



MUNCH



CRUNCH



To conclude, food forms part of our daily routine and we interact with different types of taste, touch or smell every day. We were mostly inspired by how synesthesia forms in our different senses and how sensorial design such as scenting and experience bring to users. When it comes to affordance we mostly use it throughout the collection of scents. Disabilities are most of the time the ones which are neglected while interacting with exhibitions. So we wanted to design a concept that will bring what we have learned about semantics, especially how our sense of touch and feel can help to understand a design. In the near future, we will notice more designs that will both bring interactions to disabled users and non-users so that all of them can interact together especially with the advancement of technology through applications in a virtual experience. For further development, all the stations will expand for more variety of options for visitors to interact without limitation to explore their synesthesia from all stations.

Foodnesthesia



DEPD-3530 Seniotics for Product Design

Project 2: Accessible Meanings: Multi-Sensory

Interactions of Users using their sense of Touch, Smell, and Listening. How exhibitions interact with users and those who are disabled. How blind or visually impaired users could interact with the exhibition. How deaf people could interact in an exhibition. How to use our smell senses, and what is the importance of it.

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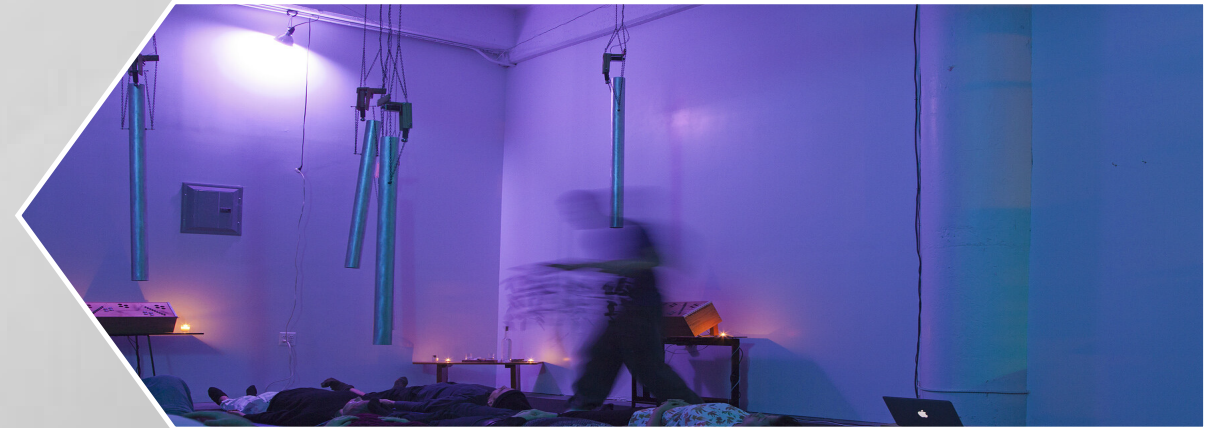
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Concept 1

Inspiration



“One thing that sound can do is stop time and make you deeply present in the moment”

Concept one focuses on designing for the quiet. We believe that Deaf is a culture. Deafness is not seen in the deaf community as a disability but rather as a difference. It is not necessarily something to overcome as much as it is something to become part of. We believe it has its own language that will thoroughly demonstrate inclusivity. Those who are hearing do not understand what deafness means from moment to moment. Although there are many types of research that were inspiring, the main inspirations are from gaming consoles and several popular interactive video games.

Concept 1

Researches



Hearing loss and deafness comes in different levels. We can hear sound waves that cause our eardrums to vibrate, sending signals to our brains to process what kind of sound it is. While deaf people do not hear the sound in their ears, they still sense the vibration that comes from the sound waves. Meaning, people who suffer from hearing loss or deafness can hear by feeling. Leading to our next step, we were searching for information about how we see and taste sounds. The term "Synthesisa" came up. It is a rare symptom of when a person's senses come across each other. For example, when a person says "Design", you will see the rainbow color and even shapes that represent it. The "Quiet" exhibit has so many

opportunities. Coming across exhibitions for the deaf, are mostly visualization of music genres. Using colors, shapes, and some animation. Like Disney's Fantasia and lots of Disney's classics, sounds were visualized by animations. It could be a cymbal that represents a water splashing, or even a violin that represents a scenery of silky skating. Where people with hearing disabilities do not enjoy exhibitions the way we do. Common aid for people with hearing loss are Rear Window Captioning (for most films), Closed-captioning glasses (for the planetarium), assistive listening devices, sign language tours, sound amplification, and induction loops. In most museums and exhibits, providing assistance to the hearing impaired is very common but then visitors will not be able to explore around on their own



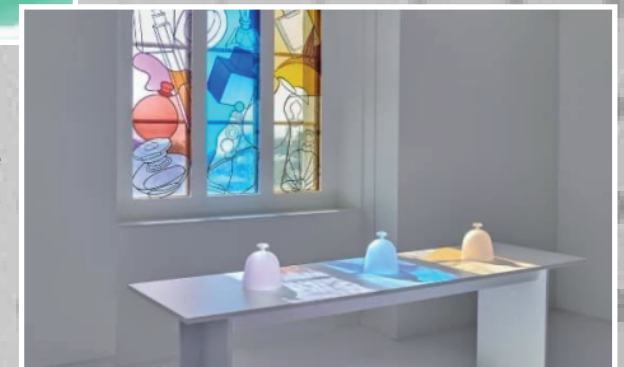
Process

How might we design a concept that portrays a surrounded display, create taste experience and through the experience of sound and music.



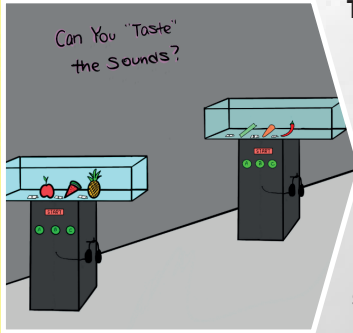
How might we design an interaction to engage dissable and non dissable users to engage in using their senses to touch object/foods and associate them to colours,

How might we design a display which will portrays a scent station that relate scent create synesthesia and create a pleasant olfactorty display.



Concepts Summary

Concept 1



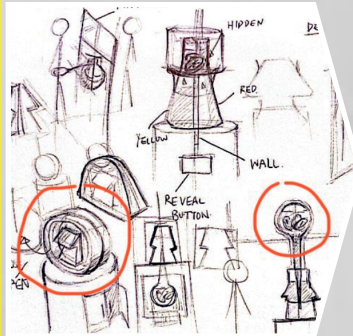
They will have to "touch and feel" the sound/vibration the food makes. Users will use headphones and a console to "hear" and "feel" the sound, then analyze and guess the right food for the right sound. Voting button (big round and flashy) for affordance as it tells the user to push. The association between music and food. Also mimicking synesthesia, by displaying food in boxes for users look and to hear the sound that the food makes. provokes the question; how do we know what we know? Especially with food that is all crunchy, how can we tell; the difference? While listening to the sound made by food, it could also trigger the user's senses to "taste" the food in their head.

Concept 2

They will have to recognize colour through their sense of touch. This interaction will bring both disabilities users and non on the same level of interactions taking into consideration that a few design is available to disable people to interact with during an exhibition. They will associate the interaction by using their sense that they use in the daily life, what their sight has bring to them and lastly bring both of them to interact by touching the object/food which will be place in the box. And the non disable user will have a bigger experience since they do not use their sense of touch without seeing. The guessing of the color by touching will show how disable users do on a daily basis not knowing which colour is the object they are touching and how colours can be associated to feeling.



Concept 3



They will have to allow users to smell one of the 10 dimensions of the scent from each station by pushing a pressure to operate the dispenser. Then, they can choose colors from their emotion or memory to light up in the station or share with others. The collection of a pleasant scent display will appeal to the visitors leading to affordance. a simple olfactory brain exercise, leading users to focus on their sense of smell by surrounding themselves with scent. The interaction provokes their emotion in smells to decide on one or more colours they perceive from synesthesia. will spray a familiar scent to the users, allowing them to take a time to breathe it in and meditate for the scenting experience. Although some smells may not have any connection, some scents may provoke their feelings to visualize their experience with only smelling one dimension of

Concept 1

Individual Sensory Exploration



Design Concept

Different food makes different crunching sounds that will produce their very own frequency and vibrations. Where the sound/vibration will be transmitted to the user. As an affordance interactive exhibition, users will listen to/ feel the vibration of the crunching sound and determine which food in the display box (the 3 selections) makes that sound. The idea of this installation is an experiment on human's capability of vibration analysis (rhythm, speed, level of vibration). Understanding why we know what we know.



Concept 2

Inspiration



“Seeing is reinforced by touch, in that touch helps us get a fuller understanding of what we see”

Users have access to different types of Design and art in museums. With time more designers and artists are looking forward to bringing users with disabilities to engage with their design. The mean of technology, experimental video, activated individual hearing, visual description tour, separate room for each topic or even sound system are improving in a way to bring more interaction to all users.

Concept 3

Individual Sensory Exploration



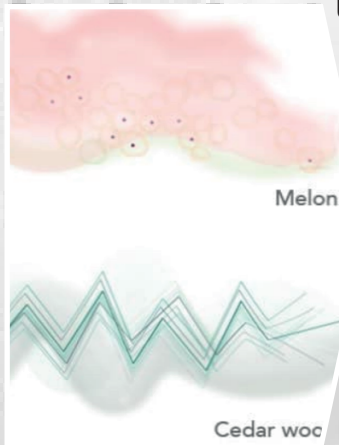
Design Concept

The collection of odors related to taste (food) in stages where each theme is hidden from users' view. The sensory exhibition will increase synesthesia in smells, provoking discussion on how people perceive smell dimension differently. Diversity in food and its smell is fascinating because it could represent individual identity and memory. It will be performed by two or more users. The fan behind the dispenser will deliver the scent to the users after diluting the scent and air to create a pleasant atmosphere. Then, they will choose a color that comes to their mind and compare it with other users' colors to provoke their reminiscence.



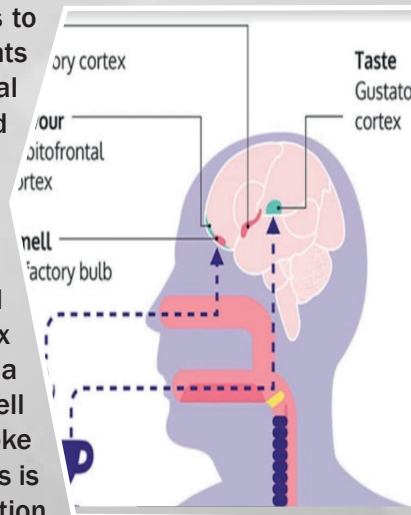
Concept 3

Researches



Utilizing multisensory stimulates the brain to obtain multiple knowledge from a single theme, creating synesthesia in future. Therefore, when people perceive odour, it has a tiny error range depending on the individual limbic system (amygdala and the hippocampus) which stimulate reminiscing and emotion according to “Experts discuss the science of smell and how scent, emotion, and memory are intertwined — and exploited” by Colleen Walsh, Harvard Staff Writer. Furthermore, the level of scent is different depending on how deep they concentrate in the atmosphere. The more they focus on the olfactory, the stronger the scent; and the longer they stay in the same environment, the weaker the scent due to accustomedness. Based on diversity in perceiving odor, Tokyo Tech researcher, Professor Takamichi Nakamoto, organized 20 odor components to

replicate odor with multicomponent olfactory data. His goal is to apply this odor data in electricity, allowing to dispense of scents while playing games, watching movies, or digital advertisements. Relating emotion in games or movies and specific odors will create nostalgia, impacting synesthesia when they smell a similar scent. From the research, olfactory senses can be organized into “primary” odors. Therefore, smells can be categorized by odor dimension: fragrant, fruity, citrus, woody, chemical, “sweet”, minty, toasted, pungent, and decayed. Implementing the use of the orbitofrontal cortex (flavor) and olfactory bulb (smell), the taste dimension became a focus for the display design for the Science World. The smell dispenser of fruity, citrus and minty dimensions will provoke users’ memory leading to synesthesia. The perception of smells is different from individuals’ experiences, observations, and emotion



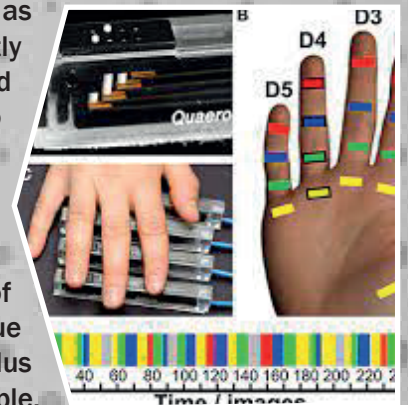
Concept 2

Researches



For the first part of the research, we made researched how museums engage disabled people in their exhibitions. MOMA engage their users through audio and app which gives information on each piece in several languages . One great example is the Hands on the Wall - Accessible Street Art Santiago, Chile; which offers six murals of the Barrio Lastarria neighbourhood has been equipped with touch panels, braille and an audio guide, so that vision impaired art lovers can experience the large-scale artwork through their fingers on the tactile panel . More research was performed on tactical simulation to colours and how tactical pictogram helps visually impaired people to have access to appreciate visual arts.

For the second part of the research, we mainly researched the theme that we have discussed which is synesthesia and the synthetic experience. This leads us to how Ideasthesia is when a concept or an idea triggers a real sensory experience, for instance, the letter “E” may be perceived in a color . In addition, some more insights bring us knowledge of how colours and shapes are perceived. For example, triangles can be perceived as being edgy, defiant, powerful and having a purpose and are mostly shown as an evil characters in a cartoon, with pointy noses and sharp edges . One example of colour is red which according to the website Seeing the colour can stimulate your appetite as we can notice it is no coincidence that most fast food restaurants use the colour red in their brand identity. Lastly, we collected some insight into how colour can be associated with meaning. Red is most of the time related to the hot, fire danger of Christmas and associated with a square which is hot and opaque in quality . It also holds the strongest of all attractions to stimulus and one great example that could associate with red is an apple.



Concept 2

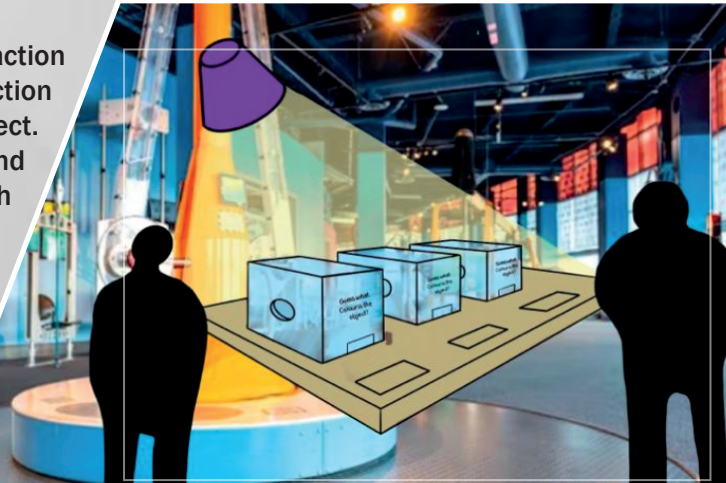
Individual Sensory Exploration



By walking blind folded i was able to explore my different senses around me. Such as touching smell and sounds which are important in our daily life

Design Concept

The concept create a synesthesia interaction that create an Universal interaction between colour shapes, food and object. As it engage users who can see and cannot see to use their sense of touch to recognize which colours are the food which has been place inside the box.Object or food will be place in each box and users will have to recognize which colour the is associated to the object they are touching.



Concept 3

Inspiration



“Glithero’s work does, in a subtle way, challenge sensory associations visitors”

Deriving inspiration from aromatherapy, many perfumers (or flavorists) composite scents in a selected theme to provide a pleasant odor for users. They begin applying fewer chemicals to display healthy odors, leading to affordance to take time and focus on their olfactory in a pleasant odor. Aesthetic inspirations of the scent museums are the Permanent Smell Collection by Andy Warhol, Workshop of a Nose by Lissoni Associati, and Nara by Britt Jonsson. Using glass allows the visitors to perceive colors, and the light reflection creates luxury appealing to gain attention. How might we relate scent to taste and create synesthesia? How might we create a pleasant olfactory display?

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Glossary

GLOSSARY

From Oxford Languages

Aromatherapy (noun) : the use of aromatic plant extracts and essential oils in massage or baths.

Disabilities (noun) : a physical or mental condition that limits a person's movements, senses, or activities.

Display (verb) : make a prominent exhibition of (something) in a place where it can be easily seen.

Emotion (noun) : a natural instinctive state of mind deriving from one's circumstances, mood, or relationships with others.

Exhibition (noun) : a public display of works of art or items of interest, held in an art gallery or museum or at a trade fair.

Frequency (noun) : the rate at which a vibration occurs that constitutes a wave, either in a material (as in sound waves), or in an electromagnetic field (as in radio waves and light), usually measured per second.

Inclusivity (noun) : the practice or policy of providing equal access to opportunities and resources for people who might otherwise be excluded or marginalized, such as those having physical or mental disabilities or belonging to other minority groups.

Interaction (noun) : reciprocal action or influence.

Odour (noun) : a distinctive smell, especially an unpleasant one.

Perception (noun) : the ability to see, hear, or become aware of something through the senses.

Reminiscing (verb) : indulge in enjoyable recollection of past events.

Rhythm (noun) : a strong, regular, repeated pattern of movement or sound.

Sense (noun) : a faculty by which the body perceives an external stimulus; one of the faculties of sight, smell, hearing, taste, and touch.

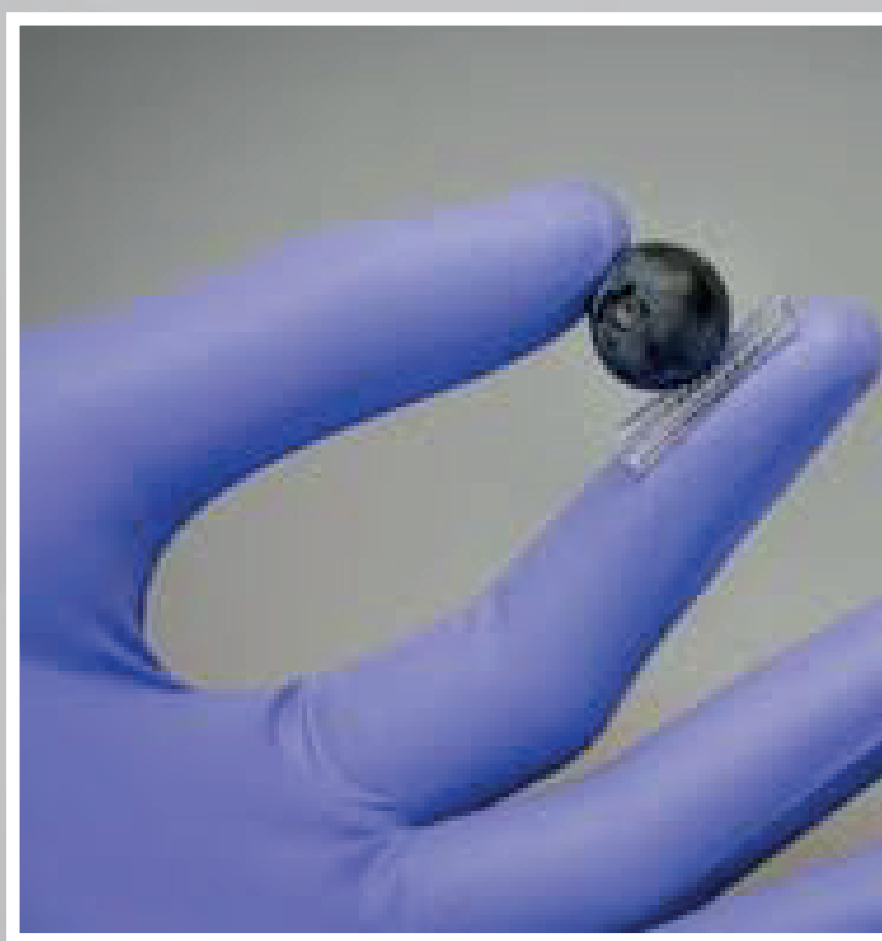
Smell (noun) : the faculty or power of perceiving odors or scents by means of the organs in the nose.

Synesthesia (noun) : the production of a sense impression relating to one sense or part of the body by stimulation of another sense or part of the body.

Touch (noun) : an act of touching someone or something.

Vibration (noun) : move or cause to move continuously and rapidly to and fro.

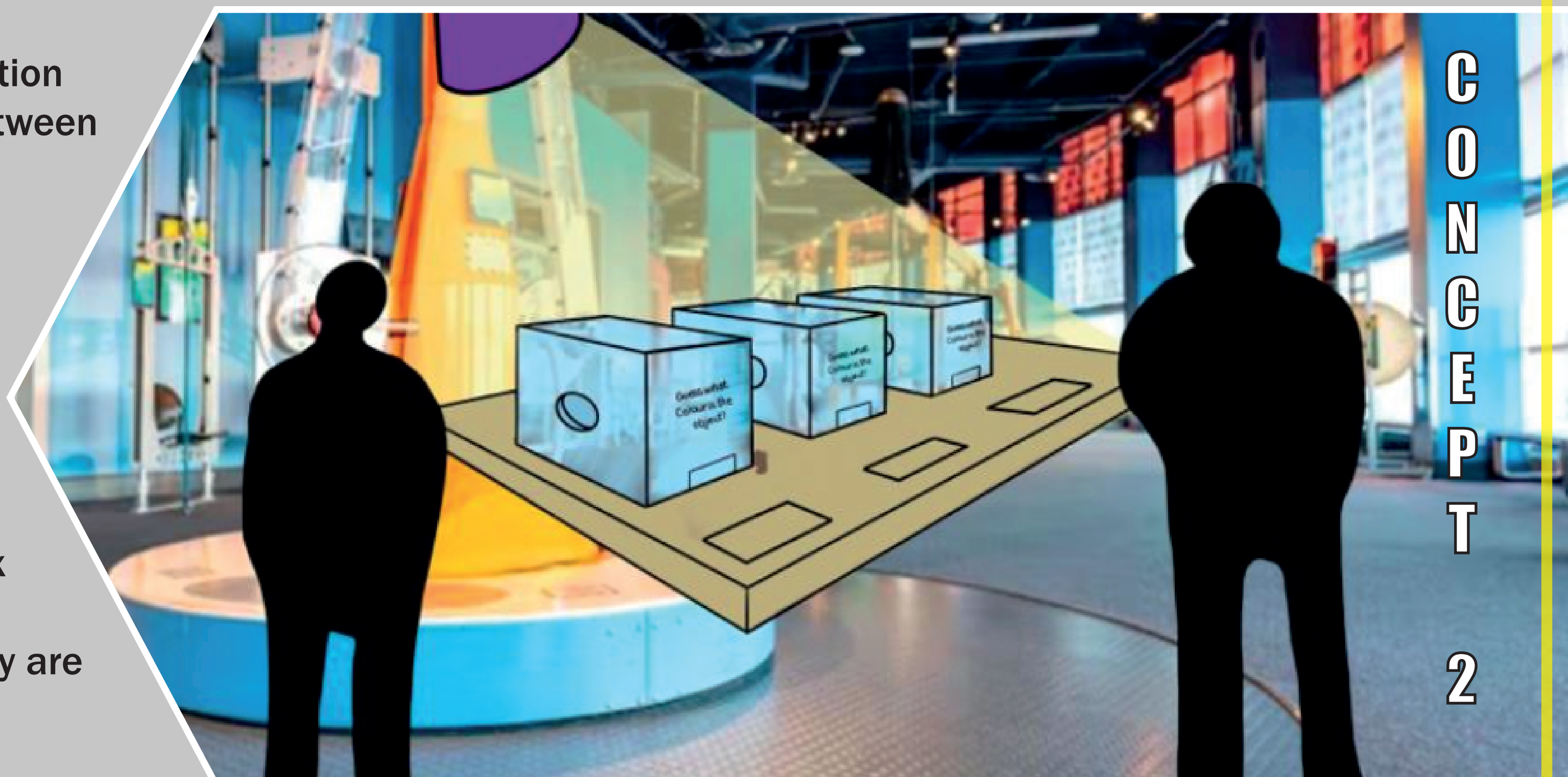
Visual : (adjective) relating to seeing or sight.



Synesthesia which is a multi-sensory instrument in our design concepts, including more design that dissable

The idea of this installation is an experiment on human's capability of vibration analysis (rhythm, speed, level of vibration). It provokes people who do not have synesthesia to picture the sound made by the exhibition.

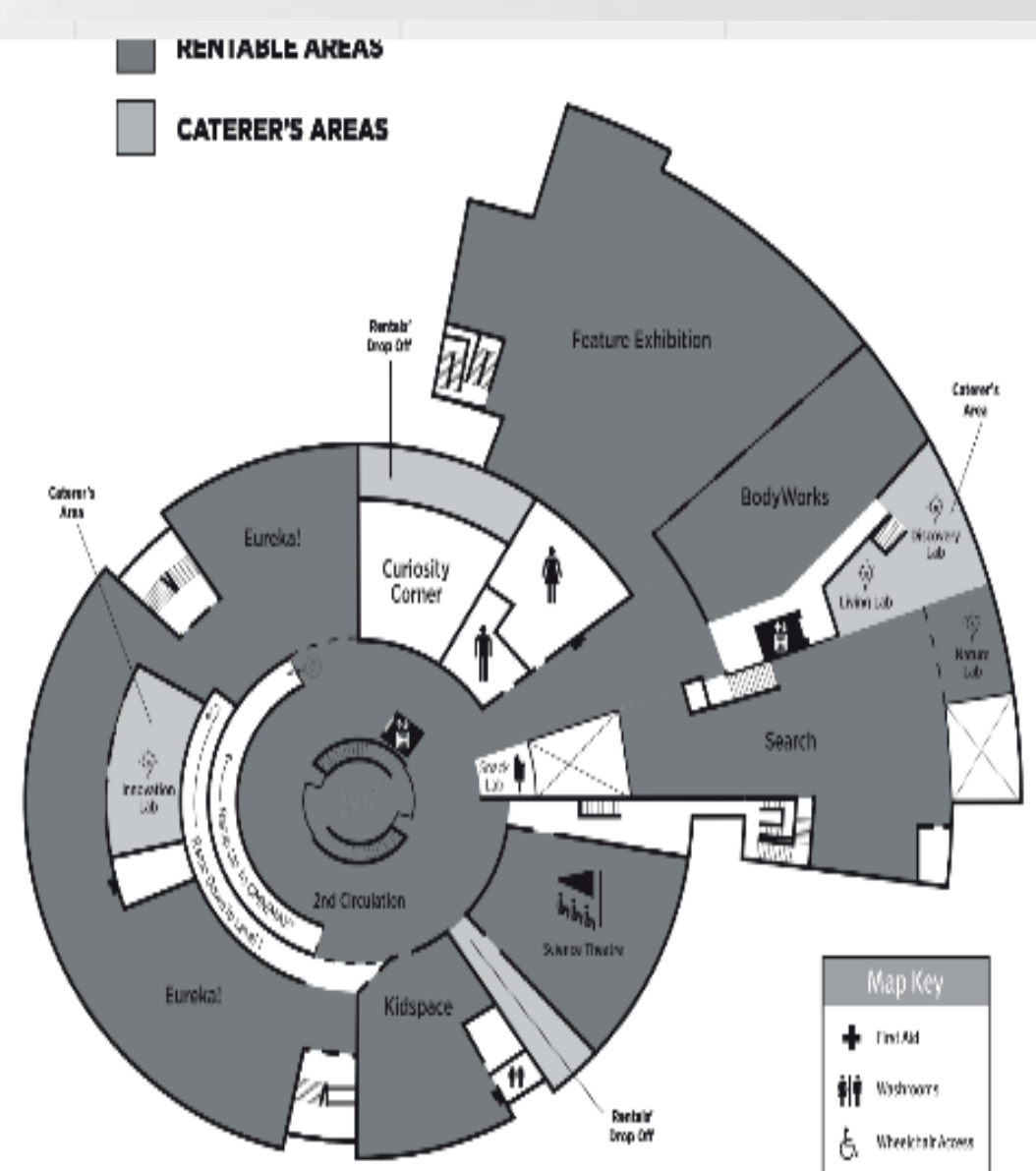
Object or food will be place in each box and users will have to recognize which colour it is associated to the object they are touching.



CONCEPT 3



Two or more users will stand face-to-face and smell the air diluted scent. They will choose a color that comes to their mind and compare it with other users' color to provoke their reminiscence.



Disabilities are most of the time the ones which are neglected while interacting with exhibitions. So we wanted to design concept that will bring what we have learned about semantics, especially how our sense of touch and feel can help to understand a design. visitors to interact without limitation to explore their synesthesia from all stations.

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