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Thesis Project - Individual Work

In the same way our immune systems naturally reject unfamiliar organisms, growing informal cities seem to relinquish typical urban planning procedures. Observed carefully, this reaction mechanism appears to emanate from dwellers who have consciously decided to take urban matters into their own hands. Arising from the current ineffectuality of the debate opposing “top-down” versus “bottom-up” strategies, this project argues for a symbiotic relationship between these two polarized scales of intervention. As such, it positions the architectural designer as an actor operating according to interdisciplinary principles rather than a celebrated autonomous entity. Driven by a sense of urgency, I let go of mainstream design processes and embrace instead the perceived irrationality of a local semi-vernacular context, choosing the residential neighborhood of Karm El-Zeitoun in eastern Beirut as its case study. In close proximity to some of the Lebanese capital’s most luxurious districts, Karm El-Zeitoun was originally a planned quarter, following a strict orthogonal layout, which progressively acquired an informal status.

The project reveals stories about the power rather than the typically publicized misfortunes of residents in Karm El-Zeitoun, namely, their subtle, witty, and sometimes devious ways of using spaces as platforms for reactions. 185 leftover plots, deemed unusable, were chosen as potential places for encounters that may empower a particular porous community. The investigation presents a modus operandi of quantifying the influence of these local spaces by detaching their physical characteristics from their urban behaviour through a series of kinetic models. These 100+ non-representational models ultimately breed a bottom-up approach to intervention that is highly uninterested in superficial problem-solving, but in acknowledging and strengthening the elasticity of the neighbourhood in reacting, recovering and solving its own problems. The ensuing 185 surgical interventions act as public spaces that transcend the scale of the object and negotiate a symbiosis between the urban and the architectural scales. This led to the implementation of one of the proposed interventions, a public space in a width of 82m. The built structure, which condemns in its location the shopping center that is planned to replace this edge of Karm El-Zeitoun in four years, sits above a major drainage line that is currently being rehabilitated in favor of the upcoming dubious project and provokes larger networks. It also provides views beyond the highway wall and reveals a new chapter in the daily life of adjacent houses whose residents gathered money to customize it with flowers, Christmas decorations, and who produced a time sheet indicating who will take care of the olive tree and when.
First Prize, Competition Entry, Fawzi W. Azar Award (10 000$) - Individual Work

The design of the Beirut Performing Arts Center embraces the high stonewall enclosing the site and attempts to highlight it, re-shape, and incorporate it as part of the spatial experience. The project is manifested as a materialization of the “anti-site” that is shaped by the twenty-three-meter difference between the two edges of the plot, and attempts to inject itself within this imaginary space while creating a minimal yet powerful gesture, conceived as a pedestrian extension to the higher street level. The design mainly deals with the application of concepts relating to performance at various scales: from the urban to the microscopic. At an urban level, the project can be interpreted as a wall mediating between the turbulent highways and the newly conceived shaded public space that spans across four different levels. It also refrains from dominating the historical landmarks present on site and sensibly accentuates them, links them by means of the proposed public space, and conceals them from the resounding expressways that were originally facing them: the longest roof is flush with the higher street level, and the large theater roof merges with the garden adjacent to the Conservatoire Building, inviting visitors from both ends to enter and experience an ambiguity of circulation between the internal spaces of the building and the roof gardens. The project also focuses on injecting performance into conventionally static spaces such as the parking, where cars can now park and enjoy a live performance along with the public at a higher level, as the stage is set between the two. A façade of bricks, softly recalling the landmarks on site, shades, filters the air and light through a contrast between an introverted southern façade and a highly extroverted and open northern façade. This performance on the northern facade is exemplified by the application of Vantablack, the darkest material on earth, into three containers of circulation: this color, or absence of color hides all sorts of shadows and perceptions of depth because of its ability to absorb all solar radiations. The result is three two-dimensional black squares hiding three three-dimensional containers placed inside the northern façade, through which images of circulating people of different sizes and directions are projected into a black screen that is viewed by the public from the roof gardens. Programmatically, the project mainly incorporates an exhibition space, a restaurant with its services, office spaces, parking levels that include technical spaces, and two performing spaces: a large 850-seat triple-height theater and a smaller 400-seat multipurpose theater with audio projection.
Field Elective, Do it, And Then Fix It As You Go, AUB - Individual Work

The course begins by giving each student the freedom to choose a readymade object. Each student commences by objectively (Part A: Objectify) describing the object in detail and synthesizing it into a series of characteristics that shall be utilized later. Following this characterization, the following step consists of rectifying the object (Part B: Rectify) by intervening on its physical features and attempting to re-organize them in a new composition. The final section of the course (Part C: Inject) consists of breeding a completely new object through the characteristics of the chosen readymade object as well as its rectified image. Only the final section will be presented in the following page. The object of choice here is a bicycle chain that is deteriorated on its two edges.

It rotates
It twists
It changes shape
Made out of 537 elements
Moves comfortably in two directions
Object formed by repeated elements
System stops working along the edges
Perforations through a surface
Creates a hinge between two systems
Three types of identical elements

Inject: Materializing a completely new object with the characteristics of the bicycle chain. Three stainless steel rods of 0.75 mm were equally cut. A hinge was created by the attachment of two rods together, through which slides the third one. Three different sizes of the system of hinges were created, 80 of each, 240 working hinges in total. The system functions as follows: The smallest and biggest rings are connected together and act as one. The smaller circle will close on the neck and rotate with its rotation. The previously described hinge is placed through fitting perforations on the biggest ring. The middle-sized ring slides between the two others and will be posed on the shoulders, always stable, always constant, whereas the other rings continuously rotate. A cord connects the rotating hinge to the middle-sized ring stable on the shoulders, through a perforation in the biggest ring. When the head rotates, the neck rotates, the system of the small-big rings rotates as well, and the cable is in tension allowing the leaf to move up.

You are your normal self, abusive of your surroundings, unappreciative of what you see and what you hear. Twist your head. You are projected to a new space, the sky is your friend, you may view some instances surrounding you through the empty spaces left between the leaves and you shall learn to appreciate them. You will listen to sounds whose sources you cannot see, but will be curious to process, shielded from the urban chaos, projected into the beauty of nature. The object changes shape, whether it’s instantaneous moving elements, or through the gradual deterioration of the leaves, until they crumble and disappear. Each leaf is unique and cannot be repeated, and each new leaf will generate a unique movement. The object changes as you change, slowly but steadily, capturing different memories, allowing you to perceive different elements.
Vertical Studio, Saga: A Family Story, AUB - Individual Work

This house, configured as a wall that disintegrates into a river, attempts to challenge the conventional design process that generates rigid permanent buildings or deployable temporary structures. Relatively, its conception plays on the dichotomy between these two seemingly opposing practices and proposes a house that is planned to die, only to live again in the form of a landscape that reshapes the original flat plot of land. The proposed house narrates the story of a Palestinian family who moved to the Bekaa Valley in Lebanon shortly after witnessing the eruption of the Palestinian-Israeli war. While searching for a land that would cater for their growing micro-community, the family members decided to settle in a secluded area, an island in the river that is only accessible by means of a boat. As such, the intended temporality of their proposed house emanates from their unyielding will to return to Palestine, one day, as soon as the war is over. For the drivers passing on the highway adjacent to the river (visible in the physical model), the house appears as a slanting wall with a single opening that gives onto an existing olive tree. The fragmented residence, however, is only ambiguously revealed through its mirror image that is reproduced in the river. This instinctive relationship with the river is further intensified as the water level varies from summer to winter and ultimately covers the lower portions of the house that are designed to embrace this inevitable encounter. Functionally, the house is accessible through the disintegrating wall that extends to a neighboring island where the family members park their boats. The entrance reveals a slight slope that steadily leads into apparently scattered spaces that are arranged from public to private programs, culminating at the peak with a praying space that flies above the olive tree. Essentially, the house is conceived as a micro-village that simultaneously responds to the individual desires of its residents but, more importantly, to their intimacy and attachment. As such, this amalgamation of spaces is as temporary as nature would allow it to be, a substitute home governed by organic forces and assembled with a hybrid of earth products: mud bricks reinforced with seeds of different kinds. After the family returns to its home country, the house slowly decays as the river infiltrates its structure and some of the surviving seeds stretch out of its walls. Ultimately, it leaves little trace of its temporary inhabitants, and procreates a topography that hopes to accommodate new non-human dwellers.
Competition Entry, Al-Zorah Rowing and Sailing Club, UAE - Individual Work

The design of the Al Zorah Rowing and Sailing Club emanates from formal experimentation with pure geometries and basic shapes. Inspired by Peter Eisenman’s philosophy about the power of the diagram in reconciling the divide between the history of architecture (diagrams of anteriority) and its subtle hints in the real world (diagrams of interiority), the investigation proceeds by exploring the potential of a building conceived as an iterated diagram. By employing Eisenman’s method of indexing a cube into complex spaces, the manipulated basic shapes (circle, square, rectangle, and line) begin to merge into one another, entangle, overlap, support, subtract, and link. The final result is an amalgamation of timeless forms that embrace the sea as their new reality. Ultimately, the lines spatialize and begin to behave as linear and vertical circulation elements that link the edge of the sea to the newly conceived club, the circles intersect and generate irrational yet functional spaces that organize the programmatic requirements, and the rectangles merge and cantilever above an outdoor terrace that opens panoramically to the mangrove trees seen from a distance. Whereas the physical spaces of the Rowing and Sailing Club are materialized through an appreciation of irrational intersections, their openings are conceived as light, almost unrecognizable surgical punctures and perforations that further highlight the intertwining geometries. Programmatically, the circular ground floor contains the main lobby that leads into the roof terrace through a covered ramp, storage spaces, classrooms, workshops, and locker rooms. A movable floating deck that responds to the changes in sea level and organizes boat parking spaces surrounds the ground floor both from its outer and inner edges. The cantilevering level is composed of a restaurant with its service spaces, a meeting room, and an office space – all opening onto the terrace.
Selected Works from Design I + Design II, AUB - Individual Work

The following works produced during my first year leading to a Bachelor of Architecture at AUB. To demonstrate certain features and lack of theoretical depth, whereas the general selection of projects presented in these pages is to express the beginnings of self-discovery. A simple collection on my five consecutive years of architectural studies revealing a readiness for concepts that I initially explored in my early years. For the student, the document aims to provide a visual narrative.

The following project displays a detailed section of a bridge undergoing rehabilitation. The materials and techniques illustrate the movement of loads and the consequential response of their skins. The form and structural response document the section of the bridge's extrados in order to create an enclosed space. The structure was then further customized to shelter the pedestrian pavilion (top) whose functionality is highly dependent on a manifestation of the above-mentioned forces and an injection of spatial qualities.
MODEL-MAKING AS A TOOL

Model of Proposed Rehabilitation Center (Left), Design III, AUB - Individual Work
Model of House In-Between Two Buildings (Right), Design II, AUB - Individual Work

With a selection of more than one hundred and fifty distinct models, this portfolio argues in favor of a design process that is predominantly shaped by rigorous model making. Although the models presented in the following page, which were assembled throughout the second year of architectural studies, are of a representational nature, they ultimately lead to abstract models that become tools of thought in the final year, and particularly in the thesis project 185 En-Counters in Karn El-Zeitouan where the kineticism explored in early years is hybridized with an eye for craft to breed vessels that have a generative design potential. From the representational to the non-representational, the process of model making developed throughout the five years of architectural studies has become an indispensable tool that is less interested in conveying objective form and more interested in expressing subjective spatial experiences, distorted views, personal interpretations, and potential spaces. On the left, the images portray the model of a rehabilitation center that was developed in the Climate Responsive Design Studio. The project proposes a series of circulation lines and circles within which spaces begin to emerge. From the highest point of the slope, the spaces seem to merge with the site by means of extensive roof planting, further highlighting the clear horizontality of the project. On the right, two photographs depict an in-between house designed in an irregular leftover plot between two buildings and averaging 2.5 meters in depth. The house is compromised of two distinct smaller houses that are joined together with a roof terrace where a planted tree appears through all the windows of the project. Relatively, the process of model making combined with an absence of photo-realistic renders throughout the entire portfolio, attempts to criticize the widespread abuse of computer-generated tools of representation and argues in favor of raw, rudimentary yet tactile physical models.
The anniversary exhibition was set up at MSFEA’s Bechtel Terrace, featuring more than 240 works by 131 alumni across an array of disciplines and media. It was curated and designed by a team of AUB architecture alumni including Mustapha Jundi, Abir El Tayeb, Ghaith Abi Ghanem, Jad Melki, and Mohamad Nahle. Designers of the structure of the exhibition explained that to gather 50 years of architecture graduates in one space, they designed an installation that is cut at eye level; and exhibits the body of work below and all the names of the authors as floating lights above. “This provides a holistic connectivity that allows the graduates to read about each other’s work in parallel. The plan of the installation responds to the curatorial concept that stems from architecture and expands to different fields.” Curators of the exhibition commented saying, “We collected over 240 projects from buildings that tackle the increasing complexity of typologies whether domestic, public, governmental, or industrial to urban master plans in the Arab world and beyond; interiors to everyday objects; as well as art pieces that uncover hidden stories from Beirut to choreographed performances at international theaters. A few alumni also shared publications on urban studies, anthropology, history, geography, and philosophy. This diversity of projects reflects how professional aspirations of alumni developed over time, and how they position architecture at the core of design and non-design fields. It demonstrates how they were able to successfully push the boundaries of an architecture education to expand its impact or to incorporate other fields and ultimately become hybrid professionals.”

In the last decade, a resurgence of drawings and drawing experiments has rapidly taken shape in the field of architecture—concurrently in academic and practical domains. Drawing, widely regarded as an essential practice in architecture, is being revitalized today as an experimental design tool that conveys thoughts, processes, and desires rather than a basic instrument of representation. As Mohsen Mostafavi, architect and educator, indicates: drawing is the architect’s direct product. While an artist’s immediate product resides in his or her painting, the architect’s imagined product, the final built structure, is usually produced by other individuals who translate that intention into physical form. As such, the architectural drawing can be seen as the quintessential direct product of the architect, and the manifestation of his/her ideas into a tangible result. With the current evolution of digital techniques, it becomes essential to illustrate how traditional drawing techniques can be hybridized with current digital practices. In this exhibit, the Department of Architecture and Design at AUB presents a series of compositions produced by students across different architecture courses and studios. Each drawing depicts a cumulative thought process that conveys complex ideas through simple gestures. The intent is not to present projects, per se, but rather a matrix of ideas through the act of drawing—highlighting its expanding capacity to encompass technique, meaning, and intention.