
4) Breaking the visual connection between the city and incompatible urban context by declaring a new approach to the urban context.

In light of the program and site-specific problems, the monotonous urban grid system of the Sancak District is manipulated. This manipulation is enriched by articulating open, semi-open, and closed spaces. The articulated physical environment leads to a prosperous relationship between residential to residential, residential to social, and social to social. In this way, the site is considered holistically to become more dynamic and surprising. Residential units are oriented in an L shape at the highest level of the site, whereas the shared co-housing facilities are distributed to the whole site and serve as social and functional areas such as studios, kitchens, dining, child care, cafe, market, and so forth. Several types of residential units are planned in variety, such as 2+1 units, studios, and duplex units. The units are articulated around a circulation tube which offers horizontal and vertical circulation between flats and terraces. Thanks to the unit articulation, numerous common spaces and private terraces are generated to increase active social life in the co-housing community. The terraces are designed to provide a good view of green roofed social areas. Therefore, the site offers a wide panoramic vista through terraced green roofs of social areas and studios which are not solely designed for artists and craftsmen but also to create a new urban texture in the Sancak district.

This project is also awarded “gold prize” by The American Architecture Prize Competition in the 2016 Student Category.

ARCH 301, Fall’15, Instructor: Giorgio Gasco.
Co-housing in Sancak District

- Our flats are articulated around circulation tides which offers horizontal and vertical direct communication between flats and common terraces.

**3 MAIN AIMS FOR ORIENTATION:**

- Keep residential units isolated from the high traffic noise.
- Utilising inclined terrain of the site to provide a decent view for its users.
- Break visual connection between city and inconsistent urban context by declaring a new approach to the urban context.

- Conduse facilities and studios for artists appear between flats and city.
- Thanks to elevation differences, the roofs of these facilities are able to be used as green common areas which offers dynamic social life.

- Then, monotonic grid system of Sancak Mahalles is manipulated.
- To achieve physical connection between facilities and flats.
- And to create a dynamic set by appeared, extraordinary, closed-seem open-open spaces.
New Residential Landscape, Lara Ergür
The project area is characterized by a historic bridge, a water body crossing the site, and semi-industrial lower-middle class residential buildings. One of the primary purposes of the design was to intervene in the socio-economic degradation and to improve the environmental quality substantially. Economic, socio-cultural, aesthetical, and environmentally sensitive concerns have been considered as well as functionality. The concept for the masterplan was “City Within A City”. A self-sustaining replica of a city on a small scale has been imagined containing residential, office, retail, industrial, and energy production zones. The proposal also reshapes the existing stream to integrate it to the project as a space defining element. The “City Within A City” design was done considering the historical heritage of Akköyprü Bridge and the existing Varlık District.

The above-mentioned general concepts and considerations have also been applied to the design of individual buildings. The design process of the buildings started from a solid rectangular mass similar to existing old buildings’ typologies which are 95s and 96s public housing. To emphasize the linearity, horizontal lines defining the balconies and the floors have been added with 4 meters in height. To add a touch of movement, dynamism, rhythm, and fun, the lines were distorted according to the sun’s path and sun angles that each floor would get. Later, panels were added to the whole façade of the buildings to add texture, aesthetics, and functionality in terms of sunlight and wind. Finally, curved shapes dominate the design to create a more humane and welcoming space.

The solid structure in the center of each building constitutes the core containing shear walls. Within the core, the space includes lifts, a staircase, and shafts. The floors are supported by columns located on a grid system. One type of shaft is hidden inside the supporting walls containing water pipes, cables, and HVAC systems. The other shaft is basically to transmit the natural light to the floors located on the periphery of the core. The natural light is reflected and diffused through the panels on the wall as well. The terraces have been utilized for three different purposes. The first function is to avail area for vegetation. The other functions are energy generation through solar panels, wind turbines, and rainwater collection.

After having further education and professional experience, the project could be considered coherent as per the general requirements of ARCH 301 Design Studio. The design considerations and the creative process follow sustainability, socio-cultural and economic expectations. However, looking back, the residential masses’ forms and sizes seem to be not consistent in creating a welcoming space but instead ended up incoherent with a human-scale approach. Should this project be physically realized, the economic and technical feasibility could pose a major difficulty.
New Residential Landscape in Ulus
“New Residential Landscape” was developed in 3rd-year studios in Fall 2019 with Dr. Giorgio Gasco. Firstly, I researched the Ulus District as the spine of Ankara, showcasing significant transformations in the city from Ottoman to contemporary times: the old citadel of ancient civilizations, ruins of empires, and the capital of modernist projects became its unique texture of it. Today, Ulus remains undervalued despite its historical character and significance in the collective memory, resulting in the degeneration of the space, urban identity, and heritage. My inquiry with this project on Anafartalar Street was to explore community integration with the city with spatial design tools. In the end, the fundamental ideas were forming an enhanced urban environment and bringing valuable qualities (back) to this historical fragment of Ankara.

Along the active Anafartalar Street, some traces of Roman antiques, Ottoman and Seljuk mosques, and Neo-Classic residences were my subjects of architectural observation and a myriad sketches. Just next to the given lot, the Sebze Hali Bazaar, reminiscent of the 1930’s modernist architecture style, was the origin of the design. The abandoned attached buildings on the perimeter and an ambiguous area used as a car park were cutting the valuable connections of Anafartalar with the lively bazaar and the forgotten architectural pieces behind it. I proposed that several abandoned buildings along this edge would be replaced by a mixed-use complex emphasizing an “experimental communal living complex”. The masses were arranged to utilize environmental factors effectively and leave green breathing spaces in this dense urban context.

Furthermore, when designing for the existing community, the program would offer affordable housing, commercial areas, and communal facilities to accommodate a (primarily) socially sustainable habitat in Ulus, grounded on its historical texture. In this vein, permeability, respect for the existing connections while providing others, and tuning with the vernacular context in the brick and timber material were the design’s critical aspects. The prominent design element was a partition between active Anafartalar street and the interior of the building; a double skin system of brick as an interface between the internal activity and outside that would also provide space by its staircases for a new community life.

Years after the project was completed, Ulus and Anafartalar are still the focus of urban development visions, renewals, and public debates. Ulus’s architectural heritage has been selectively interpreted and eliminated from time to time, and its gentrification was aimed at the scope of various projects. Nevertheless, when the development and enhancement of Ulus are aimed, the community life here needs to be encompassed within sustainable social, economic, and environmental policies which not only resemble generic material appearances but are strongly linked to the dynamic qualities and life in the district.

Sare Nur Avcı
New Residential Landscape in Ulus

ARCH 301, Fall’19, Instructor: Giorgio Gasco.
New Residential Landscape in Ulus
New Residential Landscape in Ulus

1st floor plan
3rd floor plan
6th floor plan
Virtual Connector

Selen Bekaş

The site is in Gioia del Colle, Italy. There is a railway that cuts the city into two parts. One side of the railway is the old city which has a radial organization around a historic castle. The other side of the railway is for old industrial buildings, but it is much emptier than the old city, creating an edge alongside the railway. The design process was initiated as group work for developing a masterplan and concluded with individual design proposals.

During the master planning stage, our primary concerns from the beginning were to create an urban relationship between the two sides of the railway and to create new functions so that even people from outside the city could benefit from the city. That is why we first made a vast urban bridge above the railway, which has different connections with the city. The new train station, urban stairs, and ramps are some connections. While creating the urban connector, we also came up with many functions for the new side of the city. We divided that side into three, and for one part, we aimed to create an urban edge. As there are lots of productive land in the area, we created a festival area for people like farmers or artisans to show their products and works. Around the festival area, we located some other new functions: educational buildings, cinema/theater, marketplaces/retail, art galleries, artisan zone, research center, community center, and a mediatheque. At the urban edge, we located the research and community center and the mediatheque. At this phase, we worked on different functions. I worked on the mediatheque as this building had the most potential to feed the festival area and could connect to the urban connector.

The mediatheque is a building complex that has a connector role. With an urban terrace, I connected the mediatheque buildings and the connector above the railway. Also, it has both outdoor and indoor connections with the sunken festival area. It is divided into two parts which are the “media” building and the “theque” building. The media building is the part that is seen from the main road. This building has libraries, a bookstore, a computer lab, a 5d lab, study halls, and meeting rooms. The 5d lab, library, and computer lab are the main functions, so they have limestone walls that pop out from the glass façade. The limestone parts reference the old city. The cheque building is the part that has an urban connection with the festival area. The reason why I call this one the cheque building is that most of the technological functions are in this building. There are installation boxes, a vast virtual world, a simulation box, a time loop box, a film-screening room, and a 3d virtual box. There is an inner ramp system around the virtual world. There are digital installation walls on the glass façade facing the festival area.

There is an inner street between the two buildings with urban furniture transforming into indoor furniture in the buildings and digital passageways with installation walls. The urban terrace is connected to the buildings with horizontal shading elements and has some voids that allow the trees to grow freely. As the area is humid, below the urban terrace is also a nice place to spend some time.
ARCH 401 & 402

ARCH 401 design studio is intended for students in the fourth year of BUDA and focuses on Architectural design, technology, integrated design, and historic preservation and context. The design studio engages some of the traditional stages of design development such as site analysis, conceptual and schematic design, and design development inclusive of programmatic requirements. However, in some ways, the design process diverges from traditional methods to also consider design decisions that are usually made later in the conventional approach, such as the early selection of building systems and technology.

ARCH 402 studios are formulated in a thesis format. The students are asked to define a design problem, conduct the necessary research, and develop design proposals. Pedagogically, this “thesis” format studio offers us an excellent opportunity to expose students to complex, multifaceted, real-world professional experiences. Urban mobility, infrastructural and open space deficiencies throughout the city are being identified and discussed. Each semester, each student chooses his or her own site and building type. Each student then generates a detailed building program and explores and synthesizes alternative urban and site-specific architectural concepts that address the creation of a sustainable and livable urban fabric.
Can a building exist beyond function and form and evoke emotions of a place it belongs to?

Meanwhile, architecture today is at the risk of evolving into a mass-produced, generic, context-less building form; the project aims to regenerate “the spirit of the place”. Taking part in the dominating context of Sinop, the goal is to make a meaningful gesture by the physical and cultural heritage of the city. The existence of the building is born from the very first feelings evoked in the site, with the ever-raining grey sky, dark ocean hitting the castle walls, and rocks and stone walls blended.

Situated on the western hills adjacent to the Sinop Prison and citadel walls, the walls of the building extend from the land towards the sea, giving direction and carrying all the masses. The building is allocated on a hillside used previously as a parking lot and dumping ground with 20 meters height difference. The masses are gently placed along the topography with minimum interruption preserving the hill’s steepness. The program of the building, a faculty for performing arts, includes facilities for music, dance, and theatre.

The main design ambition is to generate a dynamic spatial experience with the sky. There are no solid border of the building; the community is invited to fully encounter the students and art. There is no barrier between the sky and the enclosed space; rain and the sun is let in. By adding 3 layers of timber diagrid shell structure, students can exercise and practice on the terraces of their studios with light and air; they can dance to the rhythm of the rain. The shell structure enables rainwater harvesting for the building and communities as it is stored and recycled in the underground water tanks.

After two years and a master’s study, I am still content with the project’s approach to generating a dynamic, sensual experience shaped according to the context and environment. Also, this was the first project that I have won first place price in an architectural design competition that has broadened my perspective in terms of competitors and the practice. Therefore, I am proud to include this project in my portfolio still as it represents my approach as a designer: shaped around a deep understanding of the past, current and future of the context & function; not being scared of pushing limits and experimenting, and designing for the human perception as well as for the earth we live on.

This project has been awarded travel scholarship in Create Your Own Future Competition organized by Yaktaş.

ARCH 401, Fall’19, Instructor: Glenn Terry Kukkola.
CASTLE
The walls of the castle and adjacent prison is emphasized. These mass stone walls become the primary structure.

THE VOID
The walls are pierced to create continuous space and circulation. The axis from hidden gate of the prison is reopened. A promenade on the shore inviting the public is generated. Flow is directed from the upper level to the lower.

FORM AND PROGRAM
Masses are placed gently over the topography, being hung down from the walls. Uninterrupted circulation is maintained in 3 main axes.

THE SHELL
Timber diagrid shell structure in 3 layers with polycarbonate panels utilized as a surface to protect activity and harvest rainwater from the heavily raining sky.
1. Concrete shear walls with split face ledger block filling and stone cladding
2. Concrete retaining walls
3. Timber diagrid floor with double glulam beams
4. Concrete partition walls
5. Translucent channel glass curtain wall
6. Hidden frame curtain wall
7. Timber diagrid Structure
8. Varying transparency polycarbonate panels
30%, 20%, 10% solar transmittance photocatalytic panels for roof enables system to bring in enough light according to the function of the space and create filtered shading for outdoor activity. The configuration of the panels are designed parametrically.
Philosophy and Fine Arts College in Benderei
In the Philosophy and Fine Arts College in Bentderesi, architecture is approached as a meta-poetic construction to provide people with the cognitive stimuli that the spatiality is composed within a theoretical framework rooted in the cross-disciplinary play of space, nature, and time. The study is an attempt to align the phenomenological with the symbolic and the composition implies the constant flux between nature and architecture. The field of application is deeply linked to eclecticism and allegorical pluralism, and continuous stillness means motion between nature and architecture is composed within the different frames. Spatially arranged perspectives are formed to evoke different kind of experiences that the settlement and movement of the design is intended to be used as a hermeneutic tool revealing the presence of the absence: the locus of the city and the vortex between nature and architecture. The layers upon layers of the region and dual-aspect of entities have brought the desire to create a model of an aesthetic tension between order and chaos. Dynamic stress triggered by the configuration of closed, semi-closed, and open spaces stimulate motion related to the imaginative mental projection of the users. Together with comprehensive site analyses and synthesis, the region has been taken into consideration as the multidimensional space where the past and present are juxtaposed. Integrated with different kinds of green, the topography and the architectural units are in a constant formative relationship. In addition to detailed case studies, multidisciplinary sources have been studied to develop the methodological framework of the project. The diversity and perhaps implied eclecticism, the continuity, and the negation between entities have become the force empowering the setting of the project during the design process. The project along with all production completed throughout the 401 studios have become the initial step evoking me to dive into the conceptual and metaphorical search aligned to phenomenology that the desire to investigate the ‘paradigm’, then the ‘beyond’ is there to be fulfilled. In a manner analogous to light in Genesis, this study is, therefore, the introduction of a different level of interpretation and a higher level of multidisciplinary research in search of the infinite possibility of spatial experience and architectural imagination.
Philosophy and Fine Arts College in Bentderesi

post modern shaping the perception of old

monumental green
"Bentderesi Revitalized: Integrated Community Complex” project was developed in the 4th year studio, with the contributions of Jesus Espinoza Alvarez. The project is in a relatively central but underrated site in Ankara, Ulus. The research conducted throughout the semester showcased that Ulus District essentially worked as a spine to the city, making the project’s location very important. It was a somewhat educative site, considering its inclusion in the collective memory and urbanization of the town itself, as well as its inclusion of a historical monument, the Roman theater. This created the aim of forming a project, respectively, without disregarding its historical character and significance.

The main concern while conducting this project was to create a sustainable environment for the users of this site in 5 aspects: economic, socio-cultural, aesthetic, environmental, and functional. It was challenging to work on an area with a lot of historical significance and a monument of its own, which came with its own concerns. Another concern was the context and topographical condition of the site. There was a lot of slope on the site, which made it challenging to handle the circulation and building design. To tackle these concerns, I interviewed the local users around the site and found out more about their needs, wants, and suggestions regarding the site. Then I divided the site into pieces for each sustainability concept and created a list of functions that would work best with these concepts. After this, I zoned out the site and decided on my main building and design concept. An Integrated Community Complex would include educative, environmental, social, and economic solutions and functions without becoming irrelevant. The first course of action following this was creating and reshaping circulation according to the users’ needs and my concept and coming up with a multi-directional solution that emphasized the site’s potential. The circulation lay as a physical division between these zones and created connections. By actually integrating these zones, I was able to create a stepped building fitting with the slope of the site and meeting the users’ needs and expectations. The environmental aspect came into work here as part of the design concept, so to minimize the impact on the site, a design working with the slope instead of tempering it became an appreciable idea. This also meant there would be more areas to use as green fields, contributing to the lack of greenery in and around the site, hence the idea of using the rest of the site as a public park.

As the years passed, I see myself improving the design further by making it a flexible area, so it could be used later. Ulus is still on the spine of the city, and it will seemingly have this attribute for a long time, so it would be grand to have a flexible building concept that would fit and meet the needs of future generations easier.

Cansu Ersoy

ARCH 401, Fall’20, Instructor: Jesus Espinoza Alvarez.
The Monument of Silence
The project “A Sustainable Urban Prototype Along Ankara Stream” had a flexible brief where we got to choose the site and the function we wanted as long as it suited the project’s primary considerations. In my case, I was already tracing back the streams in Ankara that are under culverts or fully covered for the class’s mutual master plan. And I ended up selecting the long-forgotten Akköprü bridge and its’ surroundings as my site.

In 2016, three bombing attacks, all directly related to transportation, occurred in Ankara, killing more than 160 people. After being deeply moved by that, I decided to design a memorial to serve collective memory, a non-isolated haunt where people gather; “A Monument of Silence”. Considering that memorial architecture is one of the most potent ways to create a permanent reminder, the Memorial complex is designed in the middle of the city’s urban life to make the public feel and be conscious of the irreversible effects of violence by using an incisive language of architecture. The fundamental attribute of this design is its reference to transportation and security. The aim was to create an environmentally and socially sustainable, 24/7 alive, secure, multi-functional haunt. The complex contains a Memorial, a transportation node, and mixed-use facilities for anyone regardless of their sociological, ideological, or cultural identity.

Since I was more interested in the sensorial relationship between spaces and subjects, my design approach was rather sentimental than engineering. So I took the time to analyze the site and create a new site plan. By following the ordering systems which Mark Frederickson introduced, I focused on designing an economically, environmentally, culturally, functionally, and aesthetically sustainable building. Ankara is known to be dry and grey, but that does not have to be the case. With the proper revitalization of the streams and wetlands, the city could have had greenery, as Hermann Jansen proposed in his master plans.

The Monument of Silence satisfied me throughout the process and after, as I still consider architecture a social responsibility rather than a structural success. As architecture gave birth to many fields, it still exists as a combination of our basic needs and aesthetics. While functioning properly, the architecture needs to provoke emotions; with the right approach, it would serve to co-memory, and with suitable structural properties, it could last.
The Monument of Silence
A Corridors/Exhibition/Exemplary/Expansion is a graphic from Corridor Design.

The illegal and back-painted Murakami cemetery is painted on walls, located in southern Australia. Explosion of Mount Hunter, a wall painting, sometimes called the "first die" by the art historian, which one believes in a description of Mount Hunter, towering over the settlement's tower, is placed on the wall, emphasizing the connection between people, architecture, history, and explosion.
As a graduation thesis on 402 studio with Mark Paul Frederickson, I’ve wanted to focus on a land to help, correct and heal it. Not to help, fix and heal only the physical site corresponding to its environment but also to heal the socio-cultural, economic, and functional aspects related to it, as Mark says remarks. That is why I have chosen the border between Haiti and the Dominican Republic as a site that requires intervention in all these aspects. Haiti and the Dominican Republic are two countries that share an island but have been exploited by different nations in the past. Due to these nations’ different approaches towards these countries, Haiti became both environmentally and economically poor. The physical difference of deforestation is observed directly starting from the border, where the Dajabón River has also been polluted. The project is located near the border/river by consisting of a research center for volunteer researchers on the side of the Dominican Republic as well as observatories and accommodation units for volunteer researchers on the side of Haiti towards Lagon aux Boeufs, which was actually reserving rich biodiversity with its fish species, marine birds and mangroves but also has been abused with overfishing, deforestation, etc. Therefore, the project offers a collaboration between two countries to heal the land, the environment, the economy, and the local people by proposing both landscape and architectural strategies.

So, the main concerns were overcoming deforestation, cleaning the Dajabón River, recovering and protecting the rich biodiversity in and around Lagon aux Boeufs, coping with rising water levels and earthquake problems, raising awareness among local people, and offering them education, skills, and job opportunities. The design method developed around these concerns with lots of sketching and generating new ideas as Mark encourages us to do. At first, in the masterplan phase, I focused on the advantages and what the site offers as well as the disadvantages and what the site lacks to propose a treatment. The landscape, existing and destroyed vegetation, water sources, and disturbed and undisturbed soil were the focus of interest at first for landscape strategies. Then, in the next phase, I started generating as many forms as possible to come up with the most efficient and functional structural solutions, materials, layout, and plan. While developing the form, we all paid regard to utilize the sources of form such as the topography, circulation, views, climate, existing forms, ecology, sensory perception, culture, etc. Finally, the modeling phase started when the generating part concluded with a final decision.

As a result, the use of local materials such as bamboo for both environmental purposes and socio-cultural purposes offers local people skills and jobs; contemporary materials such as steel, cables, and PTFE for functional purposes, strength, and earthquake resistance; with water cleaning units; with mangrove plantation that allows for many benefits to the damaged landscape by their roots; with a porous plan layout which allows for plants to grow higher and blend inside the building; with mobile structures in different parts of the site were preferred. At the end of the studio and this project, with the chance to choose our own locales, concepts, and programs, I tried to present a sustained life among all living beings -humans, animals, plants- as I’ve wanted to create a lively building.
STRUCTURAL DETAILS
The Environmental Harvester
This 4th year’s bachelor thesis project is called “The Environmental Harvester,” located in the Rockaway Peninsula, New York, USA. The name comes from the act of the building requiring natural disasters to “harvest” various energy types. While deciding on the site, a place facing natural and social crises to push the limits of architecture to reveal its power for sustainable lives was searched for. Thus, the primary intention is “using disadvantages as advantages” and designing futuristically innovative yet green structures.

Rockaway Peninsula has two main problems; Firstly, the unequal living conditions. Therefore, the project proposes a community college providing research labs to investigate how to generate energy for NZE while providing jobs and income for locals. Secondly, the area is predicted to be under water by the end of 2050 and has been facing natural disasters. Thus, as a secondary function, the building acts as an emergency center with its flexible plans and landscape that can be adapted to any instant change even after many years. The building has two parts connected from the inside; one is the community college, and the other is the tower having additional functions as communication and management centers.

All strategies are chosen carefully, considering their effects for the upcoming years to design for the future and yet respecting the past, considering not only architectural but also engineering-scientific strategies.

By the end of 2070, even if the water level has risen or a new hurricane sandy hits the peninsula, the building will still be able to be used, providing suitable and safe habitats since the building is living in symbiosis with natural disasters rather than fighting against them.

“Can architecture be made of biomaterials and can it act in symbiosis with natural disasters by using them as advantages rather than fighting against them?”
Natural Disasters Strategies; Rather than putting a wall against it, possibilities of the problems are sought.

1. Sea Level Rise & High Tides: A hydroelectric dam structure (considering the wave movement and sea level) is located as the base of the building to generate energy and sanitize water.
2. Hurricane Sandy & Wind: Floors, envelope, and circulation corridors are designed accordingly to generate energy from the movement.
3. Algae Blooms: Collecting algae to capture CO2, produce O2, food, biofuel, and a bio-material.
4. Oysters: An earlier tourism activity; Using oysters to clean water, heal topography, and bio-materials.
Master Plan Strategies: There are three main zones: The ecological zone protecting natural habitat, the touristic area, and the economic site having vocational labs and the emergency center. Overwash flood canals, green corridors, and coastal surge barriers are located from the Atlantic ocean to the bay, and the boardwalk is elevated to control the tidal movement. A flood-proof landscape is designed in a layered way to be used even after the water has risen.

Material Strategies: The envelope of the building is made of durable corten steel (changes color over time, emphasizing the years passed) and living walls supported by composite beam and diagrid systems. The design’s interior gives the impression of a peaceful area surrounded by locally obtainable natural materials; traditional brick, cork panels, experimented oyster shells and algae, and living walls.
The Environmental Harvester

1. Durable Corten Weathering Steel (Color changes over time)
2. Air Extracted Double Layer Structural Glass System
3. Living Green Wall System
5. Primary Structure Composite Beam Bronze Steel I Section Supported with LVL
6. Boardwalk: Oyster shells, sand, mycelium
7. Oyster Attaching Structure: Oyster shells, sand, mycelium
8. Structural Steel of the Oyster Attaching Surface
9. Hydroelectric Dam: Oyster shells + Sand + Steel

[1] Composite Columns: HSS Bronze-Grey Steel
[2] Primary Structure: Double Layer Composite Beam
The graduation thesis project "The Small is Beautiful" was designed and developed with Paul Mark Frederickson in the 2021 spring semester. The cornerstone of the project consists of the search for a sustainable, self-sufficient, and community-integrated building to cultivate an undeveloped society within limited sources. From my perspective, it was a challenge to do a project in a country like Senegal, which is entirely different from my culture. No sophisticated project can be developed without knowing the place, understanding its culture, analyzing its climate, and learning the possible effects of other conditions. The correct way to do these delicately is to visit the project area frequently. Unfortunately, I did not get to see Senegal first-hand; this sensitive issue was the most complex challenge doing the design for me. The second concern was material diversity and source shortage. Because the project takes place in an underdeveloped rural area of Southern Senegal, materials that cost too much were exported from outside and that required heavy machinery in the construction process could not be selected.

The design method of the project follows the scientific steps to not go beyond what is intended. These steps consist of an ordering system that constantly questions the suitability of the building with the community. Based on the “Design Ordering Systems” introduced by professor Frederickson the project aims to achieve a high degree of sustainability with reference to economical, environmental, cultural, aesthetic and functional aspects of the design problem.

As the years passed, this project became a core for my view of questioning architecture. Is architecture just the name of an artistic path where selfish designer satisfies themselves, or is it to please rich people? It is a passion for me to solve problems in society. Therefore, I have been designing for refugees and poor people in my country this past year after graduation.

ARCH 402, Spring’21, Instructor: Mark Paul Frederickson.
COMPUTATION

Burcu Şenyapılı Özcan
Design is an open-ended question. One needs to ask more questions (eventually a series of them) to answer the fundamental question of design. The answers are partly dependent upon the nature of the questions asked and partly on who is answering them. Computation opens up more of the already open-ended design question (expansion), yet it introduces the opportunity to use algorithms to systematically organize the questions to be asked (algorithm). BUDA’s approach to computational architecture endorses these two facets of computation (expansion and algorithm) and explores both opportunities.
The expansion goes beyond the digitization of architecture, which has already taken place in architectural design and construction within the past 20 years, and beyond digital form-finding, which has subsided after making a peak with a series of debatable architectural pieces. The expansion takes us into a territory where we question the fundamentals of architecture in both spatial and structural terms. This is the exact area where BUDA encourages the students to explore.

Houssame Eddine Hsain’s proposal for an anti-desertification structure to be attached to cluster settlements, inspired from indigenous settlements in the Anti Atlas region, with use of local materials to lower the carbon footprint.

Houssame Eddine Hsain, ARCH 402, Spring ’20, Instructor: Yiğit Acar.
Halime Kızıl’s design proposal for a Biomedical Research Center, Halime created a structure producing hydroelectricity and thus is a self-sustainable building in terms of energy.
Experimenting with various software and computation methods is essential to come up with innovative solutions.
In a workshop co-led by BUDA alumnus Burak Çelik (2018) students located their designs in the virtual environment of Spatial.

Spatial Io (scan the code to view the projects in metaverse)
ARCH 440 Spring’22, Instructor: Burcu Şenyapılı Özcan.

metaverse

The spirit of the times for current and future BUDA graduates brings along the possibility of designing in virtual universes, where the fundamentals and principles of architecture are challenged. BUDA embraces this opportunity enthusiastically as it offers not only to go beyond the box but to decompose it as well.
Eda Bakırkaya explored the potential of light as a design element in the virtual environment.
ARCH 440 Spring’22, Instructor: Burcu Şenyapılı Özcan.
Aslı Erdem utilized the Cartesian coordinate system to represent architectural features. She then added a 4th axis onto the system to comprise interaction. She used this system to describe the interactivity levels of buildings. She analyzed 18 famous designs to illustrate their interaction capacities.

Aslı Erdem, ARCH 599 Spring’19, Instructor: Burcu Şenyapılı Özcan.
the algorithm

Design inherently depends on algorithms, but in a concealed and complex fashion. The complexity and the ramification of the algorithms used in the design process often render them too broad to be perceived at a glance. One of the advantages of computation in architectural education is that it breaks down this complex body of algorithms into smaller parts, which are easy to comprehend and manipulate. By this token, the strategy of BUDA focuses more on teaching the logic of computation (the structures of algorithms and ways of manipulating them) rather than the computation tools and software.

scripting

Trying to write down how to design is an excellent way of illustrating how complex designing is. There are many lessons along the way while achieving this task. It is with this conception that BUDA recognizes scripting/coding as an important asset in education.
Deniz Özden’s design for a cave dwelling and its 6 variations through scripting. ARCH 316, Fall ’21, Instructor: Ahmet Ünveren.

Müzeyyen Uçma’s elaboration on the Python script to form a cave dwelling and its variations. ARCH 316, Spring ’22, Instructor: Ahmet Ünveren.
Experimenting with parameters, Anıl Koç came up with a fluid superstructure that would be placed on the bus stops in the campus. ARCH 317, Spring’14, Instructor: Burcu Şenyapılı Özcan.

parametric design

BUDA adopts parametric design from the beginning as an essential method of design exploration. Any parametric tool is useful and informative in the sense of displaying the individual effect of parameters on the end product, regardless of the success of the end product.
In an attempt to come up with a structure that would both provide shade and also pin-point the location in campus, Pınar Ural suggested a form, produced through parametric design for the student council’s ticket sales. ARCH 317, Fall’15, Instructor: Burcu Şenyapılı Özcan.
Phase 4 of fluid urban furniture enables seating, leaning, and laying positions. Orientations which in turn render an experience that would always be different, are created through parametric design and 5 algorithm phases: phase 1 niche turning into the entrance, phase 2 trees are being avoided, phase 3 main form of the urban furniture has been generated according to the distance from the position of the avoided trees, phase 4 seating sections are created, phase 5 the one that is away from every other has been defined.
Focusing on the front facade of the A Building, a solution for both exterior and the interior of the building is designed to eliminate glare. The algorithm creates elements that would break the direct light for study areas behind the selected facade while generating urban furniture on the ground level for the exterior in the same flow. The algorithm phases are phase 1: initial facade, phase 2: reorientation of the elements by function locations on the site, phase 3: increased diffusion of the glare by randomization of the size, and phase 4: urban furniture generation to serve a variety of outdoor activities, phase 5: panel extensions to control direct lighting.

Meriç Erdoğan, ARCH 317 Fall’20, Instructor: Yavuz Baver Barut.
Group work by Lara Ergür, Sena Deniz Gülsoy, Berin Nur Kocabas, Didem Üyetürk: urban furniture generated in the sunken courtyard of the FE Building
The project challenged the students of the course to investigate the main campus, locate the areas with unused potential, and give purpose and new function to these hidden-in-the-plain-sight locations. Students worked for 4 days in a workshop tempo to finish the exhibition. While the immediate surroundings of the selected areas have been modeled (on a 1/25 scale) to give more context, unselected areas are being projected on the ground by black tape. Many different physical modeling techniques have been used in collaboration with others to manufacture what is created digitally in real life.
The best way to test a design is to construct it. With this conception, 1:1 construction and testing are embedded in many of the courses at BUDA and computational design courses are no exception. Whenever possible, we fabricate what we draw on the computer to understand (and hopefully solve) the associated challenges mutually included both in the design and the fabrication phases.

Mert Kilcioğlu fabricated his design named ‘Dyno’ in summer of 2016. The name dyno both refers to the dynamic design and to the dinosour like shape of the pavillion which is located at the courtyard of the FADA buildings. Dyno is used by the students to meet up, shoot selfies and relax under.

Mert Kilcioğlu, ARCH 317, Summer’16, Instructor: Burcu Şenyapılı Özcan.
3d printing produces mock ups of unusual geometries, allowing for students to explore surface patterns as well. ARCH 440, Spring ’22, Instructor: Burcu Şenyapılı Özcan.
ENVIRONMENTAL ASPECTS of DESIGN

Zühre Sü Gül
BUDA’s courses covering environmental sciences aim to introduce students with the intangible yet measurable contributors of an architectural setting. After experiencing the quality of light and sound indoors and outdoors in the first semester of their third year, the follow-up semester students are confronted with other parameters such as thermal comfort and air quality. Dealing with environmental factors in design necessitates a good understanding of the site input and integration of knowledge accumulation and application of materials science, construction systems, and technology in architecture. In that sense, different chapters of architectural education in our system are their mutual contributors. The process of environmentally considerate design transfers from indoors to building envelope/facades and vice-versa. The primary goal is to provide energy efficiency with a sustainable approach at a detail level or as an overall passive building system.
To keep the students engaged, it is critical to set a proper balance between theory and practice, tangible and intangible parts of the environmental sciences, in lecture courses. At BUDA, the sound absorptive and diffusive material exhibitions are usually the most exciting and fun part of acoustics classes (Figure 1). Making material samples is highly appreciated by the students. Feeling the textures by hand, observing different perforation sizes and different layers of composite materials, blowing through acoustically transparent fabrics, etc., advance students' tangible knowledge. They immediately apply this information to their ongoing projects in their design studios.
Implementation of a design project in lecture courses is an essential part of the teaching methods as well as assessments. In order to measure the acoustical performance of their auditoriums, students use various tools including digital and hand-drawings, simulations as well as simple calculations.

Kasım Berk Adsan, Nur Gök tüğ, Berrin Enise Erin, ARCH 341, Fall’21, Instructor: Zühre Sü Gül.

Adil Ahmet Sezer, Bartu Lokumcu, Selcan Ezgi Şen, ARCH 341, Fall’21, Instructor: Zühre Sü Gül.

Alibek Kerimov, Briah Afzal Chowdhri, Dillion Maurice D’Cruz, ARCH 341, Fall’21, Instructor: Zühre Sü Gül.

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Experience with materials is very valuable for architecture students. The form, texture, and feeling of materials are tangible aspects of architecture, eventually raising the student’s interest in the topic. As part of the term project of ARCH 341, students are assigned to design and produce acoustical panels to be applied in their own architectural design studios. The motivation behind the assignment is that; the present design studios are highly reverberant, and both the students and the instructors complain about the aural discomfort within the studios. The situation is even more problematic for those studios that are shared by two different sections, there is simultaneous talks within the same indoor space at different corners of the room. So, to quantify this real case problem, students are initially challenged to estimate the reverberation time of their studios for their current condition. Later, they are asked to propose an acoustical design and treatment of room surface/s with sound absorptive materials of their own design. The developed sound absorptive or diffusive panel sizes must be a minimum of 120 cm x 60 cm. The final product should also include a proposal for its application (hanging) details, either hanged on the ceiling or applied over the walls. The students in groups of two or three are asked to produce at least four panels for submission. All the panels made by 75 students from two sections are collected, and the proper ones are selected to be applied. Later, those panels are hung over walls and ceilings as proposed by the students in two selected studios (Figure 3).
One of the studios before acoustical panel applications (on the top left corner) and after the panels are designed and produced by 3rd year undergraduate students.
using waste for acoustical panel applications

One notable outcome of the acoustical panel applications is, the reuse the waste material. In order to control long reverberation times and improve the intelligibility of speech within the studio, originally a two-layered panel system was developed. The collected cardboard cups differing in size were placed in different orientations, as a front layer. After the project submission in ARCH 341, the students further developed their panel system during their final semester before graduation. In place of mineral wool as a backing absorptive layer, biodegradable and recycled materials are investigated. As a result of the coffee and tea residues are processed into coffee and tea panels (Figure 4). Sound absorption coefficients of the produced material samples are tested by Kundt tube and the potentials of re-using such biomaterials for acoustic purposes are discussed in a recent acoustics congress (Sel et al., 2021).
Different panel arrangements of cardboards (on top), photographs of coffee and tea waste panel samples (in the middle), measurement set-up by Kundt Tube (at the bottom)

Passive strategies are studied in 3rd year environmental technologies course more specifically, in coordination with Arch 302. Running design processes directed by scientific thinking has been a hallmark characteristic of BUDA. Over the course of years many students adopted such an approach in their projects.
Ceren Çetin, applying passive design strategies into her project: rainwater harvesting, sunspaces for the greenhouse, reshaped atriums, stack ventilation, thermal mass, evaporative cooling, earth tubes, double skin facade
ARCH 342, Instructor: Gökçe Ulusoy
DESIGN BUILD

Aysu Berk
The astonishing part of architecture is the way how this discipline is generated on problem-solving fed by many other fields; and various solutions coming together, forming the optimum answer. This giant tree of problem solving also includes different methods and theories that need to be answered theoretically, technically, and physically. Thus, architectural education has always been very considerate about the practical applications of the solutions to the problems, as much as the theoretical and technical manners.

Within the educational vision of BUDA, there has been a strong emphasis on the “making and constructing” component of architecture. Therefore, in addition to the studio education that is mainly based on generating the design idea and “constructing” the physical model, if not the accurate scale detailed drawing, the technical courses are also built on the experience of making, experiencing, and feeling the behavior, the problem, and the artifact of a building.

In the curriculum of BUDA, the construction and structure courses follow a methodology, where the courses are organized with a theoretical background, which is then emphasized and reinforced with a hands-on component. This physical component provides the student to engage with the material, with the 3-dimensionality and the behavior of anything that is constructed.
Within the 10 years of BUDA, there have been projects where the students are asked to conceptualize, design, plan and construct small scale artifacts on campus. One of the remarkable and long-lasting examples is the “kilim project” in 2014, where the students were asked to design a small-scale space to gather around and spend time within the context of the Bilkent University campus in Ankara. The project started with the drawings and planning, then was revised after some structural analyses were conducted and then it was realized by BUDA students on campus.

Our first graduates (Graduates of 2016) realized this project in Spring’14. This group of 24 brilliant individuals have practiced this project together in an inspiring routine and built these twin vertical towers on campus, where they stood for 8 years.
Samples from student work. In the later years, the “built” experiences are revised to be in a smaller scale, where the outcome from the course can be more manageable and more optimized where the student experience the important issues of construction and the feeling of 3D composition of elements, ARCH 252, Spring’14, Instructor: Aysu Berk.
Another design-build experience in the curriculum is embedded in the structure courses. This experience introduces the students with the opportunity to test structural behaviour. One of the aims is for the students to interact with the structural behavior through the experience of designing, calculating, and constructing a truss bridge. After construction, the bridges are tested under controlled load, and each failure is video recorded. After the testing, students are asked to prepare a written report with all the experiment’s design concepts, calculations, and results. Thus, the project simulates the design process and the entire cycle of conducting and reporting a technical investigation. Starting from 2014, the assignment has been utilized, and it is clearly observed that students benefited from the process as they have the chance to experience all the levels of the process, from the conceptual design, to the calculations, and to the failure action. Furthermore, the unexpected results of the tests (unexpected failures or non-failures) illustrate the inconsistency and margin of error in design and construction.

the bridge test

Bridge Testing, ARCH 231, Spring’16.
Pelin Halisipek, Beyza Keskin ve Sena Nur Yıldız testing their bridge. Load Carried: 28 kg, Bridge Weight: 126 gr, ARCH231, Spring’22.

The moment of the failure, ARCH231, Spring’22.

Pelin Sokmen, Iris Gul, İrem Ceri, Load Carried: 122 kg, Bridge Weight: 105 gr, an alltime record, ARCH231, Spring’14.
Group members: Hamiyet Aybike Kara, Mustafa Alperen Yaşşa, Ege Kaan Bentürk, Mahmut Furkan İnan, Load Carried: 40 kg, Bridge Weight: 142 gr ARCH 231, Bridge Testing, Spring’ 22 Instructor: Deniz Üçer Erduran.
Group members: İşıl Aygın, Ayşe Begüm Acar, Mustafa Yiğit Kodak, Ömer Bahadır Torusdağ, Load Carried: 34 kg, Bridge Weight: 100 gr.
ARCH 231, Bridge Testing, Spring’ 22 Instructor: Deniz Üçer Erduran.
On the third-year curriculum, the advanced structural also suggests students to practice a reinforced concrete beam design, where the designed samples are tested till their failure to see their capacity. The students have the chance of experiencing different designs of reinforcements and observe the varied results due to the change of amount of steel.

Hand Cast Tiny Concrete Beam Workshop was conducted as a part of Arch 332 Structural Design II course in 2022 Spring semester. As a part of the workshop the students experimented with a model reinforced concrete beam which was produced to 4cm x 4cm x 40cm dimensions. The produced concrete beam was then tested for performance by an experiment setup by applying load to test the performance of the model beam.
Concrete preparation by Ozan Demirel (instructor) & the loading process by Cahit Doğruer, ARCH332, Spring’22, Instructor: Ozan Demirel.
As BUDA, our educational vision focuses on the practical and experimental nature of Architectural Education. In this 10th academic year of BUDA, not only the courses mentioned above, but many other projects, course assignments, studio problems and critics aim to demonstrate the power of learning by “doing/building” and the feedback gained from the students and from their performances demonstrate that, this is what BUDA will keep on working on in the coming years.
MULTIDISCIPLINARY INTEGRATED DESIGN

Özge Selen Duran
Architecture, contrary to common belief, is a total collaborative practice. Even if the architect is on the main stage, in charge of and the first point of contact for all kinds of design development, architecture cannot be realized without an essential network of communications. Without a design team and the contributions of many actors involved in the process; the building design development cannot be realized.

Due to the increase in the complexity of today’s building design approaches, the input of many different specialized design professionals is essential and required to contribute to the process. On the other hand, these professionals mostly have a variety of conflicting concerns and priorities with different involvement durations, thus challenging the schedules of the building design process. Therefore, a multidisciplinary integrated design approach is consequently required to achieve the potential of this chaotic but promising design environment, which is also one of the most significant characteristics of the design education approach in BUDA.
integrated design in studio context

The attitude and conscious mindset on integrated design can only be permanent if it has been set in the early years of education, beginning with the first years of the curriculum. Thus at BUDA the majority of the courses have been intertwined with other relevant other courses, in which the outcome of one course can be processed as the source of another study in the other. Raising awareness on the importance of sharing (and distributing) responsibilities within a design team and thus developing a collaborative and synchronously executed product, or being dependent on the outputs of other tasks proceeding concurrently, or being obliged to work in a team to produce a shared outcome with different (conflicting) design approaches and priorities as well as trying to understand the concerns and privileges of other disciplines (to implement in their designs in advance to secure the designs) are some learning outcomes that the students are expected to gain at the end of their education experience at BUDA.

Architectural design studios are the primary design environments where these integrated design development processes are experienced by the students. Group works and necessary correspondences to develop a common concept, being obliged to work on a common model, distributing responsibilities to accomplish given tasks, and finalizing the project as a design team are some practices that are required to be accomplished by the students to enable them to become accustomed to these collaborative processes.

Furthermore, Architectural design studios, especially in Arch 301 & Arch 302, are designed as integrated studios with other courses (i.e., Arch 301 with Arch 331 Structural Design and Arch 341 Architectural Lighting and Acoustics; Arch 302 with Arch 342- Environmental Technology). These studio projects are expected to include all spatial, technical, environmental, social, and theoretical bases to sustain the proposed building design development, with the support and collaboration of additional courses. Following this awareness of the other essential components of building design, students start to implement these aspects to their projects throughout the rest of their curriculum. Based on these outcomes; in their final semester especially, most of the students are developing integrated building design projects as very comprehensive outputs, reflecting multidimensional and multi-sided project implementations.
Final jury presentation of a group work “working as a group – producing as a group and presenting as group”, Arch 302, Spring’17, Instructor: Özge Selen Duran.
roleplay workshops

The integrated approach is also applied in many other BUDA courses, in which the students can experience different aspects of the discipline through projects or assignments; or by simulating and roleplaying to understand the concerns and priorities of other disciplines in collaboration in the format of workshops.

The workshop medium constitutes the central backbone of ARCH 428, Integrated Design Management. In this course, students are introduced with all the components, stages, and essentials of a full building design development lifecycle, including the pre-and post-design stages. With the help of this theoretical background (but also with practice-based exemplifications of real-life projects); students then proceed to the application process, where they are roleplaying, simulating, and pretending to be different actors in various stages of the process, with multiple concerns and priorities through a reverse engineering process.
Multidisciplinary integrated design is a crucial aspect of the current building design environment. It requires not only the fulfillment of various technical, spatial, environmental, contextual, social, and cultural know-how and execution through the design development process; but also requires continuous harmony and organization in the conflicting requirements and detailed planning and fulfillment of the challenging schedule constraints. In these workshops, the students gain an awareness and a different understanding of the primary components of the design environment, with the meetings, correspondences, documentation and interdependent exchange flow.

Most essential features of the profession are hidden behind the capability of managing this complex process, in which they get used to managing their own time, managing the documentation/data exchanges, and managing the relationship between different actors and the different priorities of these actors involved in the process.

During and after these simulative role-playing workshops, the students often gain awareness and sensitivity to the complex multidisciplinary project environments and learn how to handle these complexities of increasing conflicting and challenging demands, and requirements of multi-sided perspective (i.e., technological tools, environmental impacts, economic constraints...etc.).
The multidisciplinary interaction in the simulated design environment
Workshop 1, ARCH 428, Fall ’21.

The meetings & correspondences within multidisciplinary design teams,
Workshop 2, ARCH 428, Spring ’22.
This base knowledge of awareness of the situation is also reflected in terms of comprehensive approaches for possible solution methodologies to be developed in basic schemas. Below figures depict some brainstorming exercises of Arch 428 students, where they propose innovative process maps to improve the multidisciplinary design process management approaches, based on the theoretical knowledge they are been introduced.
The multidisciplinary superimposition of design teams
Workshop 1, ARCH 428, Fall 20.
REGIONAL ECONOMICS for DESIGN

Jesus Espinoza Alvarez
If we aim for an actual condition of sustainability; sensibilities related to materials, environmental conditions, ecology, and human systems such as economics and societal practices should all be integrated into the process. Within these concepts, economics has a crucial role as it also is a system related to all the aspects listed. Therefore, we should start by stating that while our urban and architectural examples are far from perfect, we should begin with genuine economic models or scenarios if we want to inflict change.

Our main challenge is to constitute a long-term urban economics approach that does not rely on mainstream economics because sustainability cannot be reached by the ordinary and common systems. Instead, we rely on a more holistic tactic incorporating some of the issues we think are important and are not fully considered and implemented.
layered analysis

We start by considering economics and regional and urban development as social constructs that are shaped according to a society’s dynamics. It is essential to understand that, as architects, we all can promote some alternatives to mainstream development. We can explore possibilities or feasible ways to understand urban design and generate other options on architectural grounds. One method BUDA applies in design studios to examine such opportunities is to forget the existing land use conditions. Thinking from scratch, we assess a site in terms of its economic, environmental, social, aesthetic, and functional capacities and problems, and through synthesizing such factors, we arrive at novel programmatic suggestions.
Berrin Nur Kocabas, Masterplan Study, Prague at the Cusp of Change, ARCH 402, Spring’19, Instructor: Jesus Espinoza Alvarez.
We also understand that modern economics does not distinguish between renewable and non-renewable materials, but it qualifies and quantifies things through numerical means, that is, finance. The main practical question we ask is: how can we promote urban development when we know we are trying to encourage either a very new or a noticeable weak urban sector, which has an apparent reduced financial transfer and a strong dependency on the most dominant ones? We also understand that ‘top-bottom urban regional development’ promotes universal solutions. Free market regulation and poles of development spreading wealth from solid and robust rich regions over less fortunate ones are the modern regional development concepts, and they still highly influence mainstream regional development policies. The most general neoliberal market principles also focus on non-governmental and self-regulating market mechanisms. Development of a-typical programs with novel economic models emerges as a design strategy. Introducing new economic models that don’t exist elsewhere in the context, such as; the production of biomass, up-cycling, cultivation, and production of biological resources such as bamboo, are some of the strategies we have been experimenting with.
Damla Tarman, Eco-Drone Habitat Maintenance Center, ARCH 402, Spring’18, Instructor: Yiğit Acar.
So far, we also understand that this is the most common planning rationale for governments to implement and incentivize regional development. In addition, it has proven effective in stimulating demand and competitiveness in the most fortunate, prosperous, and dominant urban economic networks. However, not everything is solved and clearly explained through that vision. Sustainable goals are to be matched with some other equally essential orders, in which the ideal sustainability lies in maintaining balance among them. Maybe some different common-sense visions should be explored and help understand how specific (micro) urban components experience development.

We also know that there is a universal agreement that a fundamental source of wealth is work (human labor) and to work is to sacrifice one’s leisure and comfort; henceforward, we consider work wages a kind of compensation for the sacrifice. We intend to use this as a standard tool for our proposals. That means providing job opportunities through sustainable design and alternative economic practices. The provision of housing strategies is an extension of this idea. Another part of our strategy is designing new workspaces and new models of production, along with new forms of accommodation and social infrastructure.
In the sum of all of our understandings, we say to ourselves that, because the conventional economics concepts justify the destruction of our planet, it would be complicated to promote a more malign concept that currently rules our economic lives. Again, it is not easy to reconcile theory and practice, and the situation as regards this whole issue of top-bottom and/or bottom-up is undoubtedly puzzling to anyone. What do we have to lose but to be sure there should be answers waiting for us to be unveiled? As designers, we propose something efficient that has the primary purpose of guiding us through this complex situation. If we are to give full and equal importance to each ordering system—social, cultural, economic, philosophical, and functional—we need to measure or create indicators for each. We also need a common goal for all of them that is of our choice, like the net-zero objective.

The primary purpose of using indicators is for us to be able to track the changes in both quantity and quality for each, while we have ways to make comparisons between them. Last but not least, we hope such indicators will give us a good sense of how to keep up with a sustainable development goal in mind while we design and propose alternative architecture.
DESIGN ORDERING SYSTEMS & URBAN SUSTAINABILITY

Mark Paul Frederickson
Sustainable Design has the capacity to affect profound change in the urban fabric. For the past ten years, we have attempted to develop BUDA design studios into innovative applied research environments in which faculty and students collaborate in apprenticeship-style learning scenarios. Our studios have become international and multicultural experiences and have developed thesis projects on four continents.

Although we work on a wide variety of project types in an array of environmental and social contexts, we are most frequently involved in sustainable community development and the planning, design, and revitalization of urban environments. Over the years, we have developed a series of exciting design and planning methodologies that seem to serve us well in forming sustainable urban fabric. As architecture is inherently interdisciplinary, we engage a range of design tools on any project. But, in the formation of the intelligent and versatile urban fabric, we have become very impressed with the capacity of specific planning strategies to effect meaningful change in our cities, towns, neighborhoods, and edifices.
We have come to understand and embrace a variety of architectural, planning, and landscape architectural processes as effective catalysts of consequential economic, environmental, social, and aesthetic change in urban environments. They are also remarkably effective tools for urban and small-town revitalization. Although our processes inevitably vary according to project type, client, site, budget, etc., we find that with most complex planning projects, design organizational criteria and sources of form prove quite effective as design tools.

Although we remain apprehensive regarding using the term “sustainability”, we honor it as an elusive yet worthy goal integrated into all of our planning and design efforts. We believe that a genuinely sustainable urban environment must be defined across an array of dimensions: economic, cultural, environmental, functional, and aesthetic.
Accordingly, in our more complex projects we evaluate the relative merit of our ideas according to the following design and planning ordering systems:

**Economy:** is the design economically sustainable? Does it create jobs and income sources for the community?

**Environment:** is the design environmentally sensitive? Does it connect and enhance existing ecosystems? Does it reduce our carbon footprint?

**Culture:** does the design create opportunities for meaningful social exchange and learning?

**Function:** does the design circulate effectively? Is it safe? Is it easily maintained?

**Aesthetic:** has the design identified and created an aesthetic sensibility appropriate to the history and culture of the region and its vision of the future?
For instance, an idea that concerns itself with only aesthetic issues is not as useful as an idea that fully engages not only spatial and image-related matters but also explores economic, environmental, and social issues. A park with flowers is fine, but a park with flowers that meanders its way through a community, increasing land value, creating economic opportunities, mitigating erosion, promoting urban water harvesting, and encouraging meaningful social interaction is a richer, more layered, and therefore more relevant concept and eventual urban component.

We use these invariably interconnected systems as a means of verifying the relevance of our ideas. Our solutions must be multi-layered and satisfy the complex range of design determinants present in all urban settings. Over the years, we have understood and appreciated that landscape architectural design and planning strategies can encourage meaningful transformation in urban environments. The ordering systems have, in turn, become our definition of sustainability.

The following is a more focused discussion of how these strategies can lend dimensions of sustainability to our design and planning ideas and improve urban environments across all of the fore-mentioned ordering systems.
Economy: Our work in small town and urban revitalization projects has taught us that economic viability is perhaps the most critical issue facing clientele. If our design and planning solutions are not economically sustainable, then all other ideas and well-intentioned concepts rarely gain full realization. Catalyzing economic growth and revitalization with minimal capital outlay remains a primary concern in most urban design scenarios. The inertia counter to economic revitalization in many communities effectively postpones or cancels many well-intentioned urban design projects. Due primarily to significantly lower initial costs, we have found landscape architectural solutions to be effective facilitators of economic growth and useful organizers in urban revitalization and design scenarios. Landscape Architecture is relatively inexpensive compared to urban design solutions predicated on large architectural and infrastructure-related projects. In the United States, the value of a property will almost always increase when a park, plaza, recreational opportunity, or greenway is developed next to it.

Environment: Environmental degradation has become a genuine problem throughout the global urban fabric. Whereas past generations of designers were focused on social equity and justice, a great majority of our incoming students are environmentally motivated. They have recognized that truly sustainable urban environments not only need to preserve and remEDIATE existing ecologies but also need to approach carbon-neutrality in their formative principles. The good news is that the market for dense, walkable, mixed-use community configurations surrounded by preserved natural open space and recreation opportunities is rapidly expanding.

Culture: in most cities, we are becoming culturally isolated from one another. We view the world through our cars and television screens. Our urban fabric is formed of an anonymous grid of vehicles and garage doors with little opportunity for meaningful social interaction. We find that through the creation of interconnected green networks of parks and preserved open space as well as walkable and pedestrian-oriented streets; we can encourage meaningful social exchange. In several of our projects, socio-economic differences were an issue. For example, we have recently worked on revitalization master plans for several coastal villages where the effective economic and social integration of existing settlements into new tourism-related development became a primary component embedded in our design solutions. Landscape-based solutions proved exceptionally helpful in these complex situations.
**Function:** As previously mentioned, we consider functional issues to include the following: efficient vehicular and pedestrian circulation, user-group safety, and ease-of-maintenance issues. Urban connectivity is a critical issue in the creation of compelling urban environments. Dense, walkable, mixed-use environments that reduce our reliance on the car are paramount. Once again, one can see that green pedestrian and bicycle networks of linear parks and pedestrian-oriented streets are key design strategies. More pedestrians and bicycles in green corridors results in less traffic congestion. Centralized parking concepts connected to public transport and bicycle traffic will lead to more efficient urban transportation. Washes, streams, river corridors also offer wonderful opportunities to achieve this sort of urban interconnectivity. They offer existing unused and unclaimed open space networks that can easily accommodate pedestrian and bike trails. When this pedestrian network is coupled with effective public transportation as well as centralized vehicular and bike parking strategies, walkability is increased as traffic congestion is lessened.

**Aesthetics:** Our view and definition of “aesthetics” is a comprehensive one that necessarily considers and includes all of the ordering systems. Can an urban area be “beautiful” if:

- its inhabitants are financially destitute?
- its natural environment despoiled and unhealthy?
- it is choked with traffic?
- its citizens live in fear of crime?

We believe that a truly “beautiful” community is one in which participants reflect a sense of well-being as measured through a carefully selected range of criteria. Discovering, defining and enhancing identity are often important issues in urban design. A primary goal of our revitalization plans often includes the establishment of a “Community Face” — in essence discovering, defining, and celebrating the community’s sense of place. Defining a ‘Face’ delineates how the town/community/neighborhood meets the world and is also an important way to attract visitors to explore and enjoy the amenities the area has to offer. Further, it can be a tool both for attracting investors and for those stakeholders to market themselves. And most importantly, it can help to increase community pride and be a catalyst for the organization and care of the urban fabric.
Yağmur Buğu Coşkun, Alternative approaches to Mosque design in Karaburun, ARCH 402, Spring 20, Instructor: Mark Paul Frederickson.
Eda Tarakçı, Wastewater management and wetland restoration research center ARCH 402, Spring’19, Instructor: Mark Paul Frederickson.

Naz Kaplan, Net zero hotel and wetland revitalization complex in Izmir ARCH 402, Spring’20, Instructor: Mark Paul Frederickson.

Bünyamin Sönmez, Revitalization of urban drainage canals in Los Angeles, ARCH 402, Spring ’22, Instructor: Mark Paul Frederickson.
In summary:

It is our experience that the effective integration of hybrid design methodologies derived from the allied design fields has the capacity to effect profound change in urban environments. And it places an array of revitalization tools at our disposal.

It can stimulate economic development with modest initial investment.

It can purify and preserve our precious air, land and water resources.

It can preserve and remediate wildlife habitat. It can encourage meaningful socialization and recreation.

It can focus growth and reduce sprawl. And it can offer an urban respite to soothe an otherwise stressful existence.

We designers are fortunate people and are in possession of skills that can positively impact the surrounding urban fabric. The students in BUDA studios like to think of themselves as urban design street fighters, and they feel quite comfortable in “ugly” places…. it’s where we belong.

Replace grey with green and blue.
Replace cars with shoes.
Replace garage doors with front porches.
Replace noise with sound.
Replace concrete with parks and children playing.
THEORY & DESIGN

Giorgio Gasco
The idea that Architecture needs to be nurtured by words, namely concepts, is central to the educational experience at BUDA, as much as it happens in many other schools of architecture around the world. Yet there is a peculiar aspect of the relationship between theory and architectural design that we tried to foster in several courses: the central role of theory as an attempt to intellectualize shapes.

Architectural theory is the discourse that describes and supports architecture as a process that produces forms. In this sense, theory ultimately produces unexpected effects on the intellectual elaboration of architecture and the materiality and actual substance of its production. Architectural theory is another form of architectural practice. It defines and constitutes what architecture eventually builds. Architectural theory also mediates between the idealistic/conceptual goal of architecture (as a stance, dream, vision, imaginary practice) and the pragmatic one (as a construction, production, building practice).

Eventually, what we promoted in these last 10 years is the exquisite task of architectural theory as a restless engagement to integrate concepts and dreams into a unique worldview. The everyday practice of this unique gaze cast upon the world, when all is said and done, is Architecture.

1-Teresa Stoppani, Giorgio Ponzo and George Themistokleus, This Thing Called Theory (London: Routledge, 2016)
contemporary architecture & theory

Arch 465 is an architectural history course. It focuses on some of the most important episodes that feature the development of contemporary architecture from the II post-war period to the last decade of the XXth century. This critical review aims mainly to uncover the discourses produced by different architects and scholars and to discuss how they affected the period’s practice. The course schedule is divided into two parts. In the first part, students are introduced to the course’s contents by a series of thematic lectures that illustrate the development and articulation of concepts, ideas, plans, and visions that constitute the complex framework of contemporary architecture. In the second part, students are assigned a set of readings related to a lecture topic of their choice and asked to produce two concept works.

comparing and contrasting related readings

This exercise encourages a critical and deep interaction with the texts and writers, their ideas and arguments, and their design approaches. To compare and contrast, you need to start by identifying the main argument/s made by each text and the primary pieces of evidence used to support the arguments. How do the arguments support similar and also different ideas? If the arguments are the same, perhaps the evidence is different. In what ways? You can also look at HOW the statements are made – the writers’ styles and tones and the presentation of the argument. How have they made their arguments and structured their texts?

The result of this comparing and contrasting operation is a possible draft for constructing a fictional dialogue or interview. I.E., Make Venturi and Rossi “chat” on Functionalism, Modernism, Form, and the necessity to incorporate Complexity in the language of architecture; or Make Eisenman and Rossi “chat” on Functionalism, Modernism, Form, Typology, and the need to seek for the Autonomy of Architecture.
SYMBOLIZATION

"The purpose of symbolization is to free the meaning from the immediate situation, whereby it becomes a 'cultural object' which may form part of a more complex situation, or be moved to another place. Gathering evidently depends on symbolization, and implies a transposition of meanings to one place, which thereby becomes an existential 'centre'" (Schulz 132).

"If we analyze the nature of the formal information potential in any specific context we can see first that there is information which is iconographic and symbolic and comes primarily from cultural sources which are external to the environment." (Eisenman 321)

According to Schulz, the symbolic meanings enhance the value of the building. It strengthens its relation to place and therefore it is assumed that it has a positive impact on the design to make the building more meaningful in terms of its interaction with people. Eisenman also stated the effect of external factors on form however, Eisenman's point of view on his formal search shows that he neglects the symbolic meanings effects on formal investigations to reach a more precise and richer meaning without any constraints.
Sample page from Term Project: Analytical comparison of concepts and design strategies by P. Eisenman and R. Venturi
(Reference texts and works: Notes on Conceptual Architecture II and House II by Eisenman/Complexity and Contradiction in Architecture and Vanna Venturi House by Venturi)
Zeynep Berra Kırbaşoğlu, ARCH 465, Fall’20, Instructor: Giorgio Gasco.
contemporary architectural discourse: reading as experimental fieldwork

Arch 565, formerly called Contemporary Architecture & Theory (2017-2020), has been recently renamed Contemporary Architectural Discourse: Reading as Experimental Fieldwork (2021). From the beginning, the graduate course focuses on the reading activity as a practical experience. It aims to produce a series of conceptual works using a selection of readings from the architectural discourse of the second half of the twentieth century as a raw material. Together, they illustrate the development and articulation of concepts, ideas, plans, and visions that constitute the complex framework of contemporary architecture. The course attempts to appropriate these sources to play with their essence and inner structure. The theoretical background originates from the body of work produced in the field of experimental literature, including conceptual writings, potential literature (see: Oulipo group), object writings, text structure analysis, and non-linear narrative. Equipped with this set of notions, students developed a series of exercises where texts were analyzed and decomposed in their inner structure, explored as spaces, their concepts and ideas mapped and visualized in concept maps and causal diagrams. The goal is to disassemble these texts, decompose them into fragments to be recomposed in other frames to evoke new potential messages, and eventually disclose emerging frameworks of a text. This experience will lead to a set of narratives of personal interpretation and understanding. Different techniques and approaches will be experimented with, from collage to combinatory strips, from diagrams to concept maps.
a quote + a building:
exploring the proximity between discourse and design

For this final assignment students are expected to work on the base of two “inputs”: a short, clear, evocative quote selected out of one of the assigned topic readings, and a building whose architectural language is consistent with the discourse heralded by the selected quote.

“A building is like a soap bubble. This bubble is perfect and harmonious if the breath has been evenly distributed and regulated from the inside. The exterior is the result of the interior.”

Le Corbusier, Towards a New Architecture (1935, p. 167)

Zeynep Berra Kirbaşoğlu, ARCH 465, Fall’20, Instructor: Giorgio Gasco.
Eventually a short essay is conceived to explore the mutual influences between the quote and the building. The discourse implied by the quote is further elaborated into the text that also works as a description of the building, whereas few selected images of the building support visually the focus point of the quote. The essay is supported by a conceptual poster that frames in an iconic fashion both the quote and the building.

“Art is an access to a metaphorical fourth dimension, an all encompassing release from real time and space.”

Le Corbusier, L’Espace Indécible (1948)

Zhamilia Baiborieva, ARCH 565, Fall’17, Instructor: Giorgio Gasco.
This exercise is divided in two parts. In the first part students are asked to read, analyze, and decompose the assigned text into the major points of its argument. Through personal annotations and brief comments, they elaborate on the role of these points inside the structure of the text (opening, statement, primary or secondary point, example, support for argument, very argument, conclusion). In the second part students are asked to draft a casual diagram or other kind of visual charts to clearly represent the recognized structure of the text. In particular, the chart should investigate how the different parts are connected and how they work in order to construct the main argument. Students are invited to consider that each text has a pattern through which develops till conclusions, eventually the very aim of their chart is to reveal this pattern.

Assignment 2: Vizualizing Complexity
Bilge Yavuzyiğit, ARCH 565, Fall’19, Instructor: Giorgio Gasco.

Gülnihan Atay, ARCH 565, Fall’19, Instructor: Giorgio Gasco.
The text is represented in the form of a map, where the main arguments, their methods, aims, main examples, and results are interrelated with each other. Moreover, the location of the key concepts where they appear in the text is given by the constructed coordinate system of the paragraphs and the lines. The selected elements compose regions in which they are representing some similar ideas. Regions sometimes overlaps while sometimes express very different manifestations.

Melek Kaynar, ARCH 565, Fall ‘20, Instructor: Giorgio Gasco.
The assignment is based on the review a set of readings selected from the contemporary architectural discourse (1943 – 2000). The aim is to disassemble these texts and to reorganize their fragments within composite sentences, whose appearance as “exquisite corpses” eventually may stimulate unforeseen readings. Adjectives, nouns, and verbs are extracted from the texts to produce a key-term pool. Out of these word pools (one for each selected text) one adjective, two nouns and a verb are extracted to form a sentence and any needed conjunction can be used to link the words together. The exquisite corpse strips eventually enable to detect unexpected connections and resemblances among the diverse and complex architectural discourse of the second half of the 20th century. Furthermore, the possibilities offered by this exquisite corpse fashion, are also explored from a visual point of view, using fragments of images of architectural works from the same period.

exquisite corpse:
beyond the essay, at play with the architectural discourse of the second half of the 20th Century.
### Verbs | Nouns | Adjective
--- | --- | ---
To think | Geometric & structural purity | Formal
To ensemble | Simple geometric form | Conservative
To preserve | Geometric structure | Geometric
To propose | Structural stability & order | Pure
To break rules | Purity vs impurity | Structural
To develop | Dilemma | Misunderstood
To compete | Deconstruction, demolition, dissimulation | Inherent
To conflict | Harmony | Unseen
To stabilize | Unity | Dangerous
To destabilize | Avant-garde | Safe
To purify architecture | Hierarchy of forms | Hierarchical
To make | Competing and conflicting axis | Vertical
To ignore | Social reality vs safe reality | Traditional
To disturb | Dangerous fantasy | Ornamental
To occupy | Social milieu | External, Exotic
To abandon | Aesthetic objects | Strange
To locate | Radical deviation | Disrupted
 | Dynamic formal aesthetic | Fundamental
 | Irregular geometry | Undiagnosed
 | External violence | Buildable
 | Perfection vs imperfection | Unconventional
 | Dislocation | Solid
 | Internal distortion | Ideological
 | Familiar context | Abstract
 | Social responsibility | 
 | Contextualism | 
 | Complicated resonance | 
 | Familiar vs unfamiliar | 
 | Dynamic complexity | 
 | Solidity | 
 | Verbal abstractions | 
 | Abstract theory | 
 | Functional requirements | 
 | Unity | 
 | Expressionism | 

- Architecture is a conservative discipline that produces pure form and protects it from contamination.
- Simple forms in conflict to produce an unstable, restless geometry.
- Formal purity was associated with functional efficiency.
- The true aestheticization of the early formal investigations was actually affected when the avant-garde itself made them ornamental rather than structural.
- The modernists argued that form follows function; the deconstructivists believes that function follows deformation.

NOUN [11] semiology, environment, architecture, form in environment, sign in language, society, semantization, semiological triangle; percept, concept, representation; language, thought, reality; opposition, association, context, metaphor; common synthetic centre, expressionist ideal, meaning, harshness, sadness, depth, multivalence, form, function and technic, justification, mutual modification [12] attempt, nature of structure of form itself, physical environment, spatial organization, formal relationships, inherent logic, function, manipulation, perception, conception, neutrality, the formal structure, interpretation, relationship of form to function; substantial existence, physical element, capacity [19] geometric purity, pure form, geometric structure, impurity, modern movement, structural stability, dilemma, deconstruction, demolition, dissimulation, harmony, unity, hierarchy of forms, competing and conflicting axis; social reality, dangerous fantasy, safe reality, movement, dynamic relationship, purity of structure, aesthetic objects, counter reliefs, complexity, radical deviation, dynamic formal aesthetic, irregular geometry, external violence, symbiotic entity, perfection vs imperfection, dislocation, internal distortion, familiar context, common place, complicated resonance, resistance, subversion, unfamiliar, solidity, built, verbal abstractions, abstract theory, functional requirements, harmony, unity, expressionism


ABSTRACT MEANING OF RELATIONSHIP OF FORM TO FUNCTION CANNOT BE IGNORED

DYNAMIC COMPLEXITY OF MODERN MOVEMENT BREAKS THE RULES
(Smithson 67, Street in the air + Eisenman 70, House II)
The origin of the works included in the booklet is the use of a basic open-source text mining software (Voyant) to detect the most recurrent words in a series of selected texts (word frequency). On the base of these findings students firstly drafted a map guide to visualize the frequency of words in a text according to a coordinate system - the sentence line of each paragraph (1, n) and the location among the sequence of words for each sentence (A, Z). A further sample of works includes tables of verb lists, concept fields and dynamic frames (the latter derived from L. W. Barsalou, Frames, Concepts, and Conceptual Fields, 1992) produced for each selected text. Eventually the very aim is to explore and emphasize how a specific kind of knowledge is constructed and constituted within a single text and articulated among different texts of a specific thematic collection.

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Term project: The Naked Text, Concept Field of S. Giedion, Nine Points on Monumentality (1943). Wael Alakrah, Asli Altun, Ibrahim Haliru, Maryam Jamil, Shahzeb Khan, Bilge Sağlam, Su Sezer, Zeynep Uzun, ARCH 565, Fall ’21, Instructor: Giorgio Gasco
INTERACTIONS with the PAST

Ayşe Henry
…to know is to care, to care is to use, to use is to transform the past. Continually refashioned, the remade past continuously remoulds us.1

We are well aware at BUDA that neither the architectural education nor the future architects cannot stay isolated from their environment enriched by the layers of history. In the past 10 years, the courses focusing on the historical built environment always had the goal to offer the future architects an informed understanding and the ability to formulate meaningful contextual relationships. The learning experience is designed as an active one and the main goal remains as to offer the students the means and the media to interact with the past. The students are encouraged to mediate on the physical fabric and related factual information critically, perceive the spatial and contextual wealth of their surroundings and question the established constructs.

interactions with the past

The architecture students start interacting with the past through the basic courses (History of Built Environments ADA 263, ADA 264) at BUDA and are introduced to basic concepts. The journey then continues with architectural history electives such as Medieval Architecture in the Eastern Mediterranean (ARCH 462), Modern Turkish Architecture (ARCH 463) or Contemporary Architecture and Theory (ARCH 465). The fourth-year classes throughout the Conservation of the Built Environment (ARCH 411) classes are built on this knowledge, introducing the future architect to the history, theory and challenges of the discipline of Conservation.

Students revising about Venice Charter, strolling through Ulus/ Ankara in groups, while sketching and learning about the sites and structures that they encountered.

ARCH 462, Fall ’19, Instructor: Ayşe Henry.
The happy moment when another group of students finally accessed the remains of St. Clement at Ankara. They have read related articles before and they will write a response paper afterwards, but nothing compares to the feeling of finding out there exists a Byzantine church at Ankara, although it actually is very hard to find.

Melek Kaynar, İlknur Erdoğan and Asiel Cela, ARCH 462, Fall ’19, Instructor: Ayşe Henry.
The history and conservation classes at BUDA are often fostered by guest lecturers and extracurricular workshops, where the students can encounter different perspectives from other professionals and scholars.
The workshop with Axel Nielsen, where BUDA students explored the vernacular housing at Ankara and studied the conservation problems of timber construction.

Diagnostics in Conservation, workshop by Axel Nielsen, 2019.
FRAGILE LANDSCAPES: ISSUES IN RESEARCH OF ANCIENT LANDSCAPES AT URBANIZING PLACES

SPEAKER | Assoc. Prof. Elif Kopenhah
24 October 2020  16:00 // Zoom

ABSTRACT
“Urban development” is a very complex term which comes with rapidly changing landscapes and inevitable destruction of the previous ones. The term gradually lost its positive aspect due to extensive destruction of the cultural and natural landscapes for the sake of wind turbines, motorways, quarries etc. There is a great contradiction in discourses of the neoliberal world where cultural heritage is regarded as a great asset, but also risked with government-sponsored urbanization activities. Particularly rural heritage at places with deep histories requires new and complex methods and procedures for a responsible way of landscape conservation. This brief talk will attempt to discuss these issues with several cases from Turkey and also from a personal view acquired from 15 years experience of landscape research at Uzla-Ceşme (İzmir) peninsula, which is on the boil with mega tourism projects.

BIOGRAPHY
Associate Professor of archaeology at Mimar Sinan Fine Arts University, Istanbul. She got her PhD degree from Middle East Technical University, Settlement Archaeology program. Post-Doc at UCL, Department of Archaeology. Conducting archaeological surveys in Uzla-Ceşme Peninsula since 2006, and also co-director of Kizilova site excavations, Uzla-Izmir. She worked at Datça-Burgaz, Antalya-Kose, and Ephesus excavations. Conducted several research projects including “Unlocking the Ionia Landscape: Historic Landscapes of Uzla-Ceşme Peninsula” funded by British Academy Newton Fund. She is also one of the founders of Theoretical Archaeology Group-Turkey, and the Committee member and organizer of TAG-Turkey meetings that took place in 2013 and 2015. Also a member of International Mediterranean Survey Group. Her major publications are on Ionia archaeology, landscape archaeology and archaeological theory in Turkey.
From Documentation to Application: Transformation Story of Seddülbahir Fortress

ABSTRACT

As a 17th century Ottoman defense building, Seddülbahir Fortress has been an object to a documentation, conservation and restoration project since 1997. Located at the entrance of Dardanelles and in one of the most strategic corners of Gallipoli wars, fortress and project transformed into several different contexts through these years with changing enforcements. After 18 years on 2015, restoration application had begun, currently on-going and the site will be opened to the visitors as a museum in 2020.

BIOGRAPHY

Arzu ÖZSAVAŞCI (MA, ITU) received her B.Arch degree and Master of Arts degree on Architectural History from İstanbul Teknik Üniversitesi. She had been working in various projects including documentation and restoration projects as well as contemporary ones. She also involved in academic and interdisciplinary projects, attended symposiums and published papers as co-author. She is one of the project owners of Seddülbahir Fortress Restoration project, and a member of UIA.
The historical built environment is not considered tangential for any studio at BUDA but Arch 401 studio is specifically designed to challenge students to fully interact with historical contexts. Some students carry this interest further and choose to design with or in historical settings for their final semester.

Berk Kasm Adsan, Nur Göktuğ and Berrin Enise Erin, ARCH 411, Fall’21, Instructor: Ayşe Henry.
An instance where a genuine interest in history got tangled with the design process was Sarp Tanrıdağ’s work in Fall 2018. Sarp’s work on the inner citadel of Alanya and the historical shipyard established a dialogue with the historical strata of the context, the knowledge of shipbuilding and the historical representations of the context. Without falling into any of the well-known pitfalls of design in an historical context, the project established a very strong narrative.

Sarp Tanrıdağ, ARCH 401, Fall’18, Instructor: Yiğit Acar.
Having a strong belief that architecture is for people, for all the living, at BUDA, we have an ongoing endeavor to question the relationship between societies and spaces. In its first ten years, the department has been the space of numerous ideas and works that articulated the idea that the spaces that we create not only serve but also are socially produced by people. Such studies are sometimes produced upon a society-specific prompt and sometimes as parts of bigger-scale projects. Here, the relationship between society and space is probed in its broad scope conceptually, temporally, and geographically.

Architecture is bears the responsibility of understanding and keeping up with techniques and technologies that enable contemporary forms and structures and with the ever-changing conditions and circumstances that shape individuals, communities, and societies. We update our methods, themes, and approaches accordingly, seeking to produce works that respond to the world’s current needs intellectually and spatially.
In the term projects of Architecture and Society, each semester since 2017, students are provided with a theme that they can handle flexibly to question the relationship between spaces and the living. So far, in line with global issues, they have worked on spaces of minorities, struggle, disorder, crisis, and health. The final outputs for each student/group are a manifesto text and a poster representing the student’s ideas on the subject matter.
Both societies and spaces are intricate phenomena. Such complexity, while bearing many challenges for the designer to create a framework for their ideas and design products, presents endless opportunities for grounded, innovative and unique responses to the needs of people and their environment. Our intention is that any work produced within our BUDA and by our students and graduates extends beyond the physical and temporal borders that we are bound to, and is of high intellectual quality with the required level of understanding of and critical perspective and sensitivity towards socio-spatial issues.

Shajiya’s graduation project is situated at a highly contested area in Lahore just outside the walled city and across Data Darbar. The proposal emerges from a multi-layered reading of the context, from the colonial history of Pakistan to the current political struggles. The final product is a heterotopic setting which creates opportunities for alternating political actions on various scales, ranging from individual sanctuaries to large political demonstrations.
Sare, for her term project in Urban Metabolism, conducted a focus group with five young people and read and re-traced Atatürk Forest Farm in their mental maps. Her final essay discusses the findings in relation to the ongoing transformation of the Farm with a critical perspective.

Sare Nur Avcı, Cognition of Urban Space: Atatürk Forest Farm in Mental Maps, ARCH 351, Spring’21, Instructor: Segah Sak.
For her graduation project, Gülsen worked through sketches to question the current educational environments. Her project is based on her critical studies and proposes to handle buildings of education as spaces of sharing.

Gülsen Şenol, Co-Fusion Sharing Node, ARCH 402, Spring’18, Instructor: Segah Sak.
In her M.Sc. thesis, Bilge probes placemaking in digital media and balconies during pandemic through data gathered from Twitter.

Bilge Begüm Yavuzyiğit, Placemaking During the Pandemic: Exploring the spaces of Celebrations in Turkey through Twitter, ARCH 599, Fall ’21, Advisor: Burcu Şenyapılı Özcan, Co-Advisor: Segah Sak.
conceptual explorations

In the study of spaces and people, students are encouraged to work through concepts that expand the intellectual horizon of both the designer and the product. Conceptual explorations are barely abstract; rather, they help students build a strong basis for their works focusing and building up on the existing or expected realities that constitute environments whether they are designed or not.

Elif’s graduation project provides a built-node in search of and for the research of wellness. The project is built upon the critique towards the lack of understanding and services for the wellness of the society. Praising the vegetational wealth of the lake area of the Bilkent Campus, the project sets forth an integrative approach handling the users and the nature as a whole for wellbeing in its broad understanding.

Elif Ara, Wellness Re-Search Node, ARCH 402, Spring ‘18, Instructor: Segah Sak.
Under the theme “Spaces of Disorder”, Yankı explored dementia as a frequent disorder and questioned architecture in relation to the phenomena.

Yankı Ekin Denker, Dementia in Architecture, ARCH 321, Spring’18, Instructor: Segah Sak.
Located along Bilkent Lake, İllya’s graduation project is an intricate search for dwelling that responds to the varying needs of the students and staff of the university. Rather than creating the dwellings based on the users’ positions, the project calls for an approach that considers the community as a whole.

İllya Guler, Neighbourhood, ARCH 402, Spring’18, Instructor: Segah Sak.
Gözdenur’s research explores the perceived walkability of three paths at Bilkent through questionnaires with more than fifty citizens. The results reveal differences between the perceptions of females and males, and between day and night perceptions.

Gözdenur Teke, Walkability: The Case of Bilkent, ARCH 351, Spring’22, Instructor: Segah Sak.
Yiğithan and Şevval’s work under the theme “Spaces of Health” highlights the vitality of walkable urban environments for the health of citizens.
Expecting that BUDA students and alumni have the awareness towards social issues which is evident in their personal and professional lives, we hold the pride of being a part of a diverse and inclusive environment. Beyond the well-articulated socio-spatial issues, we explore specific issues regarding the underprivileged. Considering that each of us are a part of a society and multiple communities, and acknowledging human condition, we also create and take advantage of opportunities for self-expression.

Simruy’s graduation project tackles the refugee crisis focusing on Craco, one of the many ghost towns in Italy. The project envisions both spatial improvements to the town and proposes a model for work and housing that would raise income for the refugees while providing high quality living spaces.

Şevval Simruy Baygül, Ghost Town Refuge, ARCH 402, Spring ’20, Instructor: Yiğit Acar.
The manifesto and the poster that Naz created under the theme of “Minority Spaces” questions the safety of spaces for LGBTQ communities. Her essay highlights safety as a human right which is yet to be acknowledged in the physical and social production of spaces.

Perihan Naz Ünal, You are Safe Here, ARCH 321, Spring ’17, Instructor: Segah Sak.
Bartu’s proposal for a co-housing complex in the third-year architectural design studio aims to create a safe and healthy environment for children who are separated from their parents. Located in Çankaya, Ankara, the project takes advantage of the potential of the site in creating lively and inclusive grounds for children whose lives are inherently struggling.

Bartu Onat Türk, The Orphanage, ARCH 301, Spring ’21, Instructor: Alp Giray Köse.
For her term project in Urban Metabolism, through questionnaires with a hundred citizens and interviews with four females, İpek conducted research on women’s feelings of safety in public transport. Her research findings highlight various problems that women struggle with in relation to their mobility within urban environments.

İpek Bengisu Kumaş, Woman’s Safety in Public Transport, ARCH 351, Spring ’22, Instructors: Segah Sak.
Selen’s third-year architectural design studio project Spectrum is a co-housing project for children with autism spectrum disorders. Focusing and elaborating on the potentials of art and the landscape in therapy, the project aims to provide for children with ASD, their families and teachers.

Selen Bektaş, Spectrum Housing, ARCH 301, Fall’21, Instructor: Alp Giray Köse.
Suada’s poster that she produced under the theme “Spaces of Struggle” adopts a phenomenological approach, and questions her own struggle in life as an individual and an architectural designer.
REPRESENTATION

Yiğit Acar
During its first ten years, BUDA’s approach to design graphics and representation was shaped in a pluralist manner. This stance was a deliberate one that is shared by the faculty. The foundational courses in design graphics were delivered in an interdisciplinary manner, and the courses were designed to facilitate self-learning. The loaded curriculum of the freshman year courses and the self-learning methods allowed each student to find her/his own voice.

In freshman year, the students are encouraged to shift from one medium to another, their sketches are transferred to models and technical drawings and back. The same approach applies to the transition between manual and digital drawing skills. We not only enjoy inter-media shifts but occasional jumps into other knowledge domains related to design, such as history of architecture and construction are also common. This way, we seed an awareness of the upcoming practices. Oftentimes exceeding the regular curriculum, the representation courses touch on history, construction, and design.
A fun warm-up assignment that has become a tradition over the years is as follows:
Stage one: “Design a pencil holder. Your design should not exceed the boundaries of a 30x20x20 cm prism. The pencil holder should be designed to be produced from a single piece of reclaimed cardboard. Produce a series of drawings explaining your design on a single A4 sheet.”
Stage two: “You are given the design drawings of one of your classmates. Construct a 1/1 model of your friend’s design.”

Assigned on the first day of classes in the first year, this assignment is an ice breaker for the fresh minds enjoying their first day at the architecture school. The assignment had two aims; to introduce students to each other and to give them a first lesson on what design drawings are about: “Communicating ideas to get things built by strangers.”
representation and history

History of architecture is a natural ally of drawing education. Introducing the students to well-known examples of architecture, and getting them acquainted with the international architectural culture, has been one of the hidden agendas of freshman year drawing courses. This pedagogical agenda has been explored in various capacities by: reproduction, imitation, analytical drawings, and synthesis in manual and digital mediums.

One such instance is the study on the Dining and Assembly Hall at Brunswick Primary School by James Stirling and James Gowan (1961-1962). The students were given archival documents of the building as presented in Canadian Center for Architecture (CCA)’s online archive, and they were asked to produce a section, a sketch, and an oblique drawing of the building, learning from existing data, they had to deduce the missing information.

Aylin Hasanova,
First Unitarian Church
of Rochester by Louis Kahn,
ADA 131 Fall ’21,
Instructor: Yiğit Acar
Alize Tuncel, A previously non-existing sketch of Dining and Assembly Hall at Brunswick Primary School by James Stirling and James Gowan (1961-1962), the assignment asked the students to imagine and sketch a new perspective of the building that wasn’t present in the photographs, ADA 131, Fall’20, Instructor: Yiğit Acar
Alize Tuncel, A previously non existing section of Dining and Assembly Hall at Brunswick Primary School by James Stirling and James Gowan (1961-1962), the assignment asked the students to imagine and draw a new section of the building that wasn’t present in the archive, ADA 131, Fall’20, Instructor: Yiğit Acar.
The drawing courses’ engagement with history continues into ADA134 this time in digital medium. In a recent assignment students were asked to study the Llainfadyn, which is a small cottage house that is in display in the Museum of Welsh Life at Sg Fagans, near Cardiff and design a similar small structure with expanded walls.

Muhammet Erkam Aydoğan, Design for a dwelling unit with thick walls, a derivation of Ilynfadyn house, ADA 134, Spring’22, Instructor: Yiğit Acar.
Another mode of learning in ADA 131 has been the production of sketches from existing photographs. Again, aiming to introduce the freshman students to influential architects and ideas, this series of assignments develops weekly by adding complexity to sketches. The final step of this increase in complexity is the production of design sketches by the students. Design sketches are fundamentally different than reproduction. Reproduction is a process where the object is present, something real, or something that can be perceived, the end-result is somewhat clear to subject, whereas in design sketches the object is not present, it is something that is not existing until the sketch is done. We rely on this distinction between drawing something existent versus something non-existent as an introduction to analytical thinking and synthetical thinking.

Same approach is extended into the digital medium in ADA 134, pushing the boundaries of digital tools students are expected to produce post-digital collages from time to time to enhance their newly gained digital representation skills.

Eylül Cansu Güncüer, Museo National de Arte Romana by Rafael Moneo, ADA 134, Fall'21, Instructor: Cem Korkmaz.
Berna Selina Aydoğan, A digital sketch of a Mykonos, ADA 134, Spring’21, Instructor: Yiğit Acar.
Another case where history meets drawing was an assignment which challenged the students to reproduce a watercolor perspective produced by Paul-Rudolph, this time digitally. The students were asked to model the Miller Guesthouse by Paul Rudolph and recreate one interior and one exterior render of the house.
A recent exercise we have devised in order to facilitate divergent thinking was Taming of Chance. The exercise asked the students to blindly draw a triangle, an arc and a square on a piece of paper, turn the random sketch into a section drawing of a house and generate a digital model of the house. Taming of chance was a nice example of inter-media transfer that we are trying to facilitate and a helpful base to initiate discussion on intuition and rationality in design.
Both foundational courses, ADA131 and ADA134 are concluded with a term project where all the skills acquired in the courses are used to produce the full drawing and model set of a spatial construct designed by the student. This long running assignment is an introduction to further design practices in the upcoming years.

Term Projects:
1- Ezgi Aydın
2- Ece Er
3- Briah Afzal
4- Çolpan Erdem
5- Adil Ahmet Bahadir Sezer
6- Dillion D’Cruz
7- Ekin Açıklın
8- Bünyamin Sönmez
ADA 131, Fall’18,
Instructor: Yiğit Acar.
Can Özbayer, Term Project, where students were asked to re-arrange John Hejduk’s One-Half House ADA 131, Spring’21, Instructor: Cem Korkmaz.
Umut Mete Satıcı, Sketch model studies for Term Project, where students were asked to design a roof over a given setting. ADA 131, Fall'21, Instructor: Yiğit Acar.
Mahmut Furkan İnan, Mobile Living Unit, ADA 131, Spring’21, Instructor: Yiğit Acar.
BÜNYAMIN SÖNMEZ, Observation Tower, ADA 131, Spring’18, Instructor: Yiğit Acar.
SPONSORS
AKTAV has been offering products to enhance sound quality, minimize noise distractions and improve speech intelligibility, as well to provide decorative solutions. Parmephon (Aktav Akustik) started production in a 90,000 m² plant in Turkey in 2004, targeting the necessity of high acoustic performance in contemporary interior design projects. Parmephon's trademark ceiling tile, wall panel, and separator solutions were preferred in many domestic and international projects. Being the only glass wool acoustic product manufacturer, Aktav has become the one-stop acoustics resource for quality solutions offering high durability, aesthetics, and sound control. Parmephon products are designed for use in a wide variety of indoor environments such as; offices, conference halls, university buildings, hospitals, laboratories, restaurants, commercial centers, waiting rooms, corridors, theaters and cinemas, schools, sports facilities, and concert halls.
Bilkent CYBERPARK, the first private university technopark of Turkey, was established by Bilkent University which is one of leading universities in Turkey and Bilkent Holding in 2002. Bilkent CYBERPARK is one of the largest technoparks in Turkey by its leading companies in several fields that are 240 R&D companies, 5 research centers, 1 micro nano chip factory, 4000 approximate employees and 115,000 m2 indoor space. It has an important role in technology-based entrepreneurship ecosystem. As a part of this mission, Bilkent CYBERPARK creates partnerships for not only maintaining our presence in target countries but also the purpose of identifying potential business opportunities for incubation firms and companies by offering them continuously growing.

Gürdag Çakıl İşletmeleri Ltd. was established in 1977 by the deceased Mr. Hasan Ersözlü and grew in the direction of the principles of honesty and industriousness. In our country where consumption increases and production continuously declines, our company which adapted the idea to itself that existence will only be possible by production, has made the firsts come true by always signing under the most modern investments by thinking big within this frame. In 2000, a brick factory in the ruins in Haspolat Industry Zone, was taken over and won to the Turkish Republic of Northern Cyprus (T.R.N.C.) on being revived as a facility.
Established in Ankara in 1995 with the aim to realize medium and large scale construction projects and contribute in the development of the construction sector by continuous follow up of building technology and construction innovations and implementation of these new construction methods and technologies, IZKA Construction, Contracting Engineering Ltd. Co. through its stable growth, has gained a respectful place in the construction market with its professionalism, creativity, honesty and market development features. With its strong financial and management capacity and management team, closely following the developments and changing demands in the market, continues to be one of the leading construction companies.

The foundations of MESA HOLDING were laid 54 years ago with the establishment of MESA Housing Industries Inc. (MESA Mesken İnşaat A.Ş.) in 1969. Now, with the power, strength and confidence derived from its past and past achievements, MESA HOLDING is rising on its foundations, which are as robust and strong as the buildings it has constructed.

MESA, in the course of its journey, which started aiming to bring new perspectives and dimensions to the construction industry to make a difference in people’s lives by strictly adhering to its principles without any change, has always taken bold steps to realize its vision and in all fields in which it operates has successfully achieved all of its preset targets in a timely fashion. Indeed, MESA owes its great success and growth over long years to the happiness of millions of its customers and employees and its brand name, which is associated with trust and innovation and which conveys the sense of confidence, and actually these are the driving factors that brought MESA to where it is now and make all of us proud of being the members of MESA HOLDING.

MESA, in the course of its journey, on which it set out alone, has grown to become a group of companies under a Holding Company, and each passing year since its establishment it has made a difference in people’s lives bringing them added values and innovative practices. Now, we are proud of creating future and value for our employees and customers and making a difference in people’s lives relying on our experience of 54 years full with success and great achievements.
As Tacer, we combine our production expertise, knowledge, and over 30 years of experience with designs which cross the limits of imagination. We merge engineering with practical solutions, architectural perspectives with aesthetic expectations to develop sustainable solutions that address the requirements of modern structures and the construction industry.

In parallel with advanced technology, we push the boundaries of design to satisfy the needs of the construction industry and improve today’s modern structures, which are essential to shaping the future. With each and every system we create, we aim to improve the overall performance of structures while also offering practical and aesthetic solutions.

We, the TACER family, make your dreams come true in order to leave our nation and the next generation with a better and more sustainable way of life.