1
<World without gravity>

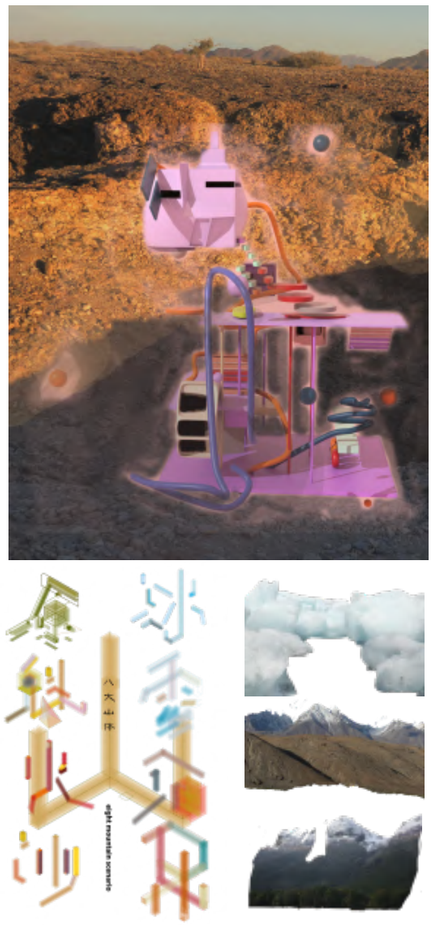
3D visual game built in Unity 3D forms built in C4D
The game was designed and developed in Unity to create a narrative environment and a unique 3D game experience of wondering in a new world.
Individual Academic Project 2018Fall
@RISD GD Independent Study=Degree Project



An interactive game design made in Unity, all assets and architectural structures are original with gravity code using basic java language and parameters. Above are screenshots from the playable demo. Ideally played as a VR game which could create a more immersive interaction as on an esoteric planet. The composition is developed by analyzing the relationship between artificial structures present in the natural environment, which is set close to a newborn planet.



The distinct aspect of a 3d verse a 2d structure is to view it from various angles and in real-life settings. Obsessed with architectural forms, combining my travel experience in rural mountain areas, I started this game design project with experimental forms that aim to create a distinct roaming experience and bring the two distinct languages together.

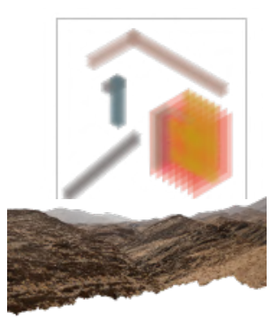
















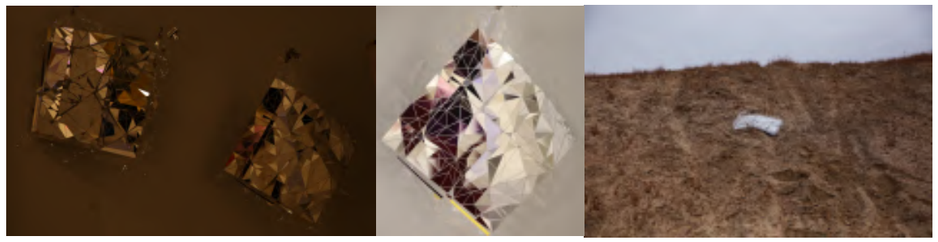
If you are interest in the recorded video format of the playable demo, please check the video supplement

The game above is a final interactive expression that evolved from a series of other study processes.

Spreads from Process book:
Self-designed content, structures, and bookbinding



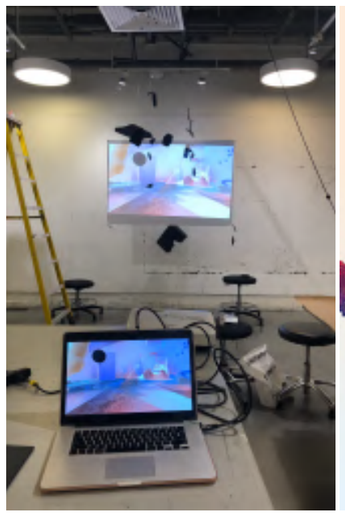
This independent study starts from 365 collections (one shape/day) of 2d forms gathered from small experimental projects about light/shadow/reflection/mundane objects observing shape/microbiology patterns etc., holding a view that experience sometimes could be visually formed and the abstract experience of 'feeling the environment could also be present as an immersive experience.





Experimental ceramics and collage illustrations with typography compositions, real-life photos and previous design studies on 2d forms





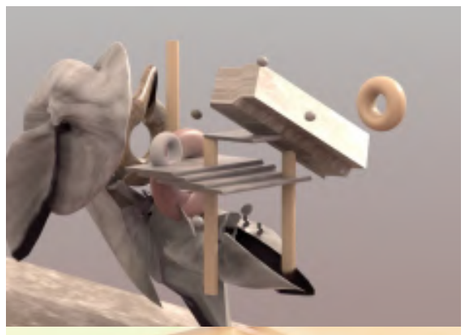


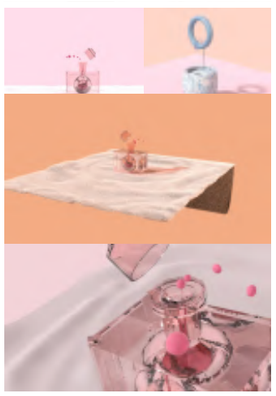


Visual and form studies using
light / reflection / projection / concrete structure

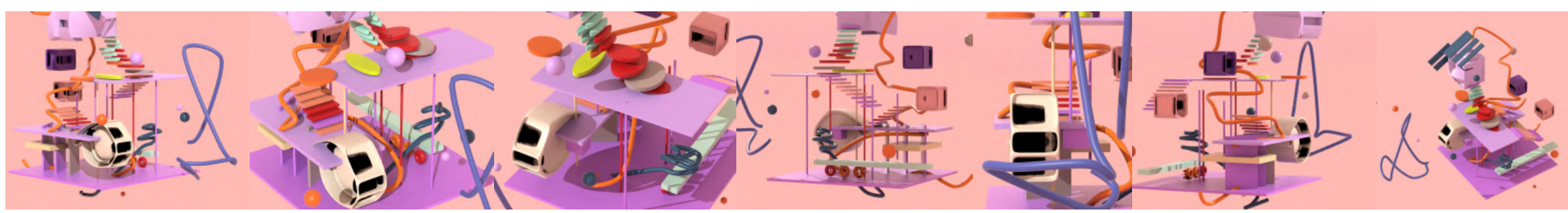




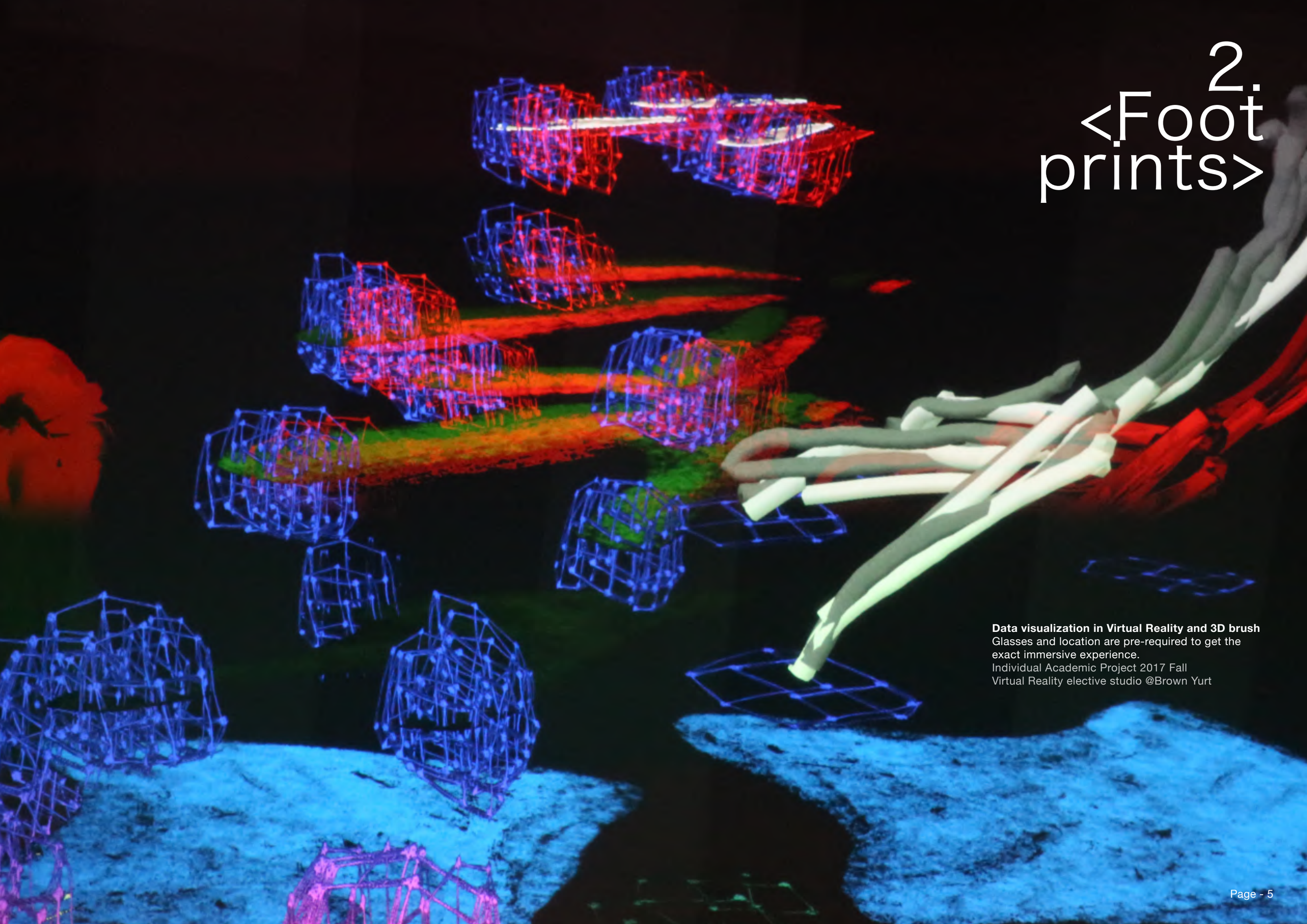








2.
<Foot prints>



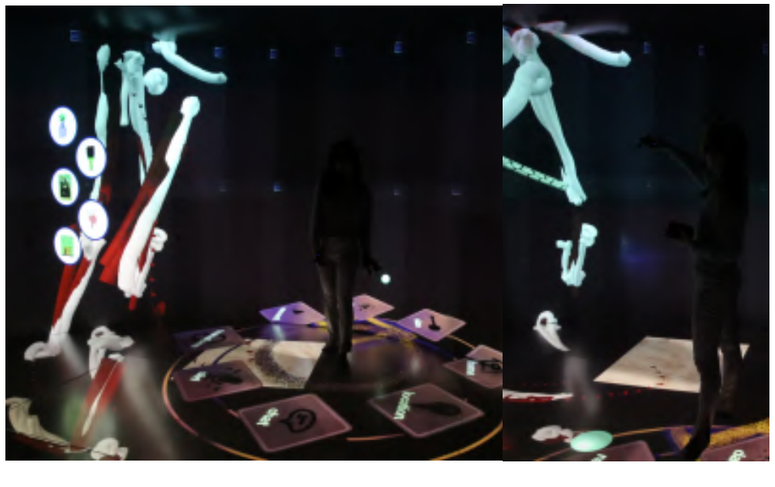
Data visualization in Virtual Reality and 3D brush
Glasses and location are pre-required to get the exact immersive experience.
Individual Academic Project 2017 Fall
Virtual Reality elective studio @Brown Yurt

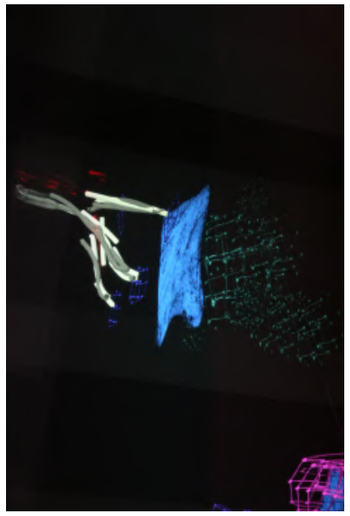


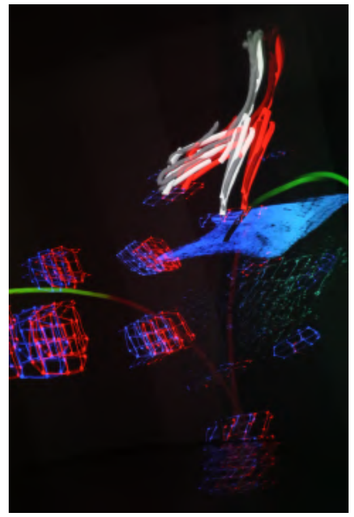
Task: Data visualization in VR space
1. Gaining data from readings about birds' footprints.
2. Imitate specific walking and imprint footprints in physical material.
3. Visualize the print in different layers and bring the visualization into Virtual Reality Space. The final virtual prints could be easily navigated around in scales and angles.
This VR project is constructed in the Brown University+RISD VR course using specific hardware equipment at Brown Yurt Lab.

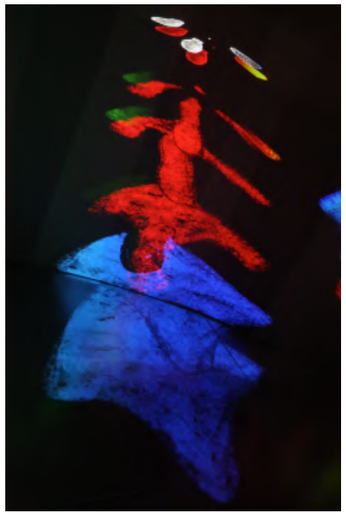


Visual and footprint assets were initially generated from real-life experiments. According to Yurt 3D brush system prints should be pre-touched in photoshop using black and white to clarify edges about shadows and shapes, then using the created assets to reinterpret the footprint data in 3d brush and boundless VR environment.

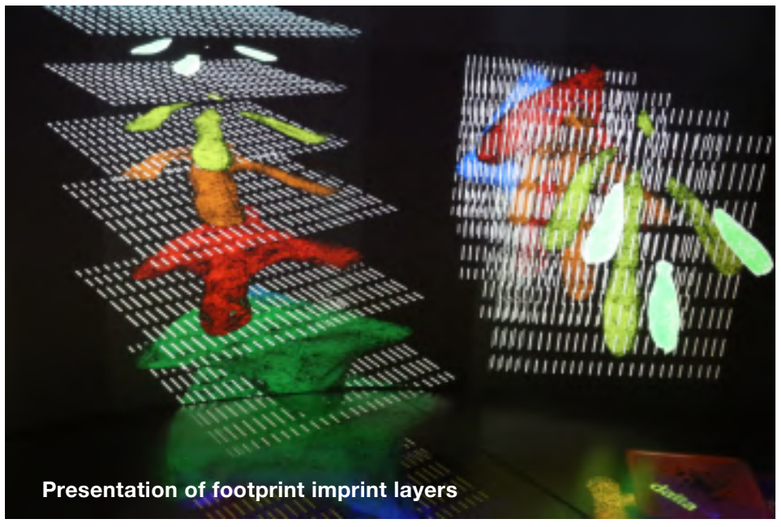




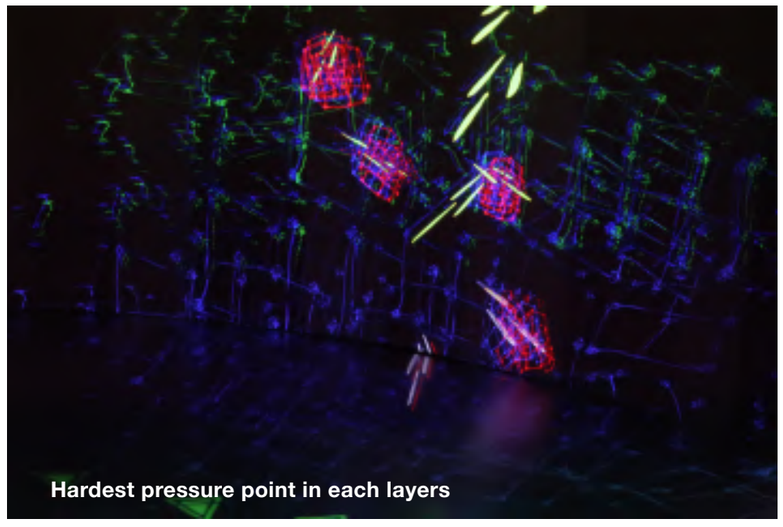




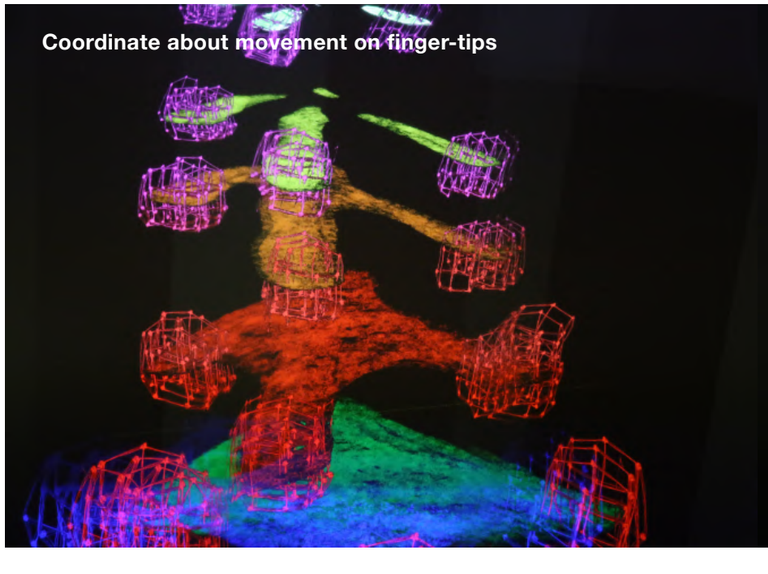
Disassemble a footprint imprint movement
1. Illustrate a foot bone structure in 3D strokes
2. Illustrate several footprint loops
3. Based on imprint movement, disassemble each layer and add each print



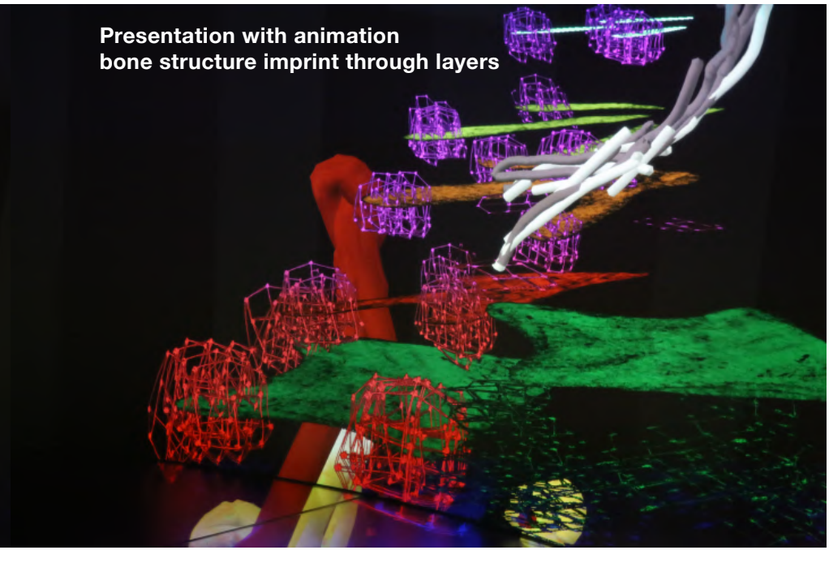
Presentation of footprint imprint layers



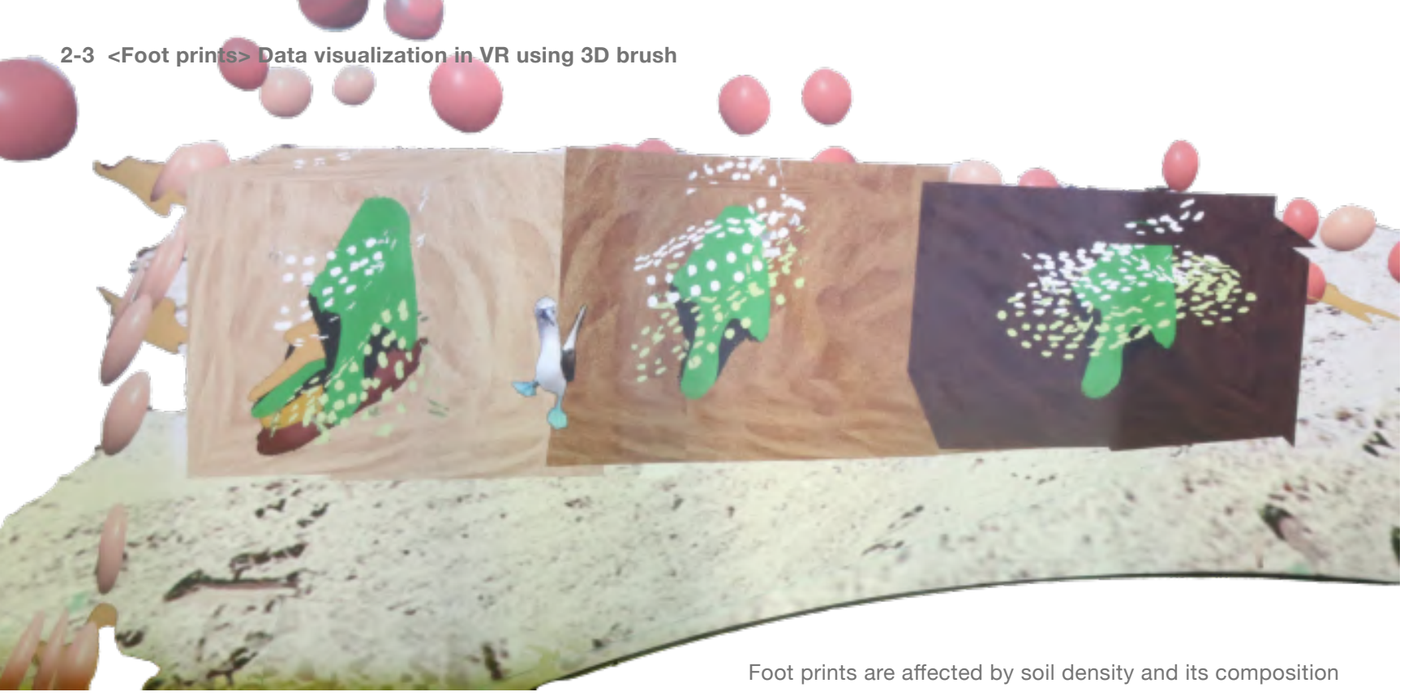
Hardest pressure point in each layers



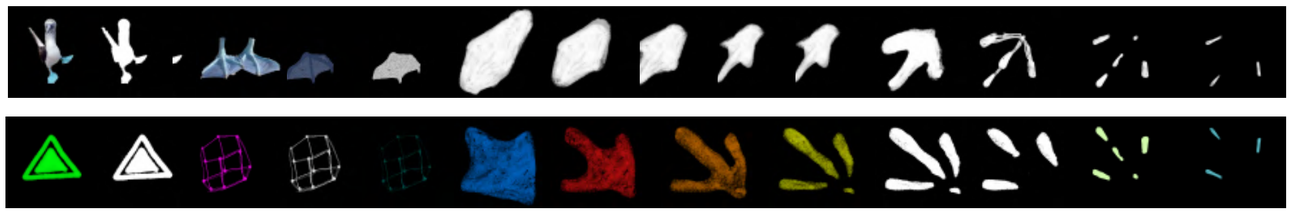
Coordinate about movement on finger-tips



Presentation with animation
bone structure imprint through layers



Foot prints are affected by soil density and its composition



Print assets are formed in various shapes, mainly depending on the soil type and how deep the foot entered. The print forms and coordinates data are estimated from course-supported documents and databases. The project task is to explore each footprint in the soil as a cube and analyze the abstraction of footprints passing through each layer of the soil. First, set up lists of parameters that could affect the size, shape, and position of the footprint result. Each factor presents as icons and visual patterns to navigate and record through the footprint database in VR.

soil type	blue-footed booby bird foot prints data	foot print		coordinates
sand stone	step into vs. out from the soil	without marks	100 step in ~0 step out 100	toe tip points
mixed soil	clam walking	in prints	Color skin represents the percentage of temperature and posture duration time	middle finger
fertile soil	bones vs. feet	distorted prints	Pressure represent by each layer of visual footprint pattern	enter angle
Other factors: If the bird is hunting (besides just walking) / footprints affected by other accidents				

Besides fulfilling the data visualization task, a simple user interface that allows changing the visual presentation in date, size, location, soil, and the weather is also created for other controllers to navigate through the presentation efficiently and have instinctive results if any factors or parameters in the database occurs to swift.

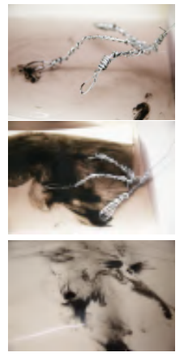
Abstract core data elements from physically testing the formation of prints

soil assests:

sand stone

mixed soil

fertile soil



footprint loop

where controller stand

pass through surface

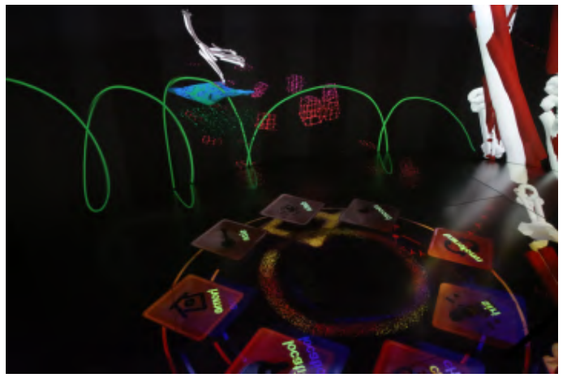
hardest pressure point

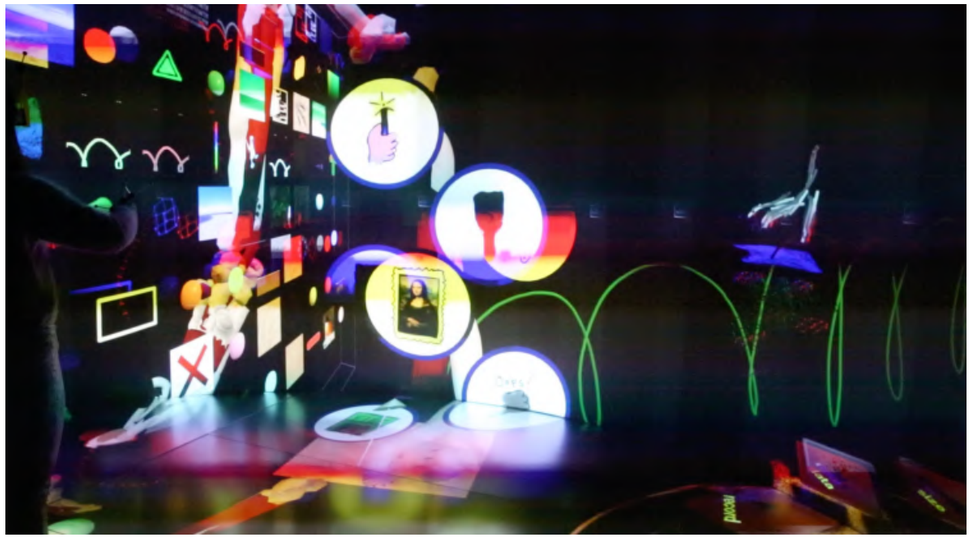
finger tip points

non-pass through surface

The additionally embed interface is intended to help new controllers navigate and visualize through the database to observe how parameters bring different results.







3, <Adults' social insecurity>



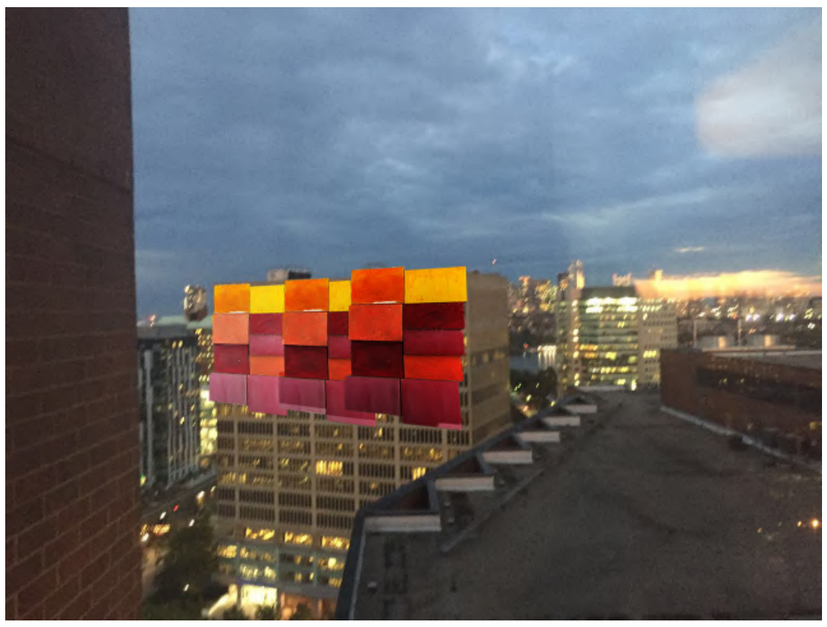
Visual discussion on social topics
A series of visual studies on social topics using building blocks as a metaphor for our resource distribution in society.
Individual Academic Project 2017 Fall
@RISD GD Design Studio III

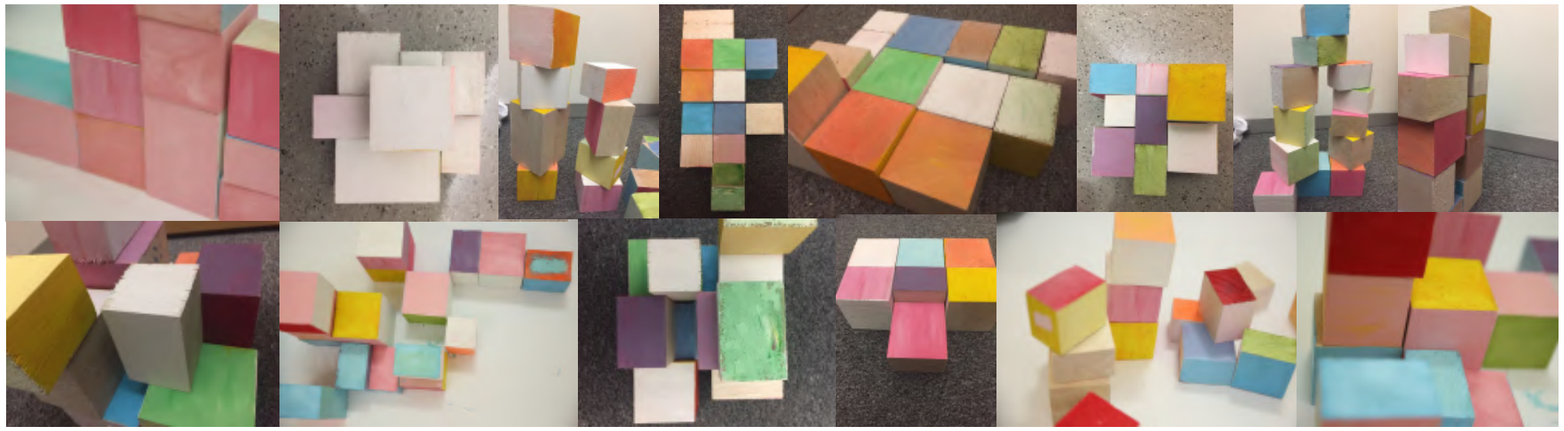


This project is abstract from observation of daily social interaction, especially meeting someone for the first time, we might confront judgment and feel treated unevenly. This reaction sometimes embeds social hierarchy. Hand gestures to infer unrevealed social judgments, and building blocks are toys for kids but here inferred as power and profit, which in an adult world are usually not directly emphasized.

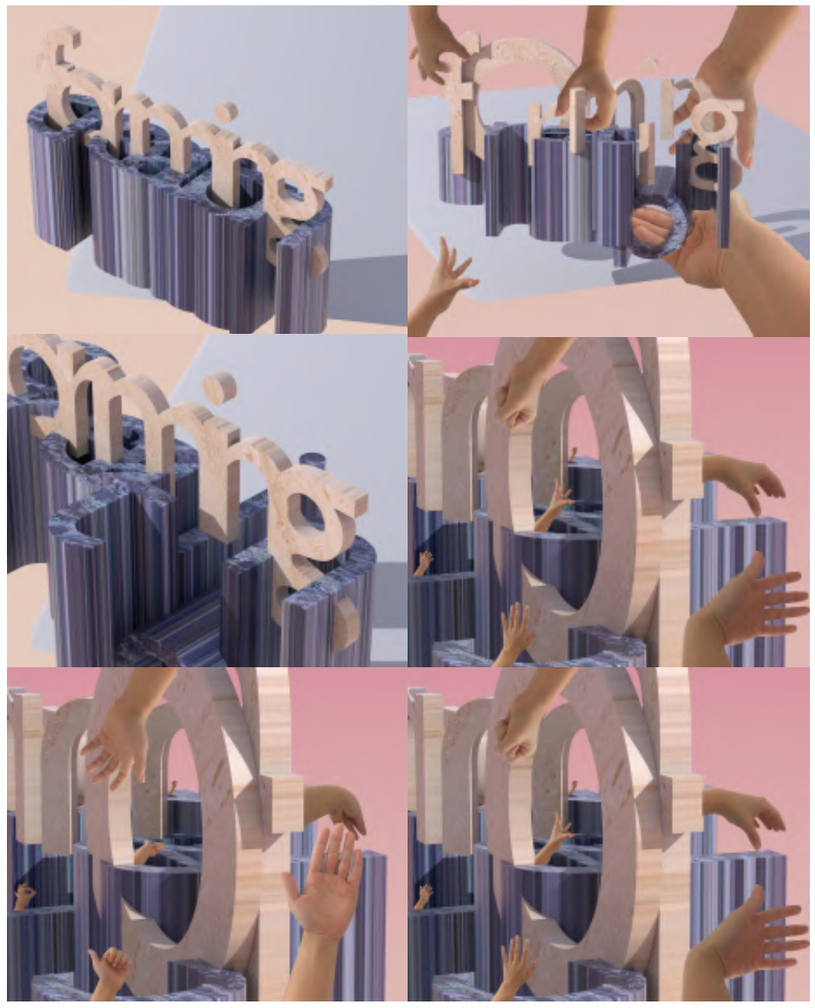








The visual presentation is adults' hands playing with building blocks as a metaphor for arranging resources. Reveal the nuance that we tend to put things in order and classification, and the way we classify is learned through our adulting experience; kids do not classify things. The classification also happens when people make connections. We are aware and sensitive, with bias or insecurity. The project is not to argue the action but to bring awareness that social unfairness occasionally happens.



Background sound used an original poem:

As we are no longer a kid,
we should mind our words
and actions, even when
we are playing with
building blocks.

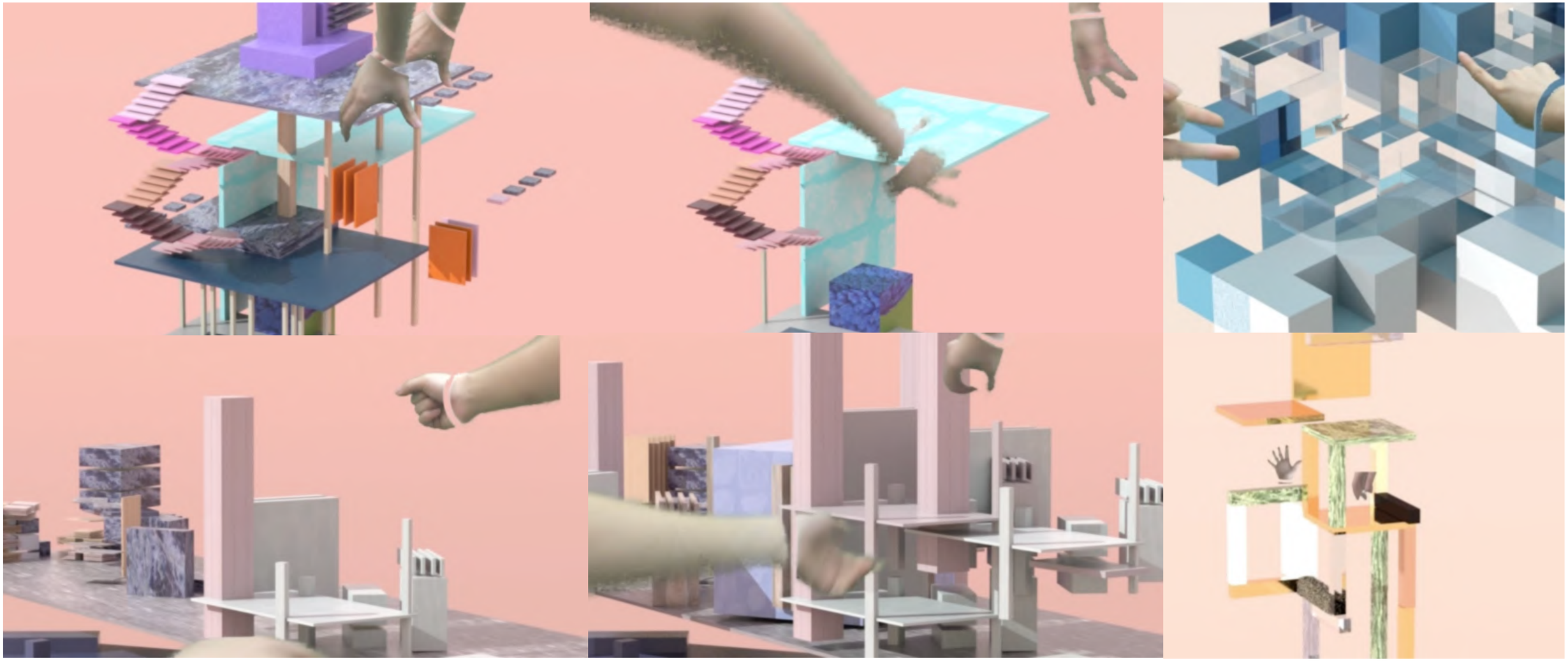
Mind our gesture
mind our words
mInd our starings
mind our glances
mind our catalogues
mind our backgrounds
mind our skills and ability
mind our destination
mind our
motion and emotion

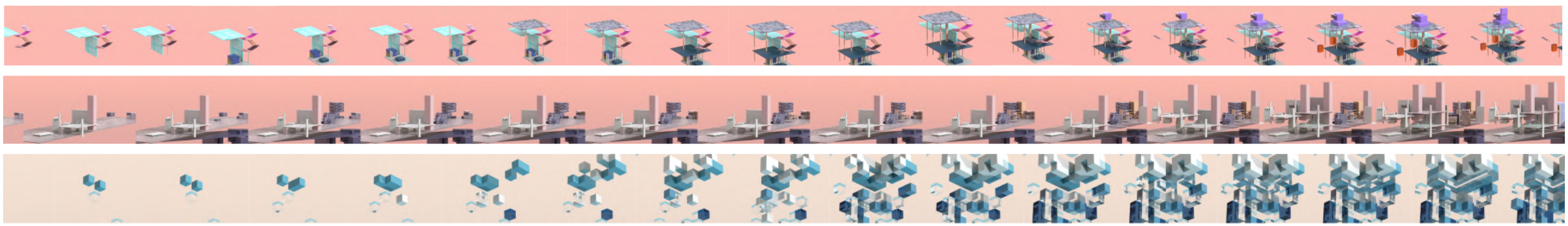
are they elegant?
are they sharp?
are they firm?
are they distinct?
are they unfair?
are they special?
are they mean?
are they inferior?











The final output is in Video format, presenting the adding action of building blocks, with the original poem as a background sound.

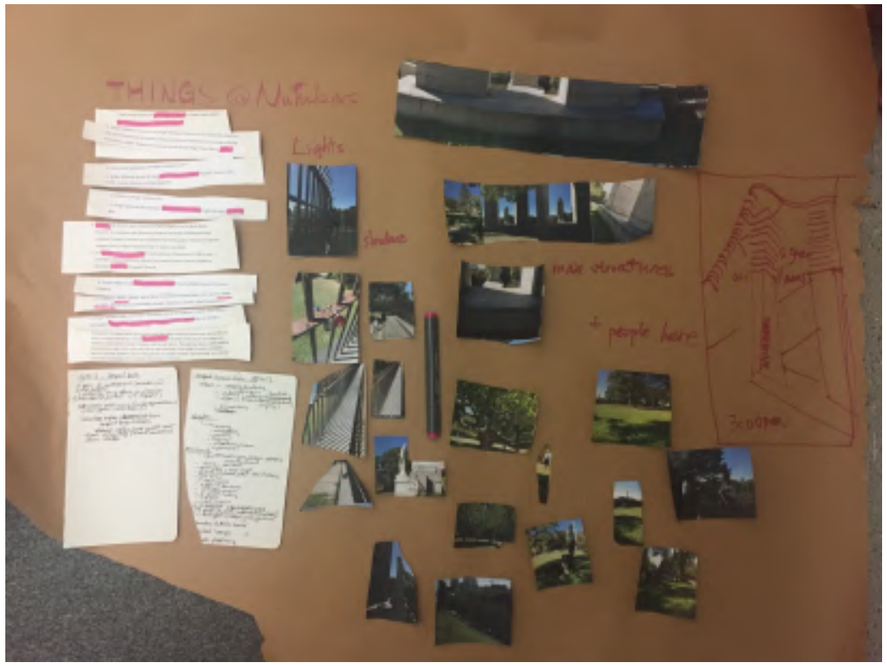
4.
<Prospect Terrace>



360° Video and VR immersive experience
Animation created in After Effects, 360° experience developed and published in Youtube 360°. This collaborative project aims to create a narrative experience at a Providence historical location.
Collaborative academic project with Melody Xu
Applicant Wenxi's contributed to the storyline and visual design @RISD GD Design Studio III 2017 Fall

Task: Narrative a Space
In this collaborative project, we worked highly involved together, starting from visiting a historical place in Providence, RI, called Prospect Terrace. We read historical documents and recorded our observations. This experience design project represents how historical buildings and elements work harmoniously with the current daily and effecting our narrative visit experience. Melody contributed to 360° and VR effects and inspired me to access exhibition and experience design.

My contribution:
- **visual form studies**
- **animation**
- **exhibition**












Our presentation set up

The final video format is an interactive piece in 360° Video with a basic VR headset. Audiences can either drag around to view different angles in the animation from a computer or directly move their heads to gain an immersive interactive VR headset experience. Please check YouTube link: https://youtu.be/6mkMmHVRpfY if you are interested in the dragging interactive 360° Video. The full VR experience needs additional set up.


This photo credit to Melody

5.
<Shuttle>

Interpretation of sound pattern animation in P5.js
An interactive projection project using 3d shapes in javascript to broadly generate a reactive system vibrating with the background music. The movement follows the rhythm of the background music, while the cursor can rotate the viewing angle.
Individual Project 2016 Spring
@RISD CTC Inro to Computation

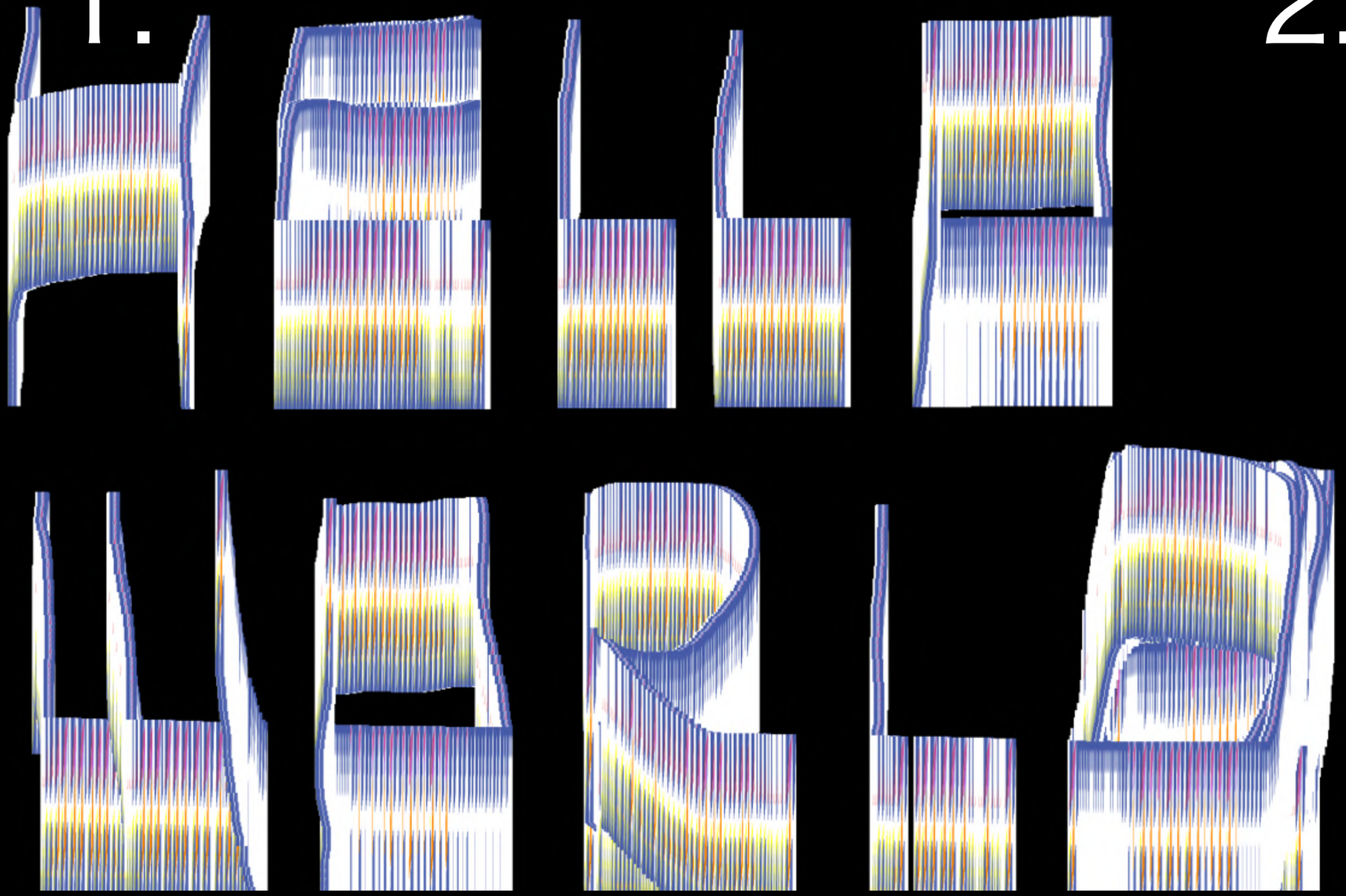
5-2
<Adaptive>
& <Breath>

1. Individual experimental academic project
Digital Typography in javascript:
Interactive coding project to allow handwriting to appear in 3D visual effects using code P5.js

@RISD Programming 2016 Fall
@RISD Typography III 2017Fall

2. Collaboration in academic projects:
Wenxi's graphic design layout using Rohan's system type
Experimental composition to express an understanding of Rohan's type is bringing air through, creating an open space for air to go through in his type, and letting the airflow so that creating a breath through contents and compositions

1.



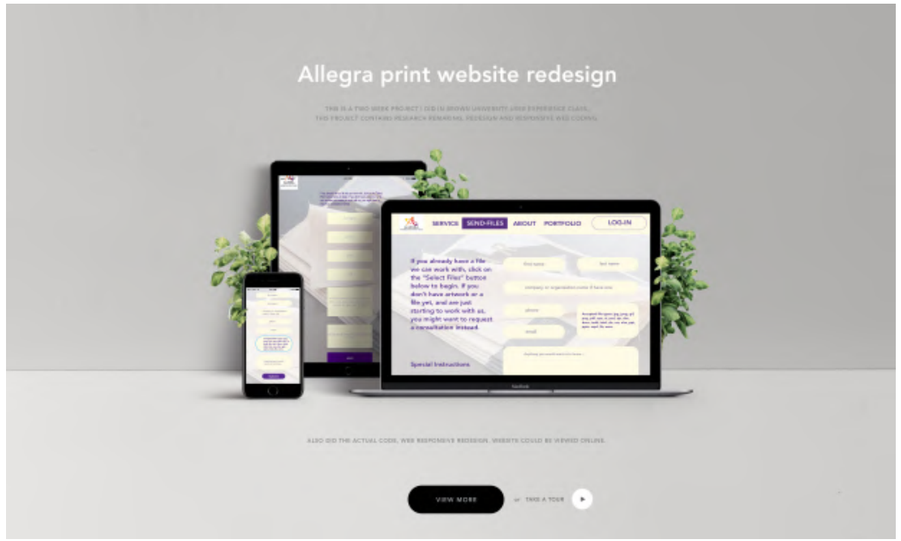
2.



5-3
<Web code &eyetracking>

1.

Individual academic project: HTML&CSS Website coding and redesigning users' path
@Brown University 2017 Fall



2.

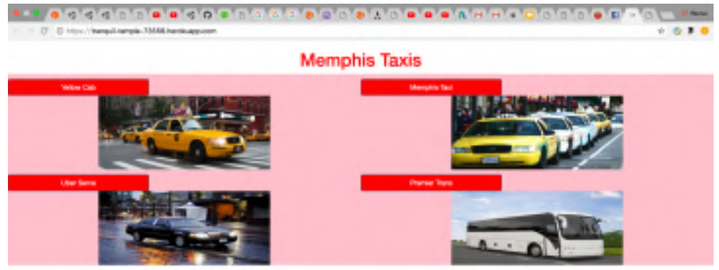
Group academic project with two other classmates, Xuefei Yang and Yunmeng Dai, in the HCI User experience academic project @Brown University 2017 Fall
My contribution:
• main feature design • user interface



3.

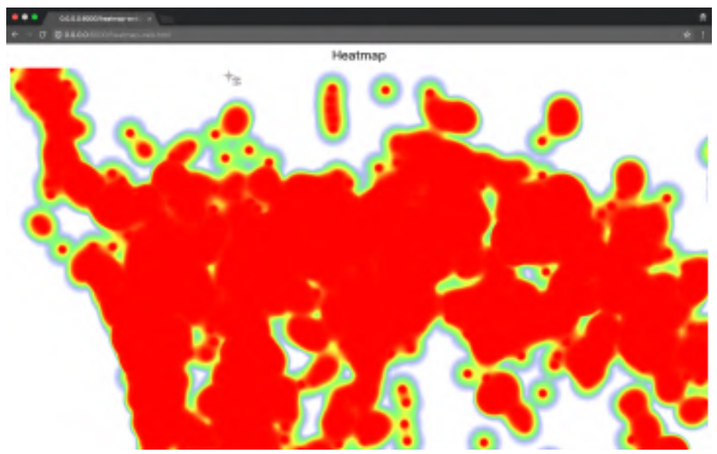
Individual academic project: A-B testing using eye-tracking and heatmap @Brown University UIUX 2017 Fall
Write the code of the website - post it public - invite a user to the eye tracker - AB testing - data visualization
• lines marked how users glance through the website
• heatmap records users' glance durations in seconds

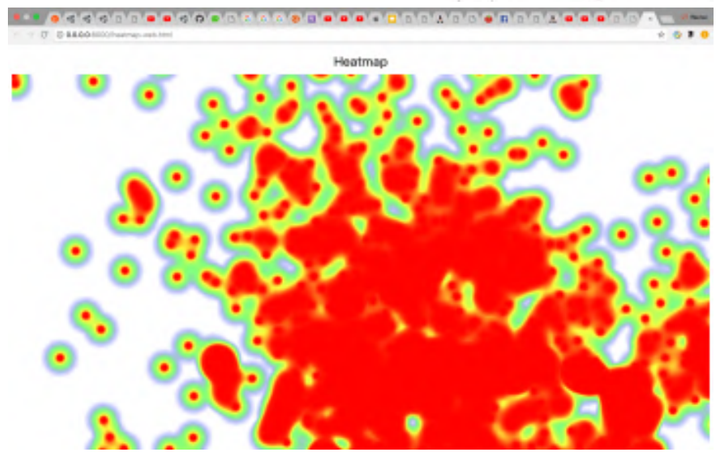






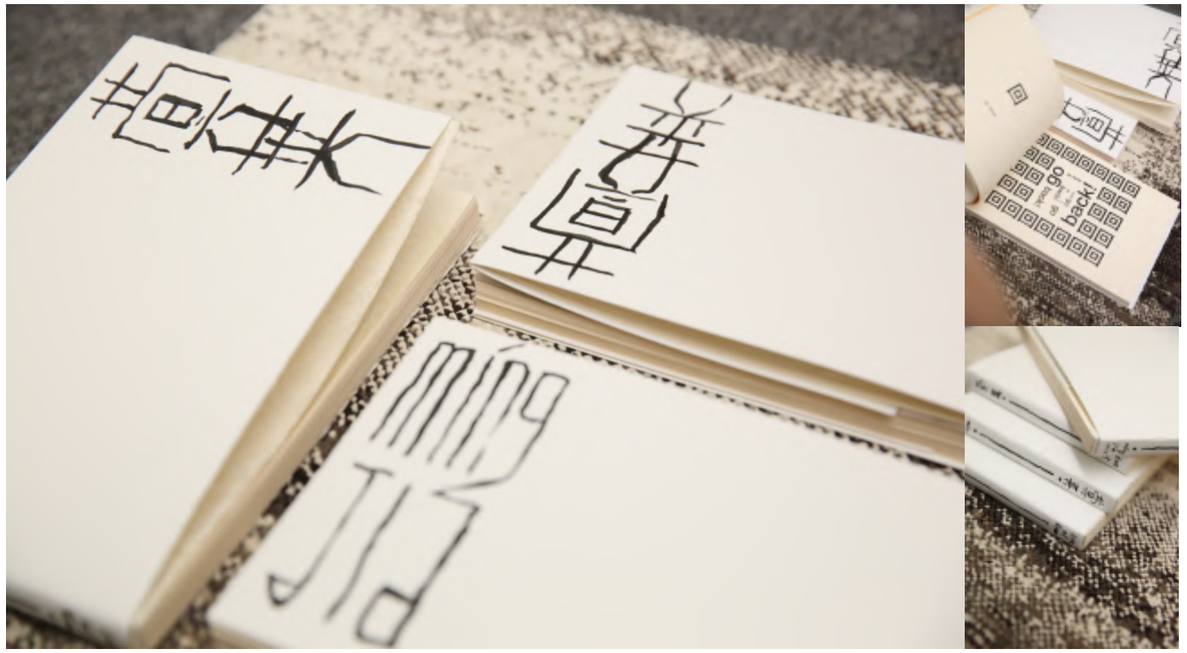






1.

Book design and bookbinding. The content includes my original poems created during a literature course.
Individual academic project @RISD LAS advanced literature class 2017 Fall



2.

Book design and bookbinding. Individual academic project @RISD Type III 2017 Fall
• taking the content from <Alice in wonderland> and do redesign in layouts
• bringing the literature content into the book design and book structures



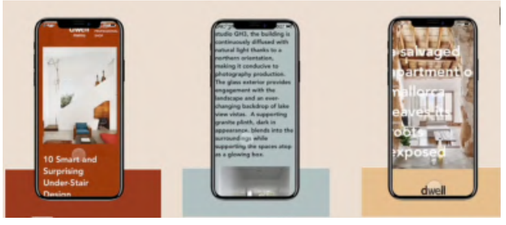
3.

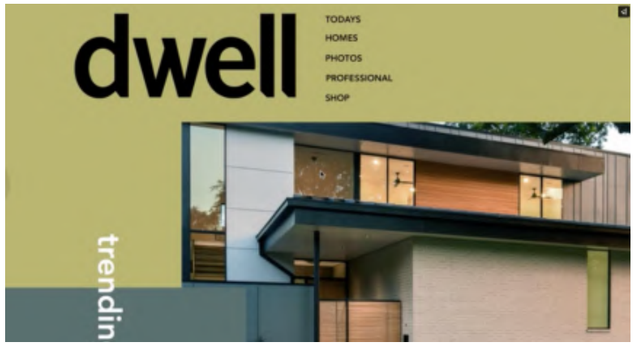
6. <Book Design>

Book design and bookbinding for <Dwell>magazine
Individual academic project @RISD Type III 2017 Fall
• taking the content from <Dwell> and do redesign in layouts
• bringing the literature content into the book design and book structures











Websites and apps now occupy most of our reading scenes. As a result, in this project, besides bookbinding, I also redesigned the website and app to create a more harmonious branding system and visualized the photo-oriented reading experience.

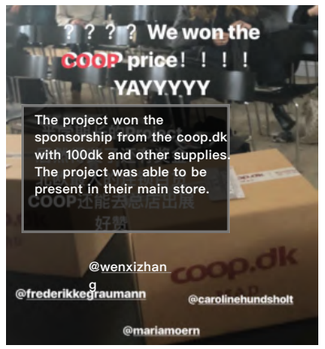




Sewing Workshop for the local community
4 people group project within Design Ethics Studio.
Wenxi's Contribution to the idea and design.
2017 Spring Exchange Semester @KADK Royal Danish Art and Design Academy Copenhagen

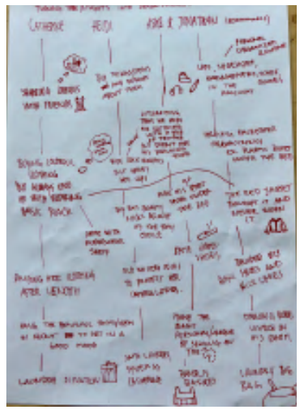
Group research and preparation - The Workshop day - Final presentation (Won the most voted 1st price and additional sponsorship from COOP.dk)





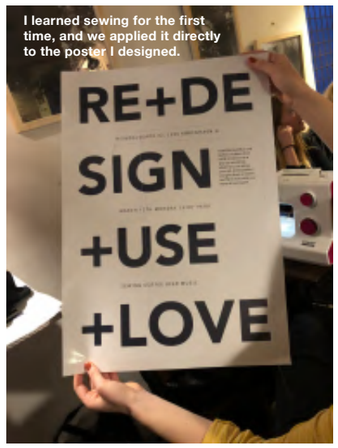


Task on ecology+sustainability
Where we start:
After a series of research, we aim to focus on basic wear, which is often cheap, easy to buy from a supermarket, and maybe too simple and basic to be taken care of. In the long run, we usually find out we own way more basic cloth than we need. This is what we want to change. Our focus is to make the essential wear personal and give it a rebirth before being left in the closet.

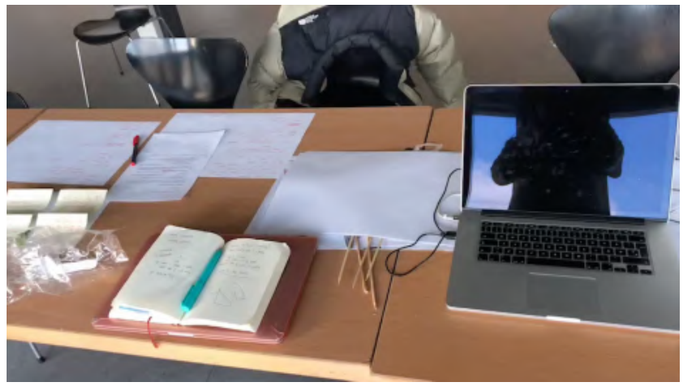


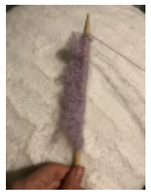


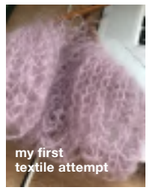
Me wearing a piece that I redesigned and sewed during the workshop as an example



I learned sewing for the first time, and we applied it directly to the poster I designed.







I contributed to the core group idea by gathering materials and data, which helped to state our goals and emphasize reuse. Individually designed and output the posters and announced the event, video-creating user scenarios, and arranged project timelines. Our supportive groupmates place the arrangement in a local Copenhagen coffee shop and core fashion sewing for incoming customers.

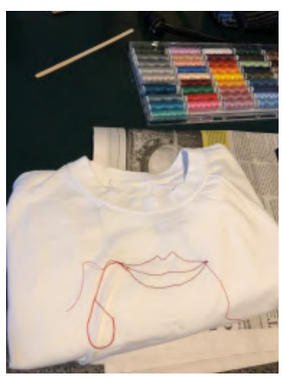


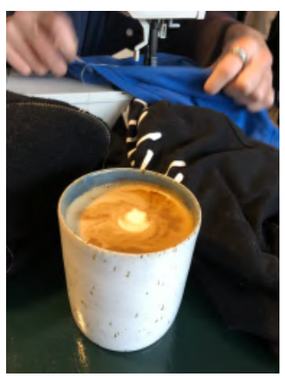




During the in-person workshop, visitors are informed to bring their basic clothes or pick one from what we provided, each individual is welcome to redesign their basics and try sewing or wait for professional fashion technique support, which is credited to our other incredible team members.

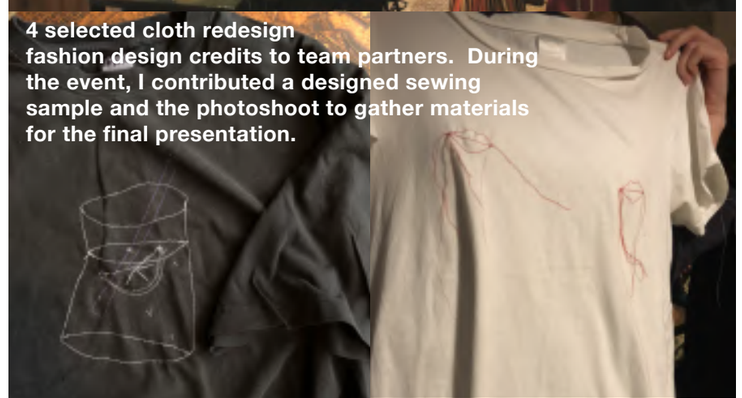














Marketing and announcing the <ReDesign ReUse Re-Love> sewing workshop, aiming to make an environmental friendly impact and call for recyclable fashion within the Copenhagen local community.









We picked an cozy environment, to encourage people stay longer and join the redesign and remaking process.









Friends and visitor to the coffee shop and kids are all welcome to join the experience, all kind of basic cloth needs our attention and not laying in a cabinet.







