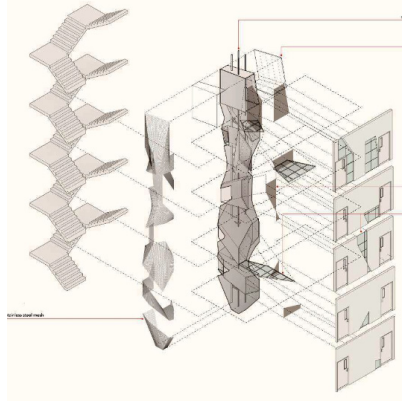


## 48.105 FOUNDATION 2

We will build on the lessons from 48-100 about clear architectural communication and abstract spatial-definition, but add a greater emphasis on material and experiential understanding, how architecture is made and used. We seek to integrate hand drawing with an expanded use of computing as tool for describing and analyzing, but also for generating new understanding and testing proposals. We explore the ideas of systems, and computational thinking, and emphasize the role of constraints and editing as fundamental to the design process. We seek greater rigor in creating order and synthesizing an array of parameters and performance criteria, but also stress a tolerance for uncertainty and multiple truths. Beginning with more abstract 2D, 3D, digital, and analog formal design and critical making exercises, and ending with the design of a small building, we explore how tectonics, joinery, materials, as well as site, context, and human use can be harnessed to create inspiring and useful architecture. Students are encouraged to begin to speculate and take careful risks, both in their designs, and drawings.



# 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2

## Tectonic Modular Marble Track

Construction and Assembly of  
Modular Units

Gunn Chaiyapatranun  
48-105 Studio A

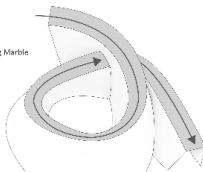
Method of Folding and Cutting  
Individual Modules



Method of Assembly of individual  
Modules, Previous Modules Presented in Blue



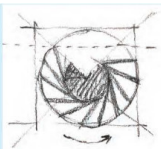
Trajectory of Rolling Marble



Each fo



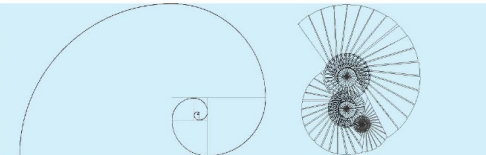
Inspiration 1



Inspiration 2

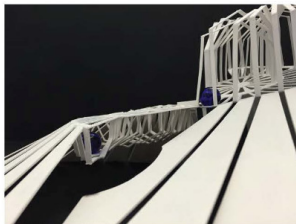
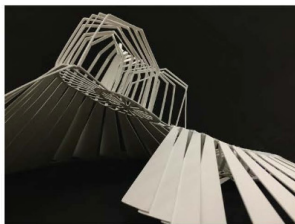


An earlier exploration



Rationalize the Fibonacci Sequence/Golden Spiral

Iteration 3



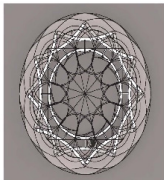
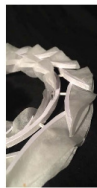
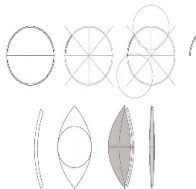
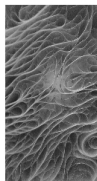
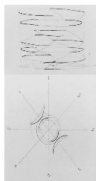
Change of level of path



# 48.105 FOUNDATION 2

Marble Runs  
Rachel Baker  
Instructor Kai Gutschow  
Studio Foundation I 48-105  
30 January 2015

Final  
Design

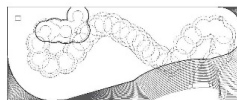
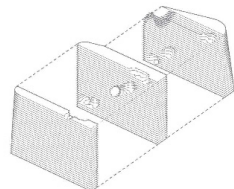


Marble Runs  
Rachel Baker  
Instructor Kai Gutschow  
Studio Foundation I 48-105  
30 January 2015

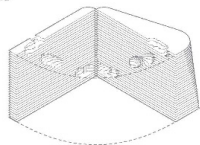
Preliminary  
Designs



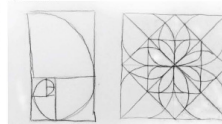
Photograph: Andrew Wittman/CC BY



Mar 2014



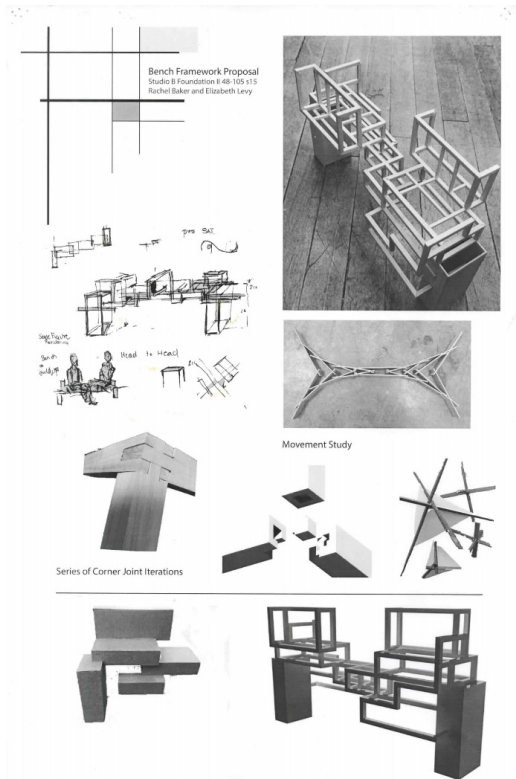
Mar 2014 (More Detailed)



May 2014 (Final)

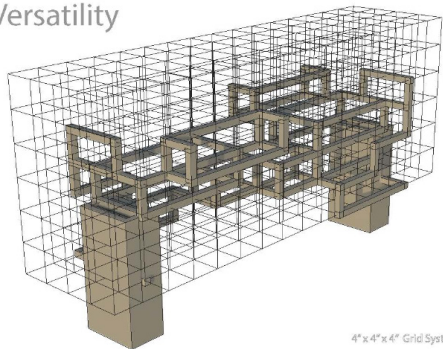


# 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2

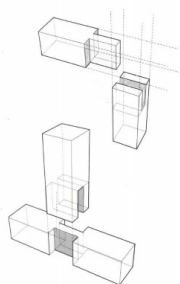
Versatility



4"x4"x4" Grid System



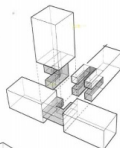
USED JOINTS



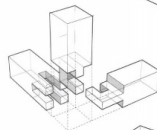
CORNER JOINT

3 -PIECE CORNER JOINT

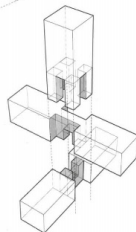
JOINT ITERATIONS



4 -PIECE CORNER JOINT

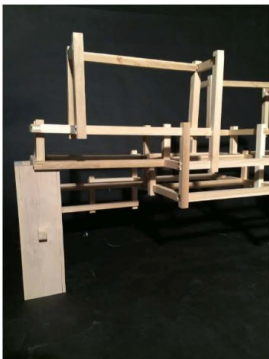


BOX CORNER JOINT



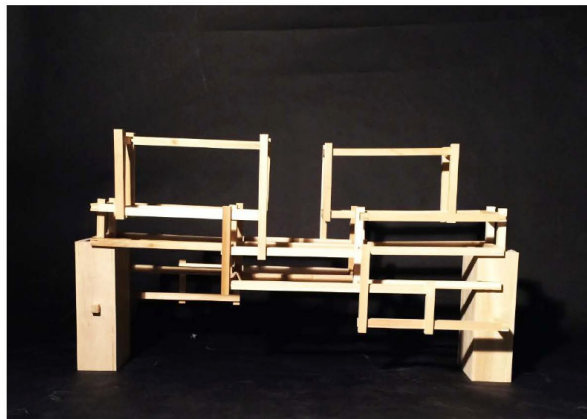
5 -PIECE CORNER JOINT

## 48.105 FOUNDATION 2



### Span Model Photos (Full Scale)

Rachel Baker and Elizabeth Levy

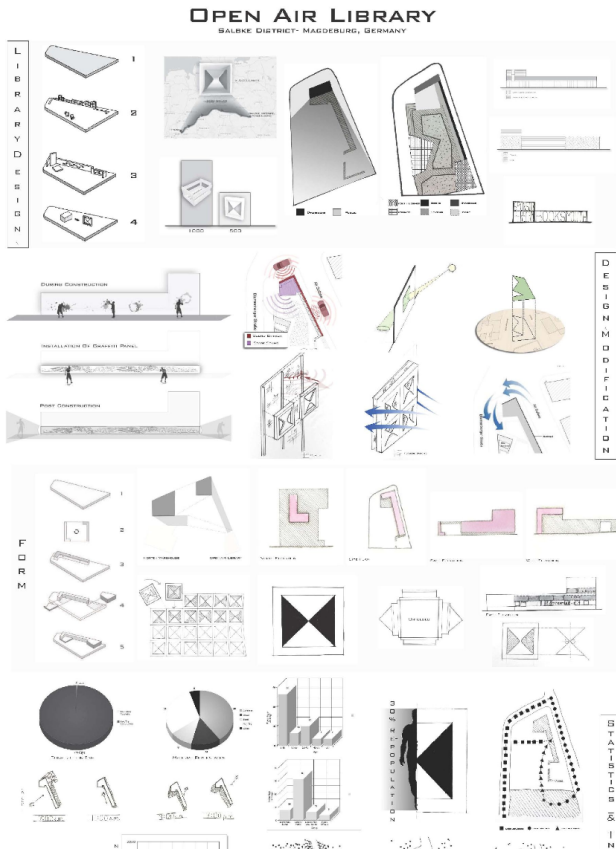
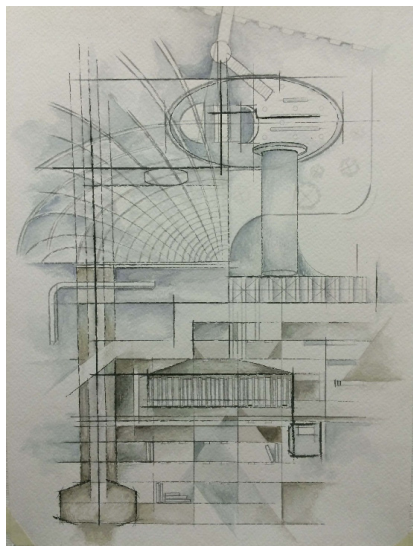


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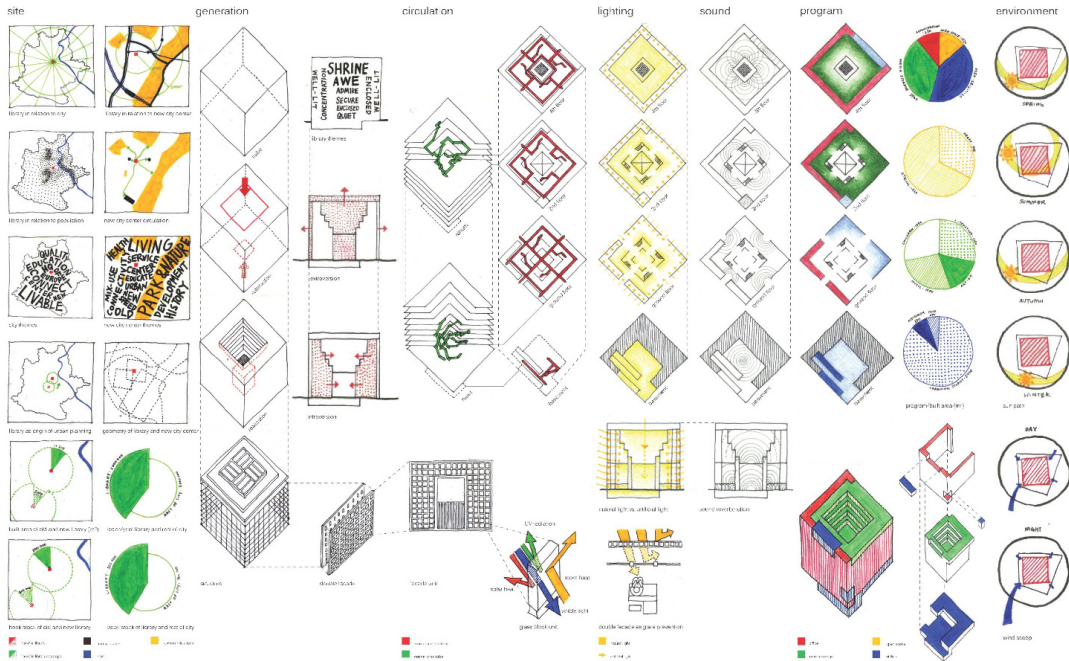




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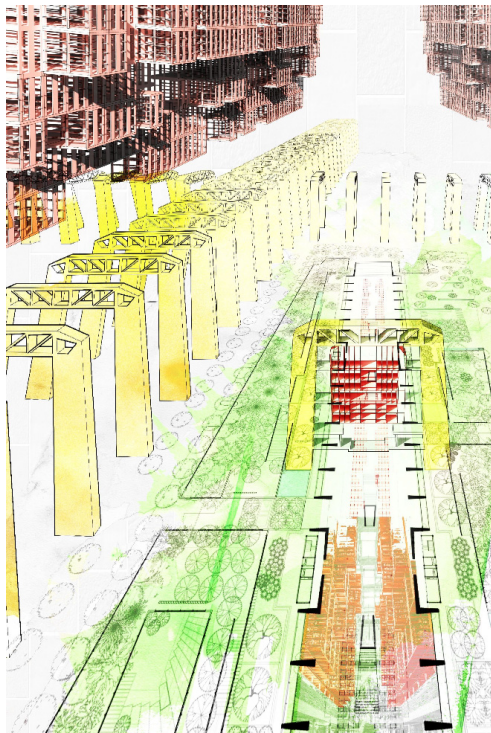
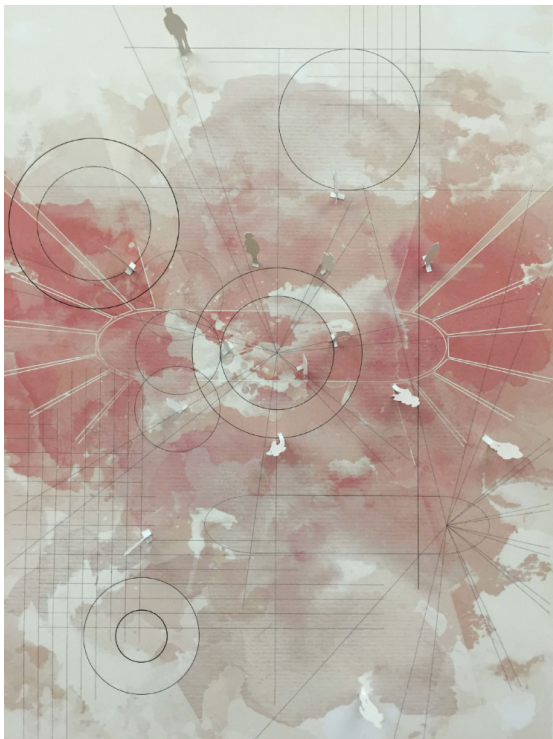


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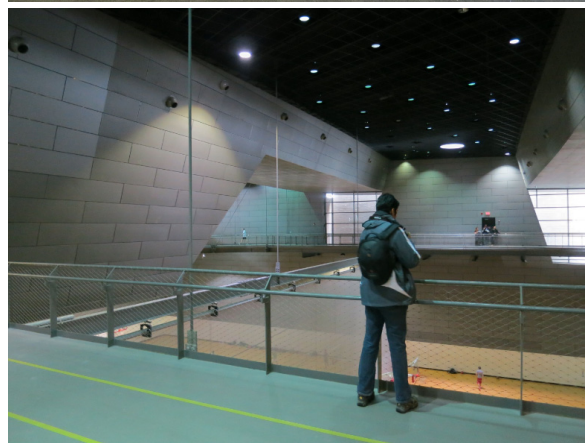


50 diagrams: stuttgart city library  
stuttgart, germany  
yi architects, 2011

## 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2



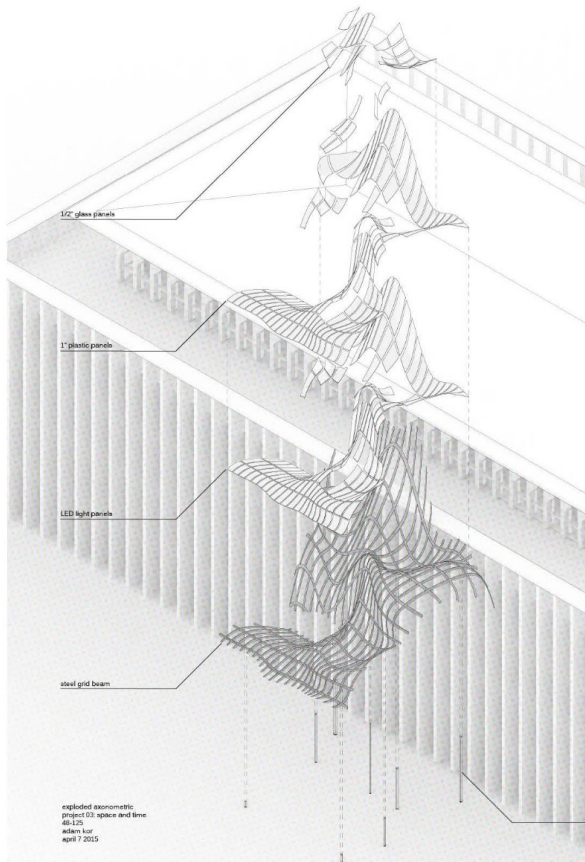
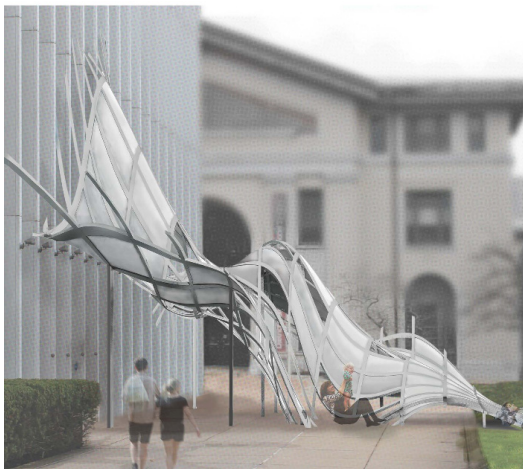
# 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2

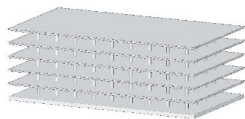
## parasitical unit

transformation of hunt library by kelly li

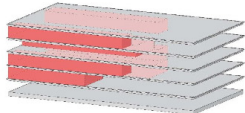
hunt library is a central space in the center of Chicago. Miller's renovation has not only physically merged to the campus, it also reformed the academic climate of the university as a whole. As Chicago library, we need not only to be a study space, but also to lead the academic, which has become a truly relevant aspect.

currently, hunt library is a building operated in eight floors. each floor plan is a 100m x 100m square. As a response to the existing situation, we are not going to consider each floor. We're not an owner, but we are able to find one study space per each eight students in the hall. Change the old and add a new one to the study space per 10 factor's hunt library's study space, but under strict budget conditions.

This is an idea, aimed to address these issues and to propose a new form for the evolution of the hunt.



STACKED ORGANIZATION



STUDY AREAS

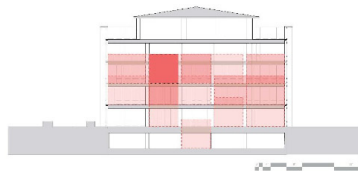
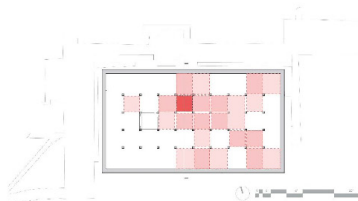
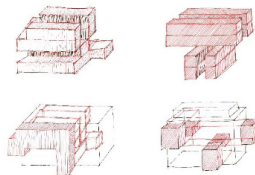
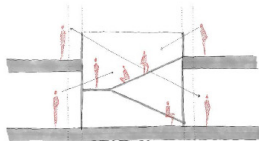
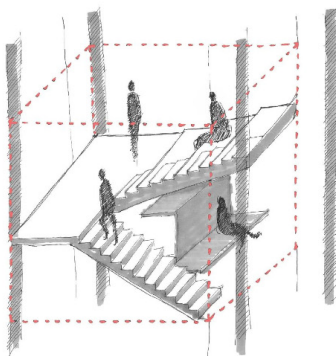


AVERAGE COLLEGE LIBRARY



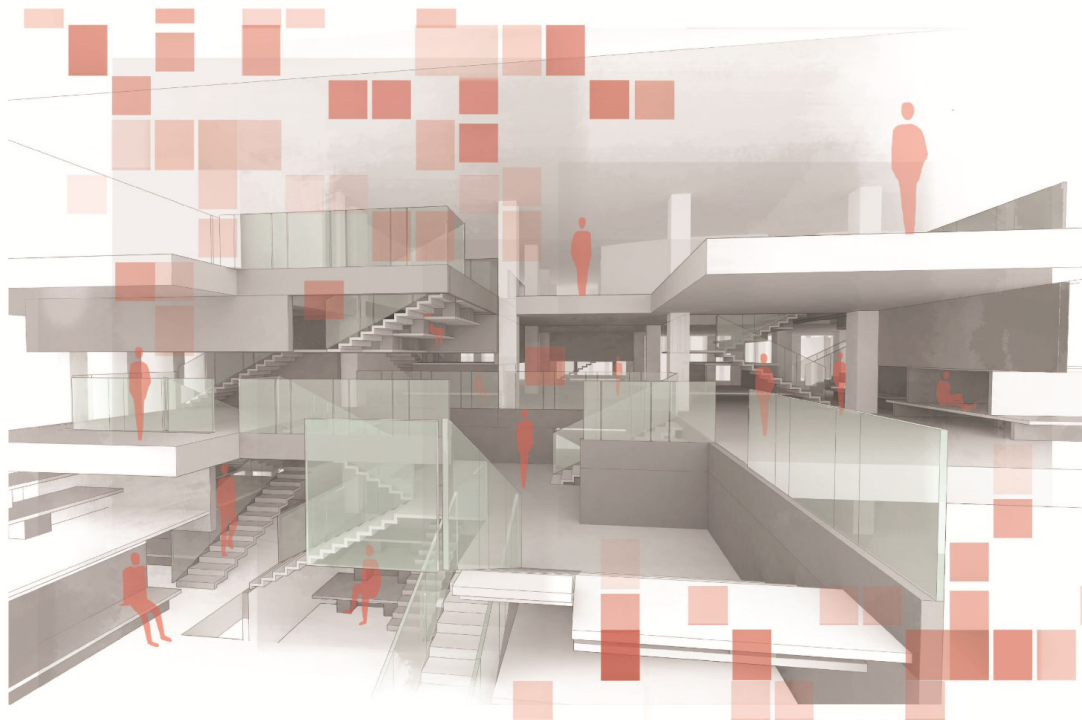
HUNT LIBRARY

NUMBER OF STUDENTS  
STUDY SEATS

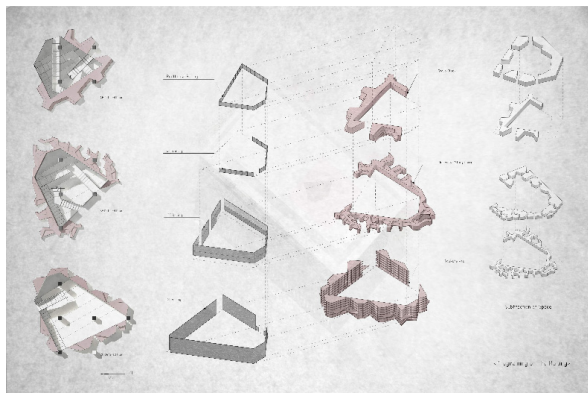
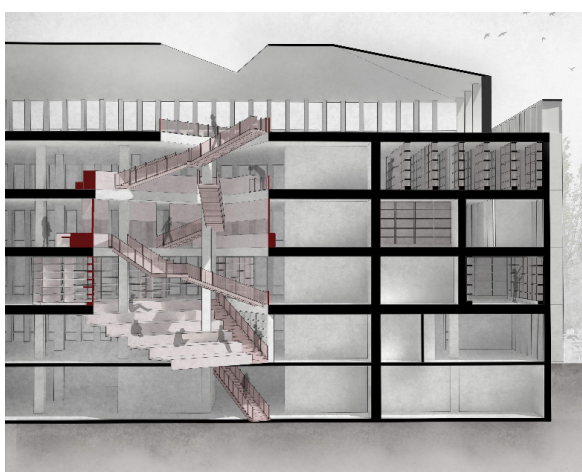
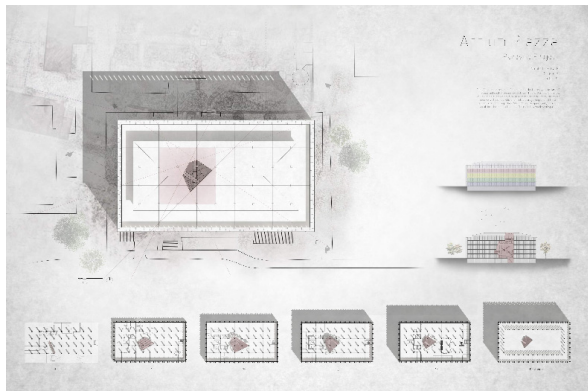




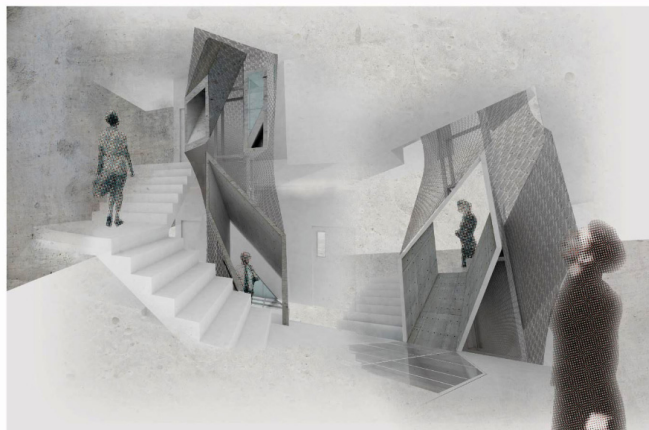
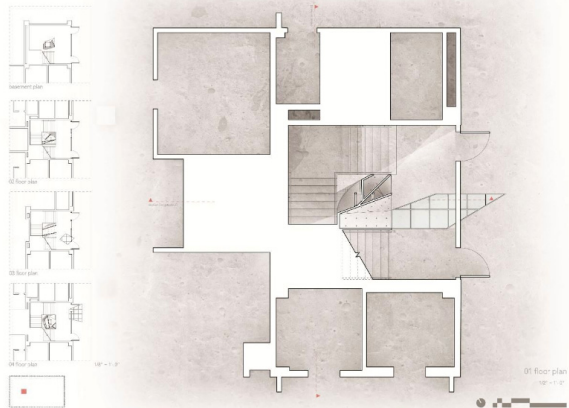
## 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2



# 48.105 FOUNDATION 2



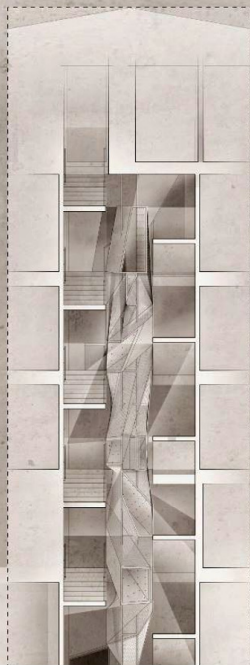
# 48.105 FOUNDATION 2

## optical portal

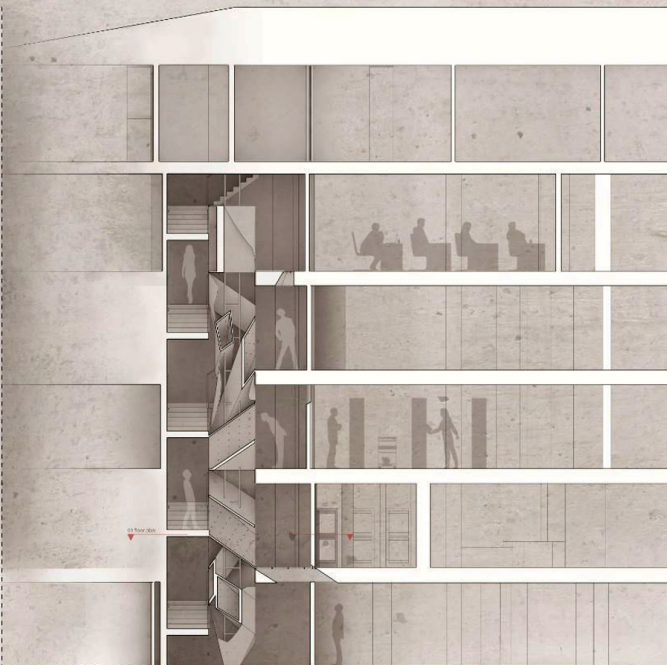
hunt library addition

adam kor  
48-105  
kai gustafow

the design aims to introduce a spatial and programmatic relationship between the new roof and the main library floor.



elevation (west)



section (longitudinal)

1/4" = 1'-0"

