

# Future Nostalgia: Breeds, Deeds, and Otherworldly Ruins

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**Building and construction are responsible for about 40% of carbon emissions globally. This sobering reality raises the question: do we need to build new? The reactivation of dormant existing structures was the main focus of an interdisciplinary vertical design studio that included third-year Architecture and fourth-year Interior Architecture students. The studio addressed the synthesis and propagation of new strategies to revitalize decommissioned parts of our built environment generating speculative narratives for future cities in partnership with Gensler, one of the world-leading design practices. This collaboration demarked a unique overlap between pedagogy and practice, bringing real-world climate issues into academia for collective problem-solving.**

**This partnership emerged from Gensler's involvement in the shaping of existing and future cities. The firm is actively leveraging mobility through design to create multimodal, vibrant settings. Throughout the semester, students interacted with designers from Gensler to explore multimodal thinking, climate sensitivity, and the transformative impact of adaptive reuse in the urban environment. The partnership encouraged human-centric design sensibilities, cognizant that human experience is ultimately at the center of any design problem. Together, students and professionals pursued design solutions capable of adapting to a changing world and catering to future cities.**

**Future cities rely on collaborative networks and shared platforms, asserting a more collective societal presence. This shift necessitates new multifunctional urban centers. As such, this collaborative studio engaged the design of multimodal transportation hubs grafted in the context of four inactive building types. The four-building typologies were the indoor mall, the office building, the parking structure, and the abandoned cultural icon. The selected buildings were sited in different cities. Each combination (city and building type) offered distinct challenges and opportunities for intervention within the urban fabric. Collectively, the four locations informed an agenda for resilient future cities, actively responding to the pressing realities of climate change while catering to shifting socio-economic parameters.**

## INTRODUCTION

An accelerated rate of development has left our landscapes cluttered with remnants and fragments of our built environment; these traces of our use and occupancy sit idle in often contested states and places. Re-appropriating structures have been a dominant mode of producing and reproducing spatial narratives since antiquity. Driven by need, authority, and practicality, such design approaches issue multifaceted sites and conditions that are often contextual rousers. Not only are the politics of adaptive reuse rich, but also the need for such resilience in design is now more urgent than ever due to the increasing scarcity of resources and a definite surge in demand for space and amenities. Additionally, the pressing realities of climate change require a prompt and robust response to how we approach architectural interventions.

According to the Global Status Report 2017, published by the UN Environment and the International Energy Agency:

Together, building and construction are responsible for 39% of all carbon emissions in the world, with operational emissions (from energy used to heat, cool, and light buildings) accounting for 28%. The remaining 11% comes from embodied carbon emissions or 'upfront' carbon that is associated with materials and construction processes throughout the whole building lifecycle.<sup>1</sup>

Undoubtedly, the future of architectural practice will have to contend with such challenges and complexities, whether those stem from the profligate approaches of the past era or the ever-changing programmatic needs and narratives of contemporary life. The Gensler-University of Tennessee, Knoxville research studio featured in this paper was situated within these parameters. It undertook critical issues and presented remarkable responses to immanent realities, aiming to stir up new imaginative design agendas. The following sections outline the thinking and considerations that were integral in formulating the studio agenda and framing its discussions and consequent design resolution.

## SYN[TACTICAL] CONTINGENCIES

The last decade witnessed a fundamental restructuring of many aspects of our daily living, ushering a radical shift to how we occupy and engage our environments.<sup>2</sup> Moreover, this



Figure 1. Aerial site view. 1111 Lincoln Road Parking Garage, Miami Beach. Student work by Christopher Brewer, Elizabeth Hankal, Trevor Thompson, and Lydia Russell.



Figure 2. Conceptual section perspective. 1111 Lincoln Road Parking Garage addition, Miami Beach. Student work by Christopher Brewer, Elizabeth Hankal, Trevor Thompson, and Lydia Russell.

restructuring mobilized a new breed of users characterized by the seamless integration of virtual and physical exchanges amidst continual social transformations and political and economic unrest. Under the new realities enabled through various networks and multimodal spaces, labor and production have assumed entirely different platforms. To cater to these changing parameters, the normative distinctions between space, time, and location disappear in favor of more amalgamated settings. These settings -while seemingly unfettered by physical placement- are anchored via virtual nodal networks and host occupants that are animate and inanimate alike. Such cohabitation challenges the architectural program; it calls for a paradigm shift where the spatial and functional exchanges are fluid. Achieving this interplay requires a rich sectional language coupled with smart systems that allow for more proficient conceptual and actual interactions between the natural and synthetic, the interior and exterior.

**MULTIMODAL SPATIAL GRAFTS**

Interiority’s aptitude for reactivating space is perhaps among its primary agencies. There has never been a time where exercising such agency is more integral. Within the parameters listed above, the studio sought to define new trajectories for future settings. While working towards a resilient architecture, we addressed human/machine integration, retrofitting existing structures with new adaptive systems. As we move towards a fourth industrial revolution characterized by a



Figure 3. Exterior view of drone taxi landing pad. The Westside Pavilion Mall intervention, LA. Student work by Tara Dawson, Caroline Pring, Callie Elonen, and Kamila Lesczczynska.

fusion of technologies, blurring the lines between the physical, digital, and biological spheres,<sup>3</sup> designers must take the primary authorship in deploying the framework for a hybrid built environment. An environment as such works for the collective well-being while harnessing the potential of this new world.

As the era of dependence on fossil fuels comes to an end, replaced by renewable energy sources and virtual connectivity, a rethinking of the systems we have come to depend is requisite. The exclusivity of the traditional architectural program will also transform in favor of multimodal spaces that cater to emerging patterns of hybrid living in smart cities. Consequently, how we move through and dwell in our cities will change. Smart cities will rely on communal networks and shared platforms to cater to a more collective societal presence. This shift necessitates new programmatic hubs that will serve as charging stations, passengers' transfer locations, drone dispatch and delivery ports, commerce, and exchange nodes, among many other functions.

As such, the main project this semester involved designing a multimodal transportation hub grafted in the context of four inactive (decommissioned) building types. These interventions operated at the intersection of old and new/virtual and analog, a dichotomy that will likely dominate as the world fully retires the tenets of the past and embraces a new era.

### TOWARDS A RESILIENT CITY

In 2016, it was widely acknowledged that our human impact has been so extensive that it warrants its unique geological classification known as the Anthropocene.<sup>4</sup> A large part of this impact is linked to cities. By 2050, the UN projects that 68% of the world's population will be living in cities.<sup>5</sup> Cities consume over two-thirds of the world's energy and account for more than 70% of global CO<sub>2</sub> emissions.<sup>6</sup> When considering design narratives for a sustainable and resilient future, cities are the place to start. With their intricate systems and various social implications, cities offer prime testing grounds for the application of speculative strategies that prompt massive change.

Cities have captured designers' imaginations for years. They have stirred rich architectural narratives (such as Archigram's Plug-in City and many others) that informed trajectories for urban development and planning. Climate, density, and mobility have been among the chief factors affecting urban design; they have informed macro and micro scales of exchange between cities and their occupants. With such an understanding in mind and to pave the way for the main design project of the semester, the studio engaged in a rigorous study of four building types in four different cities. Each combination (city and building type) offered distinct challenges and opportunities for intervention within the urban fabric. Collectively, the four locations informed an agenda for resilient future cities



Figure 4. Worm's eye view perspective. The Lever House Intervention, NYC. Student work by Jungyeon Park, Mary Quinn, Logan Guidera, and Maureen Sotak.

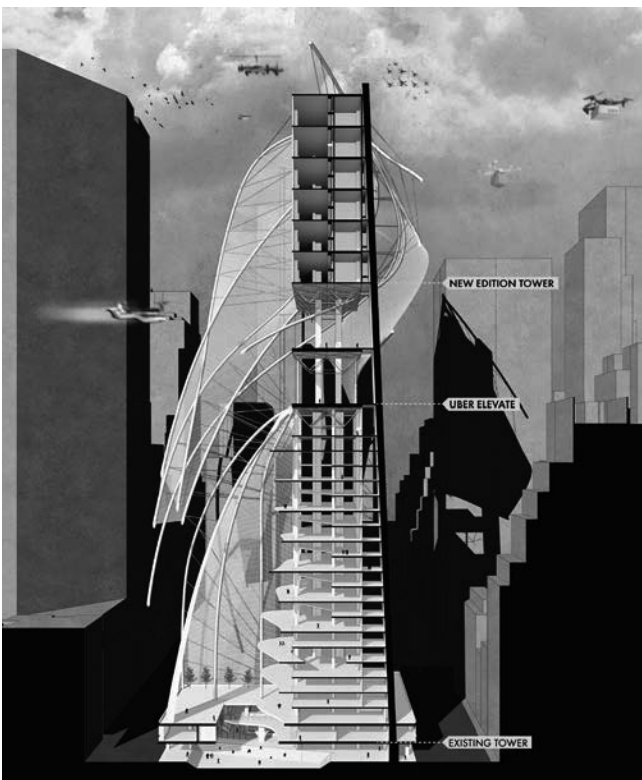


Figure 5. Section, the Lever House Intervention, NYC. Student work by Jungyeon Park, Mary Quinn, Logan Guidera, and Maureen Sotak.

that actively responds to the pressing realities of climate change and cater to shifting socio-economic parameters.

The building types the studio examined served either a retired function or will soon undergo significant changes in program and occupancy due to our evolving living habits. The four typologies are the parking structure, the indoor mall (big-box buildings), the office building, and the landmark. The cross-pollination between the four cities and programs created a fertile ground for intervention and issued a comprehensive set of imaginative narratives for our impending future.

#### FORGING NEW EXCHANGES

The projects presented here propose not only radical new responses to the real needs and aspirations of tomorrow's world but also a fluid workflow that is compatible with the changing nature of pedagogy and the design profession. Taking on a topic as crucial as climate and the changing typology of space required a robust exchange between the profession and academia. This reality prompted the design studio's collaboration with Gensler. As a shaping force of existing and future cities, Gensler is leveraging mobility through design to create multimodal, vibrant streets and new connections that support growth and sustainability. Beyond sustainability is the concept of resilience, a term that Gensler uses to recognize that design must continuously evolve, adapt to, and prepare for a changing world.



Figure 6. Interior atrium perspective showing the green wall and pollinator drones. Michigan Central Station Intervention, Detroit. Student work by Rachel Smith, Mckenna Pierce, Brendan Wallace, and Marta Kaczor.

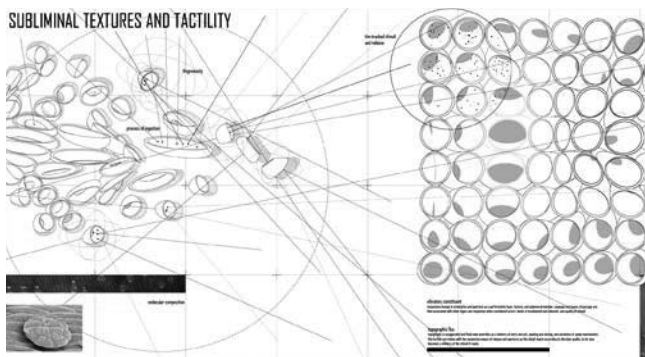


Figure 7. A natural precedent study of Venus Flytrap's molecular composition which was the base for the interior green wall, incubator units, and pollinator drones. Student work by Brendan Wallace.

Throughout the semester, students interacted with designers from the firm via virtual and in-person platforms to explore multimodal thinking, climate sensitivity, and the transformative impact of adaptive reuse in the urban environment. The partnership encouraged human-centric design sensibilities, cognizant that human experience is ultimately at the center of any design problem. This collaboration between the profession and academia proved productive on many levels, allowing both parties to draw from each other's strengths and design expertise through new models of communication and

exchange. Even before the onset of the COVID-19 pandemic in March 2020, we intended to run this studio that launched in January 2020 in a hybrid modality to facilitate continual real-time engagements and dialogue between the Gensler team and the students. As those teleconferencing and digital workspaces became the norm in academic settings soon after the pandemic-induced online transition, the collaboration went on with minimal interruptions serving as a guide for best practices for the entire college.

### RESILIENCE IN NATURE

Among the most crucial aspects architects have to consider when designing spatially is the relationship between architecture and nature, built form and living system, anthropogenic construction, and organic evolution. This applies equally to strategies of environmental responsibility, geological or meteorological impacts, anticipatory human behavior, transit occupation, or cultural, social, and demographic variety.<sup>7</sup>

The studio began with exploring resilient systems in nature from which students interpolated formal, tectonic, and material palettes. This starting point laid the premise for the collaboration between interdisciplinary groups of students formulating four teams. Each team was composed of two Interior Architecture fourth-year students and two third-year Architecture students. The collection of natural precedents

each group had was distilled into a conceptual and formal tactic for the design. With guidance from the studio's professional partners, students were able to evolve these conceptual studies into active spatial and performative strategies applied to specific contextual parameters and climate conditions.

## PROJECTS OVERVIEW

### *1111 Lincoln Road Parking Garage, Miami Beach*

By building upon the original themes of 1111 Lincoln Road Parking Garage, the students envisioned a new resilient icon for Miami Beach that caters to its diverse culture. The proposal combines bars, lounges, restaurants, and an open-air amphitheater with an urban fishery, bioreactor, and drone landing pads to create a new activity node that reflects the multifaceted context.

### *The Westside Pavilion, LA*

The Westside Pavilion shopping mall in Los Angeles is the site for a dynamic mixed-use community hub integrating retail, co-working spaces, test kitchens, a graffiti museum, a skateboard park, and a taxi-drone station. The proposal is sensitive to the adjacent neighboring residential areas and offers multiple public spaces.

### *The Lever House, NYC*

The iconic Lever House was the site of this project that reimaged work-life dynamic, transforming the original building into a sculptural tower serving as a transportation hub, workspace, hotel, innovation center, and a future-forward landing spot for drone taxis.

### *Michigan Central Station, Detroit (Located in Michigan)*

Central Station, the project involved designing an agrarian urban hub that included a solar energy farm with an incubator green wall system, drone landing pads for passengers, and a public community market. The project grows crops, culture, hybrid urban potential, and understanding between Detroit's past, present, and future.

## LOOKING AHEAD

Within the push and pull that our new realities induce, a resetting of the language of design must occur. As cities continue to navigate the complex terrain of climate change, global markets, generational shifts, and population displacement, a collaborative approach to architecture and its pedagogy is imperative. It is prudent to assume that this decade will witness an acceleration of political and environmental changes, world conflicts and crises, and global market and policy shifts, among other factors. Here therein, the designer's role must undergo yet another evolution, one where mitigating, negotiating, and accommodating constant flux outweigh spatial demarcation and management. While such redirection will undoubtedly usher a shift in architectural pedagogy and practice, it will surely deliver a more significant impact and advance progressive agendas geared towards resilient futures.

## ENDNOTES

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