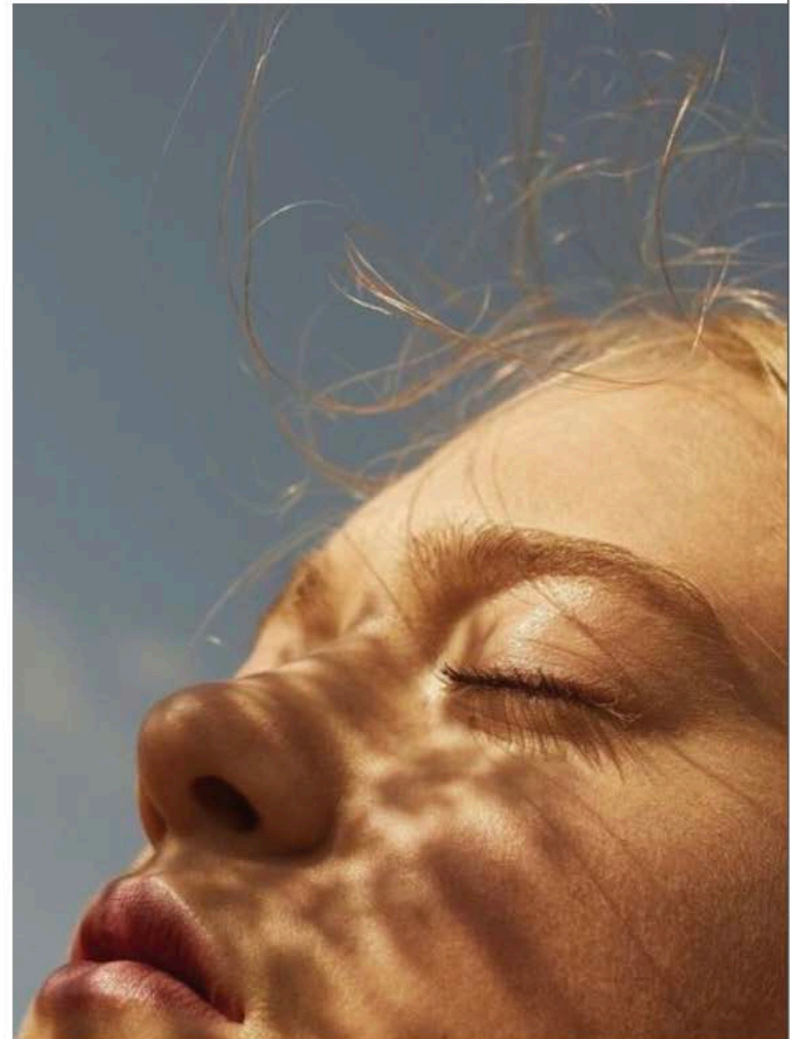


Reflective Journal

Universal Design Tools

“ I have learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel
- Maya Angelou.



Content.

01



Inclusive Design.

- Inclusive design
- Our family cabin in Sirdalen, Norway
- The Norwegian Opera
- Gardemoen Airport, Norway
- Bergen Light Rail

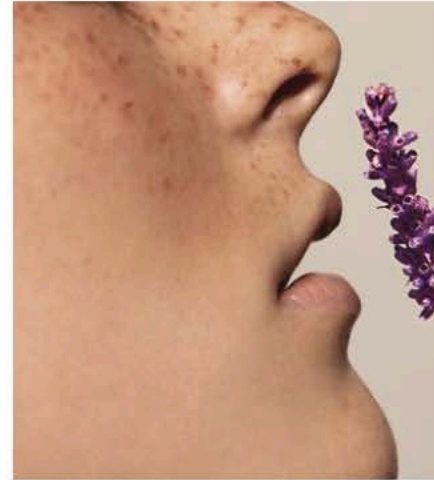
02



Phenomenology.

- Phenomenology
- Eyes of the skin, Juhani Pallasmaa
- Empathy-embodiment activity

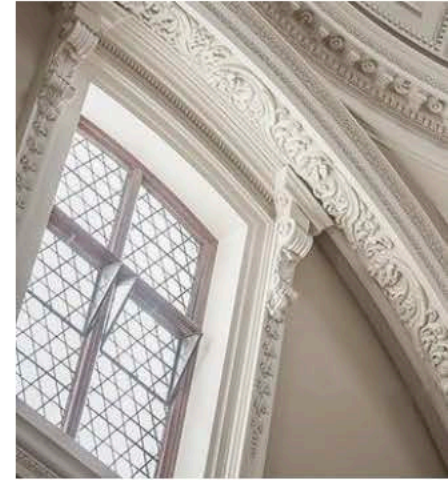
03



The senses.

- The senses
- Sensory mapping notes
- Our timeline
- Sensory mapping

04



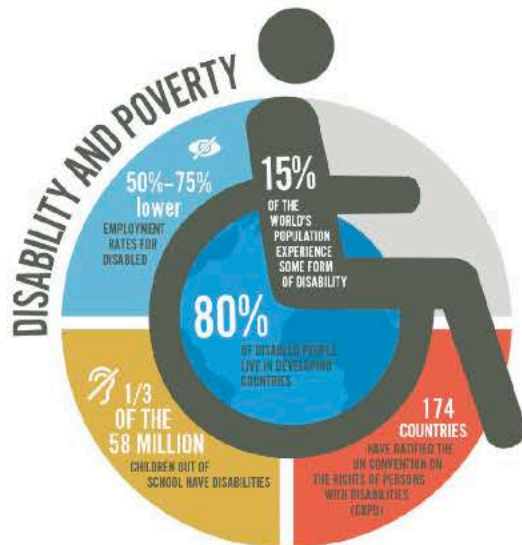
Typologies.

- Typologies
- Class exercise
- Lounge areas

Inclusive Design.

In this week's class, I learned about inclusive design and accessibility for all. I found it interesting to learn that up to 15% of the world's population is disabled, and that this figure is expected to double by 2050. These numbers underscore the importance of delivering universally designed designs for the future.

I also became aware that many people may experience temporary disabilities, and that universal design is therefore crucial for their experience as well. Anyone of us can suddenly need accessibility features such as elevators or ramps, so it is critical that buildings we visit in our daily lives already have these available.



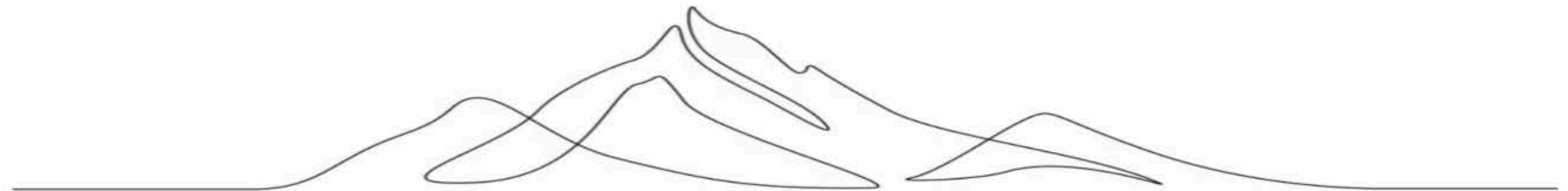
Frank Chimero's quote presented in class left a strong impression on me: "People ignore design that ignores people." This quote resonated with me because it emphasizes that a beautiful design will not be appreciated if it is not accessible to all users.

I also thought about this quote when I chose a design statement for myself as a designer: "It's about designing for the widest range of people possible." In another class activity, we were challenged to consider how different cultures can be incorporated into design. I had not previously thought about the close connection between culture and universal design, but after this question was raised, I have become more aware of the importance of treating cultural aspects with respect and knowledge in design practice.

Our family cabin in Sirdalen, Norway.

Our family cabin in Sirdalen, Norway, is a place deeply nestled in my heart and is one of my most cherished spots. To me, it's not just a cabin, but a gathering place where our family spanning four generations comes together and enjoys quality time. As someone who values family bonds, I greatly appreciate time spent with my loved ones. It's filled with many fond memories within these walls, a place where we spend time during various holidays. This place gives me feelings of positivity, belonging, security, and inclusion.

Since both of my siblings moved out and started their own families several years ago, we meet less frequently. However, we usually gather at the cabin when we first see each other. The cabin's living space features an open layout with a kitchen and living room, high ceilings, and an adjoining loft. This setup allows us to retreat to different areas while still being together. With each family member having their own bedroom and bathroom, the cabin also offers privacy when necessary. When we're together, we typically play board games, cook, or read, while the youngest ones explore games in the loft. On beautiful sunny days, we usually sit outside by the fire, grill sausages together, and have great conversations.



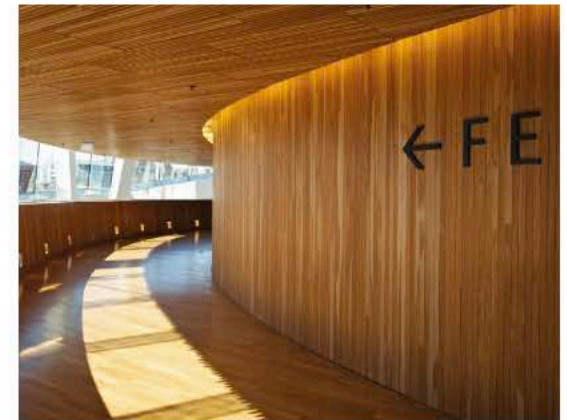


The wooden walls effectively reduce sound in the spacious room.

The Norwegian Opera.

The Opera House in Oslo, Norway's capital, is an example of a universally designed building both inside and out. The building is designed with wide walkways from ground level all the way up to the roof, where one can enjoy a fantastic view of the Oslo Fjord. During my visit on a class trip a few years ago, it was great to see that one of my classmates who is disabled and uses a wheelchair could easily get around on their own, along with the rest of the class. Inside the building, there are also wide walkways, elevators, and sound-absorbing materials on the walls in the foyer.

I myself had a grandfather with tinnitus who could never attend to watch my dance performances when I was young because the sound level in spaces like the foyer was often too loud for him. However, inside the actual auditorium, other measures have been taken, in addition to a sound technician monitoring and controlling the decibel levels being emitted. This large room with many windows usually attracts many people, but thanks to measures to dampen the acoustics, it becomes a comfortable space for everyone to be in.

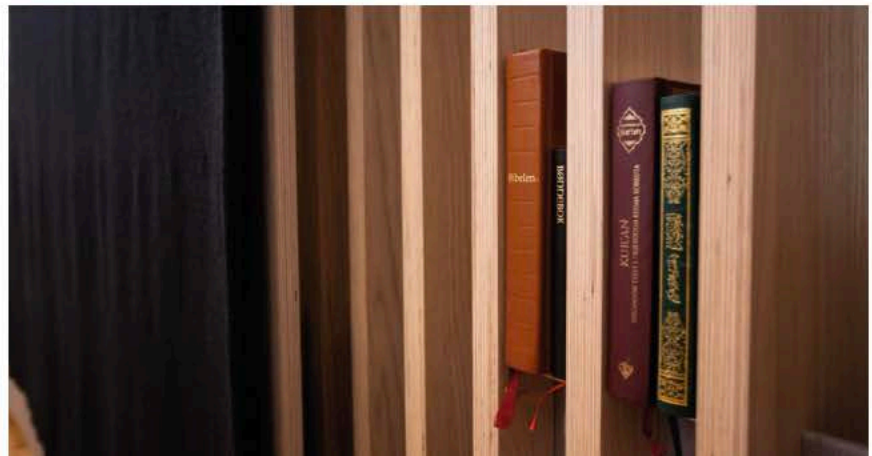


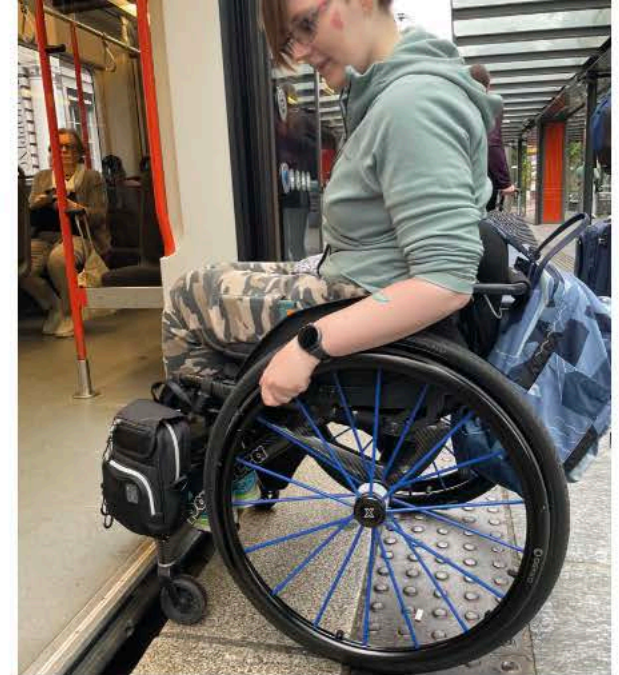
Gardemoen Airport, Norway.

Oslo Airport, Gardemoen, the largest airport in Norway, has taken measures to ensure universal accessibility. With wheelchair accessibility, guide lines for the blind, and clear signage, Gardemoen contributes to making the travel experience easier for all passengers. Assistance services and specially adapted facilities ensure that everyone can travel comfortably and safely through the airport.

Additionally, the airport offers a designated quiet room, aiming to accommodate various religious beliefs. These rooms can also be used as prayer rooms, with prayer rugs and similar items available for borrowing at any time. The airport also provides access to a chaplain for passengers seeking conversation. Furthermore, there is an array of food options available for purchase at the airport, allowing passengers to select food in line with their cultural or religious practices.

I previously believed that airport assistance services, such as wheelchair use and companion services, were only for individuals with physical challenges like paralysis or blindness. However, as my grandmother has grown older, she has also utilized these services. As a solo traveler, she needs help with handling heavy luggage and navigating the long distances at the airport. It's heartening to see that she can still explore the world and experience new things, thanks to the accommodations around her. This has personally shown me how important universal design is for ensuring inclusion and accessibility for all.





Bergen Light Rail.

The Bergen Light Rail is universally designed to a certain extent, featuring priority seats, a line of place names above the doors illuminated for those with hearing impairments, and a voice announcing the locations over the speakers for those with visual impairments. Additionally, at the light rail stops, there is a button you can press to hear when the tram arrives at your stop. However, when it comes to individuals with disabilities who are wheelchair users, the universal design of the light rail is more questionable.

During boarding and alighting the light rail, there is a small gap in the floor by the door. This gap often requires a wheelchair user to gain momentum to board the tram, which can be challenging if the carriage is crowded. I experienced this firsthand when my fellow students and I were tasked with navigating Bergen city center as blind individuals and wheelchair users for a day. Before this exercise, I had always assumed that small edges were not a problem for wheelchair users, but they can actually be quite challenging to navigate.

Phenomenology.

In the lecture and guidance on phenomenology, I became more aware of how different spaces can affect our emotions and the importance of recognizing these emotional variations. One thing I learned is that phenomenology suggests that knowledge resides within our bodies. For example, when I feel nervous before an exam, I feel it in my stomach. I also found it interesting to learn about how people react differently to textures, patterns, and textiles. I can relate to this because I have trypophobia, which triggers physical reactions when I see certain hole patterns

Another aspect I can relate to based on my own experiences is how people react differently to various textiles due to conditions like asthma or sensitivity to dust. Being an allergy sufferer myself, I may react to different wool textiles and similar materials. This experience is valuable when designing for others.

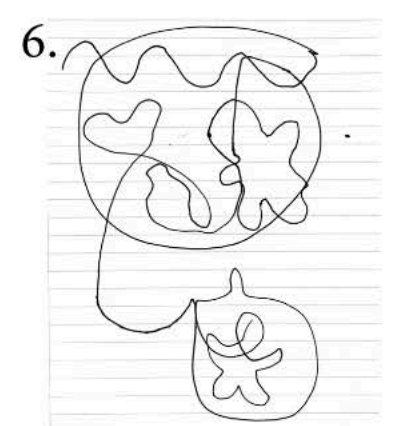
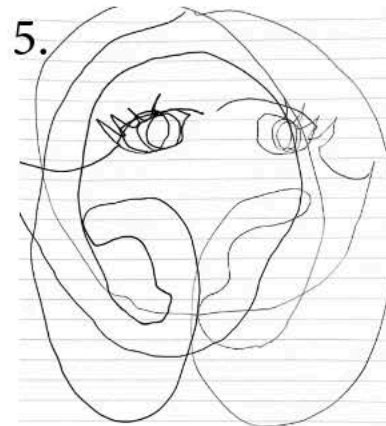
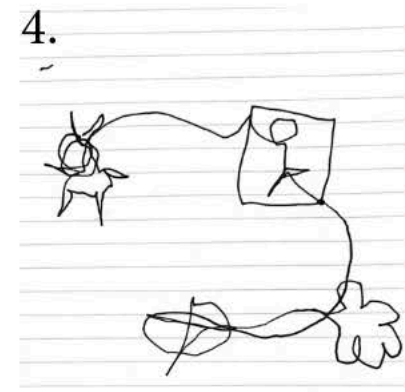
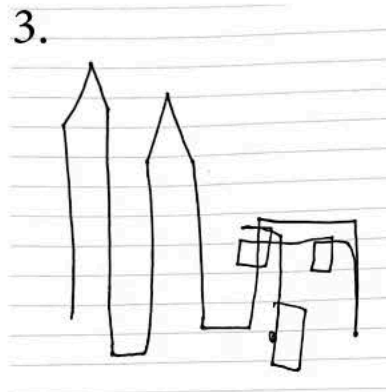
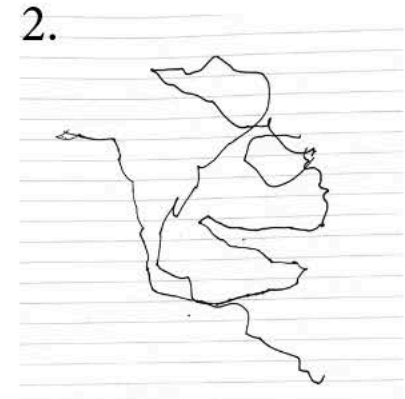
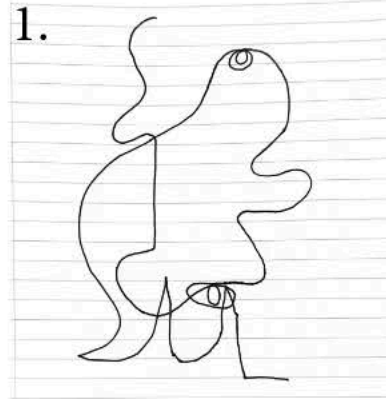


I find the concept of lighting culture and varying color temperatures measured in Kelvin very interesting. In the Nordic countries where I come from, warm light is common, creating a cozy atmosphere. However, just a short distance away, the lighting culture can be entirely different. For example, in Spain, the lights in our summer house are warm, while the neighbor's house is illuminated with white/blue light. This difference clearly highlights the cultural distinction between the different families in the neighborhood. We evidently have completely different perceptions of what constitutes cozy and comfortable lighting. That being said, it is important to acknowledge the significance of considering our senses and culture when designing, as it can affect how people feel in their surroundings.

Eyes of the skin, Juhani Pallasmaa.

Participating in the "Eyes of the Skin" drawing exercise in class was both fun and challenging. Due to my language barrier, I found it difficult to fully understand the instructions while trying to visualize and draw on the paper. As a result, my drawings ended up being quite random as I relied more on my instincts than on understanding the instructions exactly. Drawing with two pencils at the same time also proved to be difficult, as it requires a steady hand and concentration to keep the lines consistent. I also found it challenging to draw with my feet, especially in terms of applying enough pressure on the pencil to create clear lines.

Despite these challenges, the exercise provided me with an opportunity to experiment and explore new drawing techniques. It pushed me beyond my comfort zone, encouraging me to try new drawing methods as part of the creative process. However, one setback was that I lost my phone with the pictures from the exercise. Consequently, I had to ask one of my fellow students to read out these statements to me again at home while I drew. This time was easier as I had already attempted the exercise. Through this experience, I have learned the importance of saving everything in OneDrive, as it is easy to lose things.

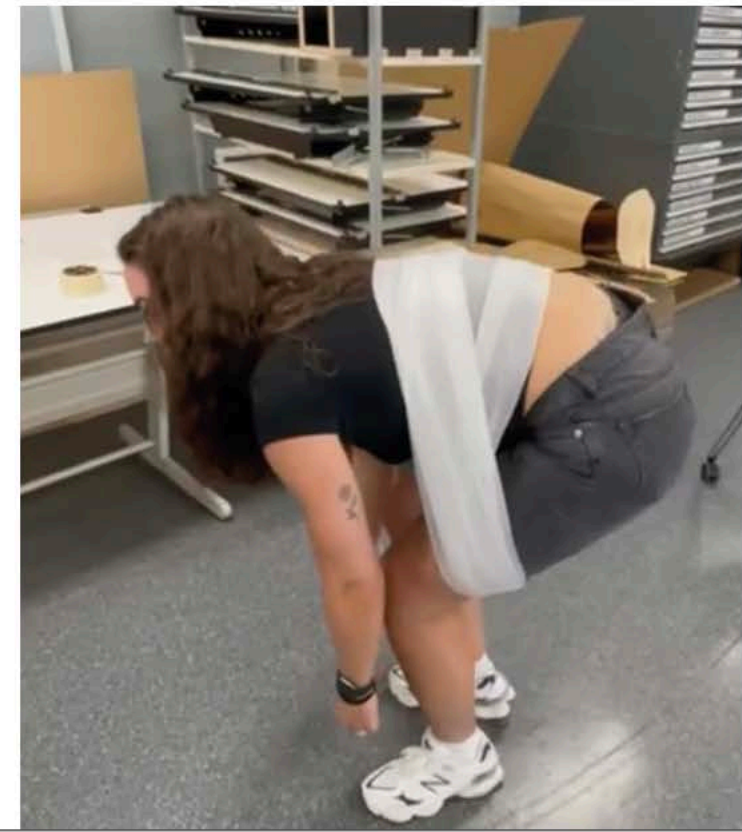


Empathy-embodiment activity.



I found this exercise very educational because it gave me a new understanding of what it feels like to have different disabilities. In my "new body," I was strapped into a chair with only one functional leg, a crooked back, and limited peripheral vision. Experiencing the world through my "new body" was truly fascinating and eye-opening. It was challenging to navigate, and I had to perform all movements at a slow pace to maintain balance. The lack of peripheral vision was also a challenge, as I could only see what was directly in front of me and not to the sides. Therefore, I had to be extra careful to avoid colliding with objects or other people. Because of my crooked back, my head was also tilted downwards, and I had limited sight to only the floor and the legs of the chair in the classroom. Seeing the world in this way was far less inspiring, and it felt somewhat demeaning to experience such limited functionality and sight.

I created a "new body" for my classmate, Victoria. The idea was to help her understand what daily life is like for our neighbor in the apartment block we live in, who has a similar disability. Victoria's experience with her new body was that it was difficult to communicate with and analyze the body language of the people around her, as making eye contact was challenging. Another factor was that she experienced significant pain in her back and thighs. Additionally, she had neck pain because she had to keep her head up to see what was happening around her. She found the whole experience demeaning and challenging. After this exercise, Victoria and I have a much better understanding of the challenges our neighbor faces in everyday life. For example, in the elevator with all the buttons high up, passing people, and interacting with cashiers at the store.



The Senses.

This week, we learned about the importance of how our senses influence our experience of being in a particular environment. I found it very interesting to be out at different places and to be conscious of this. After this exercise, I have particularly noticed smells and sounds around me that change my perception of the space I am in. For example, my classmates and I discussed the idea of creating a sensory mapping of the ground floor of the shopping center where we live. Before this exercise, we simply went through our daily routines without reflecting on anything.

But now I am more aware that there are different smells from the waffles at the cafe, the nail salon, the restaurants, the hair salon, etc. I have also become more conscious of sounds like the beeping from the grocery store, the hairdryer at the hair salon, and the cars outside. Since we moved here, I have always felt that this environment is stressful and exhausting to be in, but now I am more aware of why I experience it that way. When there are many strong different smells, different lights, loud noises, and many people in the same place, this



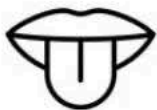
HEARING



VISION



TOUCH



TASTE



SMELL



I have also become more aware of exploring the same areas at different times of the day, as the analysis can change accordingly. For example, a train station will feel different during rush hour compared to in the evening when you are heading home and there are almost no people at the station. Another thing I have reflected more on after the lecture is how some places are used differently than originally intended. For example, a staircase at the train station where people choose to sit down. Another example is that they sit on top of the backrest of a bench instead of sitting on the seat, etc. Such things as these can be wise to consider as a designer and to observe how people actually use the design.

Sensory mapping notes.

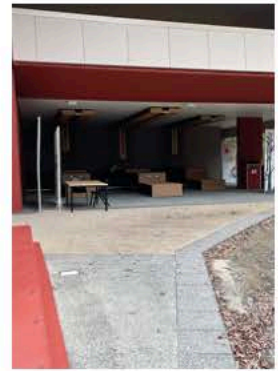
	STOP 1	STOP 2	STOP 3	STOP 4	STOP 5
	Time: 1.30 PM Griffith Univesity Junction	Time: 1.40 PM Griffith Univesity Cross between G06 and G14	Time: 1.53 PM Griffith Univesity G31 Outdoor	Time: 2.00 PM Griffith Univesity G31 Level 1	Time: 2.13 PM Griffith Univesity Top of staircase, between G23 & G30
Sound	We can hear.... - People taking - Kitchen noise - Wind in the trees - Furnitures being dropped along the floors - Music from café	We can hear.... - Trees rattling - People sobbing their feet - Cars far away - Grasshoppers - Birds singing - Some are talking	We can hear.... - Motorbike - Cars - Ventilation - Trees - Birds - Vending machine - Dry leafes in the wind	We can hear.... - Accoutic is very significant - People wispering - Beeping, machine - Sliding doors - Ventilation - Walking in the stairs	We can hear.... - Heavy feet running - Big groups talking - Laughing loadly - Leaves on trees rattling in the wind - People talking from distance, saying bye
Smell	We can smell... - Coffee/chocolate - Food/spices - Perfume/body smells	We can smell... - Fresh, plants - Brecze of perfume/food - Flowers - Sweat - Garbage (comes w the wind)	We can smell... - Intense smell of the wood - Fuel from cars - Dirt/soil - Warm/round smell - Country side/ mountains	We can smell... - Dust, vacuming - Sour - Old - Smells different people - Garbage - Soap from the toilet	We can smell... - Sweet plants - Salty - Ocean smell - Fresh plants/wood - Body smell/perfume
Sight	We can see... - Studying - People eat and drink - Socialize - Waiting - Co-working - Relax - Walking past - Meeting point - Shelter for rain Who? Employees, students, café employees, elderly Where? A busy area, but not people in a hurry, people waiting	We can see... - Mostly people walking by - Some studying - Uses the buildings around - Carrying food - Throwing away trash - Uses phones a lot - Normal/chill walking - Many walking alone - Some uses the soda-machine Who? Mostly students	We can see... - Working car - Study place - Under roof - The woods - Vending machine - The road - Some shelter, some not - Stairs - Not much lightning in studyplace - Always a few people studying here - Not much used elevator	We can see... - Light - Grey wall-to-wall carpet - Tactile dots on ground - Narrow hallway - Dust placed between window and wall - Very few people unless there is a class - White walls reflecting light	We can see... - Shelter - Bicycle things - Traffic - Socialize and study, but less than at Junction - Higher speed - probably reach tram - Many talking in phone/ watching phone - Not many stopping to chat - Very few carrying food
Touch	We can feel... - Cold, dry easy breeze - Hard, rough surface on tables and benches - Shiny, polished and cold surface on tables with chair.	We can feel... - Can feel different textures - Cool air, and small rain drops - The ground feels uneven under my shoe. - The wind	We can feel... - Warm and sunny - Leeward of the wind - I feel the texture of the paint strokes and the warmth. - Steelbolts are cold - The ground is uneven.	We can feel... - Carpet, Soft - Benches against the cold tile wall are cushioned. - Stuffing in benches feels loose - Temp is comfortable	We can feel... - Cool air - Feels the wind blowing - The ground is naturally rounded - The sun in the face



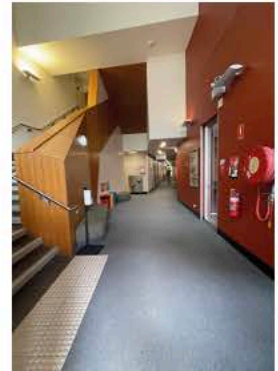
Junction



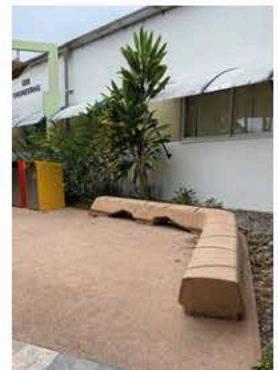
Cross between G06 & G14



G31 Outdoor



G31 Level 1



Top of staircase, between G23 & G30

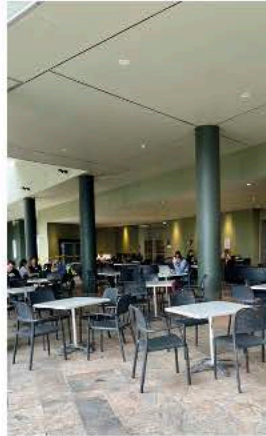
Our Timeline.

We were a group of five students exploring various locations on campus to analyze and observe different environments. We started at Junction Cafe, our favorite cafe on campus, a lively gathering spot with a lot of people. The photos were taken after lectures, so there were fewer people than usual, but the atmosphere was still evident. Next, we went to the intersection between G06 and G14, a busy path leading to the library. Here, we observed the continuous flow of people and traffic.

Our next stop was outside G31, a popular study spot due to outdoor facilities with tables and power outlets. We studied how students used this area to study and relax, and how it affected their campus life experience. Afterwards, we visited the ground floor of G31, the entrance to one of our lecture halls. Here, we noticed the tranquil atmosphere and the varied design with different materials.

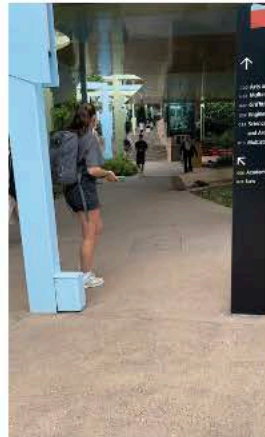
Our final stop was a busy area leading to the tram, where most students pass on their way to and from campus. Here, we observed the activity and how students reacted to being on the move. Through these different locations, we could see the variation in the campus environment and how smell, sight, touch, and sound affect the experience of each area. Next time, we will take photos simultaneously with the observations to better connect our findings with visual representations. This exploration gave us a deeper insight into campus life and will be valuable for future analyses and design planning.

Junction



1.30 PM

Cross between G06 and G14



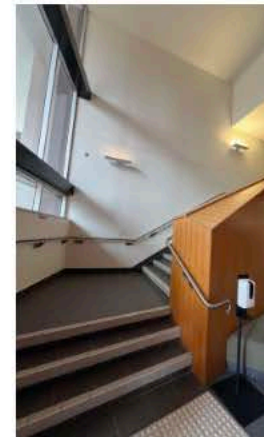
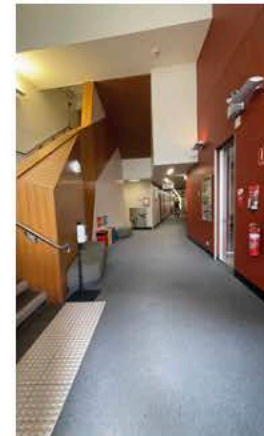
1.40 PM

G31 Outdoor



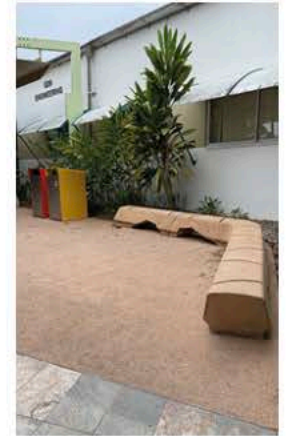
1.53 PM

G31 Level 1



2.00 PM

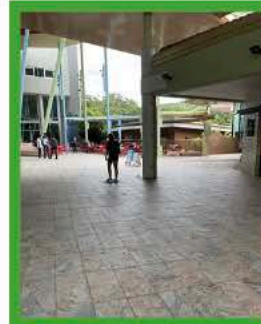
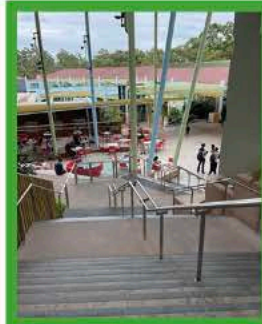
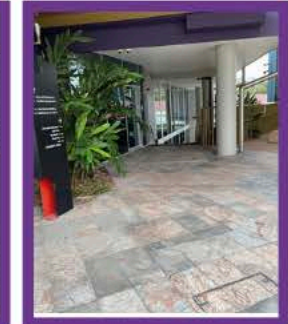
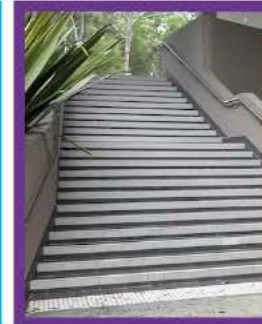
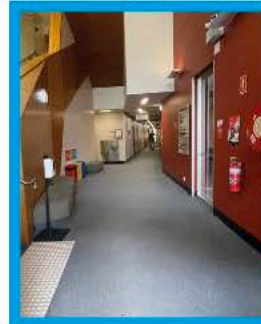
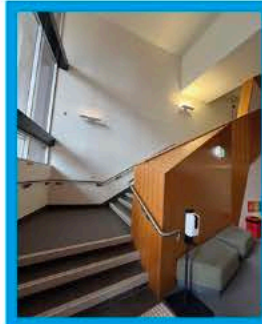
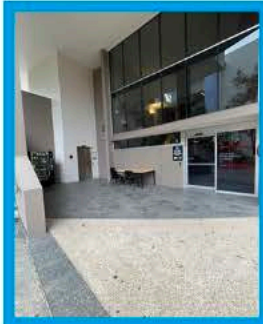
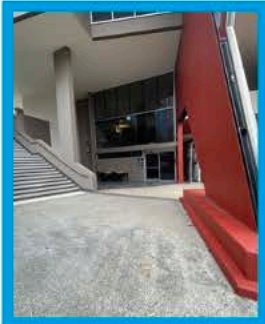
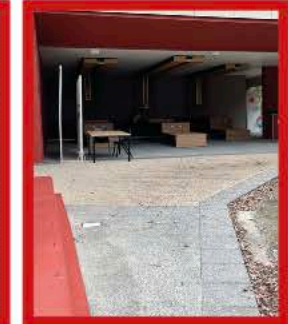
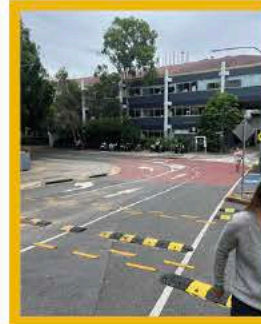
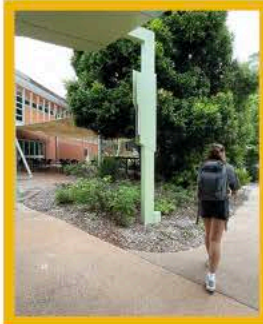
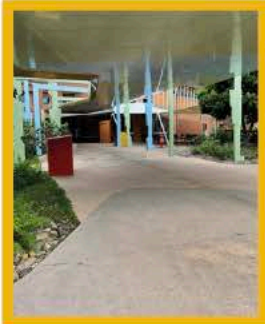
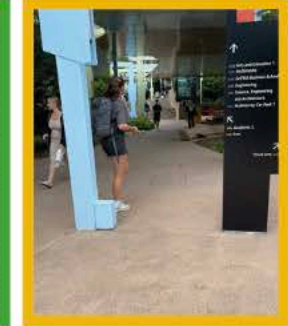
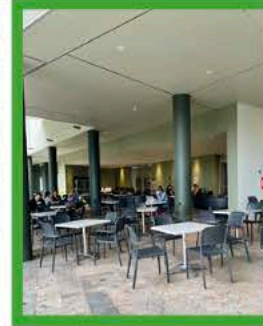
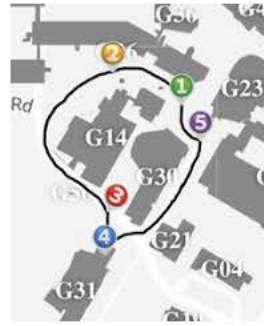
Top of staircase, between G23 & G30



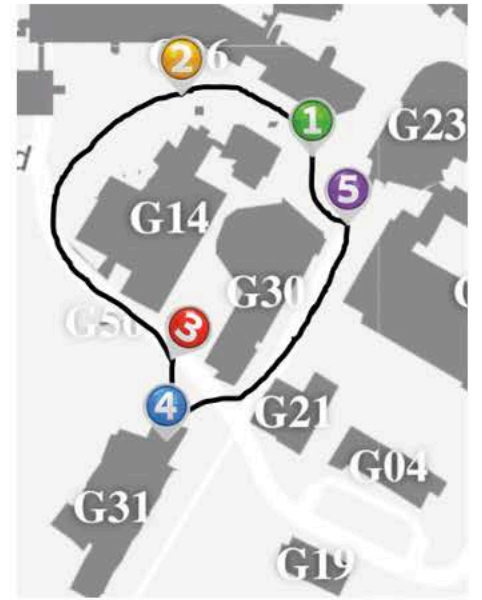
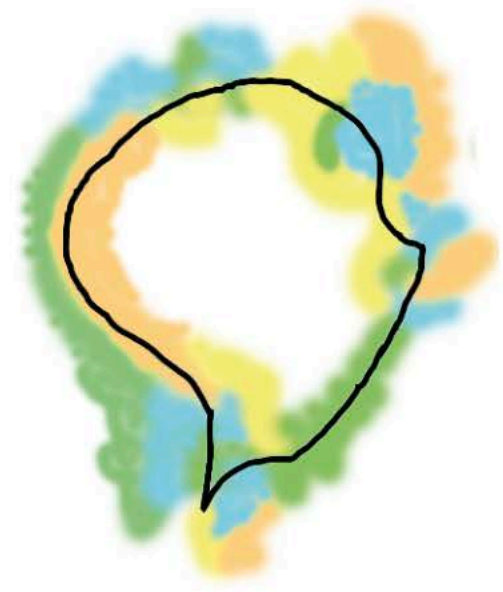
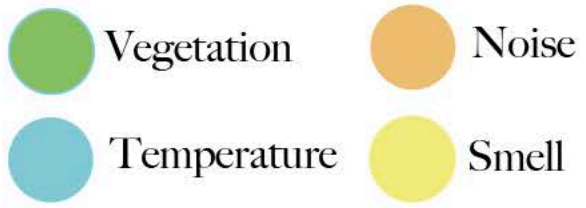
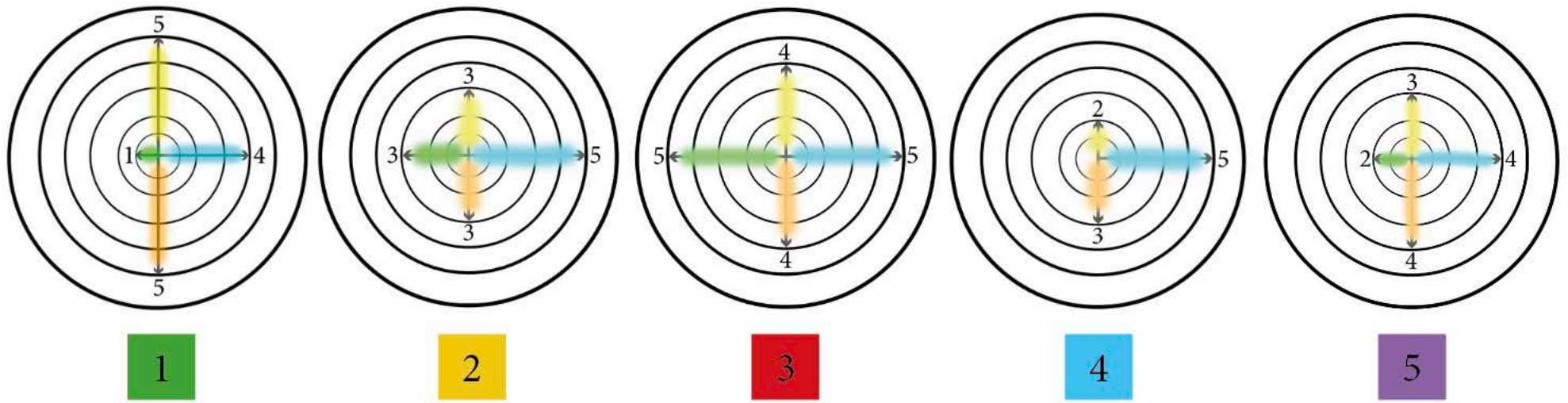
2.13 PM

Sensory mapping.

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

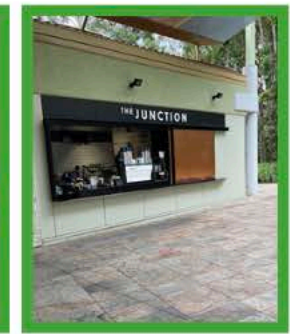
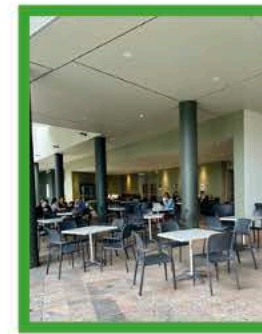
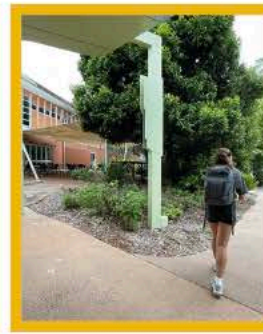
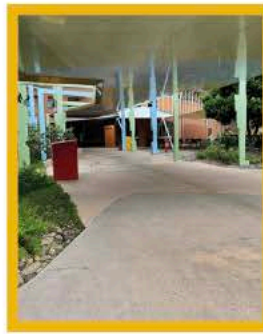


These pictures were taken at Griffith University, Gold Coast, and they depict the path we followed. The photos are color-coded to indicate the locations at which they were taken along the way.

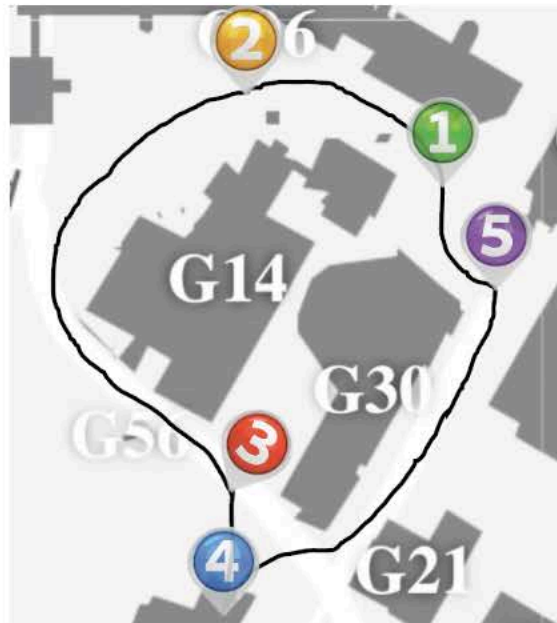


Cross between G06 and G14:

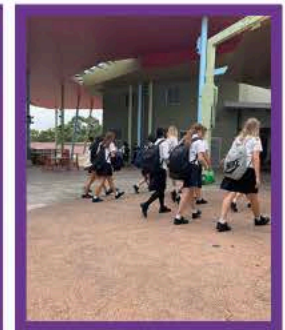
In this area, some improvements could include better signage to the various buildings for students who are not so familiar. The ground also lacks a bit of contrast compared to the beds for the visually impaired. Ground-level guiding lines could also make it easier for the blind in a busy area.



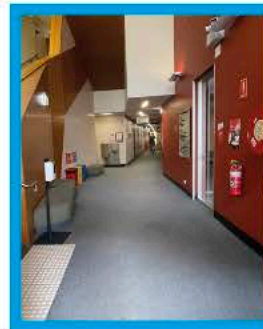
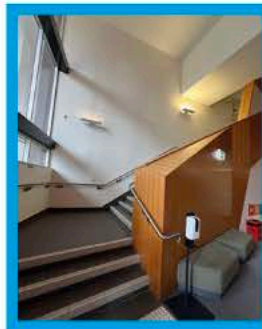
G31 Outdoor: In this area, the benches could be replaced with something lower, as there is too little space between the tables and benches, making it uncomfortable to sit there for extended periods to study. Additionally, the place could be made more inspiring and brighter during daytime, creating a more conducive environment for studying.



Junction: What can be improved in this area is to create a better queuing system, as congestion often occurs in the aisle when people are waiting for their food. People tend to cluster in the middle, making it difficult for those passing by the cafe. Additionally, it's not easy for the staff to see who is in line and who is waiting for their food.



G31 Level 1: This area feels like a basement and is very uninspiring. The different materials make the room appear cluttered, and the only thing dampening the acoustics is the carpeted floor. Additionally, it's very cold indoors, which applies to the entire campus. This makes students more tired as they are freezing and expend unnecessary energy on this.

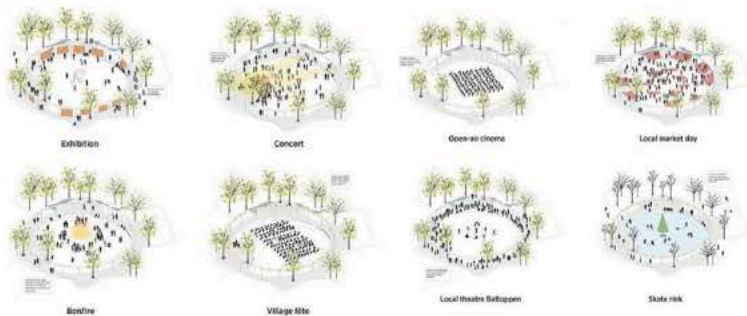


Top of staircase, between G23 & G30: In this area, there could also have been guiding lines on the ground, as it is a busy area. This is also an area where a few people sit and study, but there is a lot of noise here. Therefore, one could have created some kind of zone that is acoustically dampening for them.

Typologies.

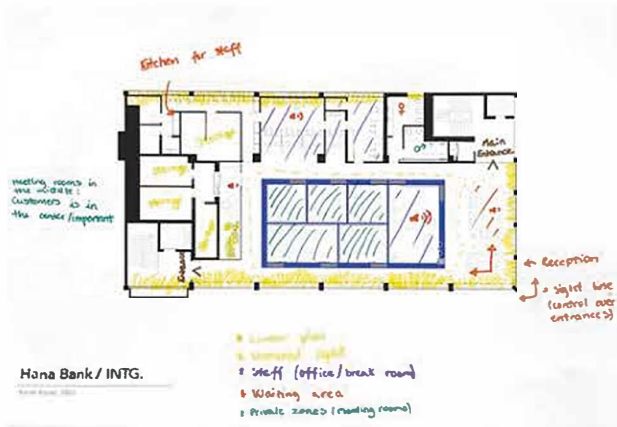
This week, we were introduced to typology, which was the most challenging topic so far this semester. After processing the information, I now have a better understanding that typology involves grouping things based on their common characteristics and attributes. It entails sorting things into categories based on what they share and how they differ from each other. For example, we can create a typology of plants, animals, humans, or other objects based on their characteristics and attributes. This helps us to structure and understand the world around us better.

During the lecture, I particularly noticed a picture of an urban square with various possibilities for events such as markets, concerts, outdoor cinemas, and ice rinks in winter. I found this fascinating because it opened my eyes to how a place can have multiple functions and be adapted to different activities. This made me think about the importance of designing flexible and versatile spaces.



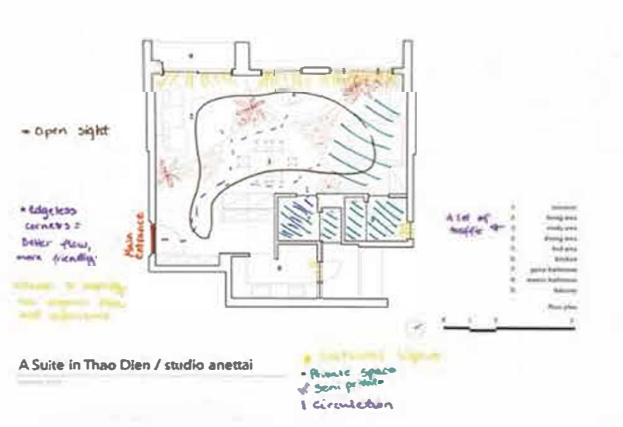
Another useful part of the lecture was the first exercise, where we mapped out lighting conditions, traffic, private and public zones, sound levels, etc. in different venues such as banks or showrooms. This exercise increased my awareness of how thorough mapping can improve the design process. By considering and being mindful of factors such as lighting conditions and noise levels, better decisions can be made as a designer, resulting in more thoughtful and user-friendly solutions for the community.

Exercise.



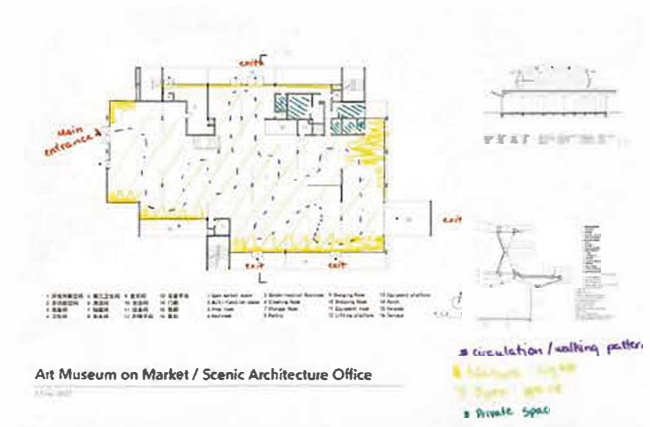
1. Hana Bank

In the drawing from Hana Bank, we mapped out where natural light enters the room, which is marked in yellow. We have also mapped out the sound levels, indicated by speaker symbols around the different zones. On the far left of the room, we believe the area is used for storage, while in the middle of the room, we believe the area is used for private zones such as meeting rooms. At the top of the room in the center, we believe the area is used for offices and break rooms for employees. We have also marked the men's and women's toilets, as well as entrances to the room. At the main entrance, we believe the area is used for a waiting area and reception. The aisle in the room is marked with a yellow dashed line, showing what we consider to be the most natural path to move around the bank.



2. A Suite in Thao Dien

In the drawing of the suite at Thao Dien, we have also marked the natural light coming in as yellow. We have outlined the private area in dashed green, which includes the toilets and the bedroom. One of the toilets is dashed in both green and purple because it is the bathroom that is naturally used by guests. The overview of the suite is marked in brown, which covers a very large area of the total space. We have also marked the natural pathway in dashed purple. In this suite, there is only one entrance, which is marked in orange at the bottom left corner. We spent less time on this one, so it's less detailed than the Hana Bank drawing. It was difficult to see how open it really was due to the organic potted plants. If they had been taller, the overview of the suite would have looked completely different.

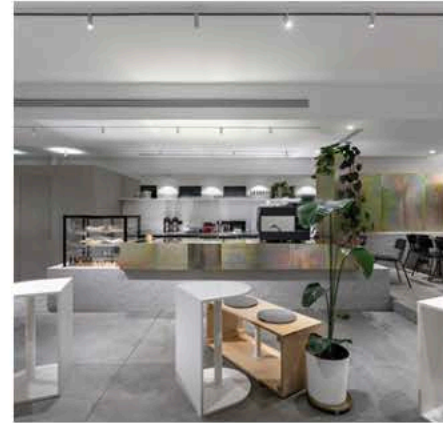


3. Art Museum on Market

In the latest drawing from the art museum, similar to the other two, we've marked natural light in yellow. Additionally, we've outlined open areas in dashed yellow, covering almost the entire space. This is because it's a museum, and we imagine there's a lot of open space with exhibits on small lightweight walls throughout the venue. The private space is outlined in dashed green, which we believe to be toilets and offices for the staff. The main entrance and emergency exits are marked in orange and are spread around the venue. The circulation and pathways in the museum are outlined in dashed purple, representing what we believe to be the natural route visitors would take while in the museum. This space is the least detailed and analyzed because this drawing is the one we had the shortest amount of time to work on.

Lounge areas.

■ Natural Light
 ■ Open Areas
 ■ Semi private
 ■ Pocket space
 ■ Private zone
 ■ Walking pattern



Materials: Concrete, greens, steel, a lot of natural light

Shape: Straight edges

Function: Café

Meaning: Creating enough seats with enough circulation

Form: Linear plan, straight zones

Size: Contains enough seats, toilets, entry, kitchen and storage

Materials: Wood, brick wall, Epoxy, plants

Shape: Straight and organic

Function: Café

Meaning: Creating enough seats with enough circulation

Form: Linear plan, straight zones

Size: Contains enough seats, toilets, entry, kitchen and storage

Materials: Tiles, stone, wood, steel, plants

Shape: organic

Function: Café

Meaning: Creating enough seats with enough circulation

Form: Linear plan, organic zones

Size: Contains enough seats, toilets, entry, kitchen and storage

Materials: Brick wall, wood, concrete, plants

Shape: Straight and organic edges

Function: Café

Meaning: Creating enough seats with enough circulation

Form: Linear plan, straight zones

Size: Contains enough seats, toilets, entry, kitchen and storage