

A COMPARISON
OF PRINCIPLE AND CONCEPT
APPLICATION

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BY LYDIA BRAWLEY-MAGEE

Creativity is shaped by the mentors and creators that come before us. They design the principles and concepts that influence our modern world. Through this presentation I seek to take these mentors and pull out their principles and concepts that inspired my own work within the context of design and architecture.

LE CORBUSIER

Le Corbusier (1887-1965) is a Swiss-French Architect, renowned for being a founder of modern architecture.

His work, *La Villa Savoye*, in particular contains many of his principles of modern architecture, including “ribbon windows” to encompass more light and “pilotis,” or effortless columns.

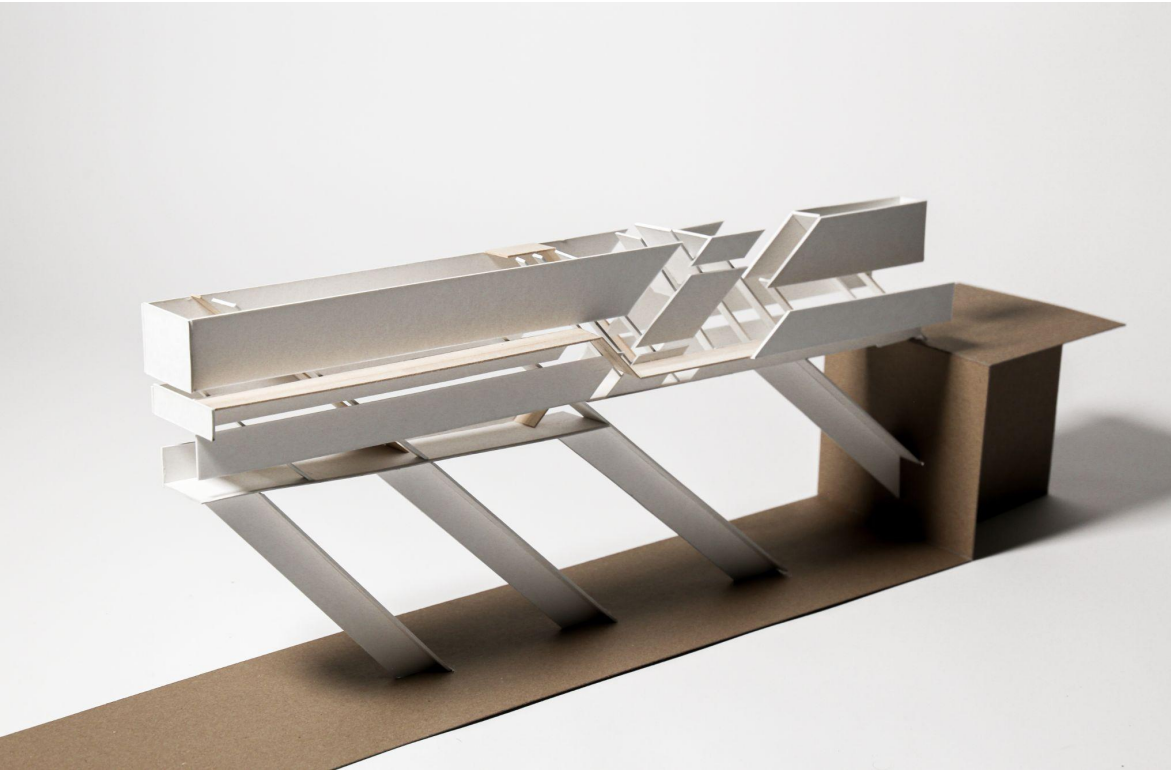


LE CORBUSIER

La Villa Savoye - Poissy,
France



BARGE ON A PRECIPICE



Inspired by the verb “shear,” this piece was designed in-class, as a pier to sit above the water and house a single inhabitant. Light was a primary focus in this project, especially as angular baffles direct light into the spaces, as well as width, which breaks the simple symmetrical design and adds a layer of complexity while maintaining precision. To both add structure and enhance the motion of the piece, inclined T-beams were used for primary support, giving the illusion that the piece is poised on a precipice, defying gravity.

It is through this work that I incorporated and reflected Le Corbusier’s principles in my own work, though my own ribbon windows, light incorporating architecture, and effortless, gravity-defying columns.

EILEEN GRAY

The Irish designer and architect, Eileen Gray (1878-1976), was considered and now holds a position as a competitor to Le Corbusier. Her designs were groundbreaking at the time, and as one of the early modern female architects, she challenged not only design, but gender expectations. Her personal villa highlights her renowned pieces, the *Bibendum* and *Transat Chairs* which represent her modern, minimal, and sleek design.



EILEEN GRAY

*Personal Villa with Bibendum
and Transat
Chairs -
Roquebrune-Cap-Martin,
France*

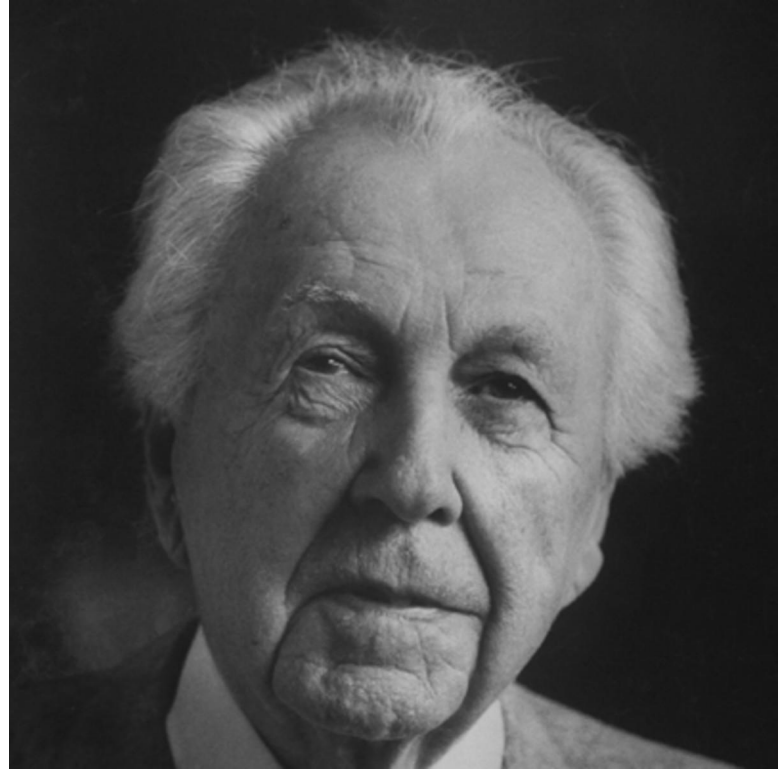




The three images depict the three models that led to the final design of the Barge as I worked away from my symmetrical interpretation of the word "shear," eventually manipulating the width and height of my facade and baffles. The concept originated from my kinetic interpretation of "shear," with a ripping and cutting movement; while the structure was simple, the shadows of my models engaged me and proved a useful lesson for future interpretations: working with light to add complexity. These practice models encompass Gray's design concepts as minimal and sleek forms build into greater complexity.

FRANK LLOYD WRIGHT

Frank Lloyd Wright (1876-1959) is considered the American founder of mid-century modern design. Despite his more known works, his under-appreciated, *Bachman Wilson House*, built at the end of his life. I chose this structure because of its sense of space. This home in particular shows a deep understanding of light and line as it forces the eye across its long lines towards the large windows.





BARGE PERSPECTIVE



An additional perspective of the Barge highlights the interior baffles and interplay of light.

This perspective photograph highlights the concepts that Wright used in his *Bachman Wilson House*, including baffles to diffuse the light and long horizontal windows that draw the eye across the structure.

PETER EISENMAN

American architect, Peter Eisenman (1932-today), is known for his high modern and deconstructionist designs.

His *City of Culture Galicia* is a complex center for culture, blanketed by deconstructionist hills. The stone and concrete slabs form both walls and ceilings for the interior enveloping and transforming the countryside geography. This particular work of Eisenman's displays his deep understanding of form and shape as his structure undulates on the hill.



PETER EISENMAN

*City of Culture Galicia -
Galicia, Spain*



FORM SKETCH

Initially an observation of light on form, this piece developed into a practice of line control and shading. An independent project, drawn from life forms, I first sketched the proportions of the dancer and then moved on to develop the subtleties of fabric, musculature, skin, and shade.

While a simple sketch, this work encapsulates a deep understanding of form and light, just as Eisenman does with his *City of Culture Galicia*.



ZAHA HADID

Zaha Hadid (1950-2016), an Iraqi-British architect, is known for her astonishing and geometric and gravity-defying designs.

Her *Heydar Aliyev Center* represents a common theme with her work of graceful and polished form, creating structures that capture light intensely. As one of the first well-known, if not famous, female architects, I admire her for defying the structure of gender roles in architecture and the structure of the built world itself.



ZAHA HADID

*Heydar Aliyev
Center - Baku,
Azerbaijan*



ENVELOPED

This piece is a study of how fabric moves in light as it envelops the human form. Tailored panels were constructed first and then details were sewn to emphasize the surface articulation, and while using recycled linens, the main focus of this project was to combine function with form, to create a classic silhouette. This piece reflects the understanding of polished form that was so critical in Hadid's work. Both "Enveloped" and *Heydar Aliyev Center* utilize the movement of light on organic form.



DIGITAL PERSPECTIVES ON BARGE

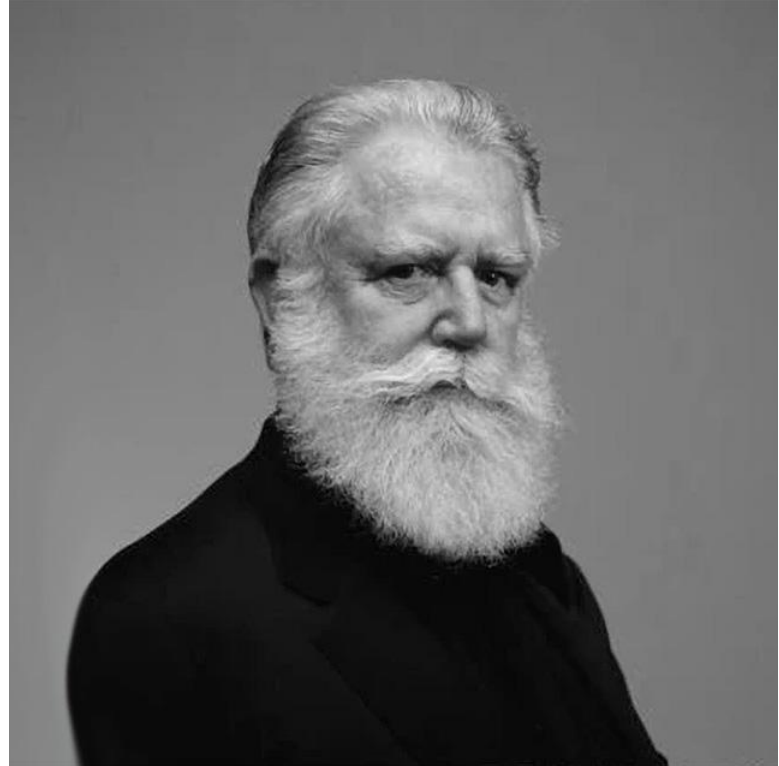
Through digital platform I explored the perspectives and the experience of the Barge on a life-like scale. Created in Rhino, I divided my main pieces of facade, intersecting them with my structural pieces, and finally adding the details.

The “Barge” project relies heavily on the use of effortless, graceful structure, just as Hadid used with many of her projects.



JAMES TURRELL

James Turrell (1943-today), an American artist and designer, is known for his use of light. His delicate and graceful use of color and light creates a hypnotic and dystopian sense of surrounding. In particular, his Guggenheim and Louis Vuitton exhibits depict a higher level of mesmerism and emotion, as well as a controlled use of color.



JAMES TURRELL

Guggenheim Exhibit - New
York, New York, United
States

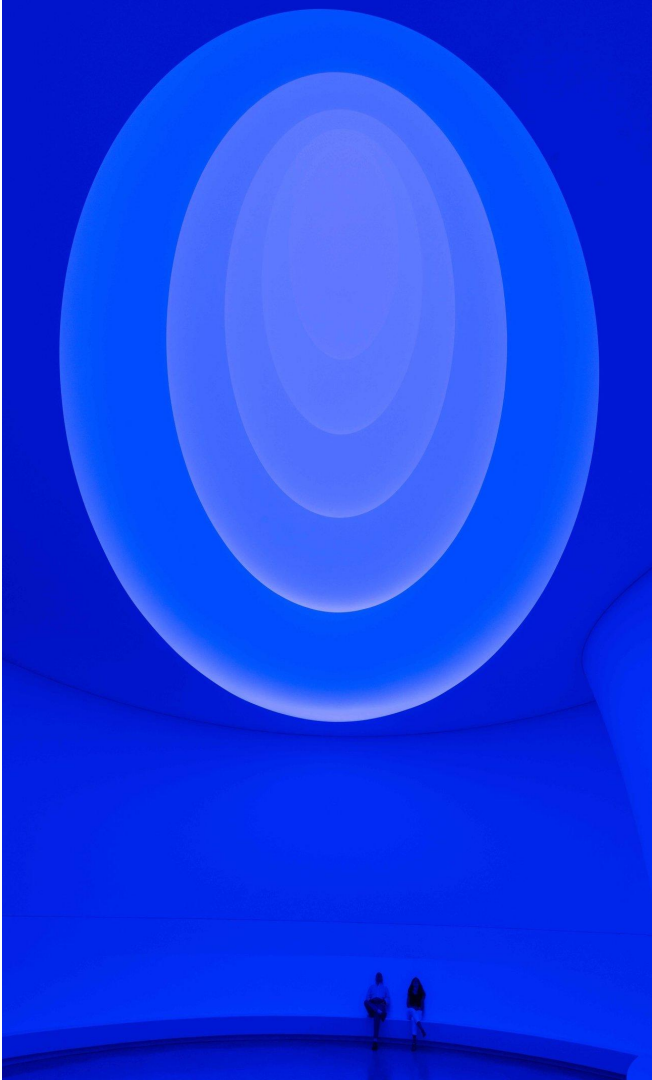
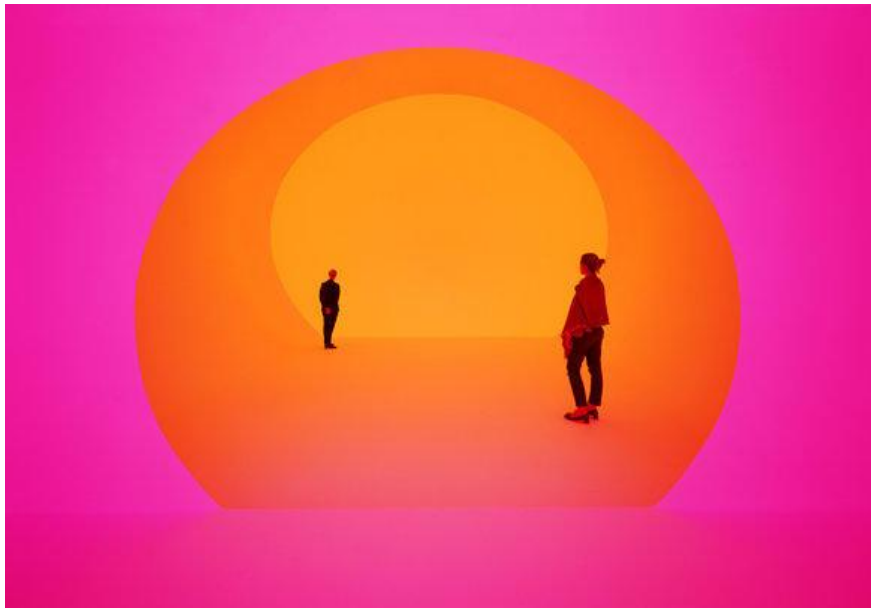


JAMES

TURRELL

(Left images) *Akhob*
- Paradise, Nevada,
United States

(Right image)
Guggenheim Exhibit
- New York, New
York, United States





CHUCK CLOSE SELF-PORTRAIT

An in-class project, this self-portrait was painted from inspiration from Chuck Close. Initially, I analyzed a photograph, creating a grid and analyzing each square, translating this onto the canvas. After this translation, I painted base colors, adding concentric shapes of differing values within. I then went in with the darkest color of that square to border the rim.

Although rare to find in architecture, color has become a staple in Turrell's work, and inspired me to include one of my few colored pieces. Chuck Close's style uses color in a specific way, using the darkest color of every square to outline the unit, using monochromatic tones to shape each feature of the larger picture.

VALERIO OLGIATI

Valerio Olgiati (1958-today) is a Swiss architect, renowned for modern and minimalist architecture. Olgiati's *Villa Alem* embodies his clean design aesthetic with a touch of playfulness. Shaped and sheltered by a box, the outer walls block any exterior viewer so they cannot discern the inside of the structure. This sense of privacy intrigues the viewer to look inside and keeps a continued sense of curiosity.







INTERSECTIONAL BASKET

For hundreds of years, baskets have served and survived through many cultures and times, a symbol of human ingenuity, and I wanted to create a modern and structural piece that serves to remind us of this intersectionality of human culture. An aim of the construction was to allow open space, while maintaining structural integrity; hand-built from coils, this basket was made from clay with a higher percentage of sand for increased strength.

My Intersectional Basket reflects Olgiate's clean design with a cloudy white glaze and solid structure. It also reflects his playful and curious design as the Basket has a childlike and pillowy form.



SOO K. CHAN - SCDA

Soo K. Chan (1962-today) is a Singapore-based architect renowned for his interdisciplinary designs which combine architecture with interior, landscape, and product design.

His *Cluny Park Residence* has Chan's unique use of light. Behind the glass facade, light emanates from the interior, drawing the observer inwards in a very curious persuasion. The structure also sets a vertical hierarchy with the facade's steel fractures that uphold the front.



*Cluny Park Residence
Gallery - Singapore*



PITCHER



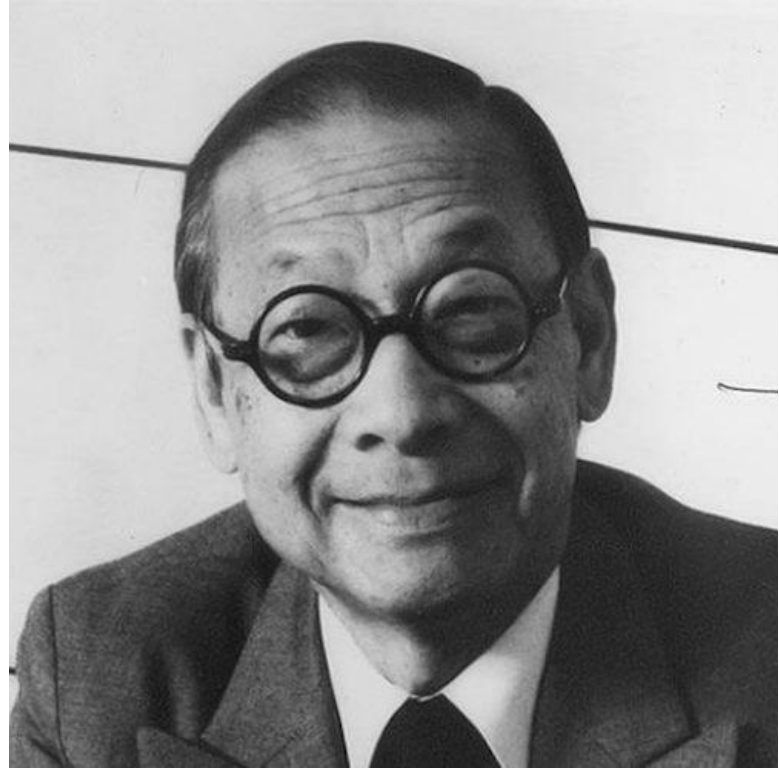
While functional, the focus of this piece is in its surface articulation. Built from a slab and altered for function, I used a hook tool to carve vertically into the exterior of the piece.

Like *Cluny Park Residence Gallery*, my pitcher exhibits a vertical hierarchy that draws the eye upwards. Additionally, by exhibiting the piece with a matte glaze it has its' own unique use of light by forcing shadows into the ridge lines, not to be reflected on the surface.

I.M. PEI

I.M. Pei (1917-2019) is a celebrated Chinese-American architect, known for his monumental, city-defining work.

His designs, especially his *Louvre Pyramid*, display a unique use of context as old contrasts new. The glass pyramid emerges from the surrounding Louvre Palace, built in 1546. This juxtaposition of a modern and napoleonic era provide for a graceful continuity of context.



I. M. PEI

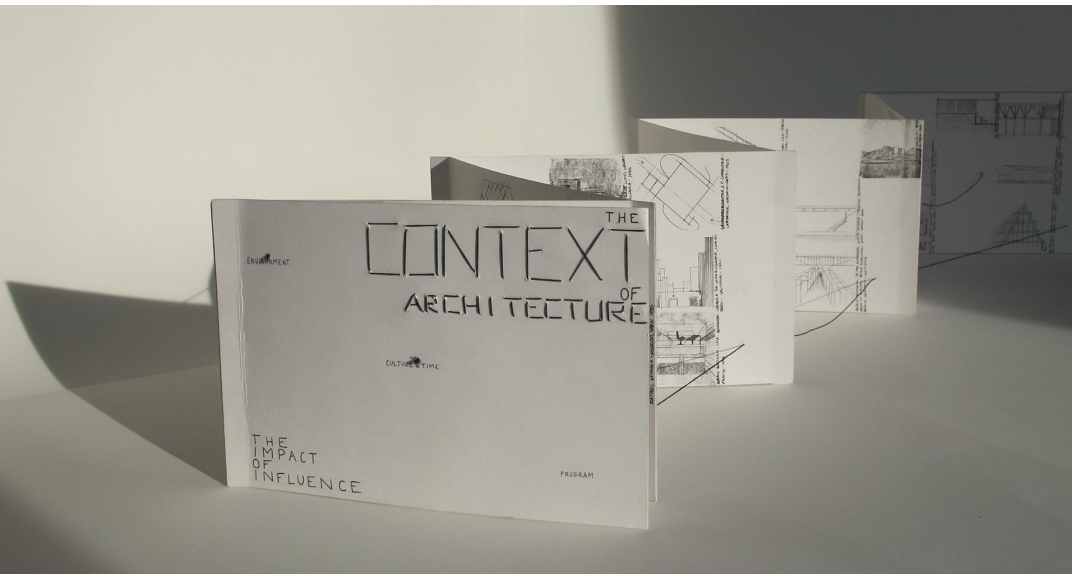
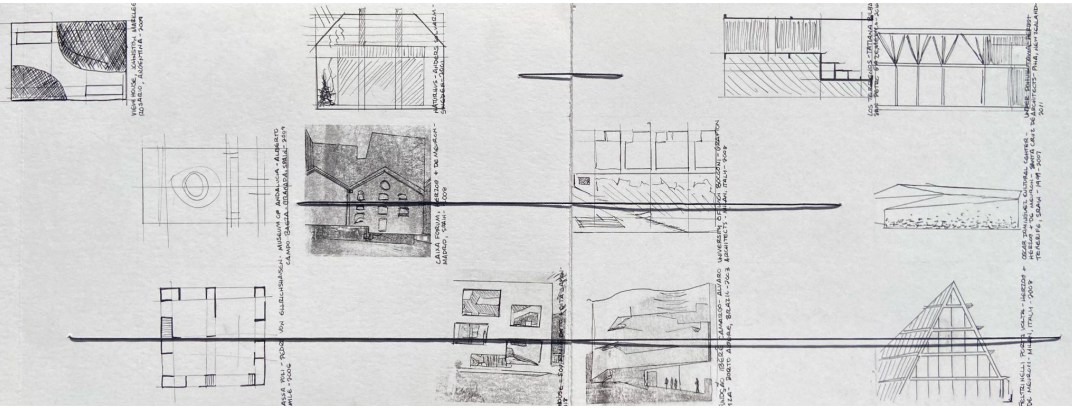
Louvre - Paris, France



CONTEXT THROUGH TIME

The intent for this piece was to explore three aspects of context: program, environment, and culture as they relate to time. By fabricating an accordion book, I could display these three facets of context separately but simultaneously, incorporating thread through the pages suggests a continuity of time and a relation between independent research and projects discussed in lectures.

While not physically representing a changing of age like my previous work, this accordion book observes the change in context over time that is so critical in I.M. Pei's work.



REM KOOLHAAS

Dutch architect, Rem Koolhaas (1944-today), is known for his defiant and creative designs that spur controversy in the architectural world.

Koolhaas' *De Rotterdam*, perfectly encapsulates his deep understanding of space: as a structure interjects the world, it must practically program its capacity.

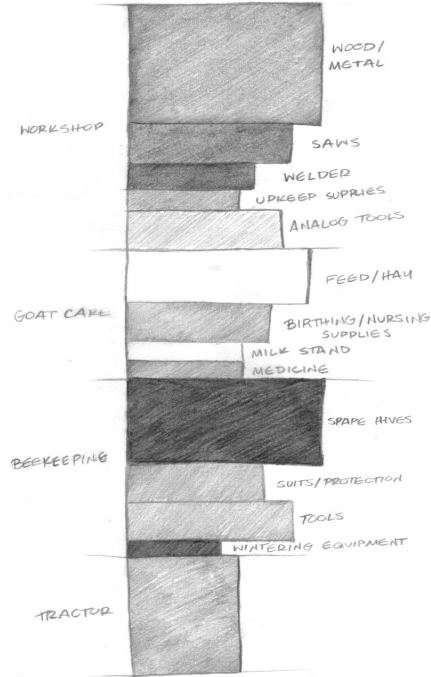
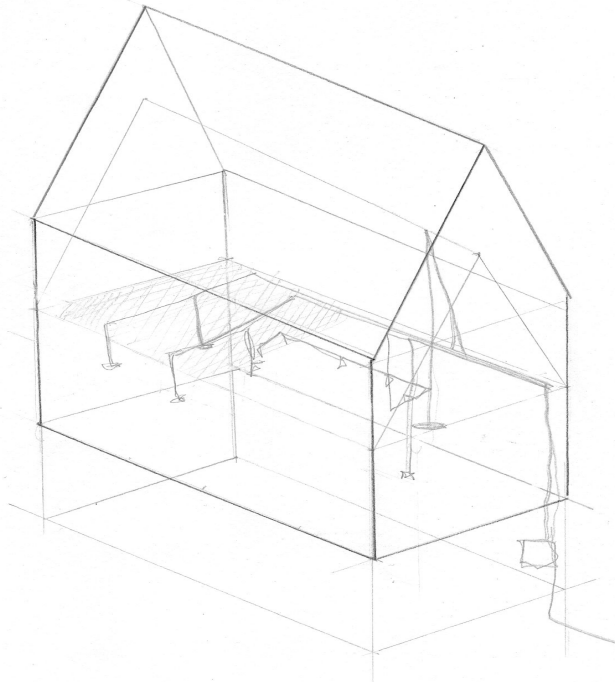


REM KOOLHAAS

De Rotterdam - Rotterdam,
Netherlands



ANALYSIS AND ABSTRACTIONS OF BARN

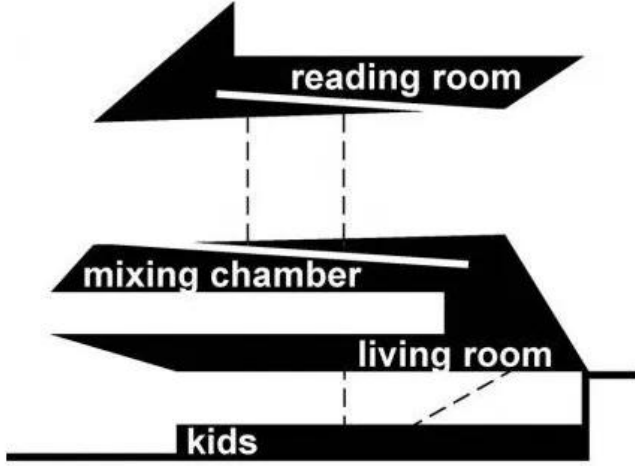
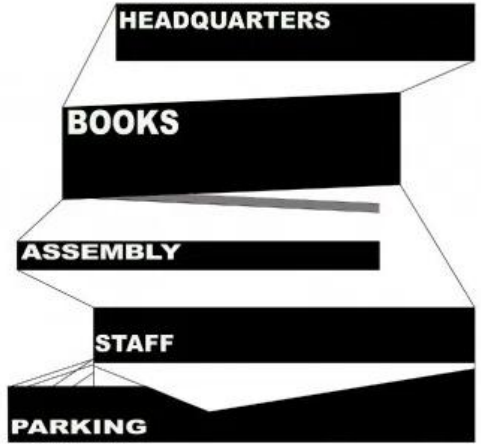
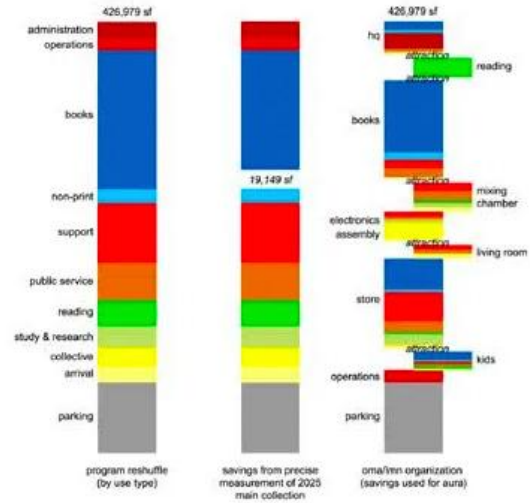


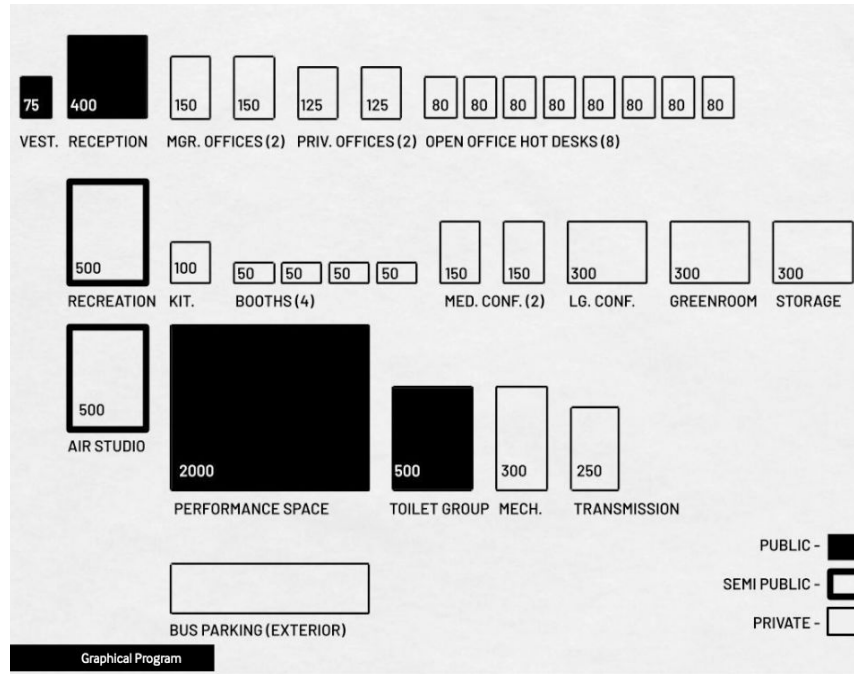
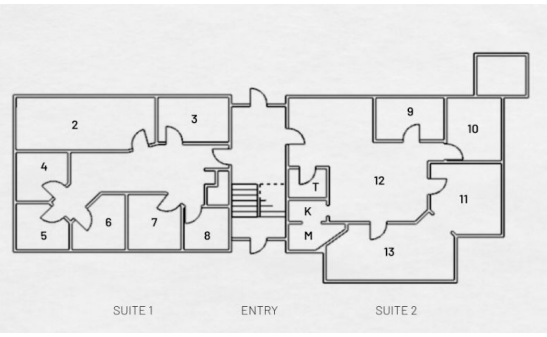
Over the past 18 months, I assisted my family by designing a multi-use pole barn. Depicted is a (left) representation of the electrical systems in the building that we designed and installed, (center) an analysis of the program for the build corresponding to frequency and space, and (right) the barn in progress.

This program analysis attempts to understand Koolhaas' interpretation of how a space is used in *De Rotterdam*, especially in the context of its environment.

REM KOOLHAAS

Seattle Central Library -
Seattle, Washington, United States





As part of a collaborative team, I worked with VMDO Architects as an Intern Architect under Kenneth Thacker, Principal Architect; we designed spatial solutions for a local radio station, WNRN. I assisted by creating the two primary images (top left and right) and helping to calculate a scale representation and programming study. The bottom left depicts the current space.

This analysis is a parallel representation of spatial programming Rem Koolhaas used when building his *Seattle Library*, so that circulation and productivity are simplest.

NERI OXMAN

Neri Oxman (1976-today) is a renowned professor and designer. Her work is known to have a nature-centric focus, as she combines design with engineering, biology, and materials engineering. Her firm creates the materials and designs of the future. Her *Aguahoja*, is a 3D printed, organic structure, and she used biopolymers to replicate the veins of a wing, or leaf, capturing the light as the cocoon wraps upwards. By using sustainable materials, Oxman was able to create lasting products that capture movement.



NERI OXMAN

Aguahoja - MIT, Boston, MA





A MODERN GILDED AGE

The form for this piece was inspired by the high, pleated necklines seen on women from the Gilded Age, a similar era to our own, where there was exponential growth in industry, and rapidly increasing amounts of waste and pollution produced. I wanted to create a modern take, not only on the classic neckline, but to also draw parallels between the United States' waste production then and now; utilizing textile recycling, this dress helps set a precedent for lower cost, lower-impact, and longer-lasting clothing to join the push against textile waste.

While not creating my own textile, by reusing fabric I continue the same environmentally-conscious principle of Oxman's. This piece also uses similar techniques between draping and veining which draw the eye up with the light.



A play on the word “zephyr,” which means both a soft wind and a delicate cotton, this piece exhibits movement while remaining functional. I crafted a simple, box pattern that minimized the amount of recycled linen needed.

Just as “Gilded Age,” “Zephyr” uses recycled textiles as a way of reclaiming material for a sustainable purpose. This piece uniquely uses the materials to create a sense of movement and constant rhythm, similar to the “wrapping” feeling of “Aquahoja.”

DAVID CHIPPERFIELD

David Chipperfield (1953-today) is a pritzker-prize-winning architect. His work is known to have a focus on sustainability and equity; founding a philosophy that “architecture is more important than architects.”

His design expertise ranges from coffee pots and briefcases to monumental museums. No matter the project he works on, he prioritizes practicality, sense design and architecture are intended to be enjoyed by the public, not prohibit the public.



DAVID CHIPPERFIELD

Moka Coffee Pot





With this teapot I wanted the piece to tell a different story from each perspective: from overhead, this piece holds relative symmetry, at elevation, this symmetry is disrupted by the different forms for the spout and handle. This teapot was first created on the wheel for the main, rounded form, then adding on a spout, handle, and lid, and glazed with a minimal and muted white.

This teapot reflects the simplistic and clean design style of David Chipperfield, while minding the experience of the user.

DAVID CHIPPERFIELD

Case Family



A PLACE AT THE TABLE

Built over a series of years in a ceramics class, these pieces were created as independent projects, culminating in a final collection of dinnerware that mixed form and function. Some pieces began with slab, others on the wheel, each with their own ceramic techniques; I glazed my work with four different tones of the same color palette, creating a cohesive tonal relation with a consistently matte finish.

Chipperfield's *Case Family* represents a collection of related products, just as "Place at the Table" does, that works to primarily deliver practicality with integrated and beautiful design.



OVERVIEW

This booklet represents hours of deep research, creation, photography, and editing. I wanted to create something that encompassed the creators that inspire me and observes how exactly their work has impacted my own. After applying to architecture school and working to collect and exhibit my work visually, I wanted to make a base of references and inspirations that I can use for my own designs. I truly think that I have made a collection that represents my values and my tastes. Now, I hope that my work can additionally serve as inspiration for young architects and designers.

