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"Atmosphere is both our perception of space, and our experience of it. Because of this, atmosphere is more than just a feeling or mood; it can become how we construct an experience. If atmosphere is how we create experience, the next question is how to measure it."

- Peter Zumthor

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About one year ago, I was asked why I wanted to be a designer. It was an overwhelming question for me, because my response at the time was simply, "to make people feel something," which is rather broad. After some struggle, I came to understand it was our emotional attachment to space that was so interesting to me. Why is it that your mom and dad's house feels the way it does? How come your best friend's house makes you feel the way it does? A gas station? The answer is atmosphere.

Once my research began, I found myself frustrated at the lack of answers. How could I activate the most primal parts of us that either deter or attract us to space? Light and color became the quick and obvious answer. It is how we perceive space at a basic level, but also carries emotional weight. By manipulating these tools, once can create a constructed experience. As designers we have an important role in developing the details and "behind-the-scenes" efficiency. However, our most important role is creating spaces for the human in all of us.



#### MEASURING ATMOSPHERE

While researching atmosphere, I found myself frustrated at the lack of definition for this phenomena. However, atmosphere is purposefully elusive, as it is a visceral, human connection to space. After some technical research on the mechanics of light and color, I did come to develop my own understanding of how to discuss atmosphere. There are two main schools of thought on the topic of measuring atmosphere. I have named them according to the designer responsible for the approach.

According to Peter Zumthor, he describes nine considerations when constructing an experience: The body of architecture, material compatibility, the sound of a space, the temperature of space, surrounding objects, between composure and seduction, tension between interior and exterior, levels of intimacy, and the light on things. While these qualities seem abstract, they can be deduced to manipulating materials, thresholds, and objects. Baudrillard offers a different school of thought, in that atmosphere is achieved at the intersection of the materiality of things, and the materiality of need. He promotes that our spaces are a system of objects, and that atmosphere is what elevates the system to a level that emotes an atmosphere.

#### MECHANICS OF ATMOSPHERE: LIGHT & COLOR

If we try to break down light and color into its most basic qualities within space, it becomes clear that color is a major driver of atmosphere: "as luminous color it appears atmospheric and diffuse to the viewer, while as non-luminous color, shape and form materializes from it." In other words, we create atmosphere through light and the color it generates, while the lack of color allows us to focus on line and form. We as human beings rely on our sight to assess our surroundings for safety, comfort and biological survival.

More than that, we can also generate a new perspective by manipulating our orientation of a space via light and color. The brightness of a color, and the variety of colors within a space, allow us to orient ourselves more effectively. When employing this in atmosphere, it can help us create an inviting world, or one that evokes mystery.

#### TRANSPARENCY LINKED TO ATMOSPHERE

Perhaps the most effective use of light and atmosphere is it's ability to create a veil. By simply inserting a veil between viewer and object, tension is created and can lead to curiosity. Transparency does not mean clear, but instead it employs a sense of ambiguity. "Translucency, as opposed to absolute transparency, is when the transmission of the image breaks down, yet light is still passing through."

It is important to consider what we are allowed to see, or encouraged to explore via transparency or filtered light. According to Baudrillard, a transparent material like glass is "A content that is also a container, and hence the basis of a transparency between the two: a kind of transcendence which, as we have seen, is the first priority in the creation of atmosphere."<sup>2</sup>

#### LIGHT LINKED TO ATMOSPHERE

The "right" type of lighting can really help construct an experience, and achieve a certain mood. When you consider color two dimensional versus three dimensional, our "eye movements are guided by the lines in a drawing, they follow color in built space." This helps us understand that colour can pull you into a space, or avert you from it. Furthermore, light can actually define thresholds and boundaries, in that "Light can create a space, as in the cone of light from a street lamp into which one can step." Color can also help emit warmth, or the lack thereof, as "This is purely a signified warmth - hence one which, be definition, is never realized: a warmth characterized, precisely, be the absence of any source."

Color as a tool of constructed experience is most effective when it is used comparatively. "Colors are contrasting ranges of shades, their value has less and less to do with their sensory qualities they are often dissociated from their form, and it is their tonal differences that give a room it's 'rhythm." Because the warmth we desire in our materials and colors does not exist in our synthetic world, warmth occurs only when colors are contrasted against each other. "So far as colors are concerned, 'atmosphere' depends upon a calculated balance between hot and cold tones."

<sup>1.</sup> Davidson, Cynthia. Reflections on Transparency: An Interview with Terence Riley in The Light Construction Reader (New York: The Monacelli Press, 2002) p47-53.

<sup>2.</sup> Baudrillard, Jean. A System of Objects. Verso: 1996. p.41

<sup>3.</sup> Buether, Axel. "The Function of Colour: An introduction to colour theory and a definition of terms", in Colour, p7-19. 2014.

<sup>4.</sup> Bohme, Gernot. Atmosphere as the Subject Matter of Architecture. 398-406

<sup>5.</sup> Baudrillard, Jean. A System of Objects. Verso: 1996. p.37

<sup>6.</sup> Baudrillard, A System p.32

<sup>7.</sup> Ibid.

#### **Abstract**

The purpose of this thesis is to explore the constructed experiences of our daily lives, brought about by the manipulation of light and color. Atmosphere, an elusive but constantly present force, provides the backbone for research and exploration, more specifically in the mechanics of light and color. Factual evidence will be used to examine atmospheric qualities of space and the roles that light and color play in the overarching conversation of constructed experience.

#### Atmosphere as constructed experience

The term atmosphere has been used frequently to describe conditions of place, whether in a movie, photograph, or physical location. Yet, the definition of atmosphere is elusive and seemingly purposefully difficult to encapsulate. Typically, "atmosphere is commonly used as a synonym for mood, feeling, ambiance, or tone". Bohme states that "If it is true that architecture shapes space, then one must move about in these spaces in order to evaluate them." When investigating atmosphere, it becomes clear that it is an experience each of us partakes. Generally, atmosphere is an initial impression. Simply, "Atmosphere is perceived most often as our first impression of a space". In the words of Peter Zumthor, "In a spatial context, however, atmospheres mediate between the built environment and human perception because they are ... a 'form of perception'. Therefore, atmosphere is both our perception of space, and our experience of it. Because of this, atmosphere is more than just a feeling or mood; it can become how we construct an experience. If atmosphere is how we create experience, the next question is how to measure it.

While there is plenty of discussion on how to generate atmosphere, there are limited resources that gauge it within a space. According to Peter Zumthor, he describes nine considerations when constructing an experience: The body of architecture, material compatibility, the sound of a space, the temperature of space, surrounding objects, between composure and seduction, tension between interior and exterior, levels of intimacy, and the light on things.<sup>6</sup> While these qualities seem abstract, they can be deduced to manipulating materials, thresholds, and objects. Baudrillard offers a different school of thought, in that atmosphere is achieved at the intersection of the materiality of things, and the materiality of need. He promotes that our spaces are a system of objects, and that atmosphere is what elevates the system to a level that emotes an atmosphere. <sup>7</sup>Taking this notion one step further, what we need from a space, usually emotionally or socially, and how it is met within the "things" a space affords, is a gauge of whether or not this is an attractive atmosphere. If we desire to construct an experience through atmosphere, we can do so best by manipulating light and color, as they have direct effects on all aforementioned components of atmosphere. <sup>8</sup>

#### Mechanisms of Atmosphere: light and color

If we try to break down light and color into its most basic qualities within space, it becomes clear that color is a major driver of atmosphere: "as luminous color it appears atmospheric and diffuse to the viewer, while as non-luminous color, shape and form materializes from it." In other words, we create atmosphere through light and the color it generates, while the lack of color allows us to focus on line and form. We as human beings rely on our sight to assess our surroundings for safety, comfort and biological survival. "Visual perception always

- Preston, Julieanna. "In the Mi(d)st Of." Architectural Design Vol 78, no. 3 (2008): p. 7
- 2 Sloane, Mona. "Tuning the Space: Investigating the Making of Atmospheres through Interior Design Practices." Interiors Volume 5, no. 3 (2014): p. 297
- Bohme, Gernot. Atmosphere as the Subject Matter of Architecture. p. 402
- Zumthor, Peter. Atmospheres. Basel: Birkhauser, 2006. p.12
- Sloane,. "Tuning the Space, p. 299
- 6 Zumthor, Peter. *Atmospheres*. Basel: Birkhauser, 2006.
- 7 Baudrillard, Jean. A System of Objects. Verso: 1996. p.36
- 8 Zumthor, *Atmospheres*, p. 13
- 9 Buether, Axel. "The Function of Colour: An introduction to colour theory and a definition of terms", in Colour, 2014. p7.

starts with the creation of orientation in space," which means figuring out where things are in relation to the light source.¹ To take it one step further, our personal and subjective perception is involved, as sight alone does not carry atmospheric properties. In other words, "seeing involves the cognitive processing of visual and spatial data that exist objectively only as colour stimuli of the retina," so we must subjectively interpret their meanings based on "[our] previous experiences in the context of the use situation.²" Color is therefore a medium of visual perception,"³ and becomes a tool of atmosphere when altered.

Similar to how atmosphere is a first impression, "On the basis of colour differentiation, the brain provides orientation in just a few seconds."<sup>4</sup> "The differentiated planning of atmospheres and material colours determines the perception of light and shadow, depth and surface, proximity and distance, and objects and space."<sup>5</sup> In other words, one can create an alternate atmosphere through adjusting our sense of scale, orientation and depth perception when we manipulate the light and color within a built environment. "Atmospheres can be generated by manipulating the scale of things to our bodies, which also brings in the question of levels of intimacy."<sup>6</sup> If we feel as though things are closer or further from us, we can feel safe, or exposed, intimate or sociable. Furthermore, color is tied to our subjective perception in that it "defines people's relationship to the object being designed".<sup>7</sup> This is usually done though the strategic use of color.

Without ample daylight or artificial light you cannot see in full color because of the "high response threshold of the color-sensitive cones." Which means the world seems red-orange just before sunrise and sunset because of the shorter distance that light has to travel when seen horizontally, and the world can seem cyan or whitish-gray because of the reflection and absorption of light in the atmosphere's particle structure. "The reduction of the spectrum to achromatic colours (without color, or only black and white), means that the perception of the environment shifts. "This allows us to understand that perception can rely on color or absence of such. However, "information on the time of day, mood, atmosphere, materiality and tactility becomes less important as a result of the chromatic color abstraction proceeds into the background." This means that with a lack of color, there is no atmosphere or mood.

We can also generate a new perspective by manipulating our orientation of a space via light and color. To begin, "most aspects of the visual color concept are oriented towards rapid perceptibility and functional differentiation, communicating a sense of security and orientation in a multi-sensual world." Through this knowledge, we can effectively claim that color is what helps us orient ourselves. How is this accomplished? "Orientation is an essential function of color, since the spatial resolution of all material structures increases exponentially with every nuance of brightness and perceptible hue." This means the brightness of a color, and the variety of colors within a space, allow us to orient ourselves more effectively. When employing this in atmosphere, it can help us create an inviting world, or one that evokes mystery. The larger the spatial scale and the less the other senses are able to assist in orientation, the more important color becomes in orientation." The application of various levels of brightness allows the observer to define density, space, proximity and distance. Once more, light is shown to play a crucial role in whether or not the experience we are building is close to us, requires a journey, is one that has many layers or is superficial.

When examining color and our depth perception, one might be encouraged to employ a visual concept. We can even make two different colours seem as one via a process called metamerism. This means that the three types of cones in our eyes that perceive color can make us perceive two different colors as the same color, based on the change in the light source (see Figure 1).

Buether, "The Function of Colour," p.10

<sup>2</sup> Ibid., pg.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid. p. 10

<sup>5</sup> Ibid. p. 11

Zumthor, Peter. Atmospheres. Basel: Birkhauser, 2006. p.51

Rieke, Timo. "Colour concepts" in Colour, 2014.p.43

<sup>8</sup> Buether, Axel. "The Function of Colour: An introduction to colour theory and a definition of terms", in Colour, 2014. p.12

<sup>9</sup> Buether, Axel. "The Function of Colour: An introduction to colour theory and a definition of terms", in Colour, 2014. p.12

<sup>10</sup> Buether, "The Function of Colour" p.7

<sup>11</sup> Ibid., p.7

<sup>12</sup> lbid., p.10

Rieke, Timo. "Colour concepts" in Colour, 2014. p45

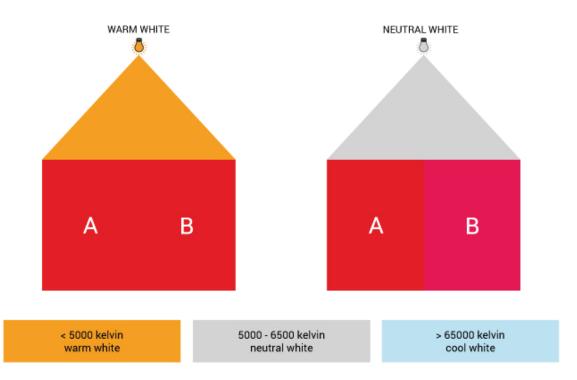


Figure 1

Only two degrees of your field of vision are in focus, which makes the background very important for atmosphere, as well as directs your eye in it's next point of focus. For example, "highly saturated colors appear closer to us and more vibrant while unsaturated are static and rigid." Therefore, we can prove that distance and proximity is perceived through saturation.

#### Transparency linked to atmosphere

Translucency is basically a manipulation of light and materiality. Still, more to be explored is the manipulation of light to alter our depth perception through translucency. "Transparency means a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity." Therefore, transparency does not mean clear, but instead it employs a sense of ambiguity. "Translucency, as opposed to absolute transparency, is when the transmission of the image breaks down, yet light is still passing through." This can help designers to create a new experience by playing with our direct relationship to space and possibly creating tension. "The tension between viewer and object implied by the use of the architectural facade as a veiling membrane indicates a departure from past attitude and a need to reexamine the word transparency as it relates to architecture." In this case, the veiling membrane could be glass, or another material that lets light in without creating a two-dimensional image. "The insertion of the veil, the presence of the thing between, sets up a certain subjective relationship between the viewer and the object; a very different relationship from the objective notion of vision implied by the classic modernist glass house, which opens up, expanding to the horizon, suggesting a continuum between the viewer and the world." It is important to consider what we are allowed to see, or encouraged to explore via transparency or filtered light.

Additionally, light can help create a sense of "weightlessness" by "suspending the user in levels of transparency with the vertical walls but horizontal surfaces like the floor panels and reflective floor and ceiling materials". Multiple surface reflections overlapping can create "haze and evanescence" as we can see in the Cartier Foundation (see Figure 2).

<sup>1</sup> Rieke, "Colour concepts" p.45

<sup>2</sup> Rowe, Colin and Robert Slutzky. "Transparency: Literal and Phenomenal, Part 1" in The Light Construction Reader (New York: The Monacelli Press, 2002), p92.

Davidson, Cynthia. Reflections on Transparency: An Interview with Terence Riley in The Light Construction Reader (New York: The Monacelli Press, 2002) p47-53.

Riley, Terence. Light Construction in The Light Construction Reader (New York: The Monacelli Press, 2002) p11.

Riley, Terence, Mark C. Taylor, Hugh Dutton, Eeva-Liisa Pelkonen, Guy Nordenson, K. Michael Hays, Greg Lynn, Toyo Ito, Joan Ockman. *Light Construction Symposium* in The Light Construction Reader (New York: The Monacelli Press, 2002) p54.

<sup>6</sup> Riley, Terence. Light Construction, p12



Figure 2

"...transparency implies an entire range of screened images, of somewhat translucent images, or any manner of perceptions that are neither opaque nor literally transparent, neither figure nor ground."<sup>1</sup>

According to Baudrillard, a transparent material like glass is "A content that is also a container, and hence the basis of a transparency between the two: a kind of transcendence which, as we have seen, is the first priority in the creation of atmosphere." He continues with "Above all, though, glass is the most effective conceivable material expression of the fundamental 'ambiguity' of atmosphere: the fact that it is at once proximity and distance, intimacy and the refusal of intimacy, communication and non-communication." Finally, "Glass works exactly like atmosphere in that it allows nothing but the sign of its content to emerge, in that it interposes itself in its transparency, just as the system of atmosphere does in its abstract consistency, between the materiality of things and the materiality of needs."

#### **Light Linked to Atmosphere**

The "right" type of lighting can really help construct an experience, and achieve a certain mood. When you consider color two dimensional versus three dimensional, our "eye movements are guided by the lines in a drawing, they follow color in built space." <sup>5</sup> This helps us understand that colour can pull you into a space, or avert you from it. Furthermore, light can actually define thresholds and boundaries, in that "Light can create a space, as in the cone of light from a street lamp into which one can step." <sup>6</sup> Color can also help emit warmth, or the lack thereof, as "This is purely a signified warmth - hence one which, be definition, is never realized: a warmth characterized, precisely, be the absence of any source." As pure black and white only occur in nature, in our attempted use of them in space, they have a specific outcome. "Straightforward and natural colors are "nothing, but an impossible echo of the state of nature, which explains why they are so aggressive." <sup>8</sup> "Black or grey retains the meaning of distinction, of culture, as opposed to the whole range of vulgar colors. As for white, it remains largely pre-eminent in the 'organic' realm: bathrooms, kitchens, sheets, linen."

Color as a tool of constructed experience is most effective when it is used comparatively. "Colors are contrasting ranges of shades, their value has less and less to do with their sensory qualities they are often dissociated from their form, and it is their tonal differences that give a room it's 'rhythm." Because the warmth we desire in our materials and colors does not exist in our synthetic world, warmth occurs only when colors are contrasted against each other. "So far as colors are concerned, 'atmosphere' depends upon a calculated balance be-

Davidson, Cynthia. Reflections on Transparency: An Interview with Terence Riley in The Light Construction Reader (New York: The Monacelli Press, 2002) p47-53.

<sup>2</sup> Baudrillard, Jean. A System of Objects. Verso: 1996. p.41

<sup>3</sup> Baudrillard, A System, p.41-42

<sup>4</sup> Ibid., p.42

<sup>5</sup> Buether, "The Function of Colour: pg.

<sup>6</sup> Bohme, Gernot. Atmosphere as the Subject Matter of Architecture. 405

<sup>7</sup> Baudrillard, Jean. A System of Objects. Verso: 1996. p.37

<sup>8 &</sup>quot;Baudrillard, A System p.32

<sup>9</sup> lbid., p.33

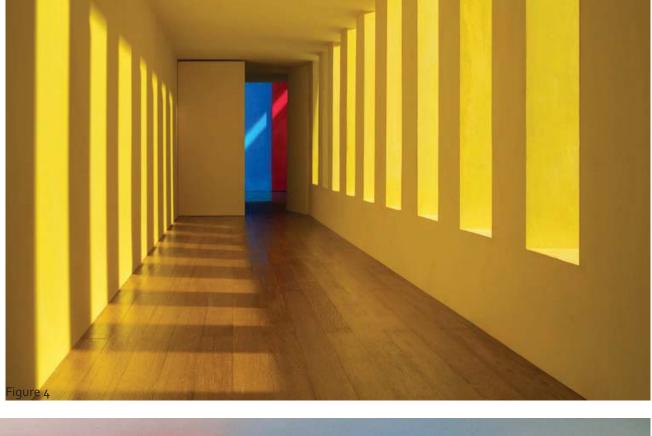
<sup>10</sup> lbid., p.35

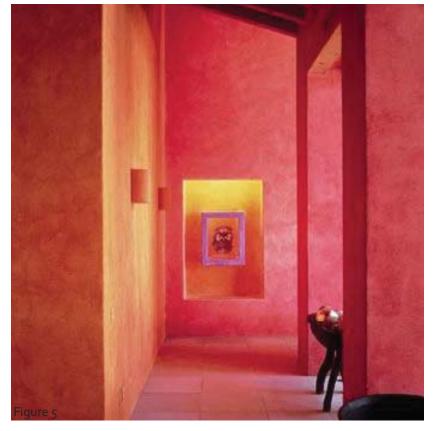
### PRECEDENTS

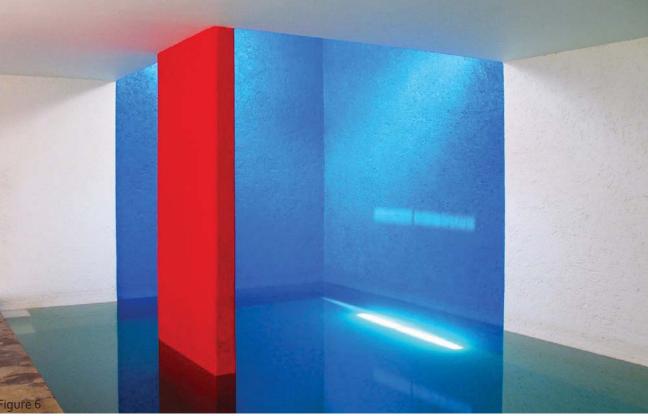
#### LUIS BARRAGÁN CASA GILARDI

Barragán came out of retirement to design Casa Gilardi for Pancho Gilardi and Martin Luque, who owned an advertising agency in Mexico City. It was intended to be either a studio space or bachelor pad for two men, and was the site for "parties". Based on the paintings of Mexican artist Chucho Reyes Ferreira, and have to be refreshed every few years to keep them the right shade.

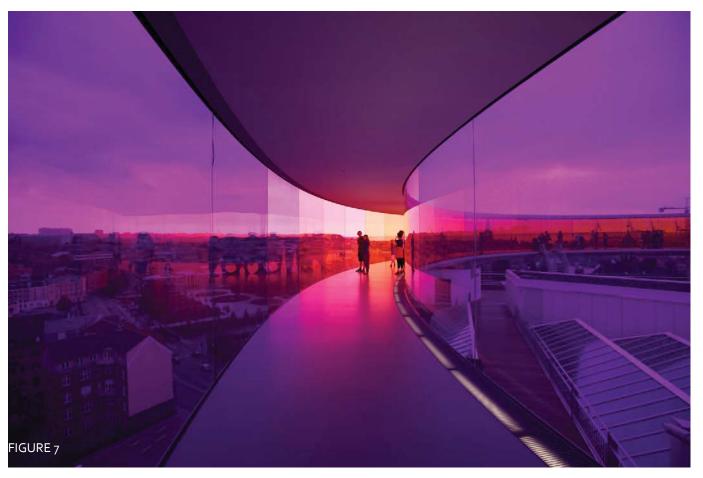








## PRECEDENTS



### OLAFUR ELIASSON YOUR RAINBOW PANORAMA, DENMARK, 2011

Eliasson and his studio got this work via a competition intended to transform the roof of ARoS Aarchus Art Museum. It allows visitors to see sweeping views of the city, sky and horizons. It also doubles as a barometer for the public, more-so at night when it is illuminated. It's 150 meters around and the glazing itself is rainbow.









### PRECEDENTS

#### SHIFT ARCHITECTURE CMY Pavilion, Netherlands, 2015

Part of the "deconstructivist movement", Eisenman, Hadid, Himmelblau, Koolhaas an Tschumi designed pavilions scattered around Groningen as part of an exhibit in 1990 titled "What a Wonderful World." Because of it's lack of program it is used today as a public exhibition space. The glazing that was meant to provide for endless video proejection. Shift Architecture took the notion of "instable facades" to it's next step by applying translucent film onto the glass in a 3D Graphic chevron.

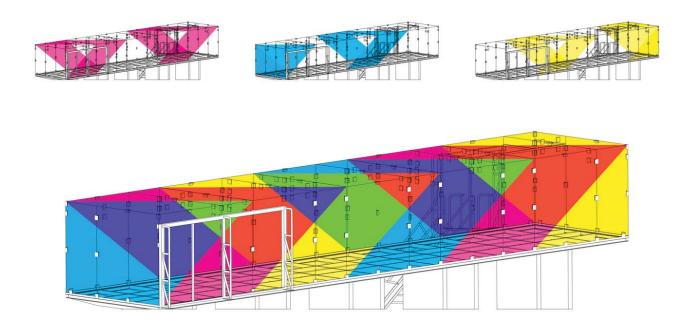


Figure 13



## INSPIRATION

SLEEP NO MORE New York City, NY, Ongoing



The following is an excerpt from an initial speech I gave explaining atmosphere and constructed experience:

"I'd like to introduce my thesis topic to all of you by asking you to imagine that you are sitting across from this man. You're not just watching him, you're witnessing something. You're partaking in the story.

That is what it is like to be a part of the audience for Sleep No More, which is an interactive drama about a 1920's murder mixed with Shakespeare. It's conducted in the historic McKittrick hotel on the lower west side of Manhattan which is a 5 story space, with specific circulation through the space for the viewers.

I believe this is a perfect example of a constructed experience because it is the story you're meant to watch. Each actor is are in one hour loops, and you can either follow a specific character or you can go wherever you want. The entire experience has multiple locations within the space - a speakeasy, a sanitarium, ballroom. Each of these spaces has a distinct atmosphere, created with light and color."

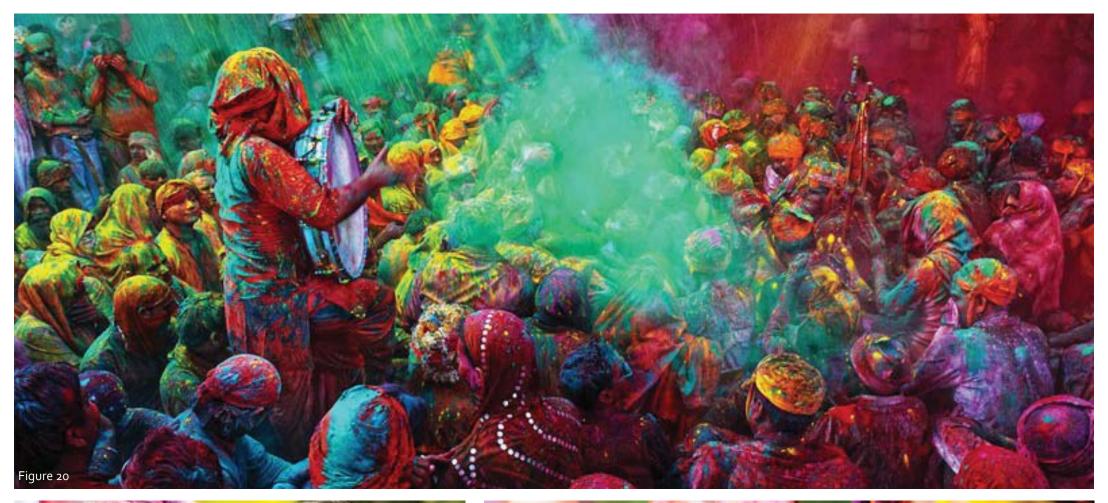






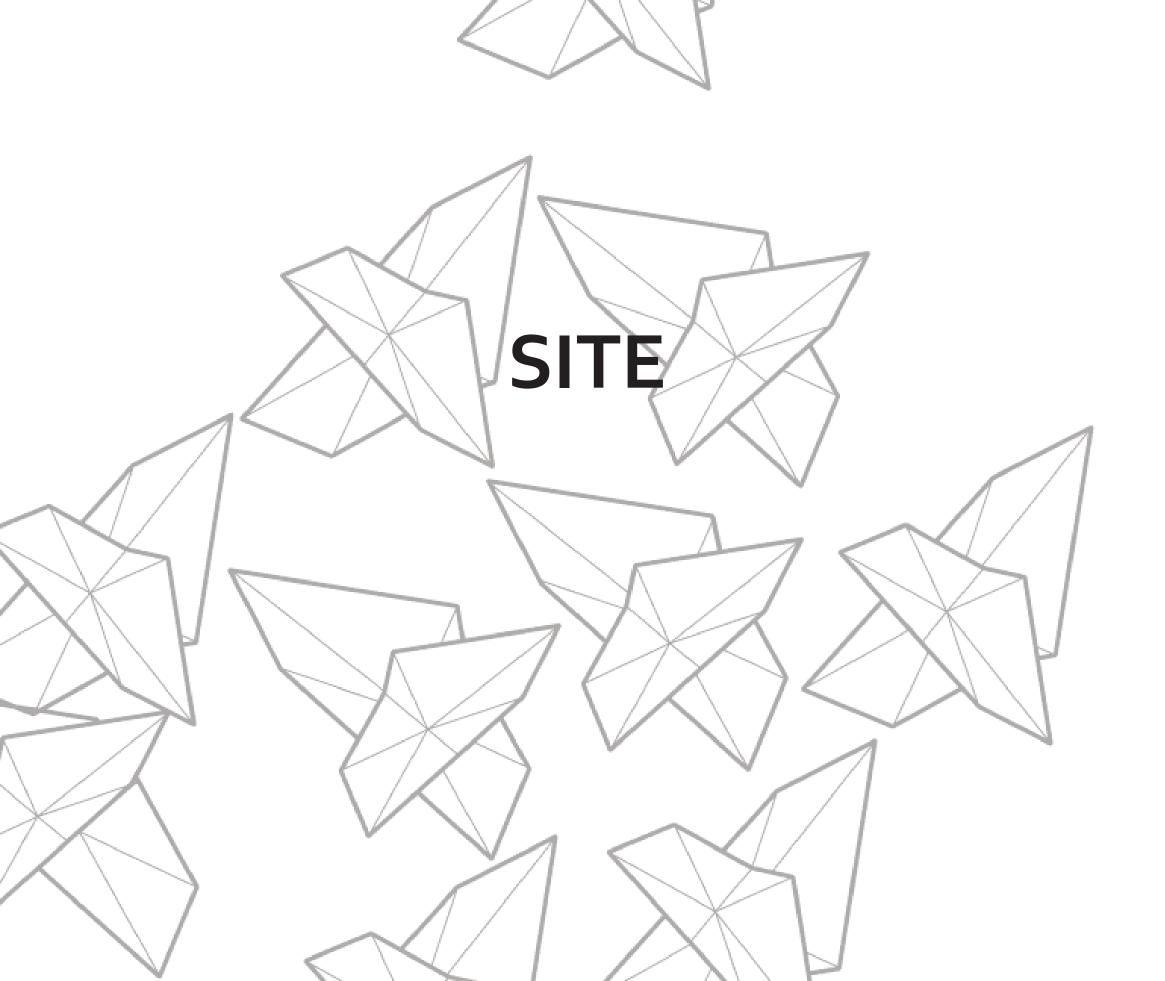
### INSPIRATION

HOLI India, Spring In certain parts of India, Holi is the festival of spring, celebrating vitality, the conquering of good over evil, and just letting go. The bursts of color that are thrown about, along with the festival atmosphere, is a starting point for my design.







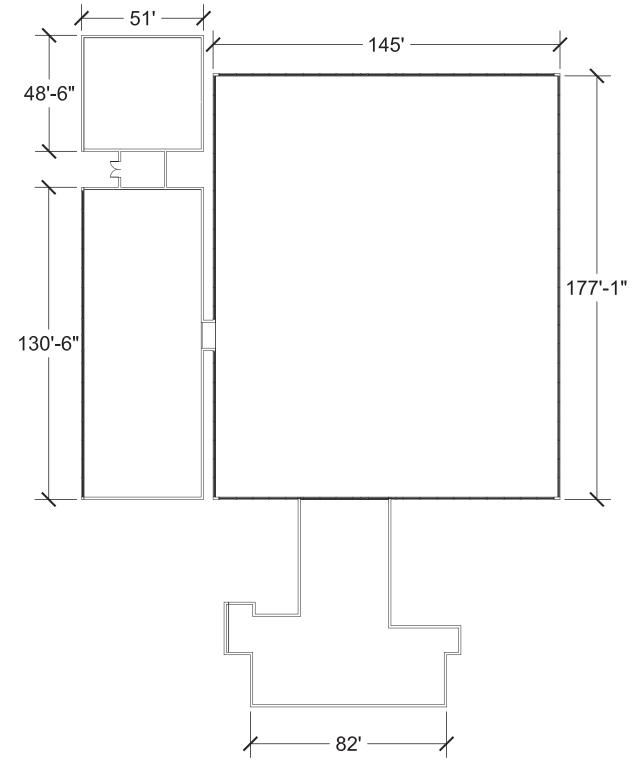




### FAIRMOUNT PARK HORTICULTURE CENTER Philadelphia, PA

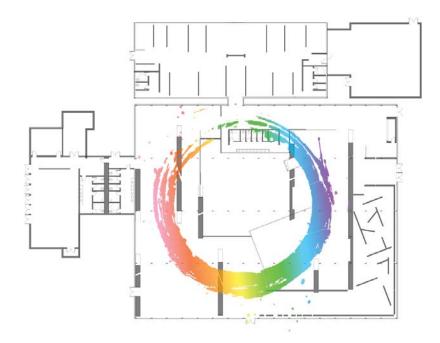
- Built in 1979
- Sits on the site of the former Horticultural Hall, an 1876 Centennial Exposition building.
- Rough square footage
- Nearby attractions: Please Touch Museum, Mann Center
- Constructed of lightweight steel framing and glass: traditional greenhouse construction





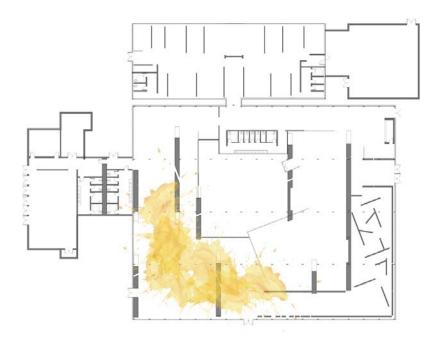
### SITE & COLOR

#### Color as Orientation (way-finding)



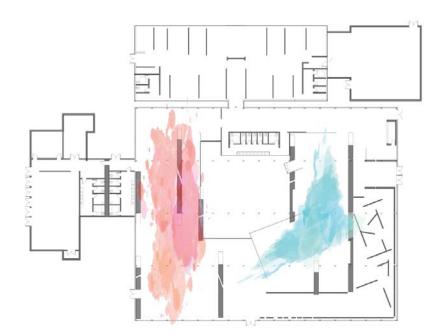
Similar to Olafur Ellisaon's "Your Rainbow Panorama", color was used as a notation of location within the space. By utilizing the familiar color gradation of the ROYGBIV rainbow, visitors become familiar with the circulation over time.

#### Daylight & Color



As natural sunlight is such an impactful factor in color rendering and our perception of space, several daylight studies were done to discover where the most natural sun exists in the site.

#### Color as Functional Communication

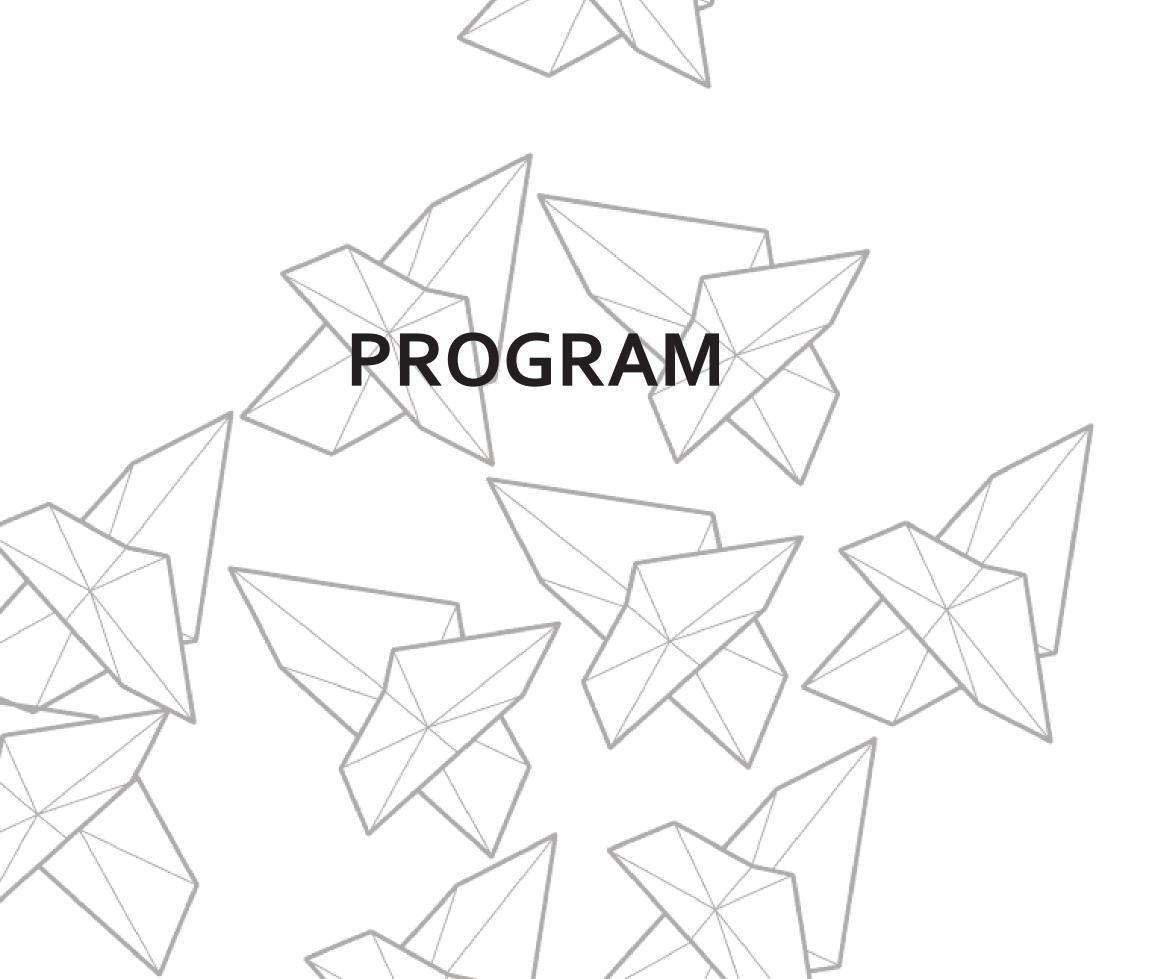


In this space, the brightest locations are the ones that have the most group-oriented activities around it. The paler, less saturation locations are where quieter and more interpersonal communication can happen.

#### Color as Atmosphere

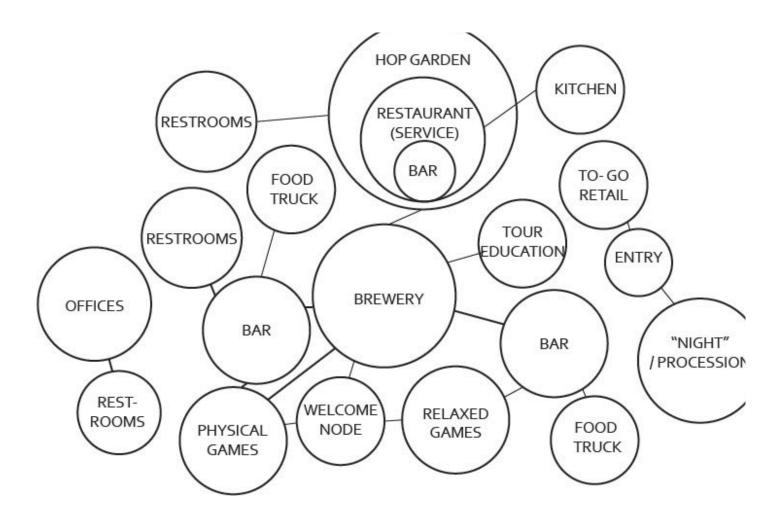


The colors in this space help us understand where our needs can be met - either more active, engaged activities or if we need a respite. Additionally, natural materials are used as a background so that they resonate with us as human beings, further bridging the gap between exterior and interior.



### OVERVIEW

#### **BUBBLE DIAGRAM**



#### **DEMOGRAPHIC INFORMATION**

With the knowledge that not everybody loves beer, I recognize that this space is for a specific demographic. The target audience is the philly microbrewer crowd. Hopefully they have awareness of how beer is brewed, and are passionate about learning more. Perhaps they even brew their own!

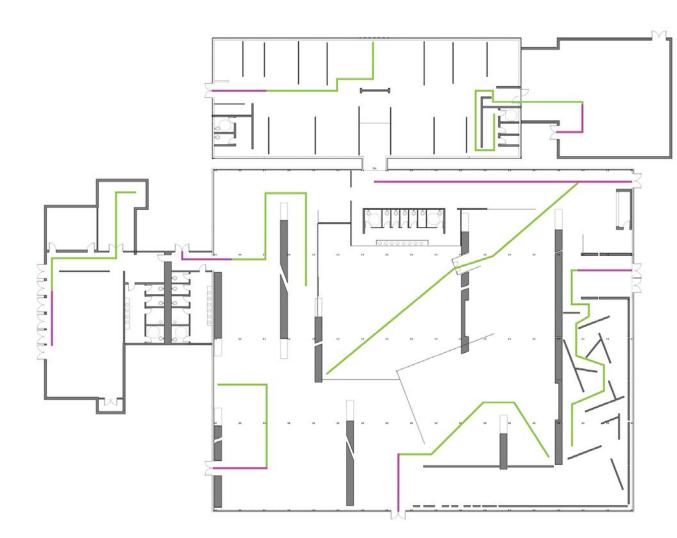
brew HUE is a destination for repeat visitors, hoping to blow off some steam in a civilized way. They enjoy the experience that is thoughtful and curated, just like their beer and food. They might enjoy a good philly cheesesteak, but also love exploring the up and coming culinary scene in Philadelphia.





## CODE COMPLIANCE

#### **EGRESS DIAGRAM**



MAXTRAVEL DISTANCES: 75' for common path of travel 150' for exit route

#### **CLASSIFICATION & PLUMBING FIXTURES**

#### Restaurant

6,000 square feet
Occupancy A-2B (Restaurant
banquet halls and food courts)
400 Occupancy
6 Restrooms

#### Merchandise

2260 Square feet Occupancy M 151 people 1 restroom

#### **Brewery (manufacture)**

5168 Square Feet Occupancy F 345 People 3 Restrooms

#### **Brewery Activity Space**

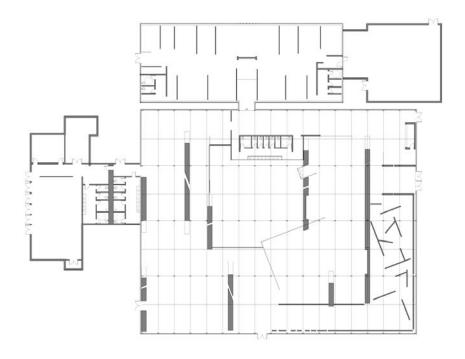
18,000 square feet, 15,000 w/o procession
- 25% for circulation
Occupancy A-2A (Night Clubs, bars, taverns, dance halls)
750 People
19 Restrooms

#### **Educational Zone**

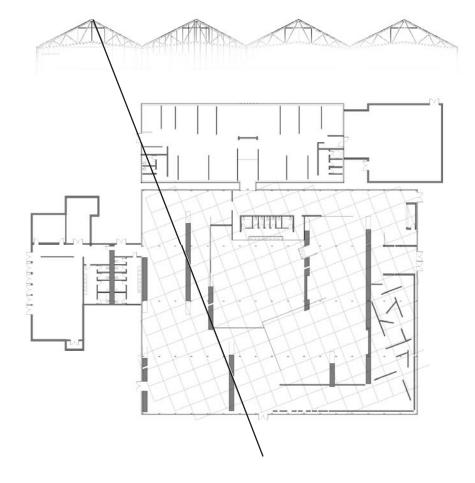
2700 Square feet Occupancy E 180 People 3 Restrooms

### PROGRAM IN SITE

#### PARTI INFORMATION



The existing structure was very informative in my design decisions. Because of the nature of eaves, the columns were vast in one direction, and a little spare in the other. Therefore, in order to ground the glass box I decided to place the wedges in the direction of the eaves themselves. This also informed the shape of the wedge, mimicking the sharp angles above.



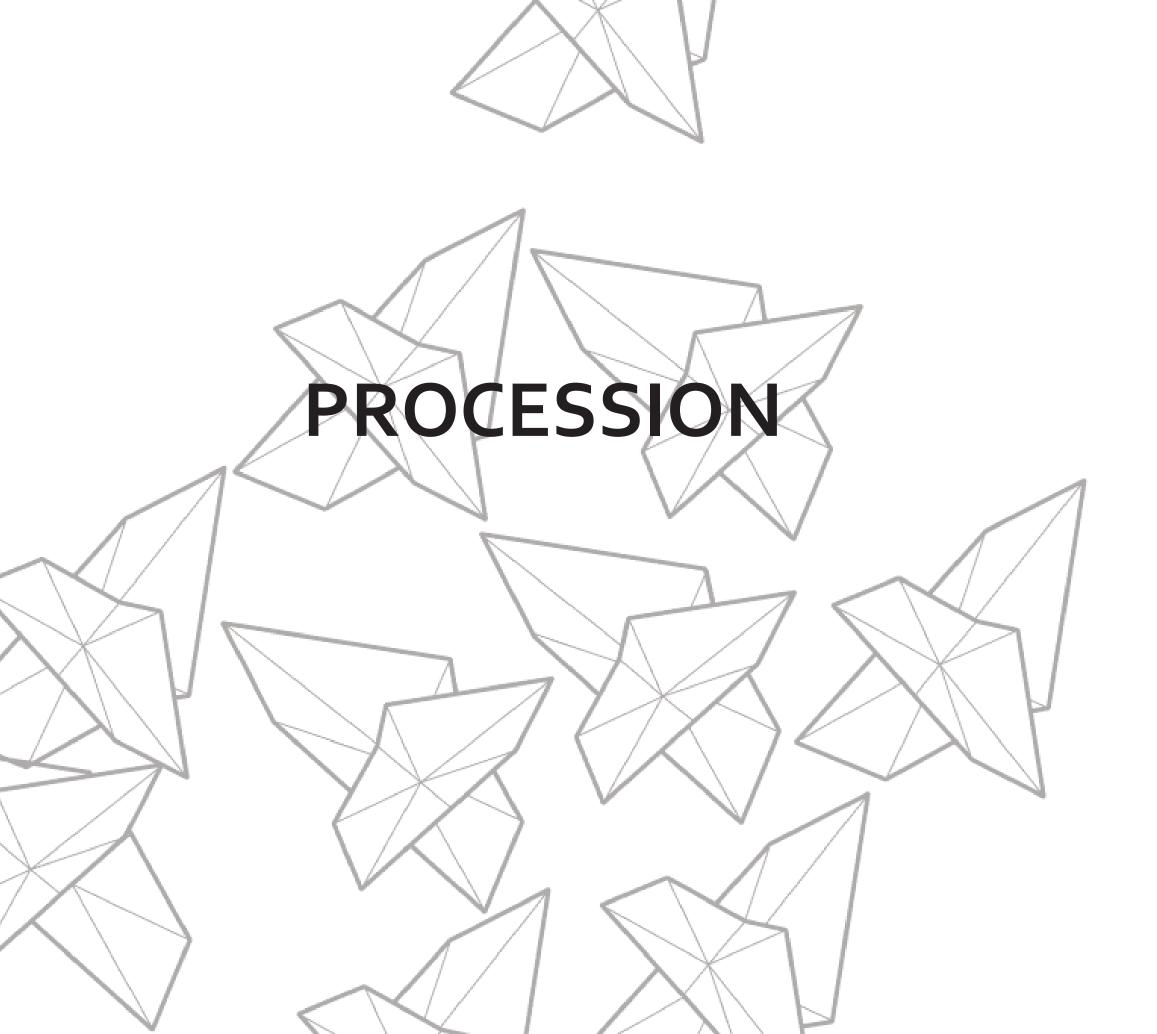
To disrupt these wedges and provide vantage points, another grid was placed on top of the initial column grid. The rotation angle of 70 degrees was taken directly from the eaves themselves.



My initial research was broad and slightly unfocused. After some time and multiple restarts, I realized that atmosphere is applicable in almost every program. After all, my argument is that every space we occupy has an atmosphere. This led to a bit of a struggle in defining a program. After some thought, I concluded that I would need to generate multiple atmospheres to provide contrast to one other. This way, the space would have truly comparable points of reference. The structure would remain the same, as would the potential for exposure to natural daylight. These were the tools I manipulated to generate a sensorial progression.

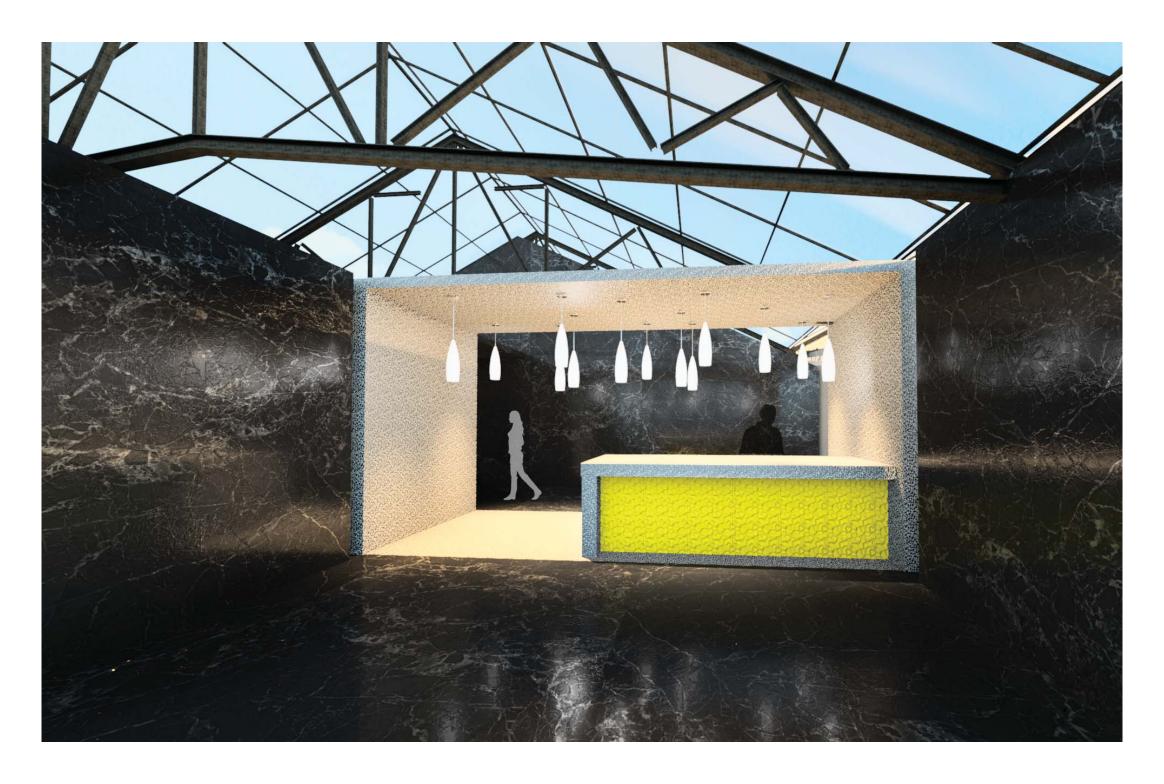
By guiding visitors through the space via a dictated path, their journey would be curated and purposeful. Deciding on the path itself was fairly simple once I referenced Holi as a programmatic driver. The contrast between a pensive, personal night of getting rid of evil followed with a day of celebration and bursts of color provides a perfect starting point for a sensorial progression. The night before was translated to an inital procession through a meandering path, followed by an arrival and circulation through a brewery. There are a few surprises and a lot of details, so each rendering reflects specific design elements.

With that, I'd like to introduce you to brew HUE. What follows is a visual representation of the verbal story I created. Please follow along, immerse yourself in the images, and read the text below if you wish.





Hello! You've arrived at brew HUE, and you're ready to get some quality beer and food. You parked your car, and start on your way up to the entrance. It's dusk, the most exciting part of the day as it signifies a change and generates anticipation. You see a glowing box within a box, piquing your curiosity. You see what look to be faceted tents, lit up, encouraging you to come to the entrance.



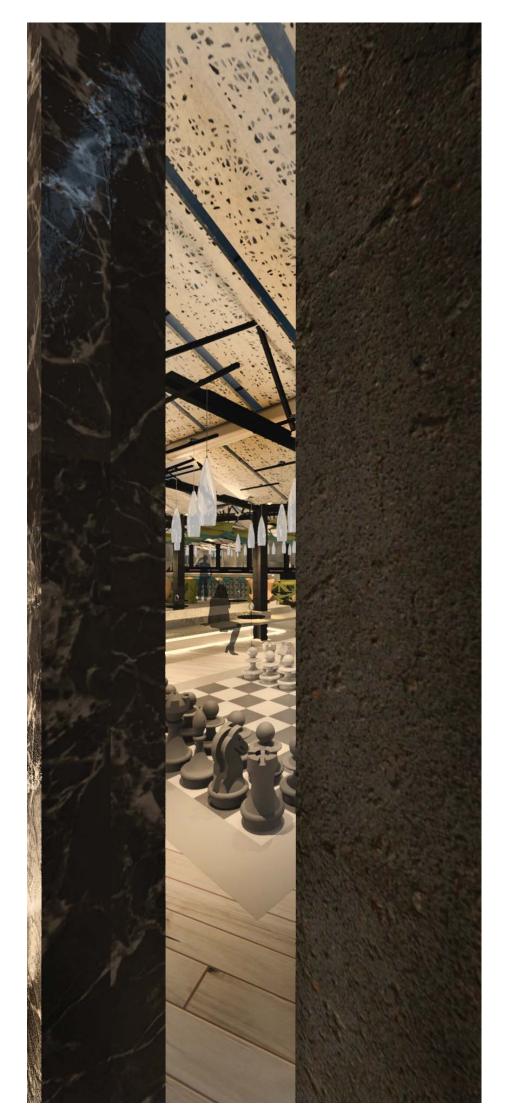
Once inside, you hear echoes of far-off laughter, see sleek marble, and find yourself suddenly speaking quieter, curious of what's to come. As you approach the front desk, glowing in contrast to the black marble, you tell the hostess that you're not here to dine in the restaurant tonight, but rather enjoy the brewery. Prepared to begin your journey, you enter the procession.



Upon turning the corner, you are faced with transparent planes that seem to overlap, and something glowing far off in the distance. That must be the fire you'd heard about! As you meander your way through the smoked glass, you find yourself thinking quietly to yourself, aware of your own breath as every movement makes an echo in this space. You become aware of the little slivers of light and bursts of laughter, as you pass gaps in this massive marble block you're contained in.



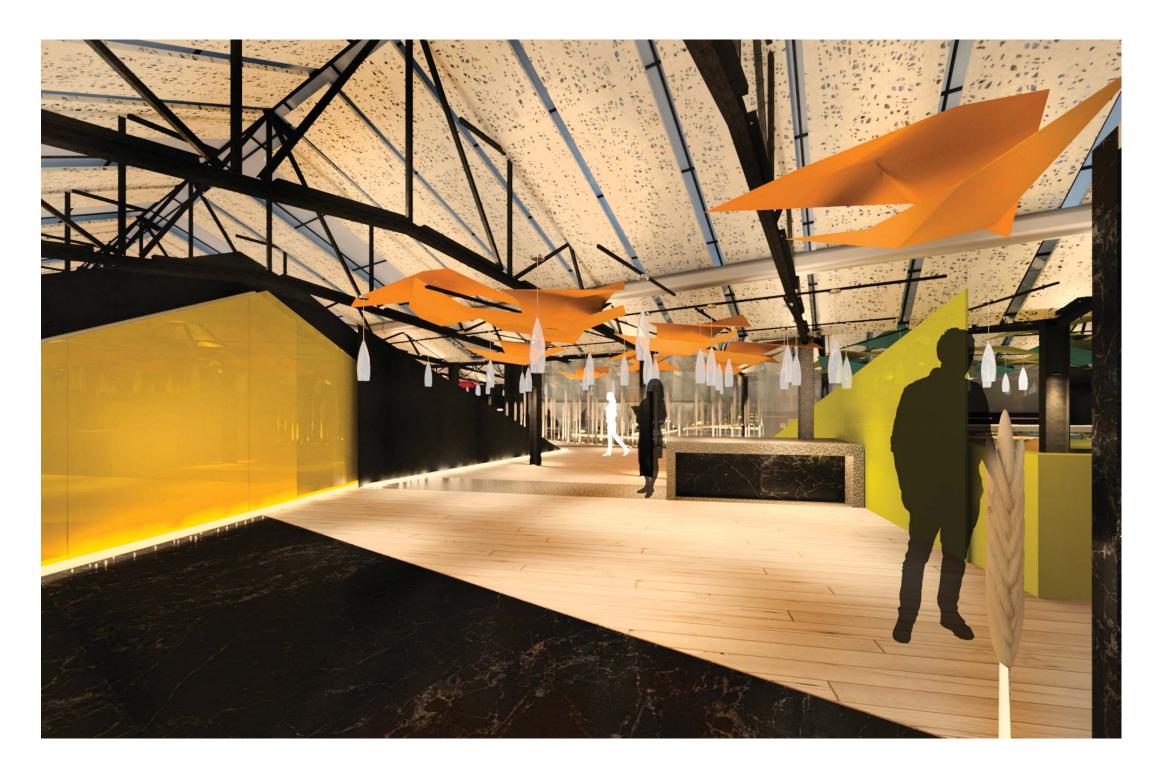
Finally you appreciate the moment to cleanse yourself of the emotional baggage you might have brought with you today. Allowing the fire to mark this spot as where you leave your contemplation and solitude, you become aware of one of these gaps in the wall. Curiously, you near to it, all the while the noise and clicking of beer glasses getting louder.



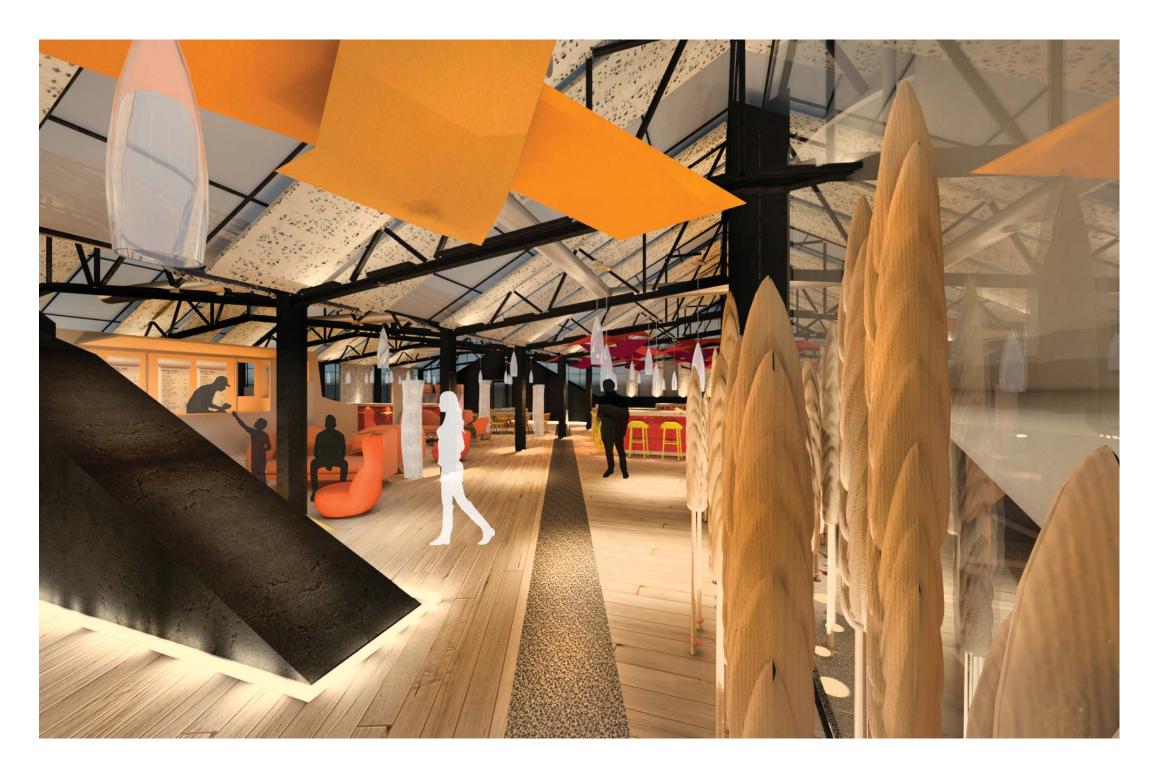
As you peak through the wall, you notice for the first time what looks to be a huge chunk of concrete... with marble on the other side. You also notice the fermenting tanks glittering all the way in the back, and what looks like a fun time, but you sill can't quite figure out how to get there. You decide to give yourself into the process and trust the journey.



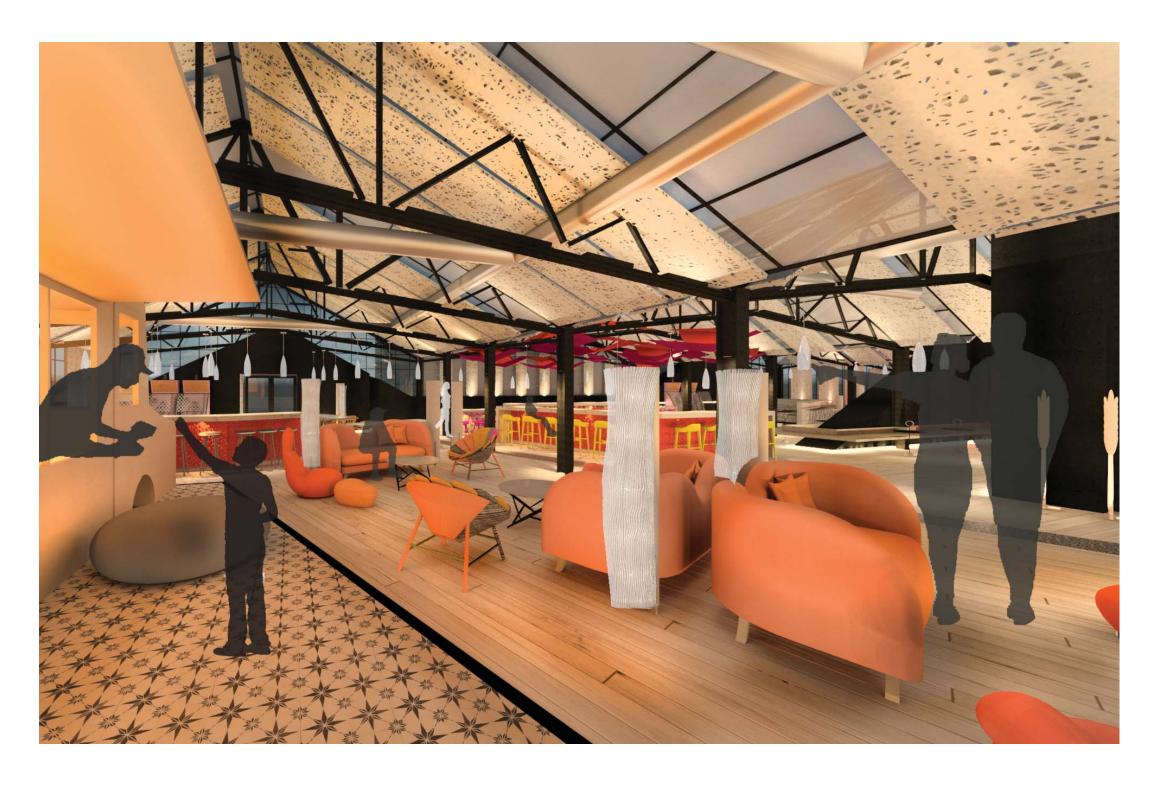
Oh, these guys! You notice that part of the glow you've been seeing are these big sticks of wheat, glowing and guiding you through dawn to eventually get to the day of celebration. At the end of this hall, you see more concrete and a big yellow plane, exciting you and encouraging you along. Also, the slots in the box seem to be getting bigger and more frequent...



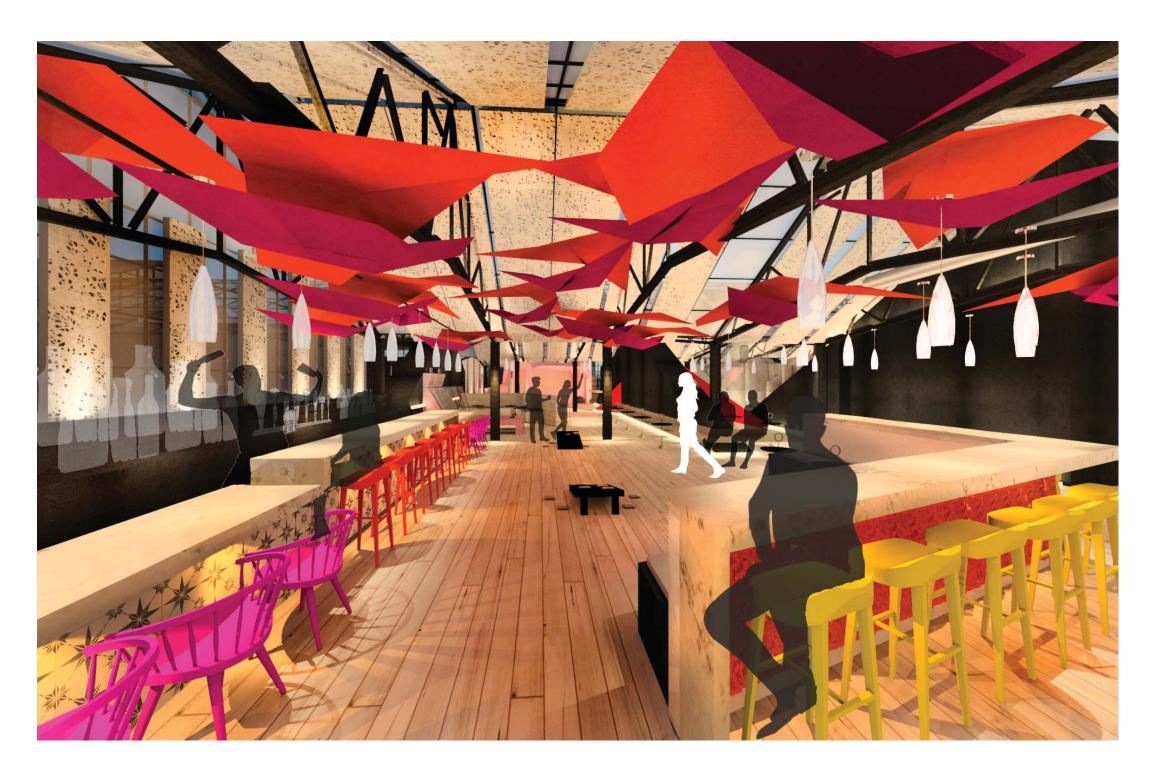
As you turn the corner, you're hit with a burst of yellow and orange! Welcome, to brew HUE! You notice that there is green to your right... but you're interested in whats around the big concrete wall with yellow glass cutting through. Thanks to the brewery being in front of you, you know there's beer... but where's the bar?



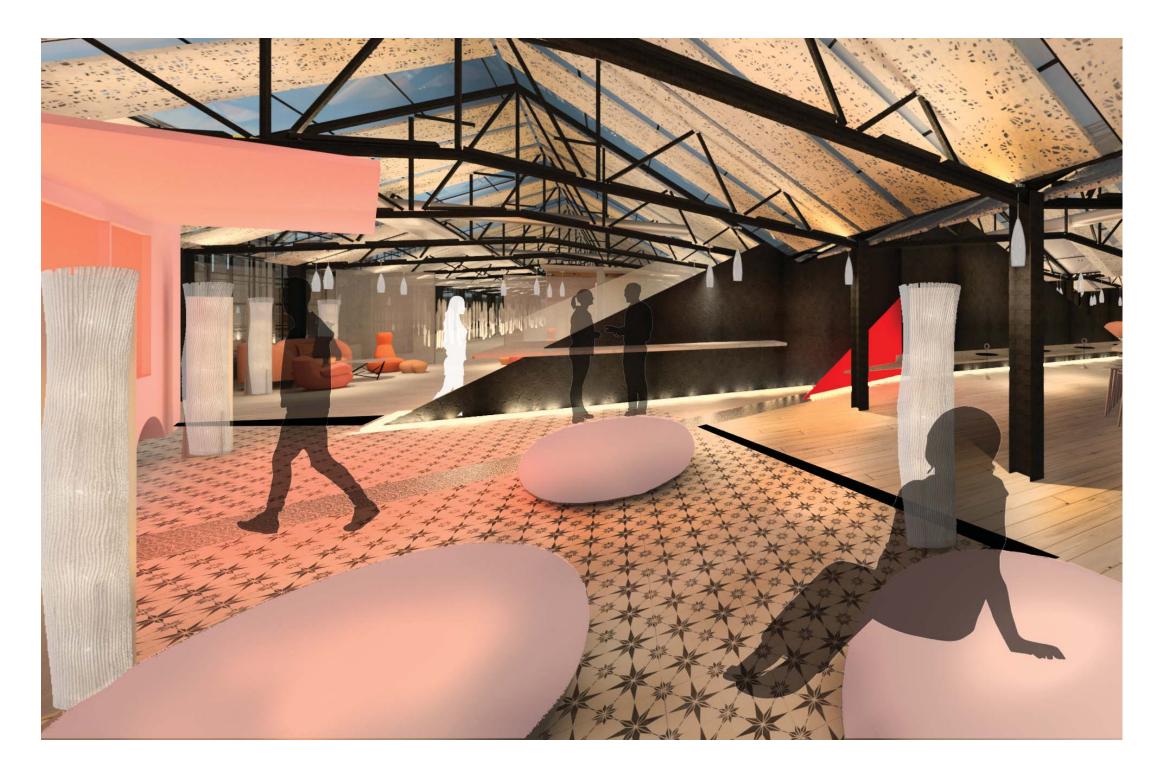
As you work your way around the wedge, you see another burst of red! And a bar! You also notice that the color disperses and becomes less saturated the further it gets away from the bar. While observing the flurry of activity and happy laughter, you realize there's a food truck. So, you go to get some food.



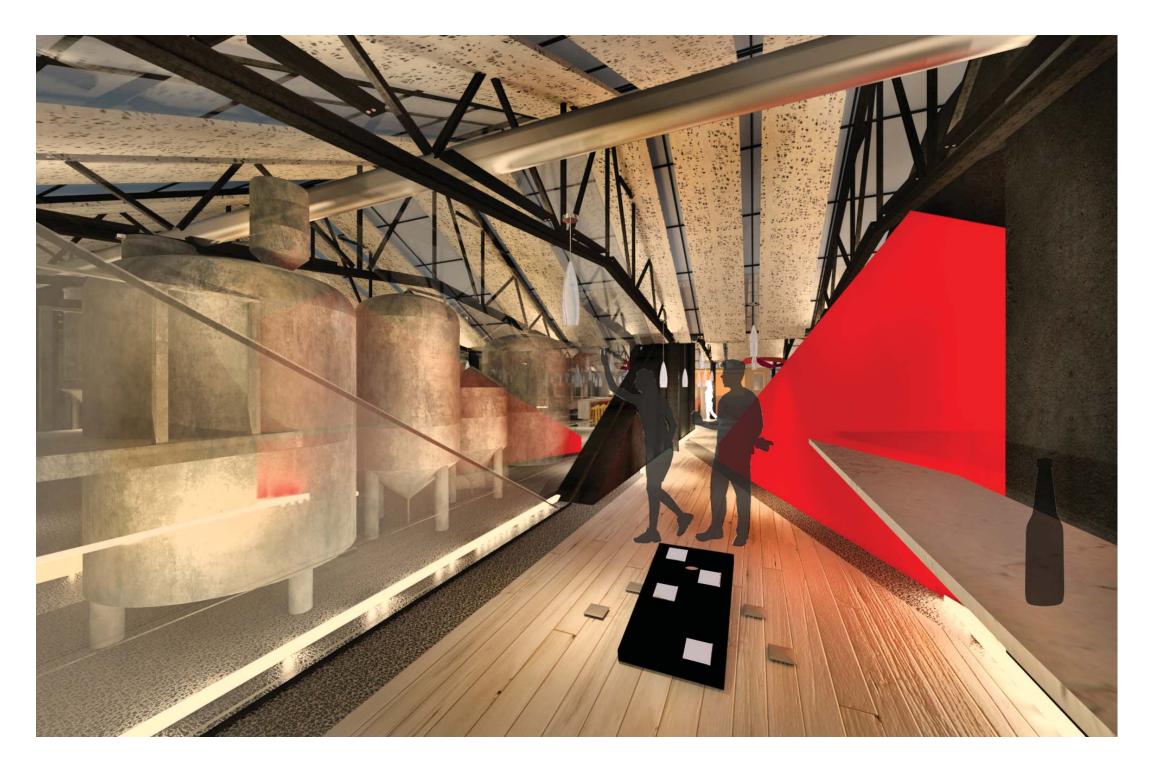
While enjoying local philly casual cuisine, you notice another wedge... and the opening above it. It seems as though this wedge could shoot right out of the sky. What's that you hear? it's skeeball! Watching them play, you noticing that you're missing a beer, you head to the red bar...



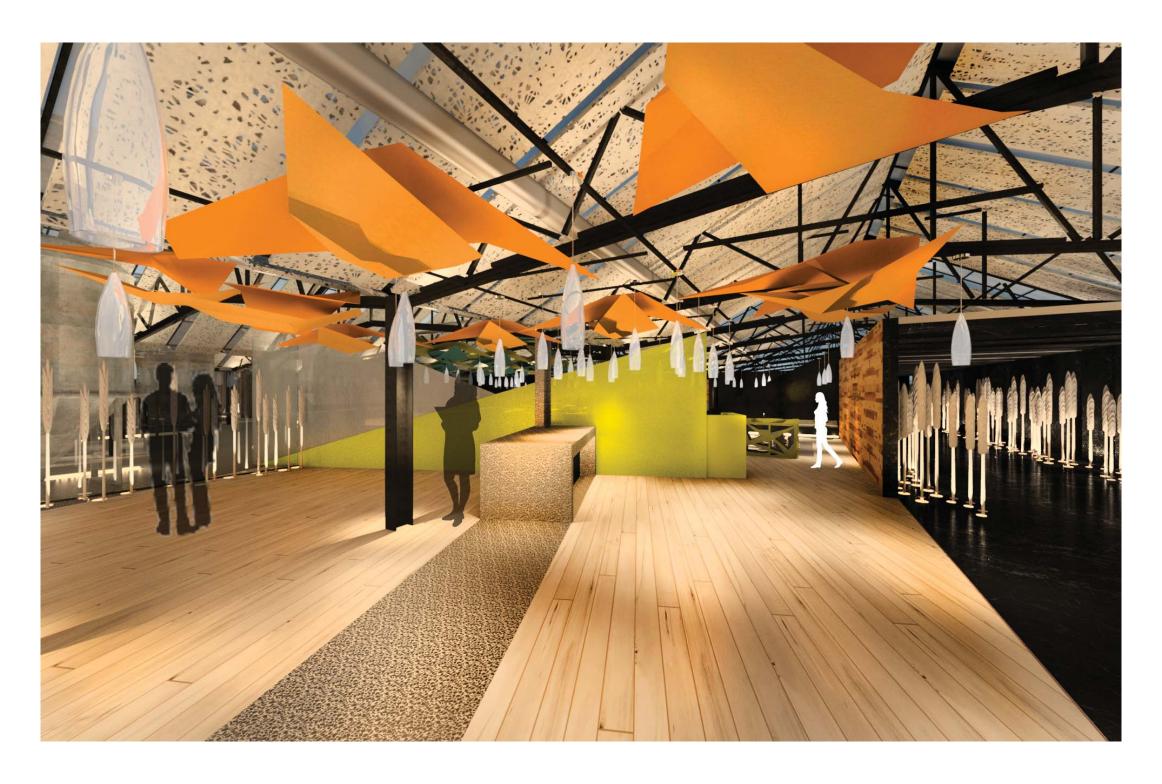
And you find corn hole! You realize that the red area is full of games that feel a bit more active. Here, you really feel like you're in a burst of color. Full of activity, excitement, and people enjoying their summer beers. The felt above you feels comforting, and dampens the noise that otherwise would be a little too much. You have to see what they're serving at the pink food truck so...



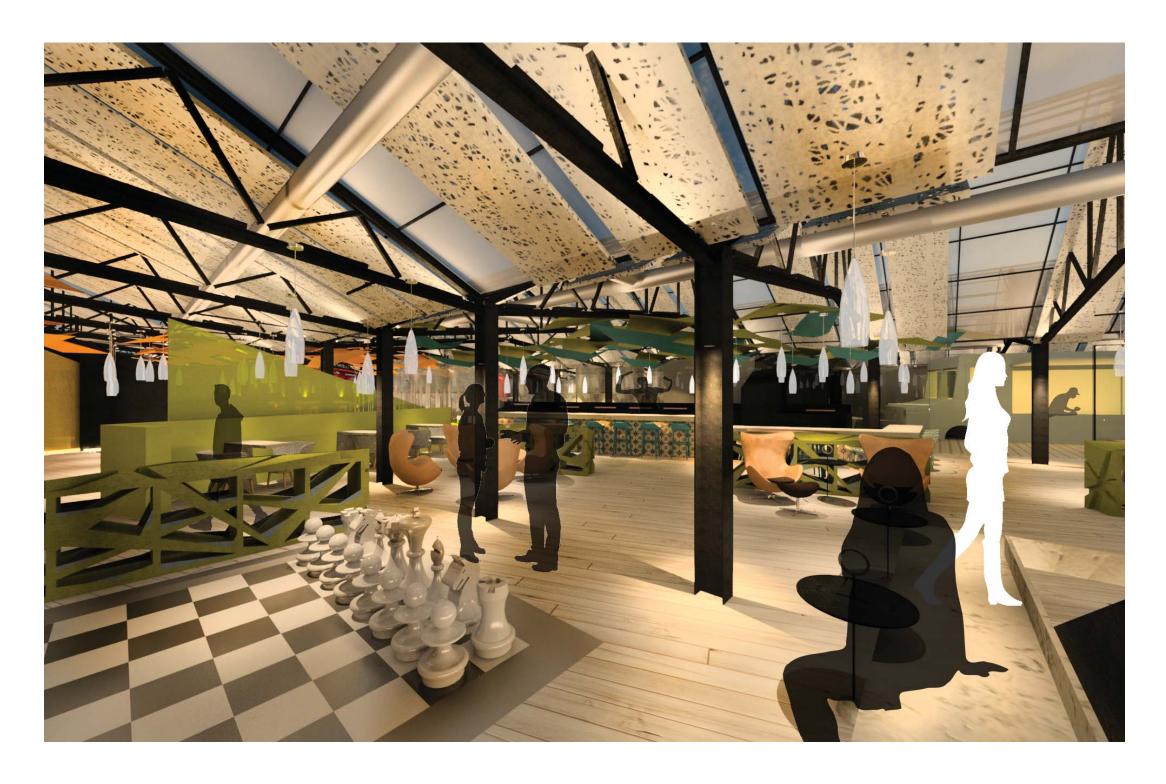
You take a peek and enjoy the poofs. And you notice that there seems to be a quieter area to go relax. You notice a little peak of red poking through that huge bit of concrete, and want to go investigate. On we go...



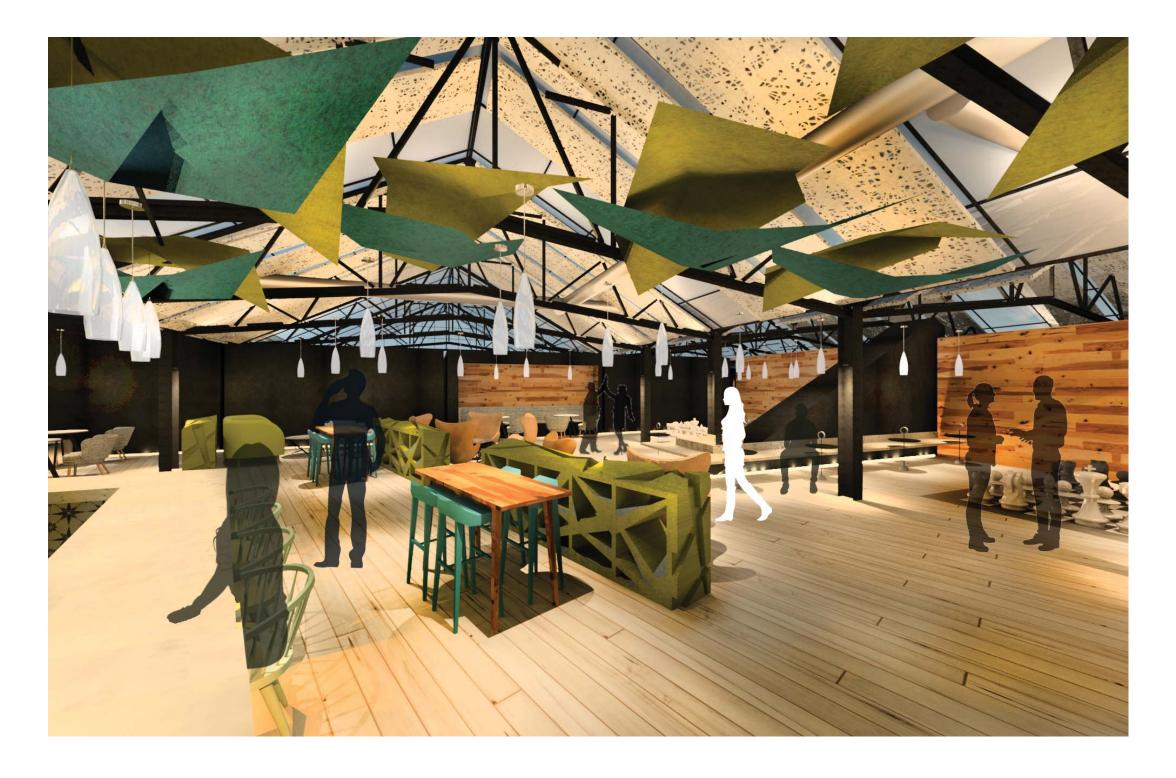
What a view of the brewery! You join a quick game, and use the ledge to put your beer down. The materiality of the twinkly, heavenly fermenting tanks is a nice backdrop to your friendly game. They are after all why you're here! Remembering that peek from earlier on near the fire, you decide it's time to go investigate that blue bar.



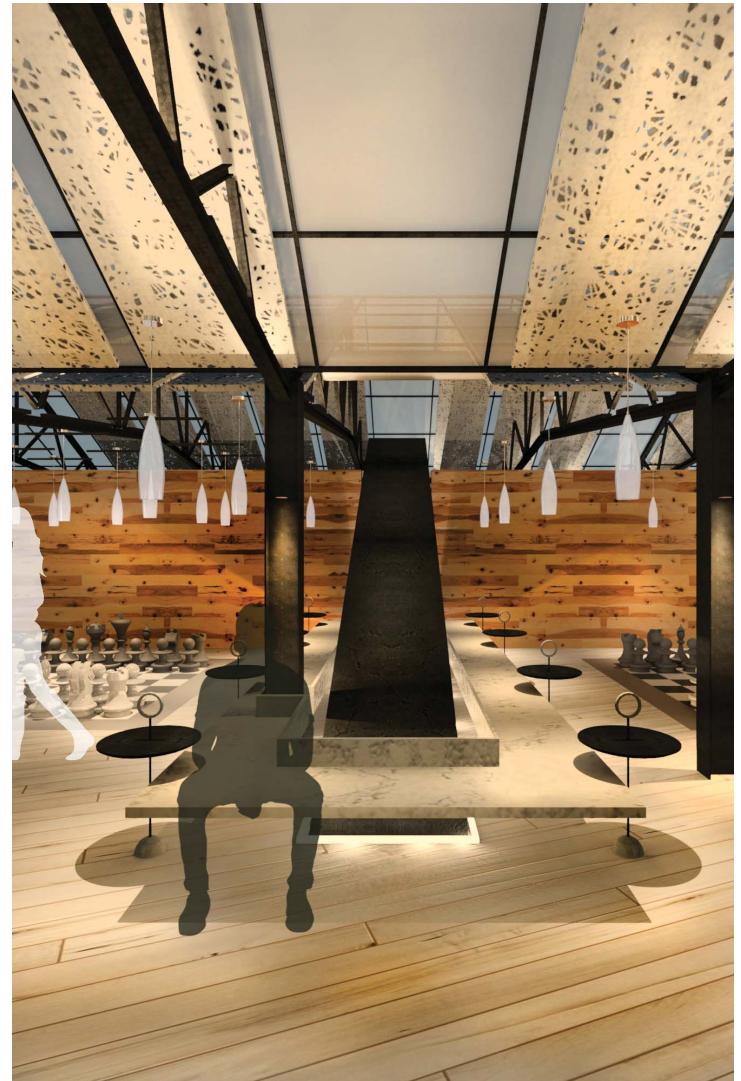
Walking through the space you get a friendly reminder of how you got here. The contrast between the experiences if evident, and you're happy to have gone through it. This giant green plane is exciting, but what's behind it?



Giant Chess! This space feels a bit more calm and relaxing, cerebral even. The wedge seat is a perfect place to sit and take a look around at all the board games and quiet debates. The blue felt over the bar lets you understand the pattern of where to find the bars, and realize you need another!



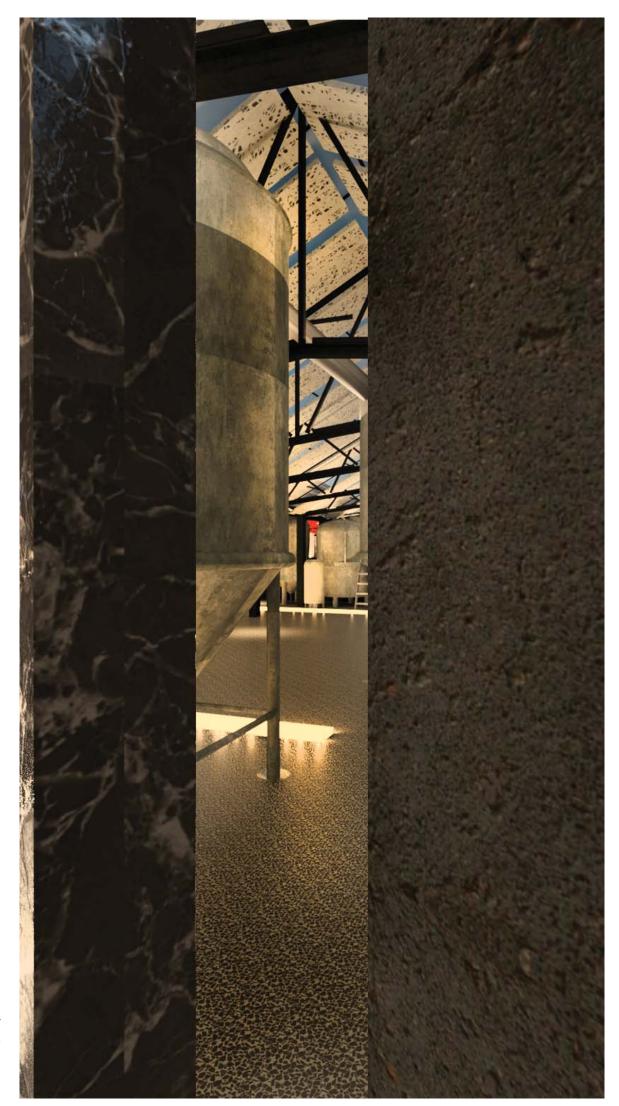
From here, You notice the felt cases for games. You also notice the wormed chestnut, elevating this space to something a bit more mature than what's going on at the red bar. Here, you take a minute to appreciate the felt panels helping to contain the light. They must be nice during the day for solar heat gain...



Walking over to check out where that blue food truck might be that you saw early on, you take a minute to appreciate this wedge. This was the first wedge you saw in the wheat walk! So that's what that was! It's a nice divider for the chess matches, and gives you another opportunity appreciate the night sky above.



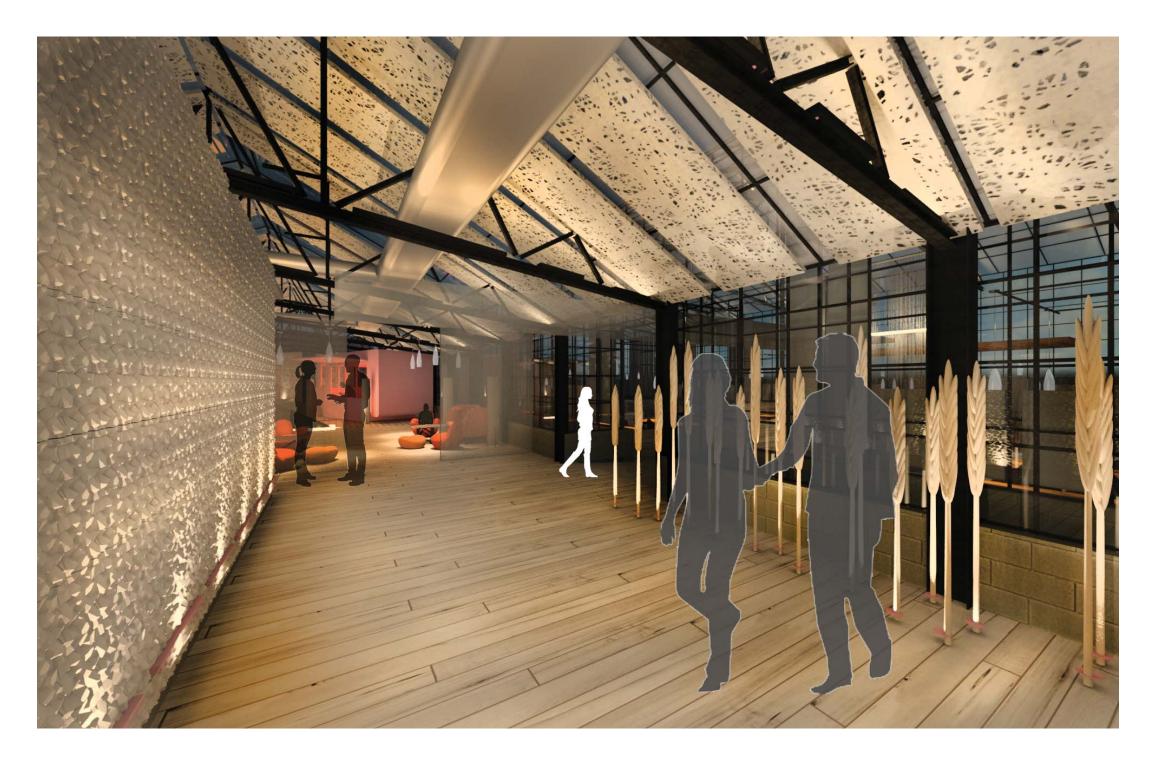
Turning around, there's the blue truck! I think it's ice cream... but you find yourself looking at the reflection of the blue bar. After letting your eyes adjust, you see it's a quiet niche for people to sit and enjoy their food. How nice! But what's behind that truck?



Another peak! This time it's into the brewery. It gives you a sense of being let in on a secret, and it's so interesting to see the fermenting beer sleep. What a flurry of activity that must be during the day!



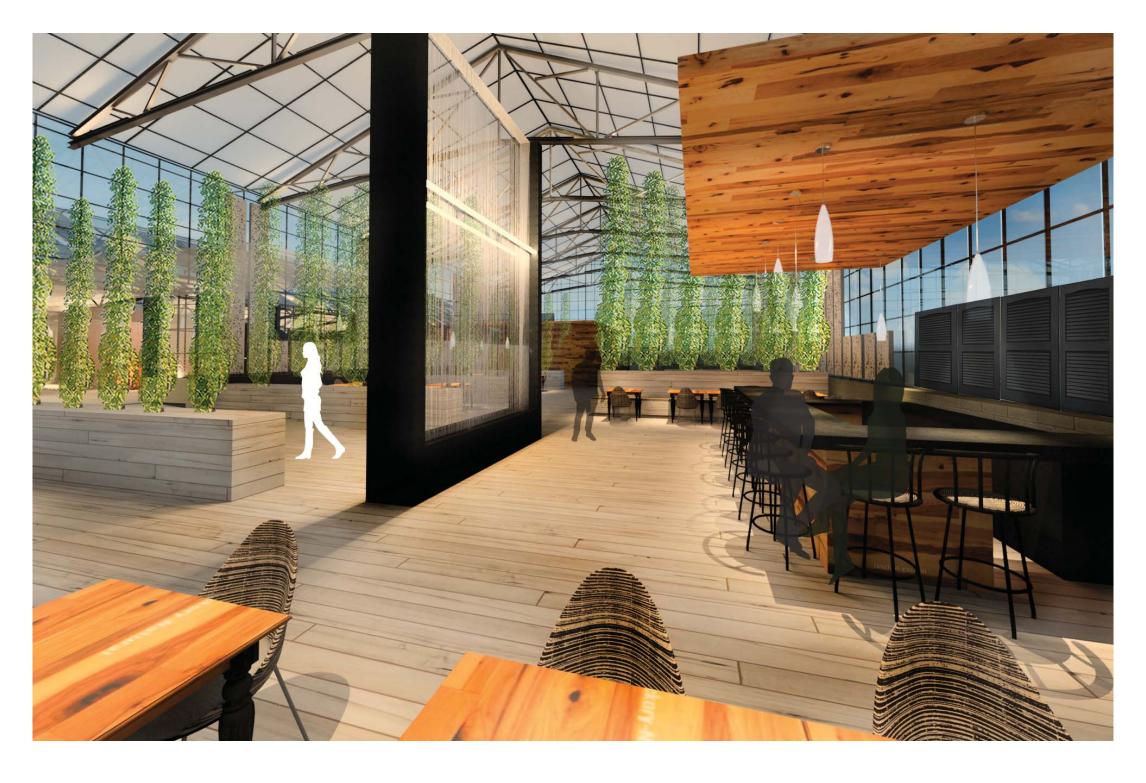
You walk through the theater, and take a look down the diffusion hallway. You felt badly about interrupting the brewery tour - they're just starting their quick video on brewery processes in the theater before heading in. This truly was a more cerebral space. The diffusion hallway seems to beckon, however. And the wheat sticks! Let's follow them...



As you near the end of the hallway, you get glimpse of this faceted while tile, creating a calming, visual interest that helps transition you. But.. what's around that corner? And what is it behind those glass walls? Do I hear... water?



Oh hops! Everywhere! You realize that this is where they grow, and that's what you're drinking. They smell is lovely and enveloping, and you hear the waterfall greeting you at the end of the translucent canopy above. You walk toward it, and slowly realize there's another bar here.



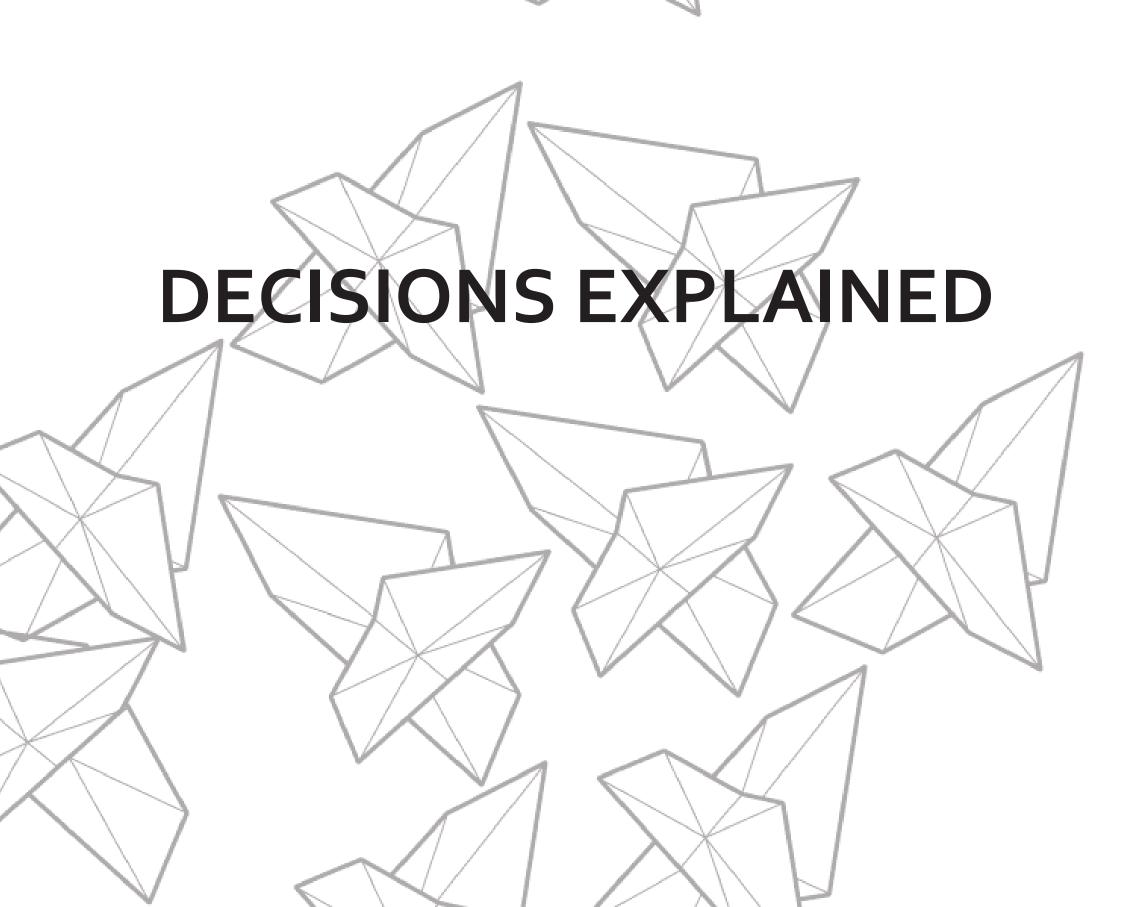
After you get your drink, you sit down at one of the bar tables. Noticing the wood again, you realize you're in a bit more of an elegant atmosphere. The water, dulling the noise from the brewery, serves as a nice backdrop. You order your meal; seasonal cuisine paired with your beers. There are so many hops, and they're nice dinner company. But, you've had your share and it's time to go.



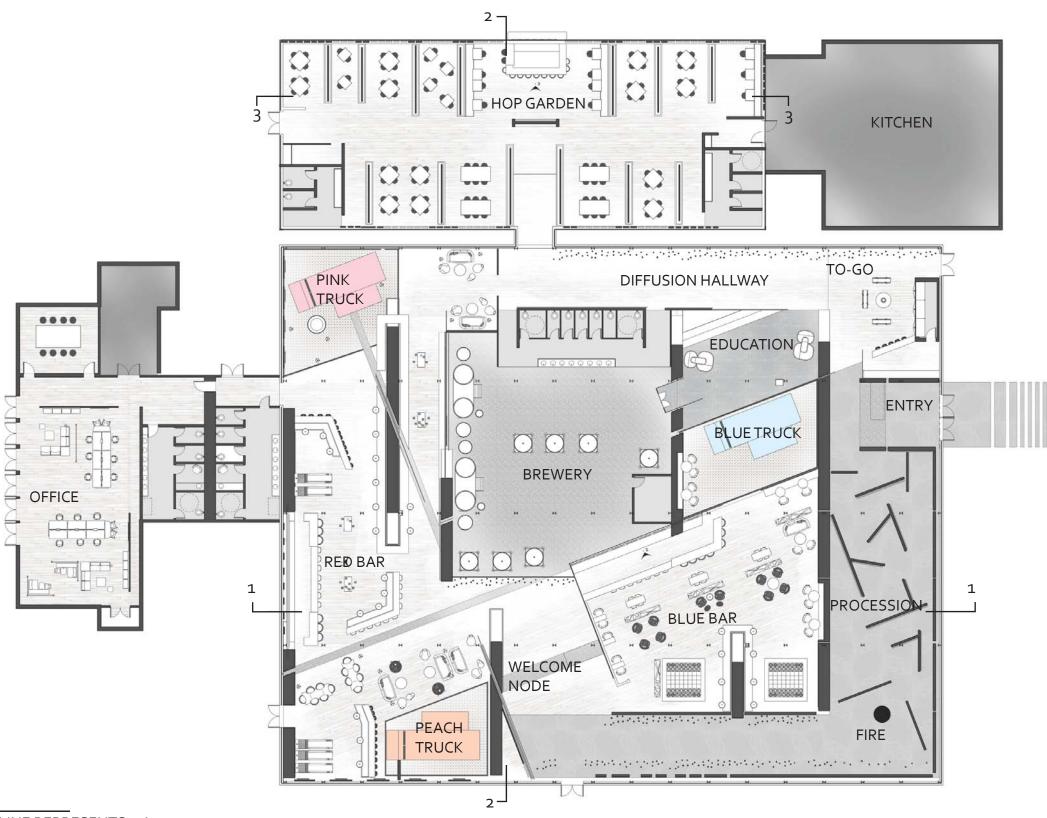
Back in the diffusion hallway, you let the wheat sticks guide you back to were you came from...



And land in the to-go area. A nice, minimal space with bottled beer and growlers to fill up as you go. If you felt like it, you might sit down for a another quick beer. But, instead you pick up a t-shirt for your friend who just HAS to come back with you, and head home.

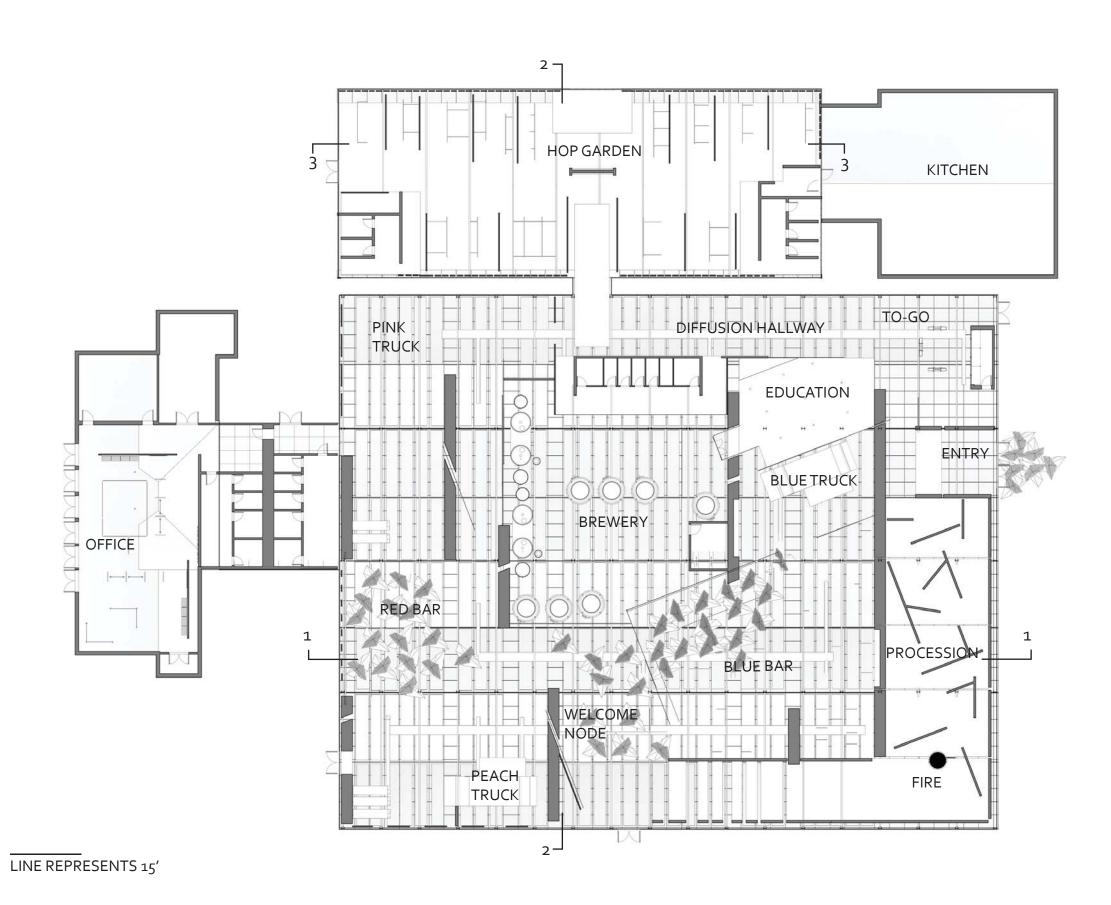


# **FLOOR PLAN**





# REFLECTED CEILING PLAN



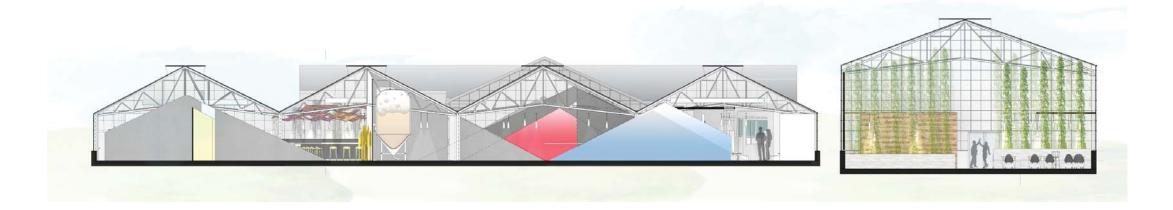
SECTION 1



LINE REPRESENTS 10'



SECTION 2



LINE REPRESENTS 10'



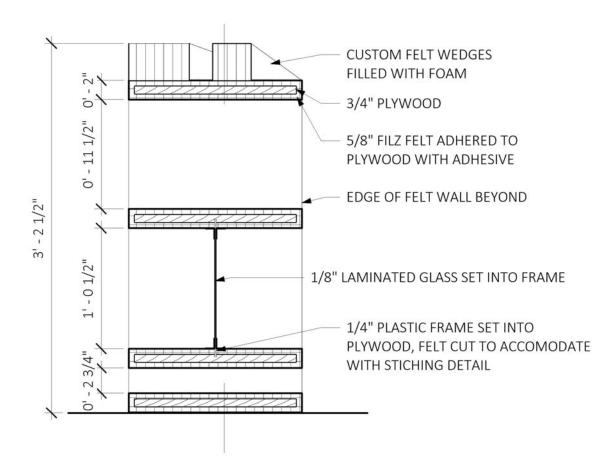
SECTION 3

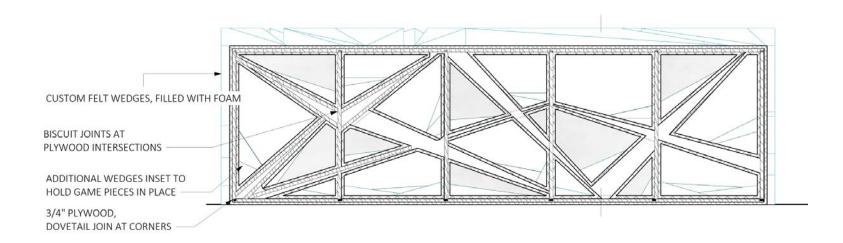


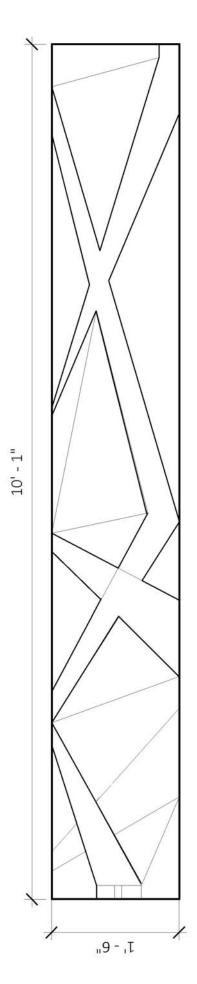
LINE REPRESENTS 10'

# DETAILS

## THE FELT BOOKCASE



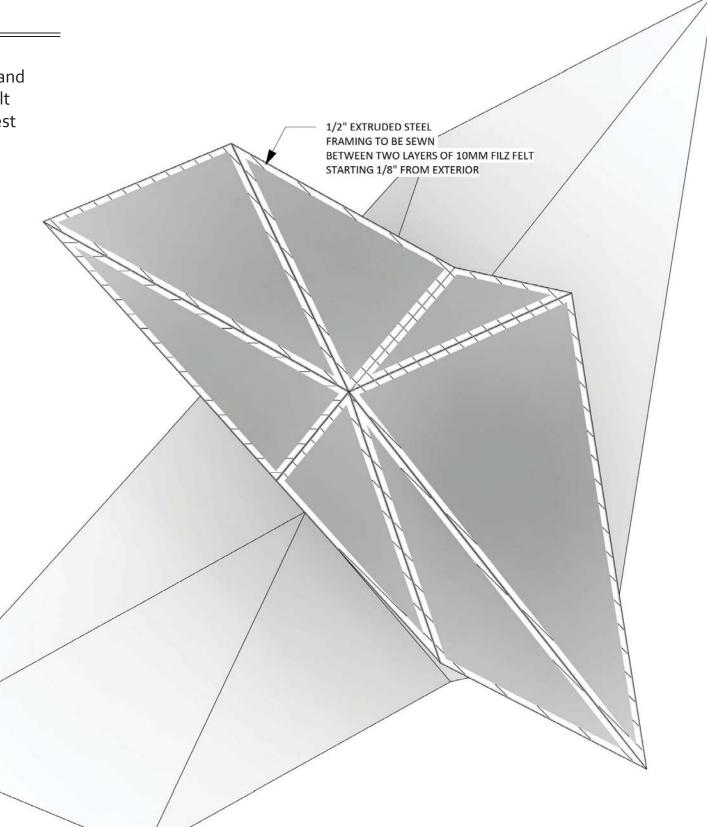


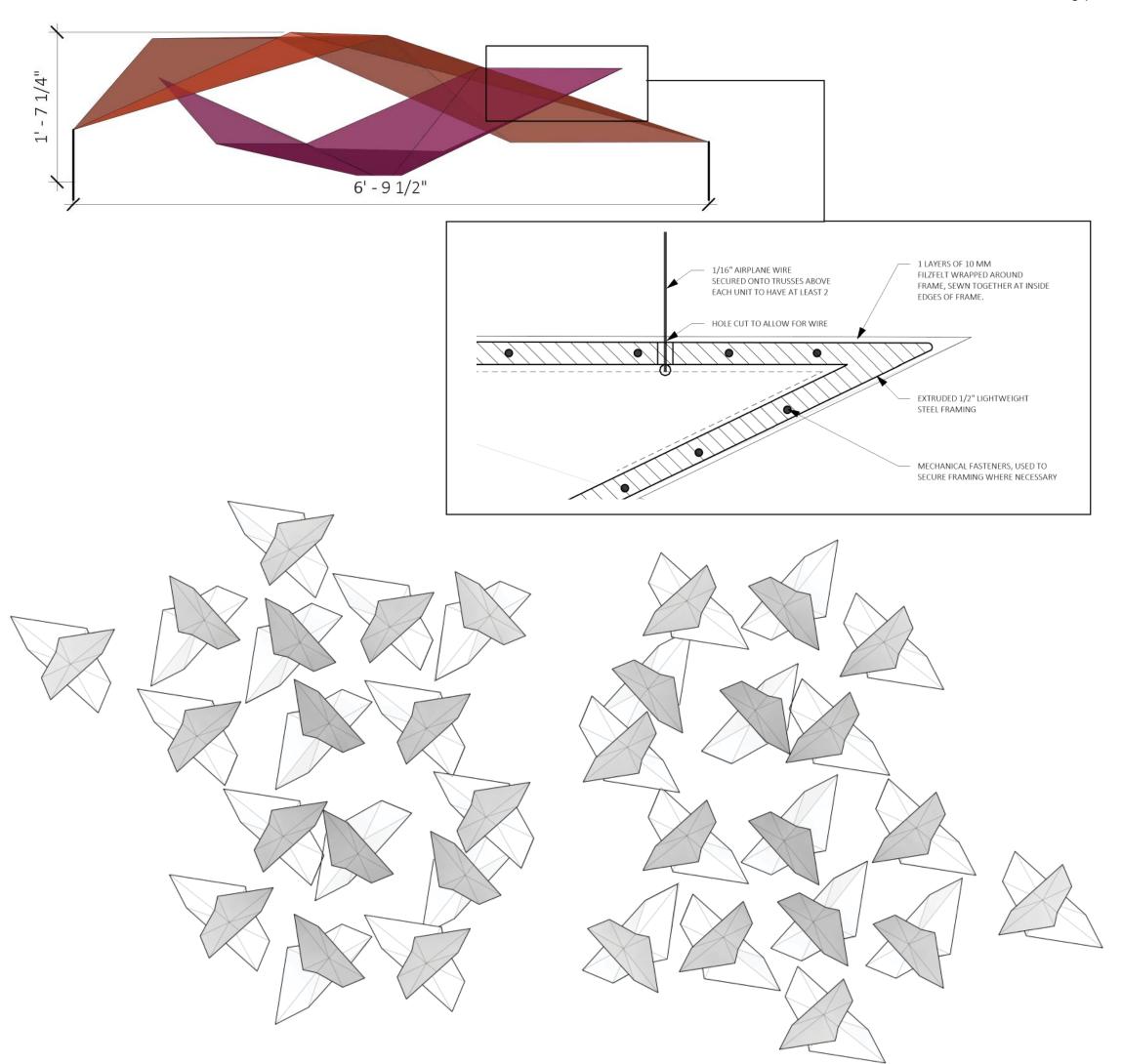




# THE CEILING FACET

To help control the noise resulting from hard surfaces and a glass and steel structure, felt facets were used in the noisiest areas. They also provided a tactile sense of warmth.

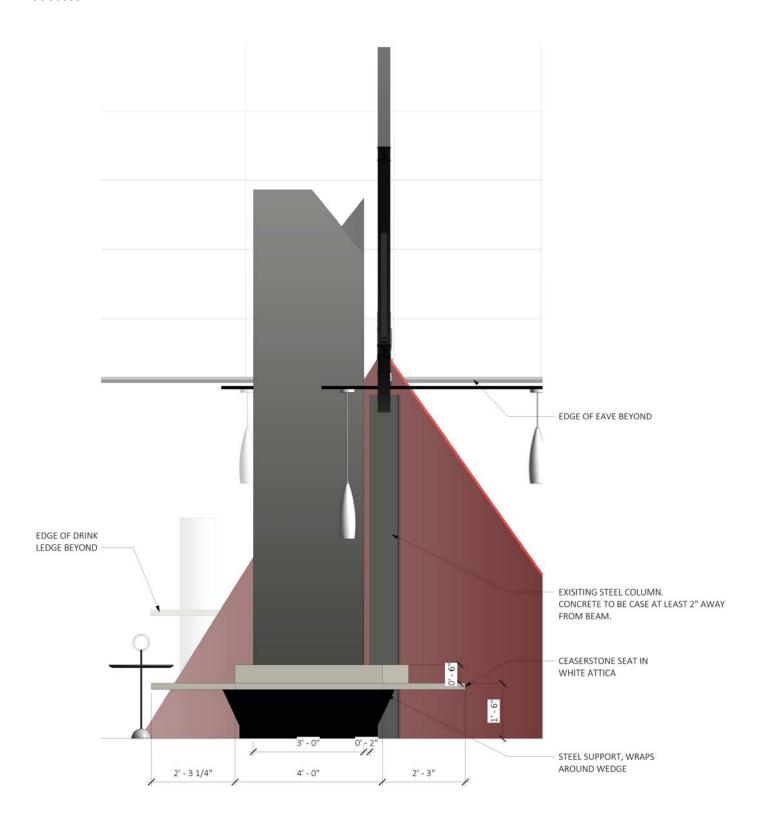


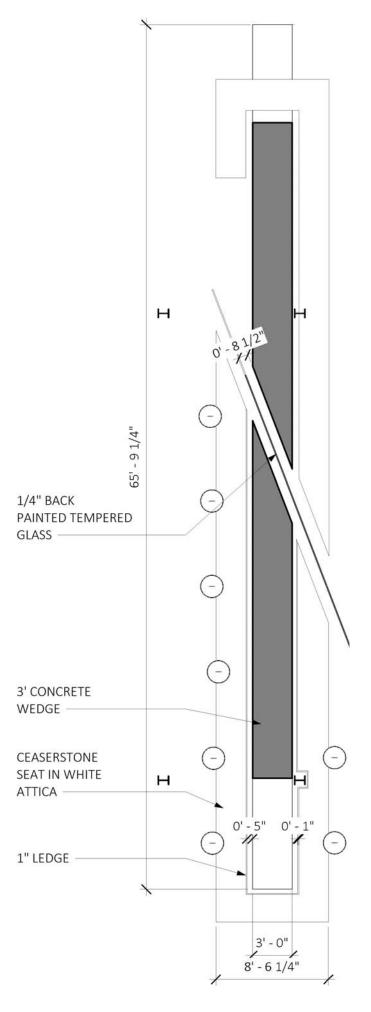


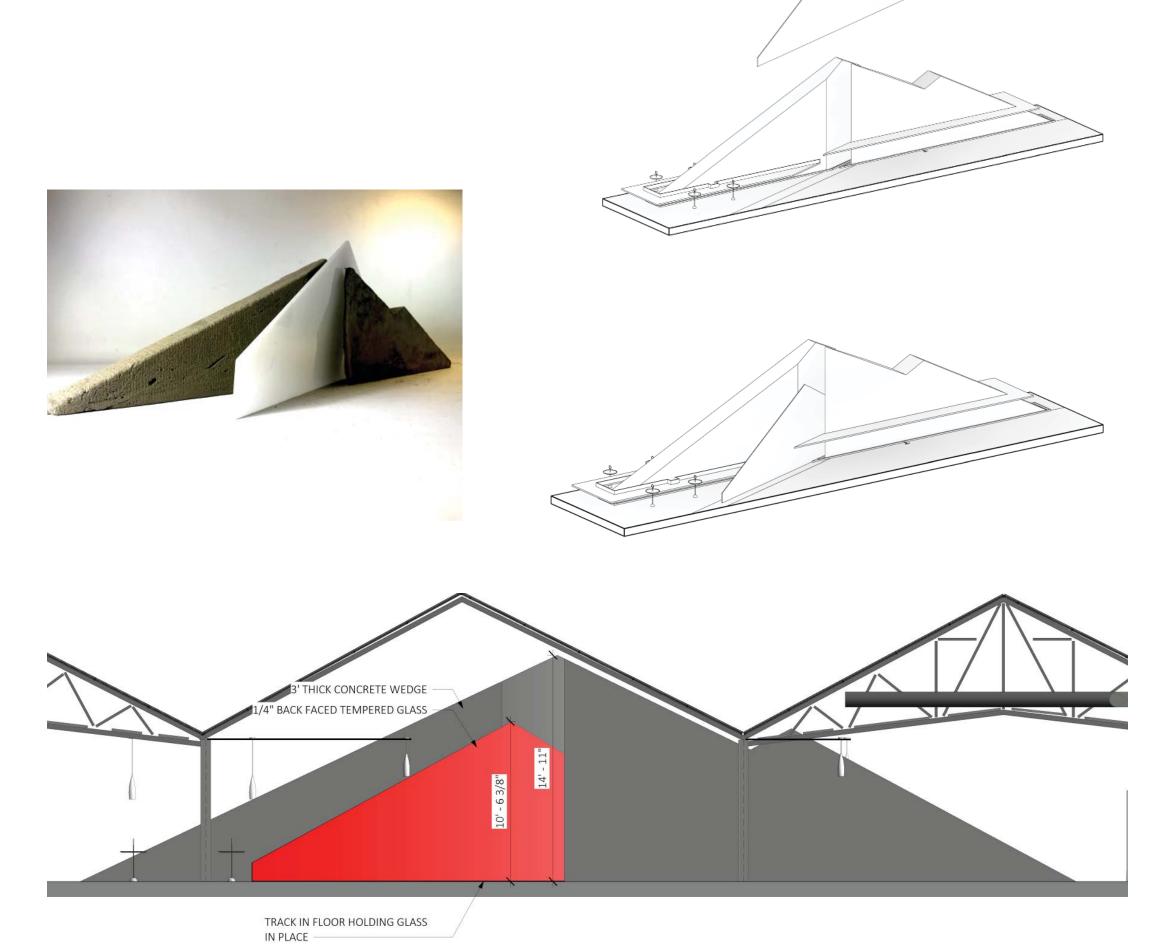


### THE WEDGE

For my final project, I explored the concrete wedges in my thesis work. They are 3' foot wide slabs intended to ground the architecture of the space. The lightweight steel structure of the site feels as though it might float away, through the transparent ceiling necessary for a greenhouse's success.







# WHYTHE WEDGE?

#### **PLANES**

As mentioned earlier, the use of a veil has a drastic impact on atmosphere. After all, the curtain has been included in theater historically for a reason. In this project I explored using planes as a veil in a number of ways. Walls of color similar to Barragan's are used to slice through huge planes of concrete. The planes translate into hops in the hop garden, creating veils that are both transparent and opaque at the same time.

Furthermore, by layering panes of glass I have accomplished a unique perspective from different vantage points. Oil paint on glass, for example, was used to create a surface that one might be able to see a 2d shape behind, but not a 3d image.

The concrete wedges themselves were disrupted in very purposeful points. By doing so, one gets a vantage point clear to the other end of the brewery, but only if they stand in the right spot.

By poking holes in the planes, the viewer experiences mystery and curiosity, guiding them along their journey. It also helps create special moments that have to be discovered.



Figure 23

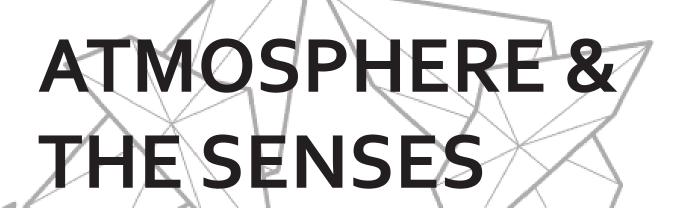


### ARCHITECTURAL GROUNDING

As the site is a greenhouse, much of the structure is clear or transparent. Because of this, the existing lightweight steel columns and trusses become very present and somewhat aggressive. I have continued the language by creating wedges in the void left from the architecture, grounding the harsh angles.

The wedges also help the glass box solidify. At 3' wide, they come additional and contrasting architectural moments that provide both relief and stability.

Above the wedges the glass box is purposefully left open, with the rest of the ceiling covered with felt. This accomplishes the goal of creating an interior and exterior blend while guiding users to them throughout the space.





## **SOLAR GAIN**

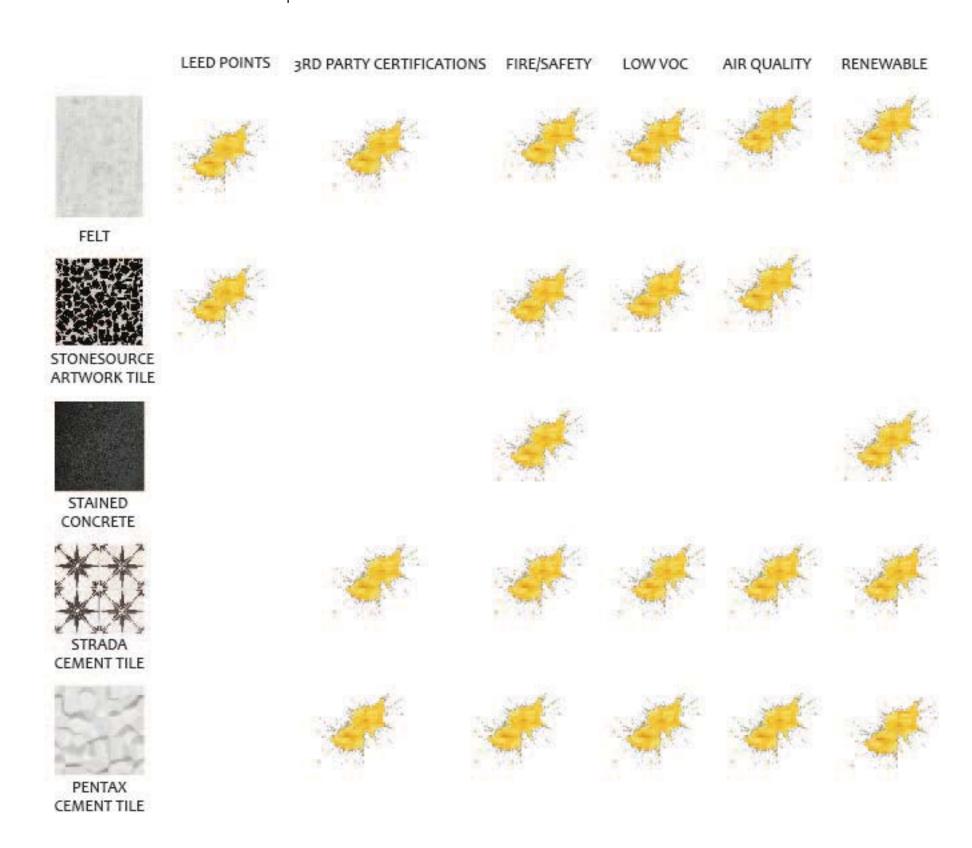
One major hurdle with the structure was the heat within that would be generated by a massive solar gain, along with limited circulation. The solution here was to create perforated felt panels that would help create a rhythm in the ceiling while also creating dappled light similar to the surrounding forests.

Additionally, the structure would open up to allow for a natural heat vent, as seen in Section 2. HVAC could be incorporated, as seen in the Reflected Ceiling Plan. Key to it's success will be in including a large trunk for each eave.



# **MATERIALS**

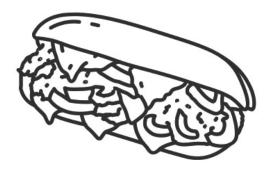
In addition to color and light, the sense are impacted by many materials. For this project, the natural materials were chosen to serve as a neutral back drop to the colorful elements in the space.



# HEAR, TASTE AND SMELL

#### **SMELL & TASTE**

A key element to atmosphere is the sensory experience, as it is what is most tied to our memories. In the hop garden, the smell of the growing plants will envelop visitors, and compliment their cuisine. An important part of the brewing process is the inclusion of spices and herbs, which will be present at large at all areas serving beer.

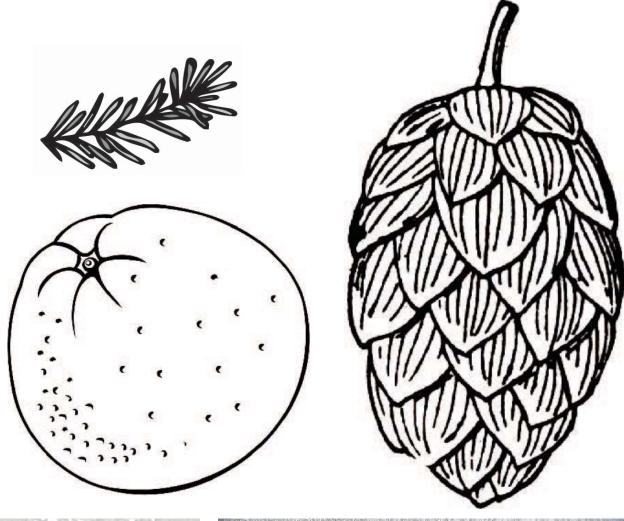


#### **HEAR**

As mentioned earlier, felt is used throughout the space to dampen the noise generated from the hard surfaces. Additionally, gaps created in the planes allow for sound to get louder or softer, the closer or further the user gets to them.

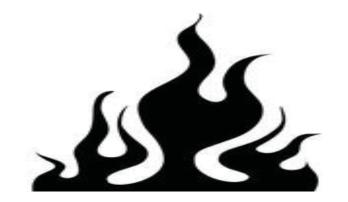
Fire and water are included in the space, as natural elements tying us to our humanity but also providing sound barriers and special moments.

Also, as the space is meant to feel festive, hopefully echoes of laughter, game play and clinking glasses will be throughout!









# FURNITURE SELECTIONS

#### **FURNITURE**

Selections for this project were made in an effort to balance the grid and sharp angles of the architecture. Additionally, an element of whimsy was achieved through the furniture and lighting.







Oppo Bla Station Chair





Karl Anderson Stix Coffee Table



Karl Anderson Terrasso Storage



Karl Anderson Lollipop Table

### LIGHTING

Multiple sources of layered light was key to a variety of atmospheres. Architectural moments were lit, as well as materials that needed emphasis.







LED wall washer



Arturto Alvarez Gea Floor Lamp



Sonic Eureka Light

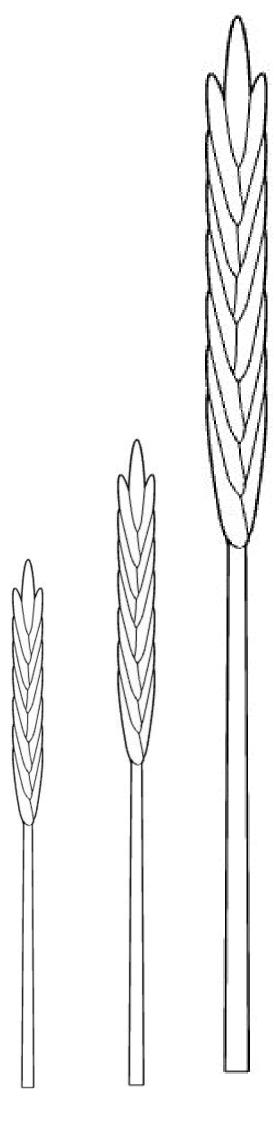
# WHEAT STICKS

#### **DESCRIPTION**

These wheat sticks are a lit element, meant as both a way-finding tool and atmospheric component. They would be made out of wood, and would uplit below. They are a literal manifestation of the wheat brewed in some beers, injecting some whimsy into the space.









#### **MAPPING**

#### "ZUMTHOR METHOD"

"I've been keeping an eye on myself, and I'm going to give you an account now, divided into nine very short chapters, of what I've found out about the way I go about things and what concerns me most when I try to generate a certain atmosphere in one of my buildings."

- Peter Zumthor, Atmospheres, 2006.

#### "BAUDRIALLARD METHOD"

"Glass works exactly like atmosphere in that it allows nothing but the sign of its content to emerge, in that it interposes itself in its transparency, just as the system of atmosphere does in its abstract consistency, between the materiality of things and the materiality of needs."

- Jean Baudrillard, A System of Objects, 1996

#### **HIS WORDS**

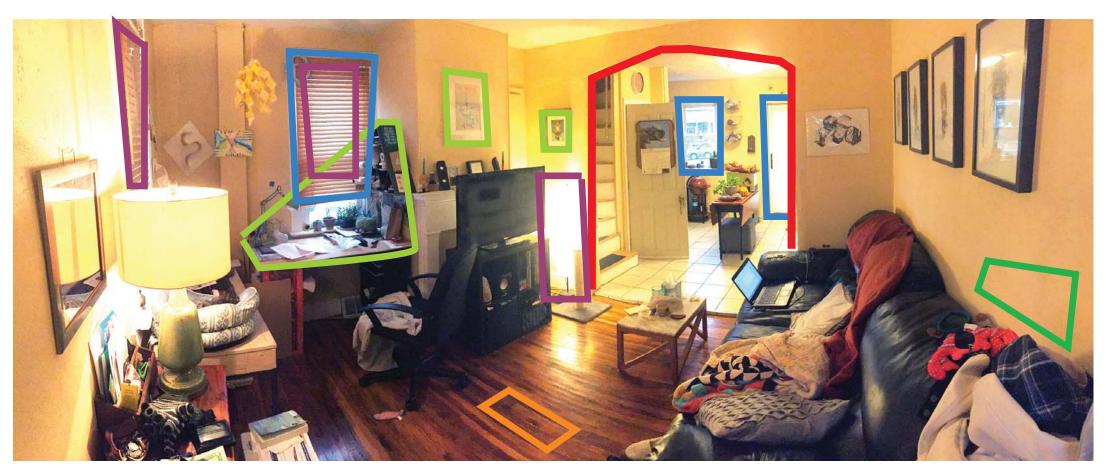
The body of architecture
Material compatibility
The sound of a space
The temperature of space
Surrounding Objects
Between composure and Seduction
Tension between interior and exterior
Levels of Intimacy
The light on things

Materiality of things Materiality of needs

#### **MY WORDS**

The architectural language
Do the materials get along?
Room shape
Warmth of materials
Artifacts
Circulation
Thresholds/portals
Scale in relationship to our body
Where and how the light falls

Objects, surfaces, materials Emotional and physical needs



#### The body of architecture:

Material compatibility: plaster walls with hardwood floors, nice!

The sound of a space: Room shape sound travels pretty easily on each floor, and we can hear the exterior machines, might hear neighbors but rarely.

The temperature of space: a lot of warm, natural wood, plaster is a warm material because of it's texture

Surrounding Artifacts: mine, and rays, things we collect, things I've made/built, things we've grown up with

Between composure and Seduction: seduction in the stairs, not a ton of space to move around though, when you're on one floor

Tension between interior and exterior: we have thresholds to the exterior which are locked doors, and we're elevated so you can't get in off the street. Plenty of windows.

Levels of Intimacy: Everything is just right for right now.

The light on things: we can control that with blinds, and we have a lot of natural sunlight possibilities.

Materiality of things: Comfort, to enjoy self expression, basic human functions, feel safe, close to train, have room for friends, outdoor access/space

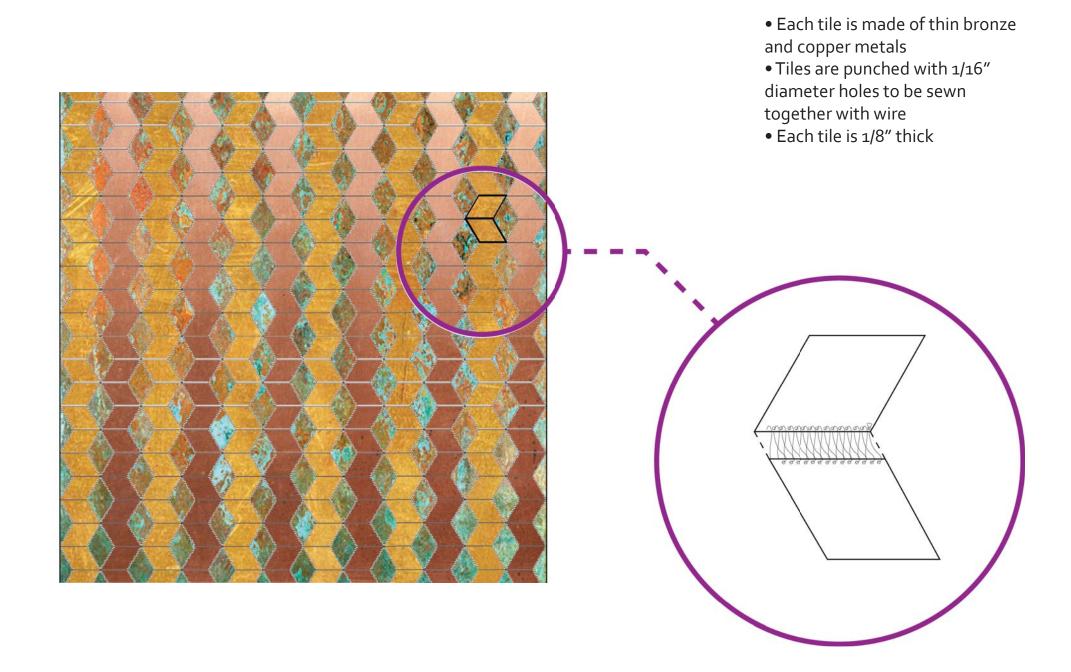
Materiality of needs: in materials and the ability to control our temperature, create space to work in, kitchen - but there is no bathroom on this floor, locked door and windows, we are close to the train, could use more seating for friends, yes we have plenty of windows and outdoor space.

#### **CONCLUSION**

While both methods broke down the larger network of elements, the Baudrillard seemed to be much more about the person and their perception. Some might not need what others do from a space, and might therefore find the space does not, or exceeds their needs. The Zumthor method on the other hand seems to be much more about the designer and their process from the beginning. However, in the end, neither define what is "good" or "bad, making the point that atmosphere cannot be defined easily, or simply.

#### **OBJECT**

Every object we come into contact with carries with it an atmosphere. With this knowledge, I have designed a metal blanket. Blankets have an expected atmosphere of comfort and warmth. By designing it with metal tiles, the blanket is no longer functional, and carries with it a frustrating but somewhat beautiful atmosphere, meant to make viewers second guess the objects in their daily life. The use of "warm metals" is another attempt at irony and contrast, in that even though it seems as though it emits warmth, it in fact takes it from our bodies.



# DESIGN PROBE #2

SCALE

For this probe, we were to explore the scale of our topic. I decided to interview my family to discover their ideal atmosphere. Below are their responses, highlighted with key terms.

Define atmosphere.	The vibe or feeling that the area that surrounds me gives me.	The environment. Lighting, temperature, texture that I am interacting with.	The visual, auditory, redolent, and tactile perception of a space that I've just entered in terms of comfort, space/volume, warmth, lighting.	How a space/place/thing/ whatever makes you feel, be it purposefully or otherwise.
Tell me a place with good atmosphere.	My places of comfort, my bedroom, my parents house.	Outside venues or a good restaurant with soft lighting, food smells and comfortable seats.	My house and backyard (outside rooms can also have good atmosphere).	Planetariums
What made it good?	A level of comfort - both physical (comfortable bed, familiar smells, lack of crowds) as well as a level of privacy.	The sensory integration of the different parts of the place.	It's peaceful and nurtures an appreciation of the wild life that lives there as well. There are large windows as well.	The darkness of the helps to provide a sense of depth and invitation to set the stage as you explore the stars.
Tell me a place with a bad atmosphere.	My new office new open floor plan.	Gas station.	A coworker's house.	A dumping ground would turn me off.
What made it bad?	Bright florescent lights and NO PRIVACY and lots of background noise.	The smell, glaring lights, noisy cars. No one really wants to be there.	It is situated on a busy intersection in a dense residential area. It impacts my sense of privacy.	The smell, the grime, the wasted excess.
Does mom and dad's house have a good atmosphere?	Yes.	Of course it's home.	The outdoor atmosphere is good there because the house is situated towards the back of the property.*	Generally yes, it's always rather warm and inviting to return to a place I once called home.*
What do you need from "home"?	Security, privacy, open space, green space, quiet places.	Good memories, good conversation. Good feelings. Conversation , warmth	My home provides me a haven to create, to feel liberated, to make art, to garden.	Comfort, relaxation, a place to enjoy myself when I'm alone or with company.
Does mom and dad's house provide these things for you?	Yes, see above.	Yes.	No. They have not lived there long.*	It did once, when I had my own personal space there.*
What is missing from mom and dads that would make it a great atmosphere?	More open space (especially in the kitchen =) )	Better seating. Larger rooms	The floor plan needs to be opened up. The shades are usually drawn which limits the natural light.	Probably a fireplace or anything else that would provide a better setting for a close gathering.
What colors create a good atmosphere?	Blues, grays	Bright. Contrasts that keep it interesting .	Earth tones, ochre, sepia, umber, green.	I'm fond of deep blues and grays
What colors create a bad atmosphere?	Reds	Black, shiny things . Plastic	Too much of anything creates confusion.	I like bright colors too, but not in a setting that's too harsh.
Is there such a thing as TOO MUCH color?	I think so, especially in a small space, or if that color is too bright.	Yes if there is too much contrast and clash.	Yes. Again, internal biases and expectations.	I would think so, yes, but it really depends on my mood.
How do you try to achieve an atmosphere?	Candles or natural light, noise like music (or absence of noise depending on the task I'm trying to achieve), always a comfy blanket.	Art work for interest. Color for background and focus. Candles for soothing scent	The space should be open and inviting but intimate. Natural daylight and a warm fire at night. Aromatic candles, music and artwork!	I like natural light during the day. Dim lighting with candles or smaller light sources for the night. I'm all about my hobbies, so I enjoy being surrounded by them.



According to my family, a good atmosphere is one where everyone has ample space for both themselves, and to gather. Warm fires and candlelight, along with natural daylight are the main light sources they enjoy. They require comfort in the form of materials and objects, but also in the knowledge that they have their privacy. Access both visually and physically to the outdoors is ideal. For them, I would like to design a foley outdoors, with layers of translucent materials to allow for the passage of natural daylight, but also filtered impressions of nature. At night, these layers of transparency will illuminate with the fire and candlelight, making interesting forms of "artwork" on the shadows reflected from the interior. Additional locations for private moments will be included, and circulation that allows for appreciation of nature is a must.

# DESIGN PROBE #3

#### **MATERIALITY**

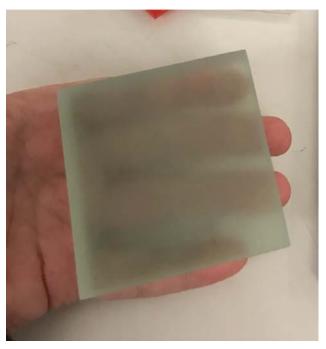
I decided to explore the different levels of colored transparency available to us as designers. I found that all of the materials had an effect on the relationship between the viewer and the viewed. However, moving forward, it will be very interesting to play with layering these veils, and creating my own version of translucent thresholds that create mystery and play with sight-lines.



The most transparent, this 3form lets the viewer have a pretty fluid relationship with the contents behind it, albeit they are aware that they are not directly next to the content.



Here we see what happens when color is introduced to break down the image behind it so it becomes only 2dimensional, and almost fake. This creates a play with shadows that certain atmospheres need.



This "next" version has more opacity, but introduces color. The haze now creates more of a threshold and boundary between viewer and object. Also, the color portrays a certain morality.



As the most opaque material, but not the darkest color, we can see that our preconceived notions about color are challenged when transparency is introduced. Although we can't see the content very clearly, the color assumes a different role here.

# CASE STUDIES

### CAKE CHESTNUT HILL, PA

#### **OBSERVATIONS**

- Muted dark colors to contrast/soften natural light
- Can see into the kitchen, but not a show kitchen
- Orange silk hanging to create diffused warm light
- Multiple points of small light sources
- Reflective elements are small/dull: gold leaf, Christmas tree twinkle lights
- Fairly warm overall
- Small space with all same size tables to allow for easy reconfiguration
- Central Fountain
- Loud
- "Scuffed" materials
- Entry has 2 layers of curtains
- Screens are present on cashier window, and roof
- Elevated +/- 3' above street
- Location of facilities is awkward
- Only need 1 service station
- Aisle ways are tiny



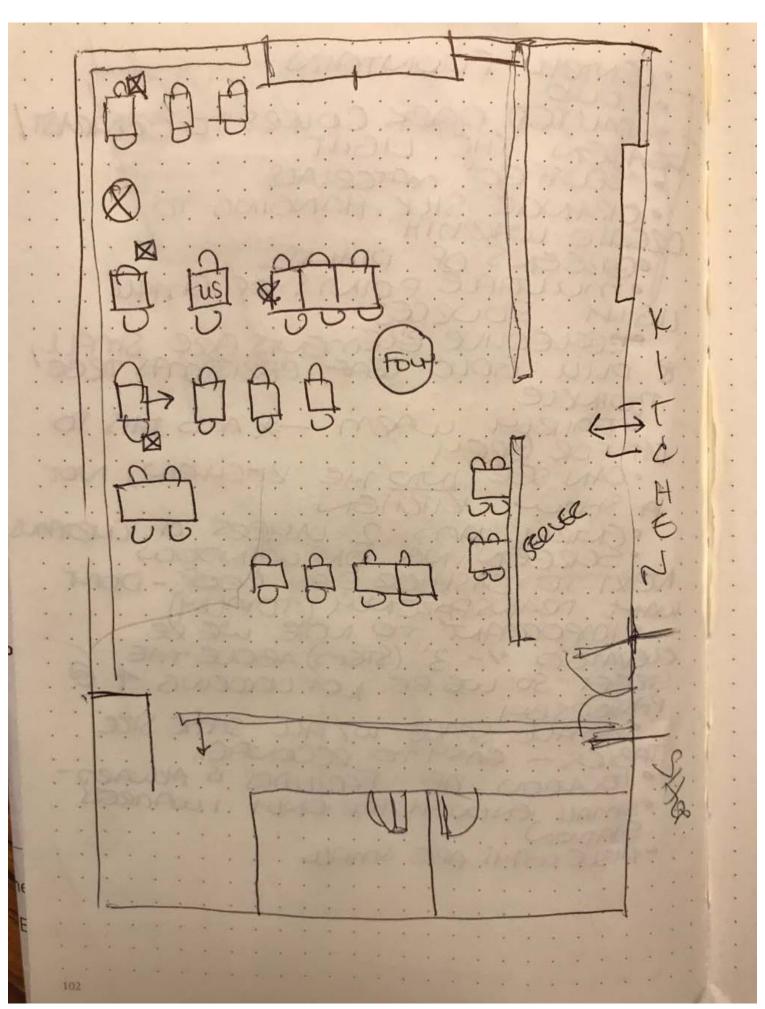












#### **SURVEY KEY FINDINGS**

- Total responses: 16
- Age range: 22-63 (mostly 20-30 year olds)
- 53% eat out regularly (defined as 1-2 times/week)
- Most important factors for a "good night out" in descending order:

Food

Service

Atmosphere and Location (were exact matches at 2.33 survey monkey points)

• Important aspects dictating atmosphere in descending order:

Temperature and Lighting

Music

Outdoor access (visual or physical)

Privacy

Natural Daylight

Color palette

- The majority of respondents (80%) said an ideal atmosphere is "between casual and formal"
- Key components to a bad atmosphere: noise, harsh lighting, dark lighting big round tables, no windows, dated interiors, crowded seating
- 93% of those that have dined in a converted greenhouse have found it enjoyable.





### **OVERALL TAKEAWAYS**

Throughout my time spent at Cake, I was able to understand several things about dining atmosphere, specifically within a converted greenhouse. After some time I began to realize that patrons would tolerate some minor inconveniences, such as a long wait time and cramped space, because of the reputation and casual atmosphere present. The weekend crowd seemed to flock to this location, considering the natural daylight necessary to dine on their breakfast and coffee. All of the tables took advantage of the windows, which also made the space feel a lot bigger than it actually was. Another key factor to the success of this establishment was it's method of controlling and celebrating all of the light. Oranges were used to diffuse the naturally blue daylight streaming in, and all of the material choices were intentionally buff or dark, to absorb plenty of light. I also noticed what a crucial difference a central "node" in a space that's a simple rectangle can make. It organized the circulation and dividing functional spaces in a clean way



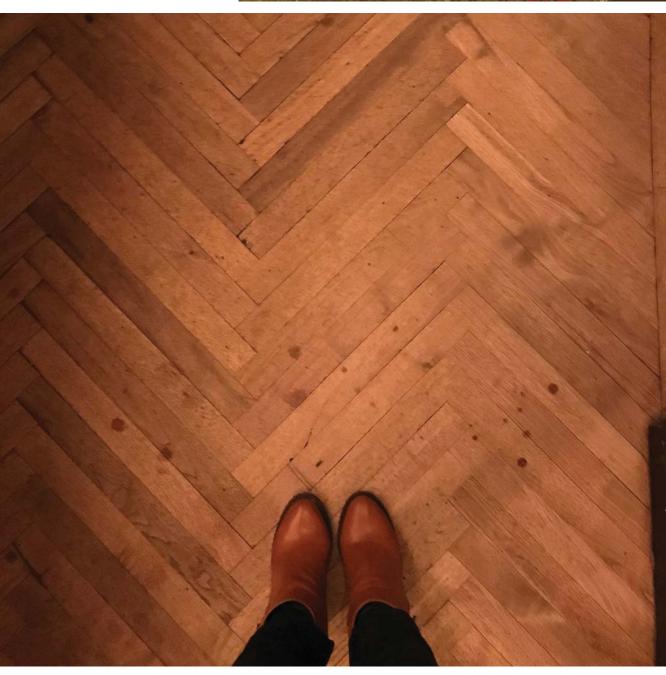
## ® CASE STUDY #2

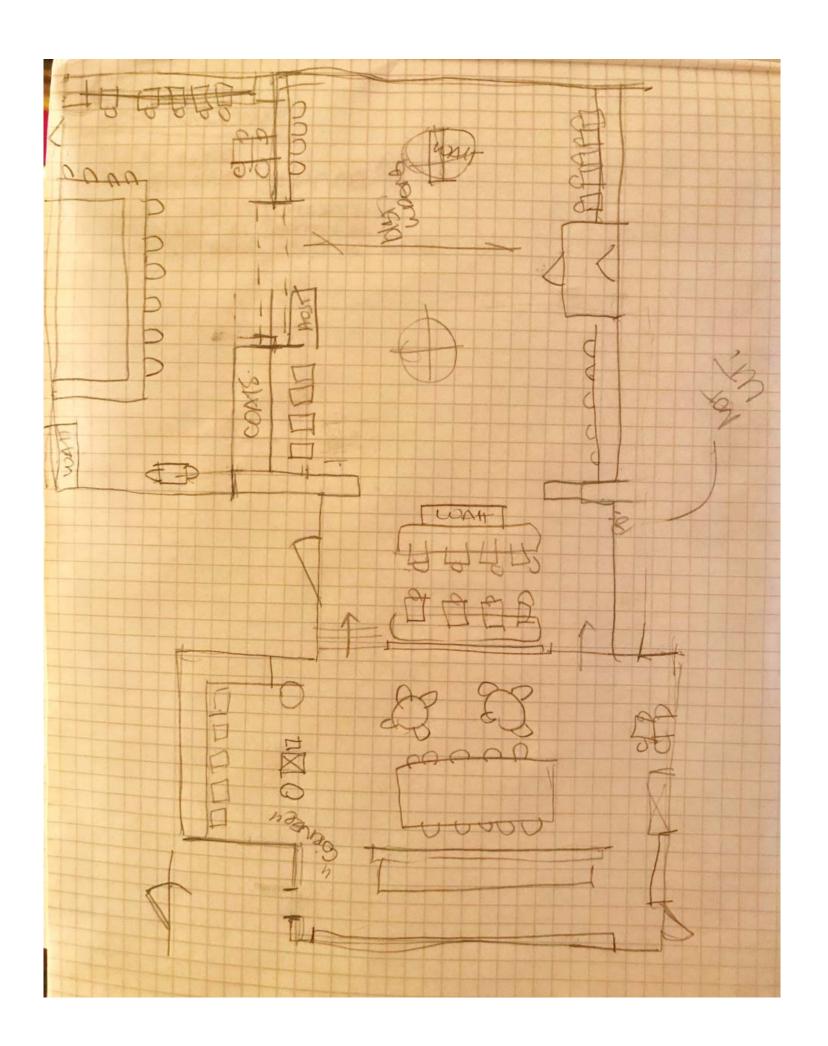
### TALULA'S GARDEN PHILADELPHIA, PA

#### **OBSERVATIONS**

- Concept: Reduce, reuse, found objects; locally sourced ingredients; Farm to table
- Windows were reused from M. Night Shalaman's movie "The Village"
- Granite countertop from Independence Mall
- Water filtration in outside bar
- Apartments above
- Old Advertising agency
- Meant to feel like a living room
- Big couches in transition space
- Sofa table is a waitstation
- High ceilings
- Bar totally separate
- Cheese counter
- Prospect and refuge
- Multiple small light sources
- Colors are limited
- Materials are the focus
- Black accent / high contrast
- Lighting focused on tables/art
- Loud
- Light is not an even wash
- Allow for overlap and depth of shadows
- "Farmhouse Eclectic"
- Bar chairs mismatched
- Greenhouse airlock
- Artwork hung at expected ceiling height
- Bar is really a waiting area for tables
- All materials have a really good hand/ reflectivity
- Bar is all stone , makes it somewhat "lobby" like.
- Bar is a duck-under
- Service the entire restaurant
- Capacity doubles in summer time













**OVERALL TAKEAWAYS** 

My time spent at Talula's was very informative about a restaurant that values a casual but elegant dining experience. It was apparent to me that some of their functionality could use some work - for example, they had to say "corner" while exiting the kitchen as the circulation was not ideal. Also, by moving the bar to a separate location, it made the function of the space seem like an afterthought. However, just like in Cake, I noticed that the lighting was multiple small sources (that might have even been too low and the use of high contrast with the black punching against the muted paint colors in the main areas.









# SCHEMATIC DESIGN PRESENTATION

APRIL 20, 2018

### **BURST BREWS**

SITE



FAIRMOUNT PARK HORTICULTURE SOCIETY



~ 40,000 sq.ft.
• located in an urban forest
• nearby attractions: Please Touch Museaun

In certain parts of India, Holi is the festival of spring, celebrating vitality, the conquering of good over evil, and just letting go. The bursts of color that are thrown about, along with the festival atmosphere, is a starting point for my design.

### INSPIRATION PHOTOS

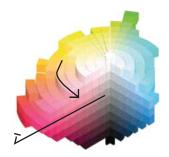


OLAFUR ELIASSON



LOUIS BARRAGAN

### **COLOR THEORY**



For this project, colors were selected based on hue (chroma) and saturation (hue), and not value. Value was included by the natural daylight, or lack therof.

#### **COLOR AS ORIENTATION**

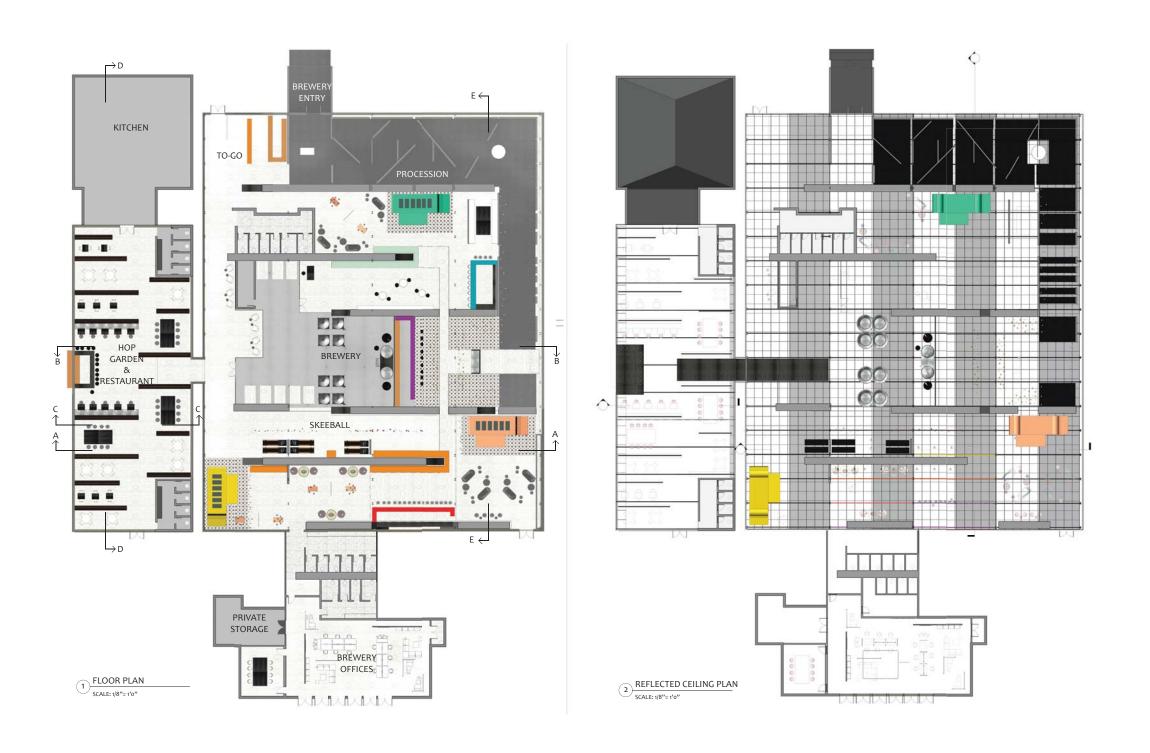
Similar to Olafur Ellisaon's "Your Rainbow Panorama", color was used as a notation of location within the space. By utilizing the familiar color gradation of the ROYGBIV rainbow, visitors become familiar with the circulation over time.

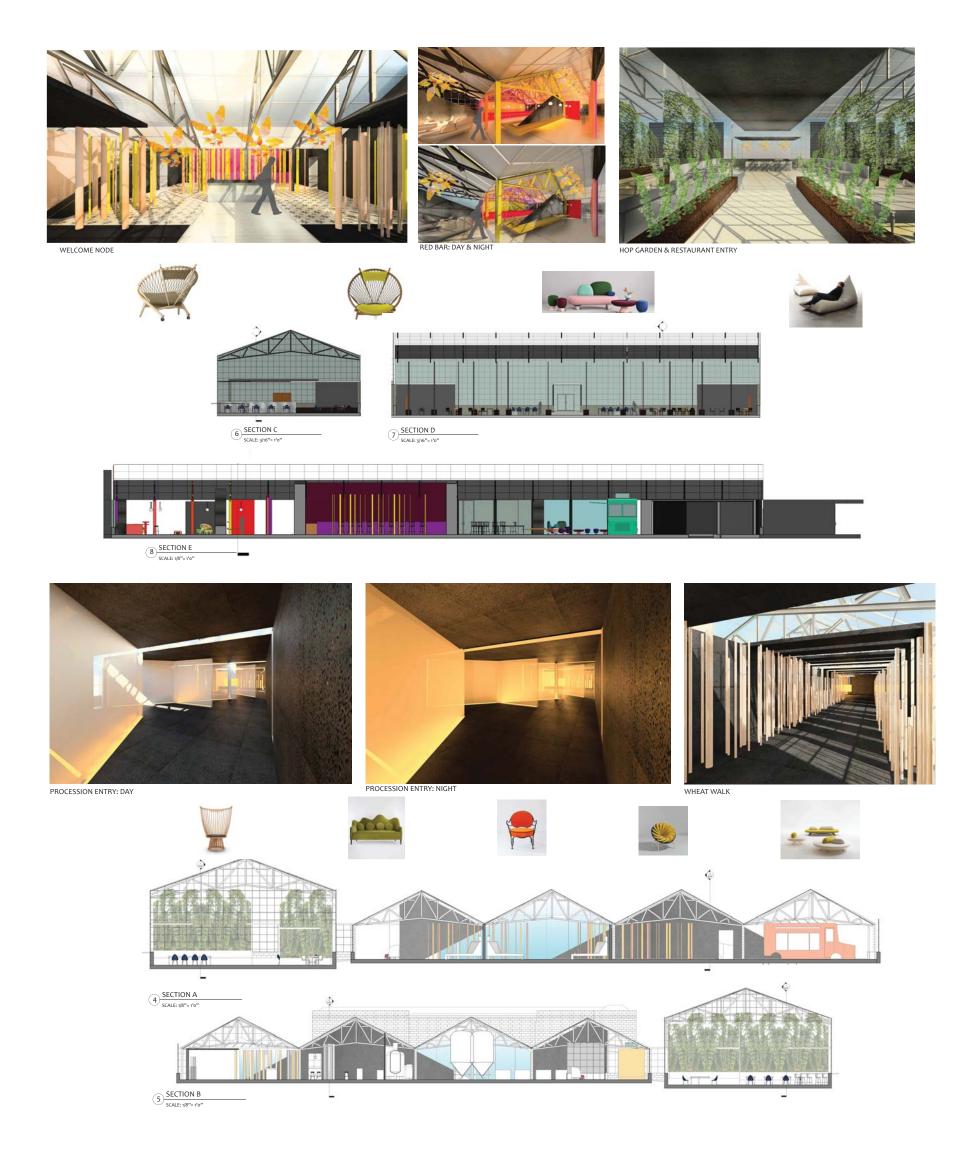
#### COLOR AS FUNCTIONAL COMMUNICATION

In this space, the brighest locations are the ones that have the most group-oriented activities around it. The paler, less saturation locations are where quieter and more interpersonal communication can happen.

#### COLOR AS ATMOSPHERE

The colors in this space help us understand where our needs can be met - either more active, engaged activities or if we need a respite. Additionally, natural materials are used as a background so that they resonate with us as human beings, further bridging the gap between exterior and interior.



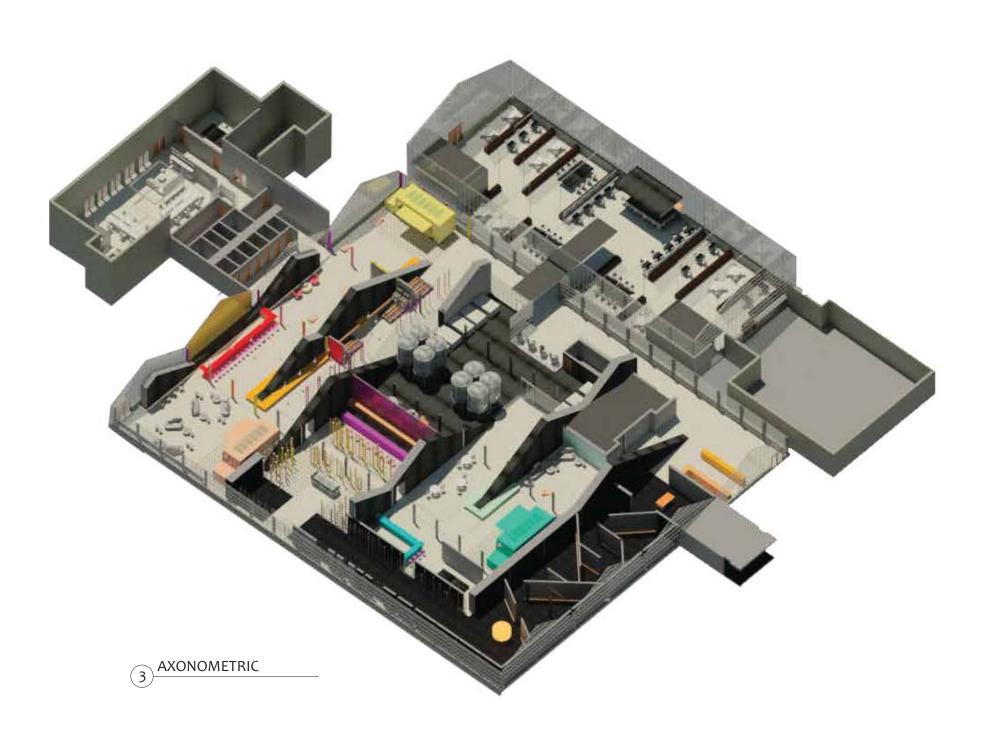








Jade Oakley



## KEY INFORMANT INTERVIEW

### CAKE CHESTNUT HILL, PA

Although multiple attempts were made to conduct an interview, the owner of Cake was simply too busy to respond to the below questions. In her words, "I wouldn't get anything else done!" However, these were the questions I had crafted for my key informant interview.

Name of interviewee and title/position:.

Date of interview:

### Conditions of the Existing Facility and Organization

1) What is the square footage of your facility and how many occupants does that accommodate?
2) Is that size/ratio ideal?

3) What is it that you think makes CAKE stand out?

4) Could you please describe the average customer?

5) What are the different departments within your facility? What do they do?

11) Number of staff? How many at facility at a time?

12) How do departments interact? Are there any special adjacencies?

15) What are the public areas in the space? Who uses them?

16) What activities take place in the public areas? What works? What doesn't?

17) What are the circulation paths of public, staff, patients, deliveries?

18) Explain the process of coming in and going out and the spaces needed for this.

19) Are there any special equipment, plumbing, lighting, technology, or ventilation requirements?

20) What are the main safety issues?

21) Are there any special safety or security issues?

#### **Design Specific Questions**

1) Are there special workplace issues that will affect program and space planning?

2) Are there special finishes or furniture?

4) Is there any special attention to acoustics considering that the main space is within glass?

#### **Thesis Specific Questions**

1) If money were no object, what would you change about this restaurant?

2) What are the spaces required to efficiently run this facility?

3) How would you describe the atmosphere of this space?

4) What would you say are the main factors affecting the atmosphere?

5)Does the fact that the site is a greenhouse have an affect on the atmosphere?

6) What effect does natural lighting have on how the space functions? How do you regulate the amount of light in the space with all this glass?

7) If you could change anything in the space, what would you?

#### **LIGHT & SPACE MOVEMENT**

In Light and Space works, neon, glass, resin, acrylic, and fluorescent lights—materials that were also used in Pop and Minimalist sculpture—frequently appear. But Light and Space artists used these materials specifically to emphasize how light reflects off of, passes through, or bends around them. As James Turrell said, in a frequently quoted aphorism, "There's a sweet deliciousness to seeing yourself see something." ARTSPACE.



LARRY BELL, COLOGNE



DEWAIN VALENTINE

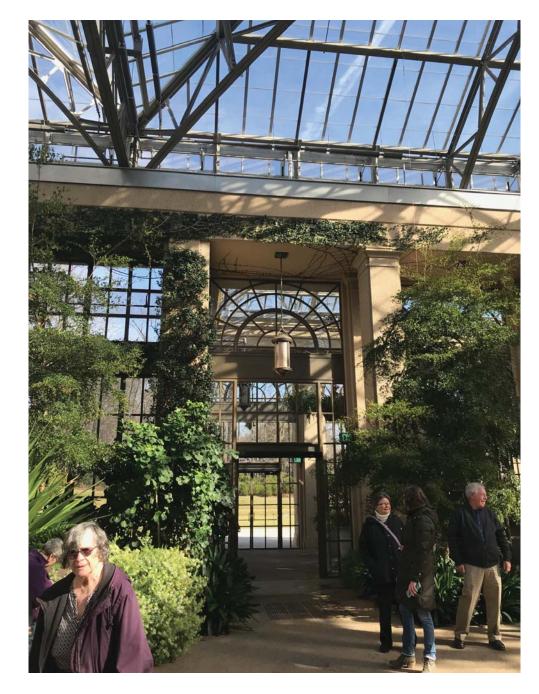


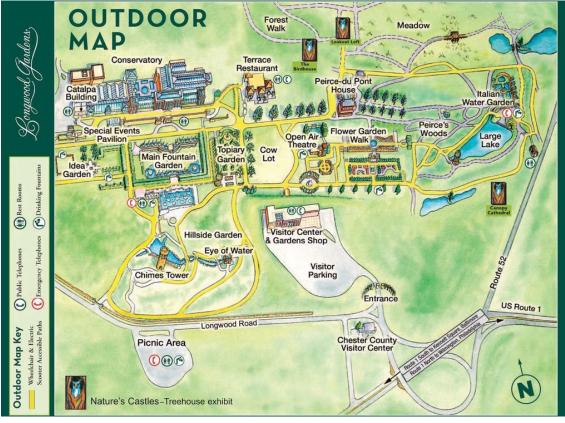
### LONGWOOD GARDENS

#### A ONCE-CONSIDERED SITE

As soon as I had established that I would like a greenhouse for a site, I immediately thought of Longwood Gardens. Located in Kennett Square, PA, the Gardens are a source of exercise and play for nearby residents and far away visitors. The site is rich with history and classical design details. Ultimately this history was not a neutral enough stage for the program I was hoping to insert in it. It was at this point that I began looking elsewhere, and landed on the Horticulture Center.















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