

WORKSHOP SENSING AND EMOTIONS

By Valerie Mace & Alessandro Biamonti



POLITECNICO
MILANO 1863
DIPARTIMENTO DI DESIGN

ual: university
of the arts
london

LAB·I·R·INT
RESEARCH ATELIER

EQUA



THE AIM:

From 13th to 17th February 2023, a group of students of the first year of the Master's Degree in Interior and Spatial Design were called upon to study, analyse and observe the interiors of Grace: Integrated Day Care Centre in Figino.

The Sensing and Emotions workshop, guided by Valerie Mace, senior lecturer at the University of the Arts London, and Alessandro Biamonti, associate professor at the Department of Design of Politecnico di Milano, engaged the students to document the sensory phenomena and corresponding emotional qualities that they considered most significant as designers.

Workshop overview:

Although changes to the senses occur through the ageing process, people with dementia can also experience acute sensory challenges, which in turn, impact on the way they feel about

their environment. According to Agnes Houston (2017), these challenges may include impaired spatial awareness through seeing, difficulties with loud noises, changes in taste, smell or temperature perception. This means that people with dementia can process sensory phenomena in a different way compared to people who do not have dementia. This can pose challenges when designing spaces for people with dementia. Accordingly, this project investigates a simple yet important question:

How can young designers better understand the sensory world of elderly people with dementia? While it does not claim to solve this challenge, this week-long activity introduces practice-led research methods that can provide a starting point towards a better understanding of the sensory world of people with dementia.

Students:

Group 1: Irene Baldi, Griorgia Pedrina, Alessia Ernesta Sana, Matteo Viale
Group 2: Sara Bellotti, Claudia De Piccoli, Annalisa de Simone, Asia Pedrini
Group 3: Sofia Favaro, Rebecca Limonta, Nicola Menassi, Irene Vago
Group 4: Martin Austria, Chiara Biscaro, Eleonora Marelli, Roberta Pagani
Group 5: Michela Amerato, Pietro Bolazzi, Sofia Leoni, Jiahang Li
Group 6: Elena Fatone, Lucia Petrella, Luca Rebonato, Lorenzo Sardella
Group 7: Giuseppe Adatti, Michele Guglielmi, Alice Sinigaglia, Xiao Yang
Group 8: Paolo Sarra, Noora Kyngäs, Alejandra Ruiz, Natalia Khobot
Group 9: Ana Maria Martinez Martinez, Jessica Flores García, Claudia Rosales Fernández
Group 10: Alice Bazzucco, Elsa De Mori, Sara Fesa, Greta Diletta Piazza
Group 11: Ana Sofia Amorim, Marija Sadochaite, Caterina Ungaro, Ala Zhyvulka

Professors

Valerie Mace for the University of the Arts London
Alessandro Biamonti for the Politecnico di Milano

Tutor

Lorenzo Fossi e Fabio Rossi

Many thanks to:

UniMiB - Loredana, Franca, Carla, Paola, MaryGiò, Iose, Roberta, Raffaella, Italo, Adriano, Angelo, Simona e Cristina.



ORGANISING



EXPLORING



ANALYSING



INTERACTING



UNDERSTANDING



PROCESSING



STRESS & KATE MALE
↓
DIVERSE SENSATION

ANZIANI

...right to Paolo, our interviewee, after we asked her why sewing
...an important touch way to her, which related to the
...what starts to become harder
...but there is this activity everything is easier
...Paolo's interview, Paolo also tries to feel her way home, as
...to family and her childhood.

SENSORY

Touch

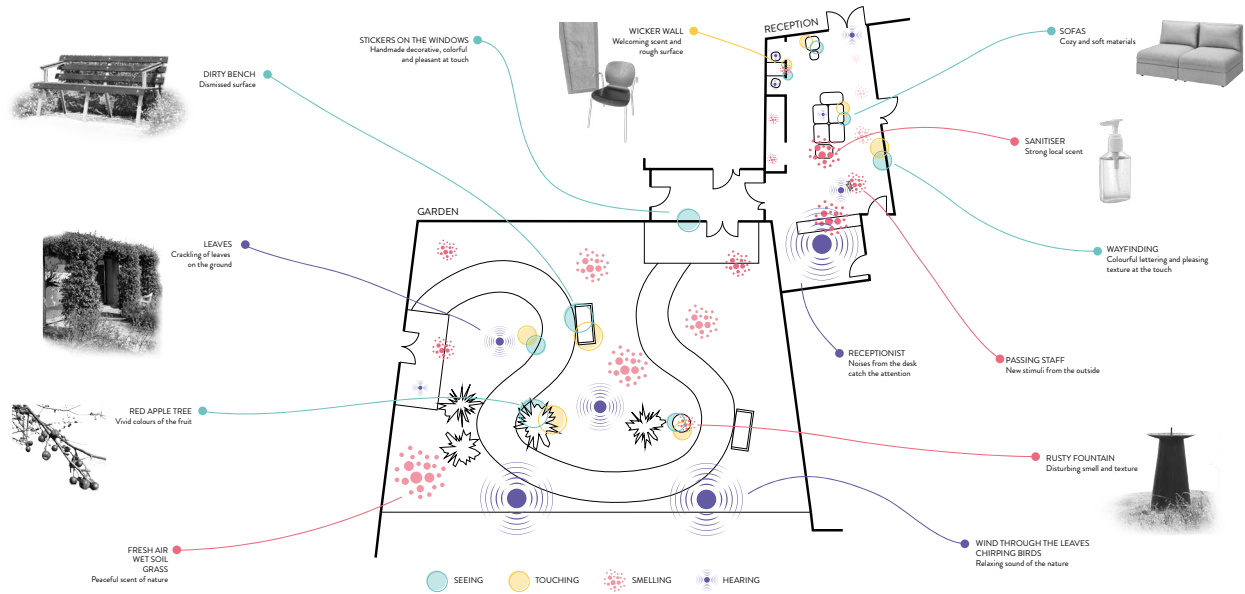
TOUCH

...the first time to start
...the first time to start
...the first time to start
...the first time to start

Why have we been with you?
...the first time to start
...the first time to start
...the first time to start

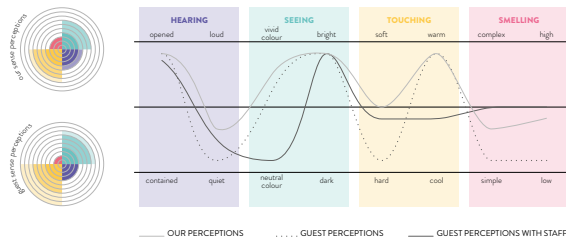
SENSING AND EMOTIONS

Experiencing spaces through the sensory emotional body

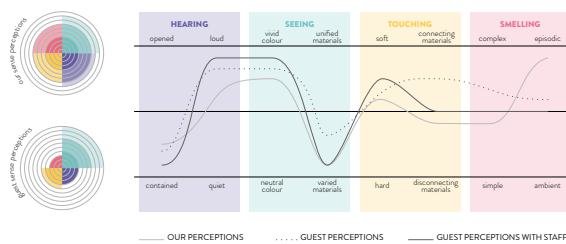


SENSORY CHART AND FLOW

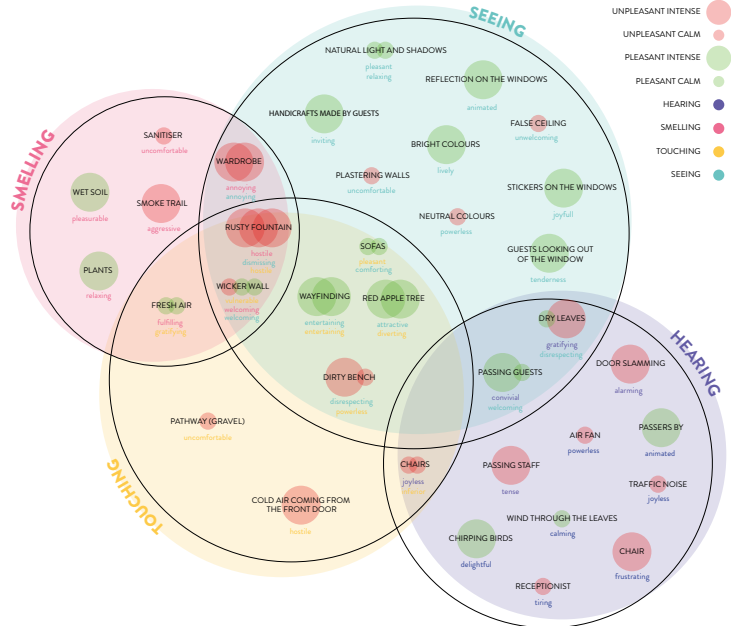
RECEPTION



GARDEN



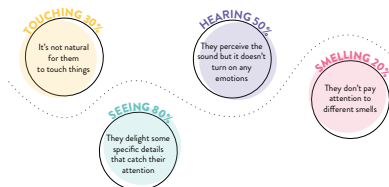
ELEMENTS AND EMOTIONS MODEL



EXPERIENCE FINAL CONCLUSIONS

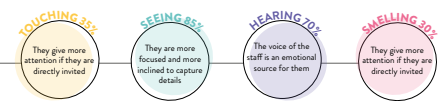
LIVING THE SPACE WITHOUT THE STAFF'S SUPPORT

When the guests are alone, they are less focused on living the space and capturing sensory stimuli

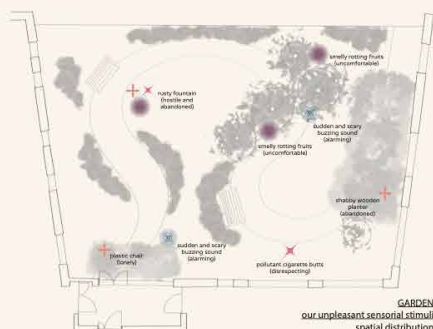
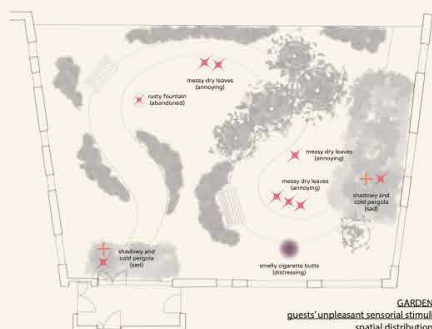
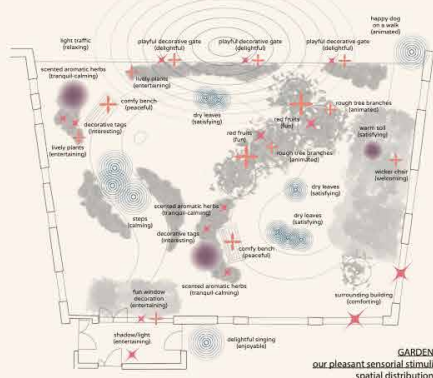
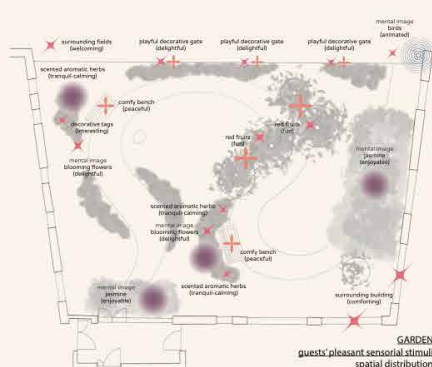


LIVING THE SPACE WITH THE STAFF'S SUPPORT

Staff helps guests living the space more consciously and with more concentration on their surroundings

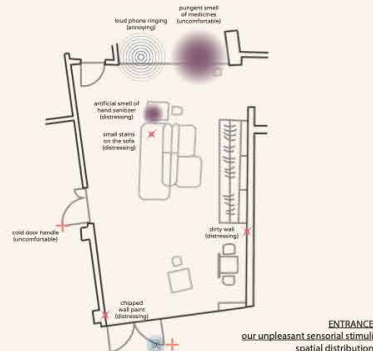
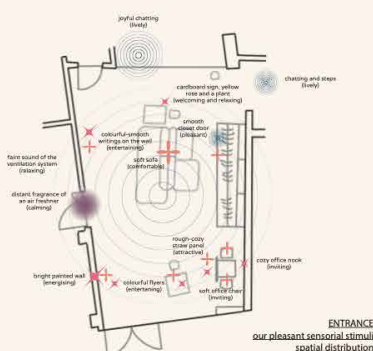
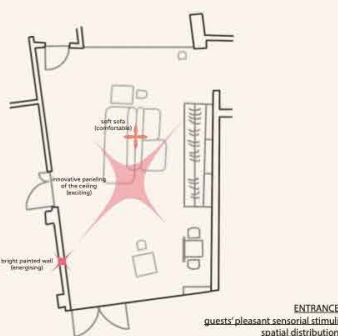


SENSING AND EMOTIONS



GRACE is an integrated day center for the reception of people suffering from dementia, located in the social housing residential complex of the Sustainable Village of Figino.

We analyzed the space and collected data based on our senses and then had a conversation with some guests to compare their perception with ours, while trying to answer the question "How can young designers better understand the sensory world of elderly people with dementia?"

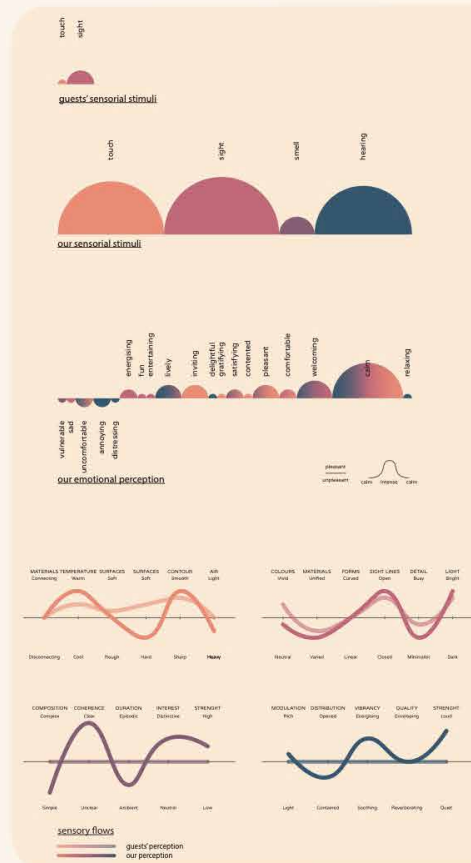
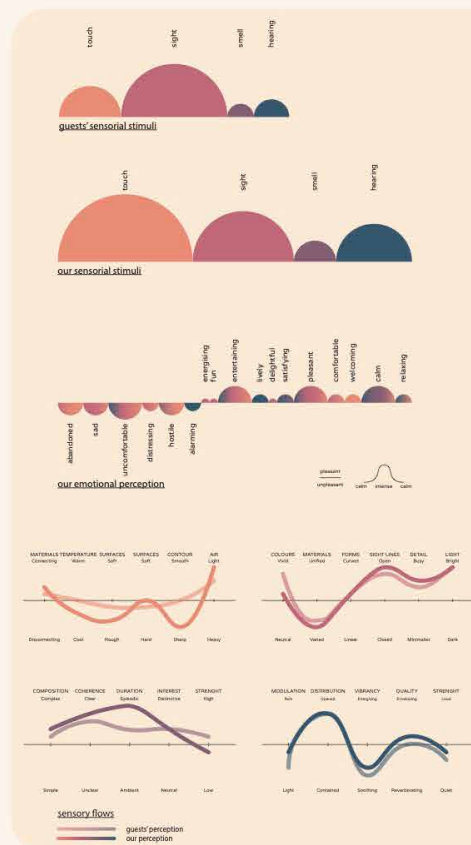


SOCIAL ENVIRONMENT
as an intertwining of physical environment,
emotional aspects and supporting figures

When talking about their experience at the care center, the guests tend to focus more on the people present in the space rather than on the space itself: it's clear that for them the social aspect is more important than the physical one.

When they do notice details about the space, the guests are greatly influenced by their prior learning: they tend to pay attention to things related to their past experiences as well as previous/current interests (careers, hobbies, etc).

Although their perception of the space is extremely subjective, all guests describe the center as a place where they feel happy, safe and well taken care of.



Group 3

Paola's THREAD

"A fountain of memories", is the phrase said by Paola, our interviewee, after we asked her why sewing was so important to her. Still alert and attentive, she explained to us how important touch was to her, which, related to the activity of weaving, leads her to remember what starts to become faded. Losing memory and memories is her biggest fear, but thanks to this activity everything is easier. Like Arianna with the thread inside the Minotaur's labyrinth, Paola also tries to find her way home, so as not to forget past memories, memories related to family and her childhood.

SENSORIAL/EMOTIONAL PLAN

We decided to divide the sensory and emotional plan for each sense we experienced. The division is useful to understand which type of sense was most affected during the experiment. Within the plants, it was decided to enhance the pleasant and unpleasant emotions we felt in the room. As for the plant concerning touch, however, it was also interesting to consider how the tactile sensations mixed with each other.

Legend

PLEASANT Dino run

Calm

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

UNPLEASANT Dino run

Calm

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Touch Dino run

Smooth

Rough

Soft

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

Hard

PLEASANT Paola

Calm

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

Intense

SENSING & EMOTIONS

Experiencing spaces through the sensory emotional body

WORKSHOP EXPERIENCE

How can young designers better understand the sensory world of elderly people with dementia?

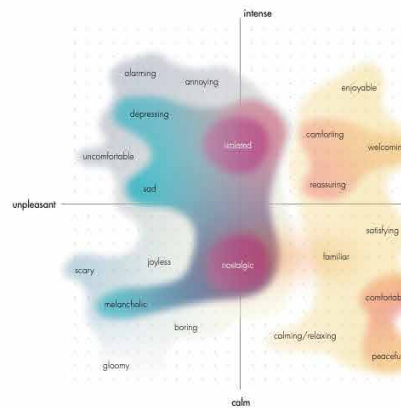
The workshop takes place at the day centre CDI Grace which is a reality belonging to a bigger project: "Piazza Grace". It represents the first Alzheimer's Village in the metropolitan city of Milan; an experimental housing response for people who want to overcome the limits that Alzheimer's disease imposes.

Our focus was documenting sensory phenomena related to our experience and the guests' experience, making a comparison between the different perception of the space. The examined rooms were therapeutic activities room, where guests do educational, socializing activities which enhance their preferences and strengths and Pina's room, a perfect reproduction of a typical 50's house full of vintage elements.

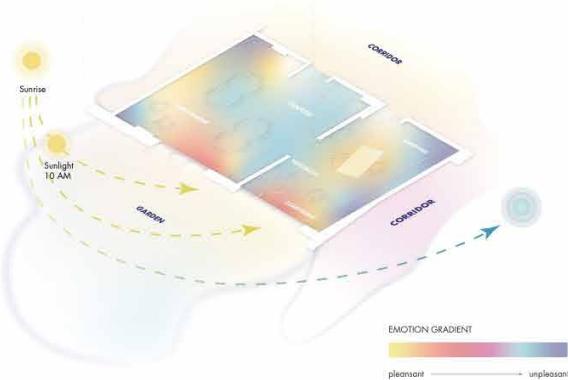
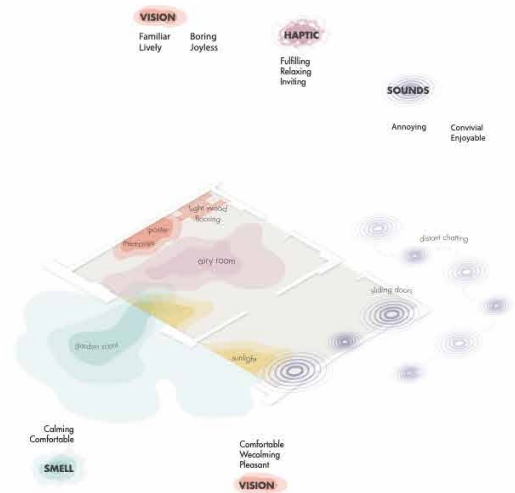
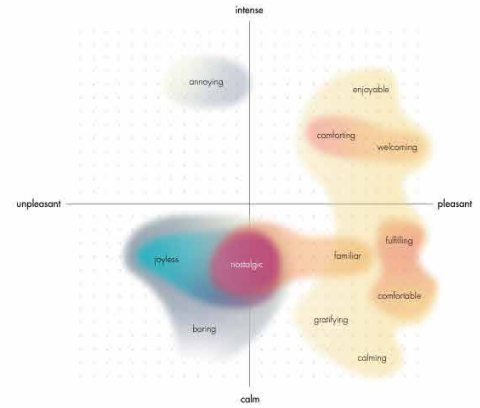
Our data analysis stands out the similarities and differences in emotional responses in this place: we can say that overall guests have a less critical perception of the place and a more positive one thanks to the stimulating community in which they live.

EMOTIONAL MODEL

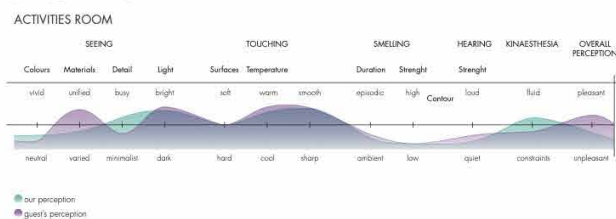
OUR EXPERIENCE



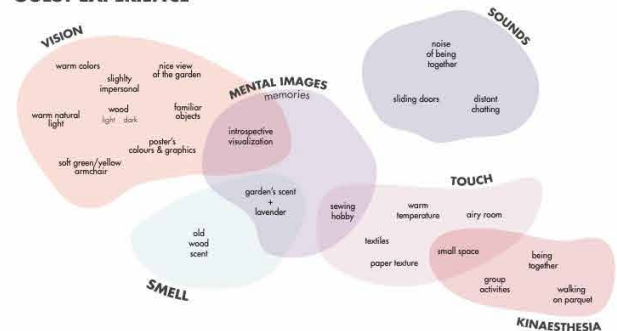
GUEST EXPERIENCE



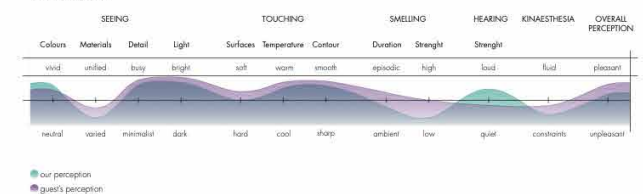
SENSORY FLOW



GUEST EXPERIENCE



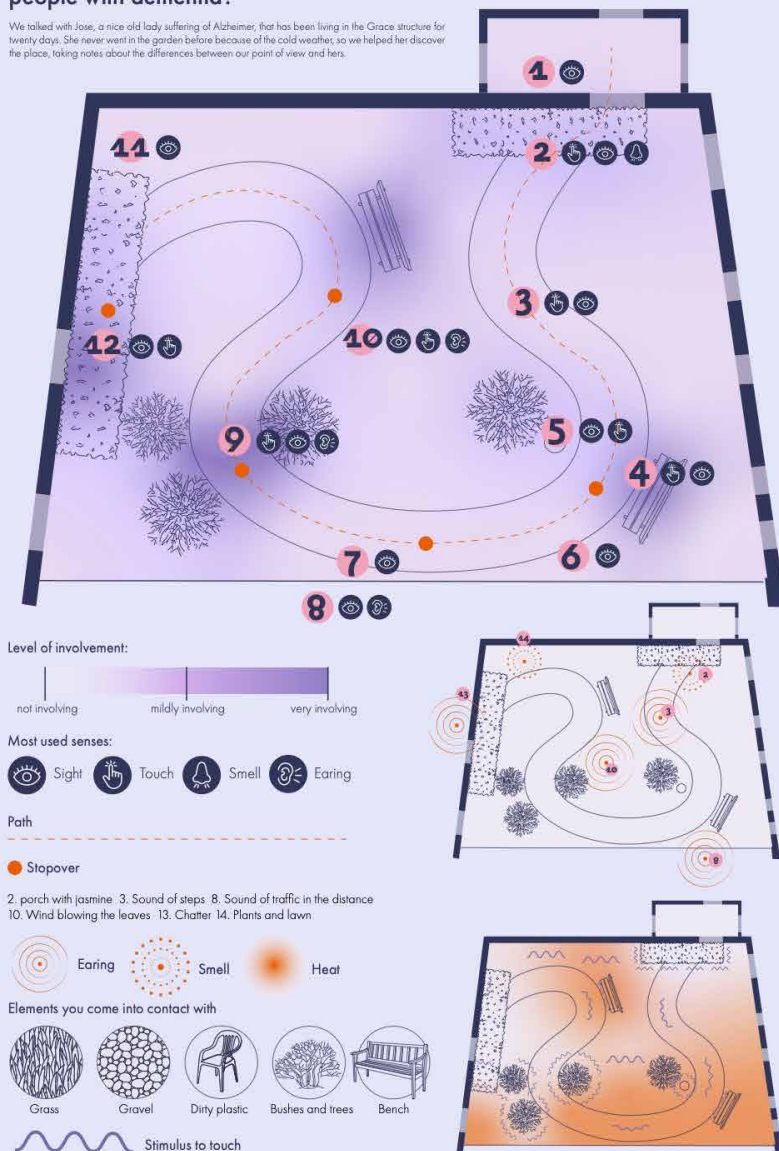
PINA'S ROOM



SENSING AND EMOTIONS

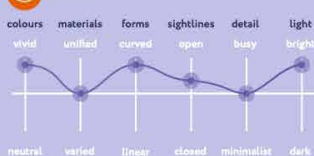
How can young designers better understand the sensory world of elderly people with dementia?

We talked with Jose, a nice old lady suffering of Alzheimer, that has been living in the Grace structure for twenty days. She never went in the garden before because of the cold weather, so we helped her discover the place, taking notes about the differences between our point of view and hers.



Sensory flow

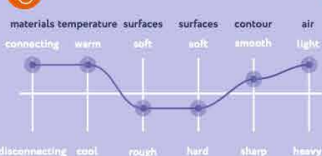
Vision



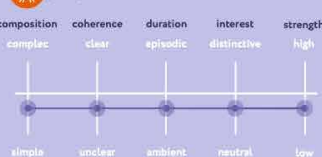
Hearing



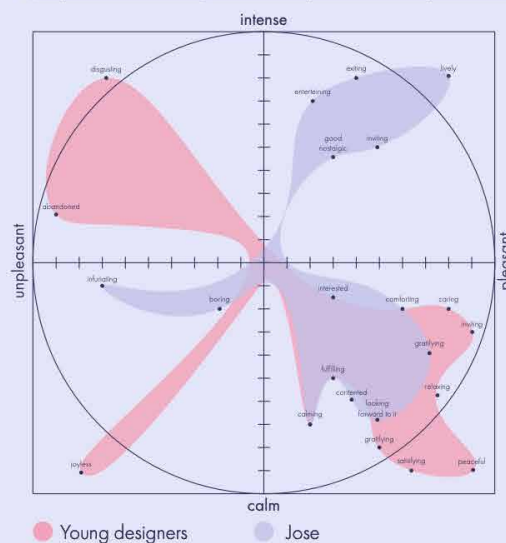
Touch



Smell



YOUNG DESIGNERS		JOSE, OUR GUEST	
	Interest		Interest
1 Entrance	JOYLESS Calm-Unpleasant	INTERESTED Calm-Pleasant	
2 Pergola	GRATIFYING Calm-Pleasant	GRATIFYING Calm-Pleasant	
3 Sidewalk	CALMING Calm-Pleasant	CALMING Calm-Pleasant	
4 Bench	RELAXING Calm-Pleasant	INVITING Intense-Pleasant	
5 Bird fountain	UNCOMFORTABLE Intense-Unpleasant	ANTICIPATING Calm-Pleasant	
6 Plant tags	CARING Calm-Pleasant	ENTERTAINING Intense-Pleasant	
7 Gates	CONTENTED Calm-Pleasant	BORING Calm-Unpleasant	
8 Field	PEACEFUL Calm-Pleasant	NOSTALGIC Intense-Pleasant	
9 Apple tree	INVITING Calm-Pleasant	LIVELY Intense-Pleasant	
10 Leaves	SATISFYING Calm-Pleasant	INFURIATING Intense-Unpleasant	
11 Flower pots	FULFILLING Calm-Pleasant	EXCITED Intense-Pleasant	
12 Chairs and tables	DISGUSTING Intense-Unpleasant	ENTERTAINING Intense-Pleasant	



Our conclusions

From our analyses we have deduced that often as designers we evaluate the space according to criteria related to functionality and aesthetics, while for people with illnesses like Jose the emotional and convivial aspect is much more important.

Young designers



Jose



Form and function

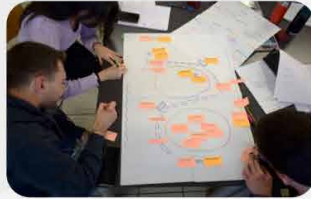
Emotion and sociability

THE SENSORIAL GARDEN

Sesto senso

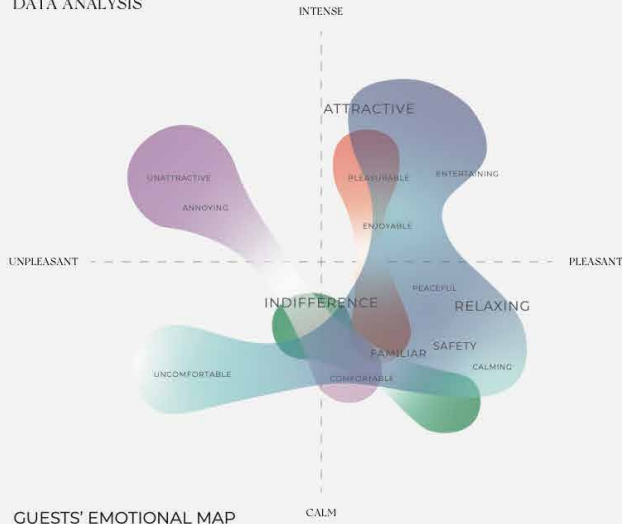
STEP 1

DATA COLLECTION

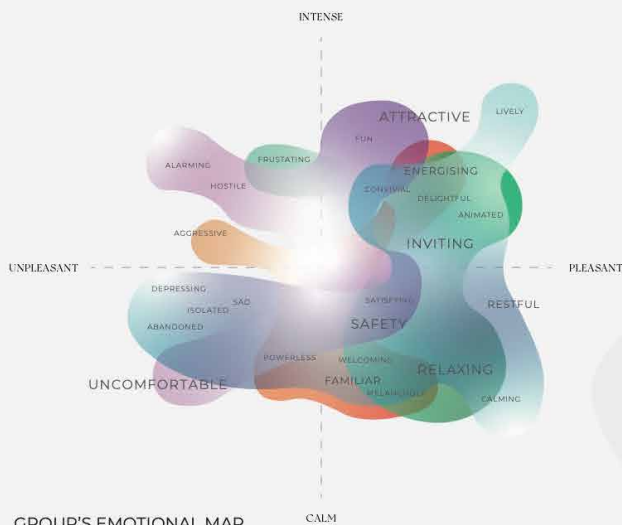


STEP 2

DATA ANALYSIS



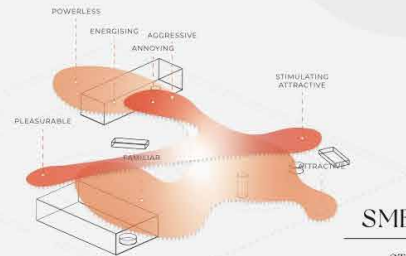
GUESTS' EMOTIONAL MAP



GROUP'S EMOTIONAL MAP

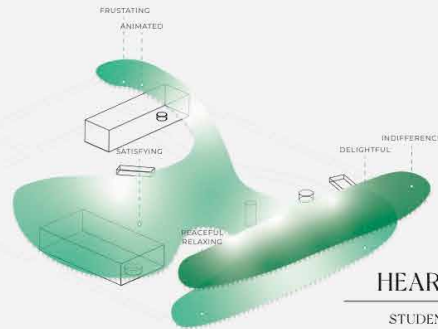
STEP 3

FINAL RESULTS



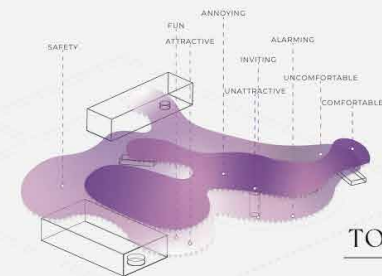
SMELLING

STUDENTS
GUESTS



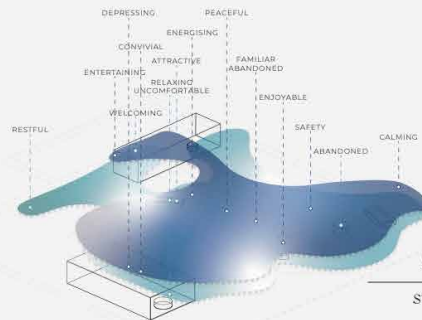
HEARING

STUDENTS
GUESTS



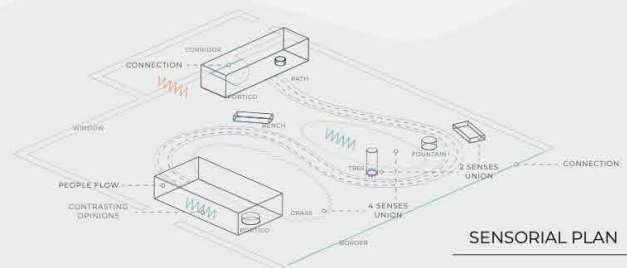
TOUCHING

STUDENTS
GUESTS



SEEING

STUDENTS
GUESTS

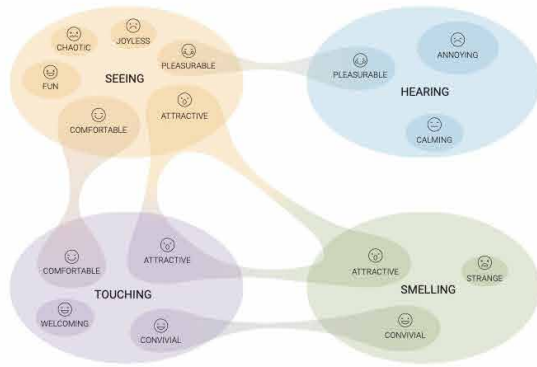


SENSORIAL PLAN

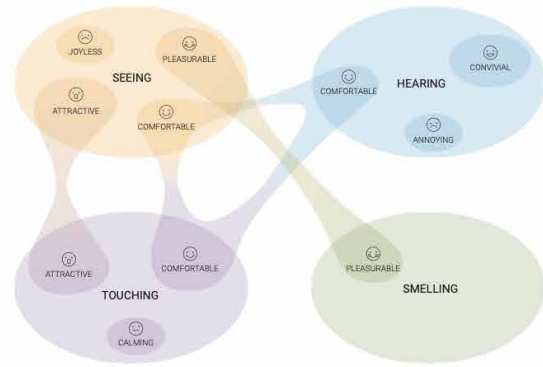
Group 7



OUR PERCEPTIONS



GUESTS PERCEPTIONS



SENSORY FLOW: SEEING



SENSORY FLOW: HEARING



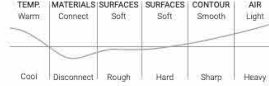
SENSORY FLOW: SEEING



SENSORY FLOW: HEARING



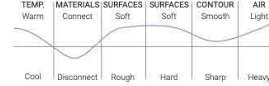
SENSORY FLOW: TOUCHING



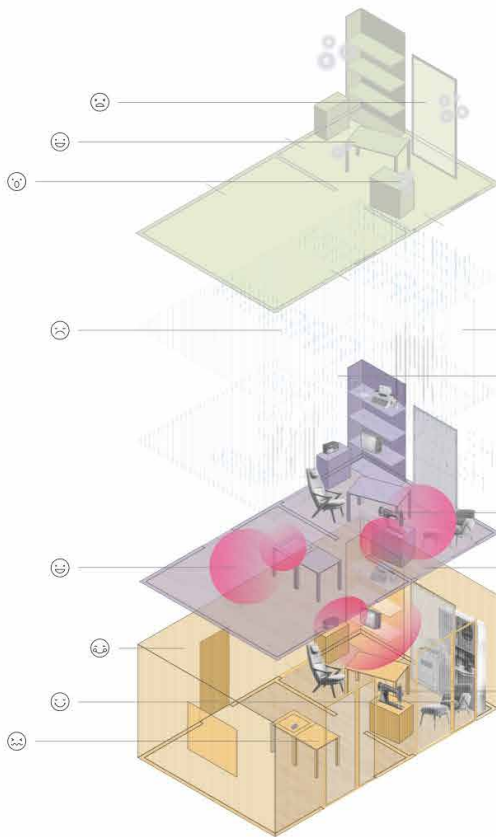
SENSORY FLOW: SMELLING



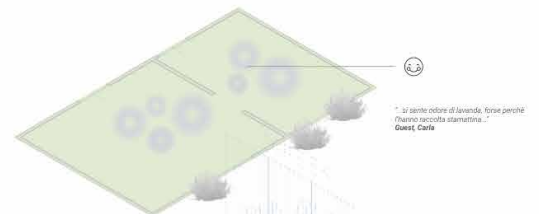
SENSORY FLOW: TOUCHING



SENSORY FLOW: SMELLING



SMELL SENSATIONS



SOUND SENSATIONS

TOUCH SENSATIONS

VISUAL SENSATIONS

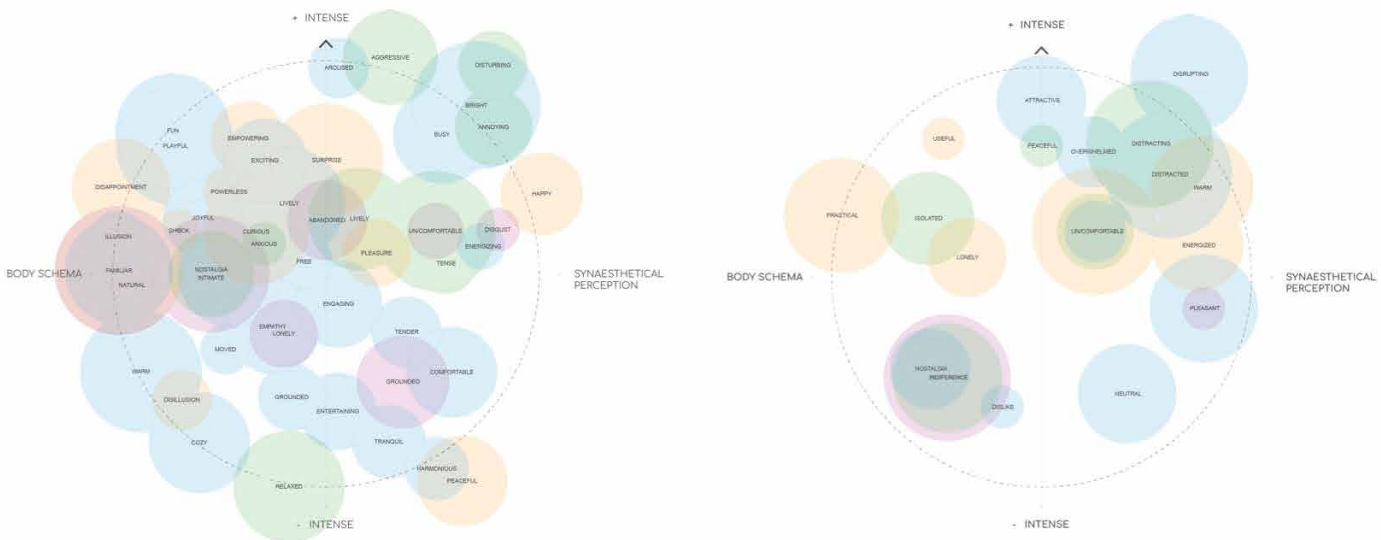
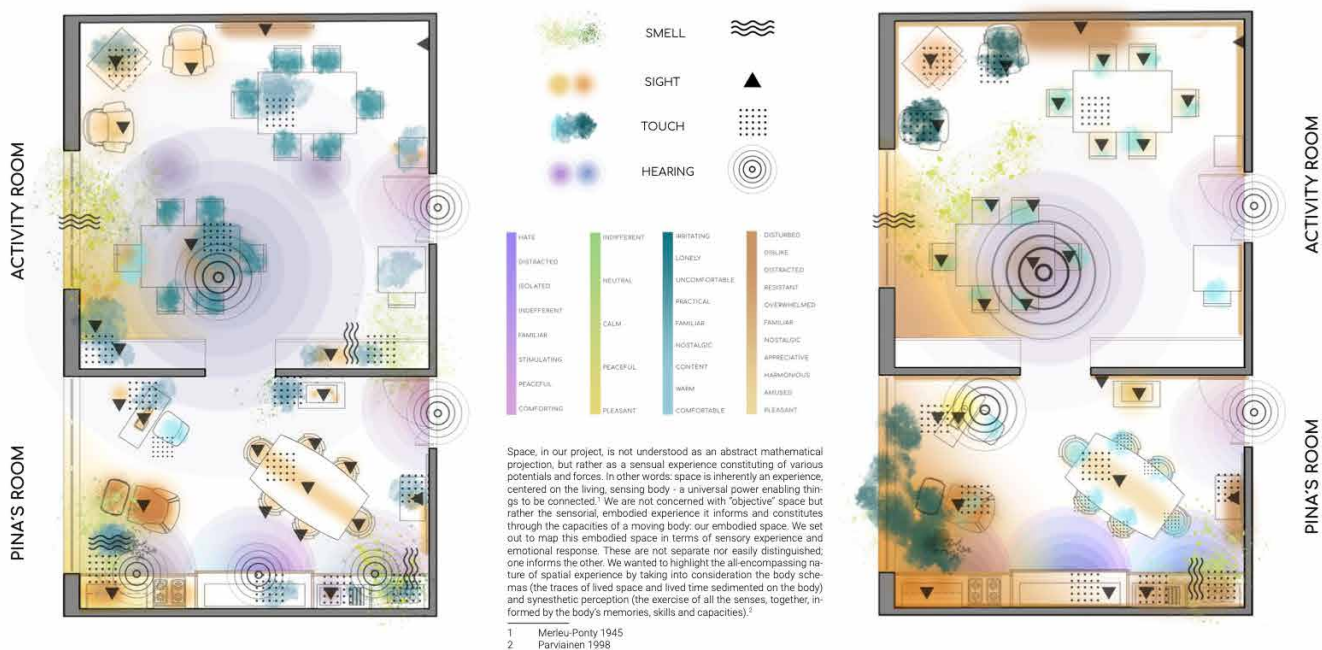
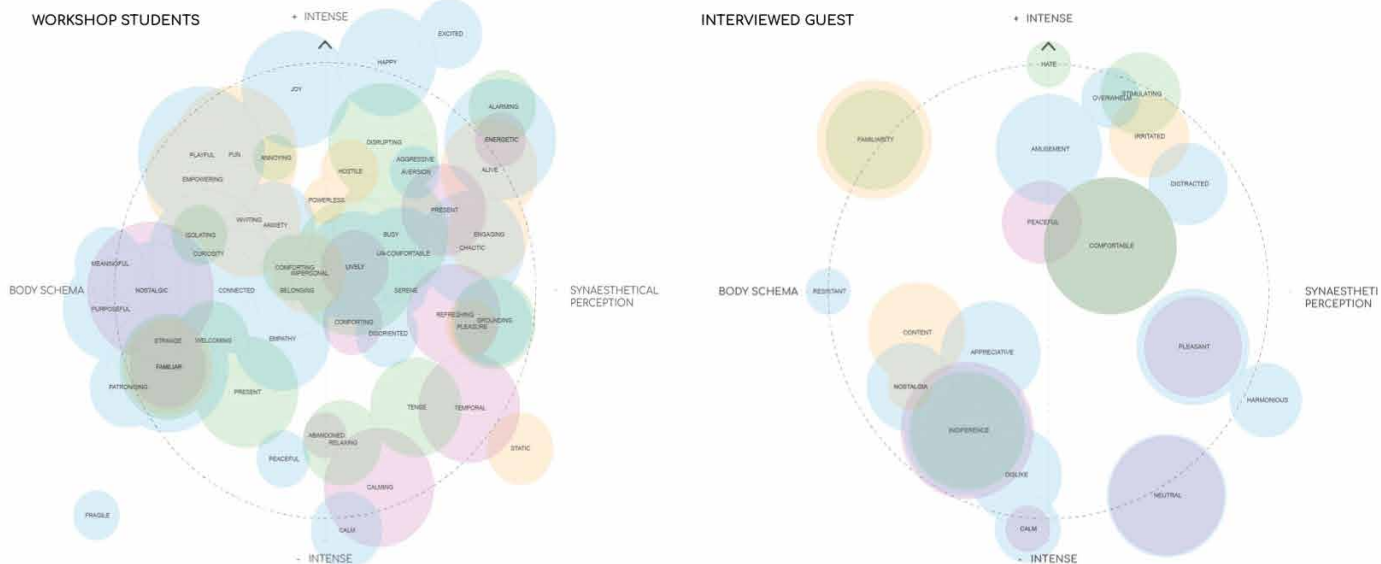
"Il sente odore di lavanda, forse perché quando accosta il materasso..."
Guest Carla

"Il sente parlare con le altre persone, almeno qui siamo in compagnia..."
Guest Carla

"Io non vedo mai in giardino e mi il freddo non piace, meglio stare dentro..."
Guest Carla

"In questa camera ci sono tante cose interessanti, mi ricordano i miei tempi..."
Guest Carla

Group 8

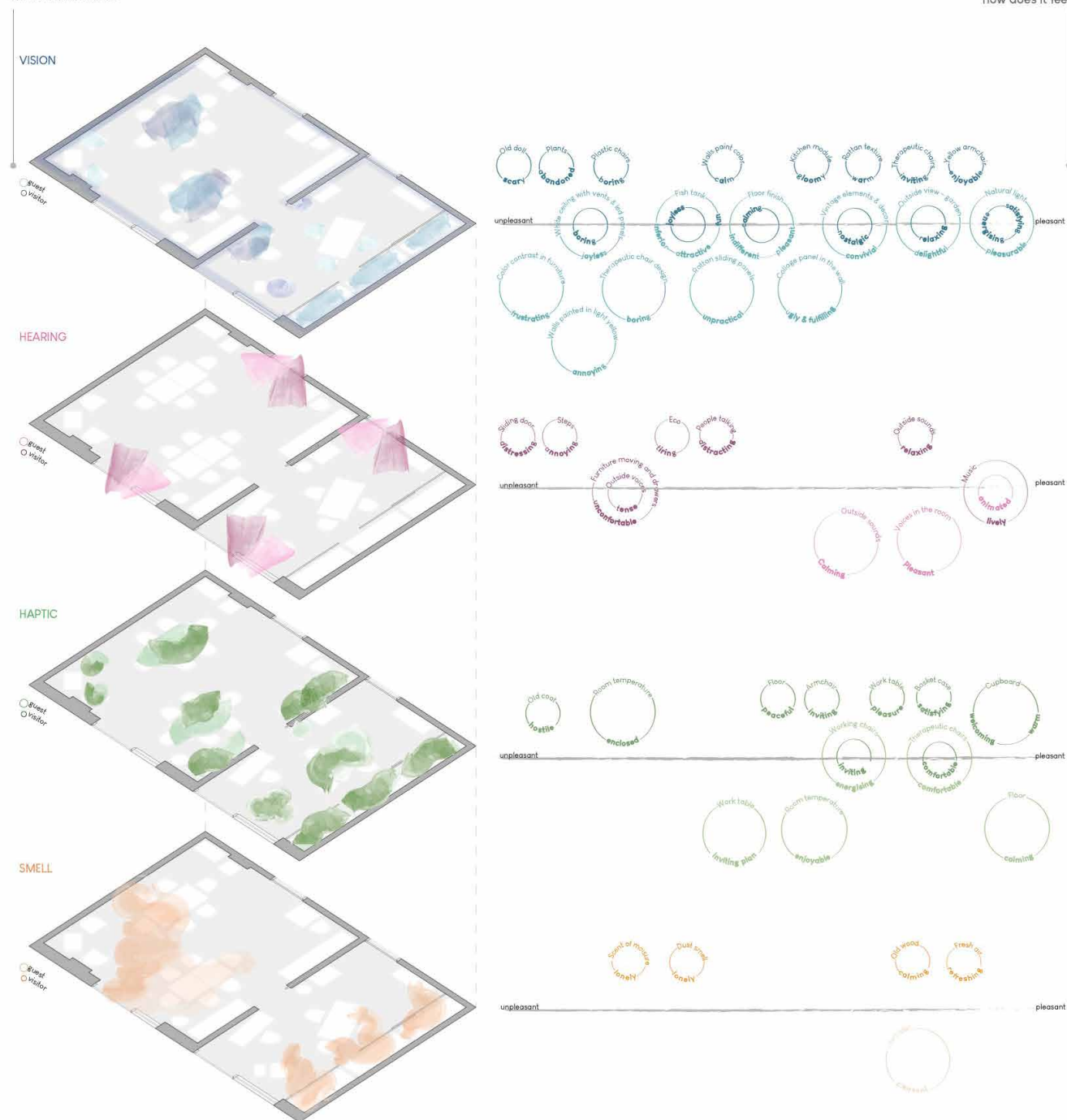


EMOTIONAL JOURNEY
exploring sensorial diversity

How can young designers better understand the sensory world of elderly people with dementia?

where is the sense?

how does it feel?



Designing the senses... when we design spaces we design modes of being:

Our architectural and design vision permeates us that we deepen elements that go unnoticed by users. Beyond color theory, materials or trends, we can not forget that sensitivity and empathy is what leads us to create complete projects. This case study allows us to turning challenges into opportunities. But above all to understand phenomenology for the benefit on sensorial and emotional experience of this sector.



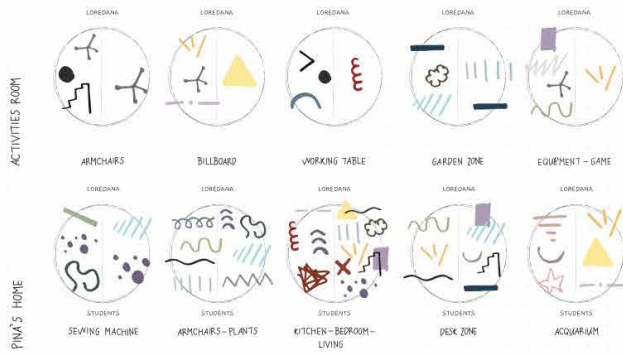
Group 10

DATA SIGN

MAPPING THE SPACE THROUGH SENSATIONS

AREA MAPPING - DATA SIGN DIAGRAMS

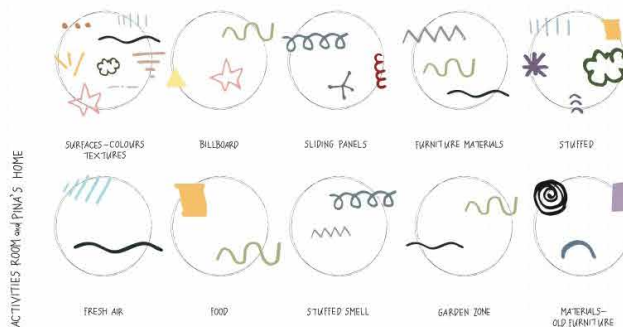
SEEING



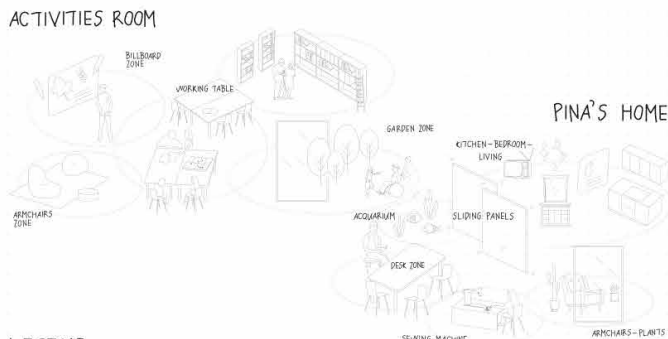
HEARING



TOUCHING and SMELLING



SPATIAL VISUALIZATION



LEGEND

PLEASANT ☺

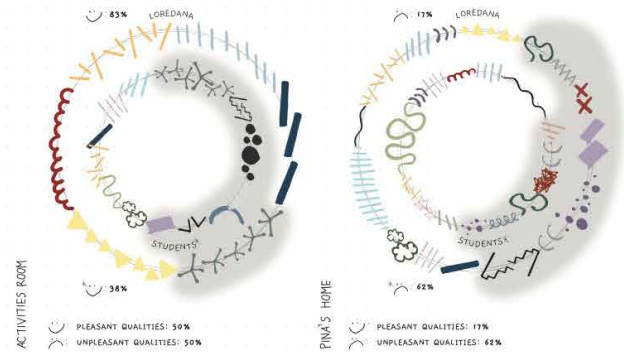


UNPLEASANT ☹

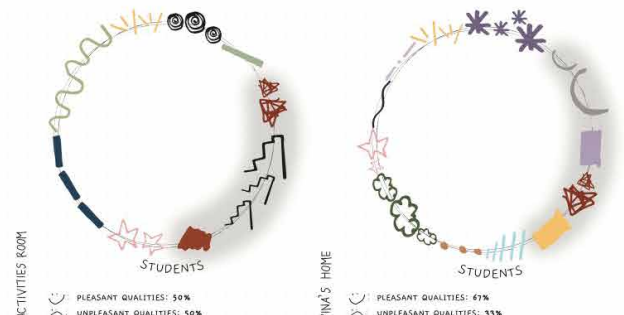


DATA SIGN RESULTS

SEEING



HEARING



TOUCHING

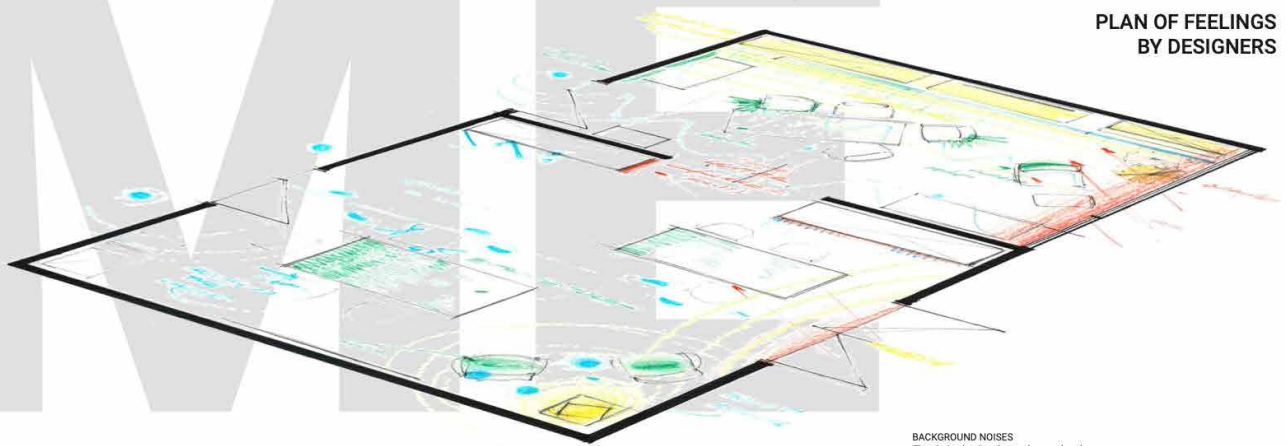


GENERAL IMPRESSION



Group 11

PLAN OF FEELINGS BY DESIGNERS



FURNITURE AND OLD OBJECTS
Antique smell
Reminiscent objects like sewing machine, memory of grand parents house

JOYLESS
NOSTALGIC



WALL COLORS
Colorful Elements in the walls
Yellow pastel color

FUN
JOYFULL
ENERGISING

The texture of the wals
DISTRESSING

PLANTS AND NATURE
The smell of soil from inside plants

PLEASURABLE
COMFORTABLE

SUNLIGHT AND BREAZE
The smell of nature coming inside
Fresh air
Warmness near the window
Natural light illuminating the rooms

PLEASANT
DELIGHTFUL



BACKGROUND NOISES
The chaies being dragged around make an unpleasant noise

DISTRESSING

The nature sound coming from the outside

PLEASANT

Voices and steps across the room

DISTRACTING

SLIDING DOORS
Apparently make the space cozy but the touch is ruff

CONFORTING

When we move it makes a sharp sound

DISTRESSING

PRESENT

ARMCHAIRS
Alarming yellow
Blue texture, a bit ruff

DISTRESSING



PRESENT

GETHERINGS AND PLAYING CARDS
"I used to play card with my friends. Now I carry a deck to play here with my colleagues"

CONVIVIAL

ARMCHAIRS
"Even though I prefer that smooth texture of the yellow chair and it's comfortable, I am repulsed by the color. I prefer this one, green, that is a bit ruff"

DISTRESSING

BACKGROUND NOISES
"The nature sounds are calming"
"I don't mind the noises coming from the corridor"

PEACEFUL
ENTERTAINING

PAST

FURNITURE AND OLD OBJECTS
"Reminds me of the things that I had but I can't use anymore, like the sewing machine"

UNCOMFORTABLE



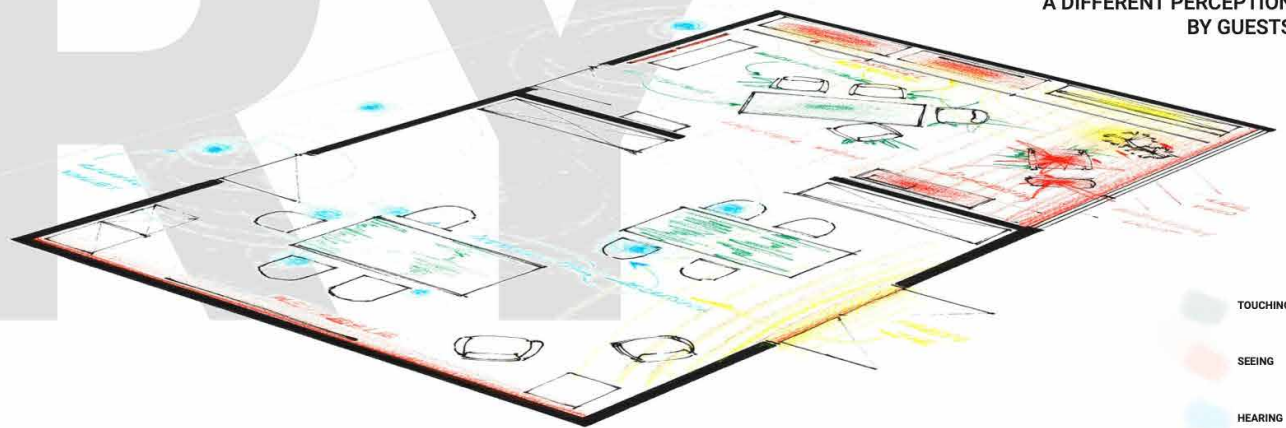
PLANTS AND NATURE
"I used to live in a place full of colorful plants"

HOMESICKNESS

SUNLIGHT AND BREAZE
"We usually go near the window to feel the warmth of the sun and the air coming from the outside"
"The natural lights coming inside the room are delightful"

PLEASURABLE
DELIGHTFUL

A DIFFERENT PERCEPTION BY GUESTS



TOUCHING

SEEING

HEARING

SMELLING



POLITECNICO
MILANO 1863

DIPARTIMENTO DI DESIGN

LAB·I·R·INT
RESEARCH ATELIER

ual: university
of the arts
london

EQUA

