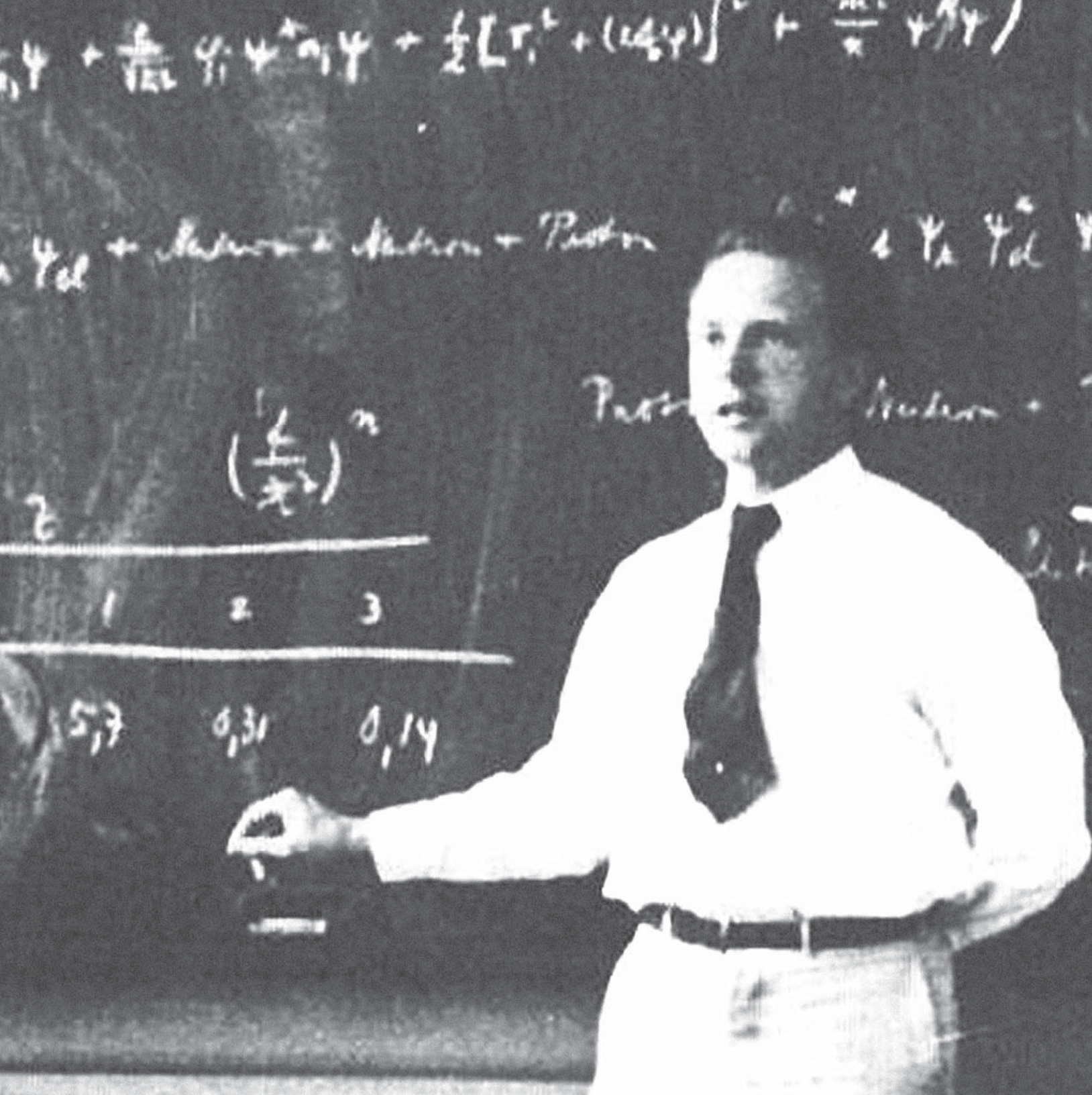






“Heisenberg was left to mull things over himself. He had a shocking but clear realization about the limits of physical knowledge: the act of observing alters the reality being observed.”



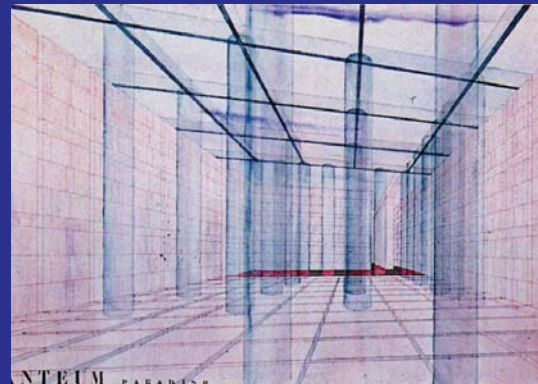
$$\psi + \frac{1}{\sqrt{2}} \psi_1 + \frac{1}{2} [\tau_1^2 + (\sigma_2 \psi)] + \frac{m}{\hbar} \psi \psi$$

$\psi_{el} + \text{Neutron} + \text{Proton} + \psi_2 \psi_{el}$

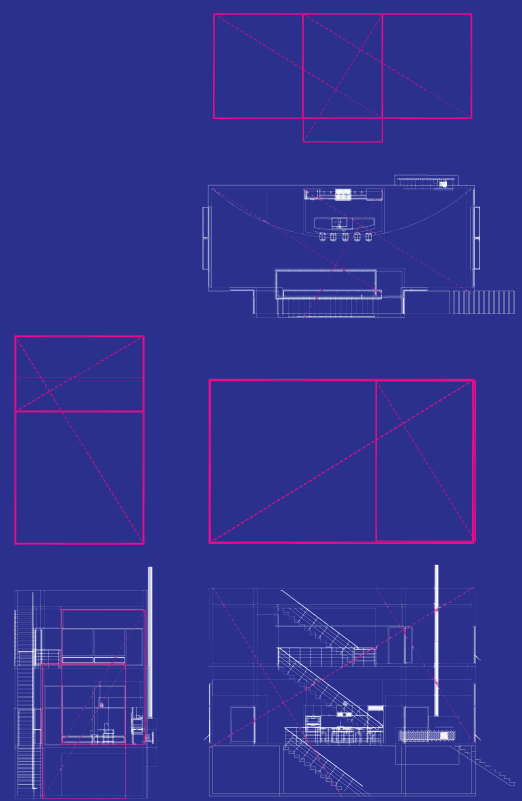
$$\left(\frac{1}{\sqrt{2}} \right)^n$$

n	1	2	3
	5,7	0,31	0,14

CASA PARADISO
San Francisco, CA



Giuseppe Terragni, The Danteum, Paradiso



Casa Paradiso

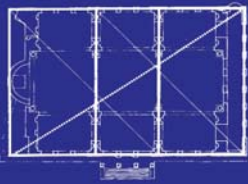


FIG. 90. Basilica of Maxentius.
Overlapping squares.

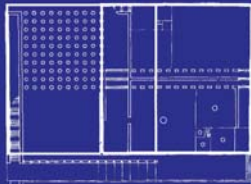


FIG. 91. Danteum, initial phase
of the displacement.

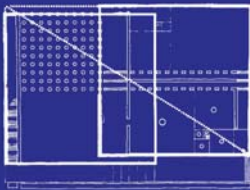


FIG. 92. Danteum, second shift.

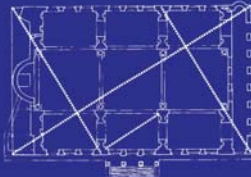
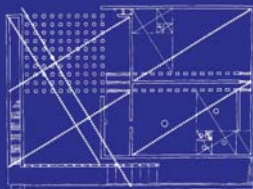


FIG. 93. Basilica of Maxentius, breakdown
of golden section rectangles.



Designed for an investment banker, his wife and daughter, this project began as a study of Giuseppe Terragni's Danteum. This project attempts to mediate between the San Francisco victorians and Terragni's project. The Danteum was conceived as museum to Italy's greatest author, Dante Alighieri, and was designed as an allegory of his greatest work, the Divine Comedy -- Inferno, Purgatorio and Paradiso.

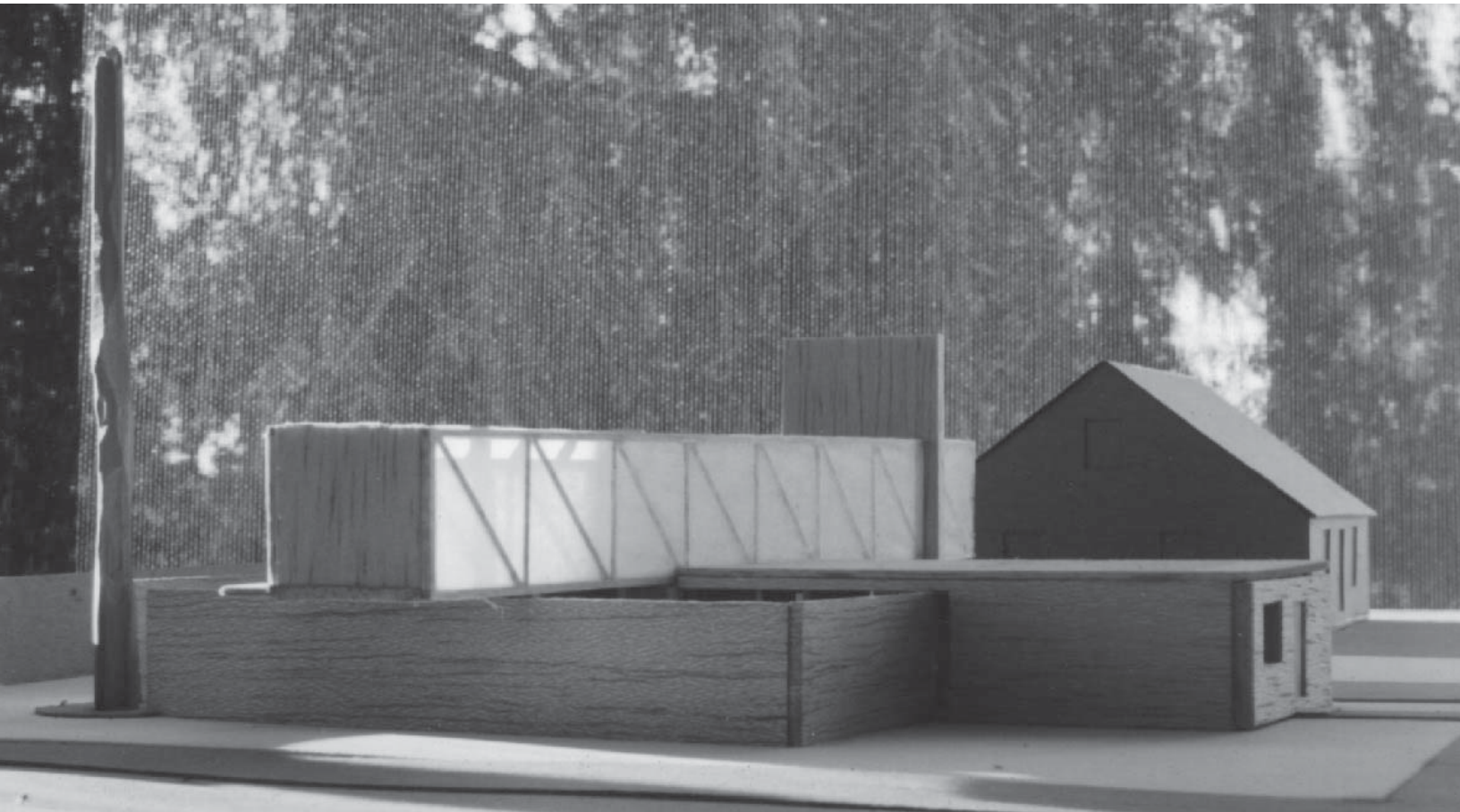
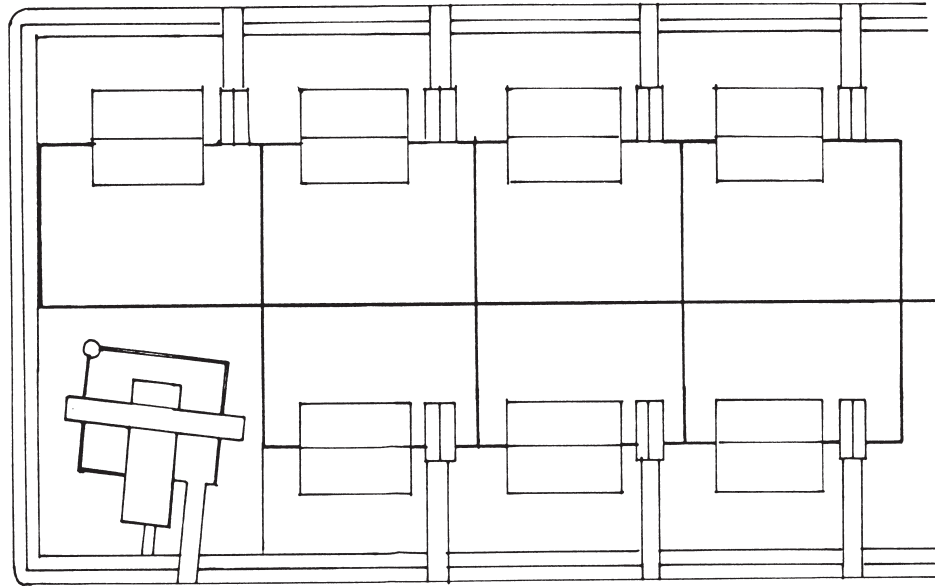
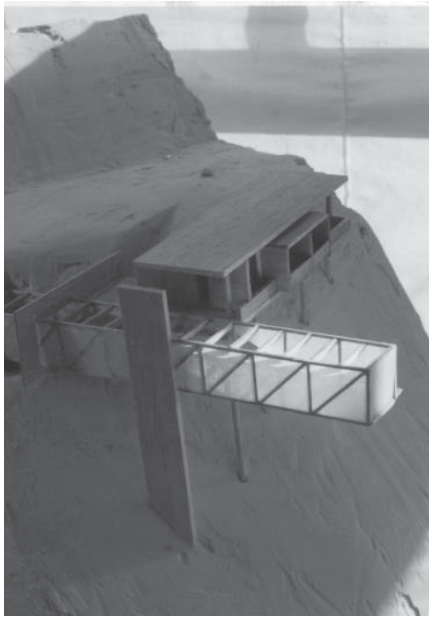
This project was a careful study of the proportioning systems and metaphors engaged by Terragni (Paradiso in particular). This proved particularly challenging due to the vertical nature of Casa Paradiso versus the horizontal procession of the Danteum. The swimming pool/skylight alludes to Terragni's glass-columned and roofed room which terminates the procession to paradise.

ARCHER'S HOUSE Levittown, NJ



This project consisted of one program for two houses on two sites (Levittown NJ and Northern California). Designed for a 19 year old Olympic archer, and a practicing Zen Buddhist, the program was spartan with the exception of an archery range.

The Levittown house was near her parents and would be used while visiting them. The northern California home was to be her primary residence. The archery ranges are aligned 'as the arrow flies' between the two homes signifying that it is the trueness of her shot that allows for her journey from New Jersey to California.



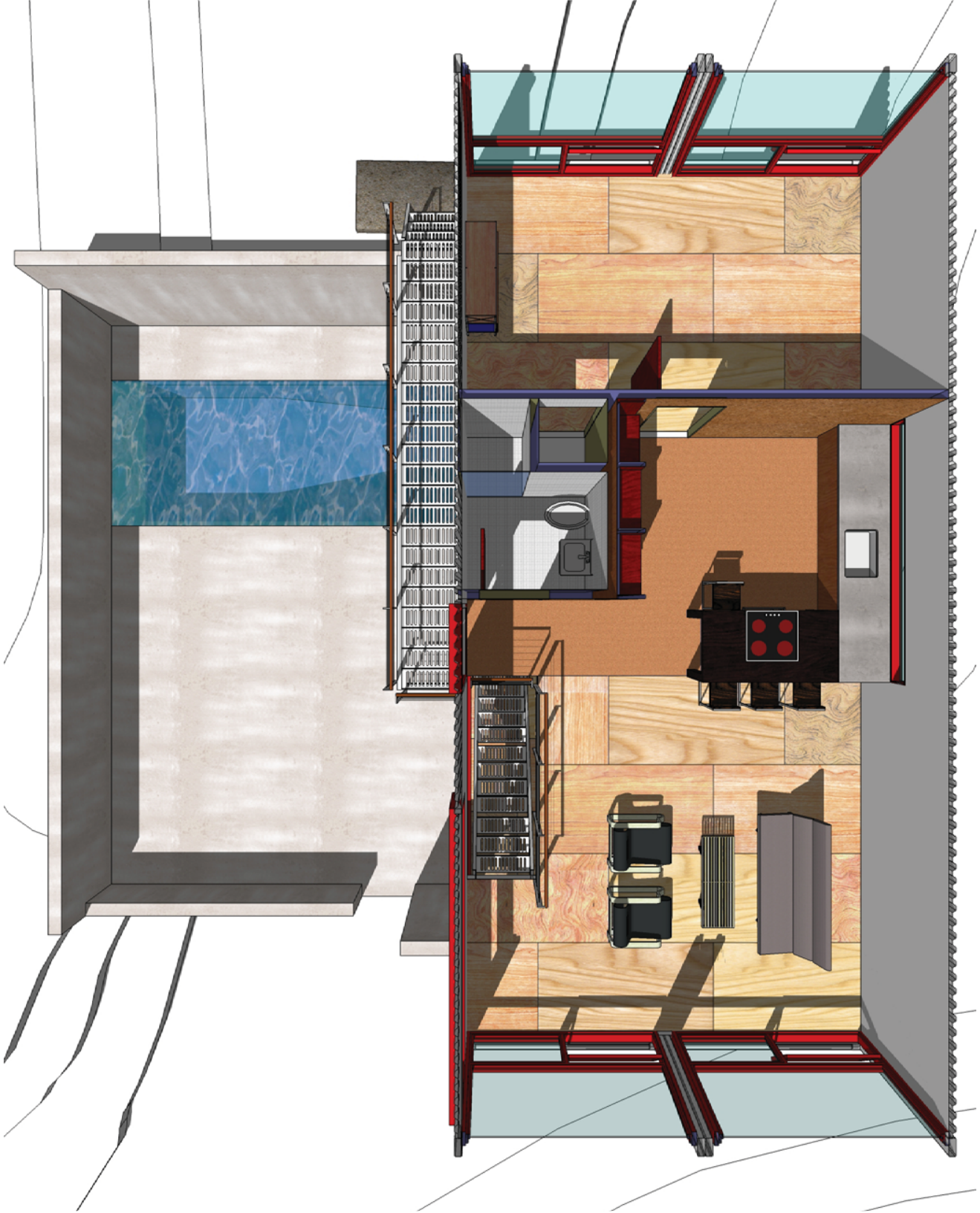
CONTAINER HOUSE

Bristol, ME



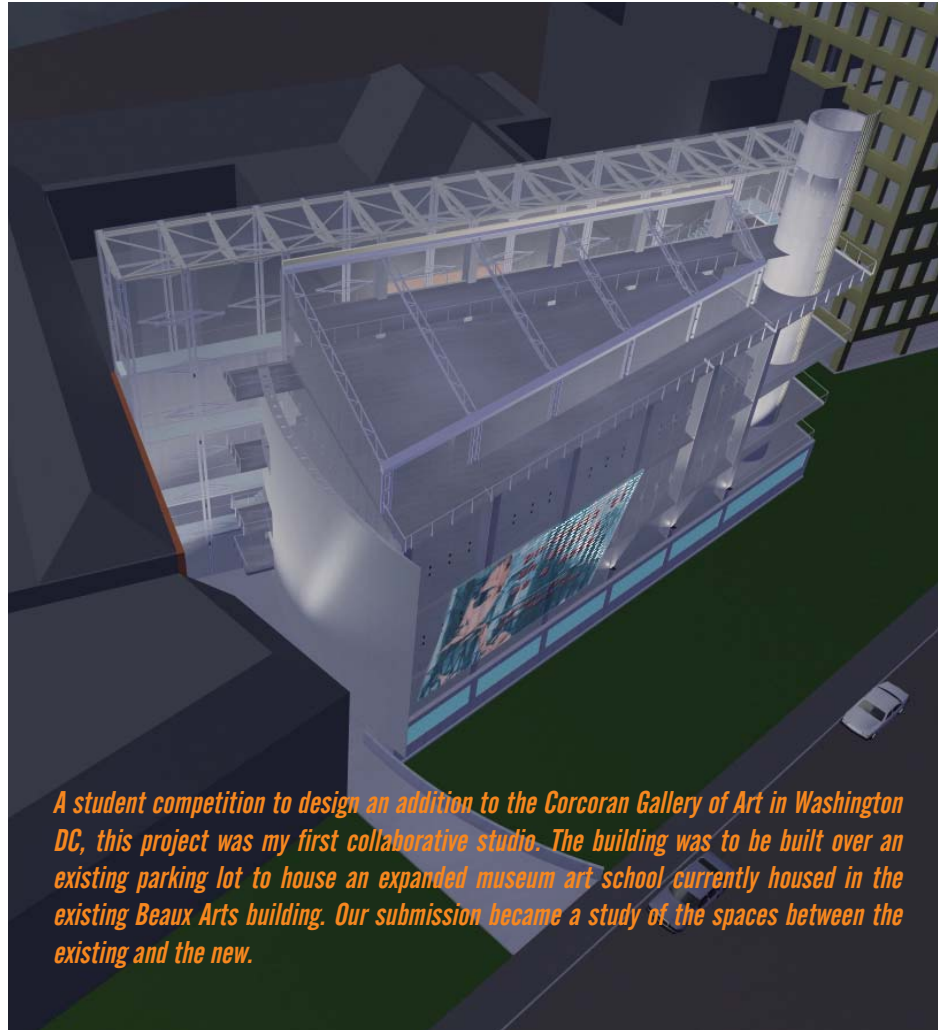
This exercise was primarily used to teach myself Sketch-Up modeling software. Also at the time I was reading a lot about using shipping containers for low-cost housing prototypes. I wanted to see if I could design a shipping container home for a program I developed for myself (a summer house in mid-coast Maine) on a real site. I wanted to produce a design that I would, given the means, be willing to build for my own use. Ultimately I wanted to push the software to its point of failure while at the same time trying to find its expressive range.



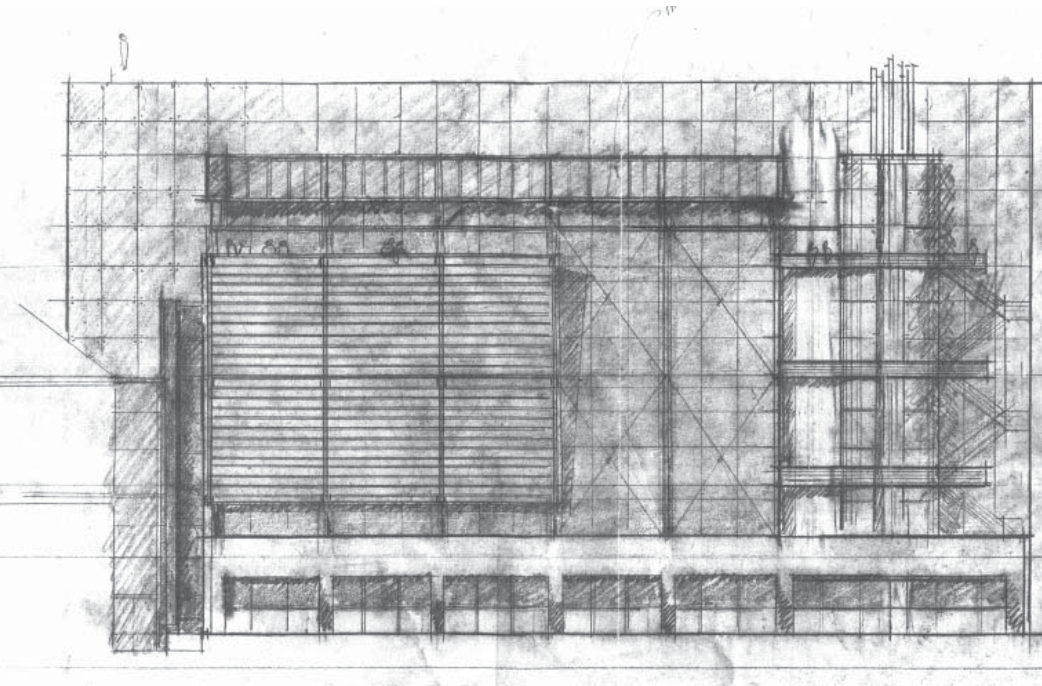


CORCORAN MUSEUM SCHOOL

Washington DC

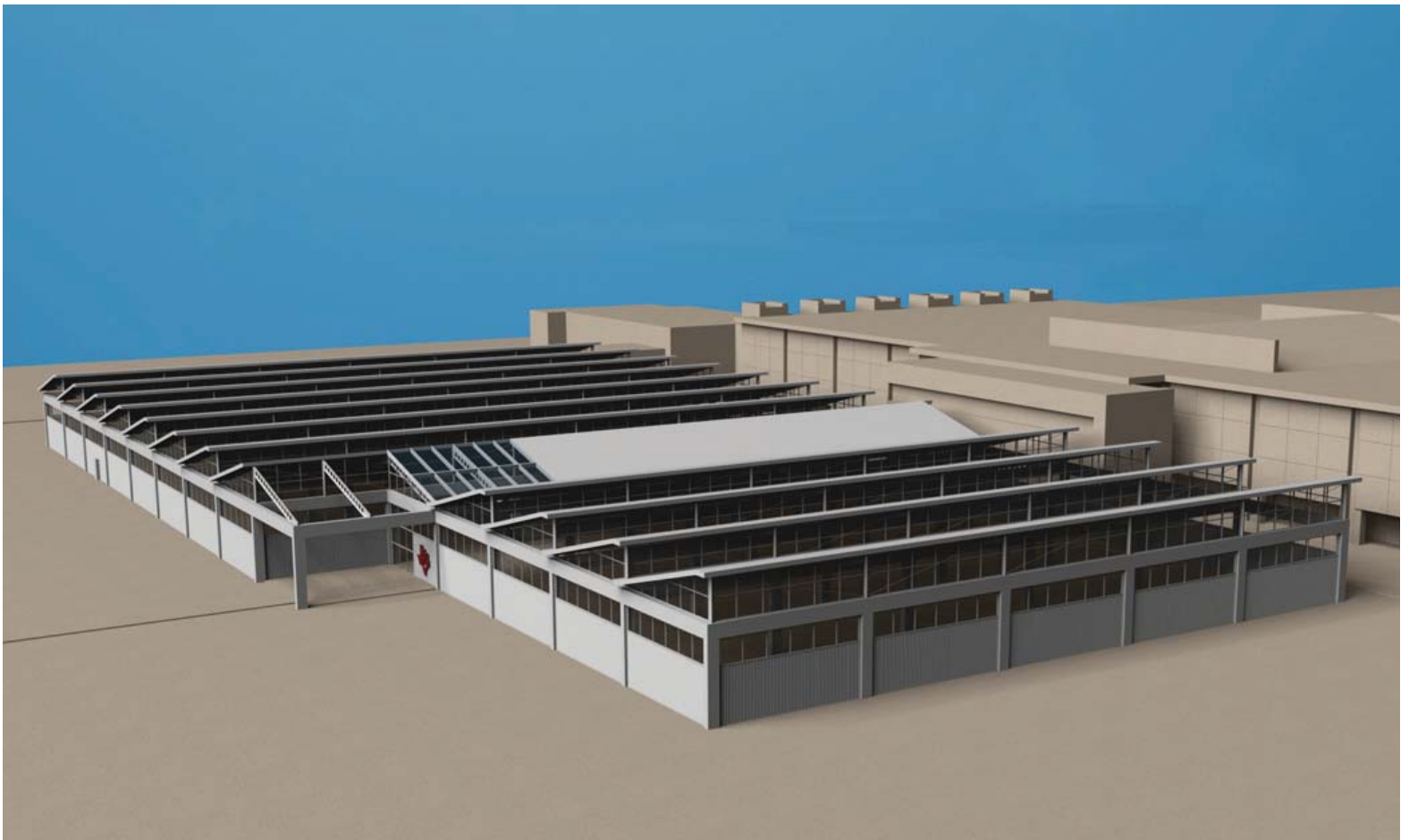


A student competition to design an addition to the Corcoran Gallery of Art in Washington DC, this project was my first collaborative studio. The building was to be built over an existing parking lot to house an expanded museum art school currently housed in the existing Beaux Arts building. Our submission became a study of the spaces between the existing and the new.



HIGH-PURITY FACILITY

*South Attleboro, MA
Process Facilities, Inc.*



This computer model was produced for a conceptual study for a new high-purity manufacturing facility replacing the existing facility in the background. This is a conceptual model I designed and built based on block diagrams developed with process/industrial engineers. The existing facility was rendered in “chip board” and the new facility was rendered in “museum board” to give the appearance of a traditional model to keep the dialog with the client in the conceptual realm rather than detail design.

VACCINE PRODUCTION FACILITY

Union, NJ

Process Facilities, Inc.



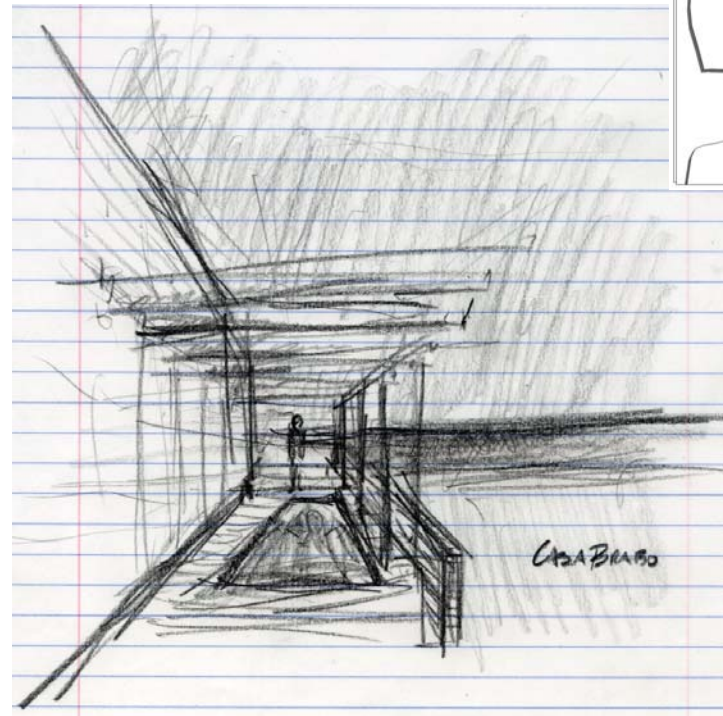
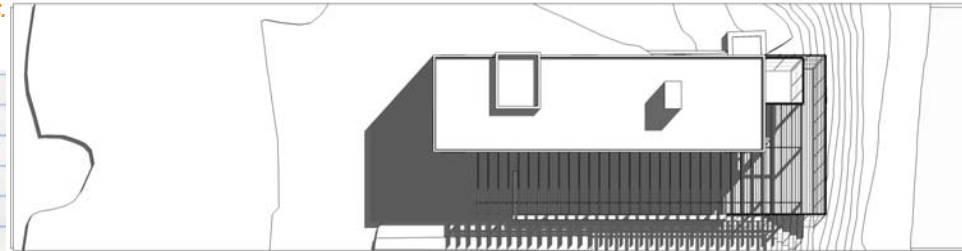
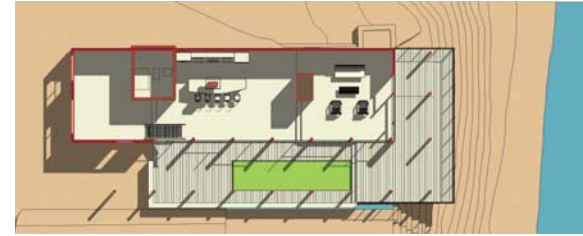
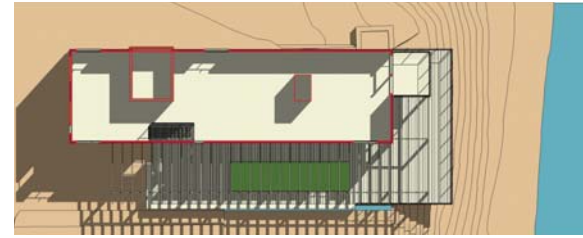
This project was a production facility addition (foreground) to an existing laboratory facility (background). I designed the production facility elevation (pressure resistant construction) and the office “knuckle” that connects the two wings. I also produced all of the architectural models and renderings of this project.

CASA BRABO
Ipswich, MA
KJ Savoie, Architects





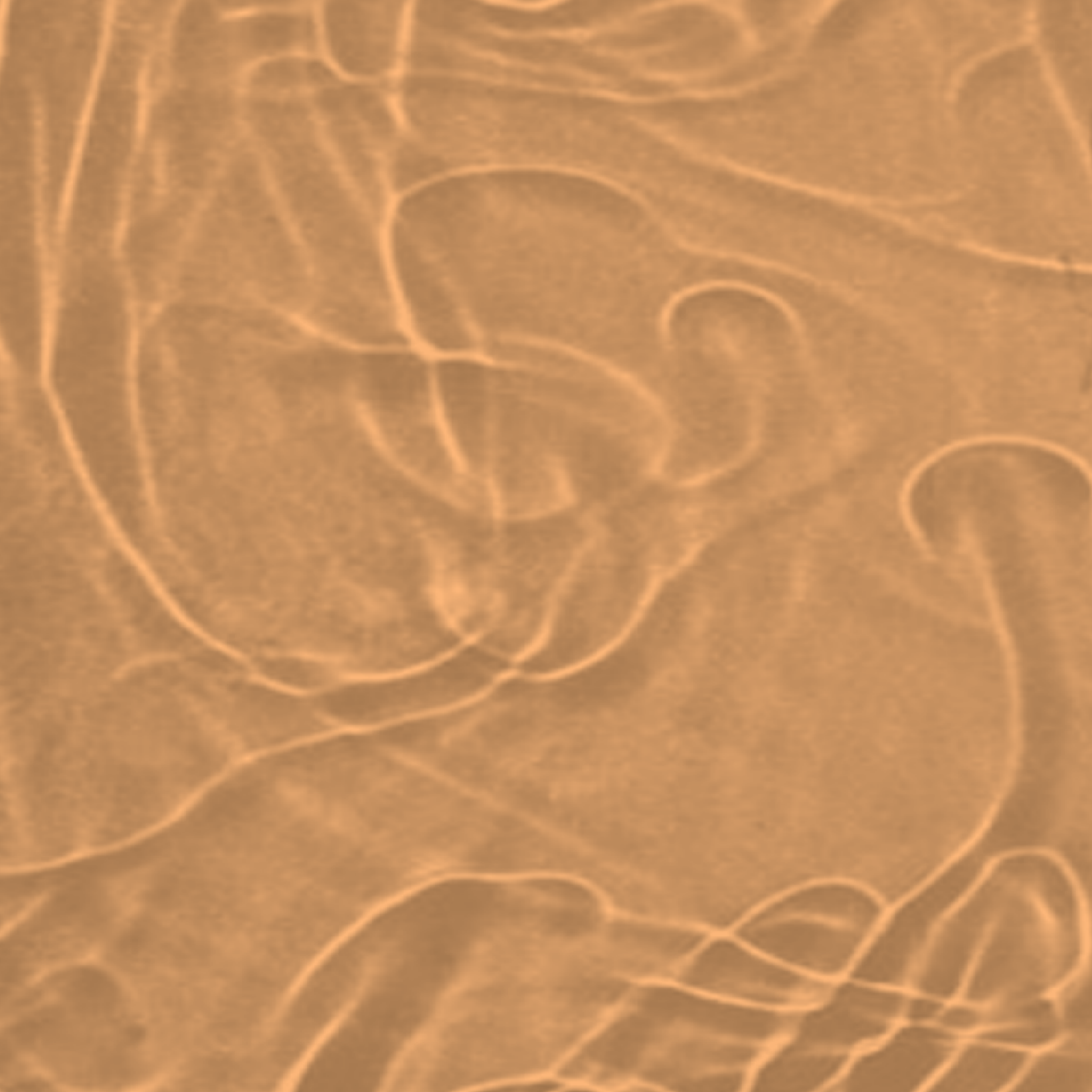
This project is a conceptual design that I submitted for an in-house design charette. It was a long narrow site with an existing cottage and was nearly completely within the conservation commission resource. Any proposal would have to be within the frontage limits of the existing structure. Septic restrictions limited the house to two bedrooms. The narrow house and open plans were a direct response to these conditions.



***MUSEUM OF BOSTON/
BOSTON SCHOOL OF DANCE***

The Degree studio was a two-semester capstone project. The two main themes of the project were time (the museum) and motion (the school of dance). The studio consisted of a series of studies and exercises intended to inform the design process

Although the studies were meant to spark my initial investigations into specific parts of the program (museum-book, motion study-dance school), for me the abstract nature of each, at times, led the studies to cross over from their initial intended relationships. This proved very useful as a tool for finding some common meaning and relationships between the programs. I was able to find common themes and motives and use them as the underpinnings to begin to formally integrate the two programs into a unified composition



S

en·tro·py

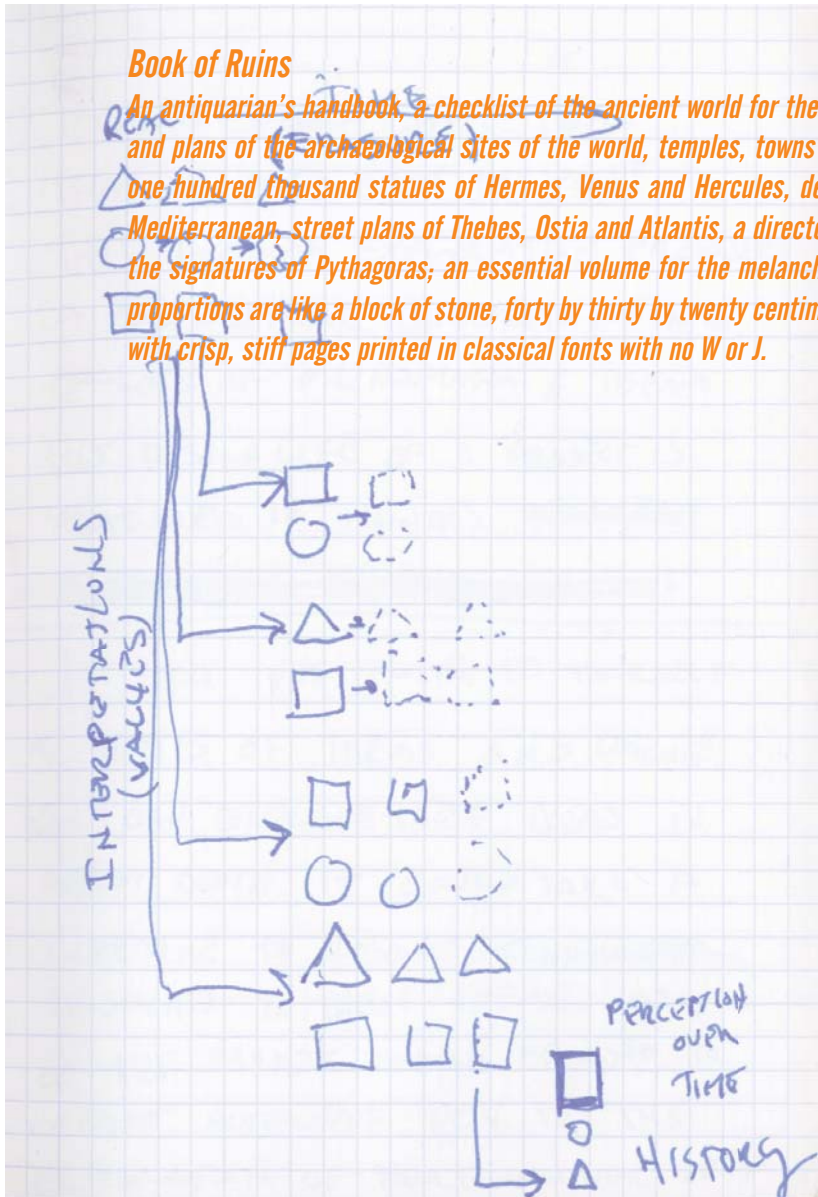
1. Symbol S for a closed thermodynamic system, a quantitative measure of the amount of thermal energy not available to do work.
2. A measure of the disorder or randomness in a closed system.
3. A measure of the loss of information in a transmitted message.
- 4. The tendency for all matter and energy in the universe to evolve toward a state of inert uniformity.**
- 5. Inevitable and steady deterioration of a system or society.**

BOOK CONSTRUCTION

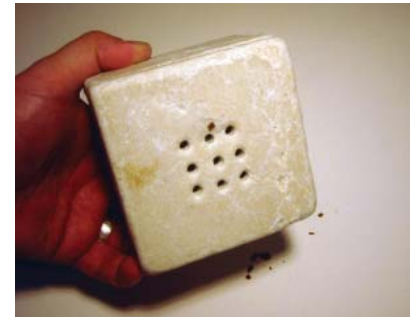
In 1991 Peter Greenaway made the film *Prospero's Books*. The film was based on William Shakespeare's *The Tempest*. In *The Tempest* Shakespeare speaks of 24 books that Prospero takes with him to his island exile. Although Shakespeare never identifies the books, Peter Greenway not only titles them, he gives detailed descriptions of the contents and of the books physical appearances.

Book of Ruins

An antiquarian's handbook, a checklist of the ancient world for the Renaissance humanist interested in antiquity. Full of maps and plans of the archaeological sites of the world, temples, towns and ports, graveyards and ancient roads, measurements of one hundred thousand statues of Hermes, Venus and Hercules, descriptions of every discovered obelisk and pedestal of the Mediterranean, street plans of Thebes, Ostia and Atlantis, a directory of the possessions of Sejanus, the tablets of Heraclitus, the signatures of Pythagoras; an essential volume for the melancholic historian who knows that nothing endures. The book's proportions are like a block of stone, forty by thirty by twenty centimetres, the colour of blue-veined marble, chalky to the touch, with crisp, stiff pages printed in classical fonts with no W or J.

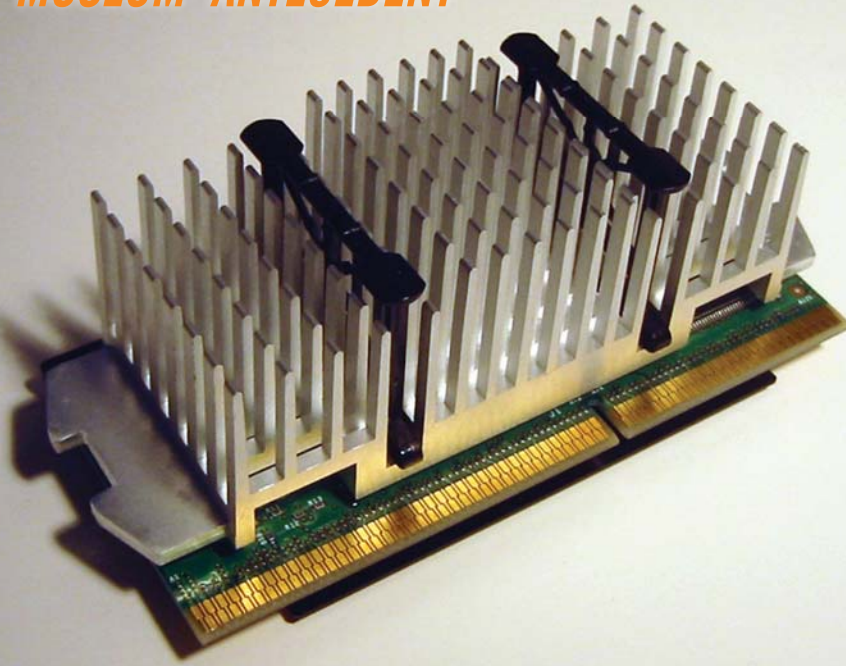


Right: Initial sketch showing historical logic. The initial events have a historical weight (relevance) that is recorded by those who experience the events. The natural tendency is for those events to fade over time (erasure). Each subsequent generation reinterprets those events based on its own value structure, certain events are deemed more significant than others based on the socio-political vantage point of that particular generation. Each interpretation further alters the original weight of the events, discarding or devaluing events based on their own unique value structure. The history, as it is passed down to us is a record not only of historical events, but also a record of the value structures that have passed between us and the original events. The act of recording (or not) becomes as much of a historical event as the events that precipitated the act.

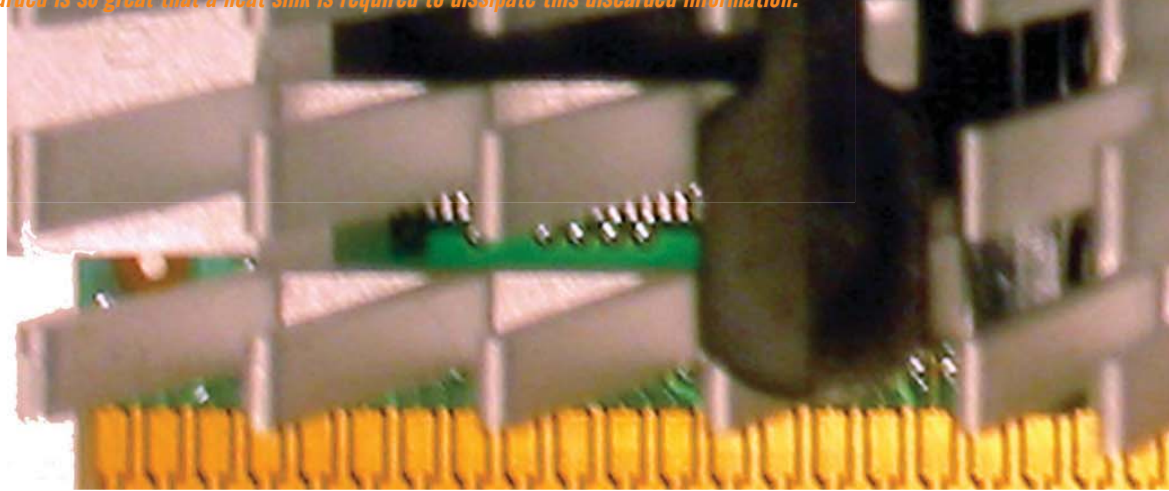


As the book and its contents age, decay will invariably set in. The pages will decay at a much faster rate than the sarcophagus that protects them. Eventually, pages will crumble back into dust. The fragments of those pages are dissipated through the holes in the bottom of the book. If the current owner of the book deems the content of the decaying page to still be relevant, they can commission a new page to replace the decaying one. If the page's relevance is deemed to have passed, the owner can commission a new page containing new content to be added to this significant collection. The book is, in effect, a cultural way station. It reflects the values of its current owner and allows a dignified passage to those memories that have been deemed irrelevant.

MUSEUM ANTECEDENT



Microprocessor Heat-sink The primary purpose of the heat-sink of a microprocessor is the dissipation of heat. That heat is the final state of information and data that is no longer required by the microprocessor to perform its next set of computations. With each clock cycle of the computer the microprocessor is filled with data consisting of instructions and raw data. This information is in a binary state where the 1 has an electrical charge and the 0 is the absence of charge. After each computational cycle, the processed data is copied to the appropriate location in the computer before all of the data is dissipated through the heat-sink as 'waste heat'. Even though each charge is so small as to be barely detectable, the amount of data that gets processed and discarded is so great that a heat sink is required to dissipate this discarded information.

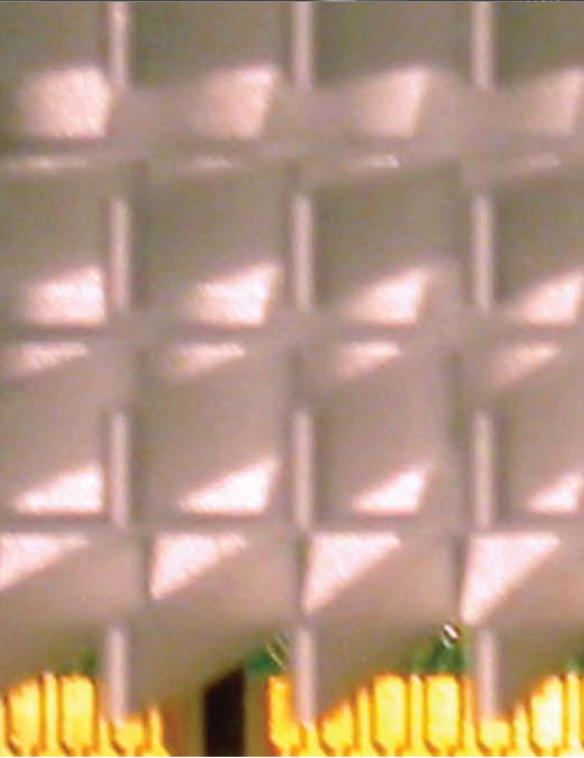


GESTURAL STUDY

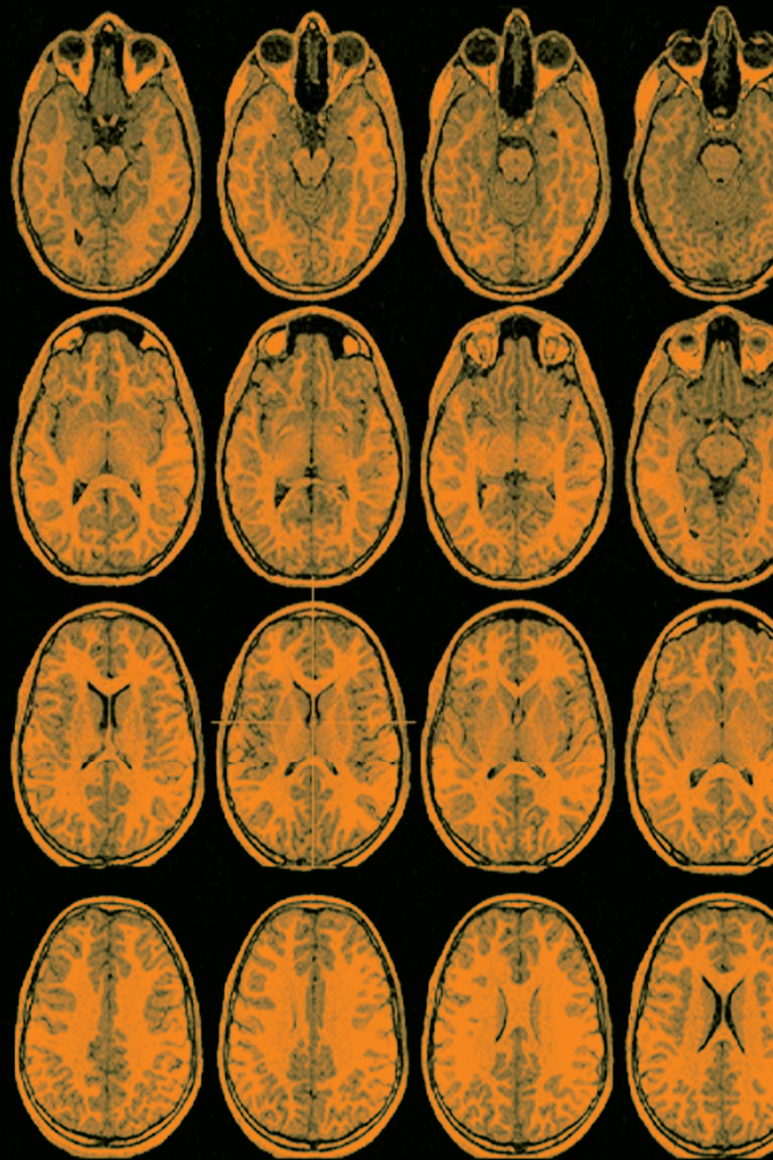


This project consists of two parts; the museum (the activator) and the dance school. The museum is finite, it only has so much space to store and display the artifacts of the city. The city consists of an infinite number of experiences, interactions and phenomena. The fact that the city is a living entity means that it will always be producing new history. The museum must then become an active element, deciding that which we collectively remember and that which we collectively forget. It is an active arbiter of our memories.

The forgotten memories are represented as a series of sine waves, decaying over time as the memory of an event or a place decays into the entropy.

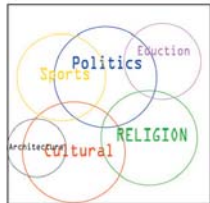


TWO WAYS OF SEEING TIME

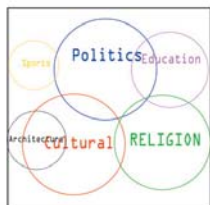




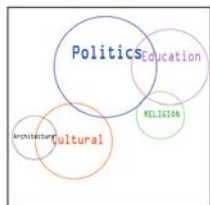
21ST CENTURY



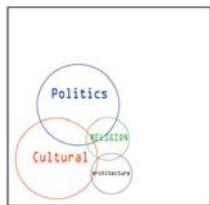
20TH CENTURY



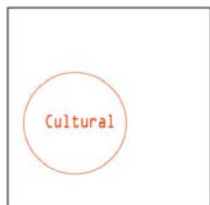
19TH CENTURY



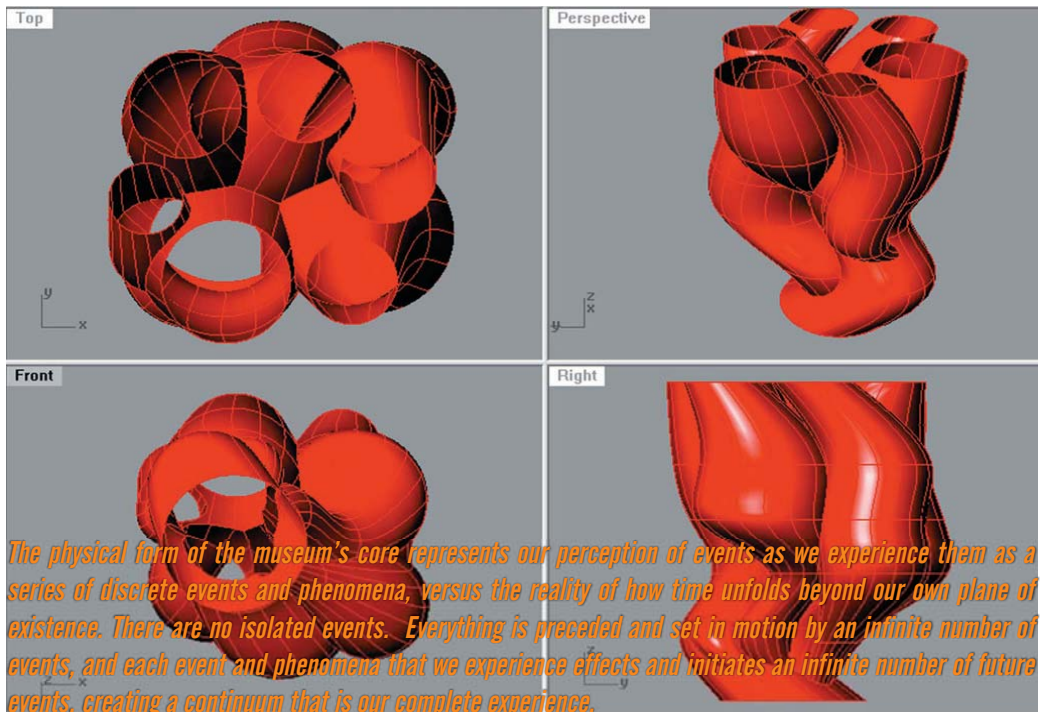
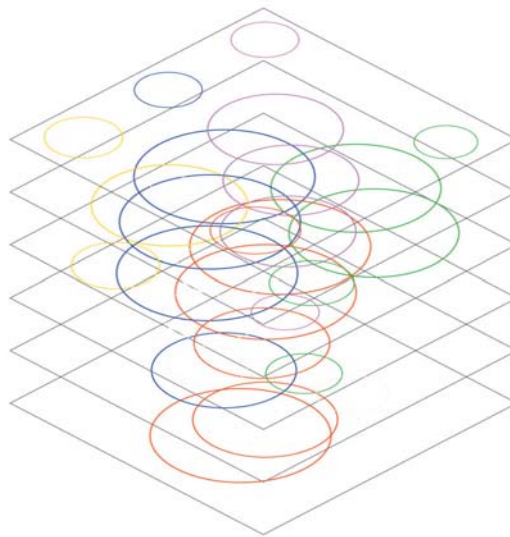
18TH CENTURY



EARLY COLNIAL

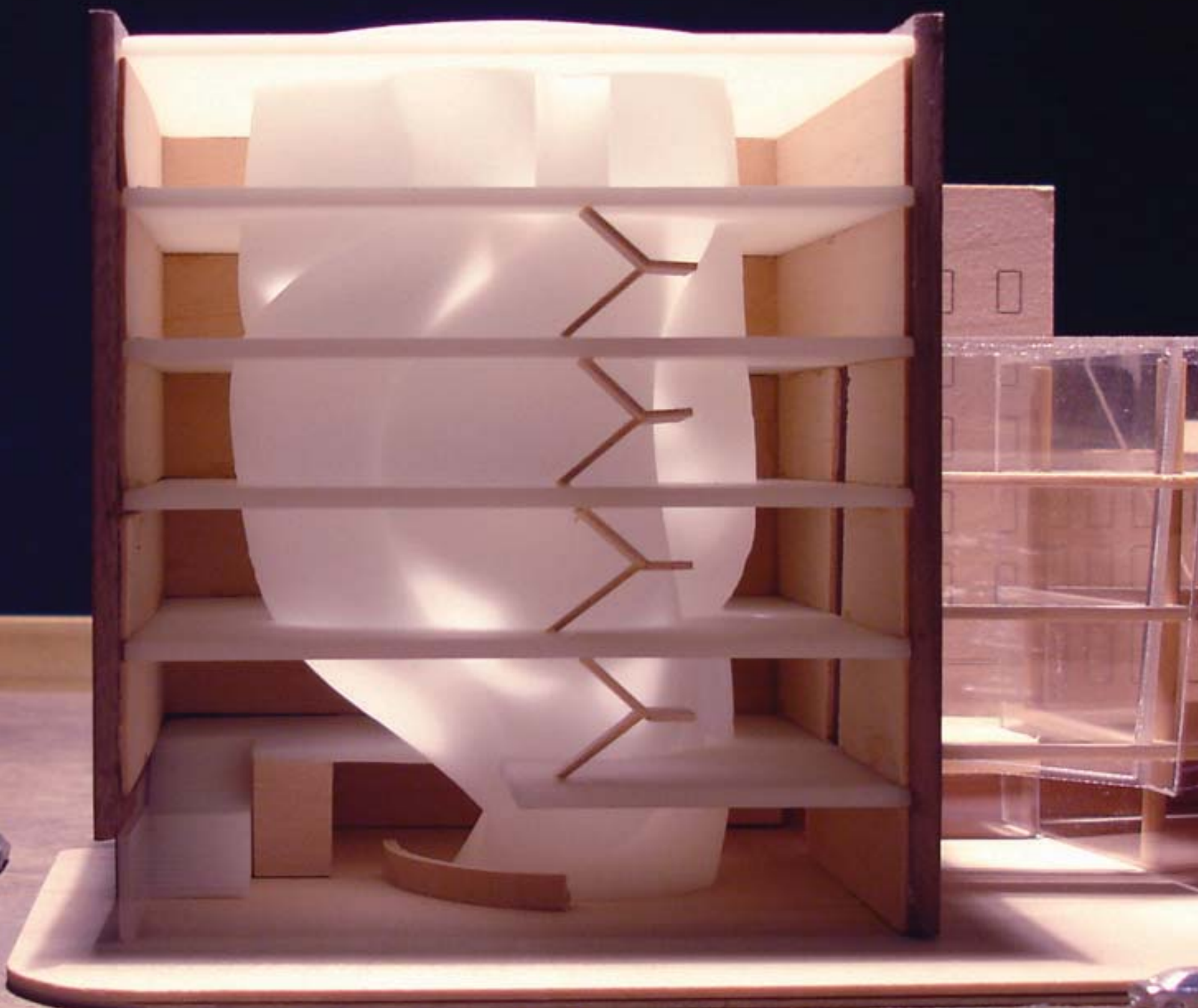


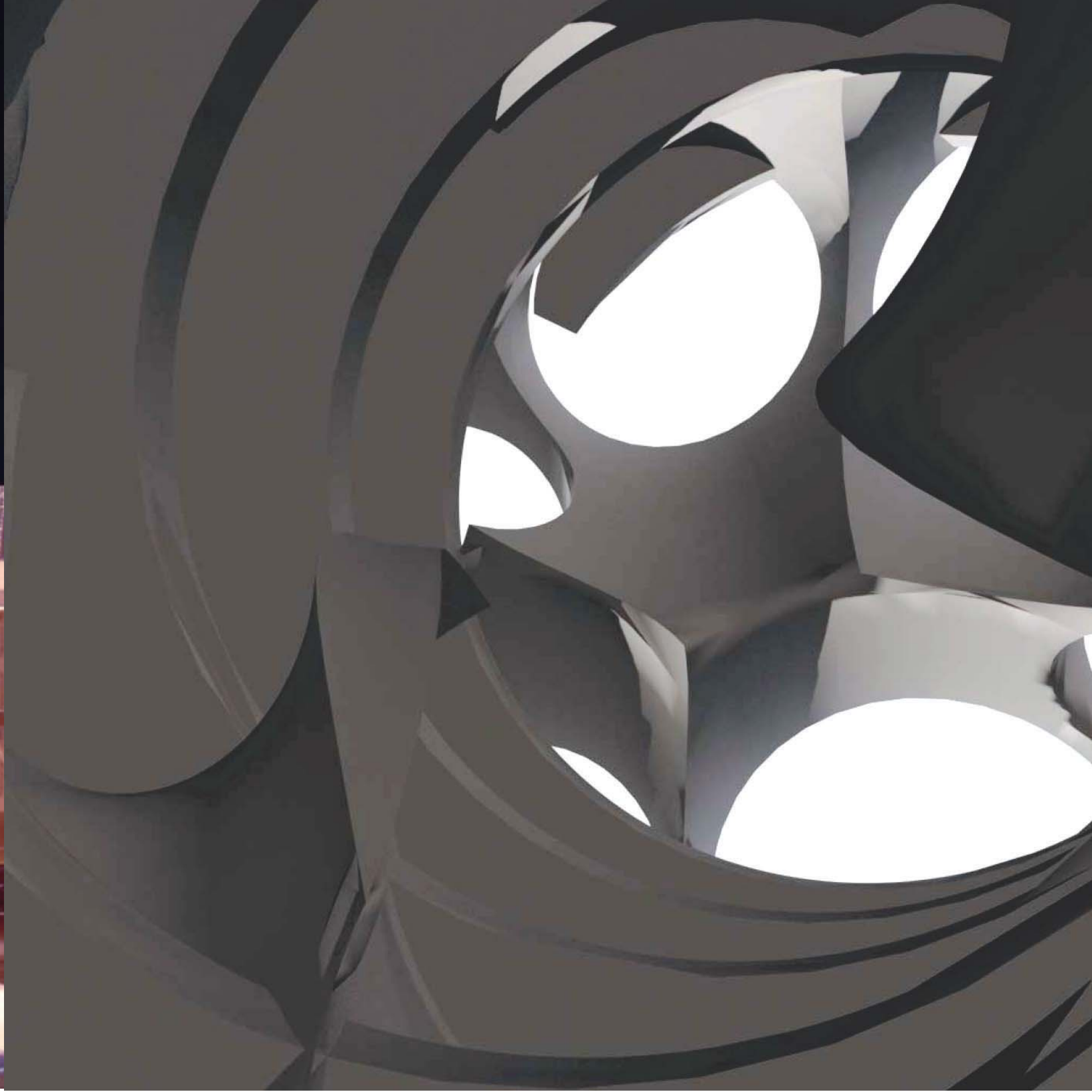
PRECOLUMBIAN



The physical form of the museum's core represents our perception of events as we experience them as a series of discrete events and phenomena, versus the reality of how time unfolds beyond our own plane of existence. There are no isolated events. Everything is preceded and set in motion by an infinite number of events, and each event and phenomena that we experience effects and initiates an infinite number of future events, creating a continuum that is our complete experience.

A MACHINE FOR THE DISSIPATION OF FORGOTTEN MEMORIES



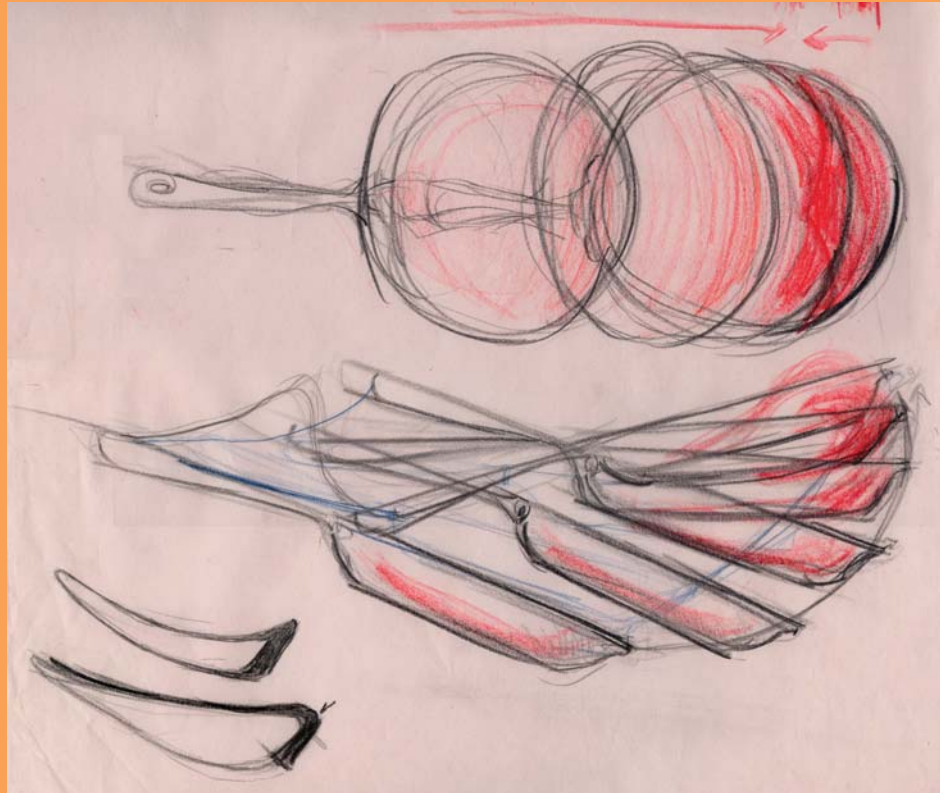
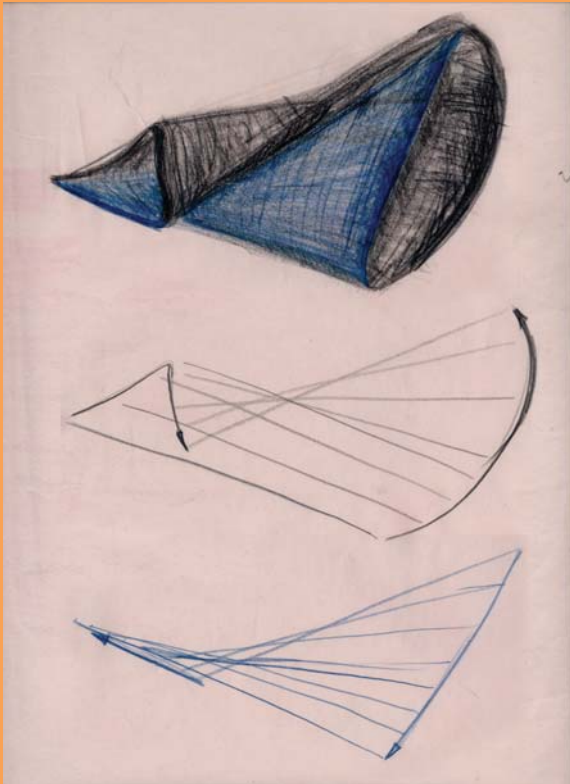


MOTION STUDY



For the motion study I was asked to pick a (simple) motion to study for a class exercise. At the time I had no idea that the motion I chose to study would be with me for twelve weeks.

The arbitrary nature of my motion forced me to dig much deeper than I might otherwise have done. I was able to uncover some profoundly fundamental ideas about not only motion, but more importantly for my project, important ideas about observing motion. These notions would provide the means of integrating the two programs with a genuine dialog.



THE FLIP

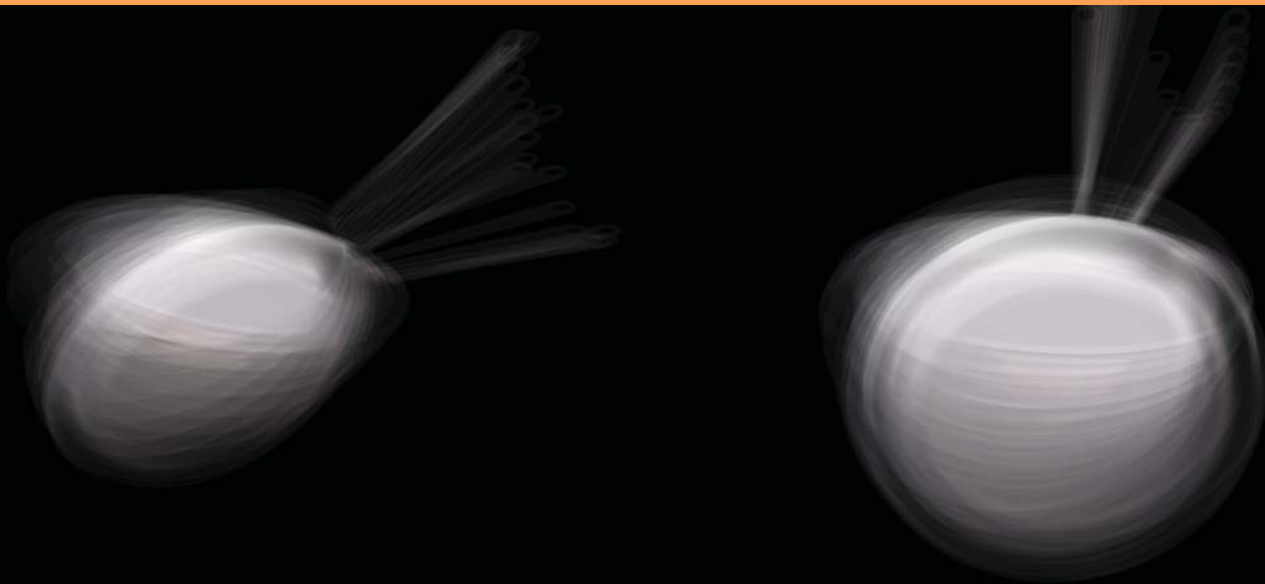
The motion I chose to study was flipping things in a frying pan, shrimp and onions to be specific. I studied my perception of the motion first through sketching. My initial sketches (above) begin by looking at the mechanics of the flip, how energy transfer and inertia are used to put the contents into the desired motion. The initial study quickly led to my next set of sketches (above left). This study attempts to understand the motion as an organic whole rather than snapshots of time. This desire to understand the motion over its entire cycle would eventually uncover some wholly unexpected phenomena that would completely redirect my motion studies and how they would inform my process.

... it is not possible to simultaneously determine the position and momentum of a particle. Moreover, the better position is known, the less well the momentum is known (and vice versa). The principle is sometimes known as the Heisenberg uncertainty principle.¹

Heisenberg was left to mull things over himself. He had a shocking but clear realization about the limits of physical knowledge: the act of observing alters the reality being observed.²

... sensory perceptions do not of themselves create the physical world around us ... they bring news of another world which lies outside of ours and is entirely independent of us. . . the external world forces itself upon our recognition with its own elemental power . . . measurements . . . give no direct information about external reality. They are only a register or representation of reactions to physical phenomena. As such they contain no explicit information and have to be interpreted. As Helmholtz said, measurements furnish the physicist with a sign which he must interpret . . .³

Max Planck 1933, Planck's constant enabled Heisenberg to formulate his Uncertainty Principle



¹ <http://scienceworld.wolfram.com/physics/UncertaintyPrinciple.html>

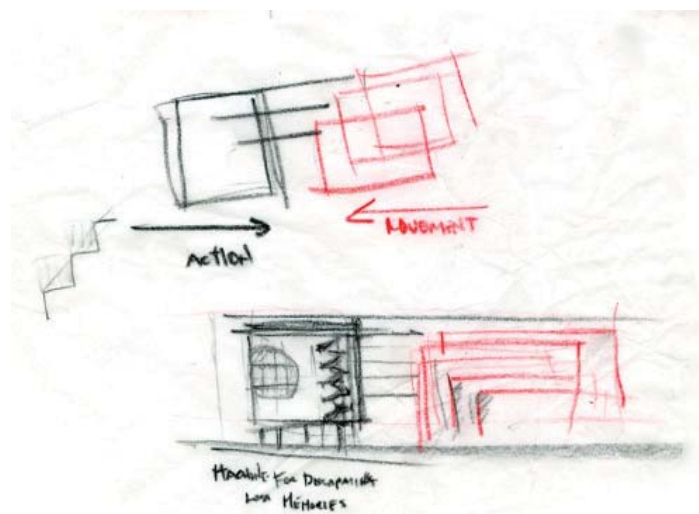
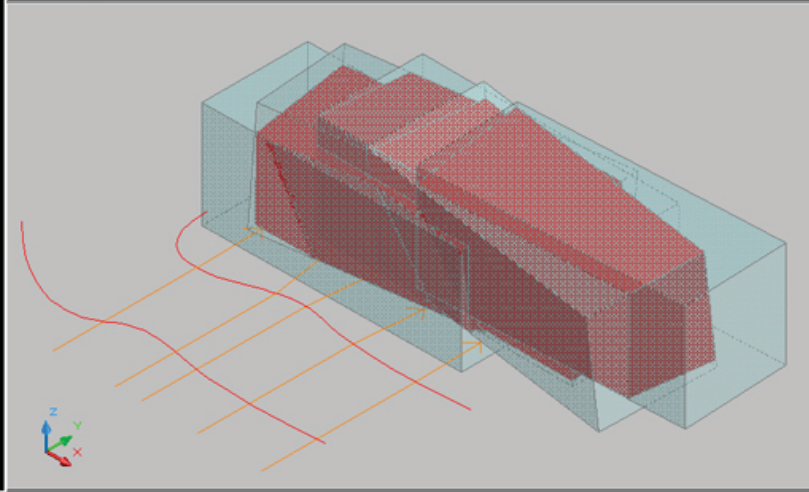
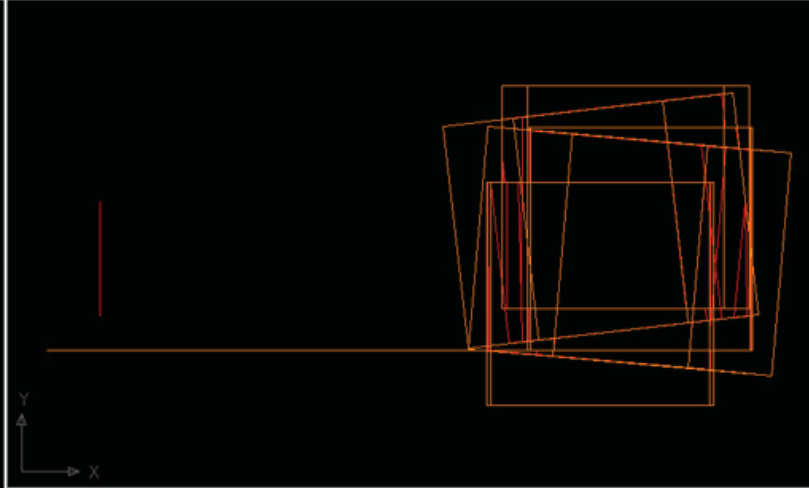
² <http://www.pbs.org/wgbh/aso/databank/entries/dp27un.html>

³ Max Planck 1933, Planck's constant enabled Heisenberg to formulate his Uncertainty Principle

POETICS OF THE MUNDANE



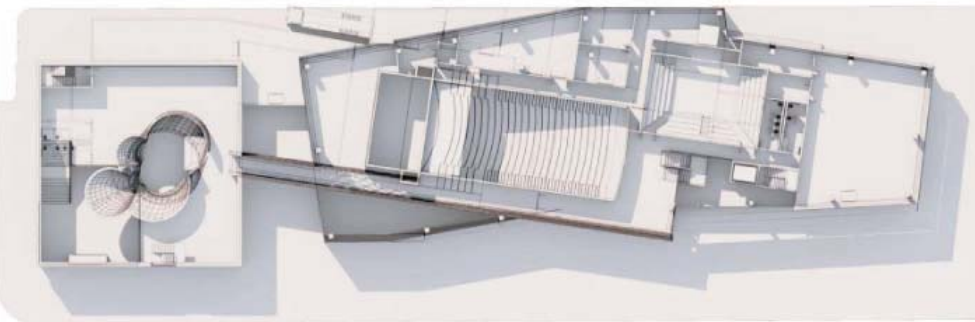
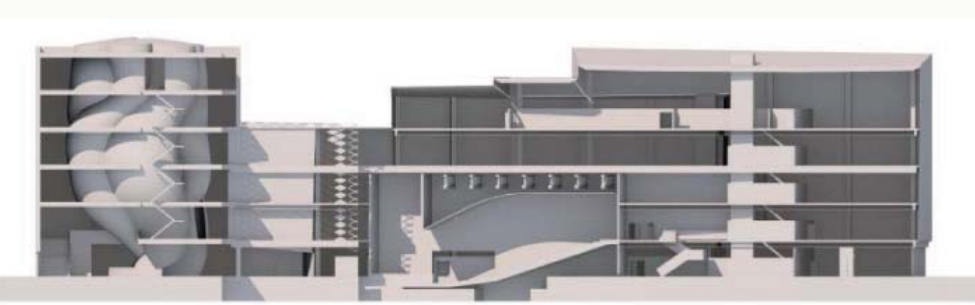
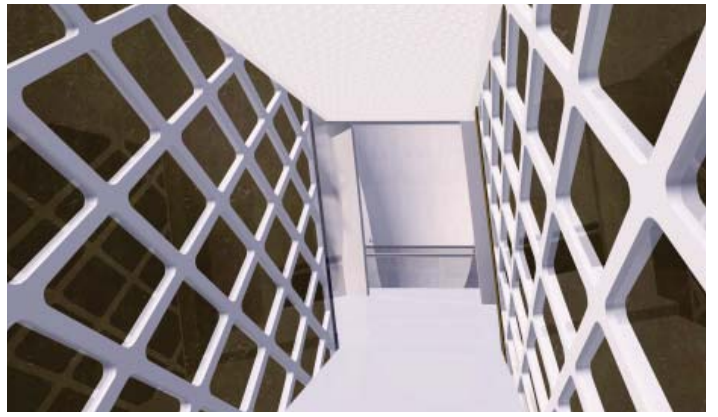
As the camera rotated around the pan I began to see forms develop and transform into new shapes. It was only after several observations of the displacement of the forms recorded that it occurred to me that these forms that I was observing were recording the movement of the observer within the echos of the pan's movement. I then realized that this phenomena could be usefull as both an analysis tool not just for understanding the movement of the object, but more importantly (for me) how the act of observing affected the perception and could introduce dynamics independent of the regular and predictable movement.



The form of the museum is shaped by the perspective of a decaying wave (the forgotten memory). As the ejected memory passes the School of Dance, its view is relative to its position in space and time. Thus the displacements that create the School of Dance's form are the echoes of forgotten memories. Everything that we are and everything that we experience is actively shaped by more events than we are capable of understanding.

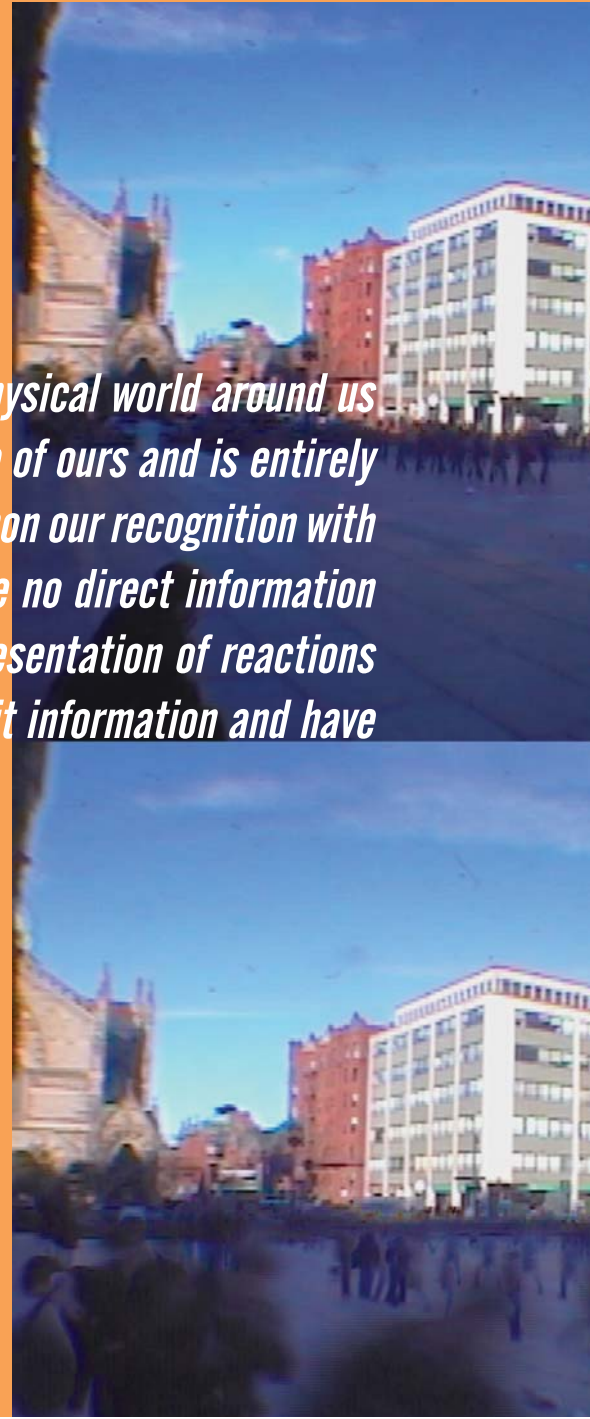






Sensory perceptions do not of themselves create the physical world around usthey bring news of another world which lies outside of ours and is entirely independent of us the external world forces itself upon our recognition with its own elemental power measurements give no direct information about external reality. They are only a register or representation of reactions to physical phenomena. As such they contain no explicit information and have to be interpreted.

Max Planck 1933

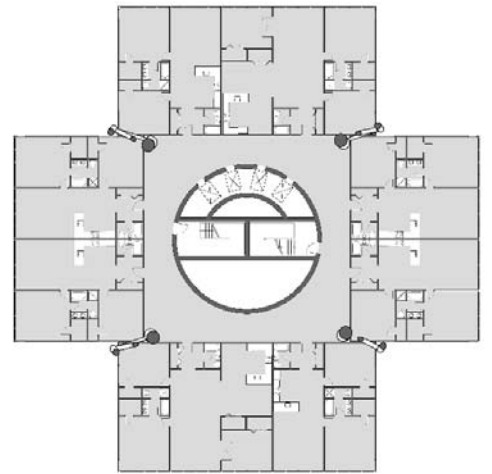


Site Analysis: Motion study, Copley Square

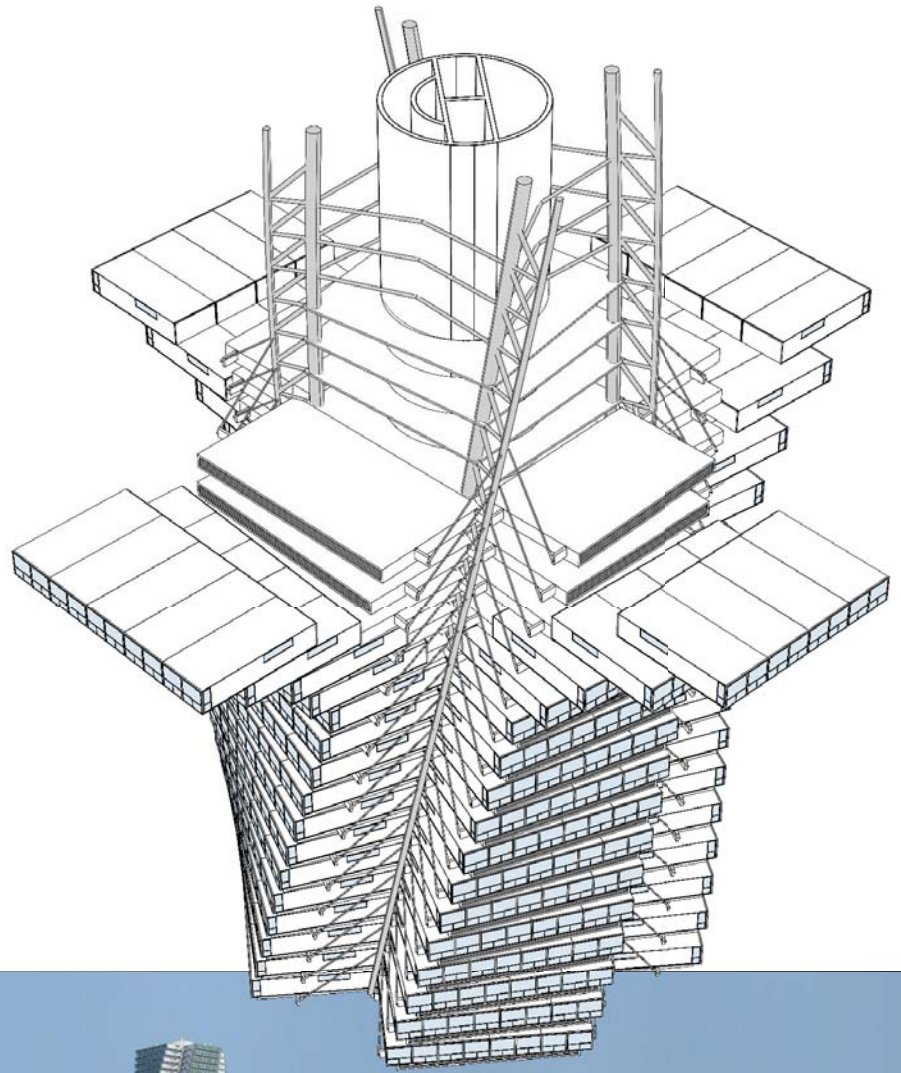




TRUMP(ED) TOWER



The basic, fundamental problem with our society is the inequity in the distribution of resources. A small percentage controls the vast majority of resources. It is an asymptote where the closer you get to the top of the pyramid, the greater the per capita resources grow. When shipping containers are proposed as housing alternatives, they do nothing to alter this fundamental imbalance. They are meant to appease those on the bottom for a generation or two, to fool them into taking their eye off the real inequalities that exist. In the west in general, and in the United States in particular, our primary problem is excessive consumption. We can't fix this problem by creating solutions for others who don't share this vice. We first need curb our own consumption problem with a model that still works in widespread application. The only way there can be a long term and fair solution, is to fundamentally redistribute resources (not wealth per se, but fundamental resource distribution.) All levels of society would draw from the same resources. For example, Donald Trump could still build Trump Tower, he would just have to use shipping containers (if it's a good basic housing unit for the poor, than it is a good basic housing unit for all). His tower would still have amenities, location and most importantly, a designer label so the wealthy could still tout their perceived superiority. Let's face it, they were always sold a bullshit bill of goods as they pranced around in these architectural spoils like the emperor in his new clothes. My proposal is to build what they need (and don't want) rather that what they want (and don't need).



Architecture is a Weapon

Studio 3AM was founded in early 2002 by a group of architectural students whose friends and families were tired of hearing them talk about architecture. It was an informal group that met in bars and pubs to drink beer and whiskey and talk about architecture. Invariably the drinking led to belligerence which began to creep into the architectural thoughts and ideas of the group. By the spring of 2006, the group had drafted its first manifesto. Studio 3AM is currently a loose confederation of like-minded designers and architects whose discussions and efforts are aimed at developing ways to undermine the architectural status quo; to continue using architecture as a weapon, but one of empowerment, rather than oppression.

The 3AM Manifesto

- *Architecture is a weapon.*
- *Architects serve society and community above all else.*
- *Architects are directly responsible for the consequences of how their architecture is used.*
- *An architect's commitment to society and community justify the subversion of individuals' desires.*
- *Architects should never deliberately do harm to anyone for anyone else's interest.**
- *If an architect can change or subvert things outside of architecture with an act of architecture, it is not only their right, but their duty to do so.***

* *paraphrased from the Hippocratic Oath.*

** *paraphrased from The U.S. Declaration of Independence.*

