

# LUCIDITY

THE THRESHOLD OF  
IMMERSIVE SPACE

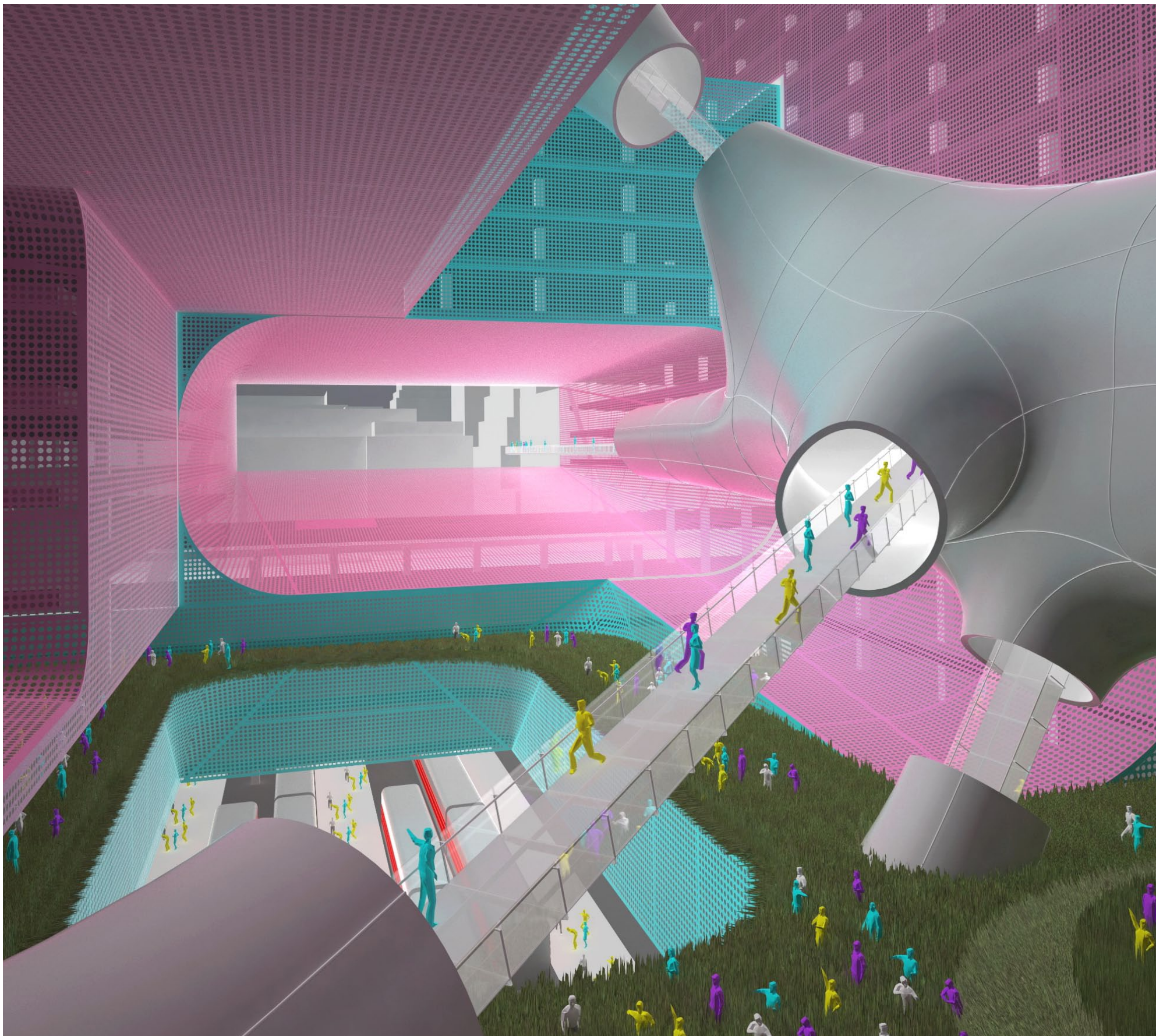
<A DESIGN SAMPLE>

2014-2016

CAL POLY / NYC

**BEN P**





<SOME OLD, SOME NEW>

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PROGRAM AND AESTHETIC FORMULATION//////////

# ICELANDIC VILLA

The Yeezus Love Temple oscillates between idealized Cartesian geometry and organic curvature, reaffirming the dialectic opposition of closed and open form. While the platonic sphere remains stable and unmoving, a series orthographic overlays suggest a quality of rhythm and extension. The otherwise idealized object in the round resembles an idea of infinite urbanism.

# YEEZUS LOVE TEMPLE / 2016



## A TECTONIC FORM



L01



L02

**L01:** The Chapel at Ronchamp visually sands outside Le Corbusier's Oeuvre, despite the fact that its formal gestures operate entirely within his system of the modular, and even within the canon of classical architecture. The defining characteristic is that what was once conceived at the scale of flat decoration or plastic ornament now assumes the figural mass of the project, casting the previous orthogonal lineaments into a democratized field of texture.

**L02:** Le Corbusier's dialectic receives a heightened level of clarity with the aid of flattening and cropping. The dueling geometries achieve perfect synthesis when bounded by an additional frame.

**L03:** The Icelandic Villa individuates a series of clustered pavilions while maintaining a visual relationship that supports the emergent work of organic sculpture from its bucolic setting.



L03

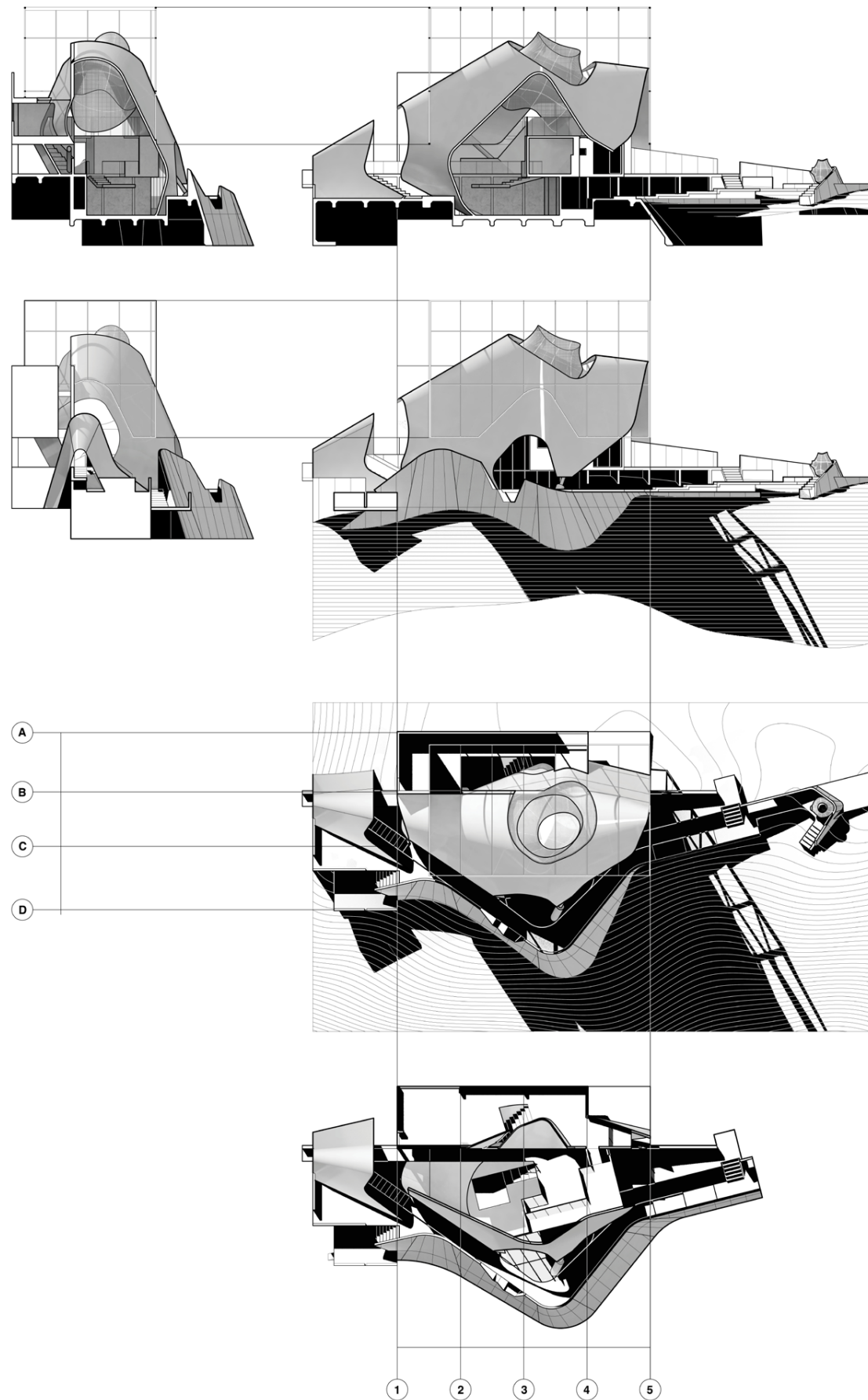


## TRANSPARENCY

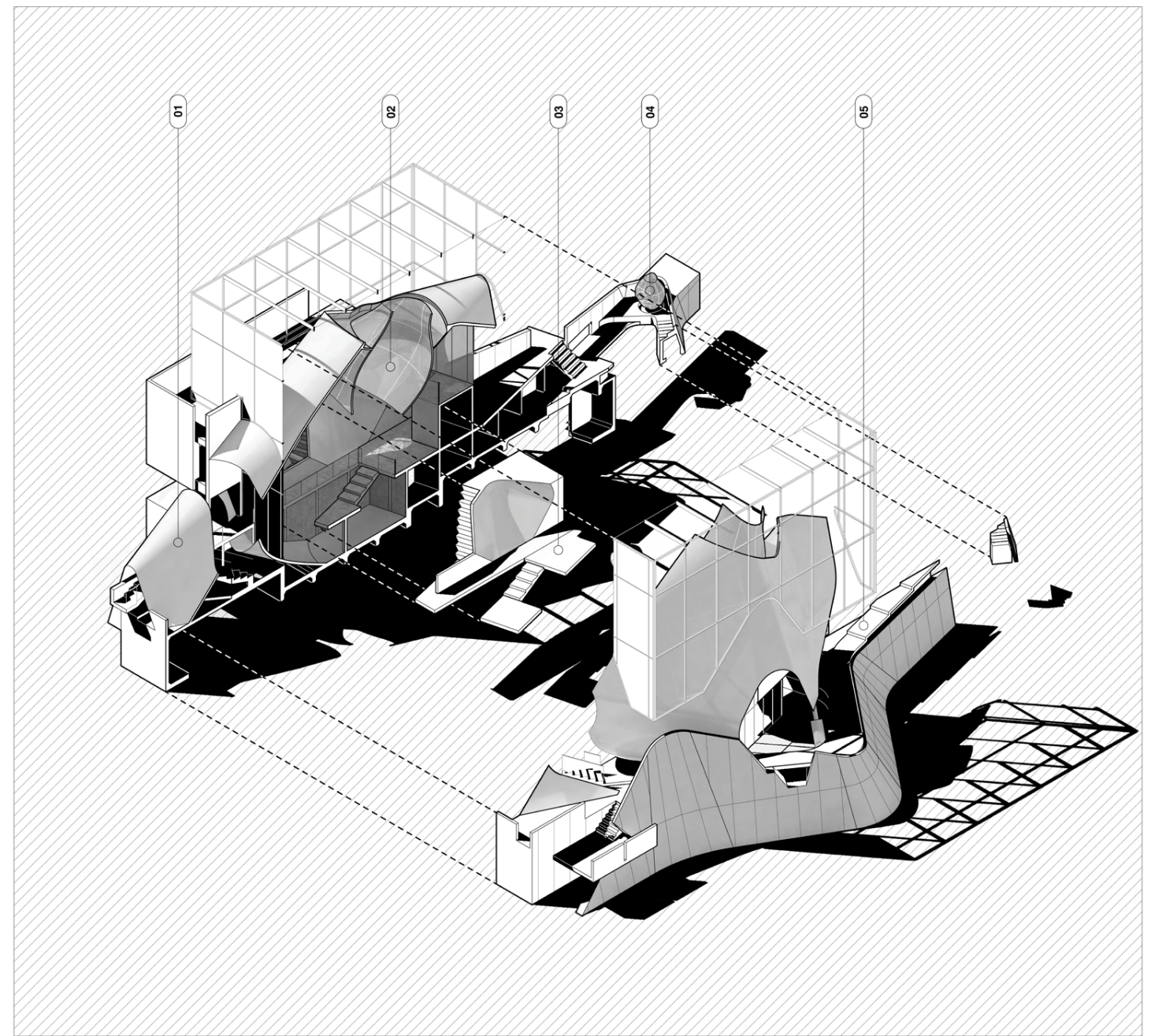
**L04:** Like brilliant beams of light which pass through diaphanous sheets of painted plastic, like spindly tentacles which cast sharpened fields of coordinate planes, an infinite sea of vertices magnify and manipulate the world of sensuous delight, bargaining the cerebral interplay of thickness and planarity. Such is the dielectric manifestation of the Icelandic Villa: optical and spatial, literal and phenomenal. The first permits visibility, a recognition of bodies depreciating in form and resolution, veiled in fibrous alabaster. The second shakes the perception of physical space; revealing incomprehensible depth in drawing, projecting inescapable flatness in building.

Two shapes magically collide in space, producing a contradiction. The Constructivists imagine floating volumes of glass and steel, and unforeseen possibilities of tectonic intricacy emerge. The cantilever monumentalizes figural objects in the round; while the structural module disintegrates cultural iconography. Seeking refuge in historical precedence, The Yeezus Love Temple deploys a combination of Greek processional planning, privileging oblique platonic solids, and Roman orthographic projection, privileging frontality and planarity. As such, the Villa must reject the stubborn traditionalism of the beauxart plan, the cool hand of streamlined contemporary; and instead reincarnate the animate plasticity of classical antiquity, the mainline injection of pure adrenaline, awakening an apathetic, impotent architecture.

**L05:** Three constituent parts reemerge in time: the circle, the square, and the body, interrelated harmoniously, inevitably. We ponder the geometric organization of Vitruvian man, but for centuries the specificity of this relationship remains confused and misguided, perhaps mysteriously unsolvable. If the circle remains perfectly inscribed within the square, then there exists virtually no indication of human proportion. But in a stoke of genius, one man speculates that perhaps the circle and the square, the ethereal realm of god and the finite plane of man, might symmetrically stand off axis, no longer inscribed or concentric, but transparently overlapped, yielding two centers: the abdomen and the reproductive organ. Such is the origin of Colin Rowe's phenomenology: an ontological paradox, a hybridized pantheonic figure, a living being governed by oppositional voices: the divine Godhead, and the libidinal dickhead.



L04

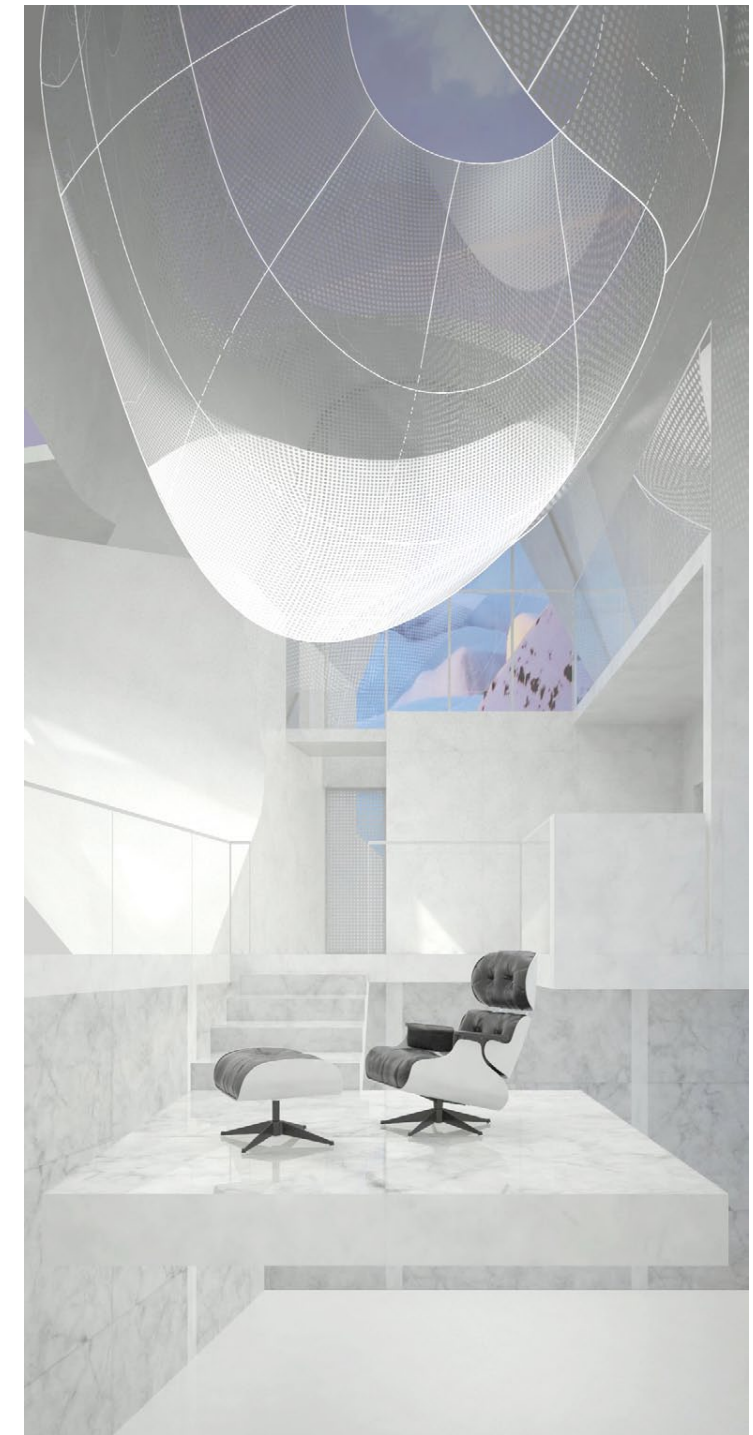


L05





L06



L07





PROGRAM AND AESTHETIC FORMULATION//////////

# PORTABLE PAVILION

The Sonic-Hebdo Scatter Chamber formulates an audio / visual experience that is both aesthetically seductive in an immediate sense, yet neurologically unsettling during prolonged engagement. Instead of presenting history in the form of artifacts encased in glass, the goal of the project is to immerse the observer within the buckling emotional context of the free speech movement as it continues to contest the impossibility of individual expression and the inevitability of authoritarian censorship.

# SONIC SCATTER CHAMBER / 2016



## DESTABILIZED FORM



M01



M02

**M01:** The museum is the new holy space, a sacred realm for meditation. As such, Le Corbusier's Firminy Chapel is the typological precedent.

**M02:** The main space is penetrated by objects of an ornamental nature, providing a visual antithesis to the otherwise monolithic solidarity. The pyramidal form floats above the curvaceous ground-scape, attempting to unify the Vitruvian dilemma. In Firminy, the square defines the first floor as the secular world of man, while the radiused geometry along the roofline resembles the sacred realm of the Gods. The massing struggles to achieve perfection as it reaches ever closer toward the distant heavens.

**M03:** The pattern prints represent a preliminary investigation of the "sharp" and the "smooth" within Le Corbusier's sliding aesthetic interests. Deviating from a binary identity of "curved" or "straight," this undoubtedly polarized item presents both mechanization and naturalism, technology and earth.



M03



M04

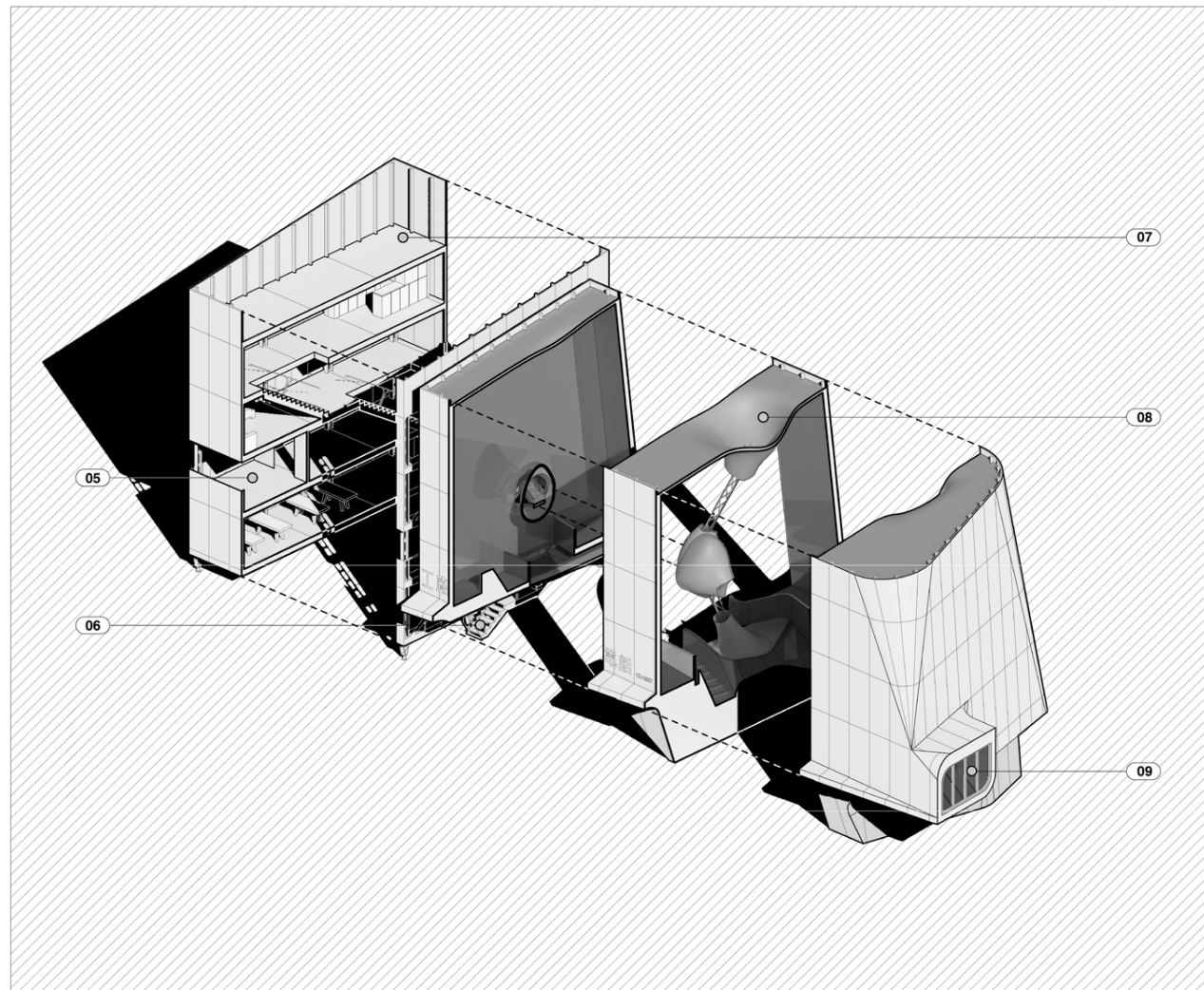


## TROJAN HORSE

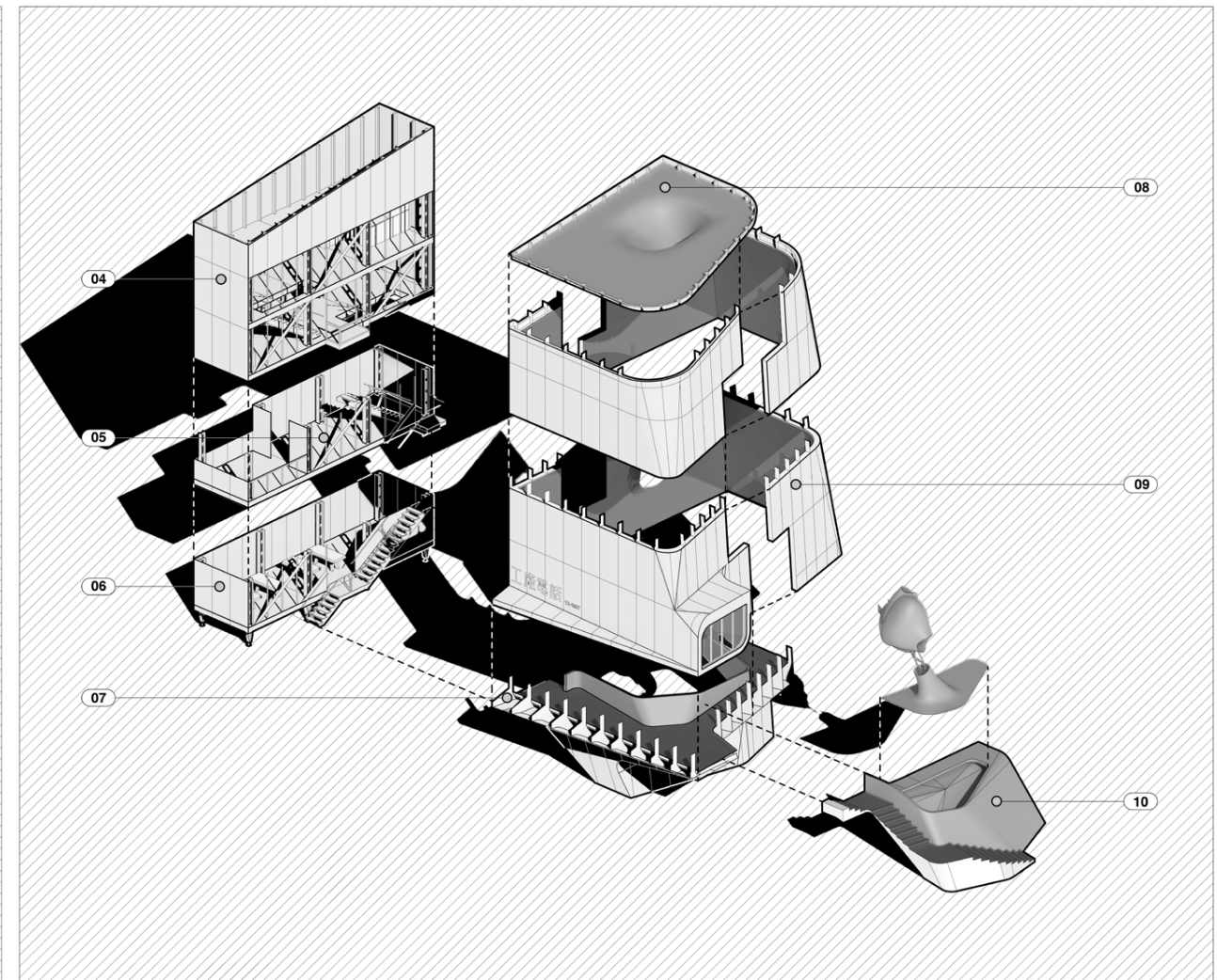
**M05:** The Hebdo Pavilion establishes a political objective of free speech through participatory modes of technological deployment and spatial affect. As an instrument of action, the sculptural figure becomes nothing more than an architectural Trojan Horse, disguising an uncensored satellite wifi channel. As an instrument for social commentary, the main gathering space (The Scatter Chamber) becomes a distorted amplification of individual thought and inquiry, literally reverberating optical and auditory information through a series of digital transmitters and highly reflective surfaces.

The pairing of uncensored data (delivery of communication) and sensory inundation (denial of communication) is a spatial meditation on the paradox of the collective; however, as the rolled steel massing unfurls its geometry to unify the elevated chamber to its contextual ground, an aesthetic foil (The Diffusion Vessel) penetrates the supple topological surface to present the identity of the marginalized individual. Though coated in the same immaterial reflectivity, the interior of the small form is padded with highly absorptive sound insulation. As a current dissemination of political ideas, the only element retaining any semblance of clarity is the uncensored wifi signal, which would display all museum content wirelessly to an individual's smartphone.

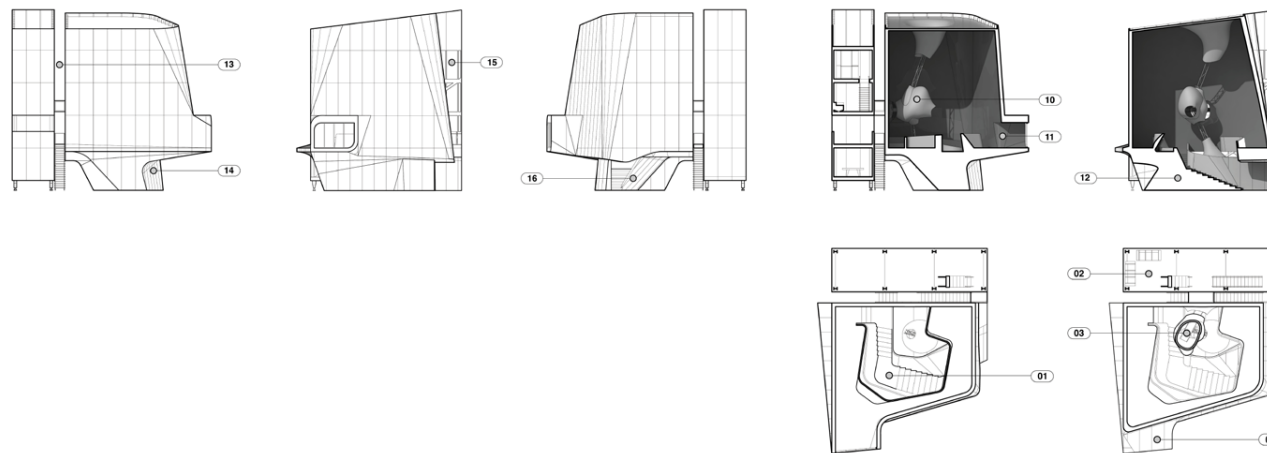
**M06:** In order to fully exercise its political impact, the final resting place for the portable pavilion will be Tiananmen Square in Beijing. Although the project is designed to circulate internationally, China, and Tiananmen Square specifically, encapsulate a global symbol of authoritarian control. To those willing to investigate the meaning behind the chrome-plated Trojan Horse, the space will appear as cogent reflection of a history of radical demonstration against institutionalized suppression.



M05



M06



M07





M08



M09





PROGRAM AND AESTHETIC FORMULATION//////////

# MEGA STRUCTURE

In wake of Louis Sullivan's century-old sermon on the mount, the disciplined architect places "form follows function" as the highest ideal of perfection. Satisfying Sullivan's vision, a wealth of young designers set forth to reduce architecture to an expression of logic and efficiency. For the modernist, logic referred to the naked structural system, and efficiency to a Fordist mentality of factory-like organization. However, as these functional obligations expand to include global parameters outside the scope of built architecture, the focused concentration of its effort becomes obscured and less meaningful. By virtue of its size and perceived sphere of influence, one could assume that mega-structures have the greatest responsibility concerning relationship to urban fabric, context, culture etc. But that is not so. The mega structure is not apart of the city, it is its own city.

# NEW PENN STATION / 2016



## THEATER TERMINAL



N02

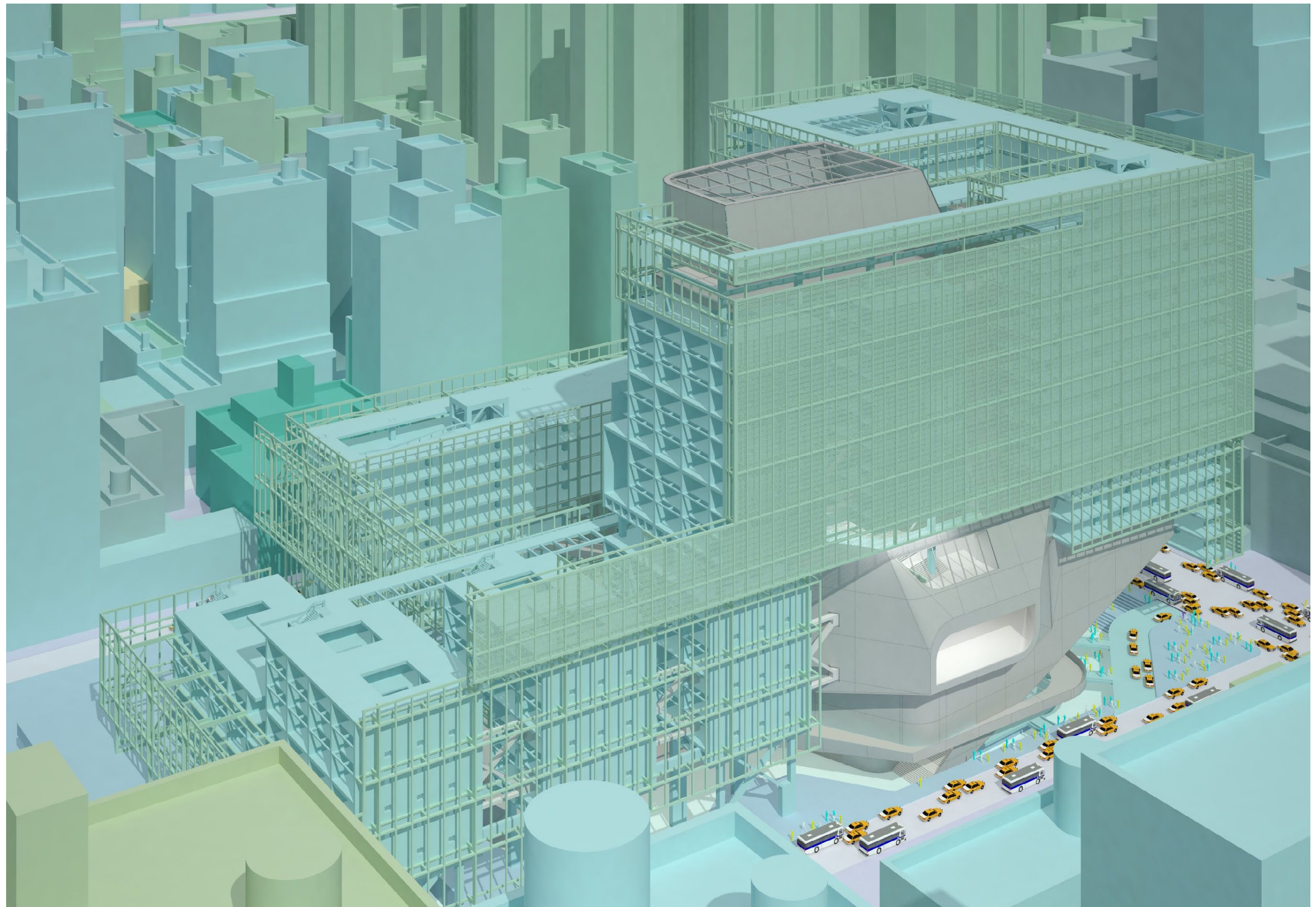


N03

**N02:** In order to produce an autonomous, self supporting city, New Penn Station, or Benn Station, follows the organizational massing of the cloistered monastery, quoting several tectonic gestures from Le Corbusier's infamous La Tourette.

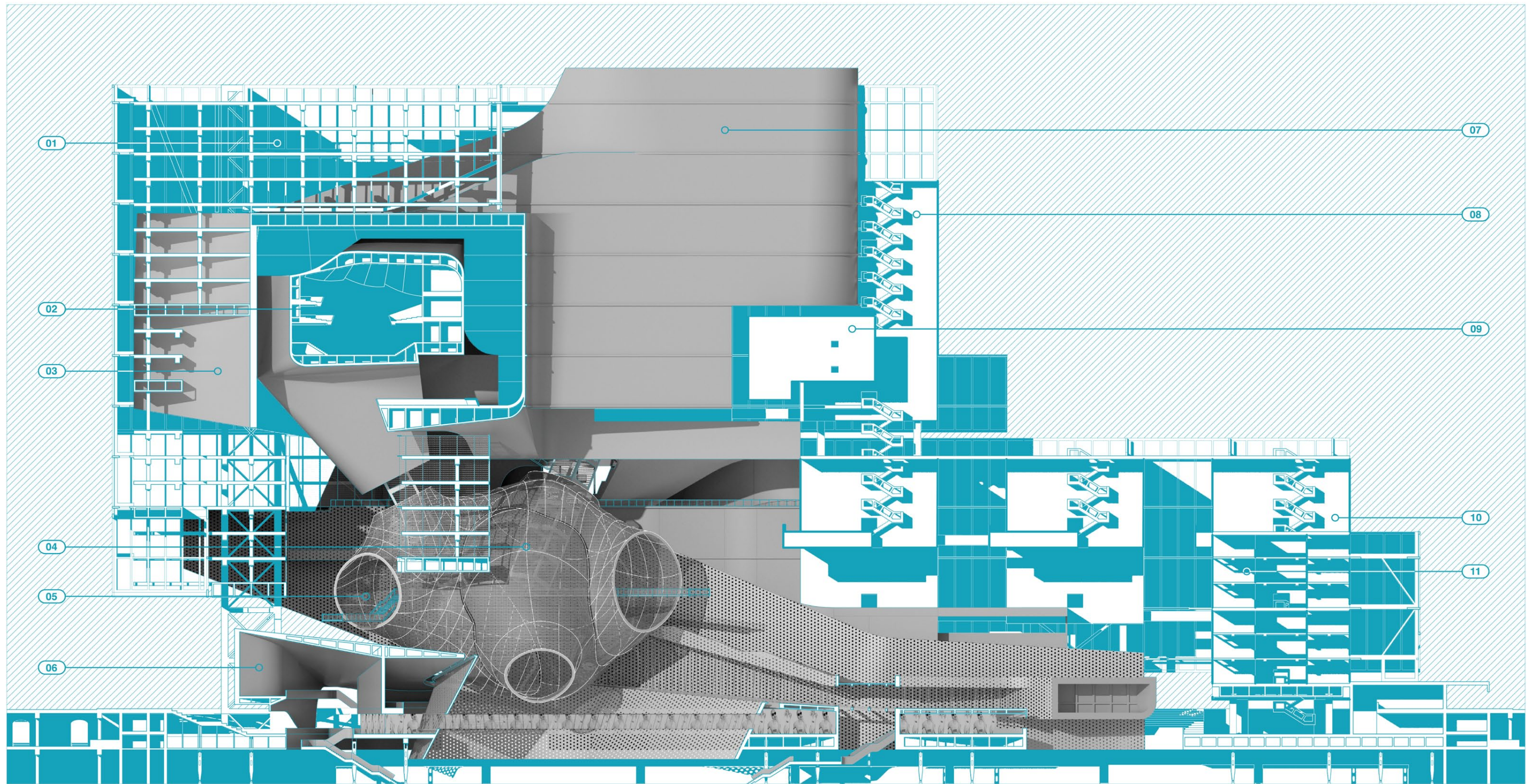
**N03:** Individual programmatic features project beyond the stoic wall architecture, emphasizing the giant order in terms of figure, but also the classical order in terms of window size and spacing.

**N04:** New Penn Station shrugs the self-imposed burden of context, the limiting framework of concept, and the martyred identity of the socially conscious architect in order to realize the autonomous benefit of a mega structure. Both train terminal and entertainment venue, a prescribed yet notably faceted project becomes a perfect vessel for inquiry as its diverse program receives an added injection of residential and office space.



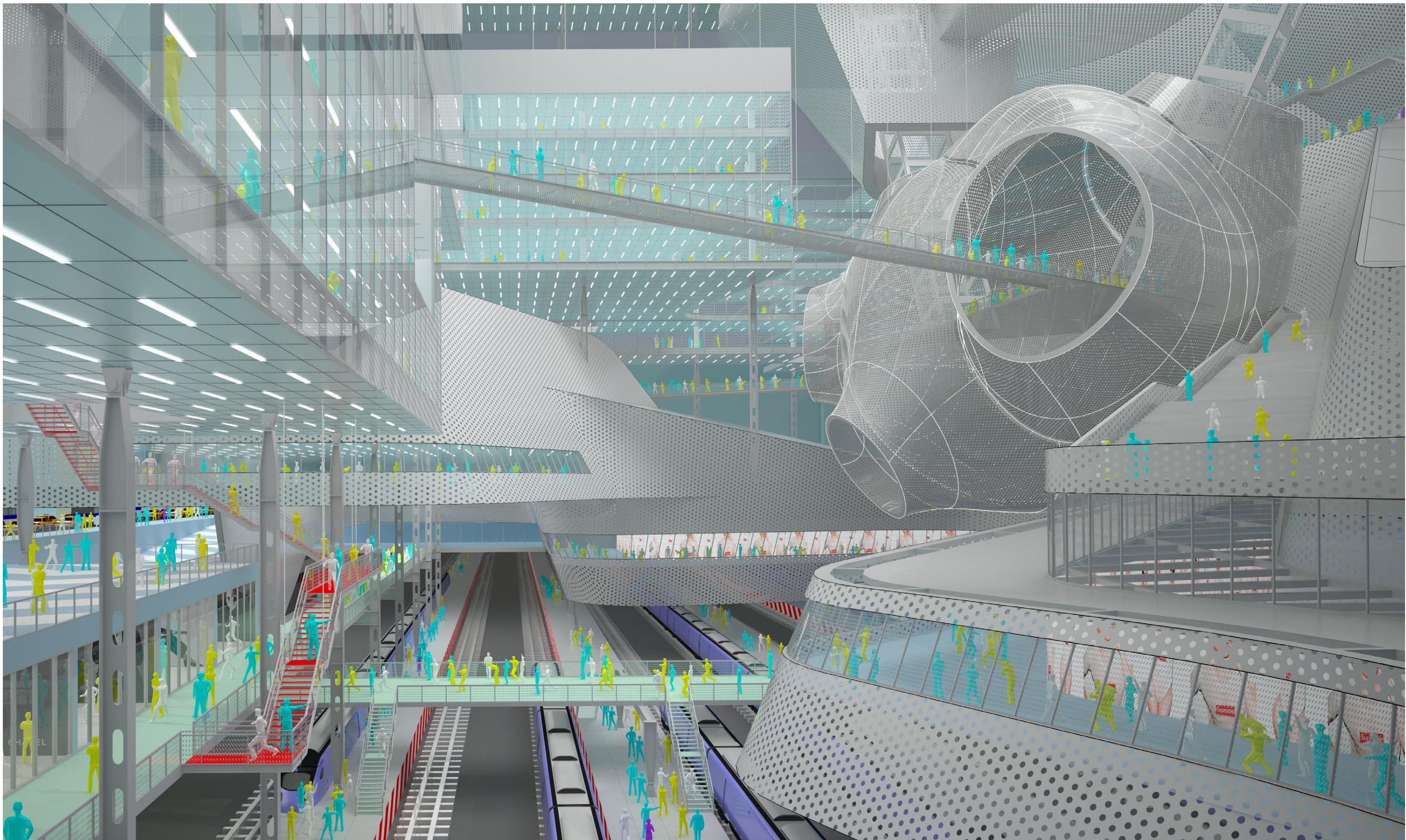
N04





N05





N06



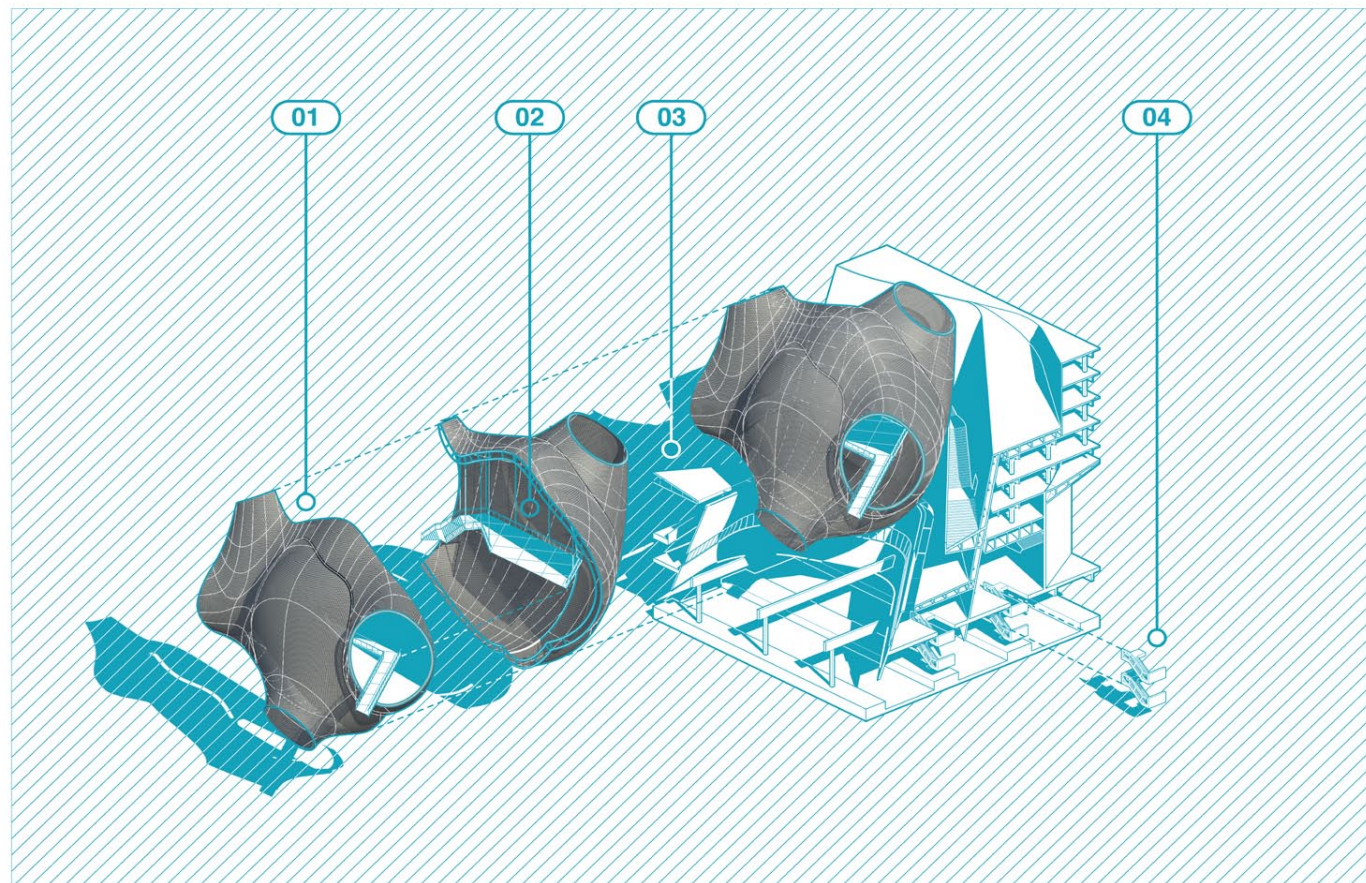
## EGG-DEMPTION

**N07:** A functionalist agenda, otherwise detailing structural collision, is now deployed on an experiential scale to orchestrate spatial collision. As the human condition oscillates between seemingly totalizing realities, the double-curved form ("Multimedia EXP") receives an onslaught of polarized programmatic constituents. A semi-enclosed space filled with audio-visual delight and unexpected sensorial engagement provides a sharp reflection of the unconscious mind as it navigates the multiplicity of its physical landscape.

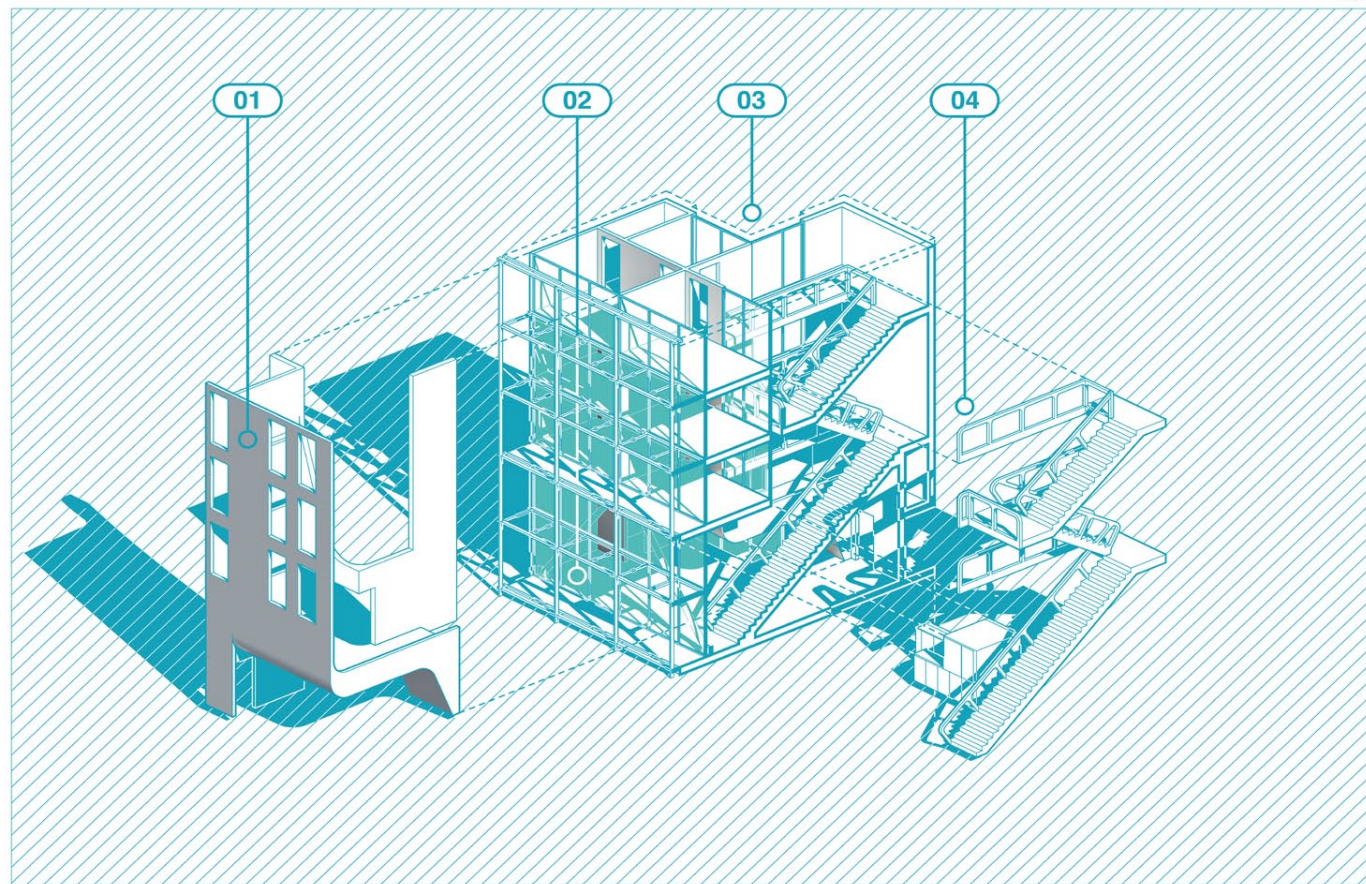
Aligned with instruments of both pleasure and pragmatic efficiency, the central waiting area is all at once the most concentrated and the most empty. The massive volume (equal to that of Grand Central or the original Mckim, Mead, and White) elusively remains neither enclosed space nor boolean void. While every building-like object is governed by tectonic intention, the derivative concourse remains un-designed, leaving the individual to craft a personal understanding of negative space.

**N08:** The idea of enclosing weirdness inside a bounding box is common practice, as the sheathed diagram generally precludes any close examination of the supposedly "coveted jewel." The New Penn Station has no desire to critique the aesthetic value of the diagram, only to detach itself from the simplistic narrative that would otherwise undermine the capacity of its extrinsic architectural rigor. Addressing the difficulty with overt curvature, geometry is identified as either poche space (rectilinear housing and office block), closed object, or truncated ribbon. Double-curved objects remain within the boundary of poche, and radiused ribbons translate from canted surfaces to straight profiles as they approach the exterior elevation. An imposed rectilinearity mutes spatial tension between New Penn Station and immediate context, amplifying the concentrated drama within the autonomous mega structure.

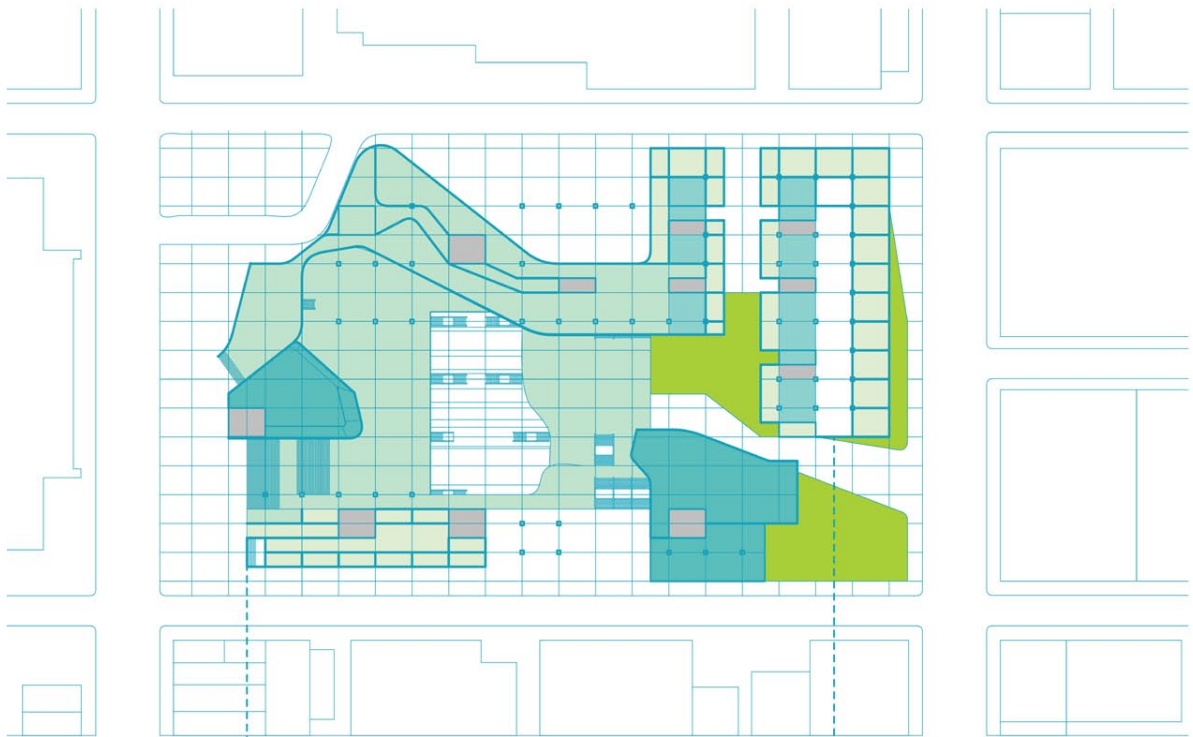
**N09:** The aesthetic modern-foil, an other-world, could evoke sensations of bliss, peace, serenity.



N07

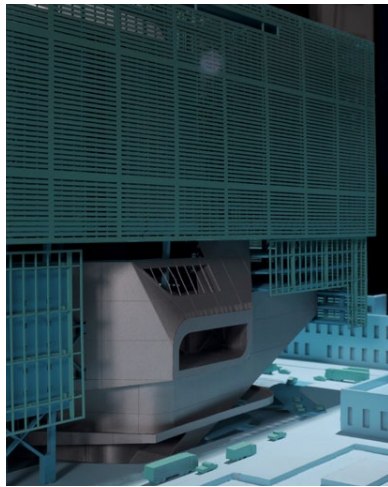


N08

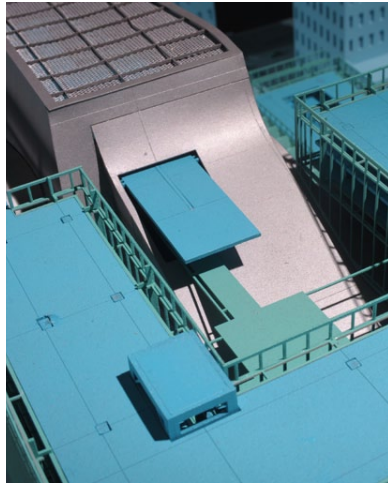


N09





N10

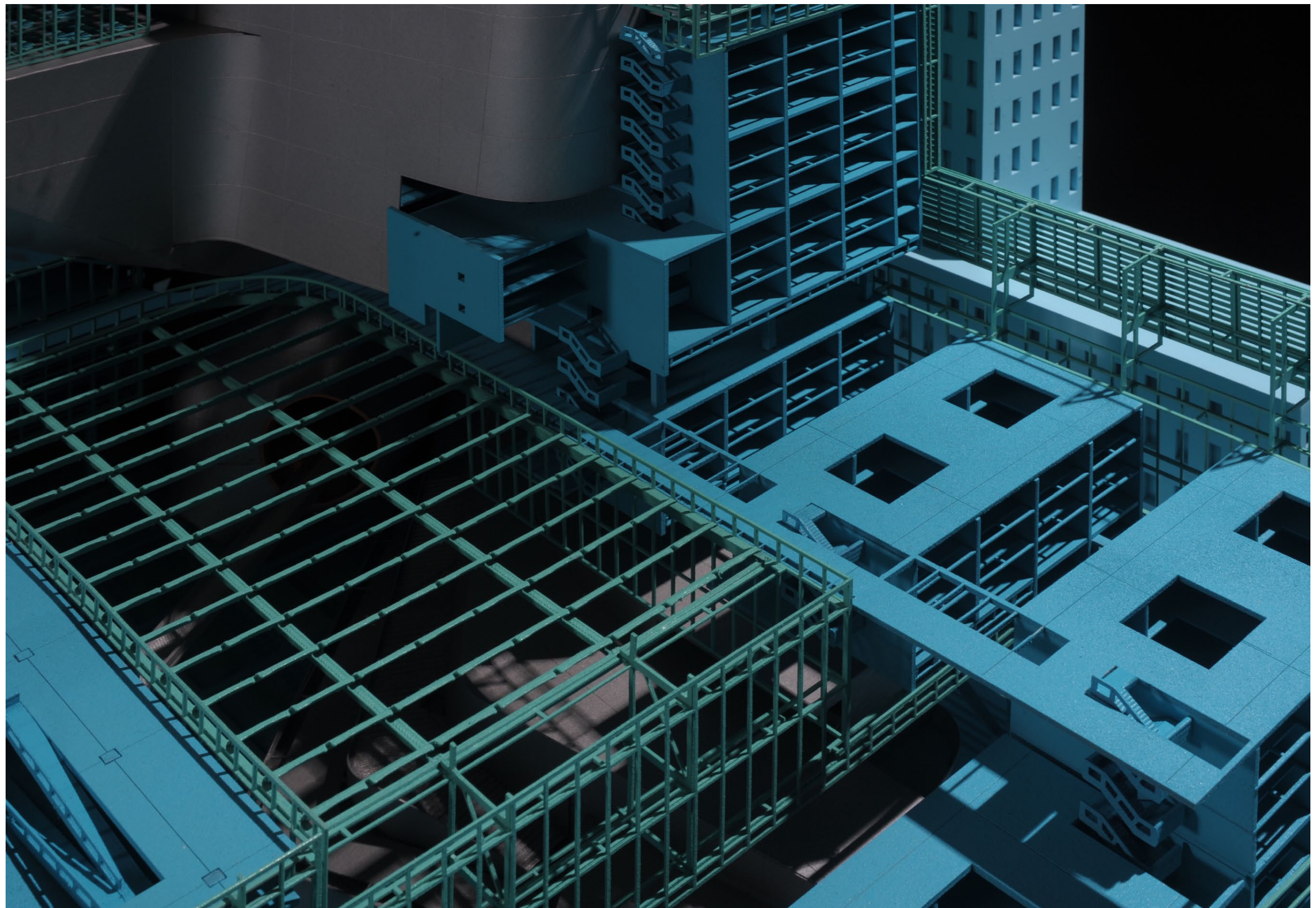


N11

**N10:** Rear cubic form supported by inverted pyramid cantilever.

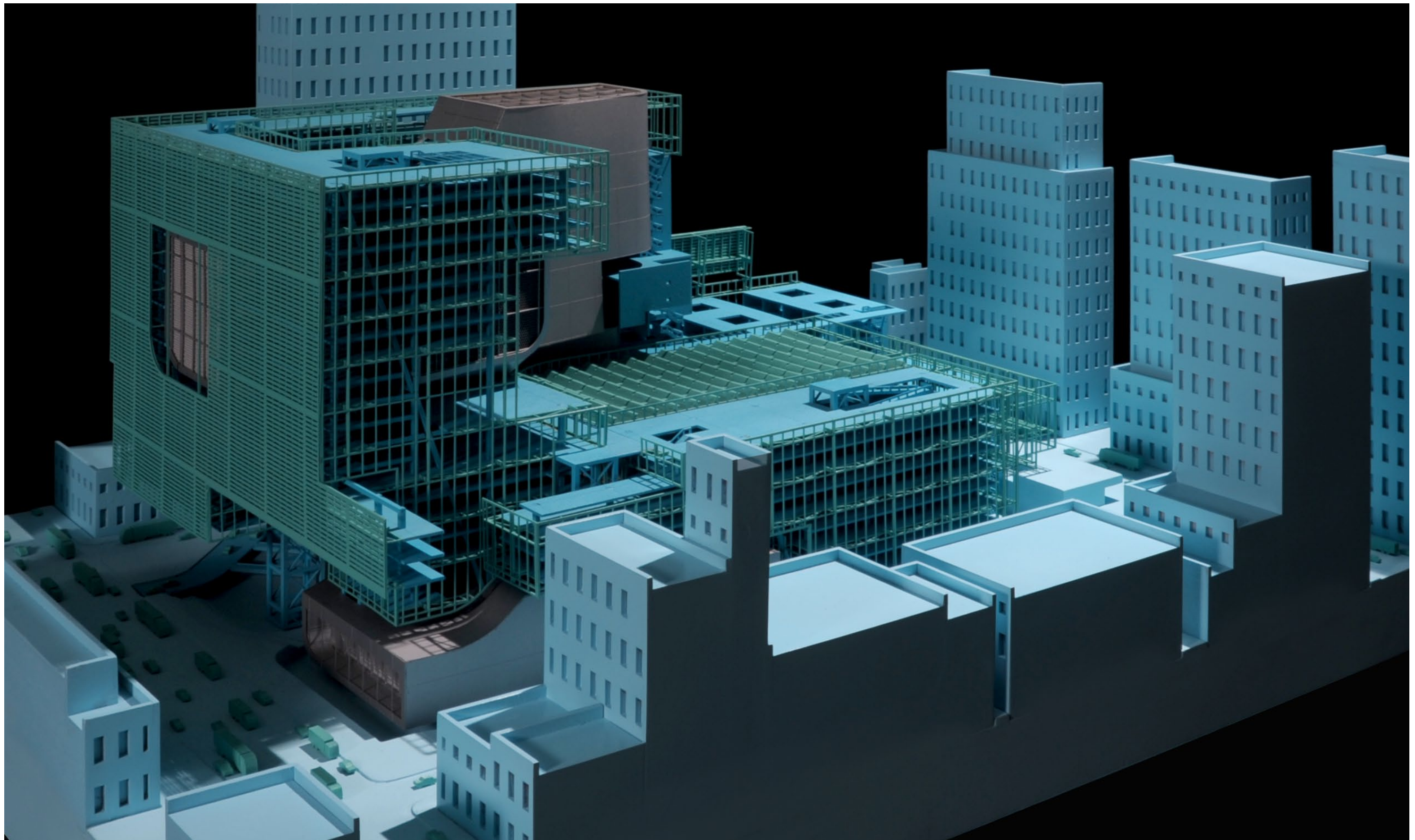
**N11:** Emphasis is placed on the object-within-an-object relationship.

**N12:** For most of history, architecture has evaluated building design from the tectonic perspective. Discrete components demonstrate technical thought, and the way in which these parts interact informs aesthetic judgment. Outside of this Jurassic systems theory, precise and organized methods now allow architecture to design seamless continuums with little necessity for tectonic expression. However, New Penn Station maintains a relational understanding of architecture as discrete objects receive an individual logic of homogeneous geometry. Enormous volumes of negative space, otherwise defined exclusively in section, triumphantly emerge as multi-dimensional objects, legitimizing respective characteristics against the presence of other objects.



N12





N13





PROGRAM AND AESTHETIC FORMULATION // // // // // // // //

# STRIP TEASE

“Strip Tease” was the final exhibition of 5th year undergraduate architectural thesis projects produced by the 2014-2015 Jackson Studio, and featured 18 proposals that were each a unique critical inquiry into new possibilities for architecture. These thesis projects were the result of a year of intensive research and design work, and represented a wide range of ambitious solutions that demonstrate the potential for architecture to meaningfully intervene within the world, and to create powerful new experiences. In order to reflect the creative ambition of each student, the final show was designed in a manner that exposed individuality while simultaneously maintaining a curated, uniform aesthetic.

# STRIP TEASE SHOW / 2015



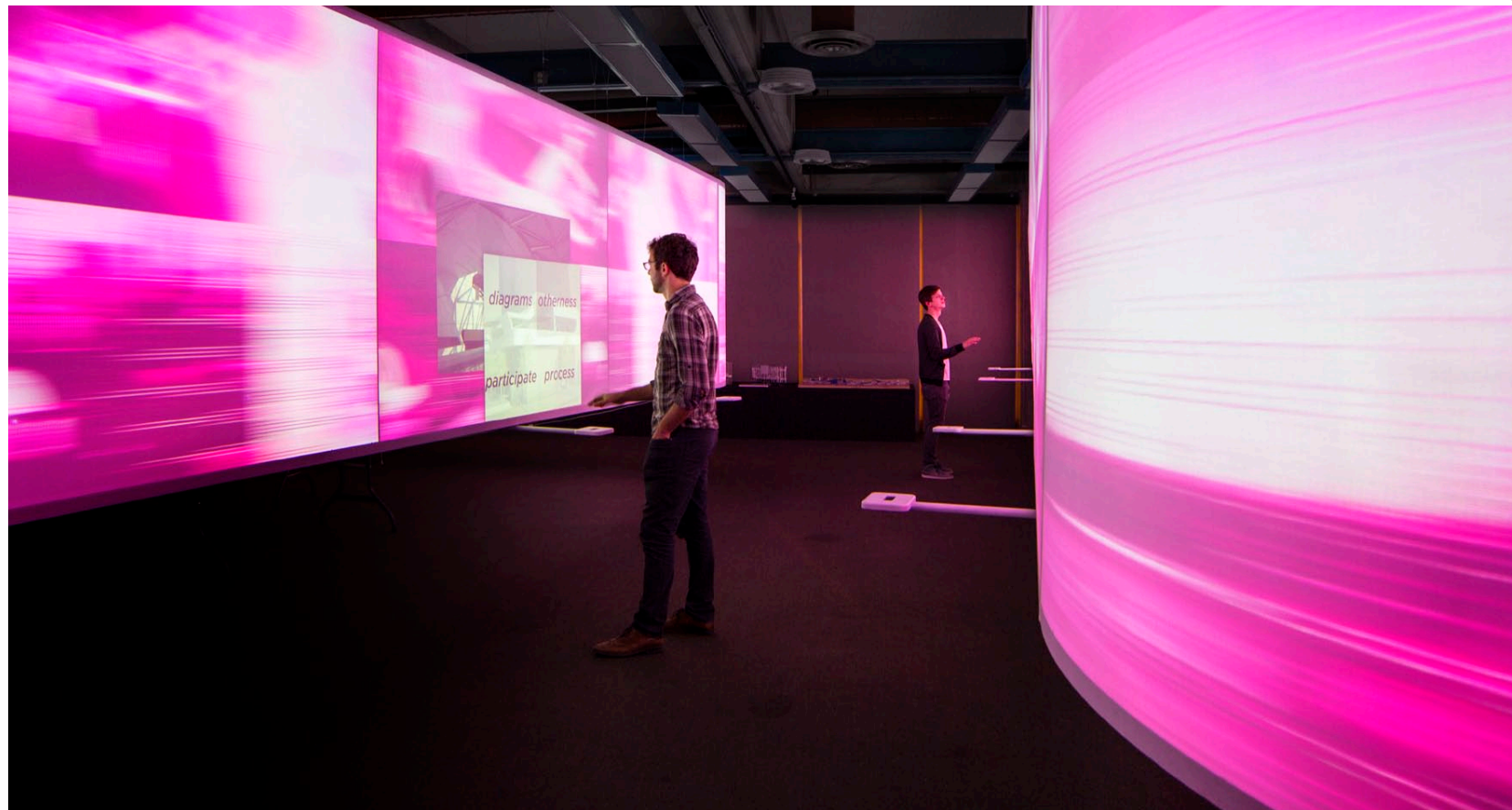
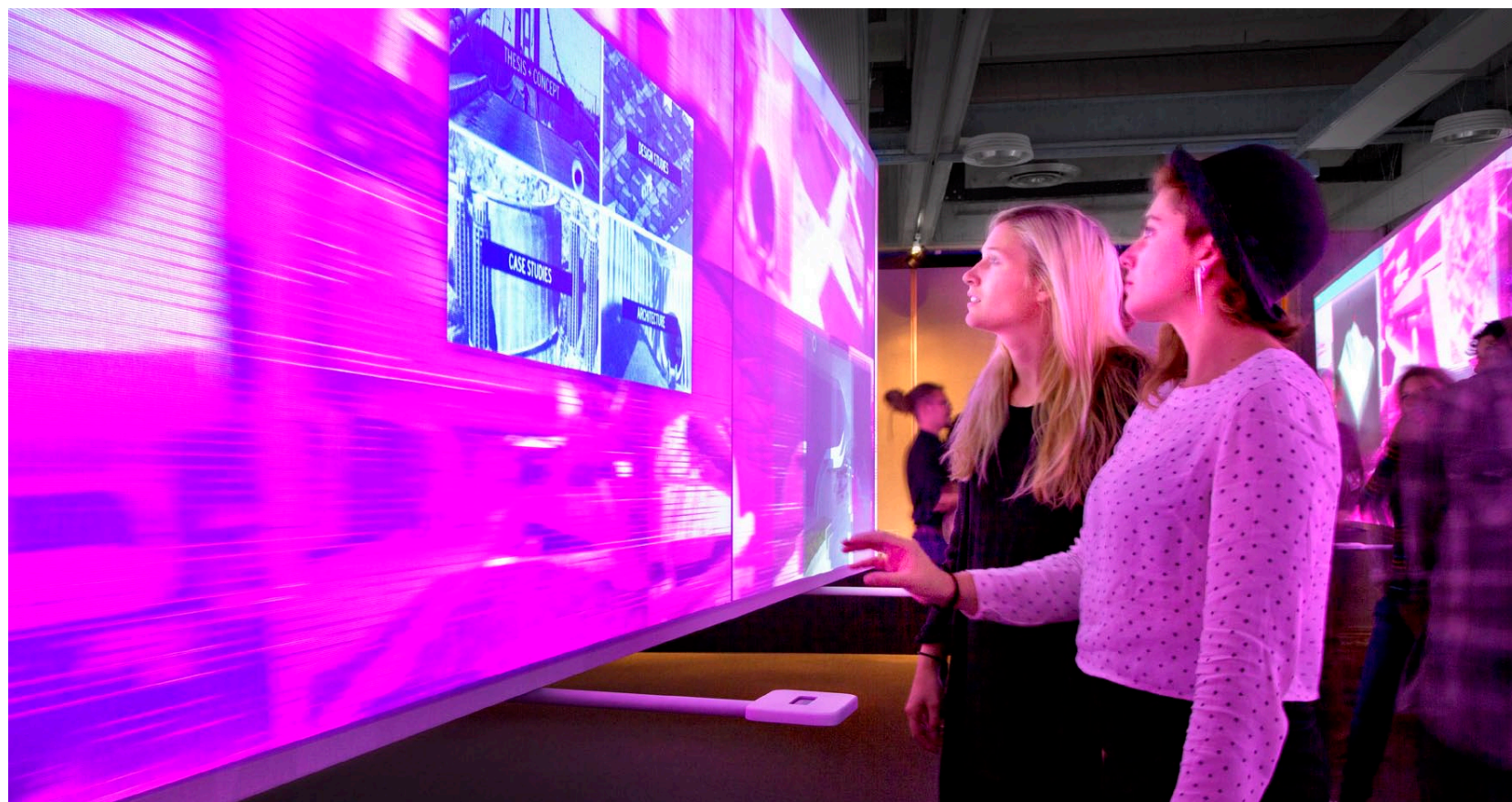
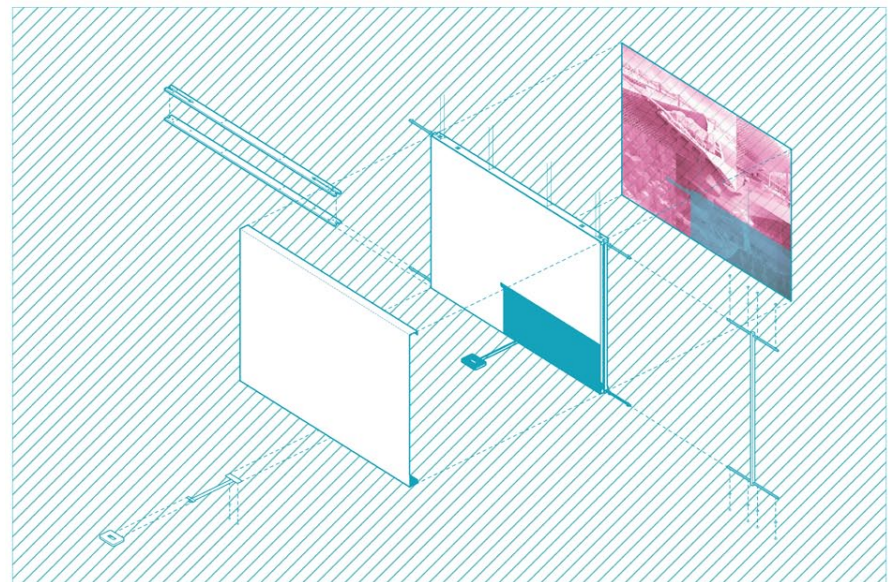
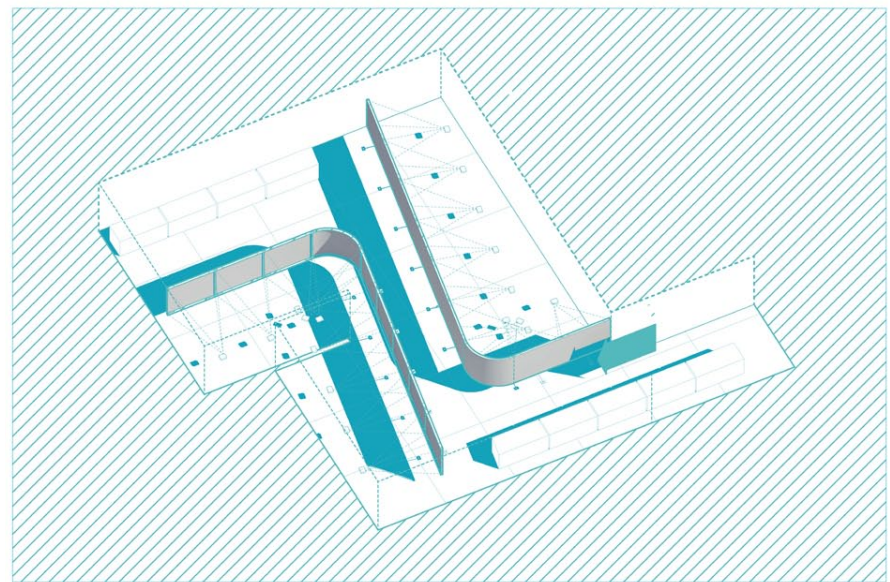
## MINORITY REPORT-ISH

**P04:** The original desire was to emulate the animation sequence that can be described as none other than a “ticker-tape,” similar to what would be found in the New York Stock exchange. With that concept in mind, the studio set out to design a structured pavilion capable of assembly in less than 24 hours on site.

The scrolling animation was to be projected on translucent fabric, but it posed two immediate concerns: the first asked how the students could support the material with speed and precision; the second asked how they could physically wrap the non-rigid material along a radiused edge. The structural solution was solved by crafting a series of wood and steel composite modules that could be assembled before the final day of installation. The fillet solution was to inset the edge of the radiused modules, to allow space for a rigid 1/8in sheet of clear polycarbonate -providing a rigid backing to prevent puckering on the corner conditions.

**P05:** Visitors were able to interact with strips of moving images projected on screens through the use of Leap Motion 3D controllers, which employ hand- and finger-sensing technology in order to allow users to control content on a screen similar to using a mouse, but without actual contact.

**P06:** The interactivity of the Leap Motion interface enabled visitors to select and manipulate content from the constantly moving image crawl, and to customize their own viewing experience of the work. This interactive interface, which was entirely designed and programmed by the students in the studio, allowed visitors to manipulate content with three basic gestures: pushing forward to select content, pinching to grab and move content, and pinching and moving both hands together or apart in order to resize content. The overall physical space was designed by **Ben Pennell**, and the digital framework for interactive software was designed by **Julien Stockwell** and **John Dallit**.





## CONTENT OVERLOAD



P02



P03

**P02:** The “Striptease” installation was designed to present the wealth of this research and design content in manner that rewarded protracted and in-depth engagement—through techniques that offered playful and interactive forms of exploration.

**P03:** 12 pads extended from the rib-boned screen, allowing users to select images from the scrolling display.

**P04:** The installation featured two Sixty-foot long by five-foot high suspended rear projection screens defining a meandering perimeter to the gallery space.



P03



PROGRAM AND AESTHETIC FORMULATION//////////

# OFFICE TOWER

Robotech Inc. evaluates the role of technology in an urban context by fusing stylistic concepts of British High- Tech and polymorphism. Both styles, borrowed from notable offices such as Gherry, Richard Rogers, and Neil Denari, provided the opportunity to study precedented use of form and material from an unbiased perspective—capable of combining and discarding certain elements at liberty.

The minimalist denounces the value of symbol, piously claiming it to be a superfluous extension of ornament. The maximalist rejects a strict adherence to function, and deploys the technology at hand to sculpt a narrative that would otherwise not exist in this world. What was once in a state of amorphous flux is now frozen in place, physically arrested by a foreign tectonic that confidently reveals itself to the unexpected observer.

# ROBOTECH STUDIOS / 2014



# STACKED BLOCK



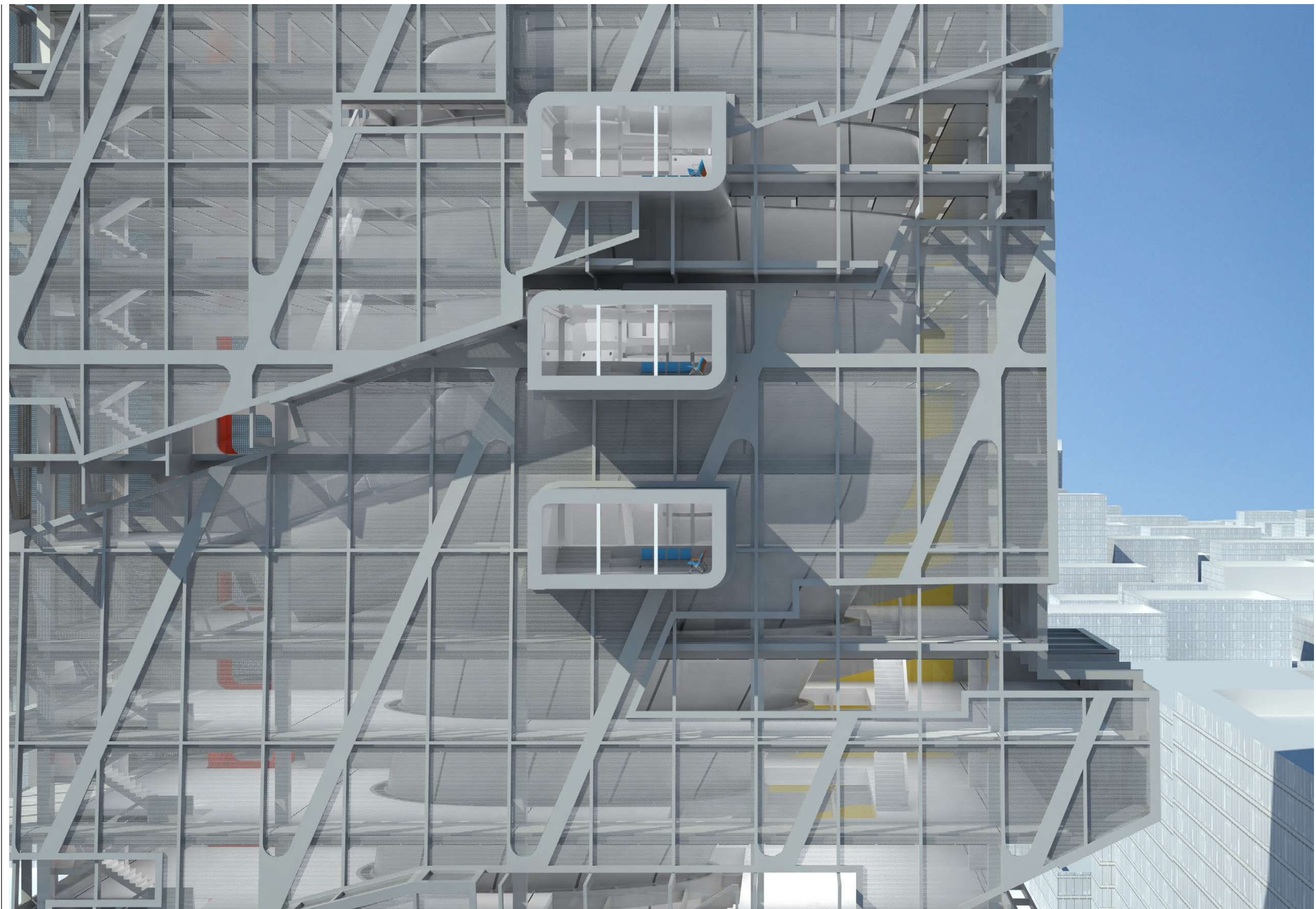
Q01



Q02

**Q01:** In order to design within the typological tower scheme, Robotec Industries first looks to Le Corbusier's Unite D' Habitation. The uniform housing block sits atop a detached and delineated giant order or piers, thereby establishing a rhetorical entry of size, weight, and grandiosity.

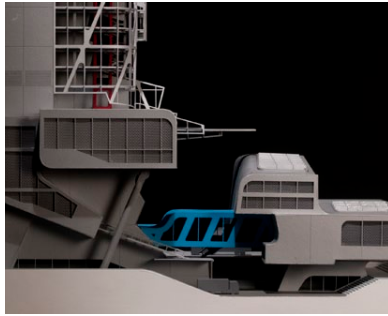
**Q02:** In a similar vein, the hermetically sealed office tower sits perched above the "working battery" of studios and animation facilities occupying the ground floor. Several scales, and geometric precedents serve to establish the different programmatic zones along the otherwise blank field of static electricity.



Q02



## MOTHERBOARD



Q03

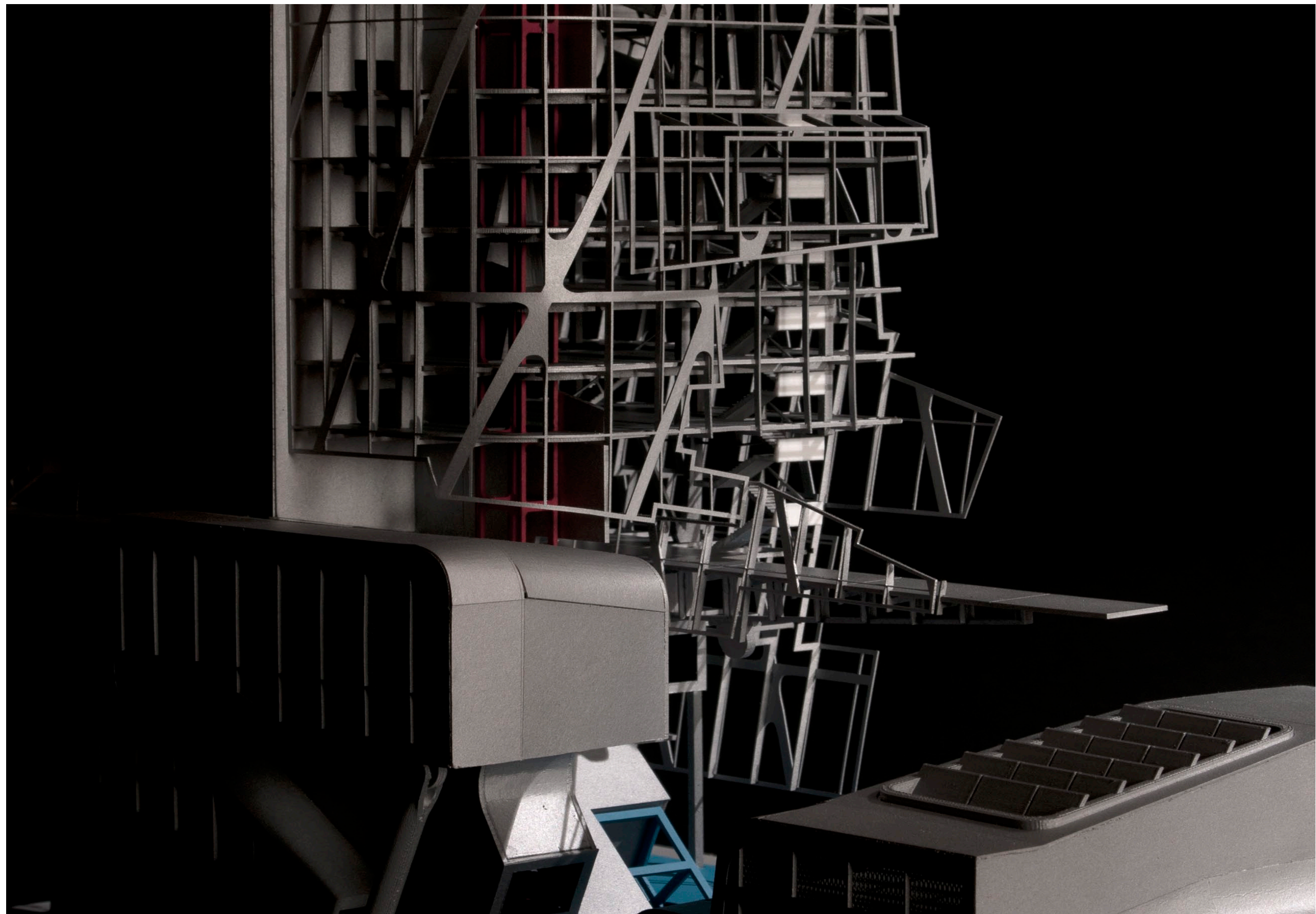


Q04

**Q03:** The entry sequence highlights the main intersection of visual styles as continuous surfaces flow into high tech cladding systems. The bottom massing, predominantly containing animation and green-screen studios, is meant to formally and organizationally act as a battery for the entire complex—delivering energy throughout the remaining programs.

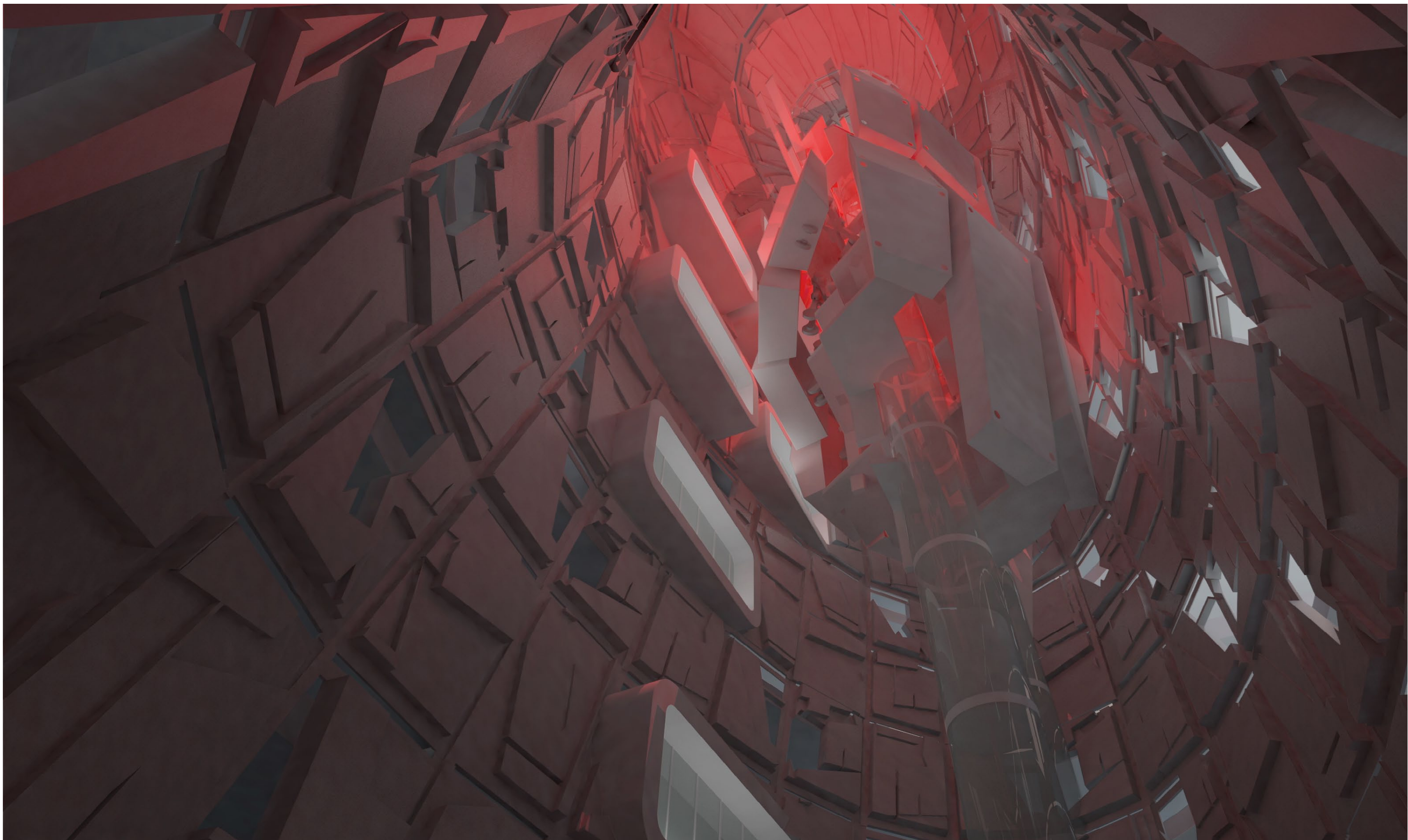
**Q04:** A small microcosm extends beyond the site boundary, contrasting notions of sharp versus smooth, machined versus organic.

**Q05:** The complex of Robotec insinuates a sense of dynamism by moments of overlap and inlay. Despite the inevitable static nature of its exterior shell, the cinematic interior space is heavily influenced by a serendipitous moment of mechanical movement. A small cat-walk extends to unite the office program with the adjacent animating complex.



Q05





Q06



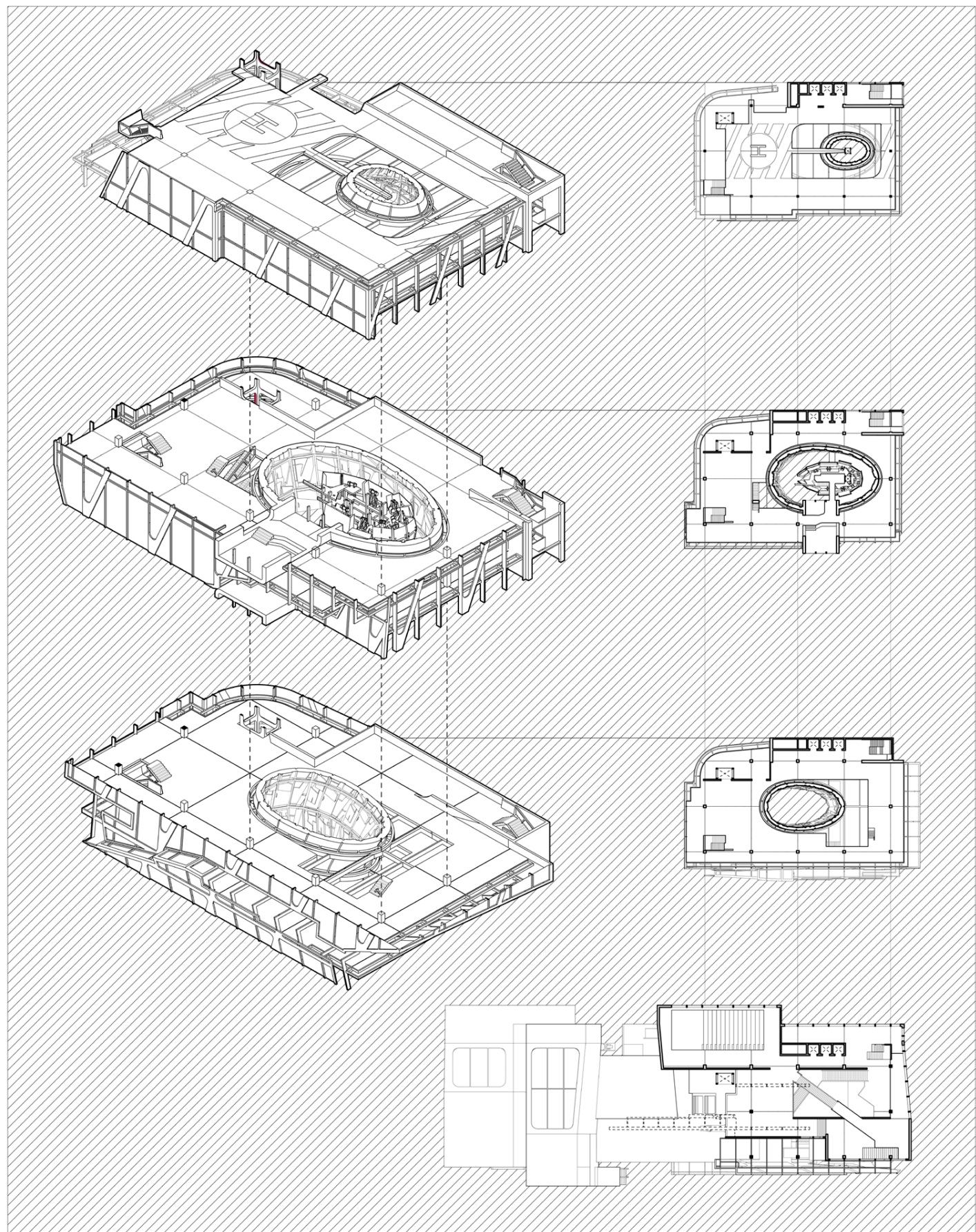
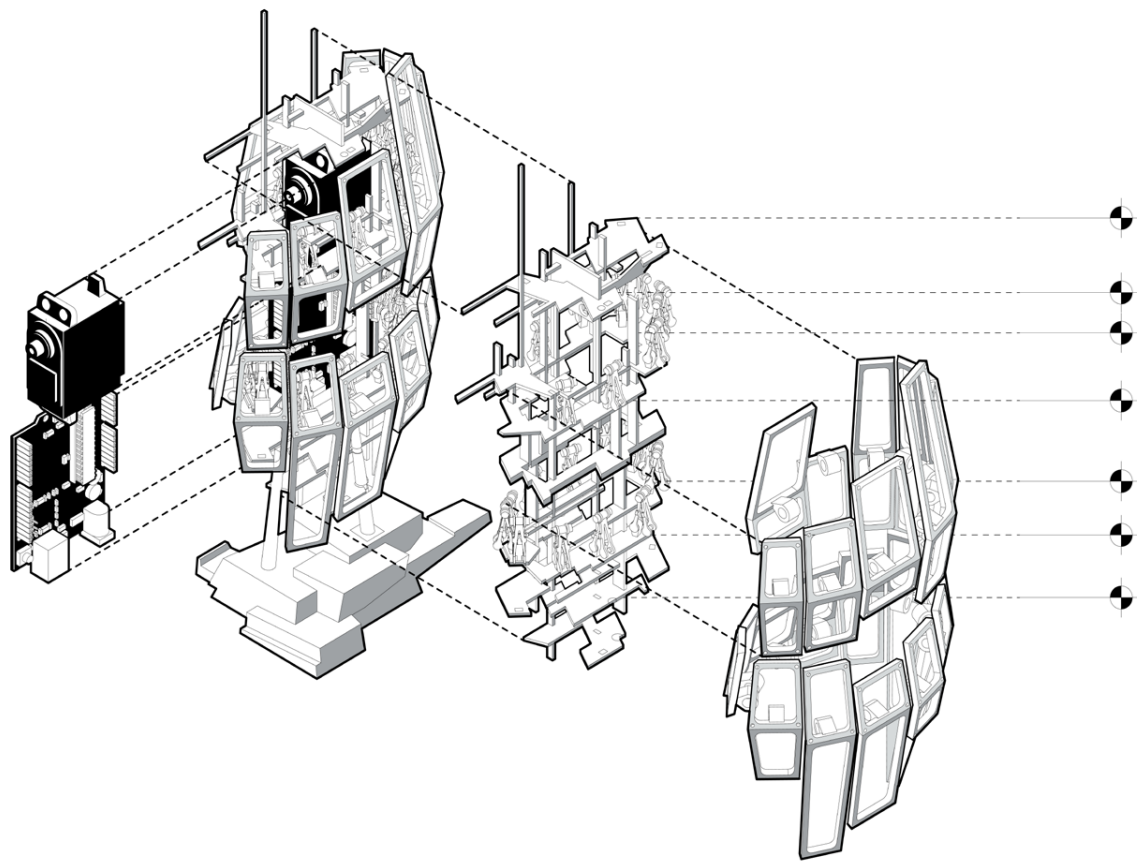
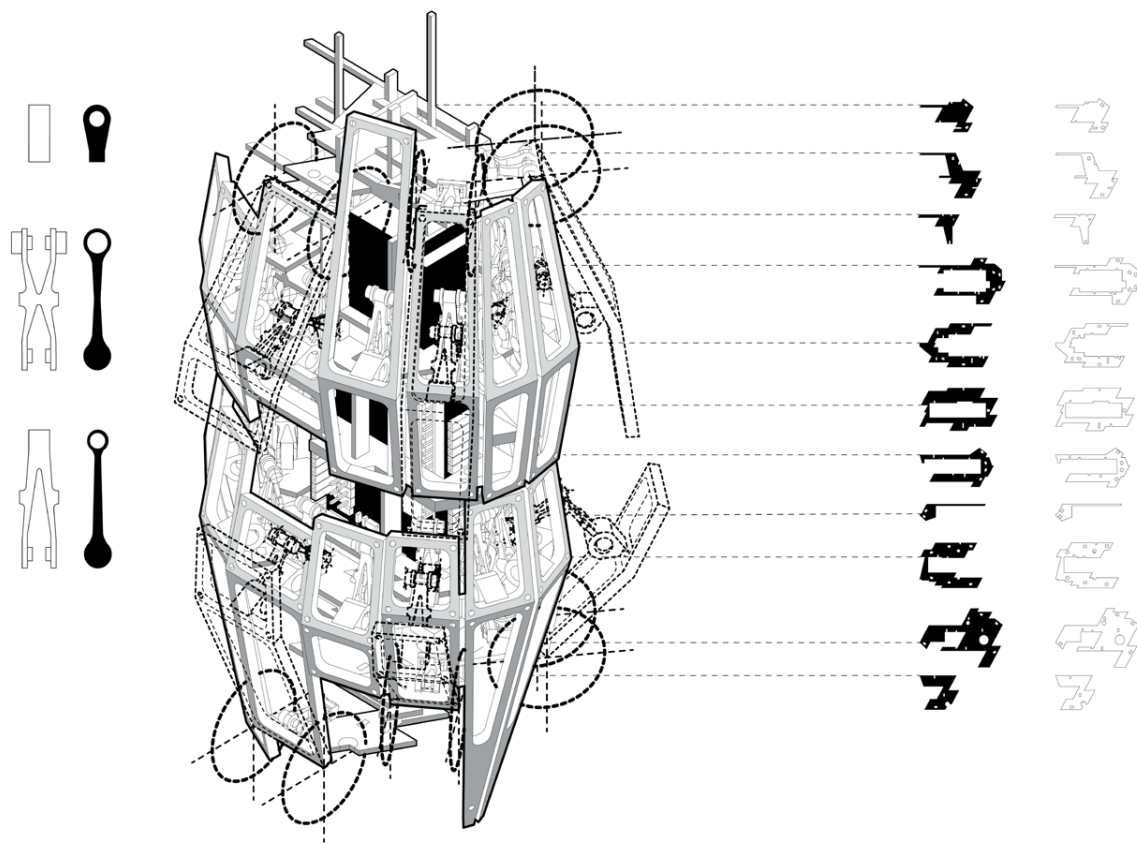
**DROID-C65**

**Q06:** Housed in the middle of a central void space, the robotic faberge egg [DROID-C65] acts as a moderator for creativity, a serendipitous beacon for the people of Hollywood.

While inside the central space, the user is meant to experience the same sense of terror and bewilderment explored in the visual works of Gregory Crewdson or even Olafur Eliasson. By virtue of its unannounced placement, almost invisible from the exterior, the experience captures an emotional dexterity that can be described as nothing less than sublime.

**Q07:** DROID-C65 is the motherboard of the building, the central hub. It acts not only as a structural core, but as an artificial identity in control of its surrounding technological domain. What does it mean to project a living, breathing essence of vitality onto architecture, an inanimate medium? Conceptually, it could service the same ontological dualism investigated by Eisenman in the Autonomous project. Rather than an established sense of non-architecture invented through process or sculptural figuration; a personified architecture attempts to reify the physical mass into something fundamentally other, independent of the human subject.

Instead of being swallowed by a giant whale in the ocean, the observer willfully intrudes into a domain that is clearly not his to rule. As such, a desired effect is to establish an artificial scenario of trespassing –inevitably rife with all the subsequent emotions that would follow: anxiety, excitement, focus, extreme consciousness etc.

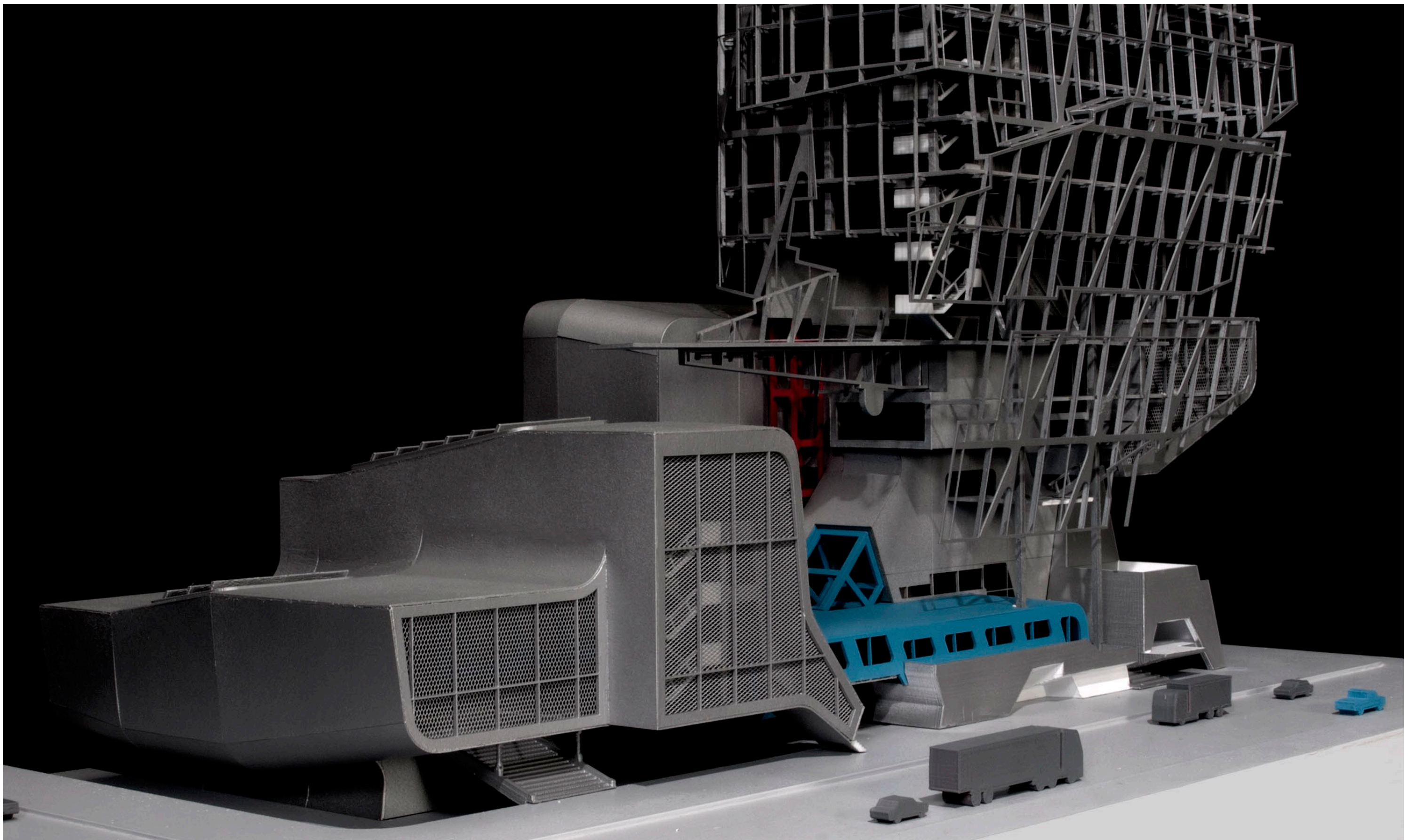


Q07

Q08

Q09





Q10





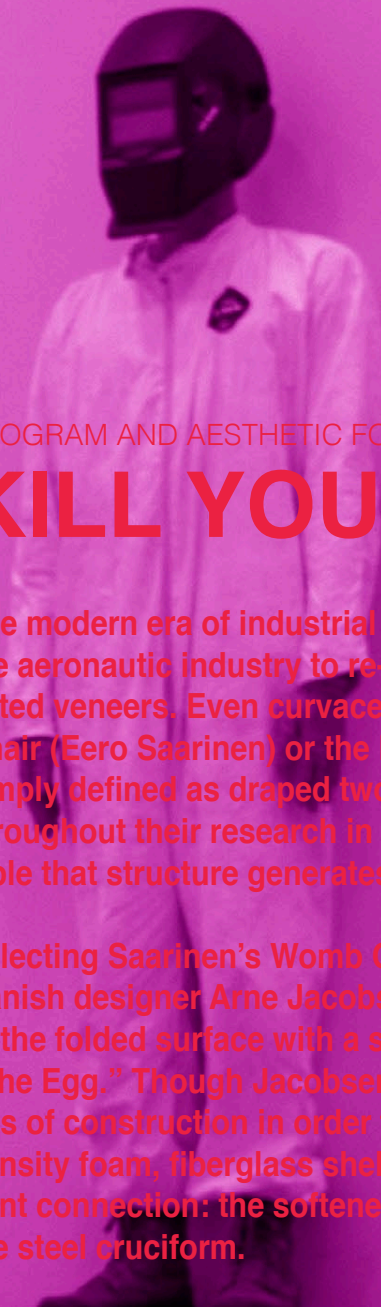
PROGRAM AND AESTHETIC FORMULATION//////////

## KILL YOUR IDOLS

The modern era of industrial design utilized advancements from the aeronautic industry to re-think the applications of laminated veneers. Even curvaceous composites such as the Womb Chair (Eero Saarinen) or the DAW Chair (Charles Eames) can be simply defined as draped two-dimensional surfaces. Common throughout their research in folding and bending was the principle that structure generates stiffness through corrugation.

Selecting Saarinen's Womb Chair as an aesthetic starting point, Danish designer Arne Jacobsen replaced the structural purity of the folded surface with a solid, close-formed object, coined "The Egg." Though Jacobsen used near-contemporary methods of construction in order to achieve his elegant shape (high density foam, fiberglass shell), his design overlooks one pivotal joint connection: the softened colorful monolith skewered by the steel cruciform.

Continuing where Jacobsen left off, Ex-Embryon addresses the otherwise subdued relationship between frame and skin, making the polarized tectonic of steel and fiberglass the primary focal point of the piece. In order to resolve this condition of materiality, the offset shell is visually detached from its steel skeleton.



# EX-EMBRYON CHAIR / 2015



## EGG-DEMPTION



R02



R03

**R02:** One side of the chair resembles a completed form that is fully achieved.

**R03:** The other half suggests an eroded state of flux that must be resolved with the help of human aid.

**R04:** The voluptuous arm-rest is replaced by a folded steel shard that is cold to the touch. As such, Ex-Embryon is more than a performative object (a chair); it is a theatrical centerpiece, a sculptural artifact in its own right, designed to reflect the architecture of today and even tomorrow.

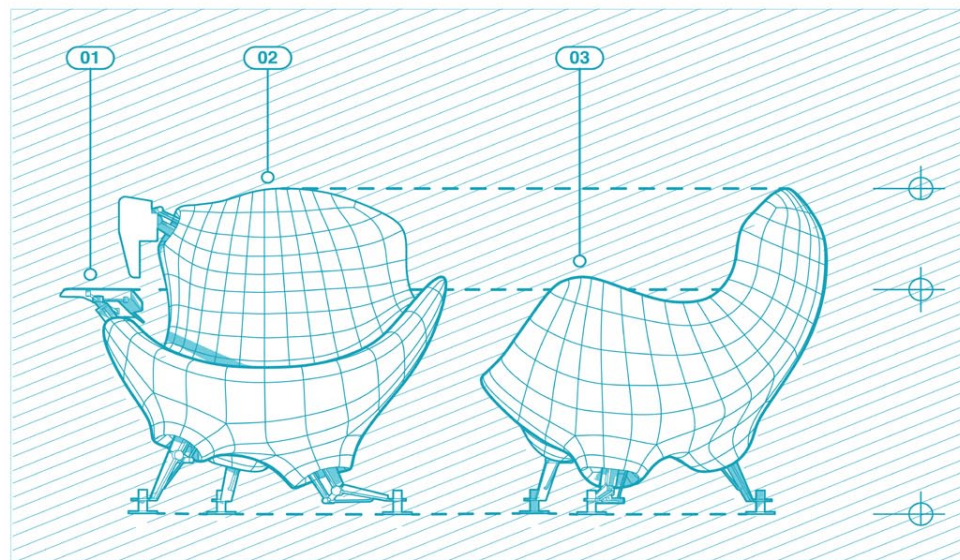


R04



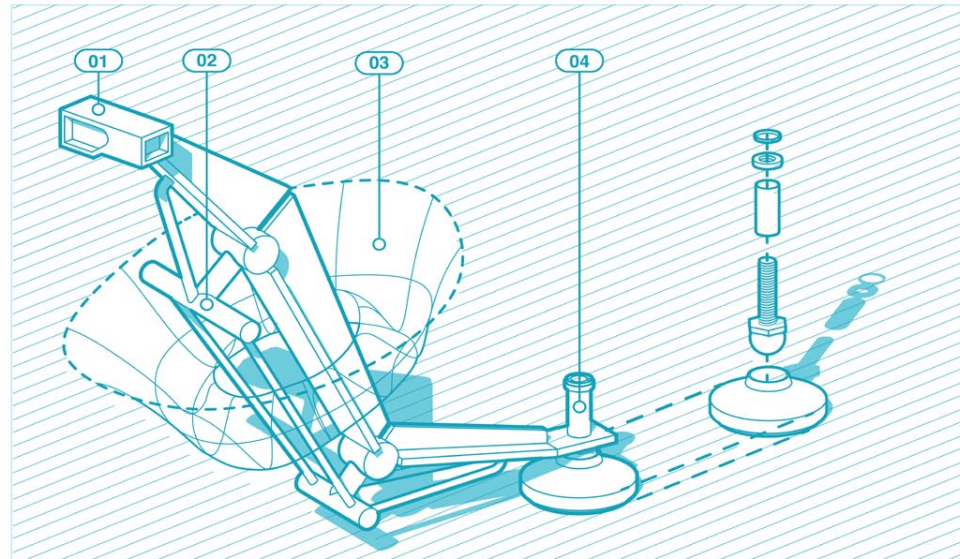
## EROTIC MOTORCYCLE

**R05:** Two methods of double-curved conditions can be largely classified as panalized frames (Guggenheim, Bilbao), or self supporting monoliths (surfboard). The first system is based on a tedious fractalization of load transference (panel to purlin to rafter to column) and each form serves as a standalone prototype. The second system is closely linked with composite materials (such as fiberglass or reinforced plastics) and controlled aspects of mass production. Though digital design has allowed architects to shape these surfaces with precision and specificity, there has yet to be an efficiently unified structural system (due to an obvious disconnect in scale). At the heart of this observation lies a hybridized conclusion: a thickened shell with a slimmer skeleton.



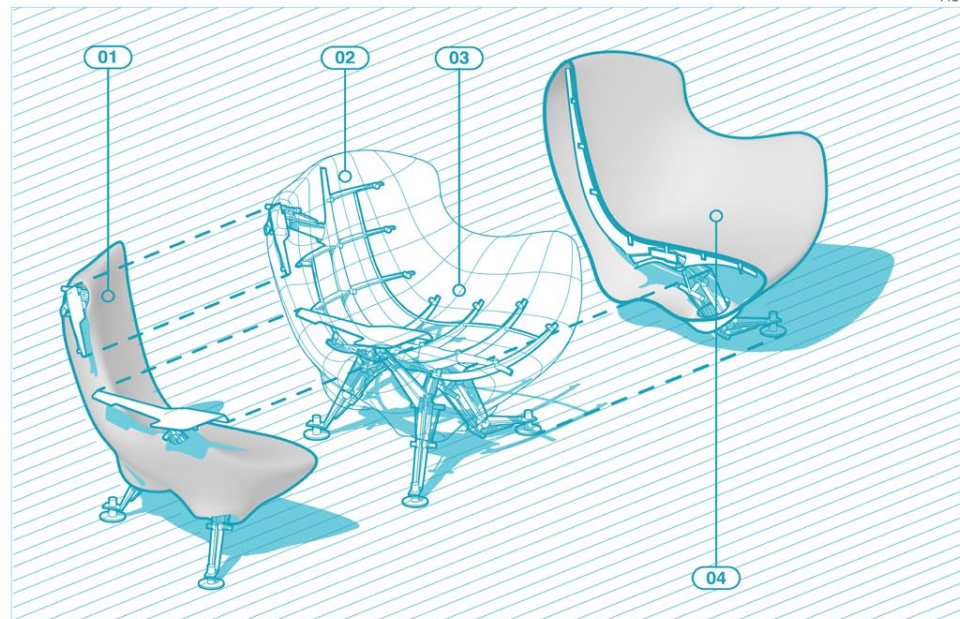
R05

**R06:** Structurally, the punctured holes in the fiberglass (normally creating weakened zones in the continuous form) are strengthened by extruding perpendicular nodes along the steel appendages (creating stiffness through folding). Aesthetically, the extruded nodes create a second "false joint" where both systems recognize the existence of the other, but disguise the real connection (bolted hardware, rubber gasket) within the form itself. From the standpoint of cost and constructibility, fabricating a hollow three-dimensional volume creates a final product that is lightweight, and structurally self supporting.



R06

**R07:** Buckminster Fuller's "Dymaxion Car" proved to be the most fuel efficient vehicle of its time, but failed to lower carbon emissions because it looked like a moving hot dog; his ambition was to design a car with low wind-resistance. Decades later, Toyota launched their own Dymaxion, fuel efficient vehicle, "The Prius." However, unlike Fuller, The Prius was a market success because their ambition was to design a symbol (the car of the future). What shall represent the formal ambitions of the ziegeltst? A continuation of the modernist project, centered grammar and tectonic? Or perhaps a rebirth of the post-modern project, centered on rhetoric and symbol?



R07



R08



R09



PROGRAM AND AESTHETIC FORMULATION//////////

## OBJECT MAKING

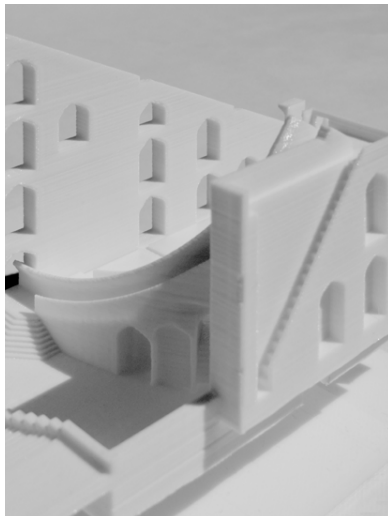
I started with Weiss / Manfredi in July of 2015. I was hired on as a full time employee in order to help with the design and construction of physical models for the US State Department Embassy in New Delhi, India. Over the course of my involvement, I strove to contribute a formal direction toward the overall aesthetic of the project. Through my craft, I synthesized architectural gestures from a wide array of historical circles: some of which bare resemblance to the Weiss / Manfredi catalog, others look toward Indian precedent studies, and others pay homage to my own personal heroes both past and present.

Many people suggested I use this time between undergraduate and graduate school to experience what its like to make construction documents, draw CAD plans etc. I assume the idea was to immerse myself in the “real world” of design. Fortunately, that was not my experience; and frankly, I could not be more delighted. The only separation between an architect and a contractor lies in his or her capacity to think in an abstract way. In my experience at the office, it hardly mattered whether I was generating one of my own conceptual models or whether I was representing a piece that had already been designed by somebody else on the team -in each and every model lay an opportunity to exercise my ability to think critically about construction and detailing.

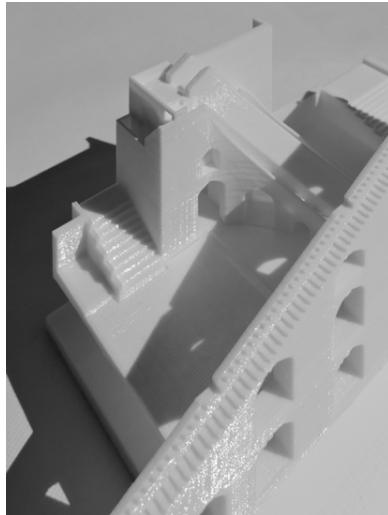
# WEISS MANFREDI / 2016



## FORM AND SYMBOL



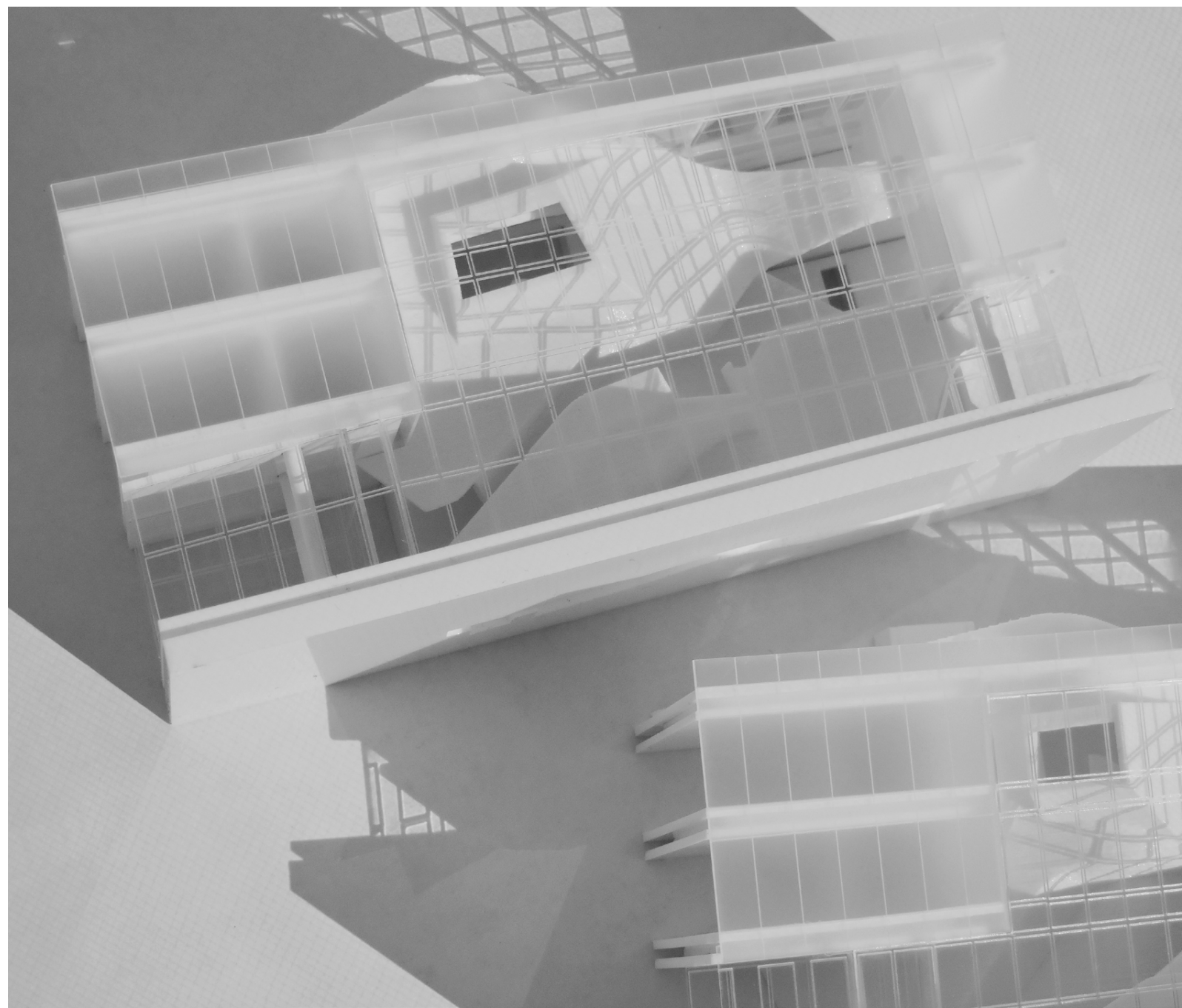
S01



S02

**S01:** One of the most fascinating works of Indian precedent architecture is the Jantar Mantar Celestial Observatory in Jaipur. At the time when it was constructed (19th century), essentially all of the instruments for solar measurement were available in compact and mechanical tools, without the need for monstrous sundials and hemispherical mapping; however, the project was funded by the patronage of the Indian government for they understood the rhetorical value behind the forms. The function of the observatory is not the technical mapping of stars and planetary movement, but rather, to exist as a symbolic reference of an intelligent society of peoples.

**S03:** Carrying forward that notion of utilitarian symbol, one of the main lobby spaces proposed a sculptural staircase, devoid of plastic ornament, yet rife with conceptual reference to views, moment, and circulation throughout the building.

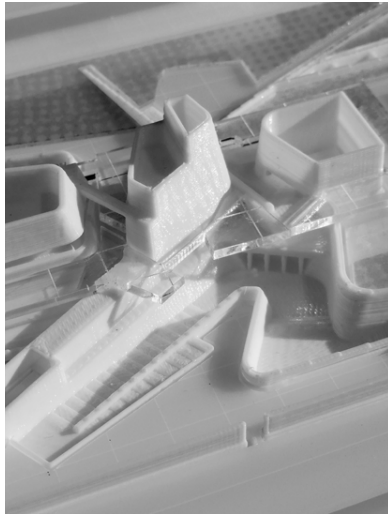


S03

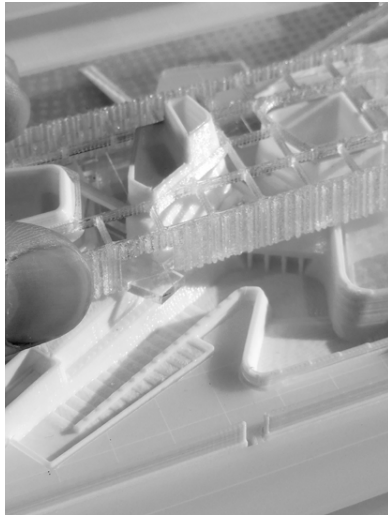


S04





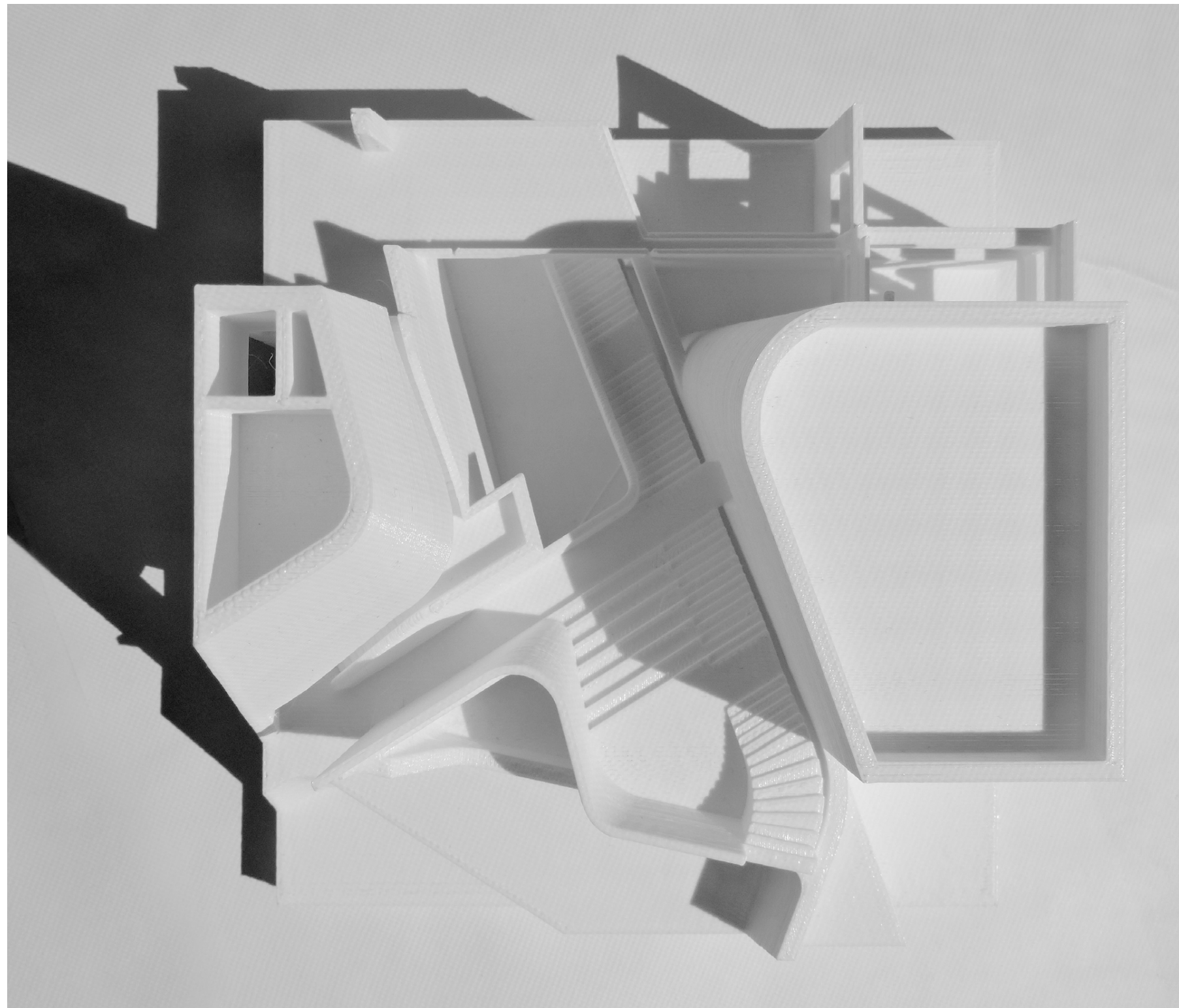
S05



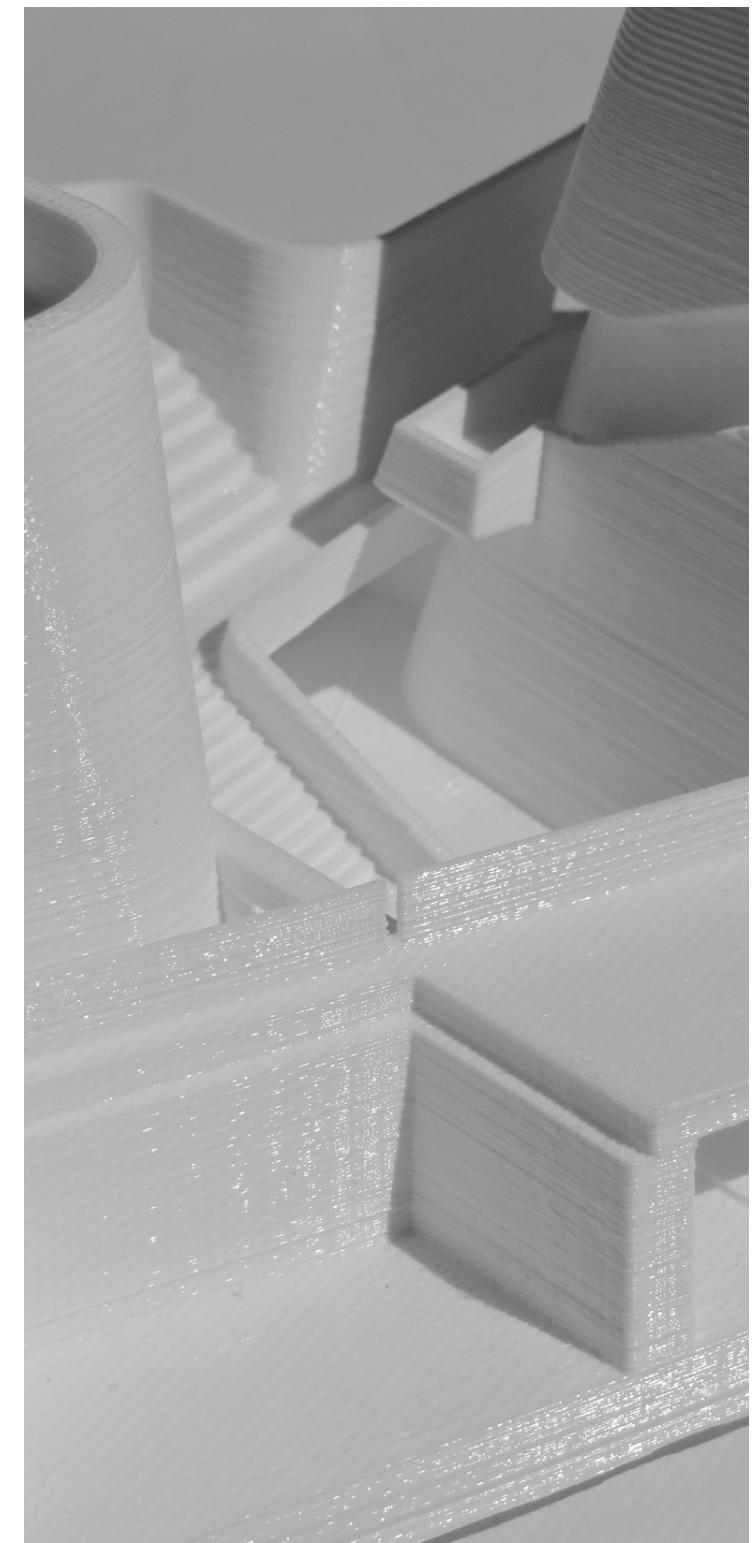
S06

**S05:** The main office building is imagined as the dynamic collision of sober, platonic solids and organic land form. A static orthogonal box sits cantilevered above a series of curved and inclined planes that organize the flow of movement beneath.

**S07:** The section model depicts the main collision within the central gallery. A staircase wraps around solid chunks of opaque marble, as it simultaneously connects all three floors around a one-directional amphitheater.



S07



S08