As the Miesian frame was in the ascendancy as a structural tendency in the 20th century; the profusion of the diagrid as a structural type has wedged its way in the last two decades. From regular and irregular steel diagrid structural frame to polyperformative extruded concrete diagrid structural shell, these structures are based on the logic of rigid matter and static frames.

*Tractable Dispositions* rethinks the frame and the morphological potential of diagrid-based structures as pliable and adaptive to transformation in form and behavioral profile during the design process and building construction until being fixed. This allows for the emergence of new relationships between the structure and the enclosure, collapsing the frame and envelope into one by moving away from the rigid geometric logic of steel frames and pre-cast concrete, to composite materials.

This thesis investigates material behavior and its potential to be encoded in architectural ‘pre-forms.’ Through a series of techniques, processes, and translations such as compression, self-expansion, and robotically controlled dynamic motions, the second state of the material geometry pair is not an optimization or a conclusion of the first. Two different states can be achieved through simultaneously crossing back and forth between programmable matter (physical) and geometry compression (digital), allowing for numerous formal outcomes to emerge based on processes of corruption and deformation of the conventional structural diagrid. Through the development of new techniques and technologies, this thesis ultimately repositions the role of the structural frame and envelope by breaking the habit of the diagrid which is becoming the hallmark of the 21st-century Modernism.
CHARACTERS’ AGGREGATION
Getting Away From High-Rise Disaster

ZHEXIONG HU
Advisor: Florencia Pita

During recent years, high-rise building has become a major type of architecture in Asia, especially in China. The high-rise monsters duplicated rapidly and diffused from big cities to much more places. Although high-rise buildings provided much living space, which could relieve the stress brought by large populations, they also had many problems that could not be ignored. For instance, high-rise buildings caused serious energy waste problems. Construction costs were high and the structures were complicated. Finally, the buildings are isolated with environments so uncomfortable that people seldom like to stay. Many have already raised serious doubts and argue for high-rise buildings’ rationality.

A big issue for high-rise buildings is that they grow straight from the bottom to the top, like the normal arrangement of housing growing linearly in the horizontal direction. It didn’t completely improve the form of housing. However, a unique feature of the Chinese Character is that it is highly aggregated. The strokes go together in a limited space by a special logic and nonlinear optimization. This complex system is efficient, diversified and non-isolated.

This project attempts to observe the logic and combination of Chinese Characters and use them to explore a new mode of housing. This mode could be habitable, producible and highly assembled. Therefore, there is a possibility that we could get away from the high-rise disaster.
This thesis is about the presence of absence through the lens of drawing. The specific types of drawings that I am interested in all make use of an abundance of lines. Some of those lines convey latent geometries, while others convey a more whimsical quality that is less explicit in their origins. The intention while producing the drawings was often to make the readings of the lines ambiguous in order to create an interesting visual and spatial effect. An attempt has been made to take these readings and interpret them into a building that mobilizes the absence of the building that was previously on the site.

I am trying to take the stable, inscribed convention of architectural drawings throughout the history of architecture and destabilize them. This destabilization is done in order to open up new possibilities by translating construction lines into constructed objects. The whole point of construction lines is that they only exist in the conception of the building. When one starts building them and takes seriously their real possibilities, the construction lines produce a kind of blurred world around them. This is due to the presence of the absent element. Making those non-actual things actual, the object of this operation produces unique qualities.

The project proposed the reconstruction of the Cathedral at Soissons, France, which currently exists only as a façade. The building is currently haunted by the existence of the previous cathedral; it is my intention to provide a strange simultaneous presence of actual and virtual elements.
Across history, the human body has served as a polyvalent metaphor for the built environment. The hierarchical and scalar relationships between the discrete parts and spaces within the body are the basis of a primitive and nearly universal aesthetic vocabulary. The legibility of these metaphors in relation to society’s notion of the body will inevitably contribute to our comprehension and experience of a work of architecture. Architecture’s abandonment of humanism and its ethical agendas has led to the rejection of the human analog in favor of organizations derived from other forms of life. However, a radical shift in society’s perception of the body since that abandonment offers the possibility of a post-humanist, corporeal architecture.

Over the past century, scientific advances have begun to generate a decentralized notion of the body that is composed of multi-layered, interdependent systems. The humanist body, the image of a pure and proportionate being, has been displaced by a marvelous reality. We no longer believe ourselves to be heads and hands and legs, but cartilage and marrow and ligaments; inside-out creatures sliced into pixel-thin sections. We are collections of tissues and organs that may live long after our consciousness is gone. This thesis attempts to challenge traditional notions of holism associated with the body metaphor in architecture through the translation of organizational and metaphysical qualities of the scientific body.

The proposed project, a Biological Education Center in Nashville, Tennessee, engenders the principles of the scientific body through its design and didactic intent. Through duplication and grafting, a new body is produced, an unnatural multiplicity unified by its intertwined systems. Comprehension and perception begin to converge as the human analog is reduced in scope to its component systems, organs and tissues. These transformations in turn give rise to complex, layered organizations. The tissues meld and reemerge as compound entities. Continuous, smooth tissues form both surface and enclosure, and discrete interior cavities are created as they meet. Microscopic textures are magnified and light reaches the interior through the porous organs. As the metamorphosed body begins to envelop the human occupant, we approach the possibility of dwelling within ourselves, not as creatures of mind, but of matter.
This thesis investigates the grey area between architecture and urban design. It explores the possibilities of designing urban space—all spaces between buildings—at a continuous architectural scale.

The stark contrast in scale and spatial contiguity between the interiors of buildings and the spaces outside of buildings has marginalized the domain of human activity and recreation. The degeneration of human-scaled (as opposed to infrastructure-scaled) urban space presents itself as a compelling contemporary challenge for architecture. Architecture must reclaim its primacy in the built environment, not only as buildings, but the spaces between, around and through buildings as well. Architecture must make the entire urban condition its domain.

Because the traditional street and square are being absorbed into the interiors of monstrous non-buildings that rival the city itself, this thesis is not only concerned with the scale of “the white” in figure ground drawings, but also the function, articulation, and integration of that space into what is typically considered “architecture.” This continuity between buildings and urban space will yield a field of “grey” conditions that cannot be represented with typical figure ground techniques, for they are neither black nor white.

This thesis manifests itself in the design of a new cultural district in the Bjørvika neighborhood of Oslo, Norway. It creates a contiguous urban architecture that ties together several new waterfront projects (Oslo Opera by Snøhetta, the Munch museum by Juan Herreros, the Barcode by MVRDV, New Central Station by SpaceGroup, Deichman Library, etc.). As it mediates between the city center and the edge of the Oslo Fjord, the proposal lives amidst the dissonance of city and sea, of figure and ground, of black and white, and of architecture and urban space.
The Metabolism is a basic system of the creature, which has its own perfect biological system. It is also a fundamental discipline for biological growth. There are a lot of processes in the biological growth of the creature; also the creature has been transformed in each process by this metabolism, through having a certain relationship with another creature. The basic principle of biological growth is a continuous transformation and improvement by repeated fundamental processes and time.

- STIMULATION
- GROUPING
- COMBINATION (AGGREGATION)
- GROWTH
- EFFICIENCY
- FLOW

(Metabolism, 1960~1970)

In architecture, this biological growth could be operated as a catalyst in order to create the animated geometry. This catalyst gives a repeated stimulus to the process in architecture, and the fundamentals process in architecture (from particle to line, from line to surface, from surface to line, from line to particle, from particle to surface) will happen sequentially as does biological growth in nature. These morphological transitions could become a reality in the physical world by changing material effect. The material effect gives architecture a multiple ontology created during the biological growth. Continuous biological growth could be realized in architecture by repeated fundamental processes.

This thesis introduces biological growth in architecture and the design process in order to animate natural geometry by using the notion of time. The animated geometry from these processes could be transformed and improved continuously as a certain creature in nature. This biological growth has the possibility to give an architect a kind of selective process in real time.

The project is for a new train station. The train station will be a three-dimensional garden in Los Angeles through biological growth. This building fuses ideas about architectural mega-structure with those of organic biological growth in urban space.
This thesis departs from the cultural and architectural developments that the invention of perspective brought to the discourse of architecture, both as an imaging strategy and as a conceptual method of architectural representation. Building on this discourse, this thesis turns toward an animated, projected geometry developed through perspectiveal techniques in order to produce a new form of architectural representation. This technique produces an architectural project that is cultivated from a contemporary culture of dynamic values and shifting trajectories by seeking comprehension through the building’s formal and indexical relationships.

Therefore, this project rethinks the stasis of buildings and attempts to generate a new discussion of comprehending relationships through a perspectival index. The utilization of robotics increases the vocabulary of indexical notation and extends the repertoire of how to understand those relationships. This generates more architectural effects in terms of comprehension than what have been previously demonstrated from an orthographic point of departure.

Legibility is important for this project as it was in Eisenman’s house X, although the importance of legibility here is not to identify the process, but to reveal the formal relationships derived from the multiplicity of vantage points and their trajectories along viewing corridors extracted from the site. New associations and relationships are derived from the interior of the building as subtle rotations of the floor plates imply a reconstruction of a morphological void within the building that extends the formal index.
lk: I'm searching for the meaning behind this surface that wraps itself over this city and this building.

eom: Well, is it on the inside/outside/this side/that side/underneath/here/there/everywhere?

lk: ……

eom: Where and why is it; where it is, over there? And what does it do, exactly?

Stroke creates a surface that acts to elaborate on the discussion of imagery and textures in contemporary architectural façades. Surfaces have the ability to transform a building into something other than an expression of its structure. For instance, a façade treatment that makes a building move through surface geometry, or disappear through textured patterns, and even blush through materiality; these all allow the building to speak a different language to other things and beings, both near and far.

Similar to the gestures of painting on a canvas, painting on an architectural façade allows for a different perspective on how to achieve poetic effects of material use and tectonics. In this thesis, thick brush strokes are used as a means to blur imagery, textures, and patterning all together. Through those techniques, micro-texturing of ghosted figures of the library will be used alongside the original color palette of the library’s original mosaic. Applied to the surface of the new library and landscape, they will work to re-contextualize a memory of what was once lost in contemporary terms, as well as generate a new cityscape.

The library as an architectural typology has lost its functionality and with the onset of technology, new uses have been developed while old ones are left unused. The Central Library once had a major presence within the city before the onset of modernism’s creation of skyscrapers. Soon after, dwarfed by its adjacent buildings, the library slowly began losing its meaning and symbol as an object and place. Thus, this project looks to revisit and address the importance of a library’s symbolism in the city in a productive contemporary way; making it a place that acts as a beacon to unite the city and encourage a healthy life of knowledge through community based interactions.
INSIDE IN

SOPHIE LAURIAULT
Advisor: Andrew Atwood

Inside In investigates the interdependency of a building’s exterior form and interior volume, by evert- ing a form on itself and reconstructing its continuous surface. There still is an interior and an exterior. But the intricate eversion of the two changes their initial separation with ambiguity. A more complex relationship between interior and exterior is established, but neither loses its specificity nor do they merge into a continuous modernist experience.

“You can do anything you want to the Stanford bunny.”

This thesis relies on the transformation of the Stanford bunny to understand the implications of the reorganization of an object’s surface and mass on itself. Through a series of cuts and stitches, the exterior and interior structure of the form is reconfigured to enclose an exterior within an intensified inside. By turning itself inside in, the Stanford bunny disrupts its familiar form and alters its original hierarchical construction of interior and exterior volume. Recognizable features remain, to ensure an understanding of what was initially ordered and rearranged. By pushing frontality inward, the thesis confounds the distinction between interior and exterior elevations and challenges the idea of Rudolf Arnheim that “one cannot see one’s own face.”

The thesis benefits from a program that originally negotiates with a complex interior/ exterior mise en scène. The planetarium and science exhibition spaces contradict their sealed and layered interiority with a replication of an exterior environment through special effects, form and scale. The project destabilizes one’s visit of the science center through an intentional misreading of interior and exterior “reality.”


INSIDE OR OUTSIDE

HSUAN LEE

Advisor: Andrew Zago

Topology views volumetric conditions independent of their geometry. Considering building enclosures topologically, most would be defined as either balloons or donuts. Both cases depend on a clear distinction between inside and outside.

Altering this building topology is a long-standing branch of architectural research. However, it has become an especially important branch over the last fifteen years. FOA’s Yokohama Pier proved the efficacy of topological complexity in destabilizing a building. Other projects, such as UN Studio’s Möbius House and Mercedes-Benz Museum and Zago Architecture’s Robbins Elementary School, built upon that insight.

This thesis seeks to build on this work by examining a specific aspect common building topology. The project is a redesign of the Broad Museum, currently under construction in Los Angeles. Of interest here is not only to use topology to alter movement through a building, but to alter the relationship of the enclosure itself. In this project, the inside face and outside face of the building pass through each other. It is a strange topology, in which the inside skin and outside skin switch places and pass through one another several times. In this way the thesis opens the examination of the technical, social, and urban potential of topology employed to alter the orientation of a building’s skin.
PROBABLE GEOMETRY: UNEXPECTED

JISUN LEE
Advisor: Hernan Diaz Alonso

In the last decade, the attention of architectural designers and theorists has been directed toward the descriptive geometries, to the extent that geometry is the preferred language for architectural communication.

More precisely, the majority of both special and theoretical innovations in architecture have become increasingly dependent in geometric conflicts.

“...geometric conflict presents a new form...”
– Greg Lynn, Folds, Bodies & Blobs

In this sense, the focus for this thesis is on the possibility of geometry through aggregation and deformation by using the re-interpreted unique figure. However, it is not simply Boolean operations that occur in the series of ‘Recycled Toy Furniture’ by Greg Lynn. Differing from Greg Lynn’s work, this project is more focused on unexpected form within conflicting geometries. Also, it will explore the predominant effect of isomorphism being the aggregation of diverse forms of design intelligence into an almost universal condition of image production. Perhaps some might see this as a triumph of superficiality over depth, but it is certainly also an intensification of the conjectural and fictive logics of design. We see this as a real and complex demand that global network culture makes on producers of architectural content.

This project is an extension of an existing building creating new figure-figure relations. It not only displays exterior aesthetic, but the thesis deals with the inside of the building by exploring three-dimensional bodies that are characterized by a certain volume.
Since the early 1900s, numerous distinguished architects have claimed that prefabricated houses will be the future of the building industry, bringing well-designed homes to the masses, similar to how factory-produced automobiles revolutionized modern mobility. Frank Lloyd Wright, Marcel Breuer, Buckminster Fuller, Walter Gropius, Charles and Ray Eames, Jean Prouve, Richard and Su Rogers, along with numerous contemporary architects, continue to invest in prefabricated housing. However, the multiple goals of fast, cheap, customizable, and signature design have yet to be realized in any past or current models. Despite the sometimes unfashionable connotations that have come to be associated with this building type, the idea that prefab can become mainstream has always managed to find enthusiastic converts, and the typology seems unwilling to fade away.

Atypical Pre-Fabrication reexamines the prefabricated housing typology and challenges not only the accepted design process, but also the construction means and methods with which it is typically associated.

Recent prototypes of prefabricated homes have primarily focused on efficiency in economics and have been unable to separate themselves from a traditional construction methodology based on rectilinear assembly and the role of the master craftsman. This has lead not only to a crop of un-inspired box projects, lacking any formal and spatial exploration, but has also cast a primarily negative light on prefabricated buildings. Prefab is associated with uninteresting, generic, and building economy, while ironically remaining cost prohibitive to most and difficult to customize.

This project, therefore, is not about economics, but about contemporizing building tectonics and methodology by proposing ‘non-ordinary’ (atypical) systems based on ordinary (typical) manufacturing and building techniques. Units are fabricated completely off site (pre-fabricated), unlike many existing prefab systems, which still rely heavily on site assembly. Potential spatial complexity and customization possibilities within this system are simultaneously interrogated.

Ultimately, this thesis is a search for contemporary spatial and formal consequences based on current architectural possibilities including digital design, modular and prefabricated construction of systems and spaces, and resultant expanded typologies, rather than a backwards looking paradigm of handmade craftsmanship, master-building tradition, and form-based vernacular construction.
What role should the rendering play in contemporary design processes? This thesis will examine how the rendering could give different meaning to form rather than simply describe the finished, physicality of architecture.

Pixelating is a general way to present an image in computer graphics and digital photography. The first part of this thesis will examine the potential of computer images when printed on paper or a 3D printer, to provide a new type of digital design interface.

The second part of this thesis will speculate on the ability of orthographic projection of light and shadow to give form abstraction rather than reality. Through these exercises, the rendering starts to change the original object, giving a visual depth not seen in the original rendering or object.

The third part of the thesis will examine the ability of rendering to transition from solely a representation of the materiality of the object to the basis for a material logic. In this case, penalization systems are created from pixel data abstracted from rendering algorithms.

In general, this thesis explores the ability of rendering to serve a larger, more central role in the design process. When rendering is not solely asked to represent some aspect of reality, it allows for multiple ways we might read form.
FORM FOLLOWS VOID

ALEXANDRA LEVIAN

Advisor: Florencia Pita

In an effort to challenge conventional architectural notions, this thesis aims to prove that the absence of mass can be more important than the actual form itself. Focusing primarily on the role of public space in the form of the piazza, several components are investigated, including the incorporation of urban space into buildings and how façades surrounding the void create depth, dimension, and inhabitable space.

This organizational strategy approaches the solid/void genre in architecture by creating a typology of void conditions and hybridizing them to maximize negative space within a building. Designing the spatial qualities of the void, along with three-dimensional façades and openings, and imprinting them onto a form, demonstrates the topological idea that interior voids often become exterior. Investigating the various ways of composing and aggregating voids within a building advances the role of the void as a significant architectural element.
PAUSAL MOMENTS
CHHENG LIM
Advisor: Coy Howard

If we honestly ask ourselves, in our heart of hearts, what we hope to achieve as designers, it is fundamentally about a search for the Other. In architecture, there exists a fifth realm, that most ephemeral of qualities that somehow exists outside of and beyond the rational to occupy a territory and a language of its own. Where does it exist, and how can we find it? This thesis believes that architecture need not be loud or ostentatious. It can have a quiet, enduring force that captures you in moments of surprise. And though we may struggle with words to describe it, we sense that there is something, just something that captures our attention. This thesis believes that architecture participates and is experienced in moments of serendipitous spontaneity. It triggers the evocation of an atmosphere and the capturing of a moment in time.

This thesis aims to achieve this through an approach that engages with multiple oxymoronic form expressions. It believes that formal sensation is produced through the simultaneous co-rising of parts to make a whole. It is a non-hierarchical approach that is less interested in a singular expression, and more interested in a conversation between constituent parts. Just as we are informed by a multitude of sensorial experiences (sight, sound, taste, emotions), a similar sort of multiplicity thereby exists in architecture. Through the layering of multiple simultaneous oppositions, this thesis aims to awaken the life force in inanimate form in order to achieve that elusive sense of the Other.
This thesis explores the aesthetic of incompleteness produced by “Weird Primitives,” which embraces two opposing ideas of the incomplete and the complete. Weirdness is a new aesthetic in architecture. A basic weird object is composed of an incomplete form like a metamorphosed creature and a complete form of a primitive cube as a frame. Aggregation of the basic unit enhances weirdness of the form.

In addition to the weirdness produced by heterogeneous combination of the incomplete and the complete, this project revisits notion of scale, and examines weirdness generated by over-scaled forms. Scale is one of the most important elements in architecture. Scale defines characteristics and purpose of objects. This project challenges how we can treat an over-scaled statue as a high-rise building and attempts to find new perception of architecture.

The project is located next to MOMA in NY and is a high-rise building that functions as a vertical public garden. Inserting a weird form into NYC, which looks like a complete city, produces new friction, conflict and complexity. It emphasizes separateness from the surrounding buildings, but at the same time, reflective material on the surface resonates with and merges into the city. In other words, the building with weird form is connected with and isolated from the city simultaneously. In response to views from different distances and angles, the building with Weird Primitives produces diverse atmosphere.
“When he arrived in Manhattan for the first time, in 1935, he held a press conference at which he described even the Empire State Building as too small and claimed the city’s leaders were too timid to hire him. He later described the height of Manhattan’s towers as “nothing more than the manifestation of an inferiority complex.” He also wrote an opinion piece in the New York Times in which he claimed that “American skyscrapers have not attained the rank of architecture; rather, they are merely small objects such as statuettes or knick-knacks, magnified to titanic proportions.” In their stead, he proposed a city of buildings that “don’t try to outdo each other but are all identical,” with highways running right to their front doors—he believed the city’s grid system was obsolete in the automobile age. Le Corbusier met with many of the city’s power brokers, including Nelson Rockefeller, who was then running his family’s real estate business. Le Corbusier pitched an early version of his Unite d’Habitation, but after two months with no commissions, he returned to France, dazzled and disappointed.”

— Fred A. Bernstein, Le Corbusier and New York City: A Love-Hate Relationship

As one of the world’s great cities, New York City must continue to cultivate opportunity and nurture innovation in every field. The Grand Central Canyon will give the city a new vision for future generations. It is better to have a building that is powerful enough to give people a new space, a new skyline, and new urban sublime and stuplime.

Sublime adjective |ˈsblm|  
An object which mixes the elements of large scale, high contrast, dynamic, infinity, and dark that display an extremely powerful tension that generates a reaction of astonishment to subjects.

Stuplime adjective |ˈstŭplɪm|  
From Ugly Things, Sianne Ngai, Stuplime be defined as “the aesthetic experience in which astonishment is paradoxically united with boredom” (P271)

I am interested in the tension between sublime and stuplime. There are two ways to approach the design of Grand Central Canyon. First, the large scale massing will be generated from a series section and plan studies of canyon by considering at the contrast and proportion with site in order to generate a sublime exterior experience. Second, a surface condition will be used as a way to provide the feeling of stuplime. The surface condition will be numerous repeating blocks which be attached on the interior of canyon in order to have low contrast texture scale with highly detail quantity.

A clear plan. An honest wall. One set of unified staircases. Coherent, simple. Yet, they elicit that there is no such a thing as a stable configuration. There is no such a thing as a simple plan.

A square. A square cut in half. A square pinched off at the corner. A square folded in the center. Turn the corner. The other corner. And one more. Is it what you imagined? Four boxes. Simple. Yet not simple at all. Strange, altered, different meaning, use, attitude. Tension. The more you look at it, the more possibilities you are going to see. Primitive? Bizarre? Disorienting? Intense. At first sight. But look deeper, longer. Go inside. Get close. Touch. Feel. See the details. Now go back. See the whole. Details disappear. They are all one. Interpretations are always going to vary. See the connections. The harmony between the pieces. The walls, the ceiling, the stairs, the other stairs, the door. Do you see it? Just go out. Look behind you. Is it what you imagined?

Go back. Now it’s about you. The scholar. The dreamer. The other box. Remember? It’s yours. Tall, open, bright. No walls to separate. Only a field of columns; rolling in the space. Are they holding up the roof? Use your imagination. Actually, use all of your imagination. This is your space. Your room. Your box. Fill it up. Re-imagine it. Re-configure it. Now go out. Take a break. You need it.
This thesis is investigating the possibilities of using personal data of the architect as a way to represent contingency in architecture. Among the many foundations that graduate design education constructs is the potential to understand and experience disciplinary misbehavior based on generational circumstances. The initial instigation of disciplinary misbehavior is an attempt to give architecture relevance again. To do so, it is necessary to overthrow the myth: the birth of the architect must be at the cost of the death of architecture. Analyzing the individuals who make the architecture as much as the architecture itself might start to suggest subjectivities that are in the world which architecture hasn’t found a place for yet; a collection of breadcrumbs that individuals collect.

The thesis is broken into four parts. First, a curated list of different building typology precedents are transformed into rooms. This section focuses on the translation from the meaning or idea of one architecture to another through the medium of drawing. The drawings are attempting to achieve simultaneity and interarchitecturality. Second, fourth wall transformations through the medium of film is an attempt to transform identifiable characteristics into something different, but still maintaining the idea behind those characteristics. The third part of the thesis is the design of a curated house in Antwerp, Belgium, which is a result of combining the first two parts of the thesis. The proposed site is the home of Peter Paul Rubens who designed and built the house in 1610 based on his experiences as a student. The land of the Rubenshuis is used to reenact disciplinary misbehavior in a contemporary context. This site is chosen because there are no positive or pejorative connotations to Rubens architecture, due to his disconnection within the discipline of architecture. Finally, the fourth part of the thesis is devoted to representing a summer report of everything that came into contact with the thesis. Using the application Daytum by Nicholas Felton, the thesis recorded over 1,500 personal statistics that simultaneously represented the process of every part of the thesis and were used as an agent for design within the parts that generate the thesis. Above all else, the investigations presented in the project strive to answer the central question of the thesis: Has digital capacity shifted architecture to complexity and curation; intricacy and the individual?
This thesis explores an idea for an organizational technique of “Implied Continuity,” that is, something that displays an appearance of unity and continuity in form or space but is physically disconnected. In 1993 Greg Lynn posited curvilinear architecture as an alternative to deconstructivist architecture. Lynn stated that in a deconstructivist logic, complexity was produced through disconnection. He believed that through using logic of pliancy or folding in architecture, both unity and complexity could be achieved. Through Implied Continuity, I will try to achieve something that has the “disconnection” characteristics of deconstructivism but with new effects of continuity and unity explored in folded/pliant architecture. Through this, I will explore a new kind of organizational coherence that maintains a certain level of autonomy while simultaneously entering a kind of confederacy—a unity that is not so dogmatically hierarchical.

The technique of implied continuity is essentially trying to create a unity of things through the disconnection of them; this is being explored through the use of lines and solids. There are two (or more) solid volumes that dissolve into lines creating dense field/network. These lines interact with each other and create a gestalt relationship between them that never literally touch. This complex field of lines starts to outline new, “implied volumes”. The original collage of solid, coherent, disconnected shapes starts to blur and transform into a hybrid of lines and solids, creating a larger, unified whole composed of disjointed, smaller parts.
There is an interactive correlation between buildings as architectural elements and streets as urban principles. Traditionally, there has been a clear boundary between these two major factors of an urban system, where they contradict each other. They have always had separate characters, distinct codes and divided regulatory systems.

This thesis seeks to erase this clear border between architecture and urbanism by blurring the edge of the boundaries around streets and buildings. This formation strategy brings urbanism designation and architectural thinking into one singular territory. In fact, they are no longer distinct; consequence is neither architecture where houses accumulate into a city, nor an urban network where the grids lay out an infrastructural carpet. In this city, the grids and its figural deviations are both urban and architectural.

The resulting formal city operates according to an architectural perspective by changing the typical network systems of an urban strategy. Instead of having streets as a connection between buildings, the buildings themselves connect to each other at an urban scale. In other words, streets read as buildings, and buildings read as streets in order to create an architectural urbanism.
MAD ASSEMBLIES

DANNY MASSARO

Advisor: Marcelyn Gow

Modernist values such as efficiency, intellectual and material transparency have encapsulated the curtain wall assembly for generations. Using the modernist curtain wall assembly in an expressionistic way produces a new system that does not concern itself with efficiency but rather redundancy, both structurally and formally.

With the use of three iconic curtain wall assemblies—SOM’s Lever House, Mies Van der Rohe’s Seagram’s building and the most commonly utilized curtain wall system today—this thesis aims to detourne the curtain wall with the effects of profusion and augmentation.

The process of multiple orientation, intersection, aggregation and point and curve attraction create effects that muddle the outline, thicken the envelope, create a shift from efficiency to redundancy and blur the perceptions of inside/outside, transparency/translucency, scale, texture and light.

An enigmatic effect is produced by increasing the perception of depth through the accretion of the assembly. The irregularity of the systems doesn’t produce cohesion but rather produces an imperfect effect of multiplicities.
The paradox in some knots has nothing to do with untangling it, but with how they are tied at all. In knot theory, the mathematical knot differs from the typical knot that we find in daily life, like shoelaces and rope, in which the ends are joined together so that it cannot be undone.

“Most problems — especially the very difficult and ‘knotty’ ones — are never formulated, verbally or visually, clearly enough to understand exactly what needs to be solved, so we tend to throw up our hands in frustration and avoid them. Also a solution is often contained in a well-articulated problem. In any event, we should not let the lack of a ready answer be a reason to avoid asking a question. Indeed, the only questions worth asking are those for which we do not already have an answer.” — Lebbeus Woods

Which leads to the knot and a cube sketch by Woods; the knot engages the cube, so it is difficult to know where the ends are to the knot. As the knot morphs into a more unified figure, the drawing’s narrative becomes one of interaction and transformation.

Through the metaphor of the disentanglement of the mechanical puzzle, certain buildings can transform and loop around themselves, creating a knot that has the possibility to dismantle its component or complicate it. In knot theory, two embedded circles (knots) are considered equivalent if one may be smoothly deformed into the other without any cuts or self-intersections. This notion of equivalence may be thought of as the heart of knot theory.

A cube is the basic form of an architectural problem; using it as a formal device could explore the limits of loops in space within the project. By examining the loops within the cube context, it has lead to the investigation of the looping space which one could travel from point A to point B through a looping form without feeling it, creating an endless building by offering a new way to experience the space in a continuous form.
“We need to take account of the aesthetic features that pervade our interactions with one another and of values that provoke admiration but impose no obligation. The passion for ranking, the fever for verdicts, that has deformed our attributes towards the arts and our lives is simply another manifestation of selfishness.” – Alexander Nehamas

By transforming the normality of cultural objects, their seemingly mundane character develops an unexpected multiplicity of engagement as the adjacencies provoke a sense of gesture and material affairs. The defamiliarization of origins and the perversion of process address an aesthetic sensibility devoted to the engagement of both uncertainty and pleasure. The empathy we feel for emotional dualities such as attraction and repulsion, are notably personified by the French phrase ‘jolie-laide’ defined directly as ‘pretty-ugly’. The aesthetic sensibility of this notion identifies with the emotional transgression of our perception both as an individual (fragment) and as a collective (whole). Within this collective query, the social implications of temporality question the source and re-source of material matters in a culture impeded by waste. By what means may these ephemeral and accessible materials begin to communicate and render personality as the qualitative differences amidst a collective experience?

“The most noble kind of beauty is that which does not carry us away suddenly, whose attacks are not violent or intoxicating. But rather the kind of beauty which infiltrates slowly, which we carry along with us almost unnoticed, and meet up with again in dreams; finally after it has for a long time lain modestly in our hearts it takes complete possession of us, filling our eyes with tears, our hearts with longing.” – Friedrich Nietzsche

The intellectual and emotional sensibilities this thesis addresses are the dominant notions of ‘jolie-laide’ that aesthetically respond to an embodiment of atypical attractions and cultural affinities. Inseparable from the didactic pursuits of affective and or effective design among the arts and architecture are the distinct notions of tolerance. By which the question remains, what is the sensitivity of an audience to accept and understand the uncertainties within any creative process, and the futility in their attempts to rationalize and conclude all there is to see?

“To interpret is to see in things what is distinctly their own. That is in turn to see them in ways that are distinctly our own, and to extend that they are ours alone, these ways of seeing turn out to be aesthetic features in there own right and themselves a claim to beauty.” – Alexander Nehamas
City is fascinating because it is not defined by any particular form nor any particular aesthetic, it is the collectiveness of differences which makes it interesting.

This thesis attempts to bring this sense of city into the scale of an architecture project, as to challenge the prevalence of single form defined architectural project.

The site is located at the Hudson Yards in Manhattan, NYC. This new building will be a Music and Art Center housing multiple performance, exhibition and educational spaces. Each building in the complex possesses its own individuality and autonomy; they do not overpower each other but they are related; they are homogenized and differentiated simultaneously. Ultimately, the assemblage of these different parts constitutes the whole as a project.
LONGHOUSE RECONFIGURED

BROOKE ORSEN

Advisor: Michael Rotondi

This thesis looks to develop a Northwest Native American multi-functional gathering house, using newly developed materials and technologies in conjunction with cultural and social concerns indigenous to the region. By focusing on contemporary precedents that offer alternatives to traditional notions of “static buildings,” this thesis will examine the relationship between how Northwest tribe’s implementation of cedar planks to create “flexible” and “movable” space and similar methods could be used within the scope of contemporary practices in culture and architecture.

Using the original longhouse form as an architectural block, this thesis will work in developing a strict symmetrical formal diagram that resonates with the constant strive towards equilibrium that is indicative of the indigenous ethos of the tribal community. Current longhouse designs generally embody replicas of the original form; this thesis works to critically assess those projects and reconsider the formal approach through the lens of contemporary notions towards anthropological architecture.

There is a cultural resurgence happening within the Northwest Native American communities and this thesis will address this through the development of a large gathering house that accommodates all of the common needs of a contemporary tribal community. The result creates a transient environment that thrives by investigating the consequences of a building that generates form, both interior and exterior, through the transformation of the initial longhouse design.
Los Angeles is often considered the mural capital of the world. While this type of street art has been illegal for the past nine years, the city is currently attempting to draft new laws that will once again legalize mural painting. Although this is a possibility, there have only been minor advancements in the application of murals on building surfaces. As technology has allowed for new forms in architecture, one could argue that technology would be beneficial in implementing the mural design process—creating innovation in the relationship between painted and built forms.

Societies throughout history have experimented with ways of integrating painting and architecture. While these attempts have yielded mostly decorative effects, this project intends to accentuate the role of painting and allow it to affect the architectural language of the building. The result being a hybridized condition where painting becomes volumetric and two-dimensional and three-dimensional objects share interior and exterior spaces.

It is a fact that paintings are confined to the surface to which they are designated. In this thesis, the paintings are designed first and the architecture generated has a relationship to what is applied on its surface. This method enhances spatial diversity as volumetric qualities are produced in selected areas, while others remain flat. Varied techniques are then used to develop a language where illusions originated with painted and sculptural forms are enhanced further with architectural form.

Though different sources inform the project, the focus is on murals as form generators. Though these are commonly painted on flat surfaces, the distortion of space created through painted perspective is amplified through the sculptural process—creating a new relationship between painting and architecture.
OFFICE BUILDING

STEFANO PASSERI
Advisor: Hernan Diaz-Alonso

There is something that recedes - always hidden, inside, inaccessible. – Ian Bogost

[The temple] is a construction around emptiness that designates the place of the Thing. — Jacques Lacan

This thesis focuses on interiority through ideas of mass and centrality. Specifically, it emphasizes interior, mass and center over exterior, surface and periphery—in an attempt to question and update the dominant role of the latter in much disciplinary discourse over the past two decades. The project introduces the interior object as the form, which, although inevitably endowed with an inside as well as an outside, most strongly addresses inward qualities. The torus is chosen as the simplest geometric proposition exemplifying those qualities: blank, monolithic mass in its elevation, pronounced centrality in its plan, unpredicted interiority in its section. By means of manipulating different parameters of this basic form, the torus provides the entire language for the development of the project. There are two working torus typologies: a ‘twisted torus,’ obtained by controlled rotations of surface points and a ‘figural torus,’ obtained by articulating the profiles and rail of the geometry with alternative figures. The effects produced by the intersection of these two objects provide the various degrees of legibility slowly revealing the presence of an unforeseen, receding interiority. The central hollow of the torus remains as the ultimate, inaccessible middle of this more complex form.

The idea of a slowly receding architecture, and the gradual attraction toward the center, are played out at the formal as well as programmatic and contextual level. The project sits in the middle of a site in the middle of downtown Century City and is surrounded by several towers. The towers prevent an uninterrupted view of the scheme from any elevation. It is only by getting substantially closer to the proposal that the intention is gradually revealed. Thus, the site already provides the opportunity for strong centrality and a sense of delayed perception. Programmatically, the project is for a mixed-use office building for a financial institution. The basic diagram, which hovers between the inner courtyard, the tholos and the atrium building, serves to reinforce the formal logic of the torus. To augment the idea of unpredicted interiority, the exterior of the scheme doesn’t hint to any immediate idea of inhabitation from the distance, especially not of the mundane kind described above. As one approaches the building, however, the impenetrable mass begins to suggest program through perforation and by means of subtle printed images of the interior spaces on the exterior surface.
This is a demonstration of how the rise of digital technology and the shifting ways we connect to each other via social media can allow us to manipulate program and scale to respond to evolving social conditions.

With the rise of digital communication, face-to-face engagement that was once taken for granted has fallen to the wayside, but is nonetheless a valuable method of communication, to share ideas and information, and to have productive debates. Because the few rule the many, political assemblies are typically based on a representative/constituent relationship; the individual voice becomes filtered as it reaches the speaker. However, as digital communication and social media become integrated in society, we see that individuals have the capability to represent themselves. These newfound communication methods have created a platform that allows the individual to share ideas, information as well as offer the ability to debate without the need for a proxy.

Since it is established that there is a value in interpersonal communication, the question arises of how to connect the billions of individuals in a way that would match the scale of a digital communication network and simultaneously work in tandem with it. This project proposes to take the political assembly hall, as we know it, and atomize it so that it creates a physical network that is aided by the virtual network and a building that provides a platform for the individual. This is a project that will break the object, take the atomized parts, reconfigure and bring them back together to become whole again, creating part to whole relationships. The atomized agora is accomplished by designing physical spaces that connect with spaces that exist elsewhere to create a whole three-dimensional space using a limited two-dimensional plane as a gateway.
Typically, a monolithic structure is solid, unbroken, rigid, invulnerable, and whole. A true monolithic piece of architecture is large and unified with no recognizable parts. This investigation deals with displacing and dislodging both formal and organizational aspects of a building while retaining a sense of wholeness.

**Singular vs. Multiplicity of Form**

There’s a possibility that forms within architecture can give it a sense of continuity through different cultural and spatial qualities. Distinct isolation from the main body emphasizes the “strategic break” while the articulation of continuity concentrates on smooth transitions. Surface continuity reduces the broken elements and focuses on the larger element of the whole.

**Articulation vs. Continuity**

For articulation in architecture, there is no single geometrical formula to create proportional harmonic regulation in spatial forms and how those parts are associated with each other. So each part is united with the whole by means of styles ranging from exceptionally distinct jointing (continuity) to the opposite of high articulation (separation).

The expression of joints in a building reveals how the parts fit into the whole by emphasizing each part separately. Articulation accentuates the visible aspect of the different parts of a building. Sometimes the effect completely obscures the sense of the whole, breaking it down into too many pieces, but in most cases the articulation expresses a balance between the two. The result may potentially be harmonious, as the fused forms are closer to the form of the human body.