

302-12

302-13

# SI PING JING LAO YUAN

Tieling Road, Lane 50, No 63, Yangpu District, Shanghai

Experience Design  
Interactions and Environments  
Course Code 2270033  
Prof. Kaja Tooming Buchanan  
Tongji University

Ofelia Fornaciari, Politecnico di Milano  
Harun Tören, HfT Stuttgart  
Cicii - WANG Qian, Tongji University  
Winnie - WEI Na, Tongji University  
Umooon - ZHANG Yumeng, Tongji University



# CONTENT

- Executive Summary
- **Design and Management Challenge**
- **General Purpose**
- Design Process
- **“Having an Experience” - John Dewey**
- **Change of the concept of “Home”**
- Research Methodology
- Issue Mapping strategy
- Phenomenological Observation
- Semi-Structured Interview
- Users Profiles
- **Issue Map Structure**
- **Areas of Issues**
- **Problem Statement**
- **Hypothesis**
- Initial Ideas
- Project Proposal
- List of figures

# EXECUTIVE SUMMARY

The **Jing Lao Yuan Nursing Home** in the Siping Community in Shanghai started in 2008. It was the Siping community government that initiated the development of an idea for a day and night care place for the elderly on Tieling Road more than 10 years ago.

The nursing home is supported and run by the **Siping Community government**. However, every resident needs to pay every month 1800 RMB for his or her “bed.” In addition, residents also need to pay for their nursing level: 1400 RMB for mild, 1600 RMB for middle, or 1800 RMB for severe nursing level.

The nursing home has a total of **39 staff members**: 3 managers, 3 doctors, 21 nurses, 3 security workers, and others, who take care of different tasks in the facility, such as cooking, washing clothes etc.

The nursing home has **three nursing levels: mild, middle and severe**. The distinctions between the nursing levels are decided by Chinese government policy and are official names for all nursing homes in the country.

The nursing home has a total of **80 beds and 78 residents**. All beds are occupied all the time, except two beds, which purposely are held “vacant” for emergency situations. The nursing home has 48 people in the mild nursing level, and 30 in the middle and severe nursing levels. According to the Head of the nursing home, Mr. Xu, the waiting time to get a place in the nursing home could be quite long and can vary. The average age of the residents is 85 years.

At the **mild nursing level**, the nurse needs to **take care of 20 residents in a 12-hour working shift**. At the **severe nursing level**, the nurse takes care of a **maximum 6 people**. In the severe level every room has its own nurse who **takes care of elderly for 24 hours**.

Nurses are chosen very carefully and they need to complete a 2-week educational course before they start working at the nursing home.

# SIPING JING LAO YUAN

Siping Nursing Home

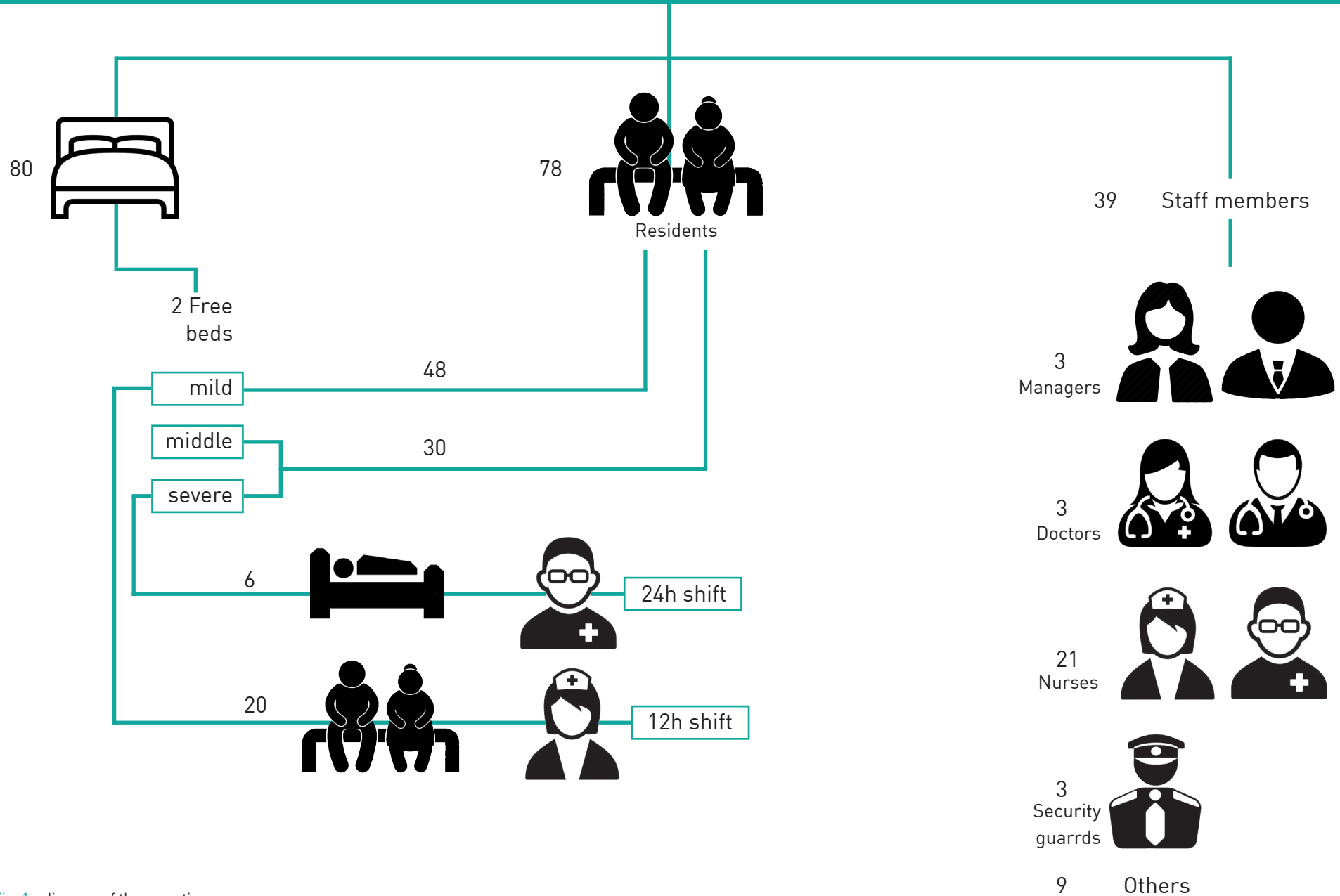


fig. 1 - diagram of the executive summary



# DESIGN AND MANAGEMENT CHALLENGE



New residents at the Jing Lao Yuan nursing home in the Siping Community in Shanghai have **difficulty adapting** and **being integrated** into their new “home” in a new physical, social, and cultural environment.

fig. 2 - elderly at lunch in the canteen

# GENERAL PURPOSE

Our general purpose is to identify how to strengthen the concept of “**being at Home**” in the Jing Lao Yuan Nursing Home, by the stimulation of **Memory** and the offer of opportunities to **increase social interactions** among the users.



## DESIGN PROCESS

List of each step of the process taken to reach the final result.



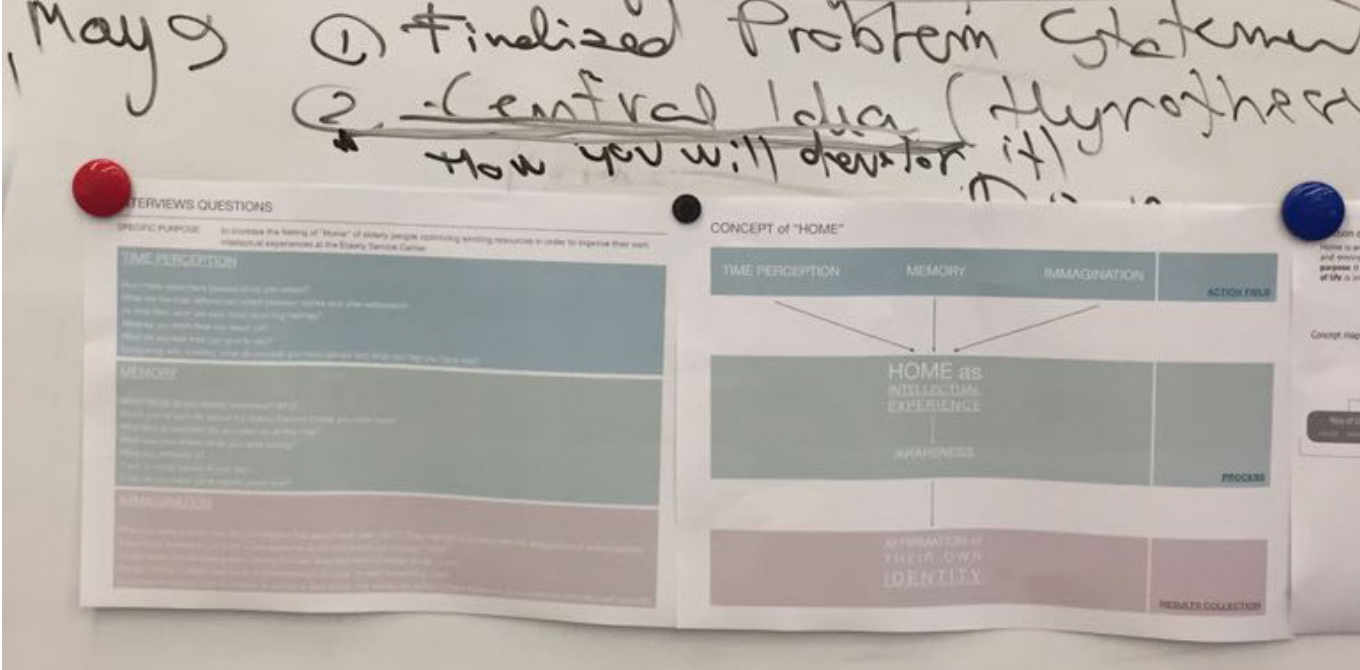
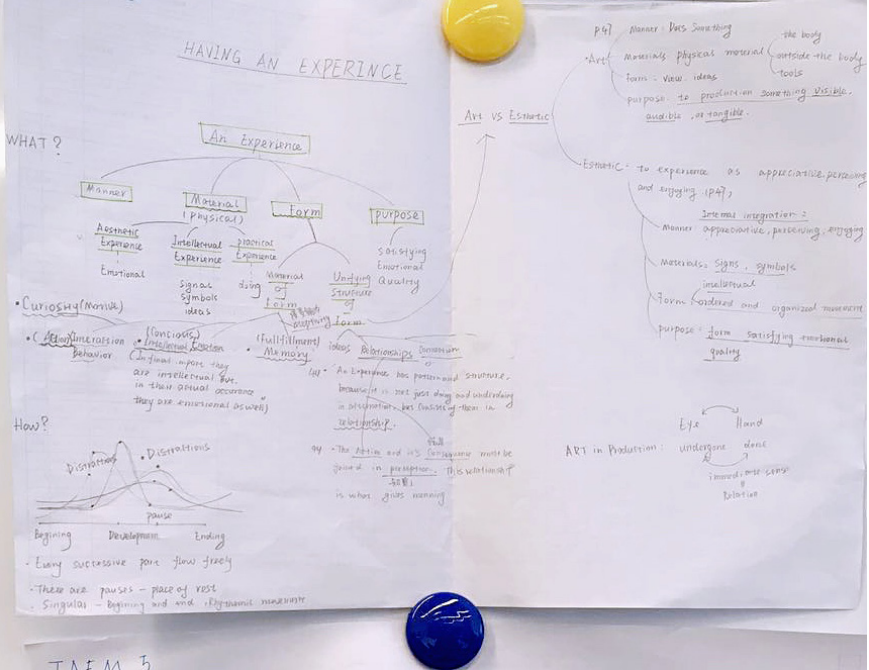


fig. 3 preliminary concept map of „Having and Experience“

fig. 4 preliminary interview questions and concept map of „Home“

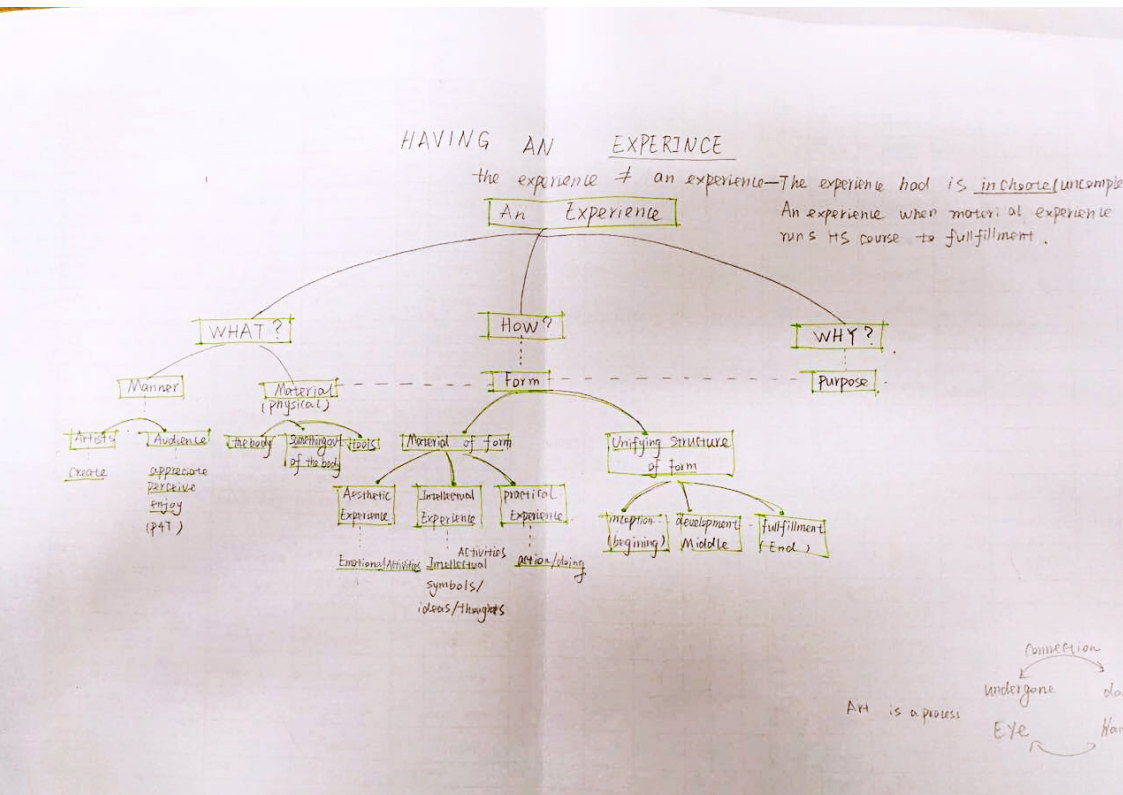


fig. 5 preliminary concept map of „Having and Experience“

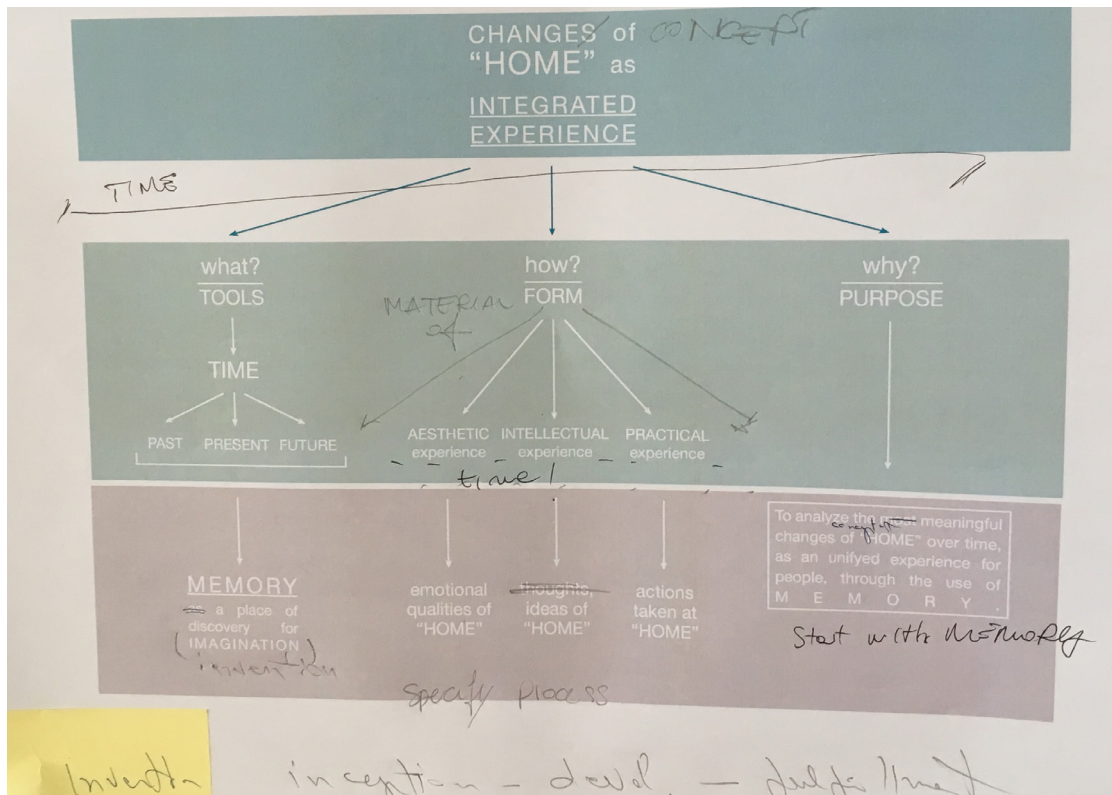


fig. 6 preliminary map of Change of Concept of „Home“



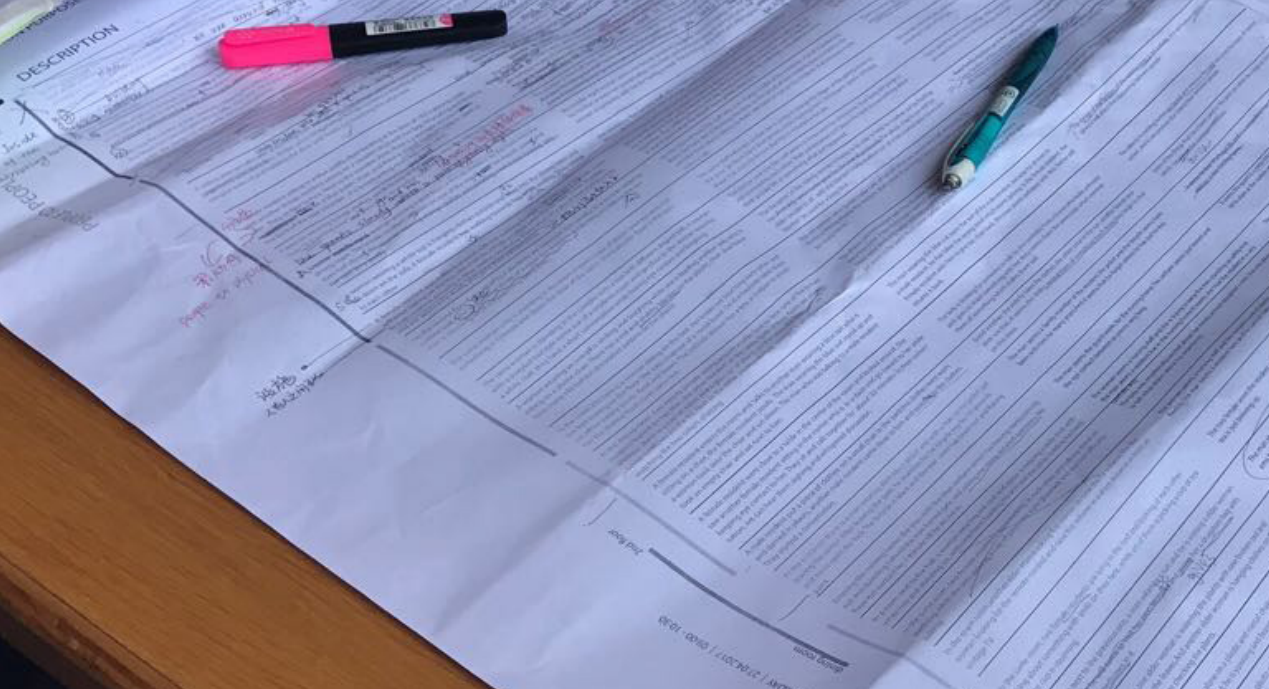


fig. 7 working on changing on our Issue Map

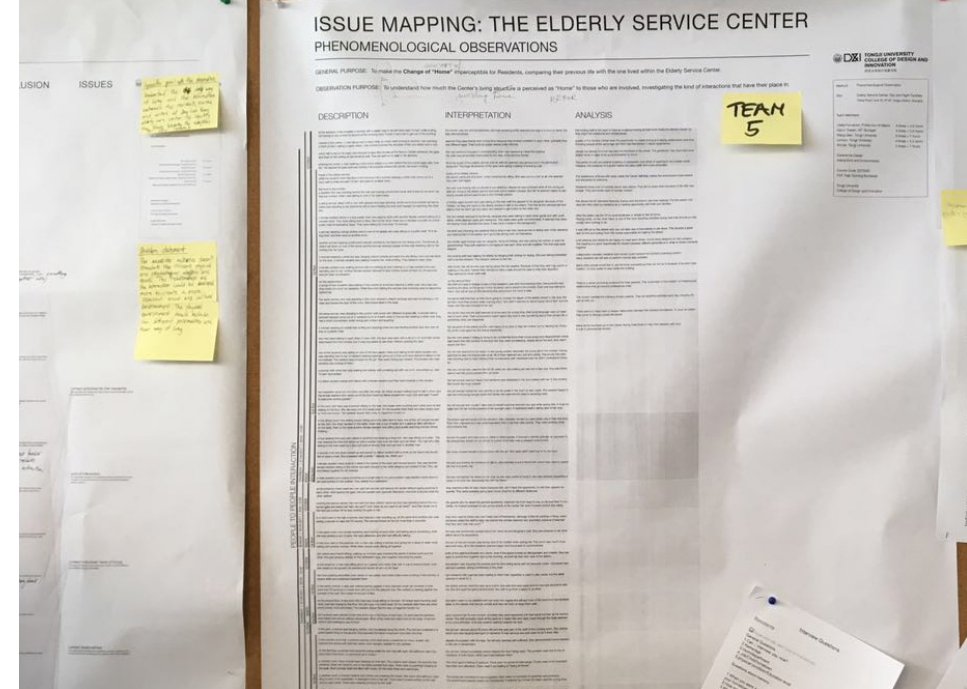


fig. 8 process of the Issue Map



fig. 9 discussion with Kaja Tooming Buchanan



fig. 10 discussion with Kaja Tooming Buchanan



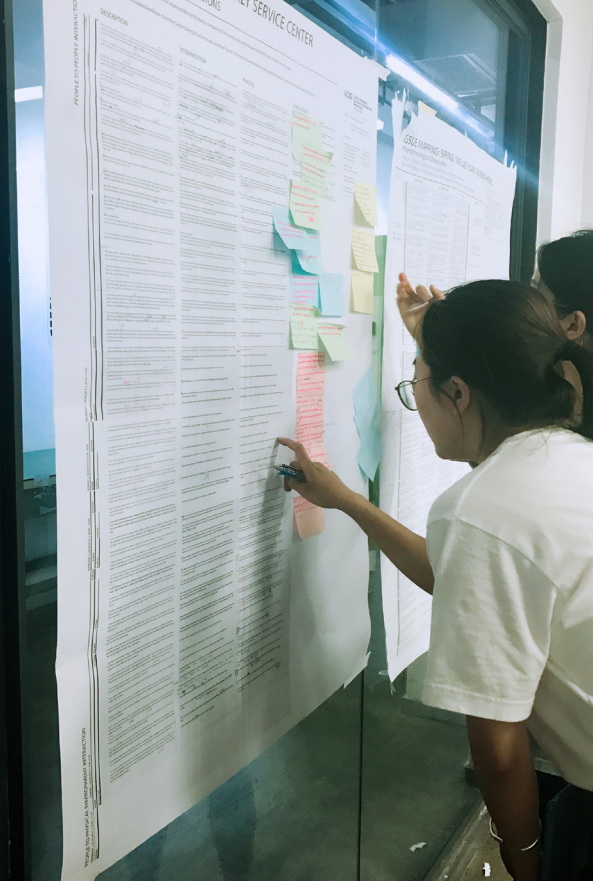


fig. 11 working on the conclusion of our observation

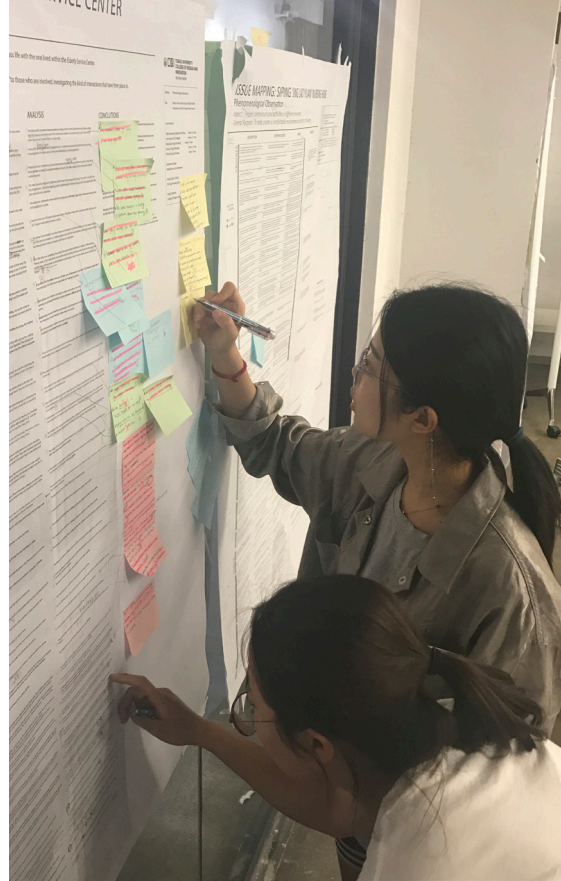


fig. 12 working on the conclusion of our observation



fig. 13 working on the Issue Map

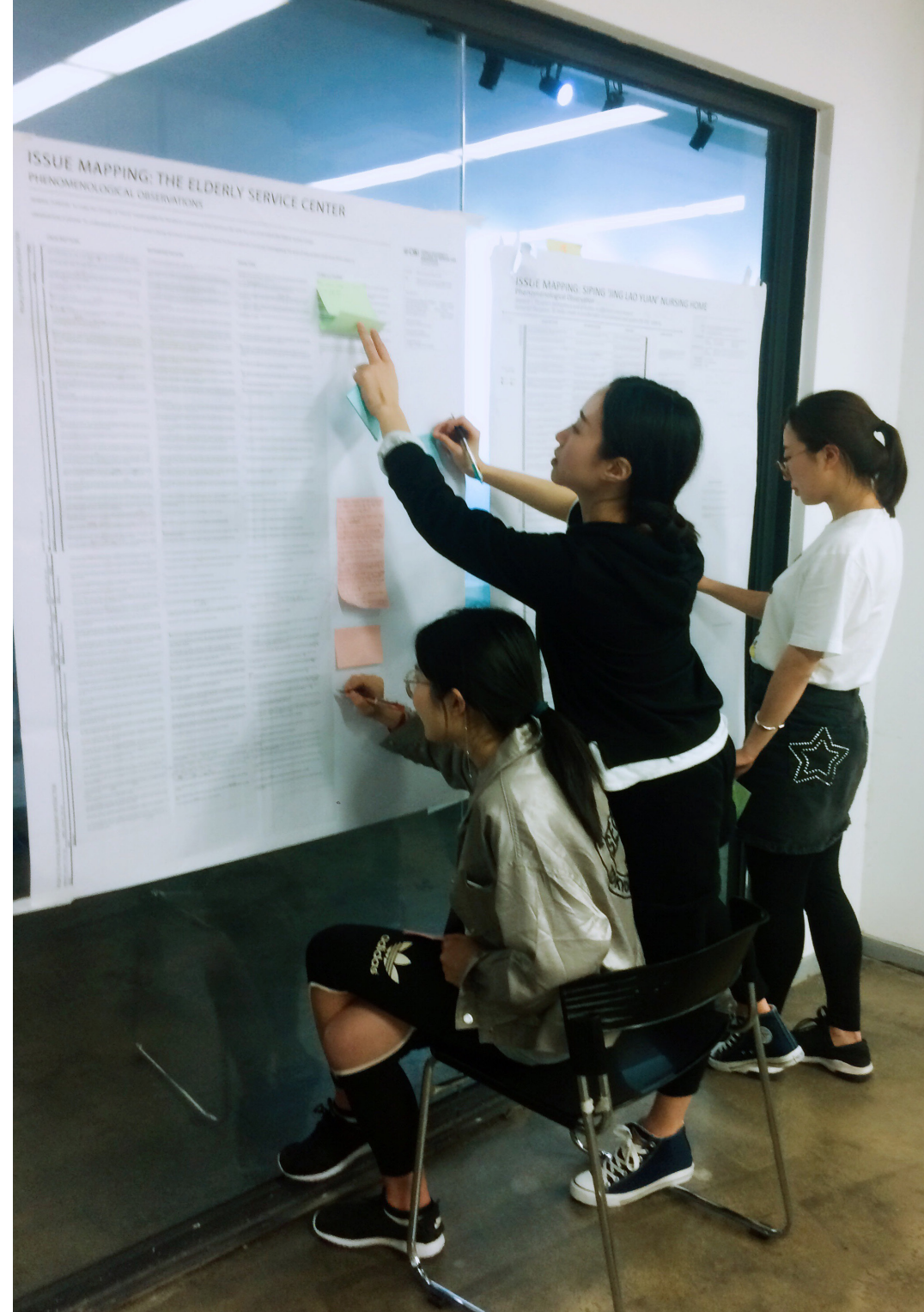


fig. 14 working on the conclusion of our observation







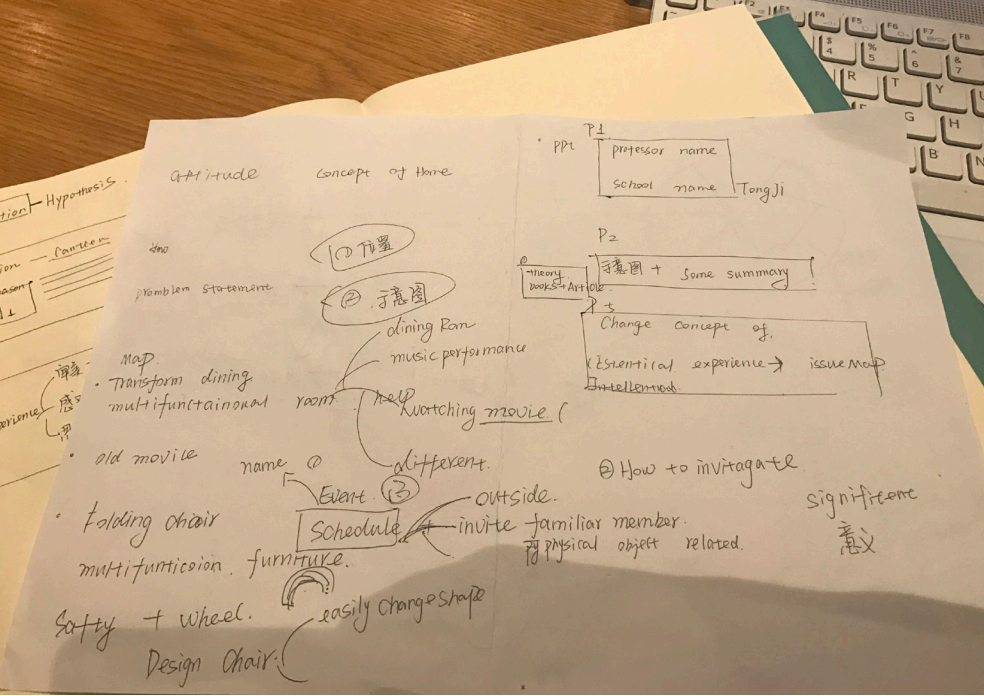


fig. 17 interview draft

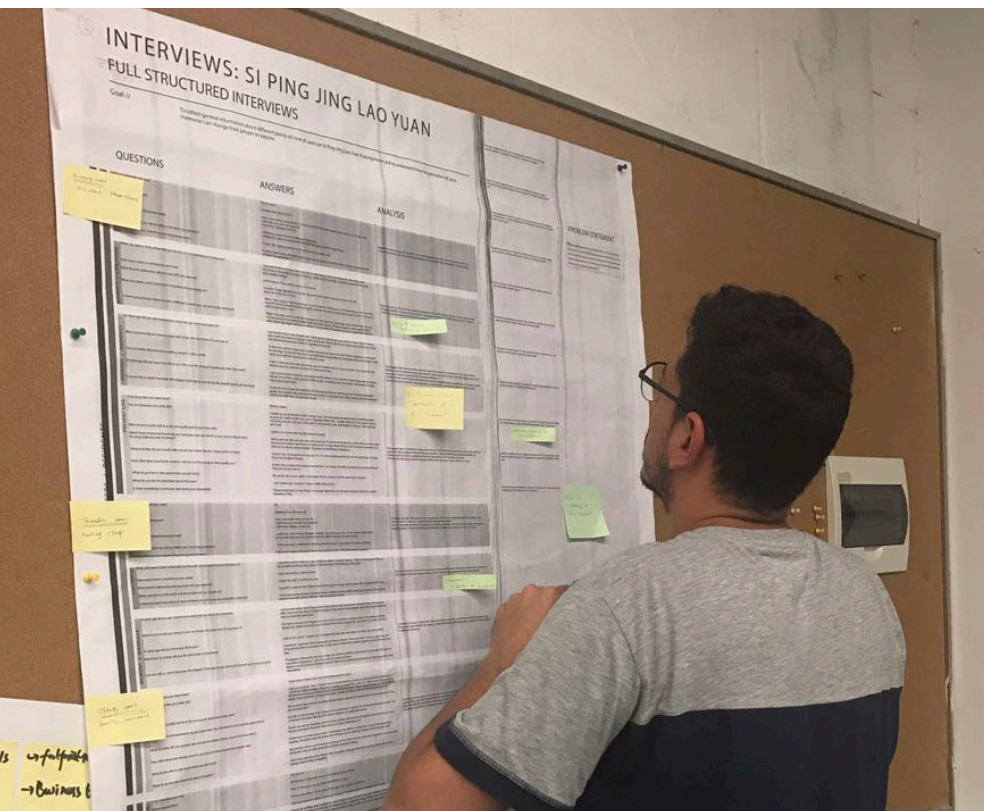


fig. 18 correction of the preliminary interview - issue map

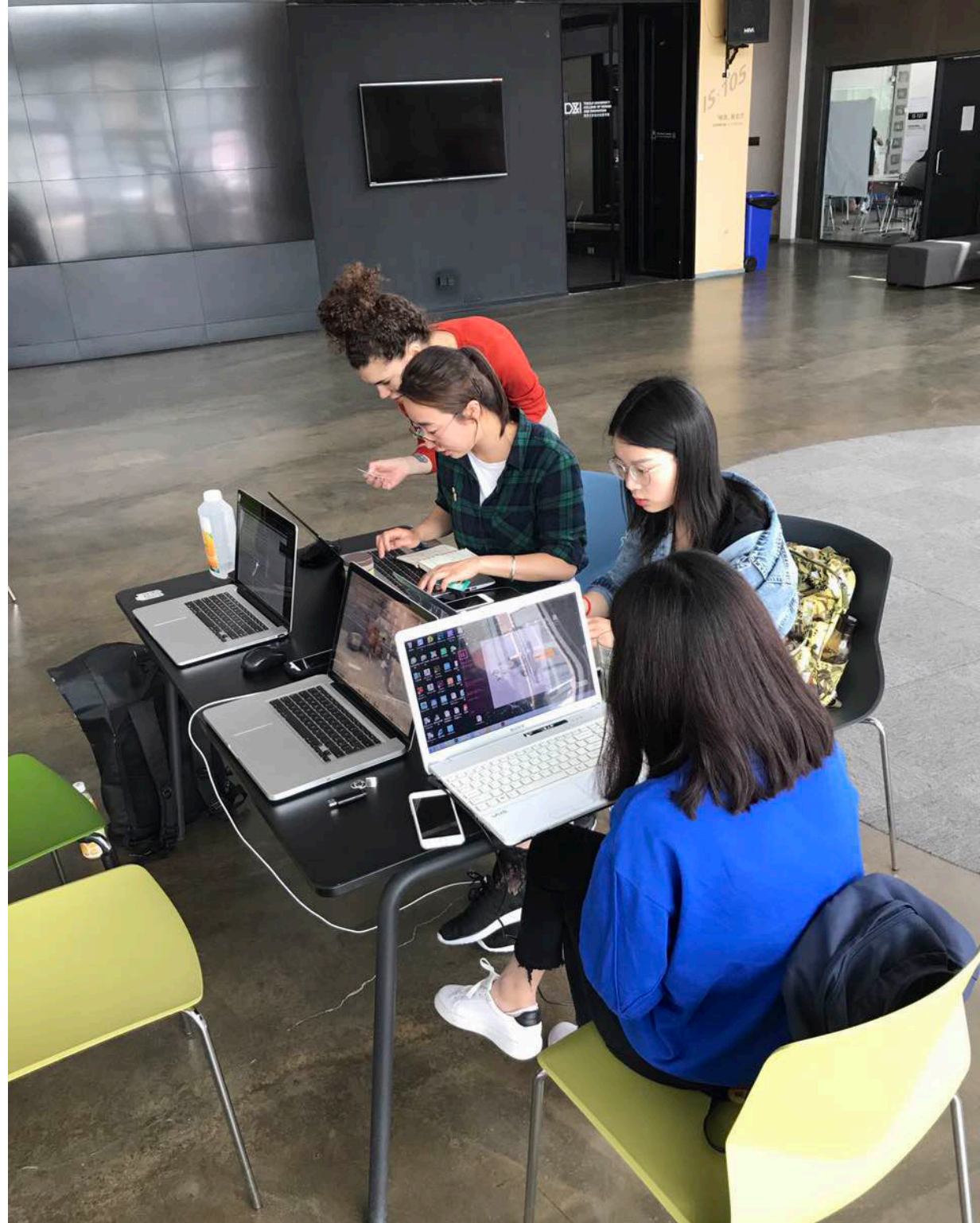


fig. 19 team working







## THEORY RESOURCE & CONCEPT OF “HOME”

DEWEY, John, “Having an Experience.”  
In *Arts as An Experience*.

# THEORY RESOURCE

# “Having an EXPERIENCE”

by John Dewey

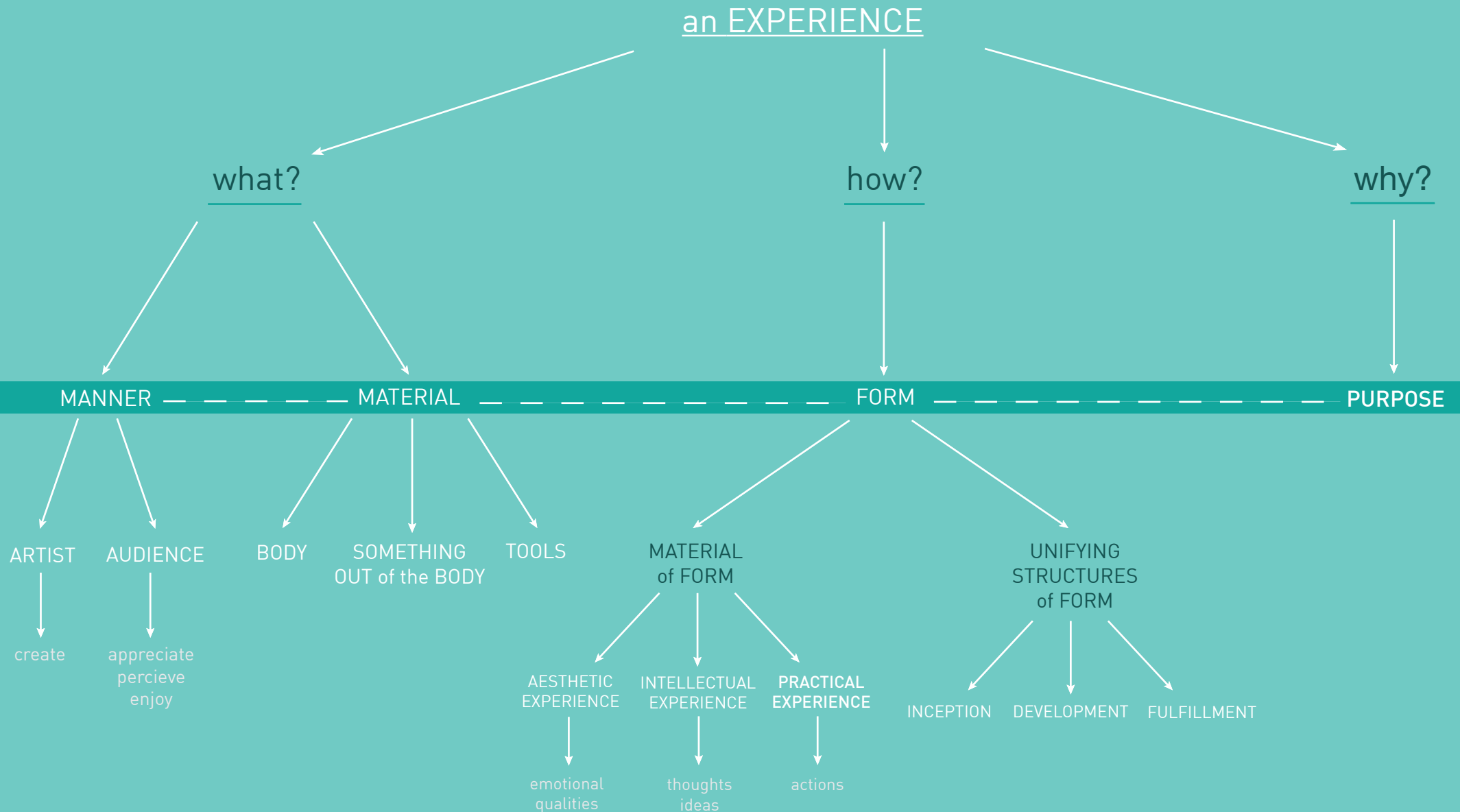


fig. 22 diagram of Dewey's theory on „Having and Experience”

# CHANGE of the concept of "HOME"

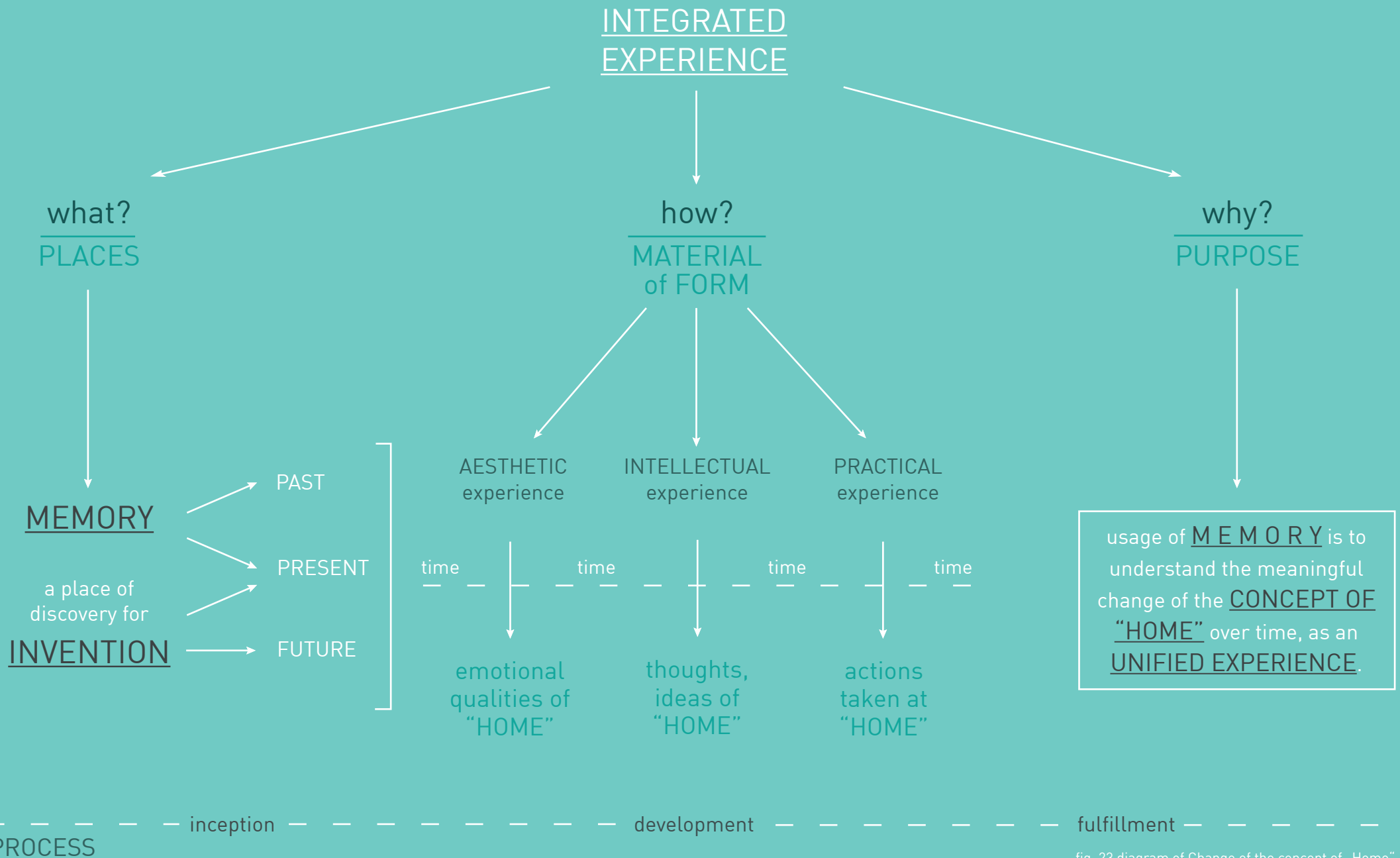


fig. 23 diagram of Change of the concept of „Home“





## RESEARCH METHODOLOGY

### Issue Mapping Strategy

- Phenomenological observation
- Semi-structured interviews

# RESEARCH METHODOLOGY

## Issue Mapping

„Issue Mapping is a strategy. It is an evidence-based discovery tool for identifying issues that constitute problematic situations. It is a successive process that unfolds over time and has its own set of methods. These methods help to identify the places for issues analyze their contextual belonging, and relevance to problematic situations.“

Kaja Tooming Buchanan

# ISSUE MAPPING STRATEGY

The issue mapping strategy provides the specific aspects for the **phenomenological observations** and **interview** that can affect **people to people** interaction and **people to physical environment** interaction.

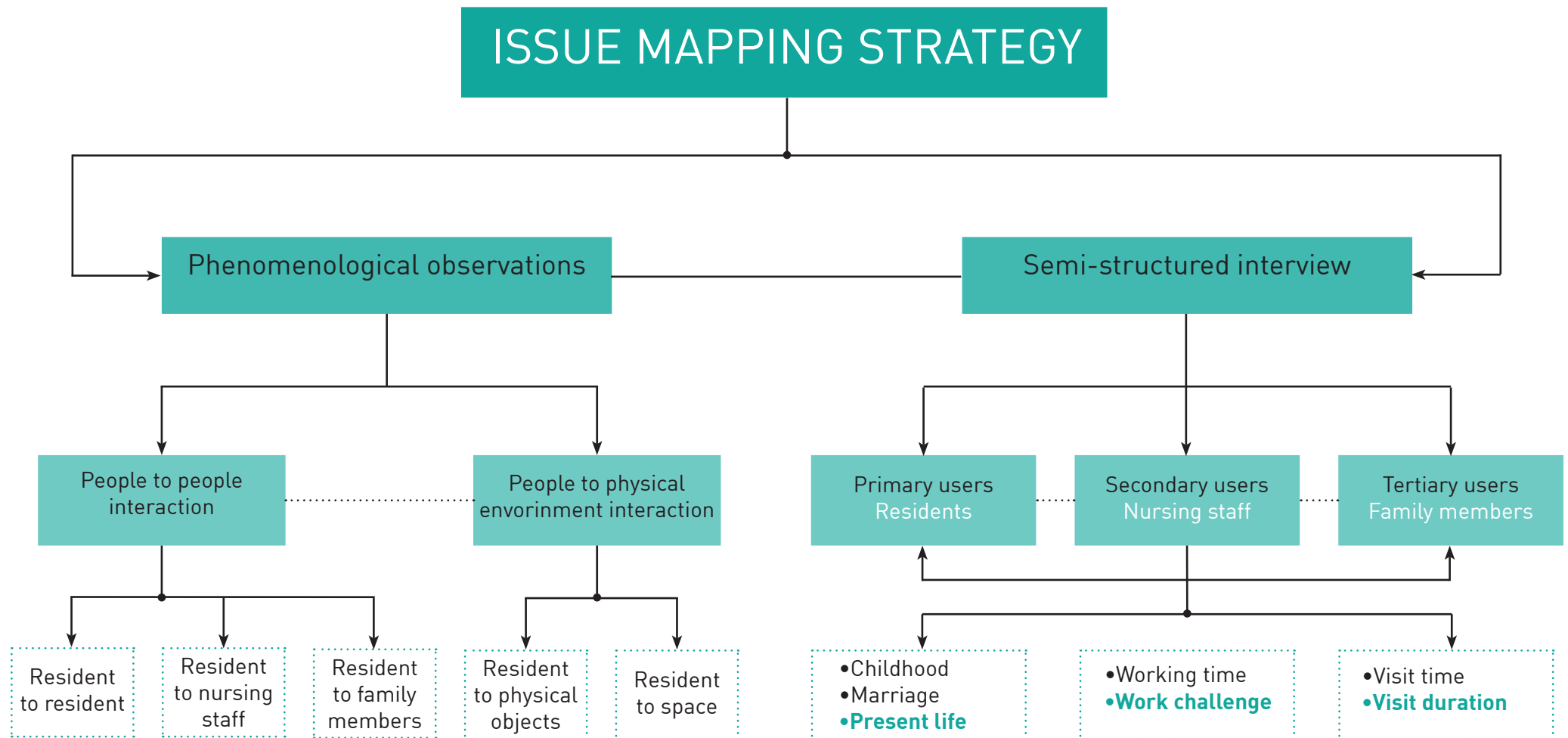


fig.24 diagram of Issue Mapping Structure



105—41

## PHENOMENOLOGICAL OBSERVATION

### GOAL

To understand how **people to people** interactions and **people to physical environment** interactions can affect the state of mind of different users in the Jing Lao Yuan Nursing Home.

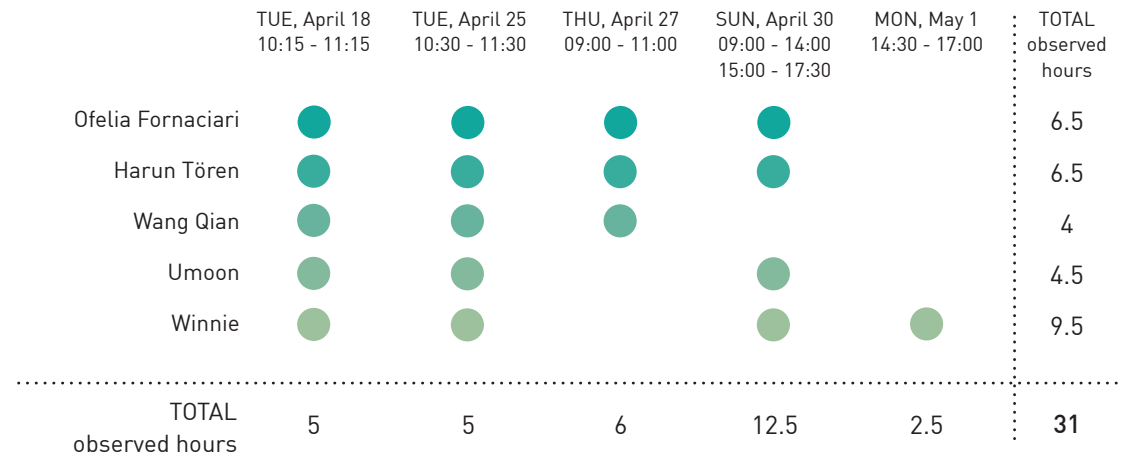


fig. 25 diagram of our total observation time

fig. 26 picture of a residents bed





fig. 28 two interviewees in the backyard



fig. 29 two interviewees in the backyard

## SEMI-STRUCTURED INTERVIEWS

### GOAL

To collect **general information** about different points of view of users on Si Ping Jing Lao Yuan Nursing Home and to understand how the **perception** of some **memories** can **change** from people to people.

|                             | FRI, MAY 5<br>14:30 - 16:30 | TOTAL<br>observed<br>hours |
|-----------------------------|-----------------------------|----------------------------|
| Ofelia Fornaciari           |                             | -                          |
| Harun Tören                 |                             | -                          |
| Wang Qian                   | ●                           | 2                          |
| Umoon                       | ●                           | 2                          |
| Winnie                      | ●                           | 2                          |
| <b>TOTAL observed hours</b> | <b>6</b>                    | <b>6</b>                   |

fig. 27 diagram of the total interview time

# SEMI-STRUCTURED INTERVIEWS

## Interview questions



### Primary users (Residents)

#### General information

Can I interview you now?  
Name/age?Job/child/hometown?  
Physical condition/Education level?  
.....

#### Childhood

When you were a child, where did you live and can you describe your hometown?  
How many sisters or brothers do you have?  
What kind of relationship did you have with your parents?  
Is there any particular object of your childhood to which you are particularly attached?  
.....

#### Marriage

At what age did you get married and where did you live in that moment?  
What furniture did you bring to your new house and what kind of house was it?  
.....

#### Present life

How long have you been here?  
Can you describe your daily life?  
Who do you usually talk to or do you usually spend your time with?  
.....



### Secondary users (Nursing staffs)

#### General information

Can I interview you now?  
Name/age?Job/child/hometown?  
Physical condition/Education level?  
.....

#### Working time

What are your tasks inside the Elderly Service Center?  
Can you describe your daily work?  
Which is your working method?  
Are you satisfied with your salary comparing with your working hours?  
What do these residents mean to you?  
And which is the biggest challenge in your work?  
Who do you usually talk to or do you usually spend your time with during your free time?  
At what age did you get married and where did you live in that moment?  
What furniture did you bring to your new house and what kind of house was it?  
Are you satisfied with your working environment?  
Do you have any suggestion about that?  
Do you think people who live here feel this place as their own home?  
What do you usually do after your workshift?  
Do you usually leave the Center or do you prefer to stay here?



### Tertiary users (Family members)

#### General information

Can I interview you now?  
Name/age?Job/child/hometown?  
Physical condition/Education level?  
.....

#### Visit time

What kind of activity do you do with your relative when you come to visit him/her?  
Could you describe the visiting process?  
  
What kind of "gifts" do you usually bring to him/her?  
  
Do you usually help the residents in their daily routine?  
What is your opinion about this place?  
And why did you choose it with your relative?  
What do you think about the expenses fees?  
Are they fit to the living conditions offered by the service?  
.....




# USER PROFILES

We have identified three main characters who play a key role withing the Jing Lao Yuan Nursing Home.

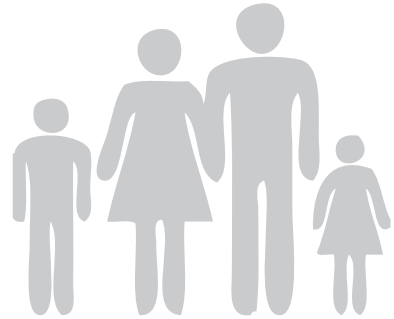
## ELDERLY PEOPLE -primary users-

|                             |  |
|-----------------------------|--|
| Age:                        | 60 - 100 years old                                     |
| Gender:                     | 75% Female   |
| Character:                  | Mostly passionate and easygoing                        |
| Time staying in the Center: | "Old" Residents: 1-8 years, "New" Residents: 0-60 days |
| Origin/Location:            | Each part of China                                     |
| Physical Conditions:        | Mostly self contained                                  |
| Language Level:             | Spoken Mandarin  |
| Family:                     | Singles and Married                                    |
| Specific experience:        | The majority has experience with other Nursing Homes   |



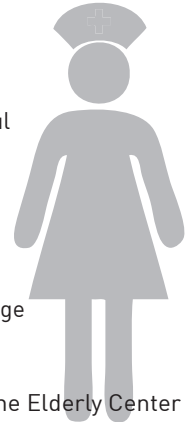
## NURSING STAFF -tertiary users-

|                             |                      |
|-----------------------------|----------------------|
| Age:                        | 8 - 60 years old     |
| Gender:                     | 60% Female           |
| Character:                  | Friendly and helpful |
| Time staying in the Center: | Each part of China   |
| Origin/Location:            | Healthy              |
| Physical Conditions:        | Spoken Mandarin      |
| Language Level:             | Singles and Married  |
| Family:                     | At least once a week |
| Specific experience:        | At least one hour    |



## NURSING STAFF -secondary users-

|                             |  |
|-----------------------------|--|
| Age:                        | 35 - 55 years old                                      |
| Gender:                     | -  |
| Character:                  | Mostly organized, easygoing and helpful                |
| Time staying in the Center: | At least half a year                                   |
| Origin/Location:            | Each part of China                                     |
| Physical Conditions:        | Healthy, energetic and active                          |
| Language Level:             | Mostly familiar with their native language             |
| Family:                     | Singles and Married                                    |
| Specific experience:        | The majority has experience only in the Elderly Center |



# STRUCTURE OF ISSUE MAPPING

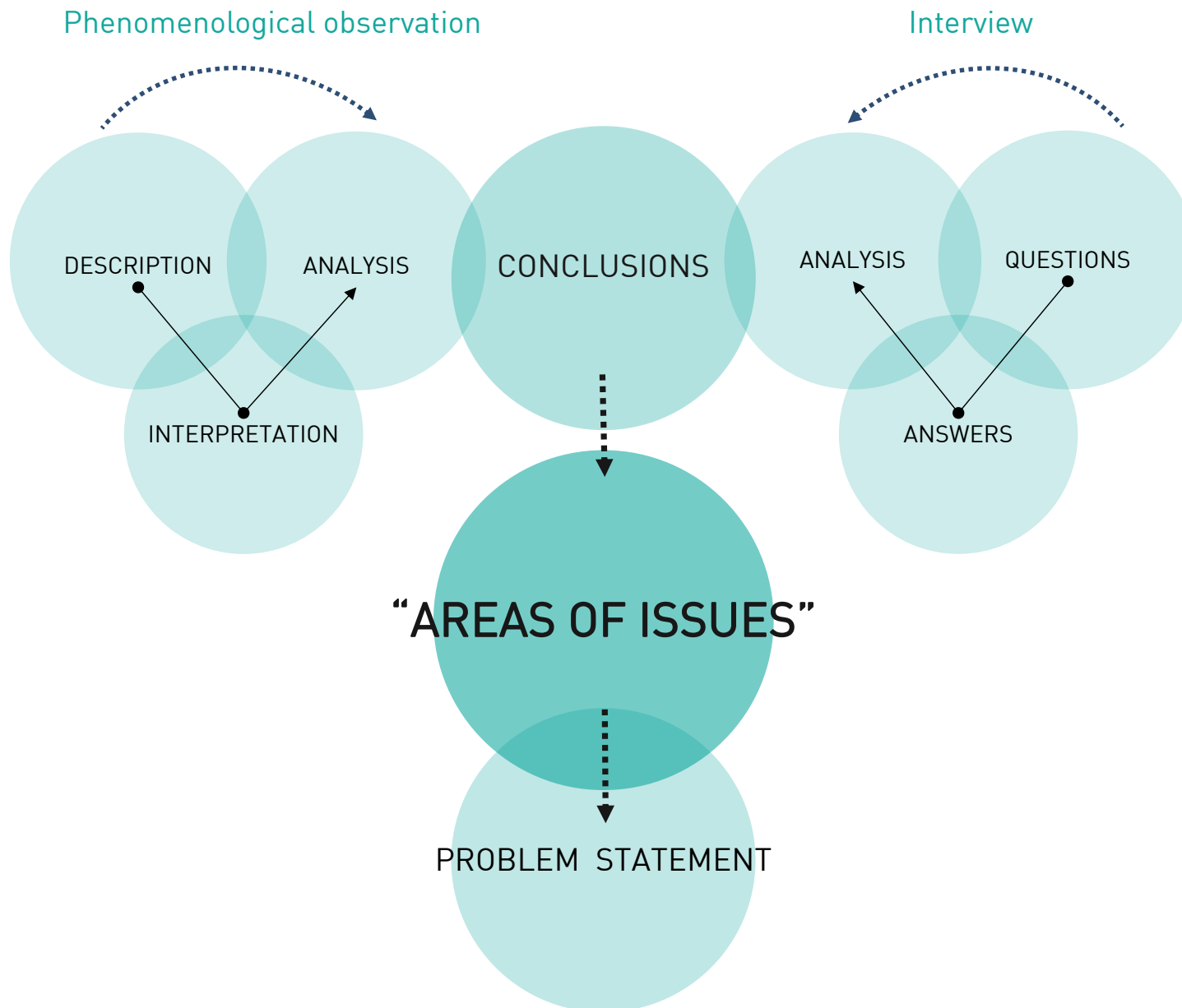


fig. 30 diagram of structure of issue map

# 1

## AREAS OF ISSUES

### **Lack of Memory stimulation //**

The absence of personal belongings and the use of space in a completely impersonal way don't stimulate the **Memory** of elderly people. The absence of artifacts that may represent memories of past lives causes in the residents a feeling of malaise and depression.

# 2

## AREAS OF ISSUES

### **Lack of people to people interaction //**

Interaction with other people has a positive effect on the mood of residents. The elderly show open attitudes and happiness in receiving visits from known and unknown people. However, the lack of **interaction** between residents in everyday life causes a state of sadness and loneliness.

# 3

## AREAS OF ISSUES

### **Obsolescence of the physical environment //**

The equipment, as well as the common areas, are unsuitable for the elderly's life. Non-ergonomic furniture, obsolete walking aids and unreadable signs on the walls are some examples of a service that does not meet the **needs** of residents.

# 4

## AREAS OF ISSUES

### **Limited organization of common activities //**

The Nursing Home offers great common areas such as the dining room, the main courtyard and two terraces, but they are not used properly. The lack of **organized activities** for the elderly reduces the sense of “being at Home”. The feeling of loneliness grows and residents tend to isolate themselves.



## AREAS OF ISSUES

---

### **Lack of Memory stimulation //**

The absence of personal belongings and the use of space in a completely impersonal way don't stimulate the Memory of elderly people.

### **Lack of people to people interaction //**

The lack of interaction between residents in everyday life causes a state of sadness and loneliness.

### **Obsolescence of the physical environment //**

The equipment does not meet the needs of residents.

### **Limited organization of common activities //**

The lack of organized activities for the elderly reduces the sense of "being at Home".


## PROBLEM STATEMENT

---

The absence of **personal belongings** and the impersonal use of private spaces does not allow the feeling of "being at Home", leading to a consequent non-stimulation of elderly's **Memory** over time. Furthermore the availability of space is not supported by a proper organization of **common activities** that can facilitate its use.



## HYPOTHESIS



Residents' **Memory** will be stimulated through the design of new spaces tailored to suit elderly's needs and the increased presence of personal belongings able to lead residents to **common memories**. Also secondary and tertiary users can take part in recreational activities organized in the **new common areas**, so encouraging the **social interaction** with the elderly.



## INITIAL IDEAS

Si Ping Jing Lao Yuan as an Integrated Experience.



# SI PING JING LAO YUAN

as an

## INTEGRATED EXPERIENCE

aesthetic  
SPACE  
DESIGN

intellectual  
SYSTEM OF  
ACTIVITIES

practical  
FURNITURE  
DESIGN

multifunctional  
space



Residents will be eager to attend the common areas that meet their concept of “being at Home”.

emotions

scheduled program  
of activities



The interaction among residents will be enhanced by sharing common activities that might involve different users.

emotions

multifunctional  
furniture



Residents can adapt space according to their daily needs, encouraging a more dynamic use of common areas.

fig. 31 diagram of preliminary ideas

# PROJECT PROPOSAL

## Space and Furniture Design

Our proposal foresees the project of a **custom designed space** for the new “home” of elderly people. Every detail is based on the needs of the residents. **Modular furnishings** can be assembled together, taking different configurations for each type of activity: eating, organizing shows and socializing.

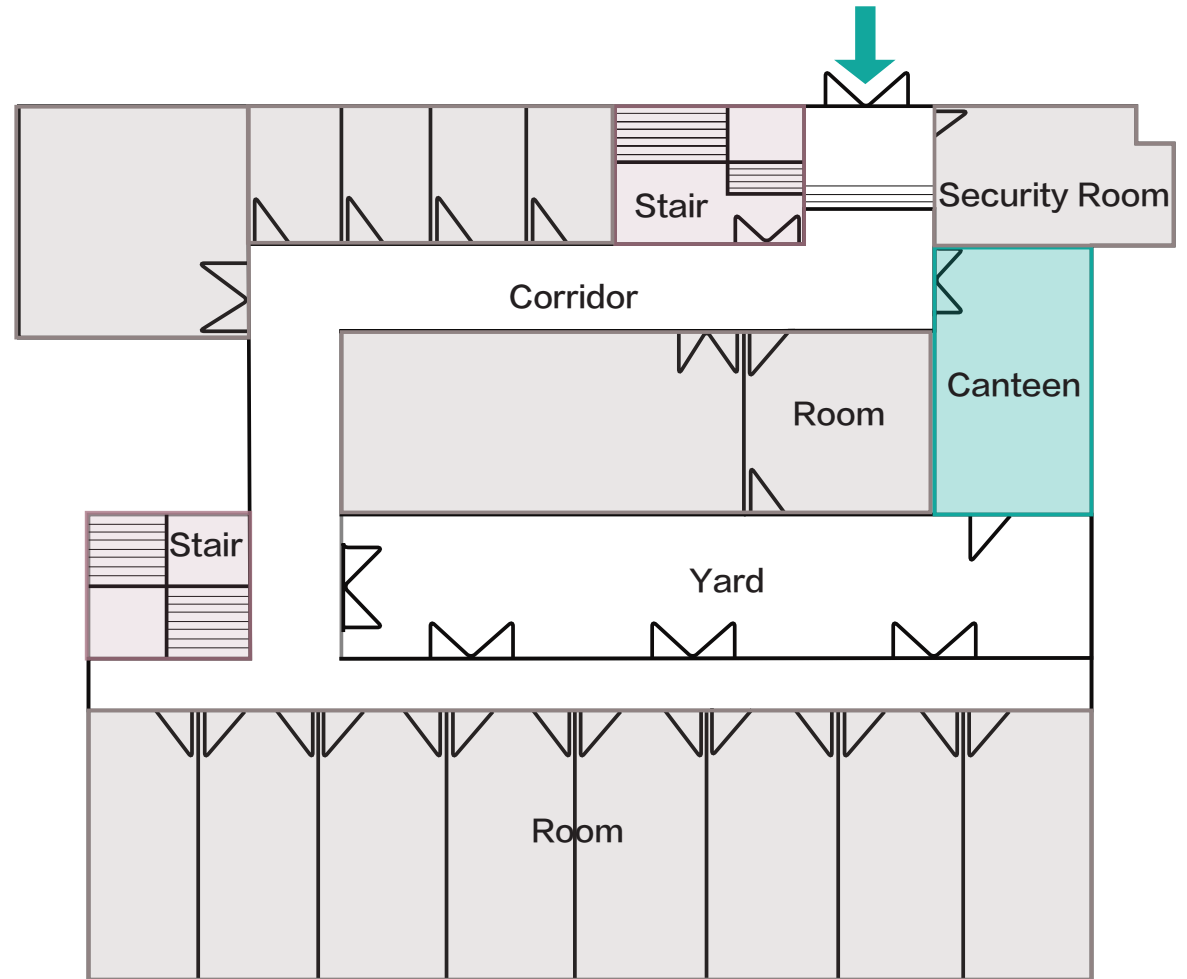


fig. 32 1F\_floor plan of the Si Ping Jing Lao Yuan

# PERSONAL BELONGINGS' ENGAGEMENT FOR THE STIMULATION OF MEMORY

Thanks to the design of new spaces, the elderly can be involved in the decorative phase through the engagement of **personal belongings**, recalling **common memories** and making the new environment a new “Home” open to everyone.



fig. 33 idea of personal belongings of elderly



# NEW SPACES FOR COMMON ACTIVITIES

Furniture designed for new spaces will have the main goal of **versatility** and **flexibility** in adapting to different circumstances. According to their reciprocal position, they can meet different needs of residents, including: eating, doing common activities and organizing shows.

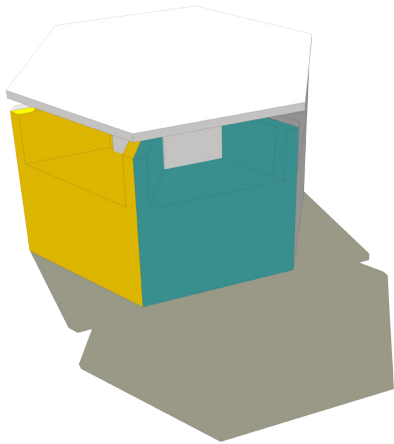


fig. 33a safe spacing type

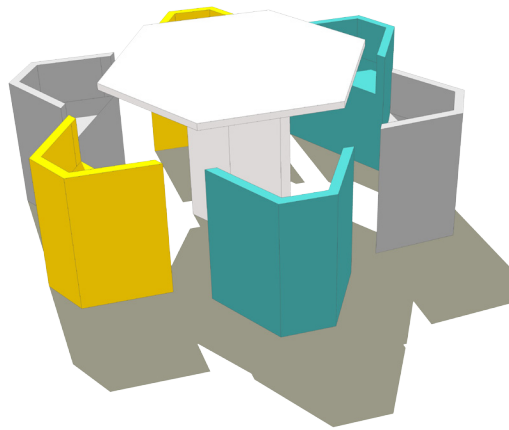


fig. 33b eating type

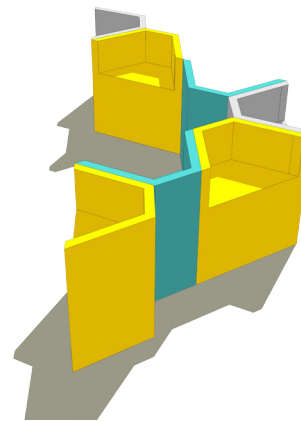


fig. 33c chatting type

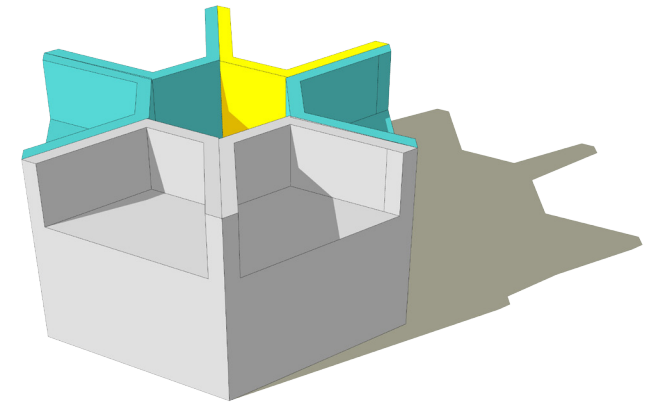


fig. 33d reading type

# 1. COMMON ACTIVITIES

- Doing workshops
- Chatting
- Watching movies
- Reading books

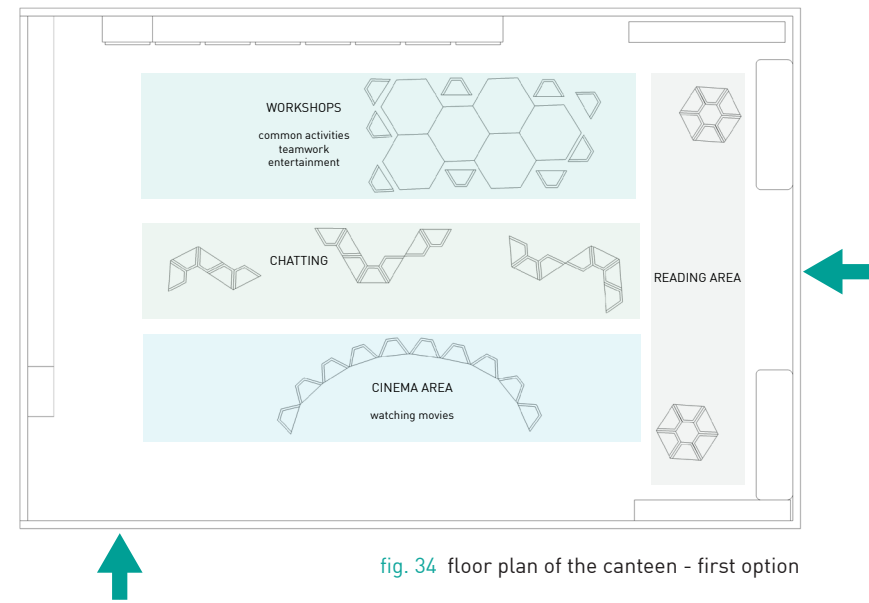


fig. 34 floor plan of the canteen - first option



fig. 35 visualization of the first option



## 2. EATING

- Having meals
- Having a rest
- Reading books

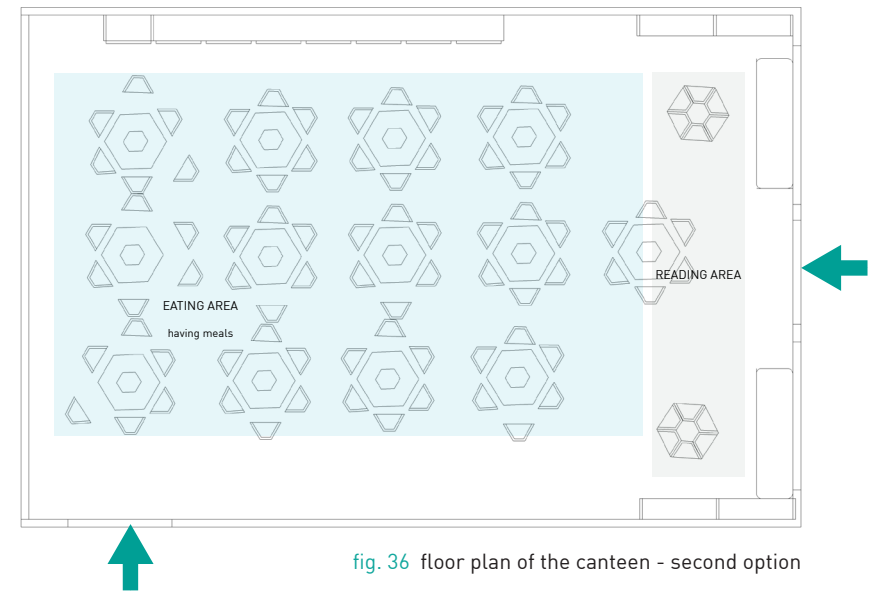


fig. 36 floor plan of the canteen - second option



fig. 37 visualization of the second option



### 3. MEETINGS & PERFORMANCES

- Meetings
- Having performances

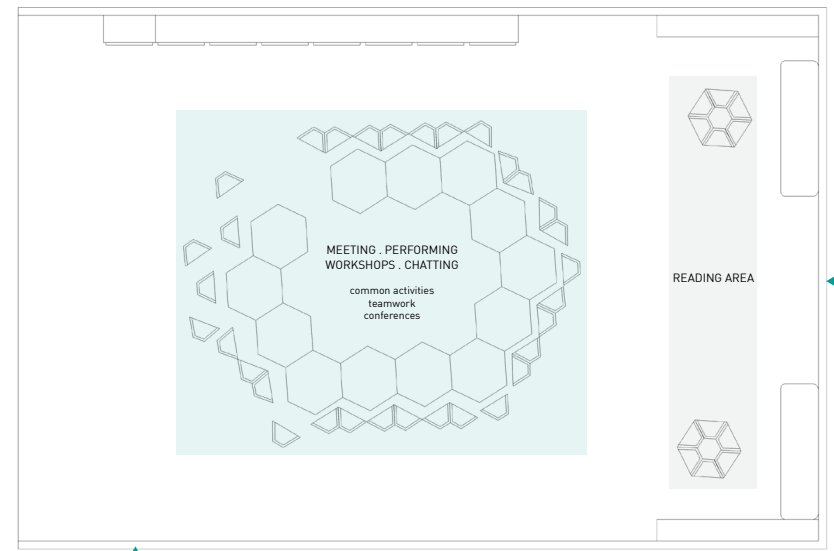


fig. 38 floor plan of the canteen - third option



fig. 39 visualization of the third option



“Memory as a place of  
discovery for Invention”

James McKeen Cattel

## LIST OF FIGURES

- fig. 1 - diagram of the executive summary
- fig. 2 - elderly at lunch in the canteen
- fig. 3 priliminary concept map of „Having and Experience“
- fig. 4 priliminary interview questions and concept map of Conccent of „Home“
- fig. 5 priliminary concept map of „Having and Experience“
- fig. 6 priliminary map of Change of Concept of „Home“
- fig. 7 working on changing on our Issue Map
- fig. 8 process of the Issue Map
- fig. 9 discussion with Kaja Tooming Buchanan
- fig. 10 discussion with Kaja Tooming Buchanan
- fig. 11 working on the conclusion of our observation
- fig. 12 working on the conclusion of our observation
- fig. 13 working on the Issue Map
- fig. 14 working on the conclusion of our observation
- fig. 15 priliminary phenomological observation - Issue Map
- fig. 16 priliminary phenomological observation - Issue Map - digital
- fig. 17 interview draft
- fig. 18 correction of the preliminary interview - issue map
- fig. 19 team working
- fig. 20 preliminary interview results and the analysis
- fig. 21 preliminary interview results and the analysis - digital
- fig. 22 diagram of Deweys theory on „Having and Experience“
- fig. 23 diagram of Change of the concept of „Home“
- fig. 24 diagram of Issue Mapping Structure
- fig. 25 diagram of our total observation time
- fig. 26 diagram of Issue Map
- fig. 27 diagram of the total interview time
- fig. 28 two interviewees in the backyard
- fig. 29 two interviewees in the backyard
- fig. 30 diagram of structure of issue map
- fig. 31 diagram of preliminary ideas
- fig. 32 1F\_floor plan of the Si Ping Jing Lao Yuan
- fig. 33 idea of personal belongings of elderly
- fig. 34 floor plan of the canteen - first option
- fig. 35 visualization of the first option
- fig. 36 floor plan of the canteen - second option
- fig. 37 visualization of the second option
- fig. 38 floor plan of the canteen - third option
- fig. 39 visualization of the third option

xièxie  
thank you  
mille grazie  
danke schön  
teşekkürler  
kiitos  
tack