## G B B N PARALLAX PAVILION

DESIGN ISSUE SERIES (DIS)



## **DESIGN ISSUES SERIES (DIS)**

GBBN's Design Issues Series (DIS) is a yearly, inter-office exhibit that digs into a different issue—like digital tools, prefabrication, common space, and now, perception. Our aim is to deepen the community's connection to design by sharing the thinking and the making that go into creating the built world we all share.

**Parallax** is the effect of changing the apparent position or direction of an object due to a change in vantage point.

Simply put, how you see something impacts what you see. We created the Parallax Pavilion to look different from every angle.



### ASSEMBLY GUIDE: 33 SECTIONS & HUNDREDS OF PIECES THAT MADE UP THE PARALLAX PAVILION

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PARALLAX PRECEDENTS

## WHY PARALLAX PAVILION

# ARCHITECTURE & **DESIGN** SHAPE PEOPLE'S **DAILY EXPERIENCES**.

As architects, we usually hand off our designs to someone else to build. With the Parallax Pavilion, we controlled the whole process from start to finish, pushing our knowledge of fabrication and constructability.







SKETCHES & IDEAS GENERATED ROM OUR CHARRETTE.

## IDEATION CHARRETTE

## ORGANIZE IDEAS, Focus design

The team used a charrette to explore ideas around the following principles to focus the design and figure out what type of pavilion to create.

### 01 Perforation

- Very small opening creating a moire effect when layered
- Very large openings, a place for someone to sit or move through

### 02 Fins

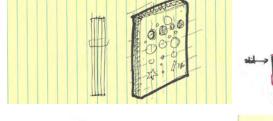
- Create a variation in transparency creating optical illusions
- Reflective treatment could further enhance the parallax condition
- Fins are 3-dimensional lines

### 03 Line

- The density of lines create illusions of mass
- In plan, the meandering of the vertical lines create space
- Dimensional line shape with portions that are reflective, pink, and black

### 04 Mass

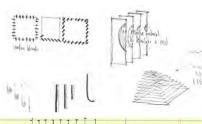
- Mass surface distortions
- Juxtaposed spaces
- Forced perspectives

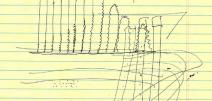


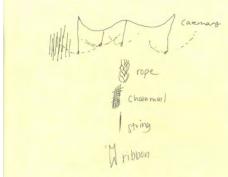


PERF.

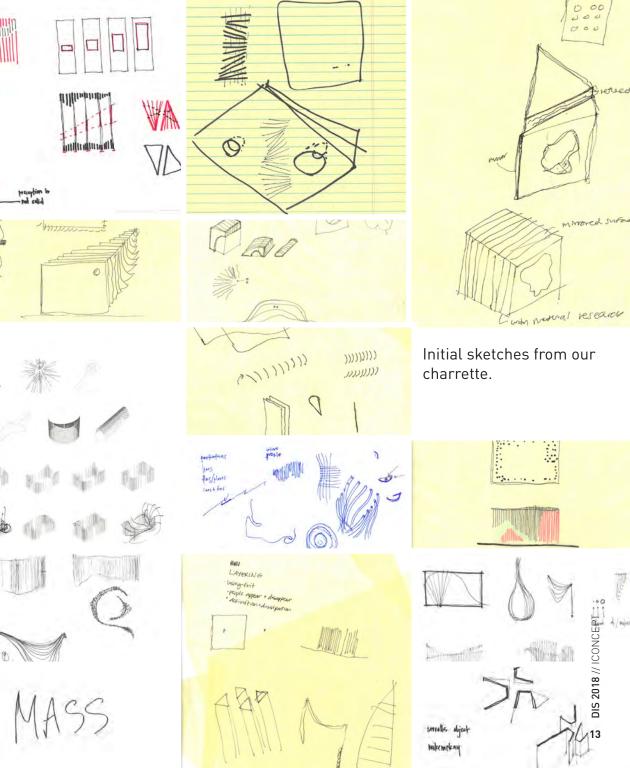








\* COMMON Space studies?





Overview 01 Plan 02 Section 03 Loft 04 Material 05 Assembly



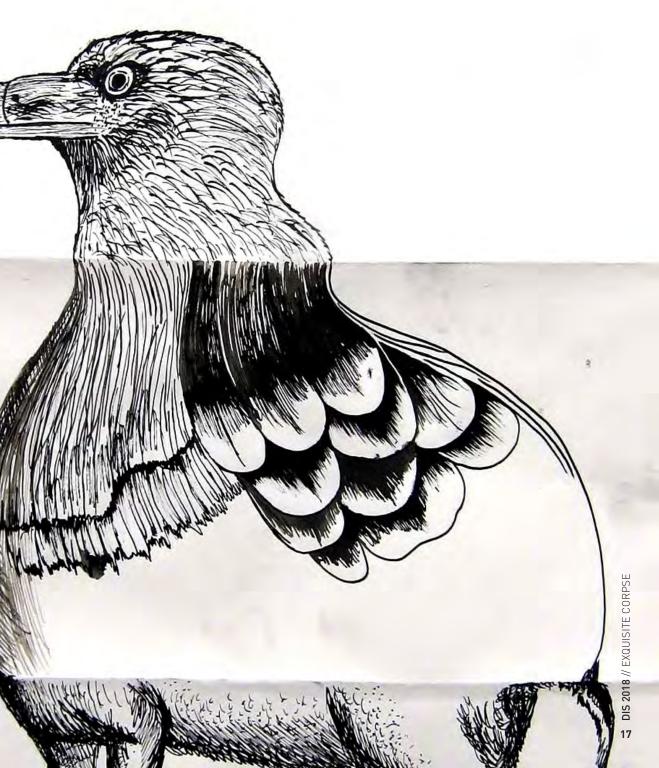
## EXQUISITE CORPSE

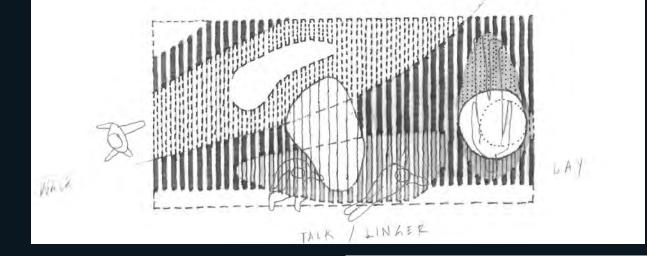
Conceived as a parlor game among 20th century surrealists, "Cadavre Exquis", a collaborative game in which players draw in turn on a sheet of paper, fold it to conceal what they have drawn, and pass it on to the next player.

To create the Parallax Pavilion,

## **FIVE TEAMS** FROM ACROSS **OUR THREE U.S. OFFICES CONTRIBUTED** to different phases of the project—each team blind to what would be passed to them. Challenging the status

quo is part of GBBN's culture and intentionally disconnecting from our traditional design methods forced us to think about design differently.

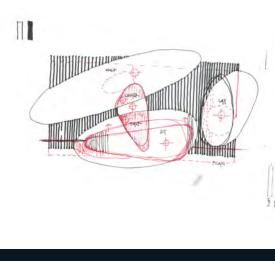




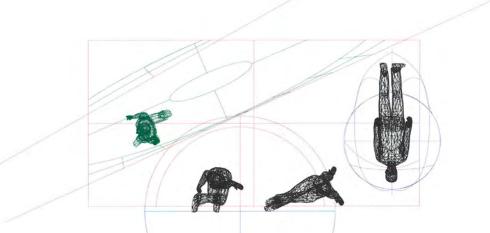
## 01 PLAN

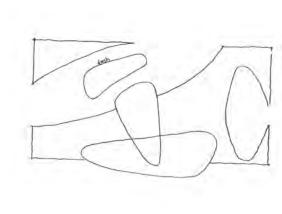
Team 1 kicked off our Exquisite Corpse design process by drafting the plan of our pavilion.

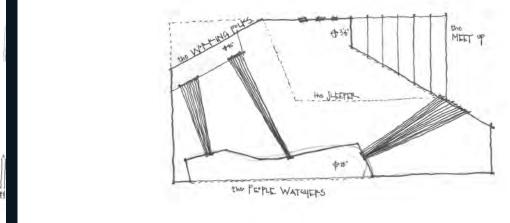
As seen here, the team considered space in terms of how the human body interacts with the pavilion in motion and at rest.

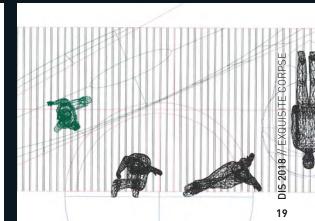


THIS PLANWAS HANDED OFFTO THE NEXT TEAM





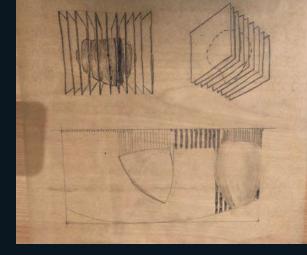




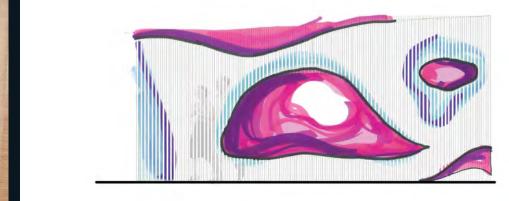


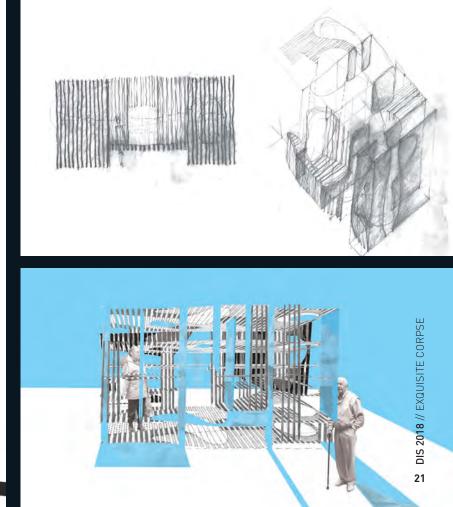
Based only on the plan given, Team 2 then designed the section.

The team considered the fins and the subtraction of them begin to inform the three dimensional space.





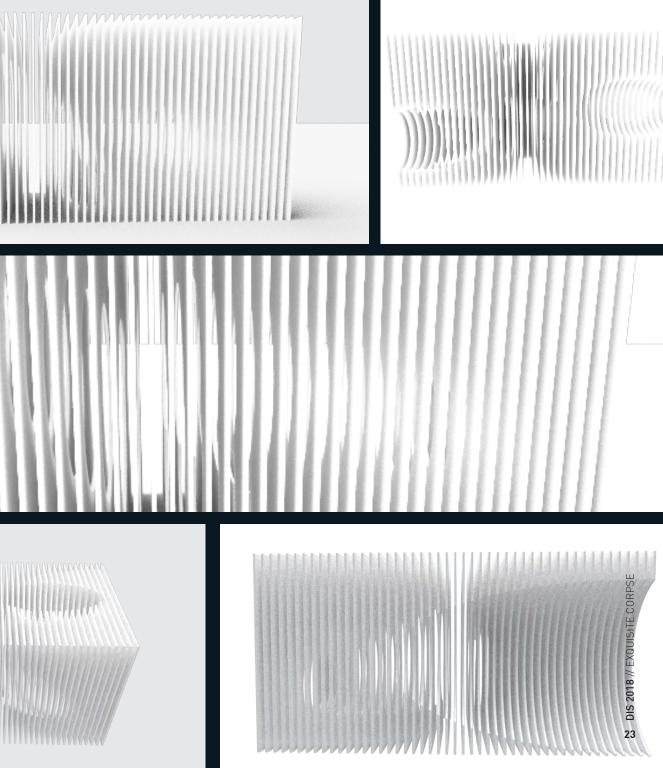




### 03 LOFT

Team 3, with only the plan and two sections, was tasked with imagining the pavilion three dimensionally.



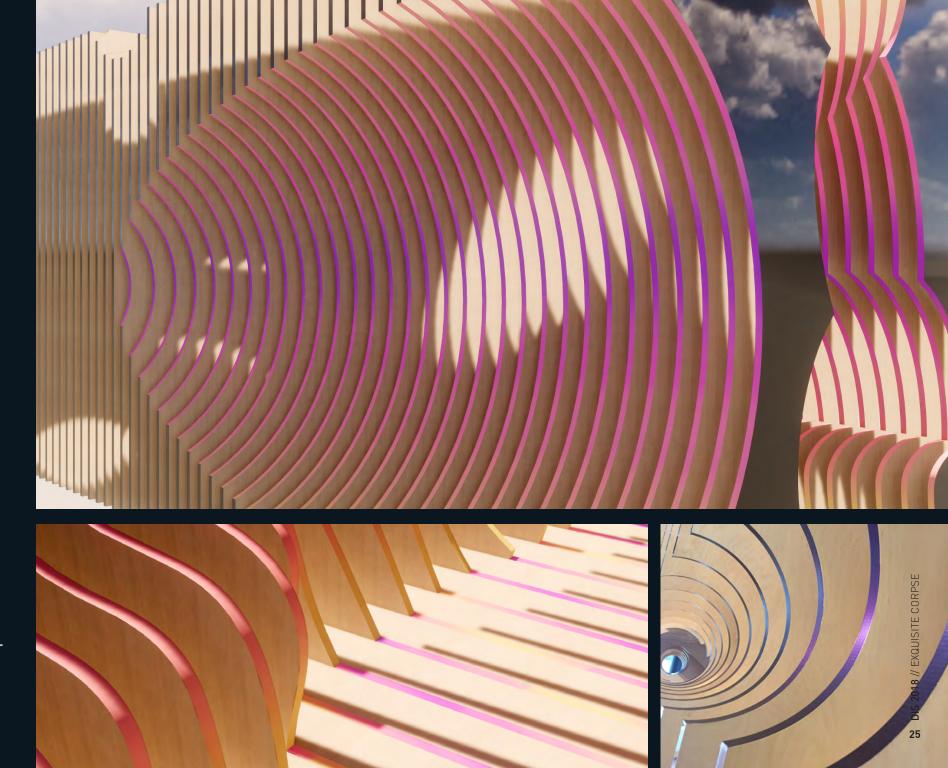


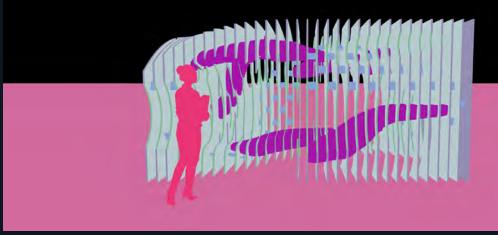
### 04 MATERIALS

Once the pavilion was designed in 3D, Team 4 had to define the materials that would be used to fabricate the structure.

The team focused on materials that, like the pavilion itself, would appear to change as the viewer moved around the pavilion.

> MATERIALS SELECTED & RENDERED BEFORE HANDING OVER TO BUILD TEAM

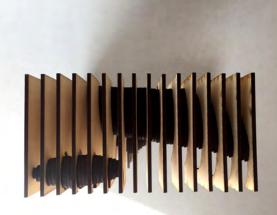




LASER CUT & DIGITAL MODELS CREATED TO UNDERSTAND HOW THE PAVILION WAS TO BE BUILT.

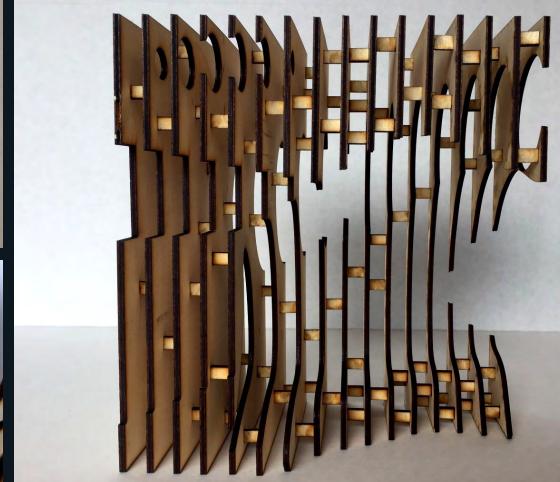
### 05 ASSEMBLY

Finally, Team 5, incorporating all previous information, worked closely with a fabricator to craft all the separate pieces that make up the structure.

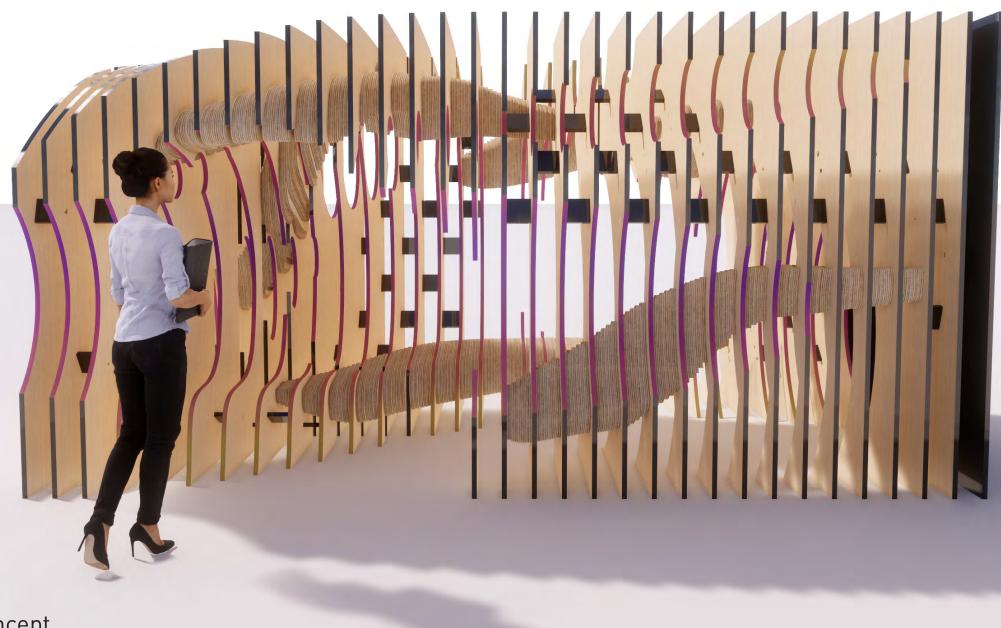








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Rendering of final pavilion concept.



## FABRICATION

We turned to Cincinnati-based Riverside Architectural Millwork to fabricate the pavilion.

Working closely with Riverside revealed to us just how important it is to

# **BRING FABRICATORS ON BOARD AS** EARLY AS POSSIBLE **IN A PROJECT**





Their expertise and advice was invaluable.





## EXHIBITION 01 LOUISVILLE 02 CINCINNATI 03 PITTSBURGH

## LOUISVILLE

We kicked off our exhibitions in Louisville at with a mini build (half the pavilion) at their city-wide Maker Faire event.

# WE LEARNED A **VALUABLE LESSON**: **BUILDING THIS MOTHER TAKES TIME!**

We designed the pavilion so it could be built and taken apart by different teams in different cities, but it still takes time, so we planned accordingly for our exhibits in Cincinnati and Pittsburgh.

After our exhibits in Cincinnati and PIttsburgh, we had the opportunity to return to Louisville with the full pavilion for Junior Achievement Inspire, a career fair for 10,000 area middle schoolers.













## CINCINNATI

Our first build of the full pavilion took 12 hours, but

# THE COMMUNITY **RESPONSE MADE EVERY MINUTE** WORTH IT.

Many of our Cincinnati-based clients, consultants, and the community at large came to our open house exhibition.

We also hosted a sold out crowd at our lunch and learn with AIGA Cincinnati Design Week.









AS A CATALYST FOR CHANGE, ARCHITECTURE'S ABILITY TO SHAPE OUR DAILY EXPERIENCES IN MATERIAL & DETAIL IS SUBTLE YET POWERFUL.





## PITTSBURGH

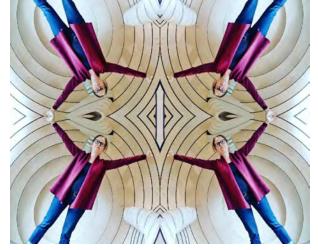
At our Pittsburgh exhibition, our build time got faster - from 12 hours down to 10 hours.

Held on a lovely evening during one of the neighborhood's regular Unblurred gallery walks, our Pittsburgh crew threw open the office's overhead door to the street,

# **ENTICING LOTS OF PEOPLE TO COME IN AND ENGAGE** WITH THE PAVILION.















# **TREPRESENTS** THE COLLECTIVE ENERGY OF OUR FRM WORKING ON A DESIGN PROBLEM "



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Bringing on fabrication partners early in the process enhances the final product.

Changing up our typical process was invigorating and gave us a different perspective on how we design and work together as teams.

THE PAVILION TRAVELED **1,280** MILES IN A RENTED TRUCK

## **KEY TAKEAWAYS**



## DD OVER 600 DO SAW THE PAVILION (



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PARALLAX PAVILION

