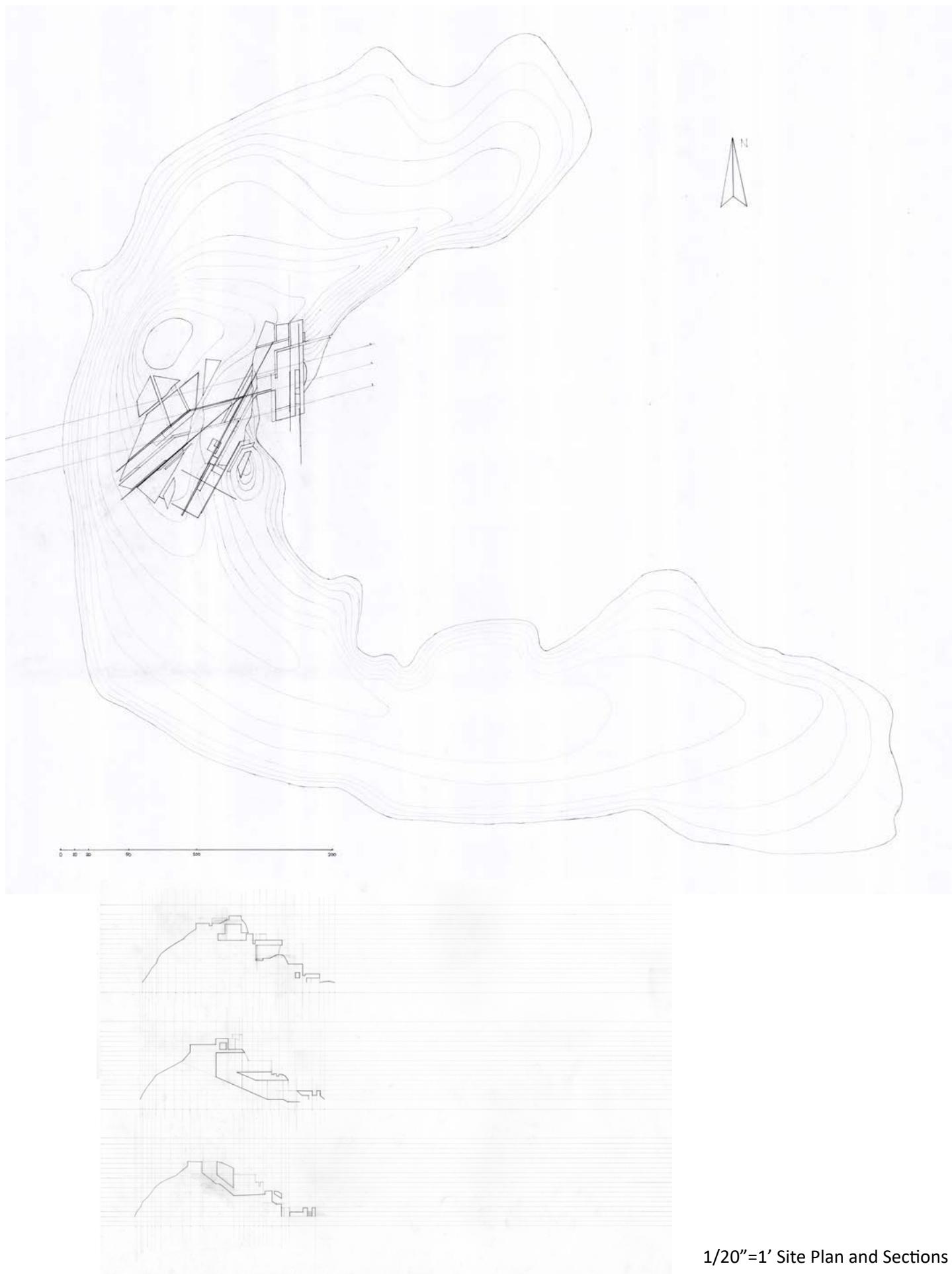


DWELLING OF THE WIND

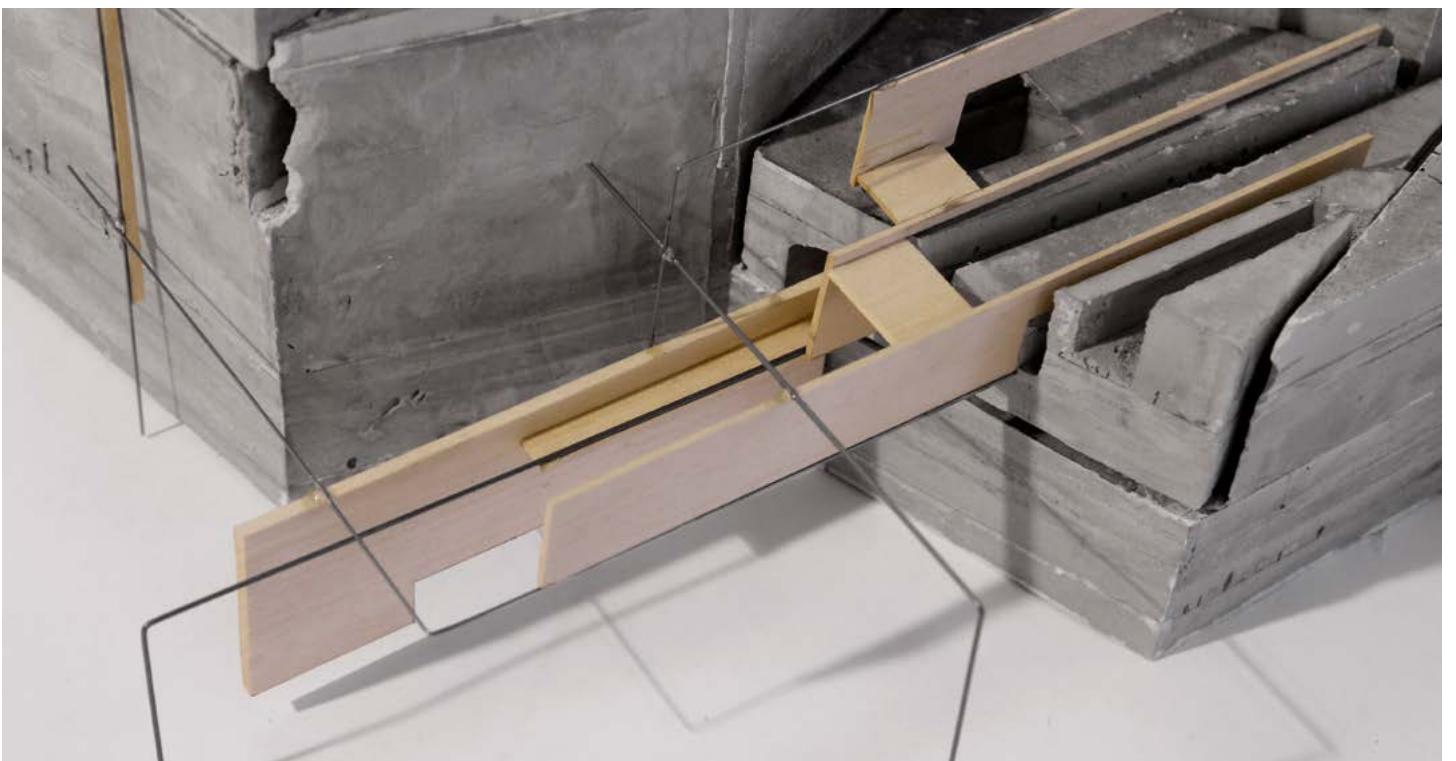
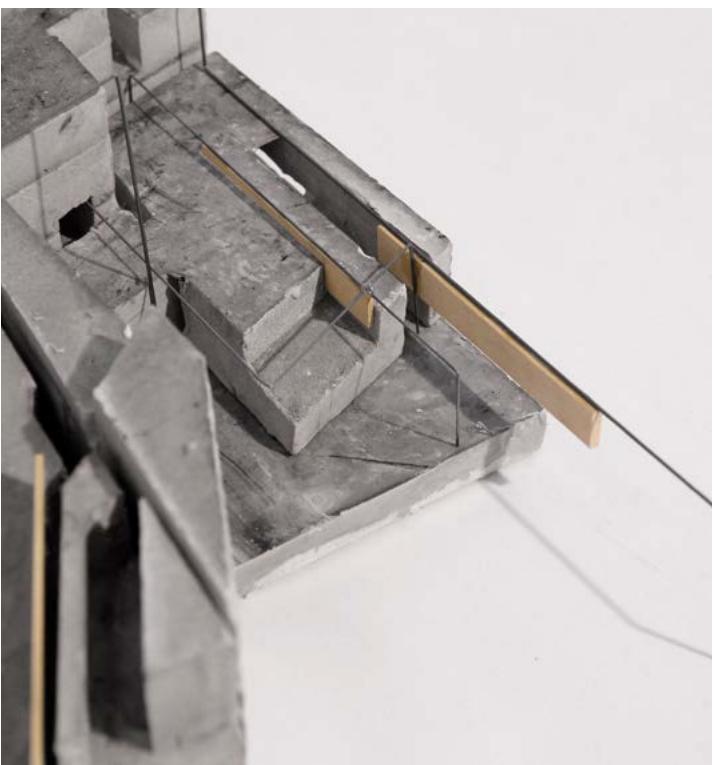
Based on the study of the element "Air" through an Albatross installation and a drawing machine, I designed a dwelling that locates on Horseshoe Island. Capturing the wind with vertical wooden pieces, the design can guide the wind into passageways carved out as landscape, and lead some wind into the interior negative spaces where human dwells. The layout of the wind passages and the arrangement of inside spaces are based on the lines and dots in the drawing produced by the drawing machine respectively. The wind is also redirected to the direction along the contour of the valley of the island by the carve outs.



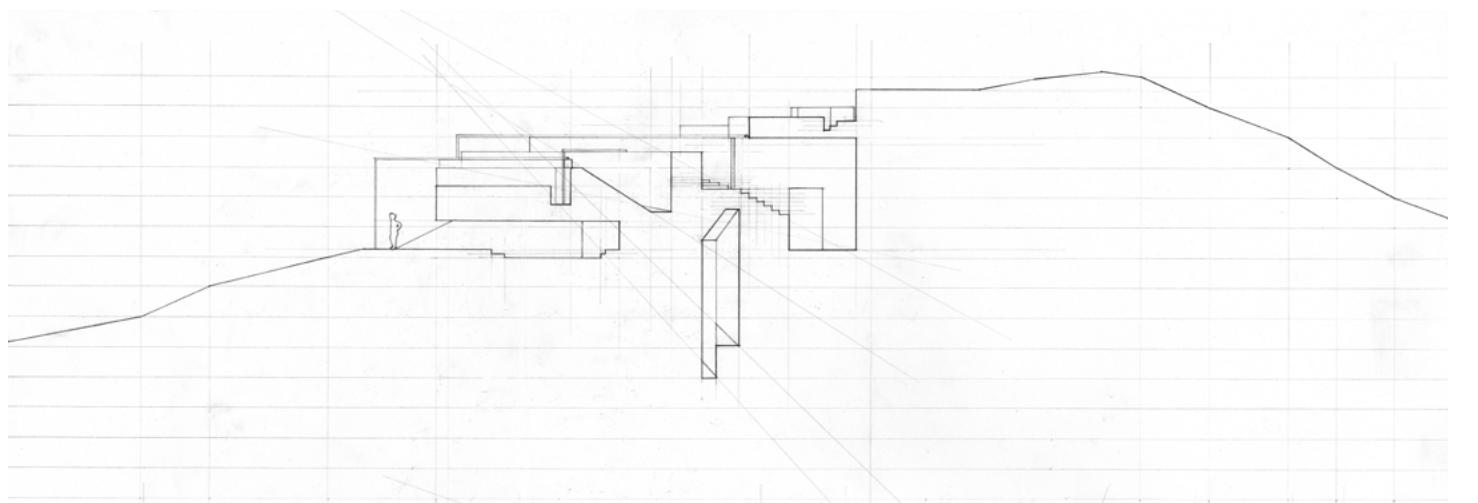
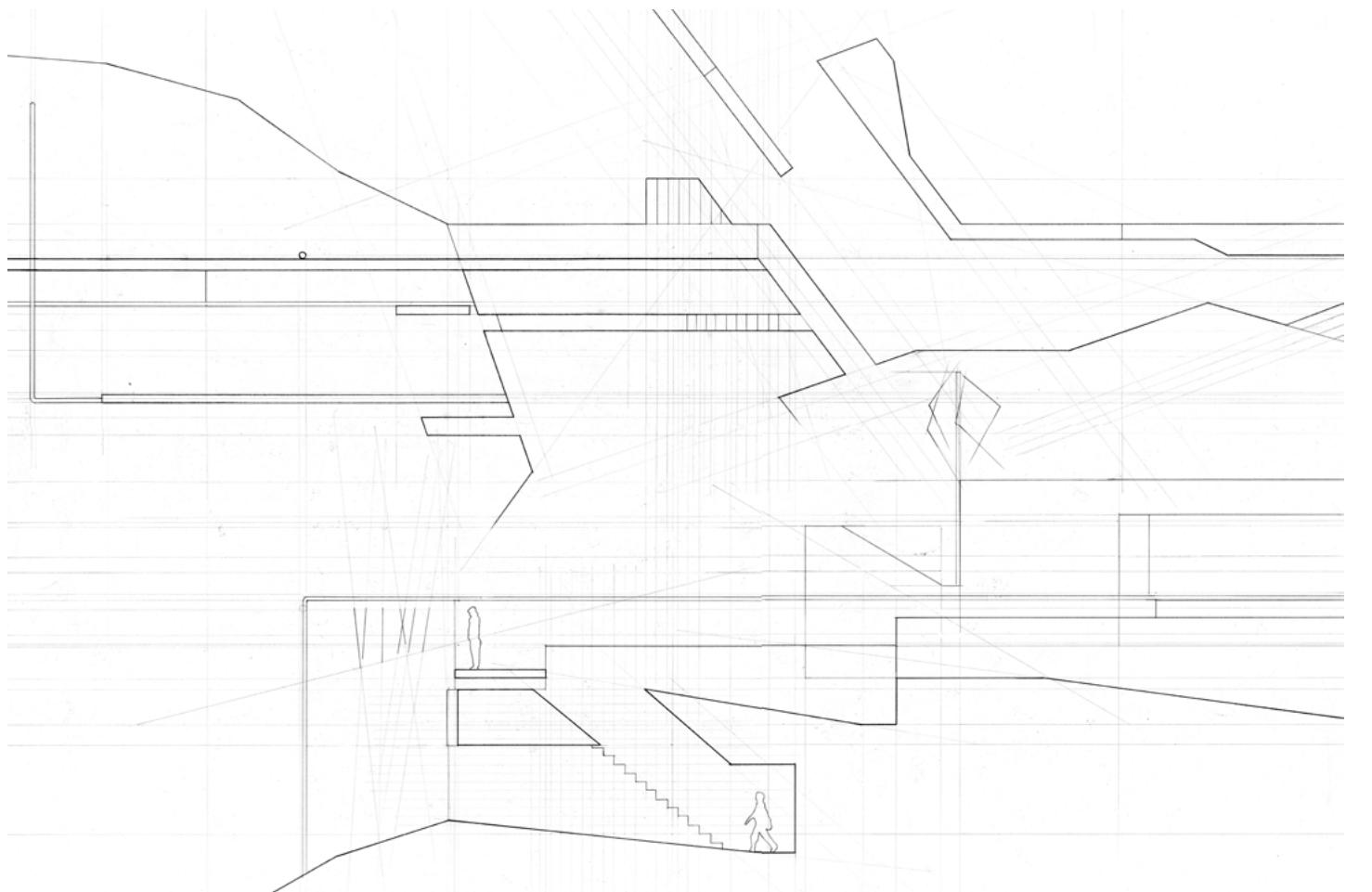
1/8"=1' Final Model; Rockite, wood, wire; 18"×18"×9"



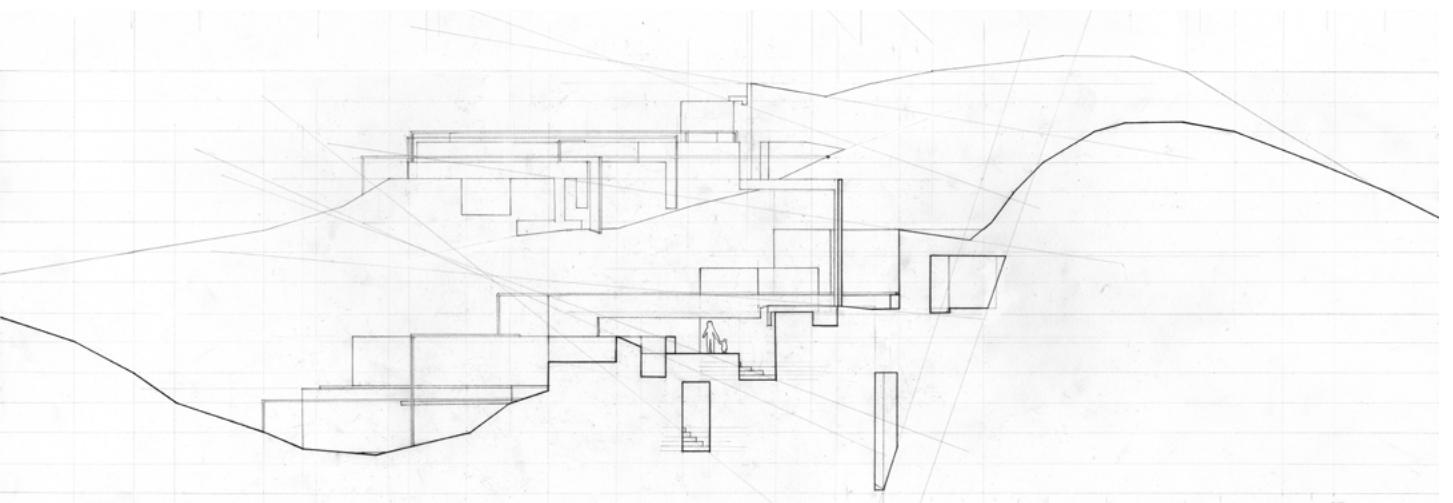
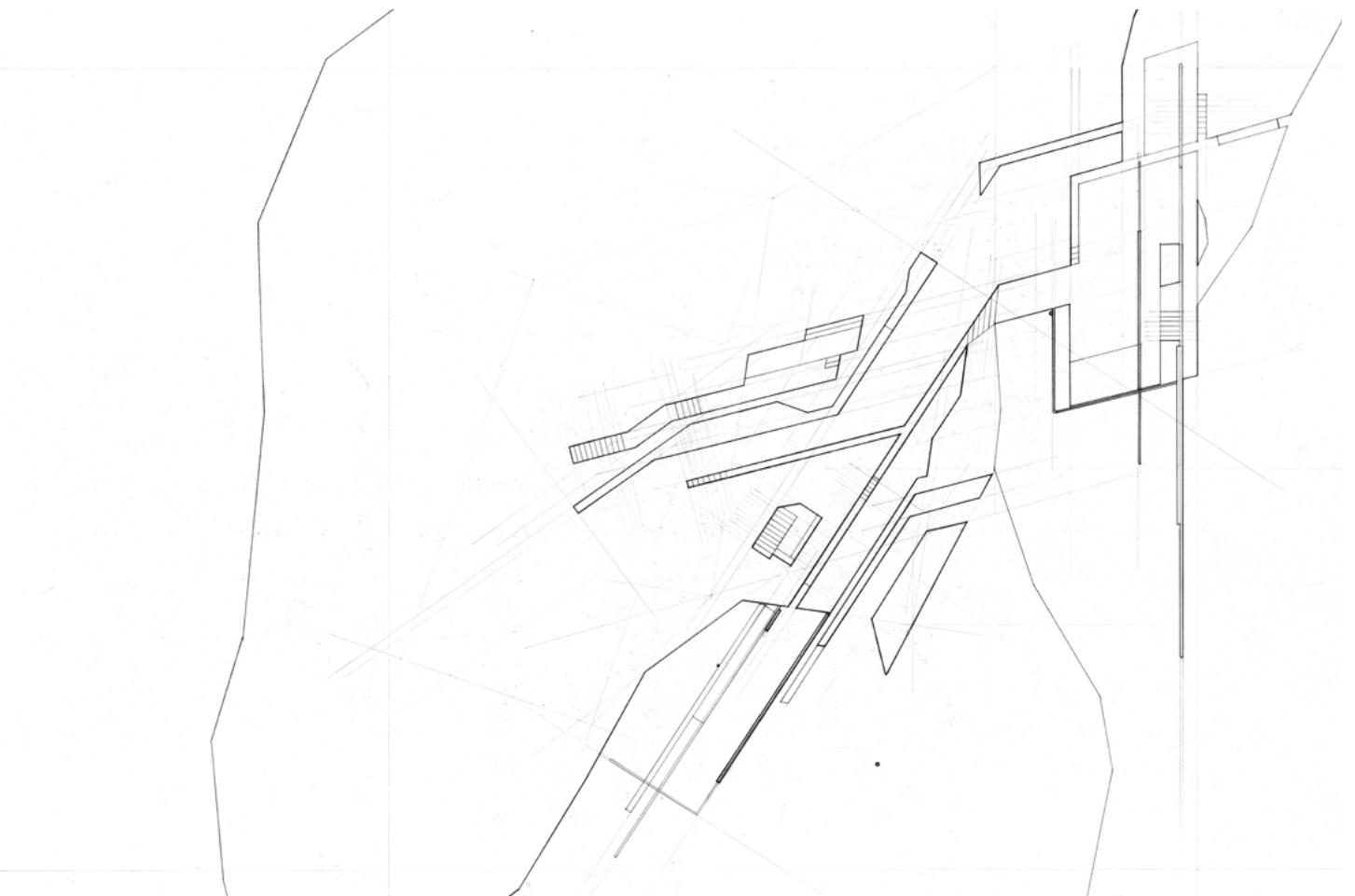
1/20"=1' Site Plan and Sections



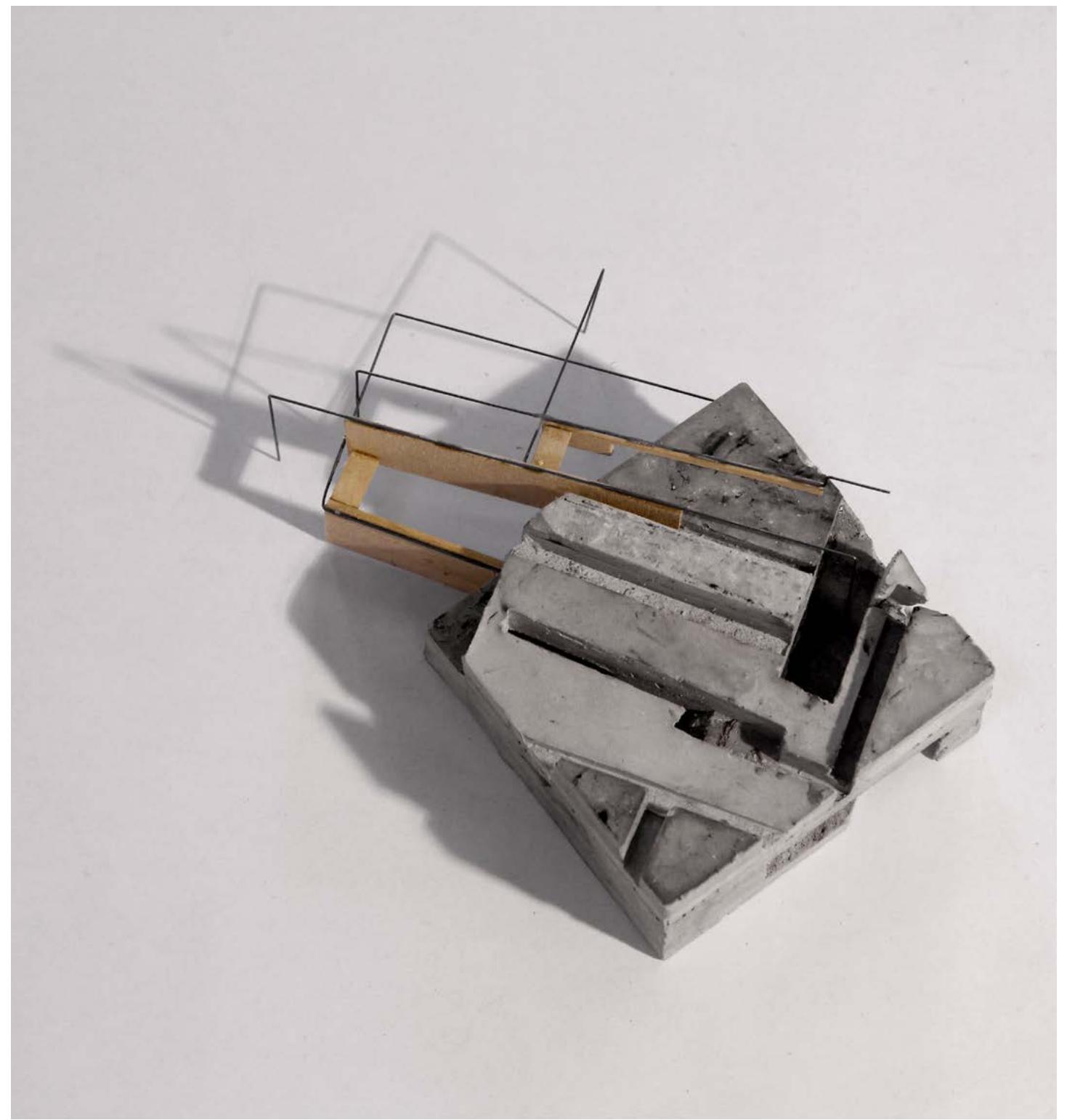
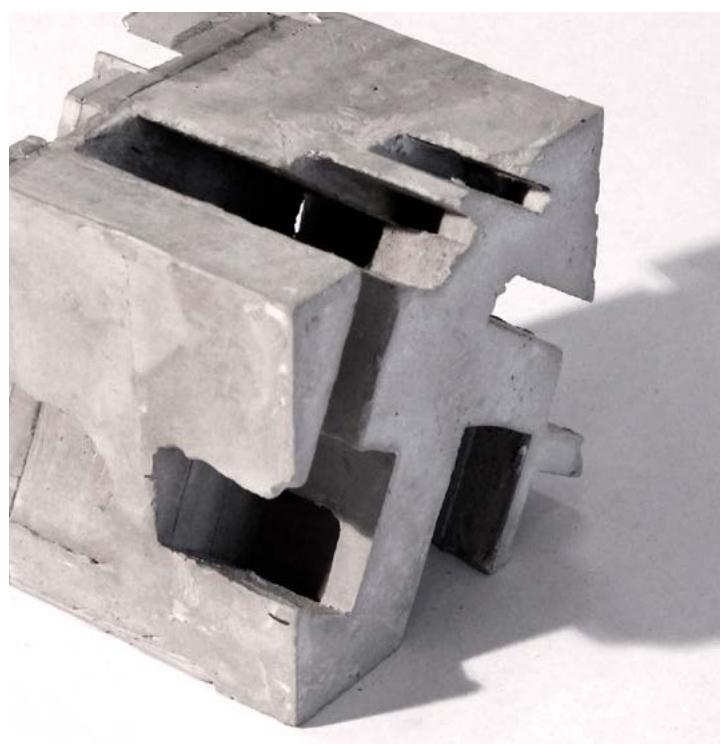
Details of the Final Model



1/4"=1' Detailed Plan and Section; 1/8"=1' Section

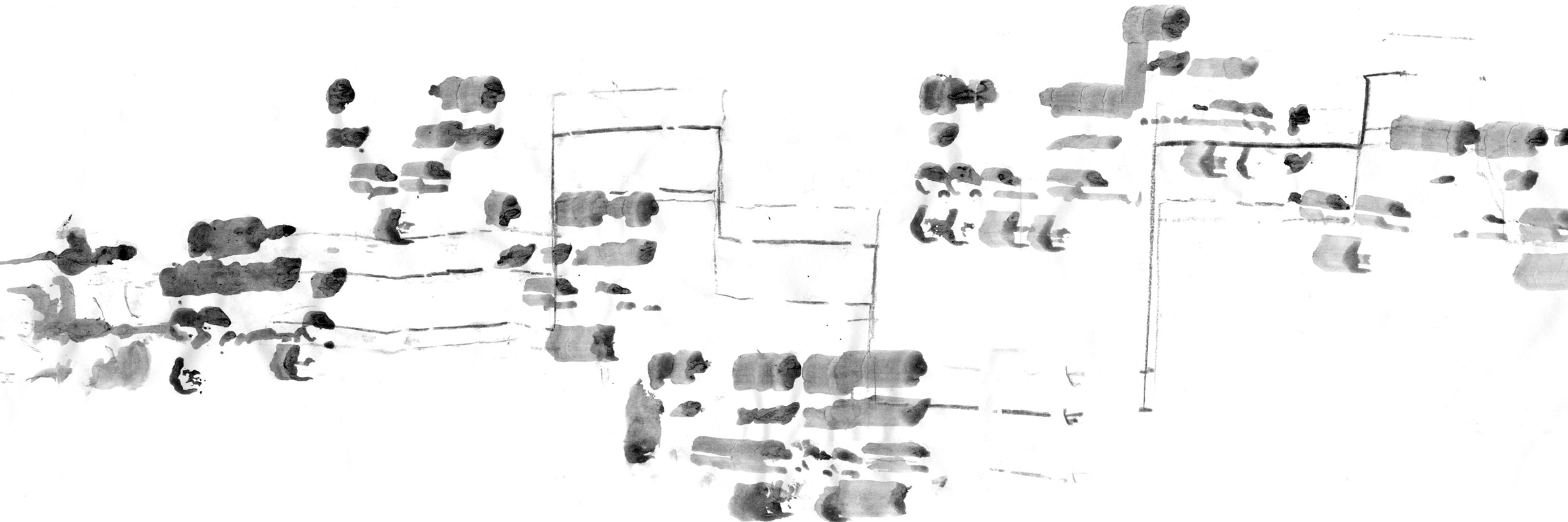


1/8"=1' Plan and Section



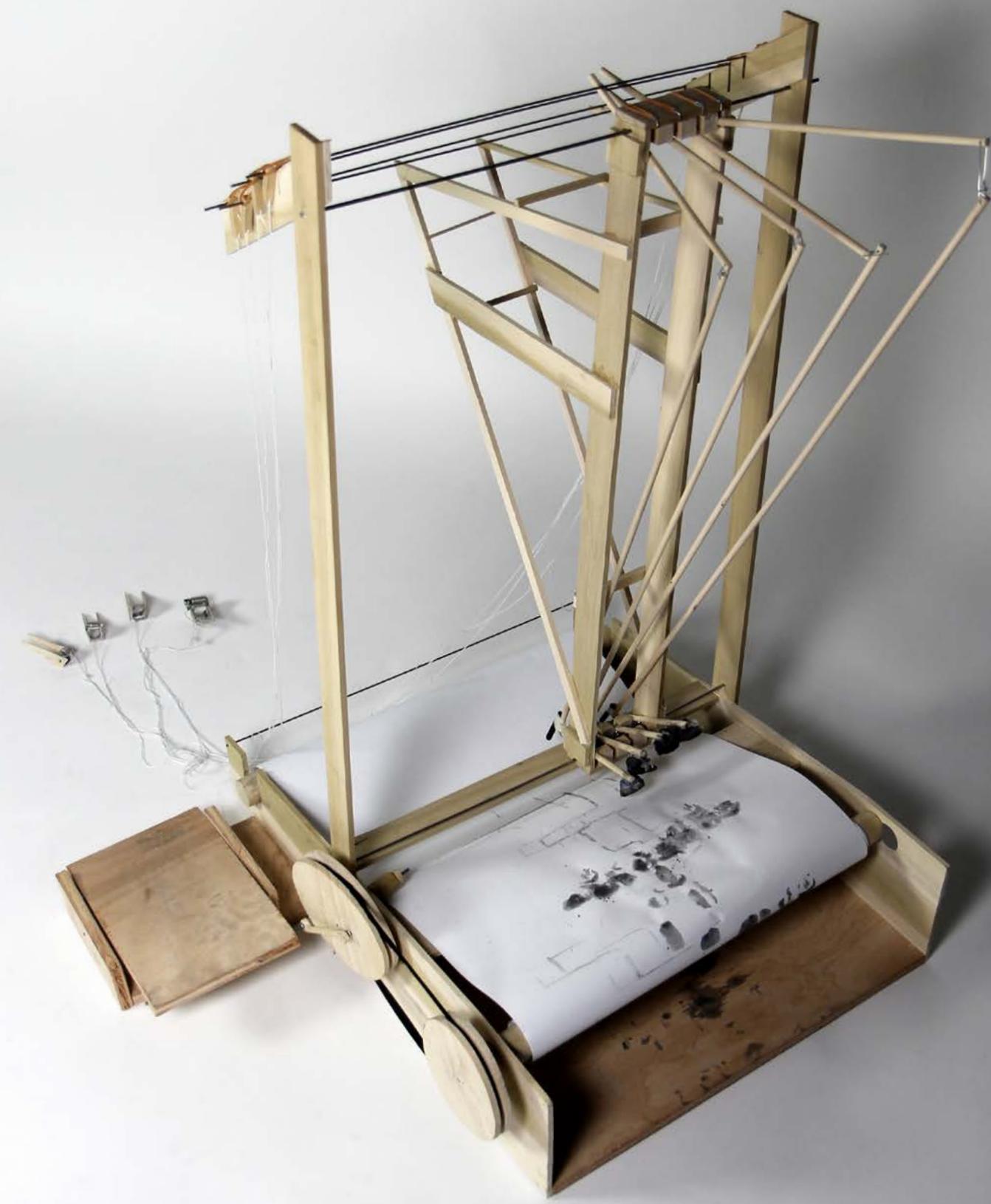
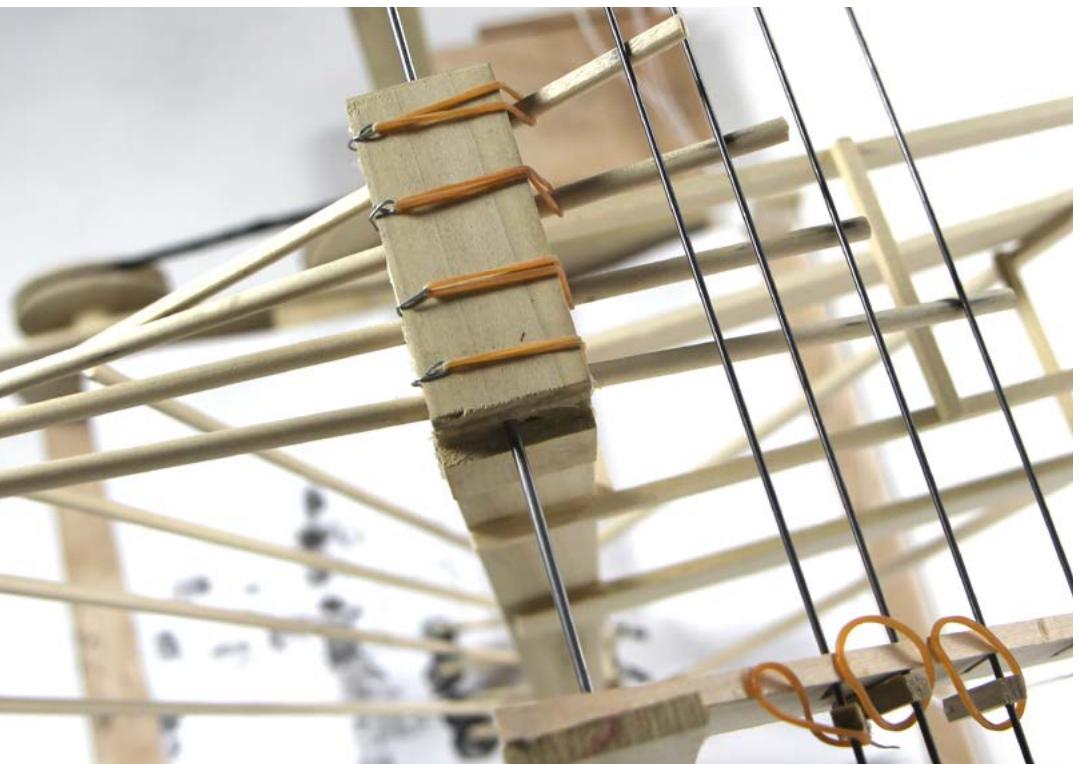
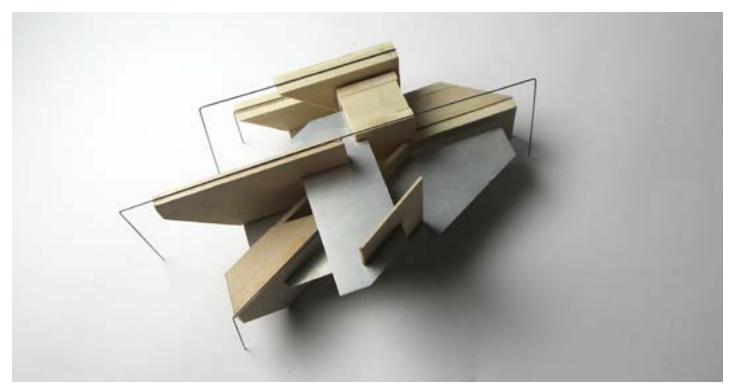
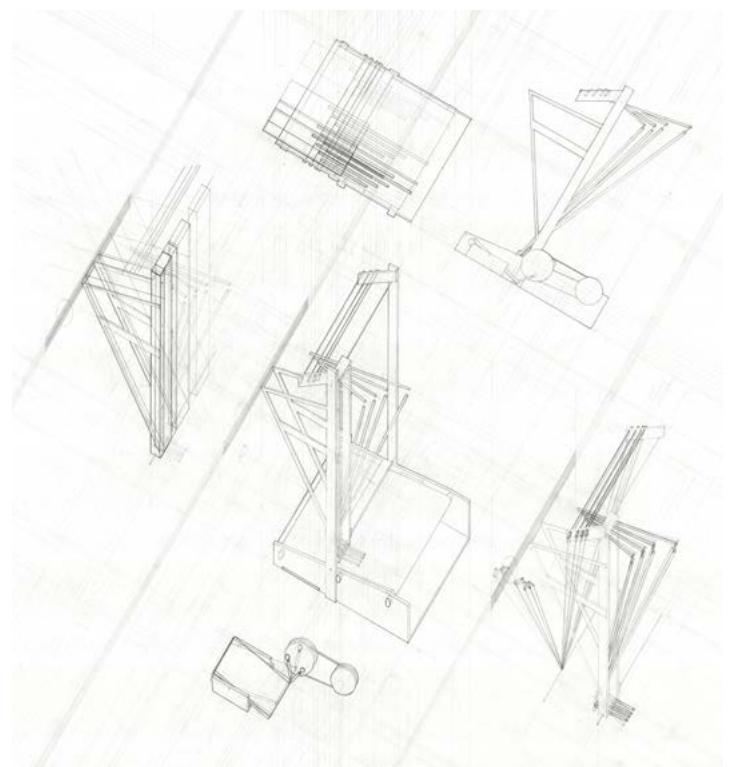


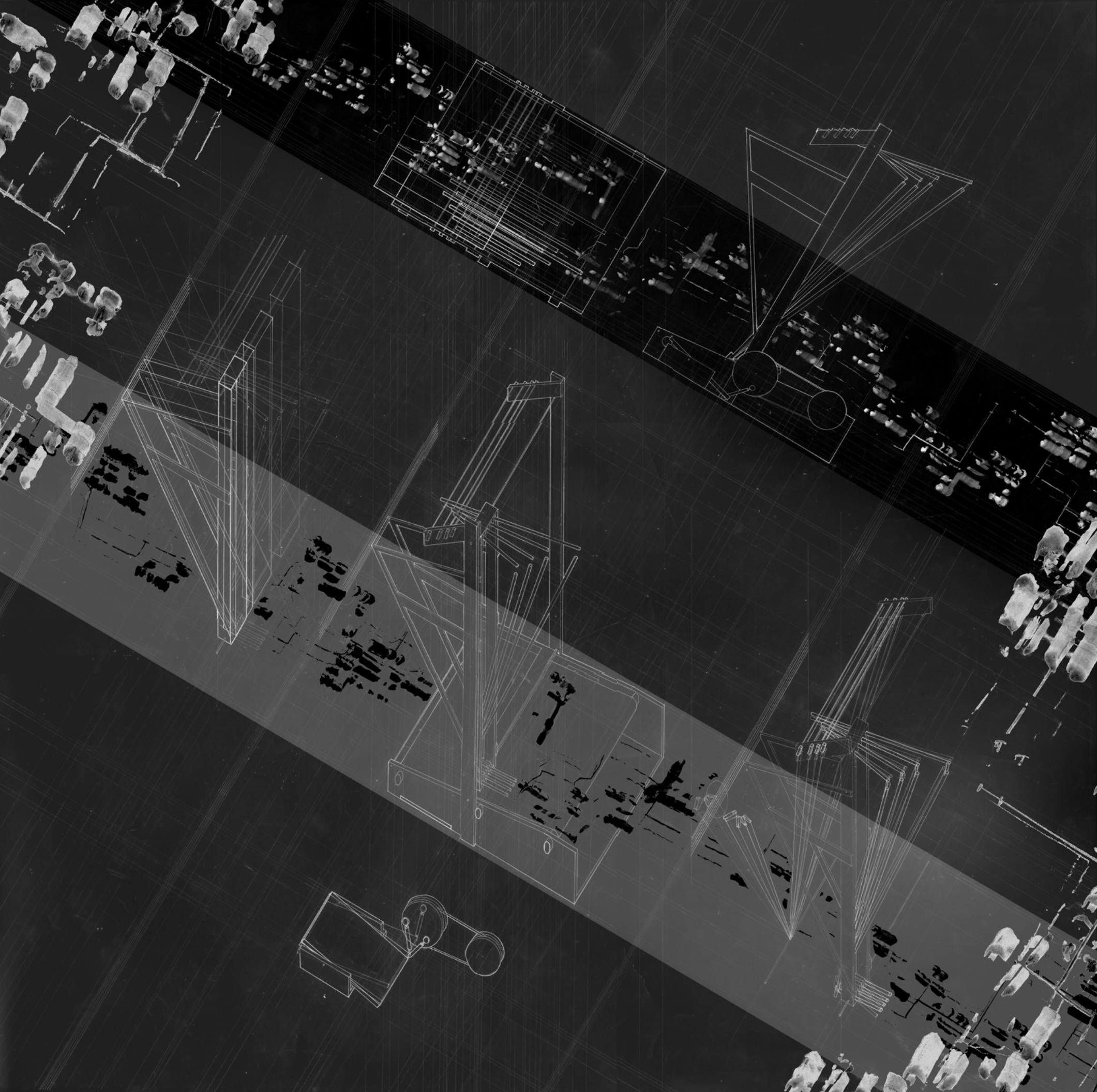
Collage of the Performance of the Drawing Machine



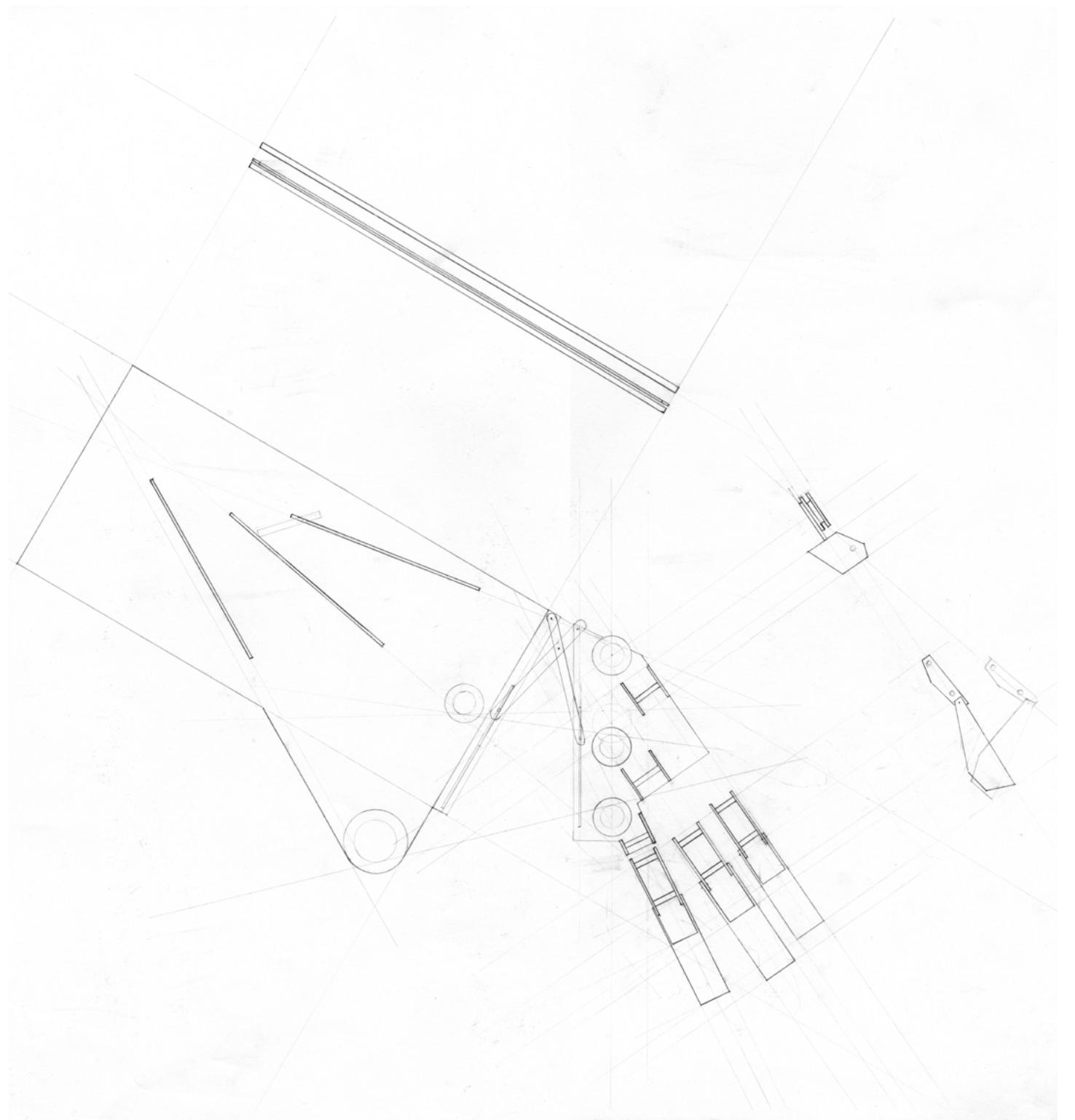
DRAWING MACHINE

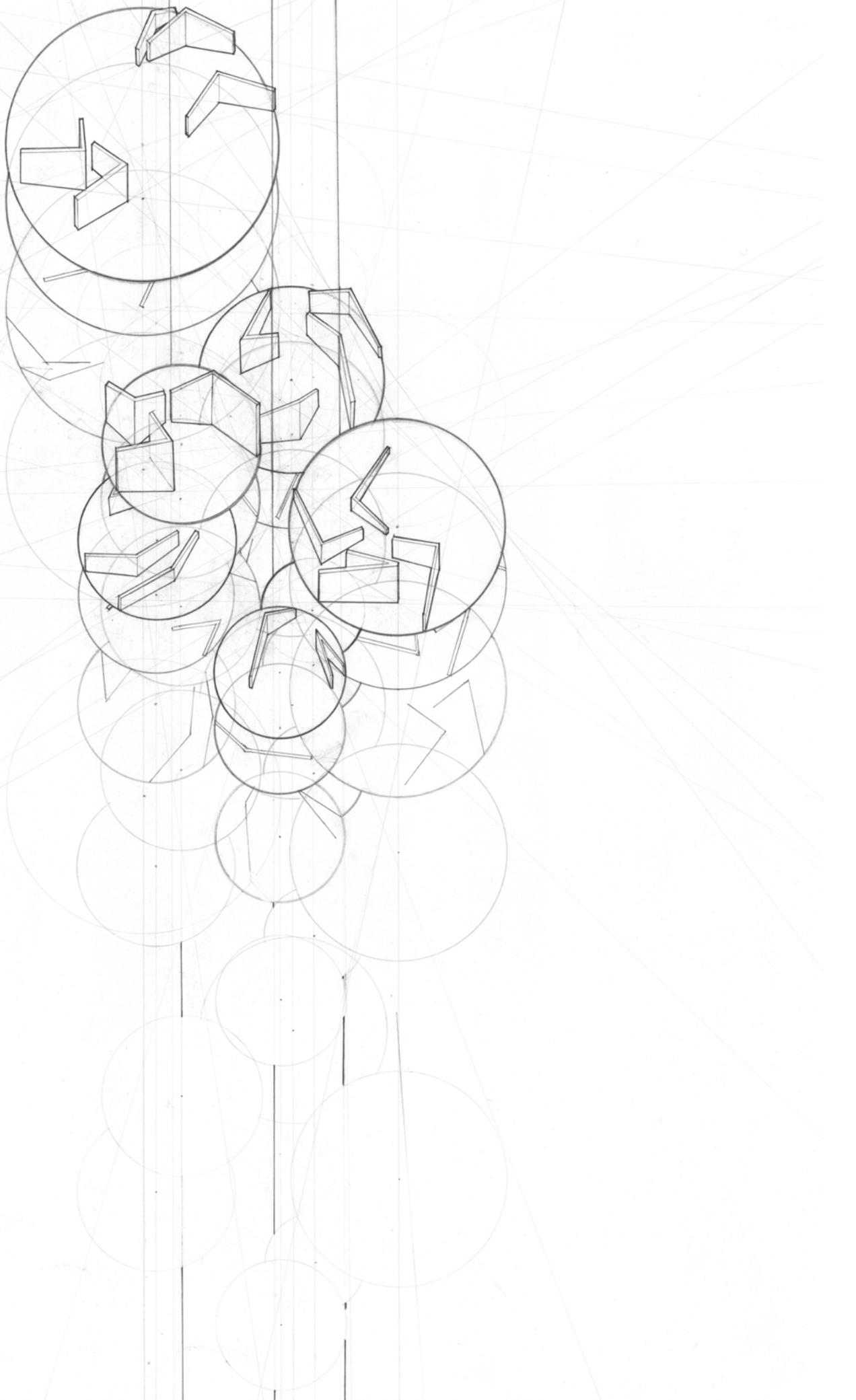
The drawing machine captures the movement of a guitar player and translates the sound that conveys in the air into a series of dots connected by four intermittent datum lines. The bending of the guitar player's fingers pulls the strings that connect to a mechanism, which draws dots and lines by taping different wood bars. The movement of the guitar player's left hand along the neck of the instrument is used to elicit the movement of the drawing mechanism throughout the paper. This helps the machine capture the music more precisely and allows it to draw variations. The taping of the guitar player's right foot is also recorded by peddles that can rotate the paper roll and push paper forward. When the player is taping along the beat, the paper will constantly go through the machine and the passage of time will be documented.





Collage of the Machine Drawing and the Drawing Produced by the Machine



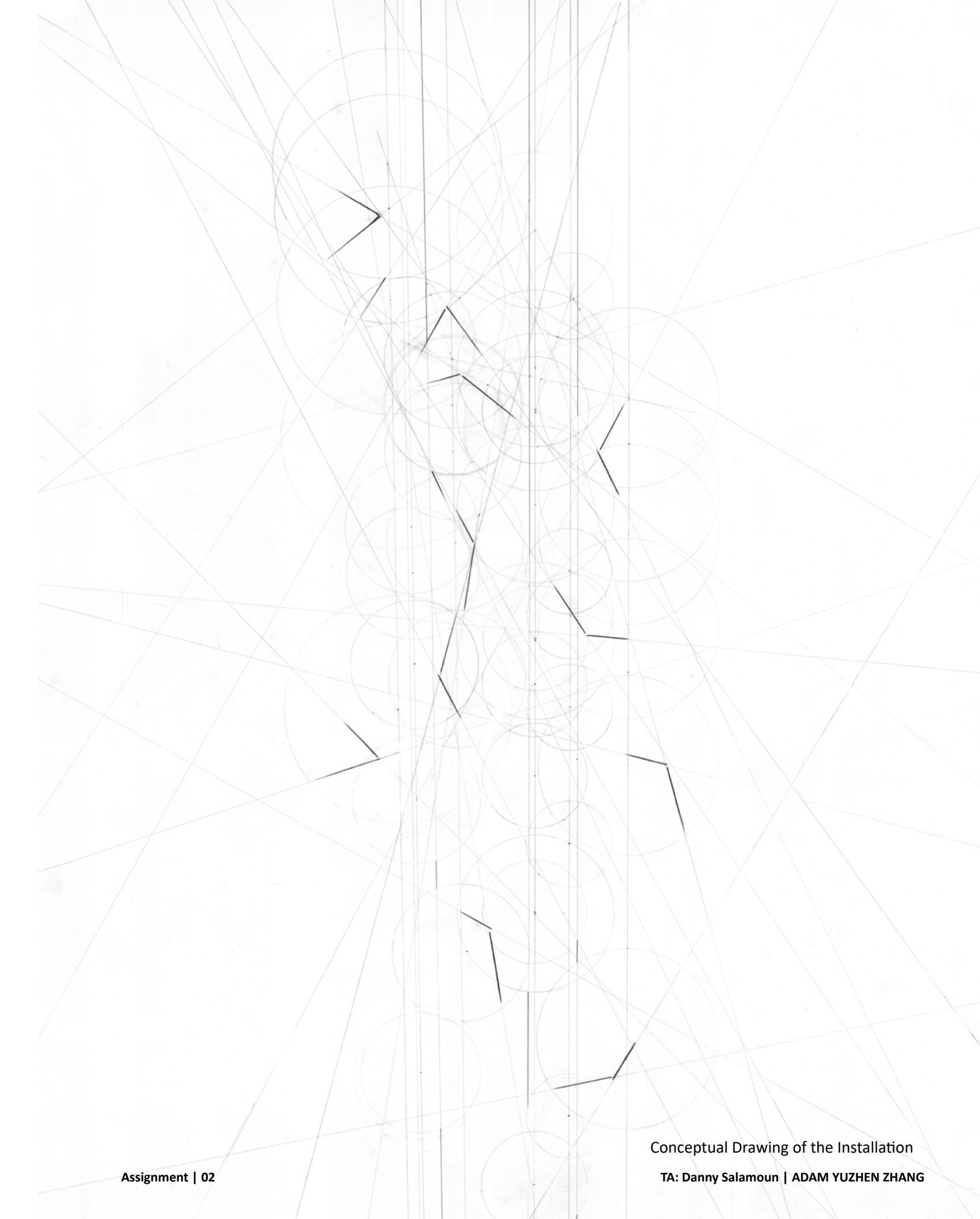


ALBATROSS INSTALLATION

By drawing the movement of an albatross' wing when it's gliding, I captured the existence of the element of "Air" and learned its features. Constructing upon the 2D drawings, I made 3D models and installations that represents the element "Air" and concepts derived from the drawings. The installation is composed of horizontal gears of different levels, and vertical ones that connect them in between and allow them to move within a framework. The installation is placed between the two electric doors of the Milstein Hall. When people pass by, the wind generated will push the peddles on the horizontal gears and cause the whole installation to move vertically along the strings. Wind is thus captured by the installation. The invisible element "Air" now becomes visible.



Cornell AAP | ARCH 1101/1103 | FALL 2016 | Professors: Val Warke / Luben Dimcheff



Assignment | 02

Conceptual Drawing of the Installation

TA: Danny Salamoun | ADAM YUZHEN ZHANG

