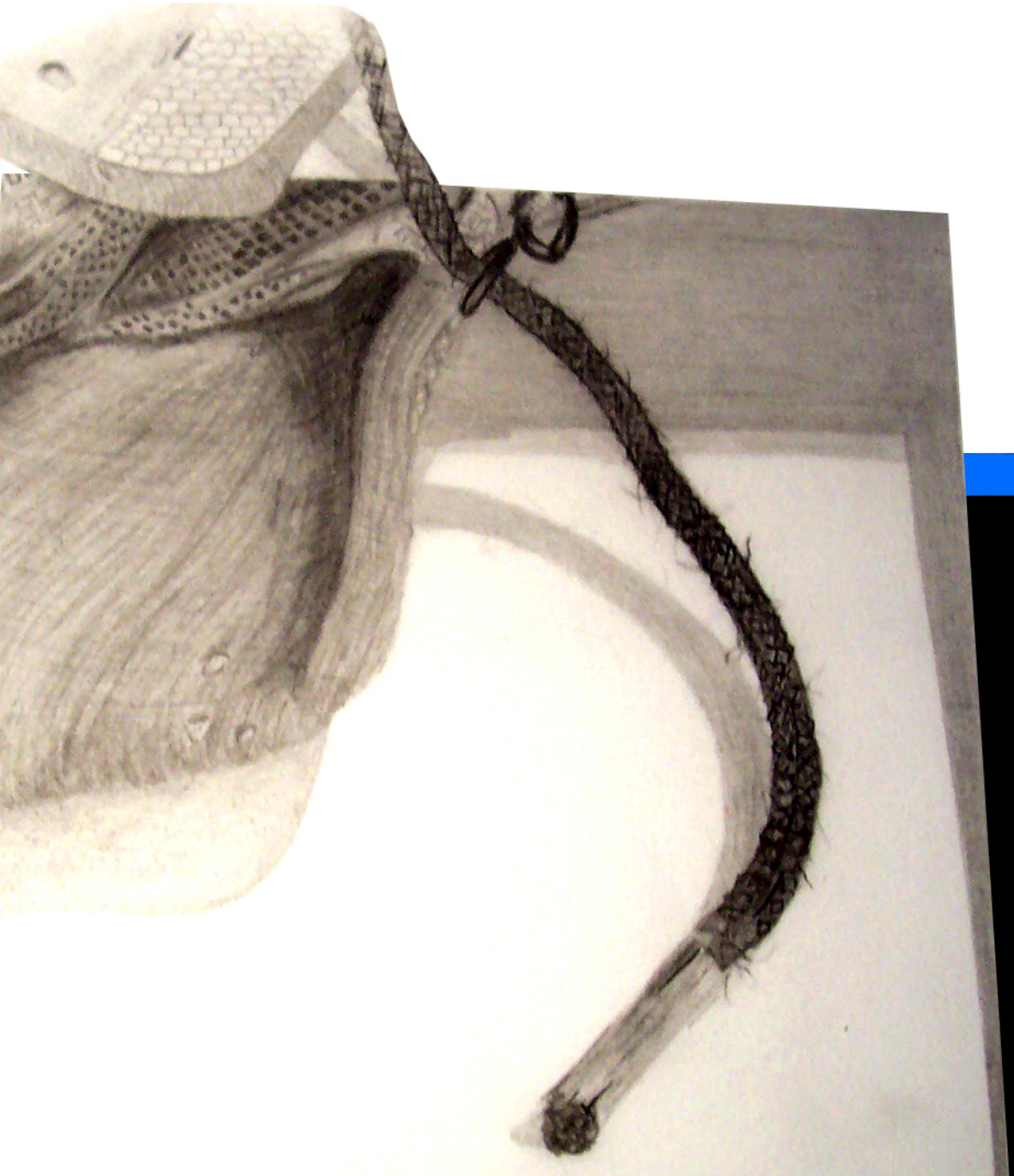
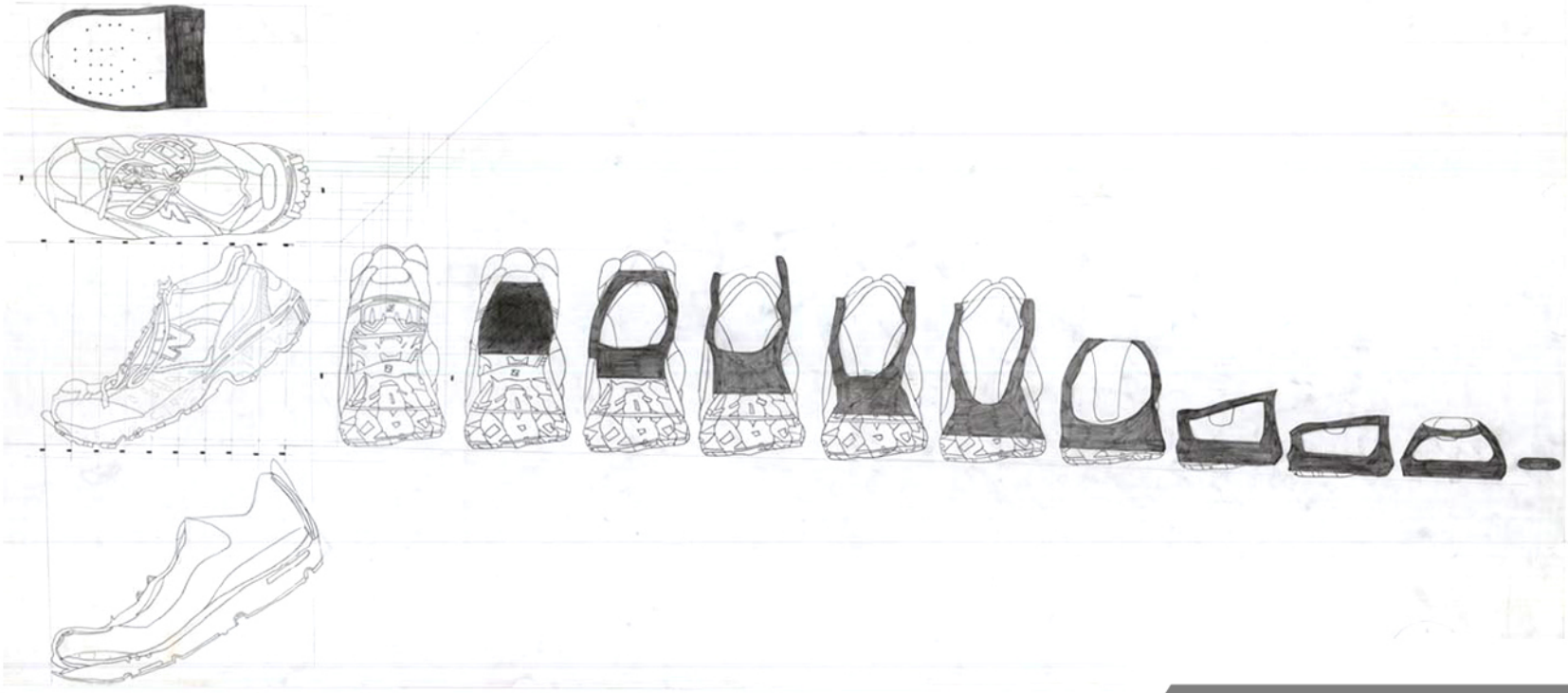
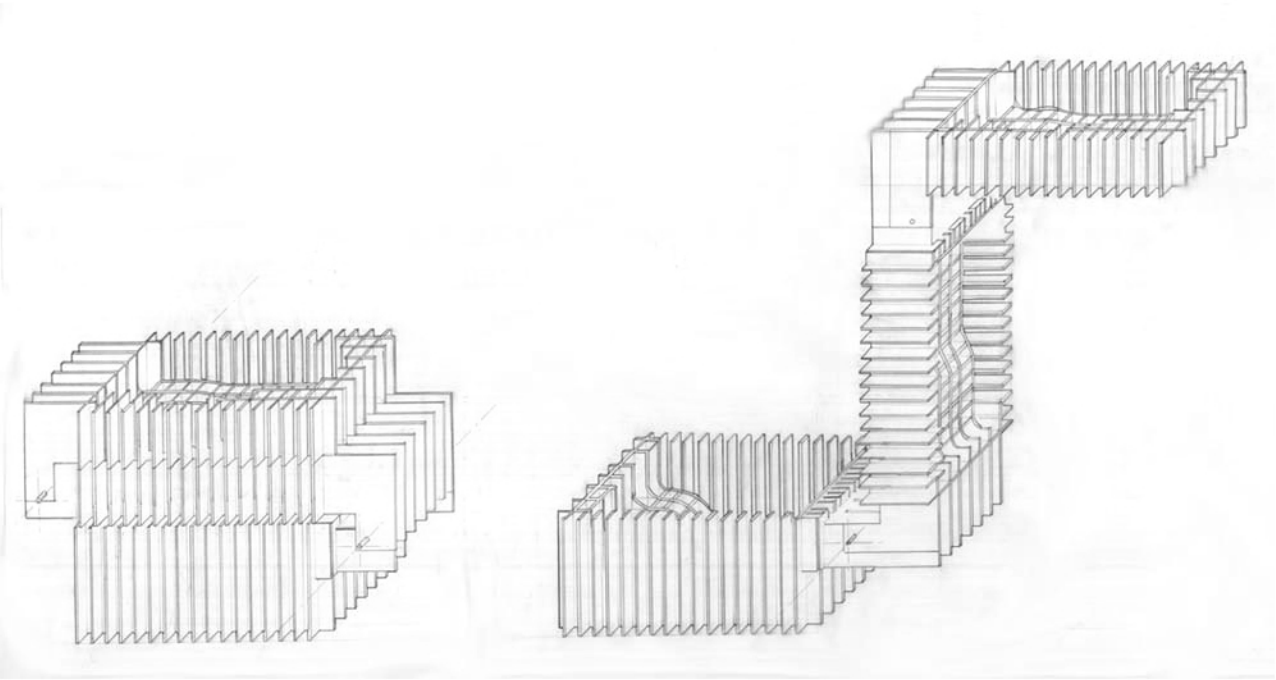


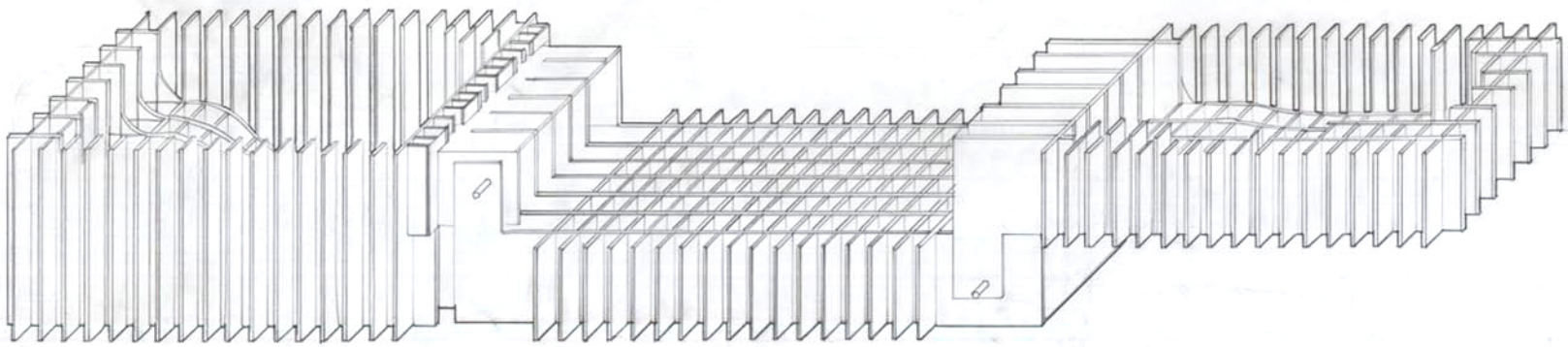
Freshmen year was the introduction to a variety of projects. Beyond the introductions to shadow drawings, box making, and plaster molding techniques, a project unfolded around a found object, in this case, an old shoe. The shoe was dissected and documented. A box to house its parts was then designed and finally a shoe store completed the semester. The second semester sought examination and research of current architecture with reproduction. That semester closed with a full-scale group project; a water balloon catapult.

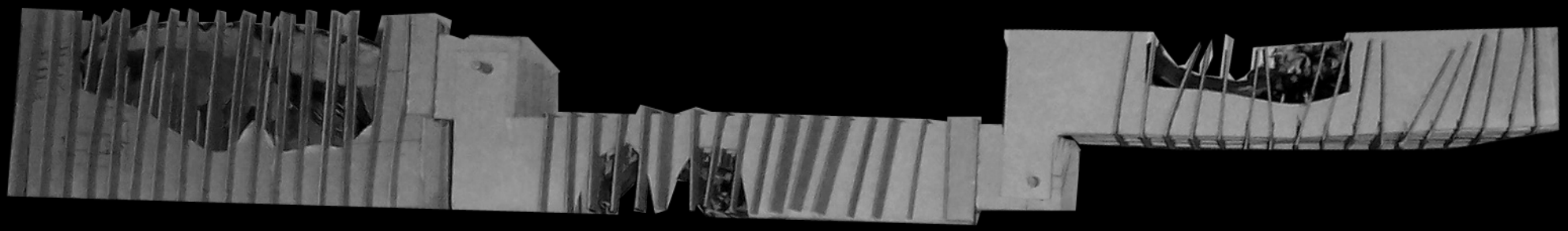
To the left is an early twelve-hour drawing.

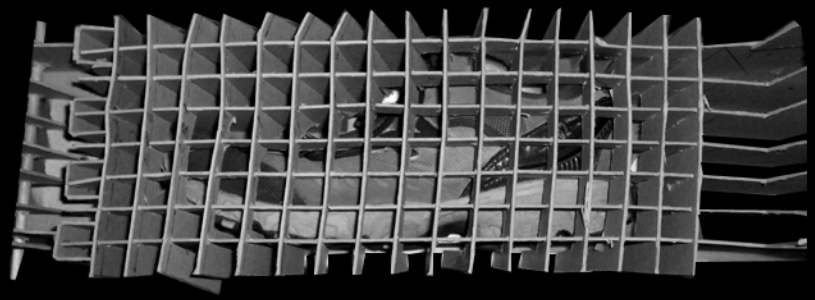


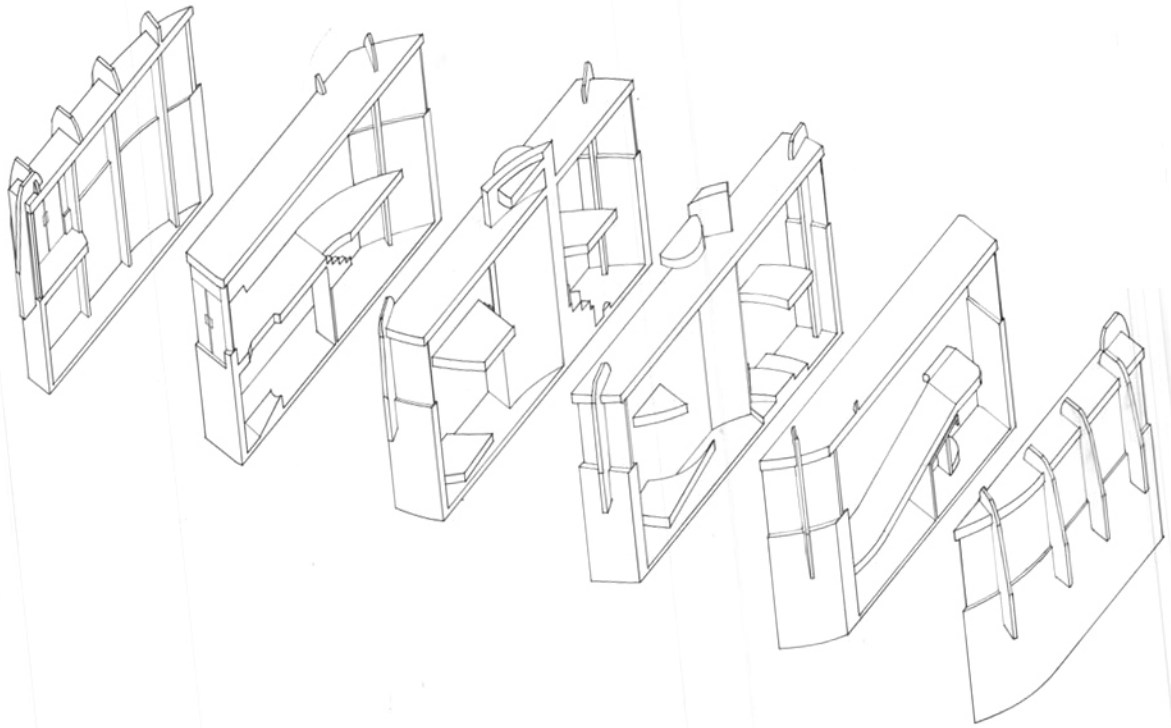


Continuing concepts from the viewing windows combined with a unique folding system. The box shown on this and the next page was developed from this.



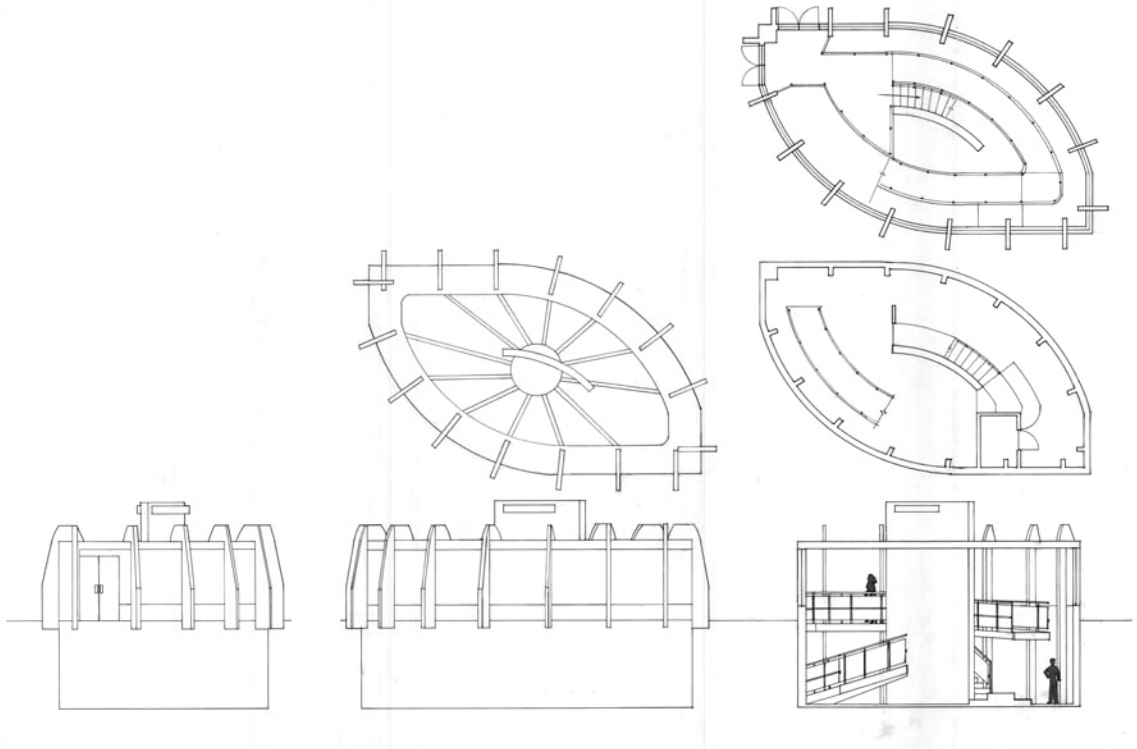




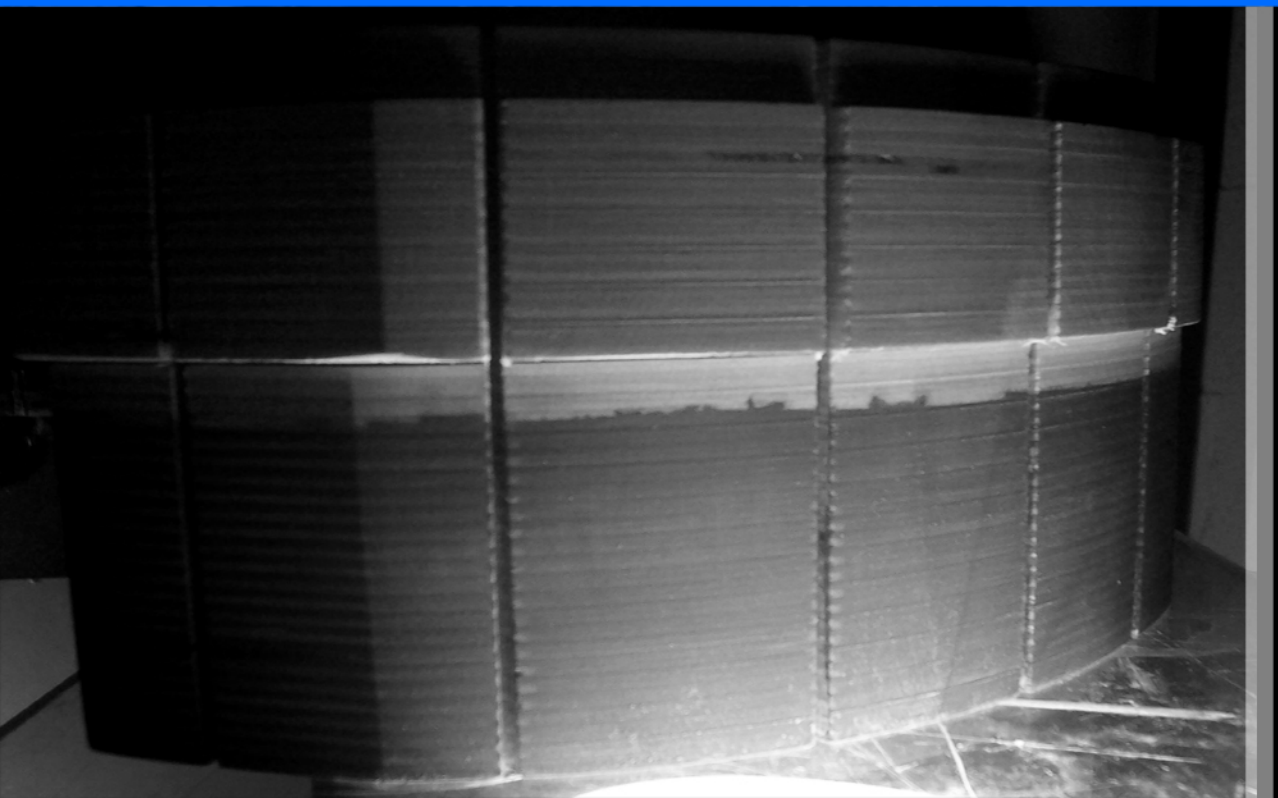


Keeping 360 vision in mind from previous projects brings the introduction of a spiral as a concept for the shoe store and running track.

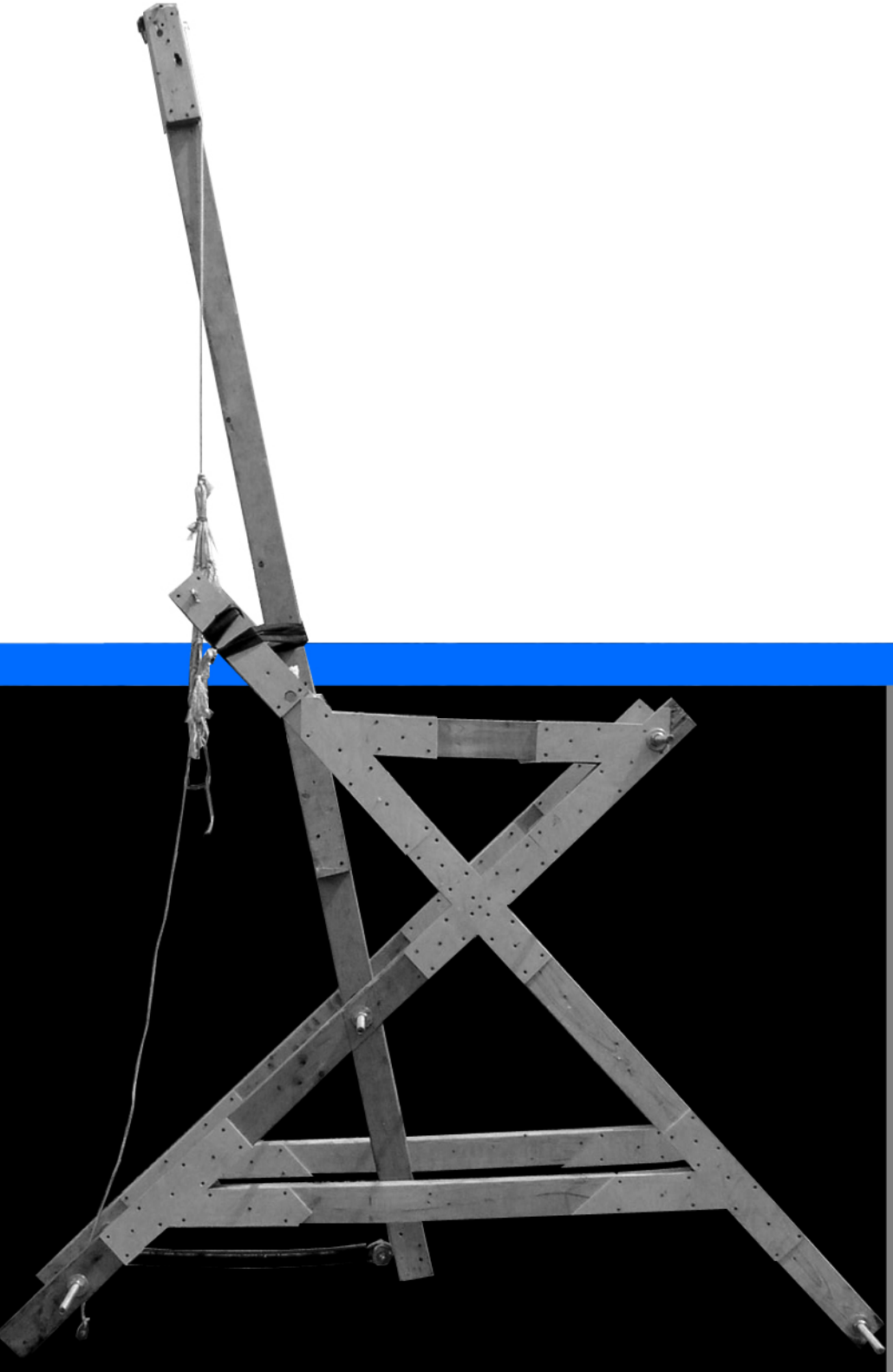
The model on the left is a volumetric model representing the interior space. It cuts apart to reveal the running track inside.



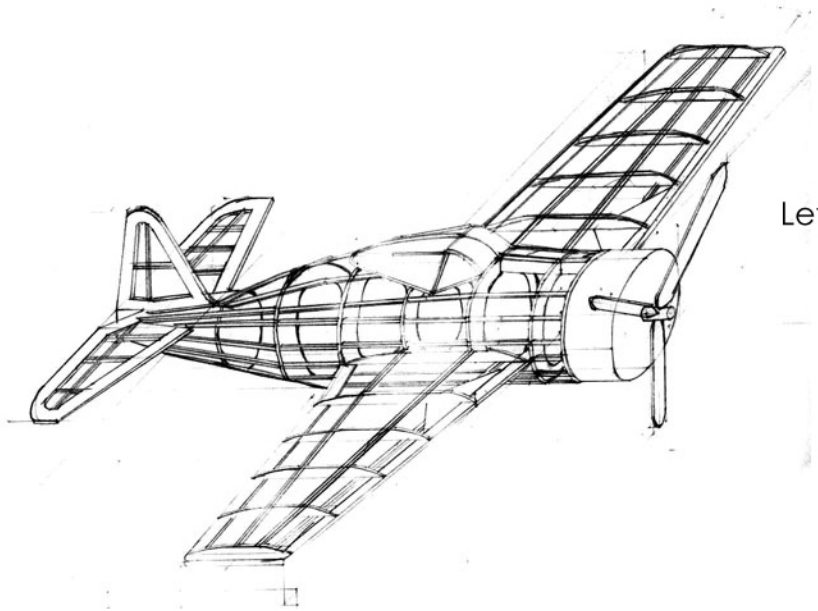
The drawings and model shown include the basement space. The running track keeps the spiral concept and allows vision. The exterior of the building has vertical fins similar to the shoebox. Boxes are placed along the windows. Removed boxes provide punched holes to view inside to outside while the boxes themselves provide visibility of the product from both the track and the exterior.



A water balloon catapult designed t launch water balloons 150 feet. Modifications to the design, placement of hinges, size, quantity of hinges, materials, and basket conditions were all modified on a trial and error basis before building the final model shown here. To operate, the arm is pulled downward extending the spring. When released, the spring recoils, thrusting the arm forward. The arm then strikes a rubber surface, stopping its motion thrusting a net attached to a rope even further. This increases both height and velocity of the projectile. The rubber striking surface stops the arm but allows some cushion as to not damage the structure of the catapult itself.

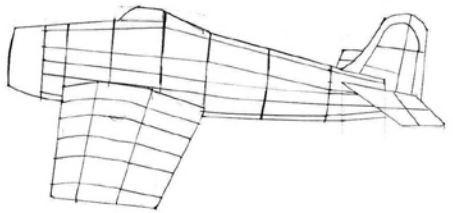


Communications required the building of a model airplane and several drawings of the airplane frame demonstrating abilities to draw many different views and abstractions.

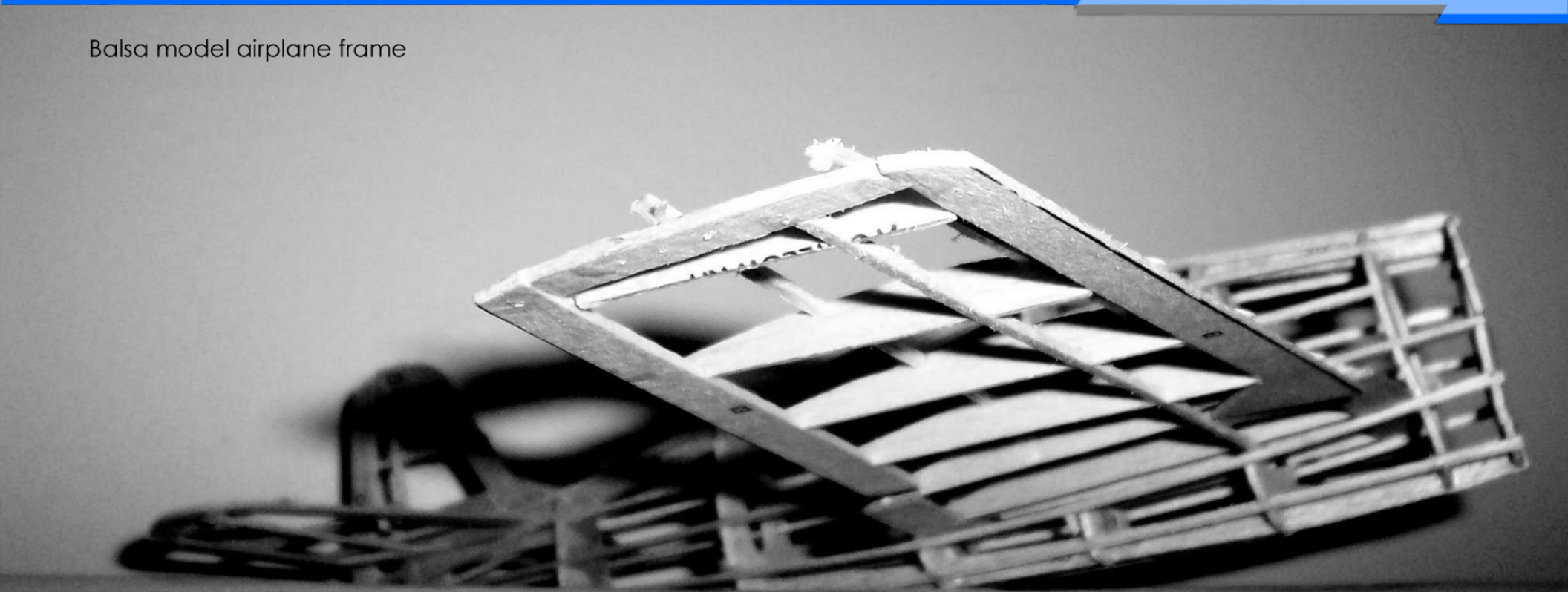


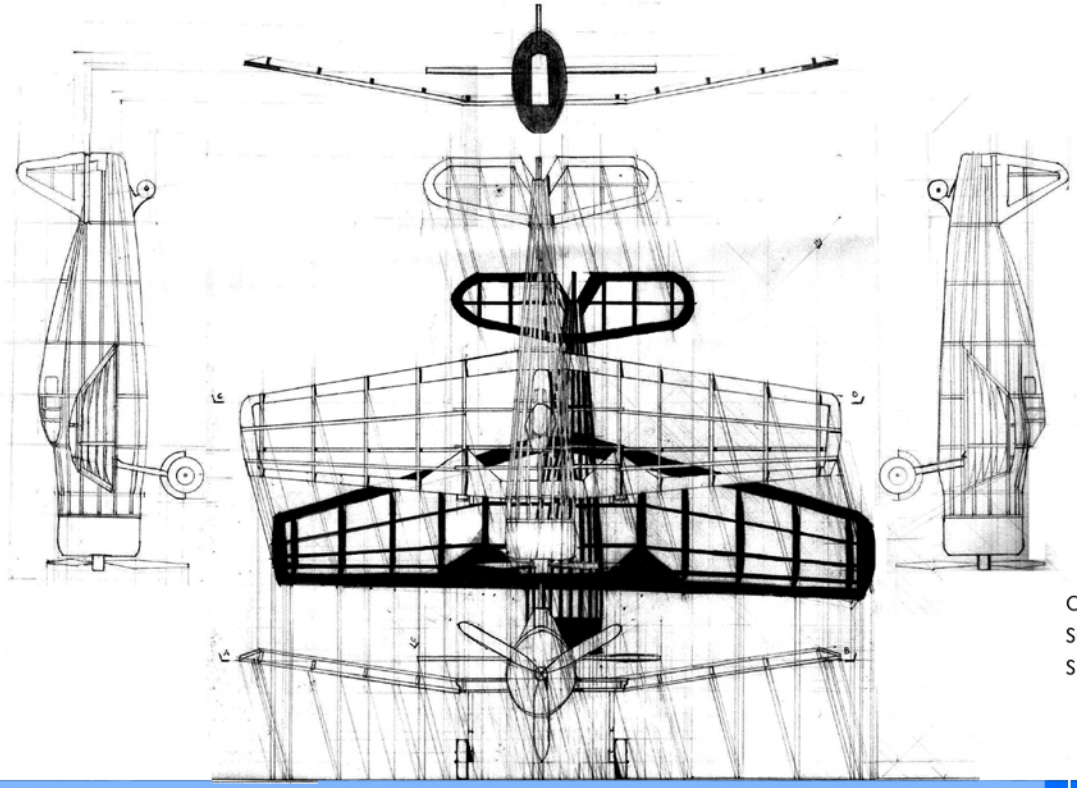
Left: Axonometric View

Right: Model Airplane with sheathing and corresponding drawing.

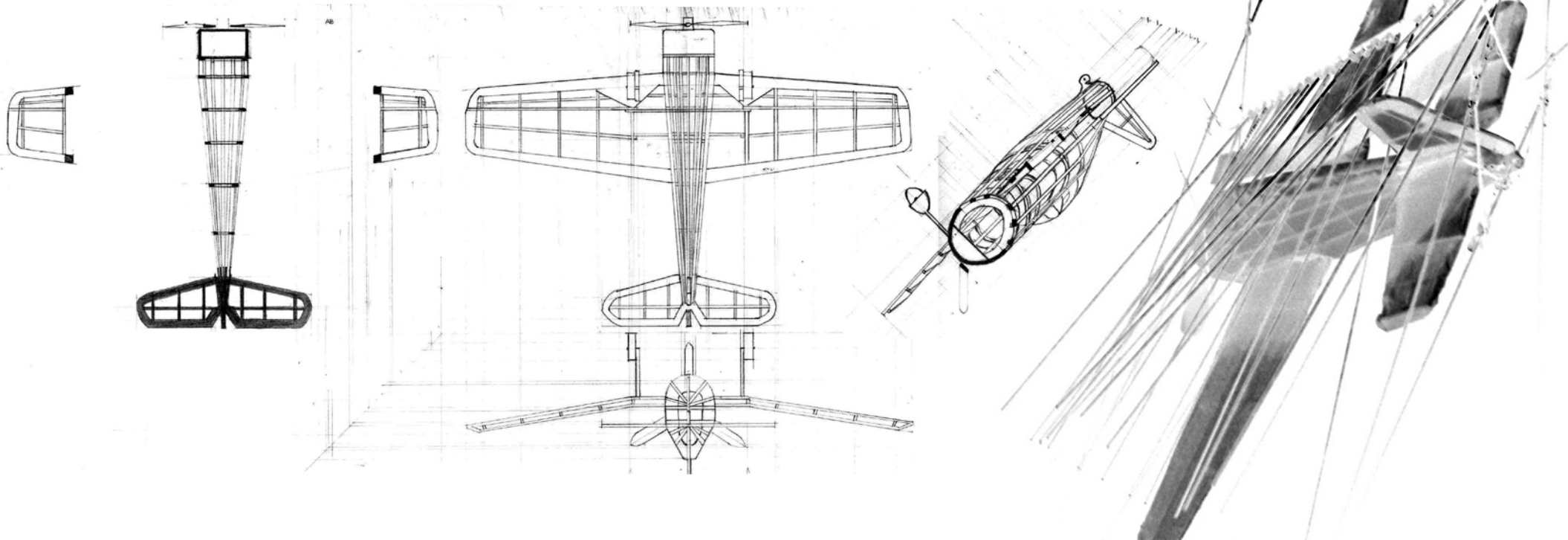


Balsa model airplane frame

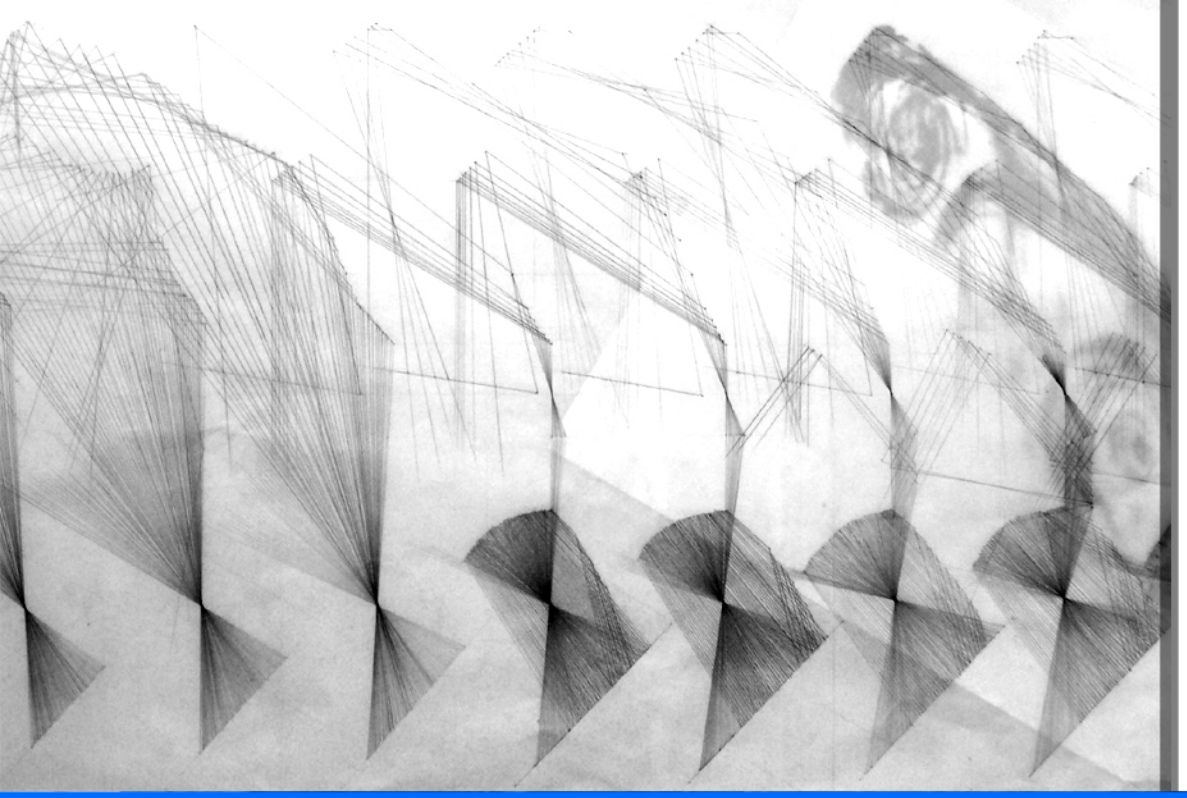




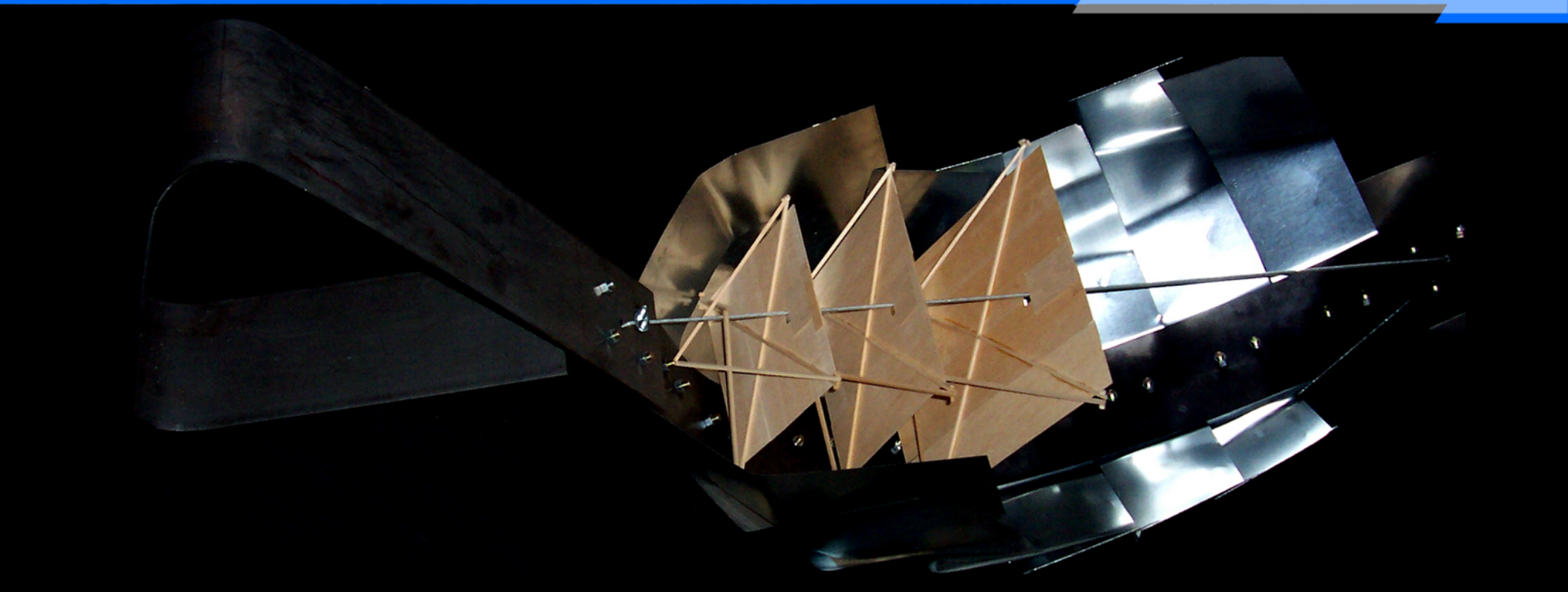
all elevations; cross, longitudinal, oblique sections; and photograph of airplane in specially designed measuring device



Sophomore Fall semester started with the exploration of the St. Chapelle Cathedral. From that, a proposal was to be devised that would provide shelter from and operate in the wind.



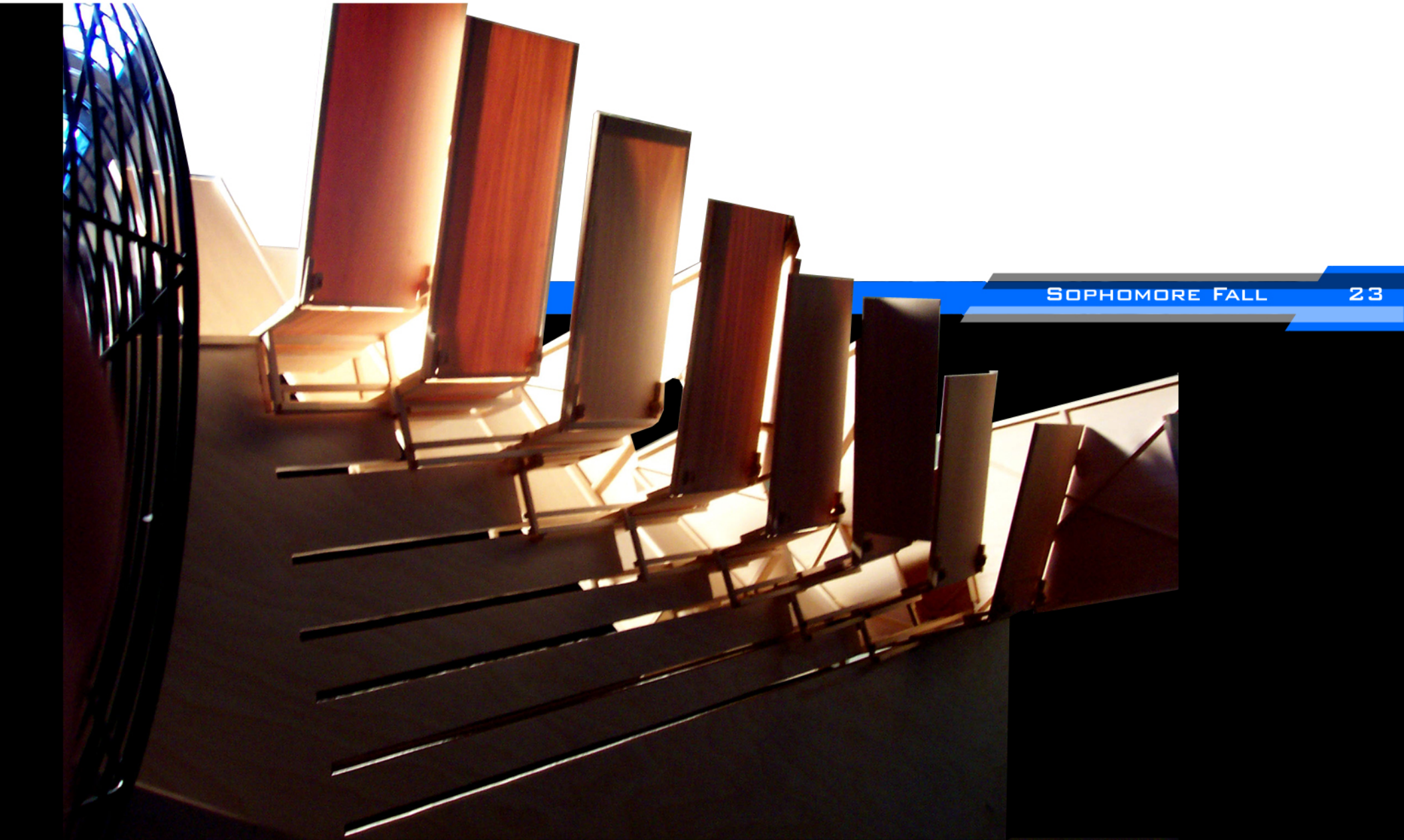
Drawing studies abstract the flow of wind into a series of lines modified by the objects they hit at one inch intervals in the cross-section. The model below uses metal fins to direct air to expand and move wooden panels.

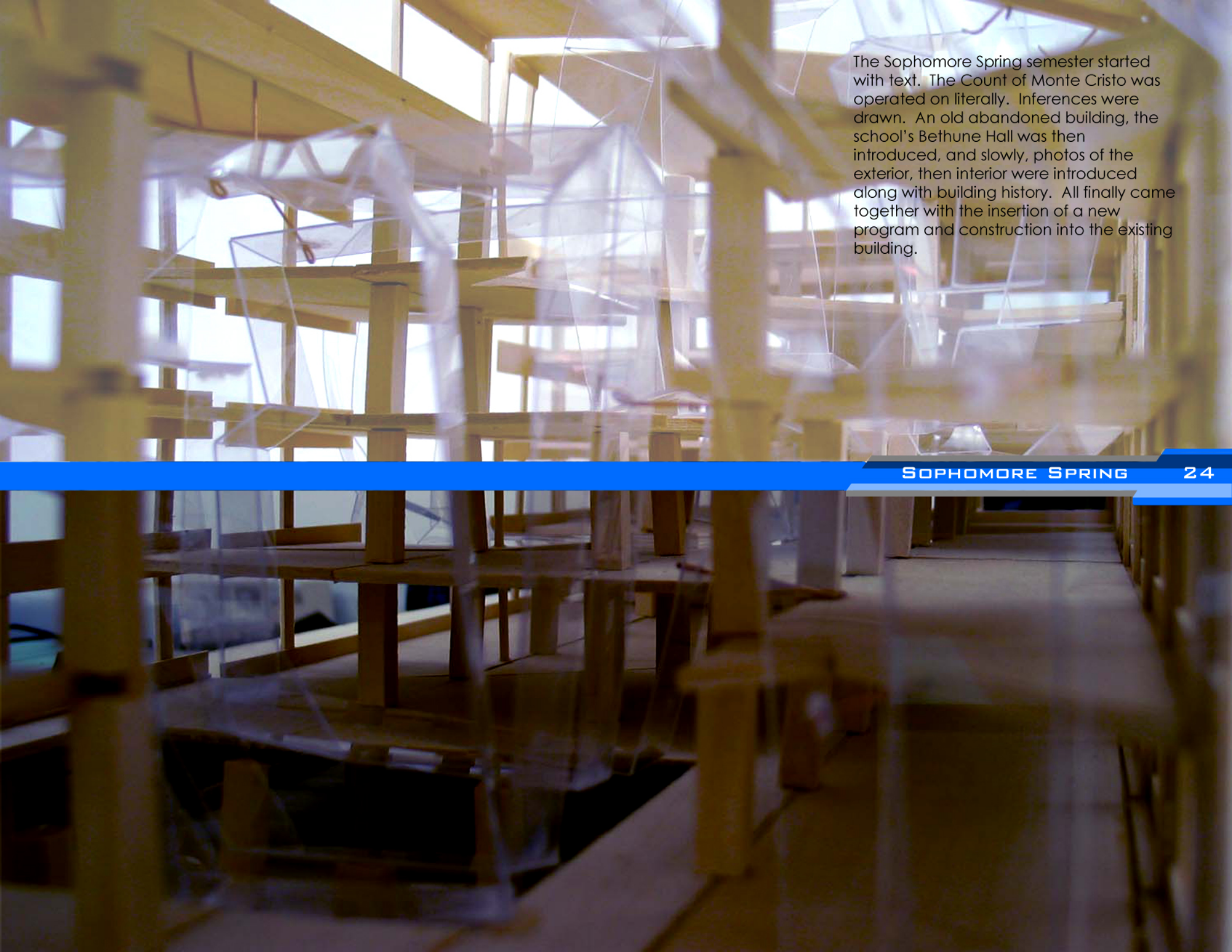


The final project incorporates the metal fins from the previous project as part of the expanding panels. The photograph below shows the shelter in the open / no wind state.

As wind is added, the panels slide on a series of tracks, each panel pulling the next while being pushed by the wind.

In the closed / wind position, the panels slide farther from the source and end closing off an area at the end of the structure, protecting it from the wind.





The Sophomore Spring semester started with text. The Count of Monte Cristo was operated on literally. Inferences were drawn. An old abandoned building, the school's Bethune Hall was then introduced, and slowly, photos of the exterior, then interior were introduced along with building history. All finally came together with the insertion of a new program and construction into the existing building.

t zero

es in planning and carrying out the

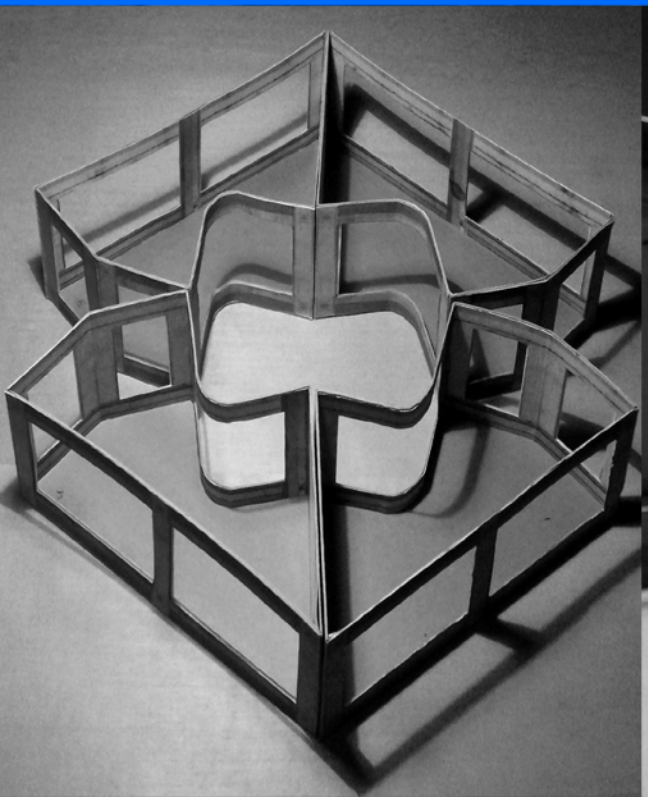
which
the pla
r oversi
he fortress apart, sounding out its
tinue putting it back together, con-
more insuperable barriers.
ie fortress that Faria and I create are
id more different: Faria, beginning
e, is complicating it extremely to in-
f the single unforeseen elements he
ath; I, setting out from the jumble of
each isolated obstacle the clue to a

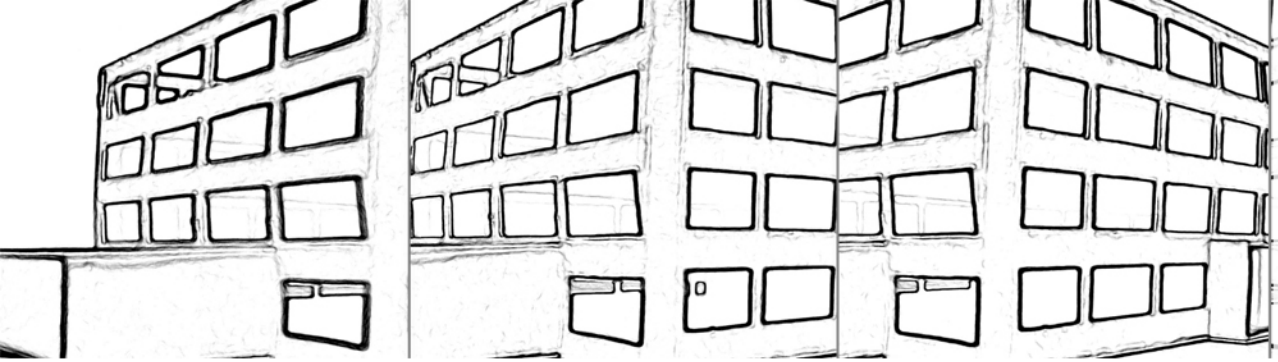
Photographs were manipulated and changed to create new abstract spaces based on analysis of the text.

TIME?

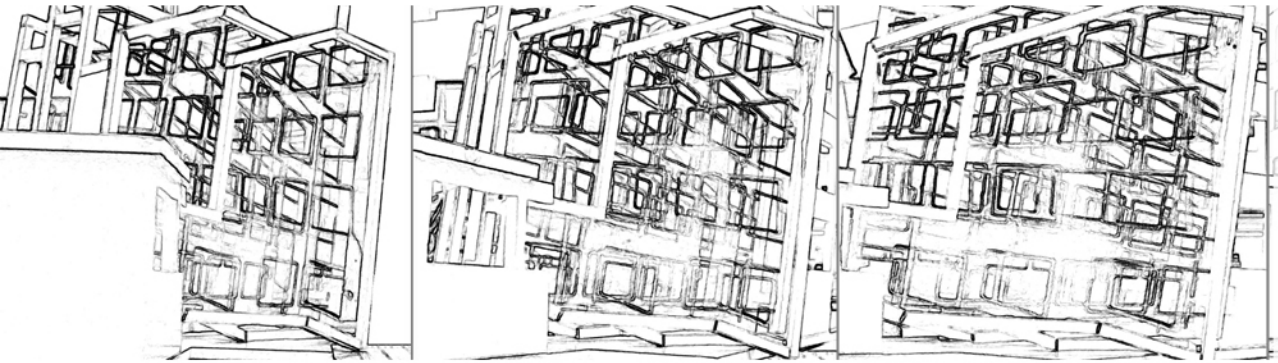
Therefore: each cell seems separated from the outside only by the thickness of a wall, but Faria as he excavates discovers that in between there is always another cell, and between this cell and the outside, still another. The image I derive is this: a fortress that grows around us, and the longer we remain shut up in it the more it removes us from the outside. The Abbé digs, digs, but the walls increase in thickness, the battlements and the buttresses are multiplied. Perhaps if he can succeed in advancing faster than the fortress expands, Faria at a certain point will find himself outside unawares. It would be necessary to invert th

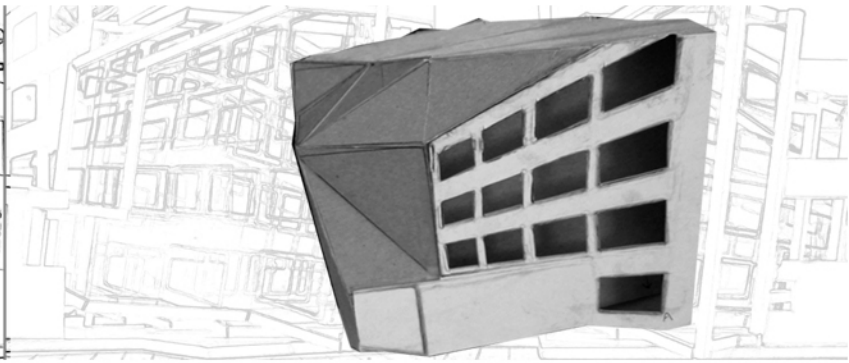
Photographs of the interior are built to recreate the altered photos. In the process, juxtapositions from the text are displayed; here the idea is a manipulation of interior / exterior. The inside of the arranged spaces is actually outside of the boxes constructed. The four boxes can be rearranged to give different views. Viewing Interior thru exterior in the repetitive process leads to a process for exploring the re-programming of Bethune Hall.

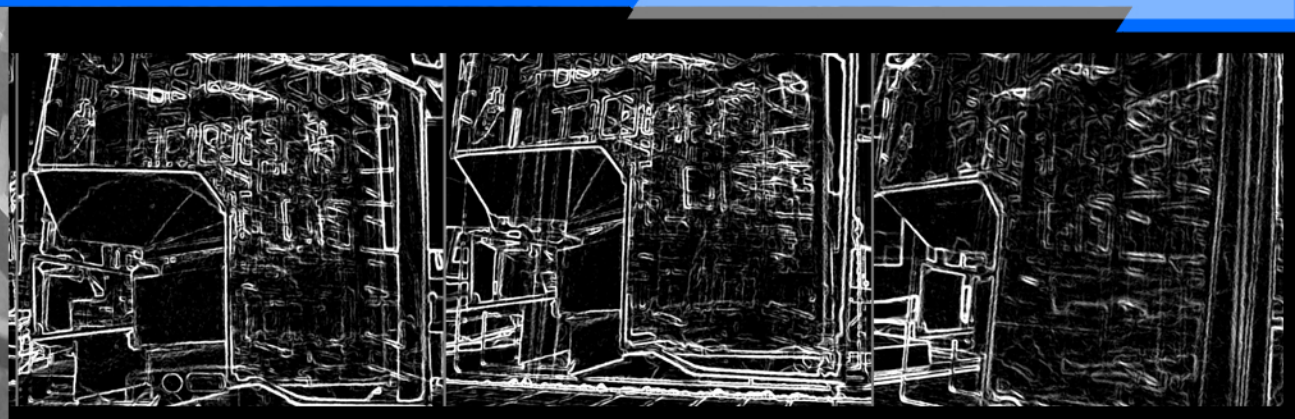


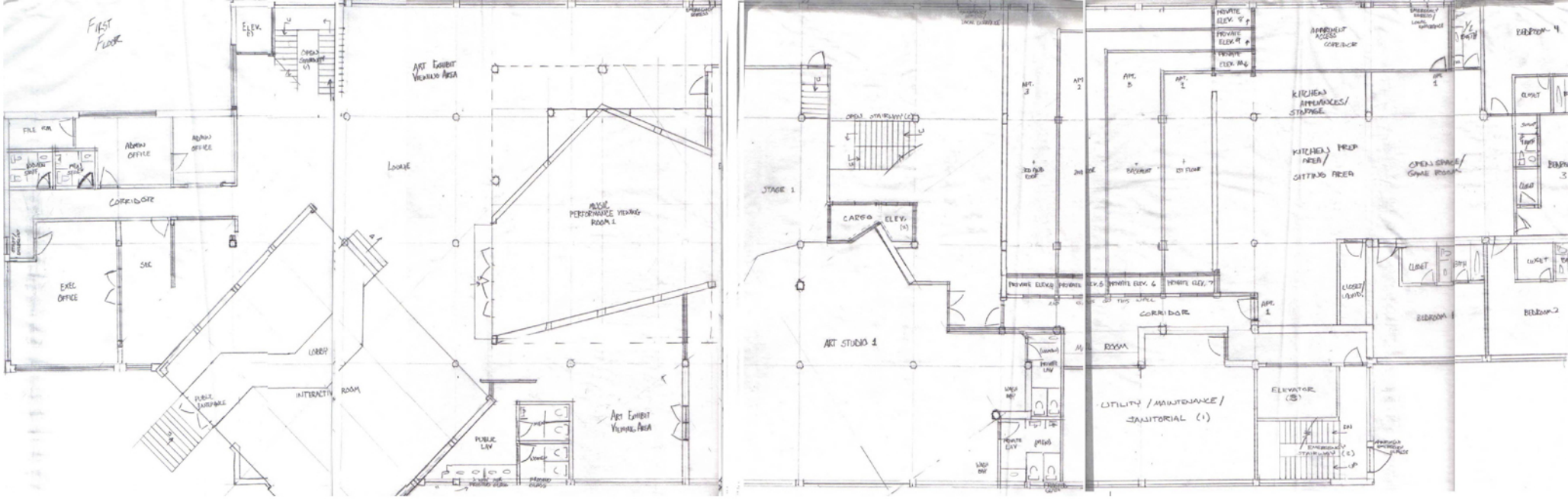


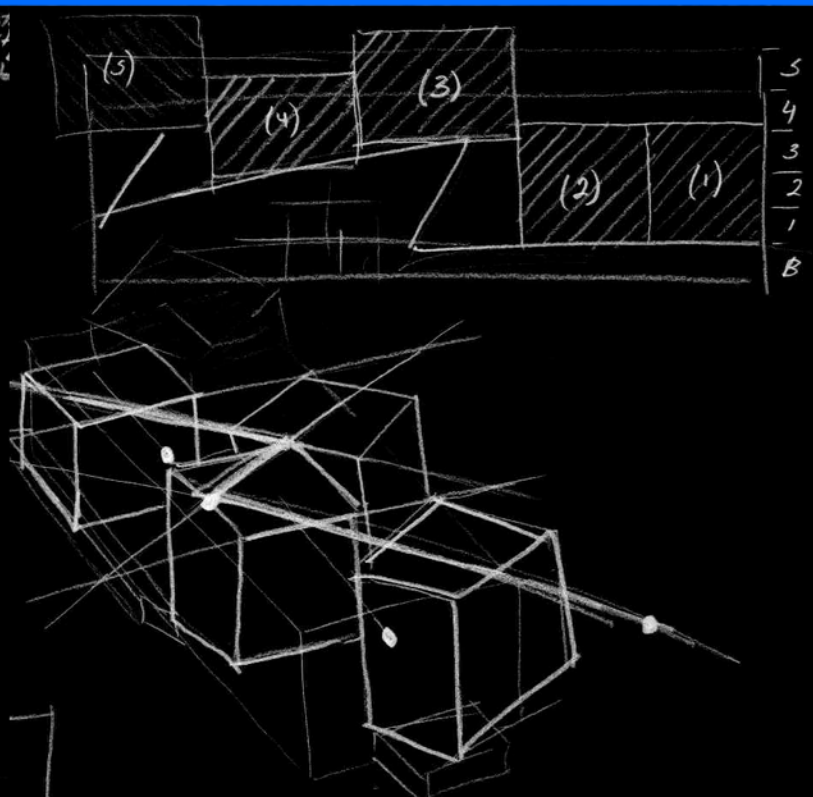
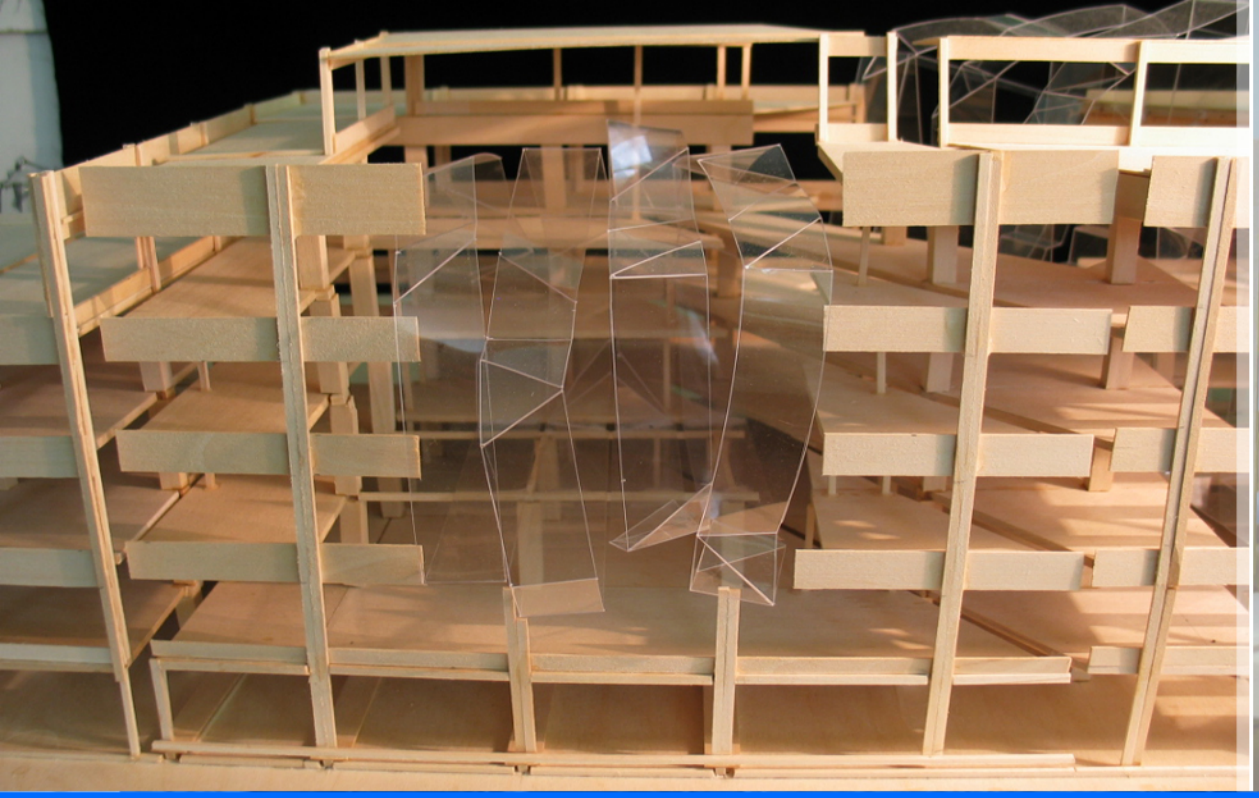
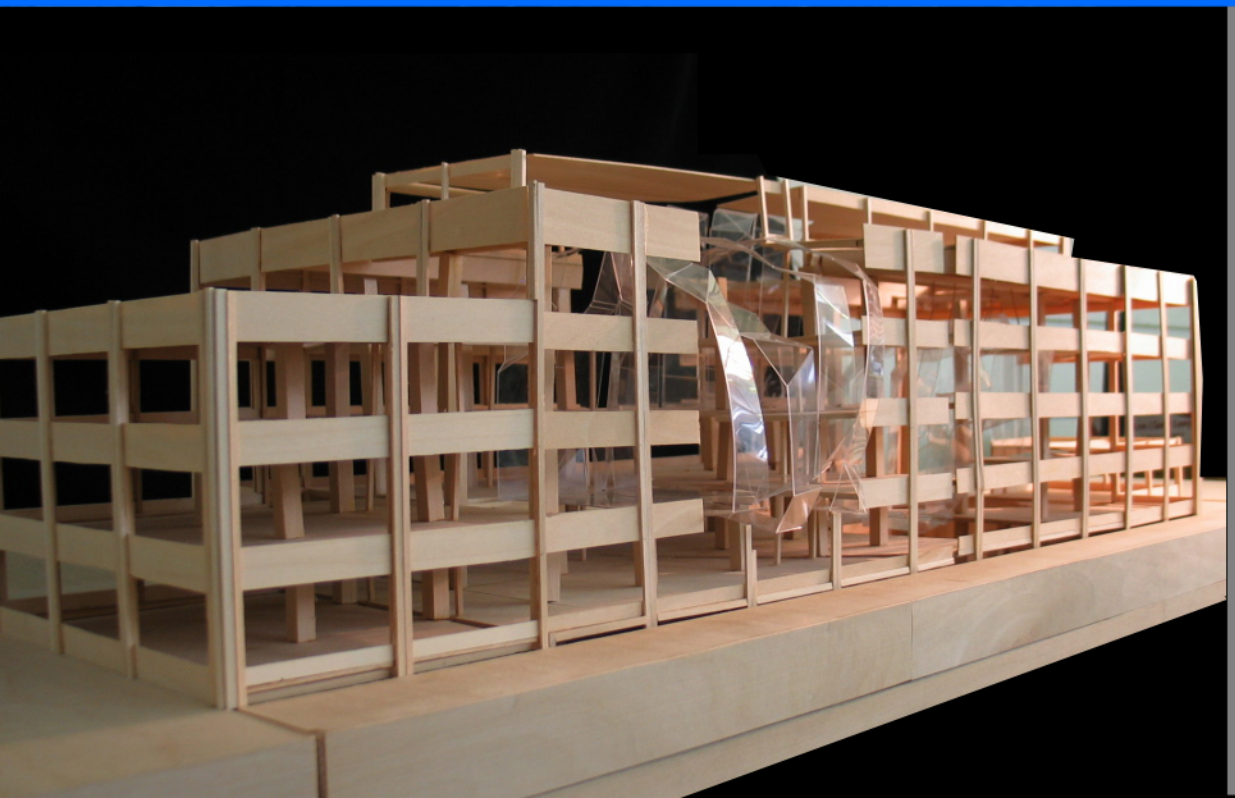
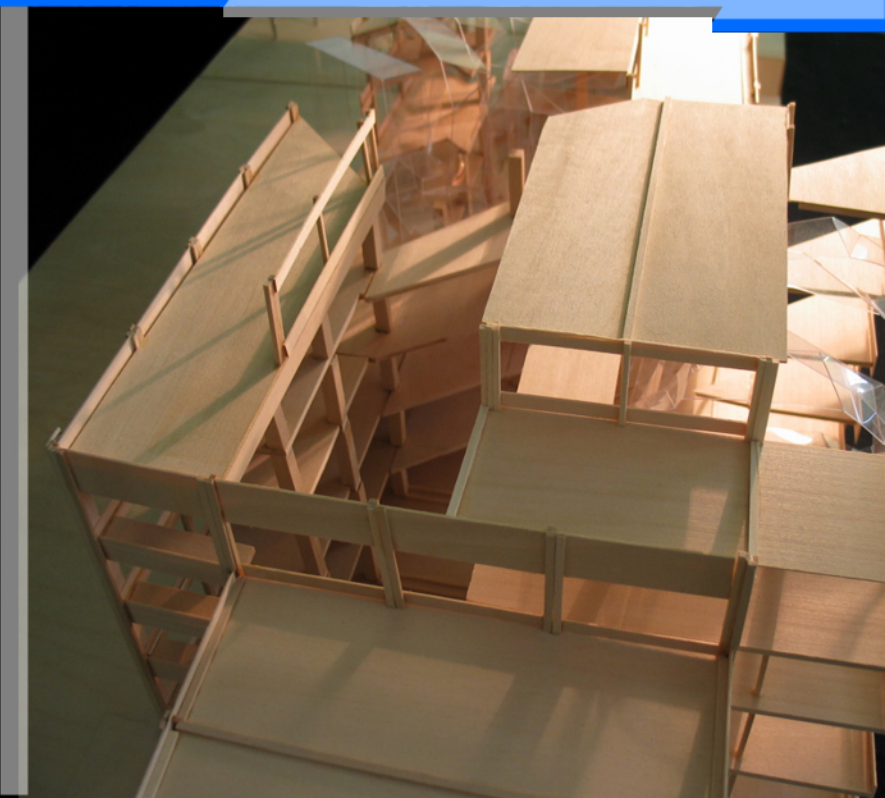
Photographs were taken of a Bethune Hall model given the human scope of vision, as one would enter the building. The process was repeated for each of the four spaces given by the new program. By stacking these photos and connecting the outside spaces in the drawings, a volume is created. These processes all relate back to the many inferences drawn from the text.











Based on path of motion and path of vision, diagrammatic plans and sections are developed. They show where the volumes will be located in relation to the original structure of Bethune Hall.