# Hospice in Biskopsgården

Master Thesis by Hongyin Liu Chalmers University of Technology HT 2015

# Hospice in Biskopsgården

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Master's thesis Chalmers School of Architecture 2015

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#### **Abstract**

Hospice is a place to host people who are in their latest period of life. It offers palliative care which aims to help improve life quality for both guests and their families. Unlike hospitals which the cure of disease take first priority, hospices put more focus on human's inhabitation and social interaction needs.

The aim of this thesis is to design a hospice space following the hospice ideology. A homely place to provide necessary support from all aspects for people in this special time. A space offers chance to rethink about life and talk openly about death. A space tries to inspire trust and help maintain life's dignity.

This thesis is mainly based on a research by design method. The work starts with literature study, study trip, interviews with both hospice workers and designers in order to help me understand the context. To achieve the goal, three aspects are identified as focus points during the process. Functionality: the space need to offer efficient support for palliative care. Belongingness or home like feeling: the space tries to offer a welcome atmosphere and give priority to guests' privacy. Building's integration with site's landscape: using the building to help strength users' connection with nature for a nice healing environment.

The outcome is a place not only supports the needs of palliative care and helps guests maintain their life quality, but also helps relatives reduce pressure and to give them a better memory of this period.

Key words: hospice space, homely, integration with landscape, functionality

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#### Introduction

Dduring 19-20th with a rapid development of medical care, hospitals gradually under took families' traditional role to nurse dying people. At that time, death was treated as a failure of modern medical science. In around 1970s', together with a increased criticism of megahospital there also raised a hospice movement. It aims to provide care lacks in hospital and proposes to talk openly about death. It works to make the last period of life peaceful, meaningful and fulfilled as possible.

Right now in my country, China, most of the people still passed away in hospitals and it is not common to think and discuss about death or palliative care in the family. Usually when a patient's situation goes worse, doctor will ask to send the patient into ICU. The Family and friends then is not allowed to visit the patient freely anymore until the patient passed away or get better and leaves ICU. Not until myself experienced this common process that I noticed how bad memory it can leave. This experience persuaded me to start thinking about death and palliative care. Before saying goodbye to this world, instead of staying in the ward with machine, maybe it is better to spend more time with family and see this beautiful world more carefully.

From my experience I noticed that it is so important to give everybody relative support in this special time. The one who is going to passed away faces a situation which totally unfamiliar with and the rest of the family need to deal with their complex emotion. Everyone at this time can be sensitive and exausted and with the help of professional palliative care team, it should be easier to face the situation.

When try to search a thesis topic, "the hospice" comes into my view. I think it is a good chance for me to learn more about relative knowledge and present my attitude toward death. Hospice as a place to host people in their last period of life should provide a comfortable and warm atmosphere. This is not only for the guest (people who is going to passed away) but more for the relatives. It can help them have a gentle memory about this time. Waiting for death is sad but still we can try to make it more peaceful.

The main working method for this thesis is a research by design process. Although death is an important theme in all religions but in this project there will not be specific discussion based on religions. Hospices that integrate with hospital will not be discussed in this thesis and the result will be a free-standing residential hospice solely for end of life care which faces to all potential people without a special age group.

#### 1.General Context

#### 1.1 What is a hospice?

The word "hospice" comes from Latin "hospitum", which its original meaning is guesthouse, a shelter for sick and weary travelers. During the middle age, it is available at many monastic hospitals. Now this word more relates to the place that host people who have terminally illness and receive palliative care. The core for hospice ideology is: "a creation of a community deals openly with death/dying so that no one dies alone or in pain."

"No one comes here expecting to be cured nor is it a home for incurables, as the patients don't look forward to spending years in the place. It is simply a 'hospice' where those area received who have very soon to die and who know not where to lay their weary heads." <sup>2</sup>

-- Grace Goldin, 2000

According to definition from WHO, Palliative Care aims to improve life quality for patients and their families facing the problem associated with life-threatening illness. It not only provides relief from pain and other distressing symptoms but also integrates the psychological and spiritual aspects of patient care. It tries to support patients to live as actively as possible and also support the family cope during this period and in their own bereavement.

The four cores for Palliative care is: family involve, reduce pain, comfortable and holistic. As a hospice it aims to provide space which can support the activities above and help reinforce the hospice ideology. It aims to provide a space can accommodates all the life aspects of guests.

#### 1.2 A hospice for whom?

A palliative care team usually includes doctor, nurse, social worker, physical therapist, psychologist, psychiatrist etc. Most of the care is given as a family visiting. But if the patient's situation become really tough for family care or has nobody to take care, he can move to a hospice. An average staying time for a guest in hospice is around 20-30 days. Taking Göteborg as an example, right now the region has 3 hospices that hold approx. 30 beds in total and can fully support the whole area's needs.

#### 1.3 Development direction

The illustration Fig.1 shows a brief history about hospice's development. The rapidly expansion and development of modern hospice starts in the late 1970s. It cooperated with the postmodernism of hospital, which questioned about an over emphasis of medical technology but ignoring human being's wholeness.

- 1. McGann, Sarah, The production of hospice space:conceptualizing the space of caring and dying, (Ashgate Publishing Group, June 2013, P.106)
- 2. Worpole, Ken, Innovation in hospice architecture, Mortality (Abingdon, England, 2008, P.11)

Compared with hospitals, hospices move further on the humanism's way since they have no responsibility for cure based on medical technology. In a hospice, medical care is only to help reduce symptom and at the same time staffs there give more attention to the spiritual care for both guests and relatives. It aims to focus more on human inhabitation & social interaction. During my interview, a staff in hospice explained their work like this: "We do everything we can to help maintain life's dignity and activity."

If in the beginning, the hospice is only a place for dying people, now it is developing as a hybrid building: a home, a community, a hotel and an education center etc.

#### Mid century -- 18th



19th -- Mid of 20th



1970s -- now

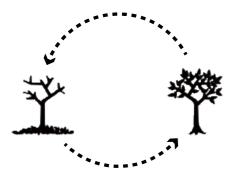


Fig. 1 The development of hospice, author made.

- Religions play important role in death .
- Family takes main responsibility to nurse for dying people.
- Hospital and medical technology undertakes the role of family.
- Death is treated as failure of treatment and should be hided.
- Admiting human's limits and taking death as part of nature
- More focus on life quality and people's dignity.

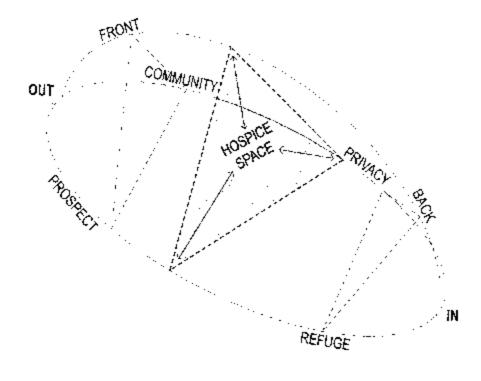


Fig.2 The ddynamic shape of hospice McGann, 2009

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### 2. Theory study based on hospice space

#### 2.1 Theory from "The production of hospice space"

Today there are several kind of hospices: it can be a few special designed wards integrated with other standard wards, a department in hospital or an individual building. In book "The production of hospice space" author points out: "comparing with discuss about hospice building, it's more essential to talk about hospice space".<sup>3</sup>

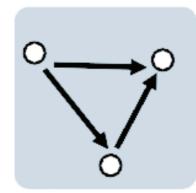
In this book, the author defines three main acting groups of people in a hospice: staffs, guests and relatives. Based on their different needs of space, he brings 3 themes of space into discussion: front and back, prospect and refuge, privacy and community.

Front and back: Here the front area represents the presentation space and the back area represents the preparaion space for people to adjust themselves. Both areas are needed by all groups of people in a hospice. For staffs, all working areas can be their front acting area, where they can perform properly during working hours. But they also need a back place in this high pressure environment. It is a safe place that provide refuge from the guests, a place for take a break and recharge themselves. The same goes for the relatives. In the company of the guest, they need to think about acting properly, but themselves are also suffering at the same time. Thus a possible place for them to communicate or release their emotion is necessary. (E.g. a quiet room or a consultant room) For guests, the common area is a front area where they can go when they feel have enough energy and a quiet corner in the garden may serve temporarily as a back area. The private room can become both front and back areas depending on who is in the room.

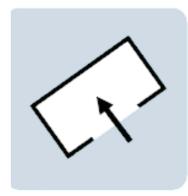
Prospect and refuge: Since the beginning of the hospice movement, people want to emphasize homely feeling of this environment. It means the space need to "provide an important refuge from the outside world and represents our corner of the world" 4 yet at the same time, this doesn't means isolated. According to Jay Appleton's habitat theory "the ideal environment, from primitive times to now, is one that provides the comfort of both hiding and seeing." <sup>6</sup>or interpreted to "seeing without being seen".

Privacy and Community: Irwin Altman<sup>8</sup> defines privacy as "selective control of access to the self or to one's group". In the hospice, guests are gradual lost their control of body as well as space surround themselves. To make sure they will not be exposed to surrounding or isolated, a definition of personal territory need to be careful planned. Meanwhile, various from staying time, their relationship with people there can change also. Strangers, nurses can become friends as time passing and communication between them may increase. Thus the space should provide a 'threshold space' which allows guests to control openness of their territory easily according to their own needs.

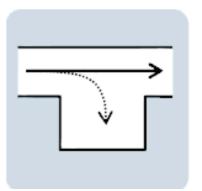
- 3. McGann, Sarah, op. cit., P. 72
- 4. McGann, Sarah, op. cit., P. 87
- 5. Appleton, J. The Experience of Landscape. (London: Wiley. 1975)



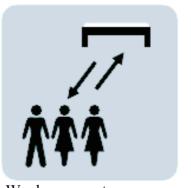
Easy from A to B



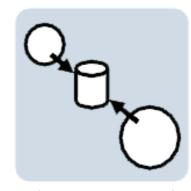
Communal entrance



Extend public area for semiprivate space

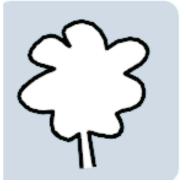


Ward as seperate zone



Share communal or Avoid the impression of supportive facility for been watched different depatment





Access to nature



Communal space should encourage social

Fig.3 Hospice space order principle, Resource from "The good hospice program"

- 6. McGann, Sarah, op. cit., P. 89
- 7. McGann, Sarah, op. cit., P. 94
- 8. Irwin Altman, The Environment and Social Behaviour: Privacy, Personal Space, Territory, Crowding. (Monterey: Brooks/Cole,1975)
- 9. Altman, I. op. cit., P.18

#### 2.2 Theory from "The programme for the Good Hospice in Denmark"

In 2006, Denmark published "The programme for the Good Hospice in Denmark". Goal of the project is to offer an inspiration and tool for future hospice projects' design and planning in the country. In this book, it points out some important areas to create a good hospice and provides suggestions for space principles to follow. (Fig.3)

There are four important areas include in this discussion: arrival space, common space, chillout space and private room. Each of these spaces have been given a visual impression by collage. (Fig.4)

An arrival space contributes a lot to help all visitors build their first impression of a hospice. A canopy is suggested as weather shelter and it is important to give visitors a chance to gradually approach the building which allow them to prepare and get used to the hospice. Car parking is necessary on site, it is better do not expose this kind of big area of hard pavement right next to entrance since it may destroy the building's friendly and welcome feeling. Around the hospice, it is possible to offer some nice public green area which can attract people from surrounding. Their activities can bring a vivid daily life's picture to guests inside the hospice so that they know they are not isolated from the rest of the world.

A common space is the main communal area for all groups of users in a hospice. It need to have a lively atmosphere which is suitable to hold several activities and encourage people to talk or share their knowledge and experiences. A natural rallying point is suggested there, which can be a piano, a fire place, etc.

Due to hospice's special character, chill-out space is as important as common space inside this building. This is a quiet place allow people to be along or have some private talk. The most important thing for this space is to let people feel safe, be relax and help them release their emotion.

A private room is the place where guests will spend most of their time. It must be a cozy area with warm light, nice view and textiles. The room offers possibility for guests to rearrange it according to their own needs or accommodate other relatives.

#### 2.3 Working direction based on theory

In both books, authors suggested to integrate garden with building. The landscape can work both as a soft boundary and a chill-out space. In "Design details for health" there is a sentence really touched me. "At the end of life, time must be measured by quality. Window is not just an opening for light and air, it frames a vista of the last sunrise." It reminds me that nature is such a fantastic stage, clouds, light, birds, they are acting there all the time, only by staring at them can have lots of fun.

10. SIGNAL architects, Programme for The Good Hospice in Denmark (Realdania Fund, 2007)

11. Leibrock Cynthia A, Harris Debra, Design Details for Health: Making the Most of Interior Design's Healing Potential (2nd Edition), (John Wiley & Sons, May 2011)

12. L.Cynthia A, H. Debra op. cit., p. 68

On the other side, in my culture we compare death to leaves falling from tree. Falling leaves back to earth as back home in order to prepare to start a new circle of life. Death is a nature part of life, having more contact with nature before the end of life maybe can remind us of this fact. In this fictions project, it is possible to choose a site has a nice potential for landscape, and how to use building to help all users establish more contact with nature looks very attract for me.

In a hospice, an average stay time of 20-30 days is not short, especially for guests who take this as their last "home". It should provide support for all aspects of their daily life from both physical and psychological sides. Meanwhile, this is also an institute for professional palliative care, a place death comes frequently. How to let people feel warm and comfortable during their stay there is another topic I would like to discuss in this project.

Fig.4 Collage inspired by "The good hospice program" ( author made, exclude "the common space" )



#### **Arrival Space**

- Approaching
- · Screened parking
- Covered canopy
- Activity area for public



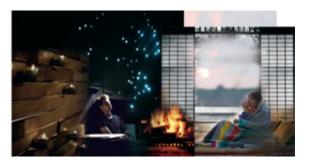
#### **Private Space**

- Personal decoration
- Private terrace
- Nice texture
- Light, view



#### **Common Space**

- Lively atmosphere
- Encourage activity and energy
- Natural rallying points

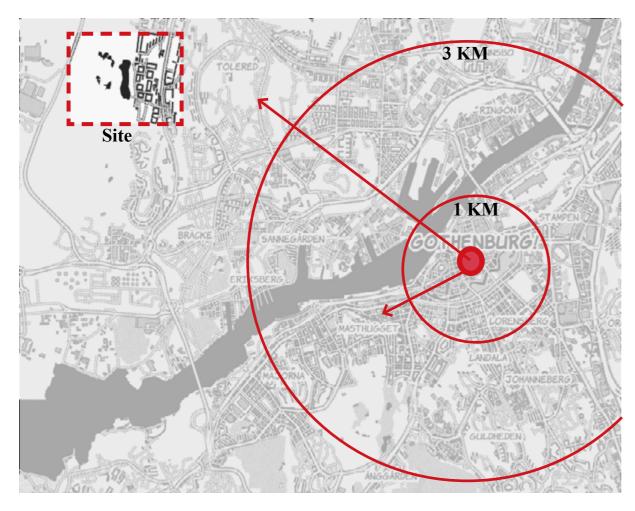


#### **Chill-out Space**

- Spiritual character (eg. Zen)
- Be able to leaning back
- Seeing without being seen

## 3. The Site

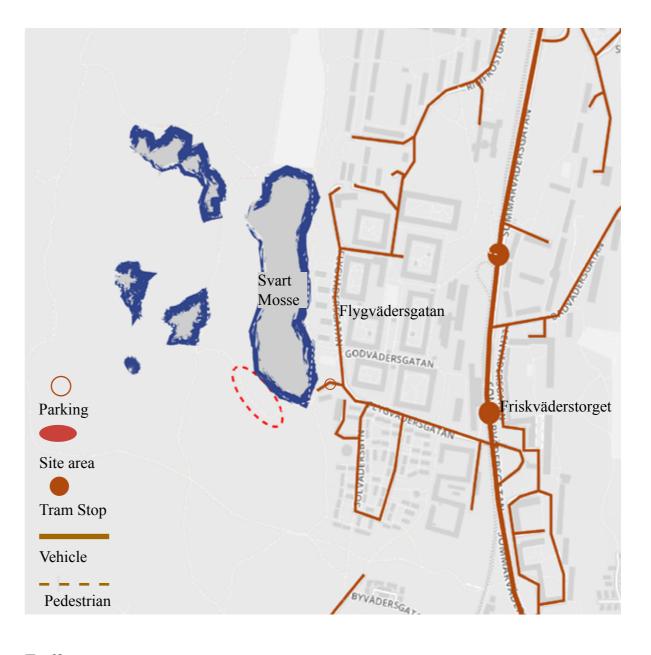
#### **Easy Accessibility**



#### Location

The site is located in the northwest of Gothenburg city center, approx. 8 km driving by car and the name is called Biskopsgården.



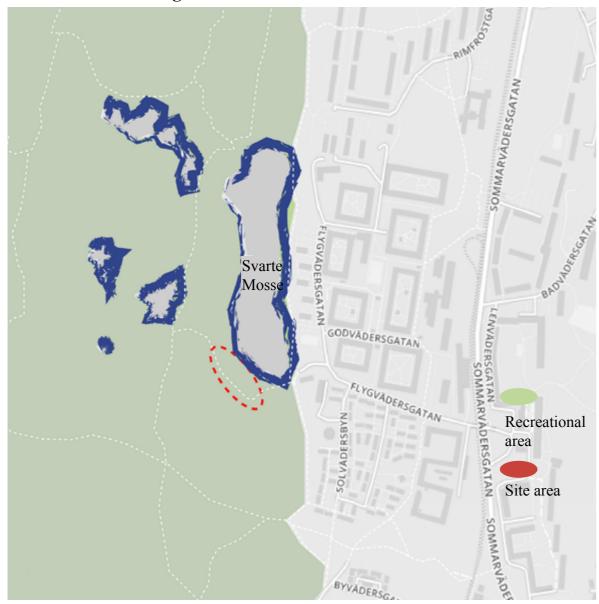


#### Traffic

The site can be reached easily both by car and by public transportation. Driving road named Flygvädersgatan leads directly to Svart Mosse, right now there is a small parking area at the south side of the lake. Tram line 5,6,10 can reach tram stop Friskväderstorget which is approx. 10 min. walking distance from site. The negative thing is that since this is a recreational area, it is only possible to reach the site by car from east side of the lake.

### 3. The Site

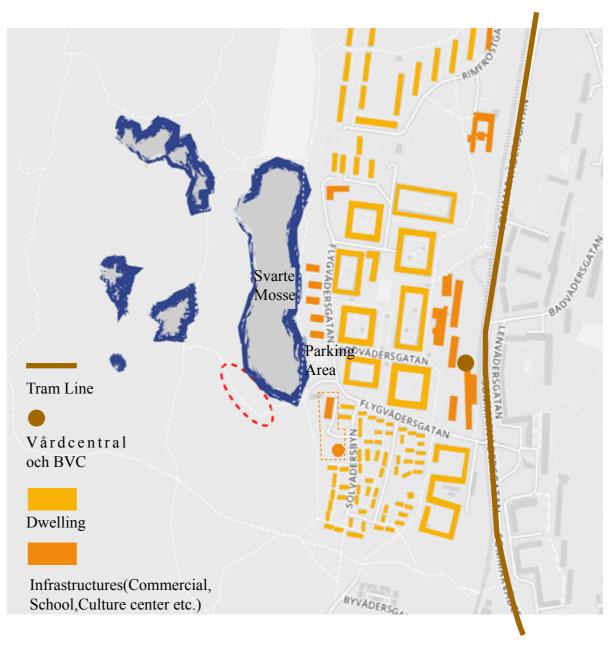
#### Pleasant surrounding



#### **Nature resource**

The site is located in the southwest side of Svarte Mosse which is previously a marsh area. The lake is 200m above the sea level. Right now it is used for swimming and fishing. The recreation area has several running tracks and rapture trails besides there can also see some protected species of birds.





#### **Buildings**

Along the tram line, there has some infrastructures such as shops, culture center and Health center. The east side of lake is a parking area with some one floor storages. Behind the parking area are some 5 floors' multi-story dwellings and the southeast side of the lake is a villa area. At the west corner of the villa area in the dash frame there is a kindergarten and a water tank.

## 3. The Site

### Nature view





### **Buildings**





Up: The parking area and mult-story dwellings behind it. Bottom: The kindergarten and a water tank next to the site. Photos: Hongyin Liu

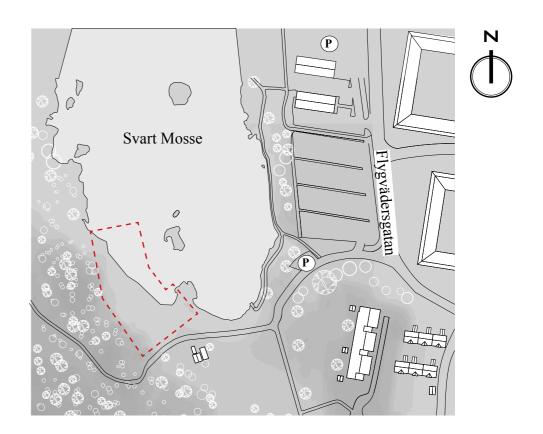
## 3. The Site

#### Approach the site

Right now there is only pedestrian paths lead to site. When people arrive, they first depart from Flygvädersgatan and park their cars. The parking site shows a glance of Svart Mosse. Following the road after a turning, a broad open view of lake will present right in front of everybody.



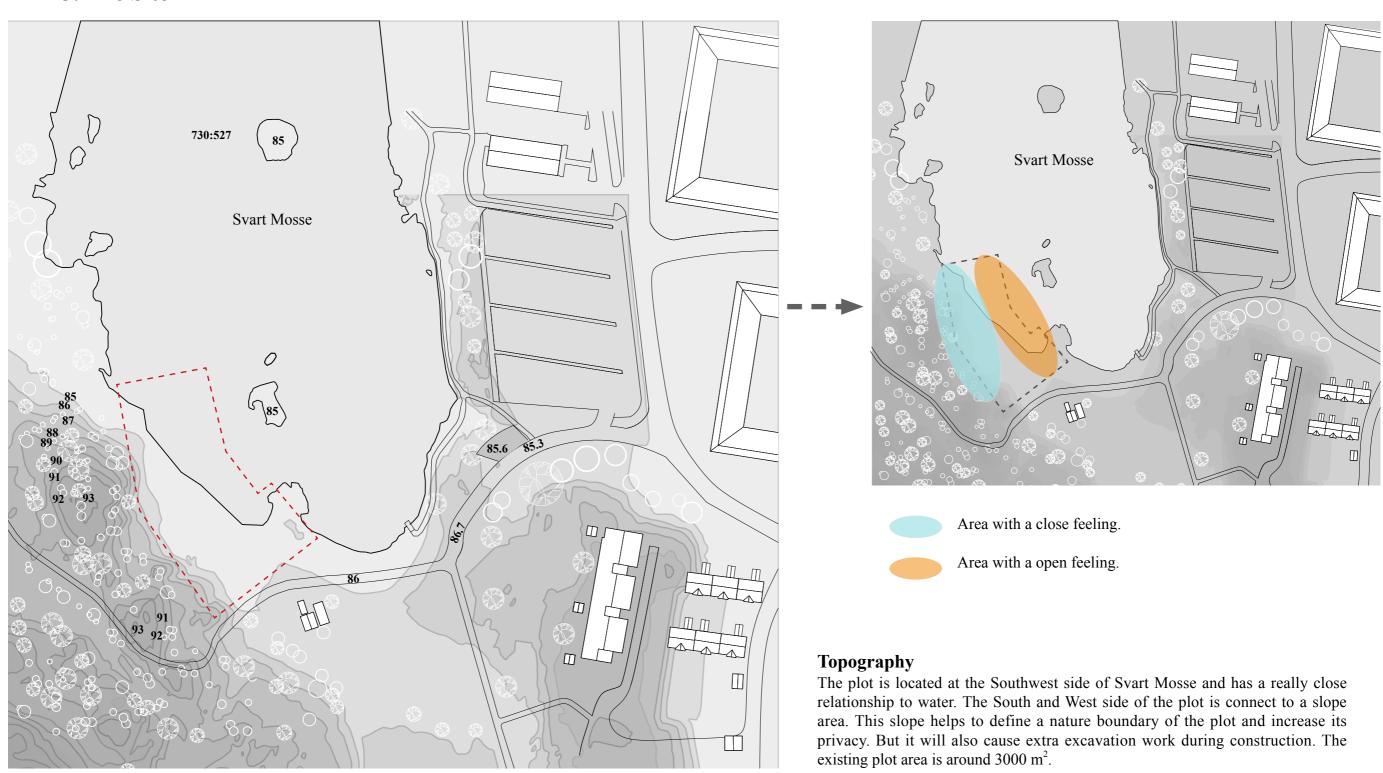
Paking area



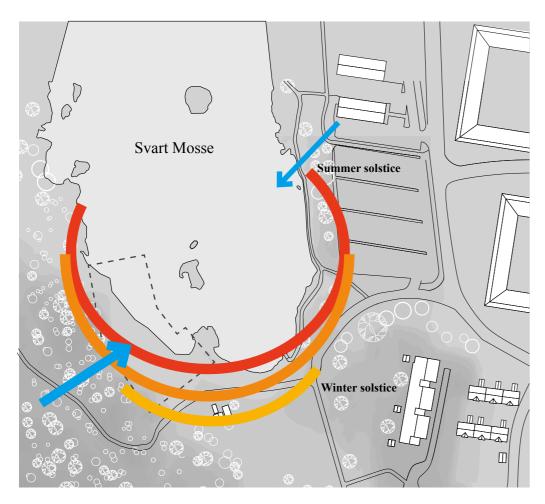


Path leads to site Photos: Hongyin Liu

## 3. The Site

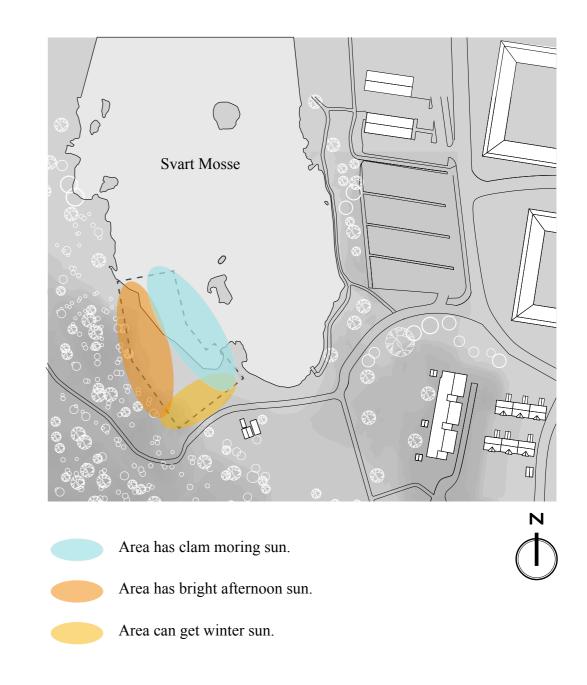


## 3. The Site

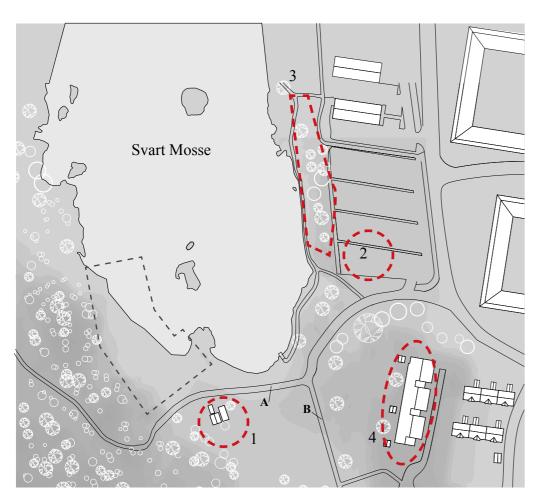


#### Climate

The average temperature in summer is between 12°C - 20°C and in winter is around – 3 °C to 3 °C. The main wind direction comes from Southwest and Northeast. On the plot, slope area in the Southwest can help protect building from Southwest wind. It is possible to get ideal sunlight on site in most time of a year, but during the winter period, only Southeast side of the plot can get direct sunlight.

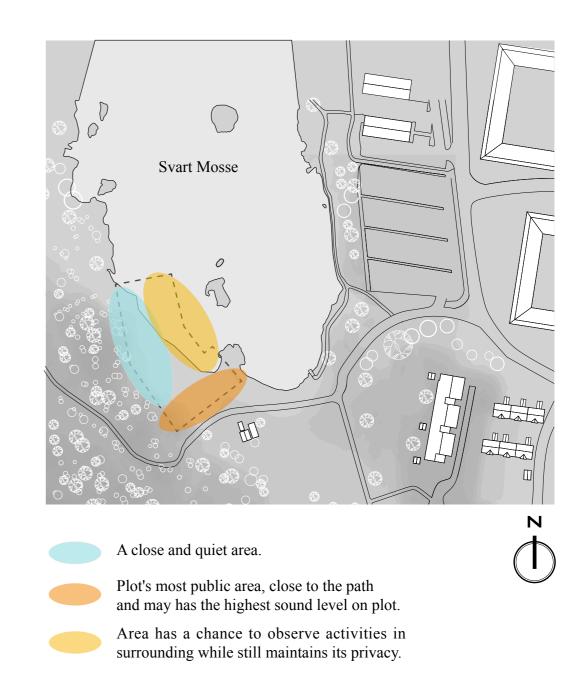


## 3. The Site



#### Activity

Area No.1 and No. 2 has two playgrounds which attract lots of children and teenagers there. Area No. 3 has seats, in the afternoon sometimes can see people feed birds or fishing. Area No. 4 is a kindergarten. Path A and Path B are two jogging tracks.



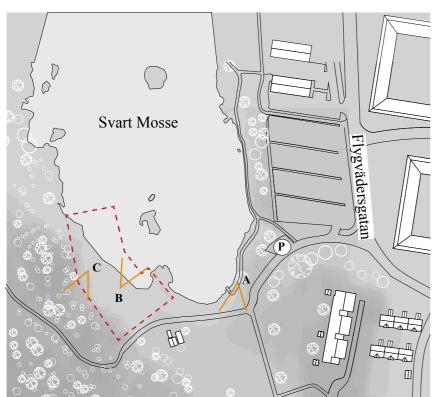
## 3. The Site





Up: Site surrounding Bottom: Currently lake view from site Photos: Hongyin Liu

## 3. The Site





View B to rock island in inside Svart Mosse.



View A to children's playground



View C to the slope.

## 4. Proposal

#### **Vision and Concept**

Design vision for this project is to create a homely place for both guests and their families, a place help maintain good life quality until the end. Guests have their private rooms which try to offer a warm and comfortable personal space. It can be rearranged according to different numbers of visitors. All private rooms have nice contact with surrounding to allow people get in touch with outside without leaving their private area. Besides giving consideration to privacy, the design also wants to present a feeling of community inside the building. There are various communal areas aim for promoting social activities. These places encourage people to share their experiences with each other.

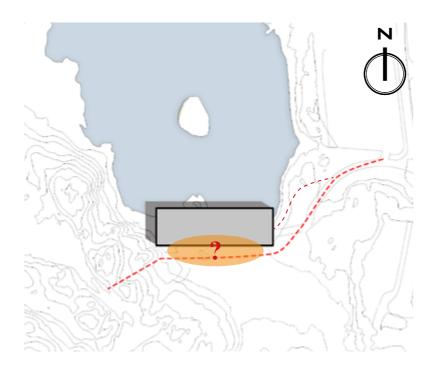
Nature resources will be an important element in this project. The building has an intention to guide people to see this world more careful at this special time. Meanwhile, the building itself should not disturb the original recreational area, it should open to the surrounding and invite people to pass by.

The building's imagery comes from boat house. Buildings in Fig.4 reflects a nice and close relationship to water. It is also a meaningful metaphor to connect the hospice with boat house. A place like harbor, a place for guests to have a rest in order to prepare for a new journey.

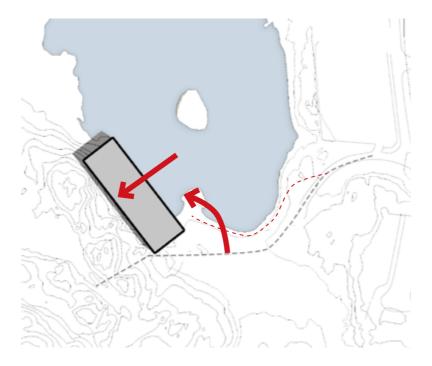


Fig.5 Inspiration picture www.pinterest.com/pin/571816483913791793/. (2015-5-18)

## **Vision and Concept**



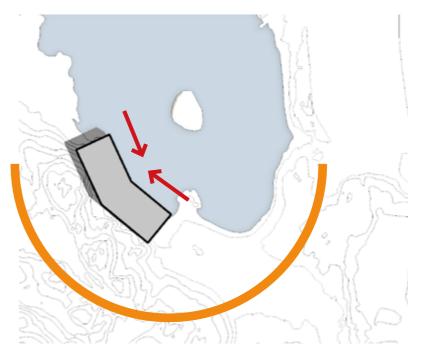
Part of the building overhangs the lake to get a nice contact with water. The relationship between existing pedestrian path and the building is not really suitable in this situation. The building blocks public's intention to reach the lake.



The building is moved to the southwest side of the lake to avoid the confliction with existing road.

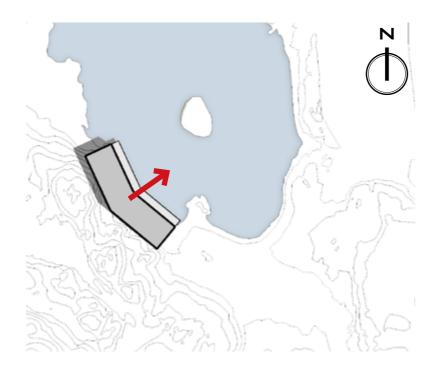
This area has two slopes side-by-side and the building is

now inserted into the slope.

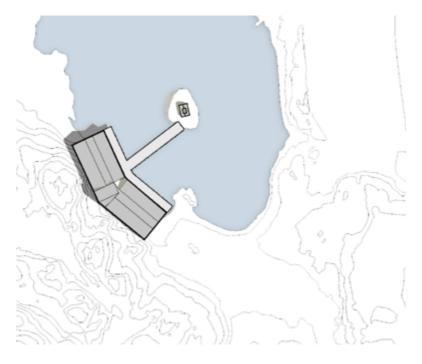


Bend the shape slightly to adapt to the topography. It also helps the building gain more sunlight in the morning. The orange circle represents the light situation in spring and autumn deluxe day.

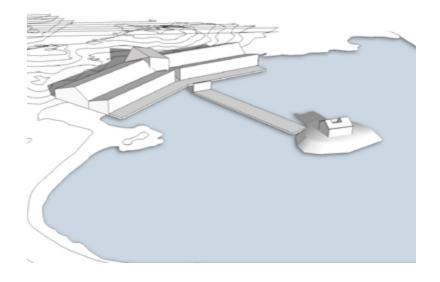
## **Vision and Concept**



A deck is extracted to build more contact with water. This deck is designed also as a buffer area in front of the building. It is open to both public and the users of hospice.



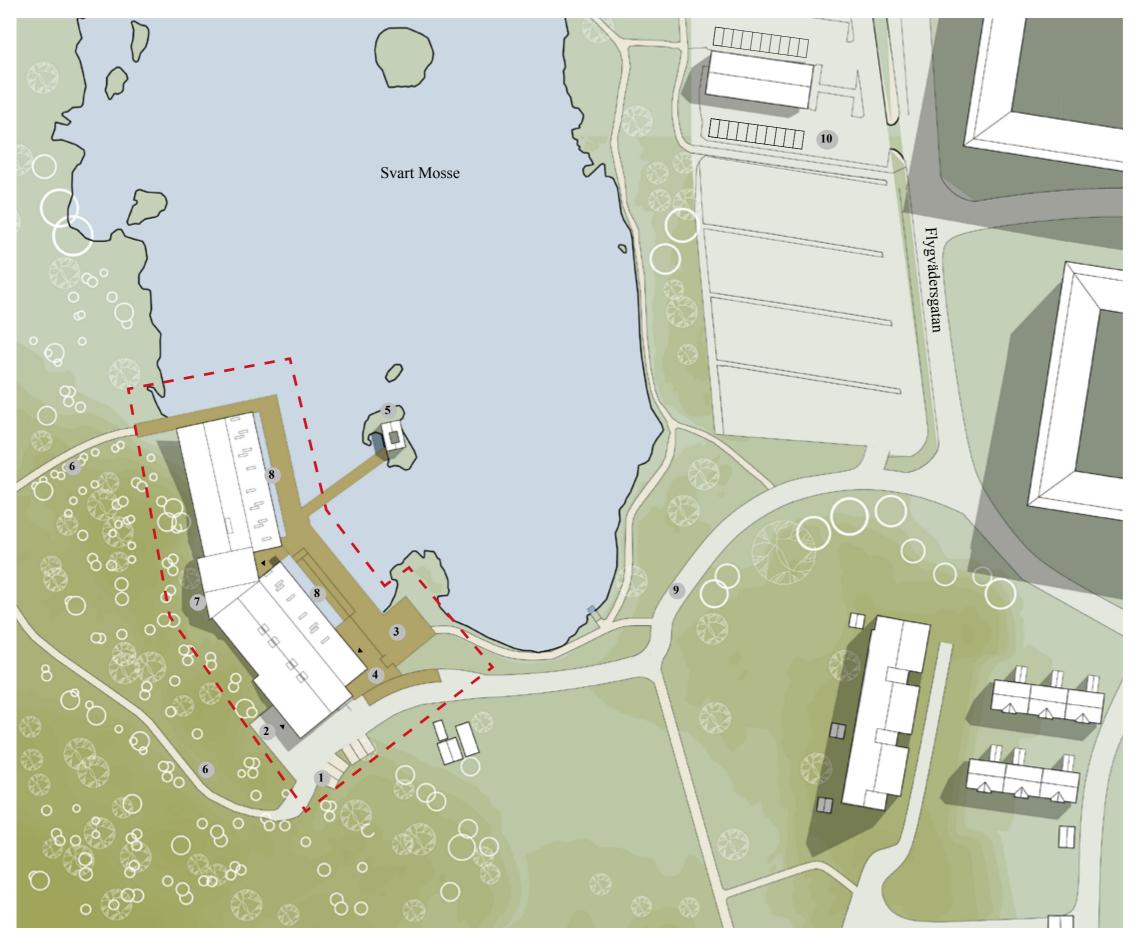
An individual quiet room is located on the small rock island face to the hospice. It offers a solitude area outside the hospice which can be shared by public. The two parts are connected by water deck.



A bird view from northeast side of the building. All guest rooms are set in one row and have a direct water view. The building has only one floor except the middle part.

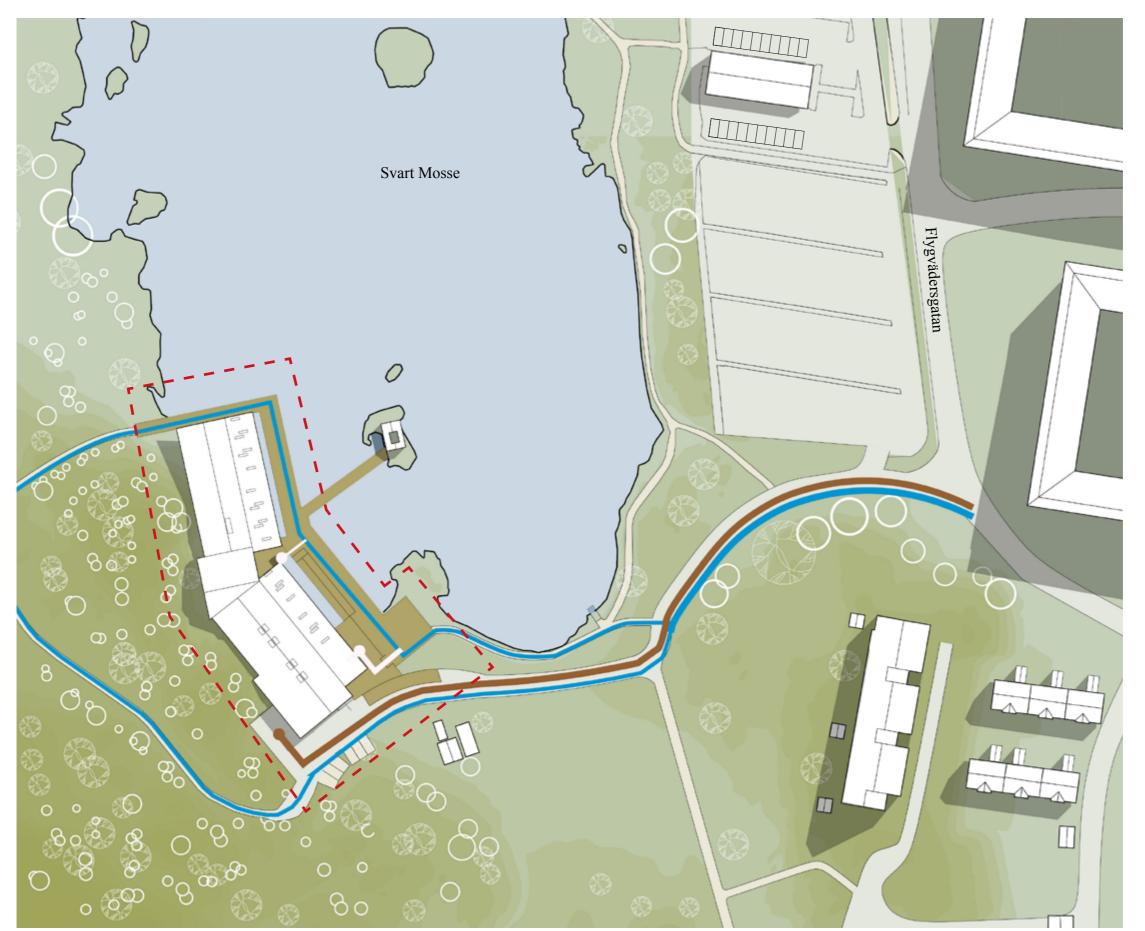


Site Model 1:1000





- Parking for staff
   Goods delivery
   Public Deck
   Semi-private deck for hospice
   Individual quiet room
- 6. Nature trail to recreational area
- 7. Backyard for hospice
- 8. Water pool in front of guest room9. New driving road to hospice10. Public parking



## **Site Flow**

----- Vechile

Public pedestrians

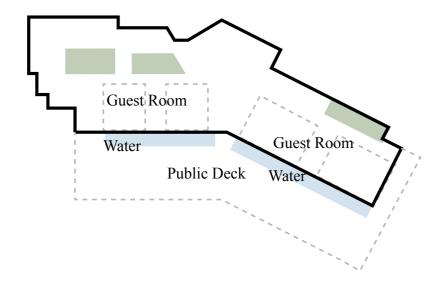
Visitors

The new driving road can only used by hospice. Visitors are suggested to park in the public area. The lower part of the deck is open to public and connect with nature trail.



**Perspective View to Entrance** 

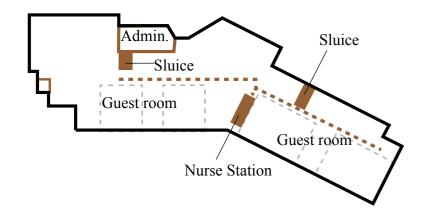




## **Plan Principle**

#### **Privacy**

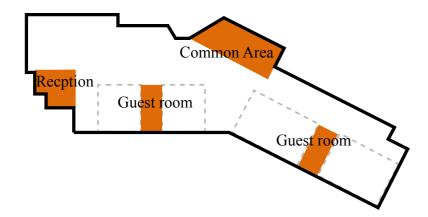
All guest rooms are set along one side of the building for an equal sunlight condition. Courtyards use to separate staffs' and guests' area. Water pool in front of guest rooms separates them from the public deck and help strength rooms' privacy.



#### Efficiency

Nurse station is in the middle of the building in order to reduce walking distance. (<35M for each side) Both sides of the guest rooms has a room for sluice and linen storage.

Administration and rest area is separated with nurses' working place to allow staffs have chance to chill out.



#### Multi-communal space

Various typies of communal spaces are intersected into the building. Main common and dining area is in the middle of the building. It is a meeting place for all users in hospice. Living rooms between guest rooms intend to be used more by guests and their families.

## **Programme**

Private			
Guest room.bathroom		33 m <sup>2</sup>	10
Common			
Kitchen and Dining	, )		
(Chairs, sofa, main for patients)		$45 \text{ m}^2$	1
Entrance, reception, waiting area		$20 \text{ m}^2$	1
Smoking room		$13 \text{ m}^2$	1
Living room		$33 \text{ m}^2$	2
Quiet room		$25 \text{ m}^2$	2
Common room		$45 \text{ m}^2$	1
Practical			
Sluice Room	$10 \text{ m}^2$	2	
Linen Room	$10 \text{ m}^2$	2	
Medicine storage	$7 \text{ m}^2$	1	
Nurse station	$10 \text{ m}^2$	1	
Big storage area	$50 \text{ m}^2$	1	
Waste room	$15 \text{ m}^2$	1	
Technical room	$40 \text{ m}^2$	1	
Cold room	$18 \text{ m}^2$	1	
Assistant bath	$30 \text{ m}^2$	1	
Parking			
Staff			
Admin. office	$15 \text{ m}^2$	1	
Manager office	$15 \text{ m}^2$	1	
Break room	$15 \text{ m}^2$	1	
Conference	$30 \text{ m}^2$	1	
Toilets	$6 \text{ m}^2$	2	
Copy room	$8 \text{ m}^2$	1	
Changing,locaker	15 m <sup>2</sup>	1	
Clean area	796 m²		
Gross area	1538 m <sup>2</sup>		





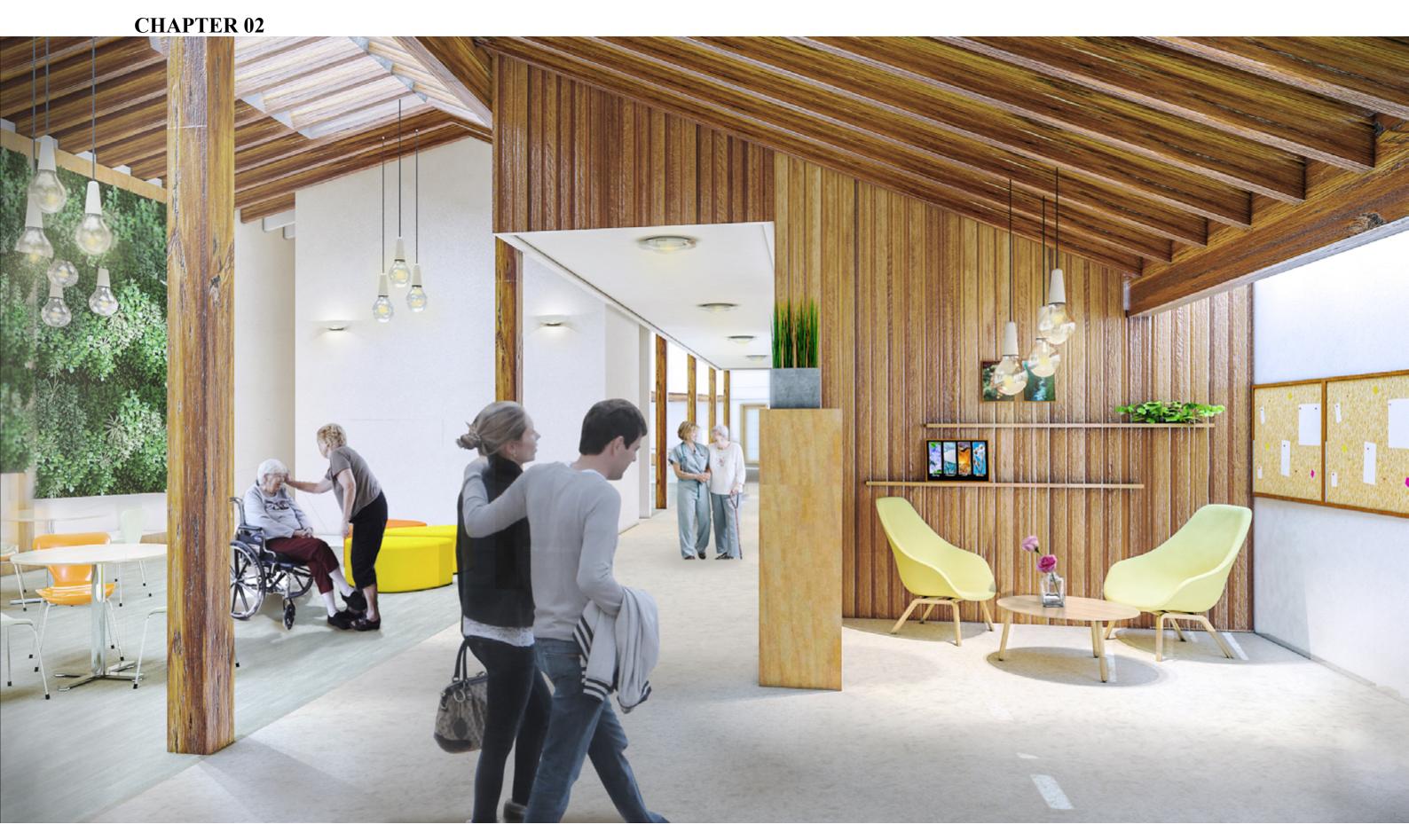
Fig. 6 Grief therapy http://christiancounseling.guru/wp-content/uploads/2014/05/bigstock-Patient-crying-next-to-her-the-46616083.jpg (2016-1-11)



Fig. 7 Example for interior of consultant room http://www10.aeccafe.com/blogs/arch-showcase/files/2014/02/023\_EFFEKT\_Livsrum\_\_Thomas\_Ibsen.jpg ( 2016-1-11)

### **Entrance Area Plan 1:100**

Entrance faces directly to one of the courtyard. We try to bring in nature elements such as sunlight and green plants into the building through courtyard. Together with warm wood material and soft light, we would like to create a nice healing environment there. This area is the most public part in the building. When guest had passed away, family members may continue come in for grief counseling and therapy. It is important to let these visitors feel relax and welcome in entrance area in order to help calm their sensitive mood.



**Entrance Area Perspective** 

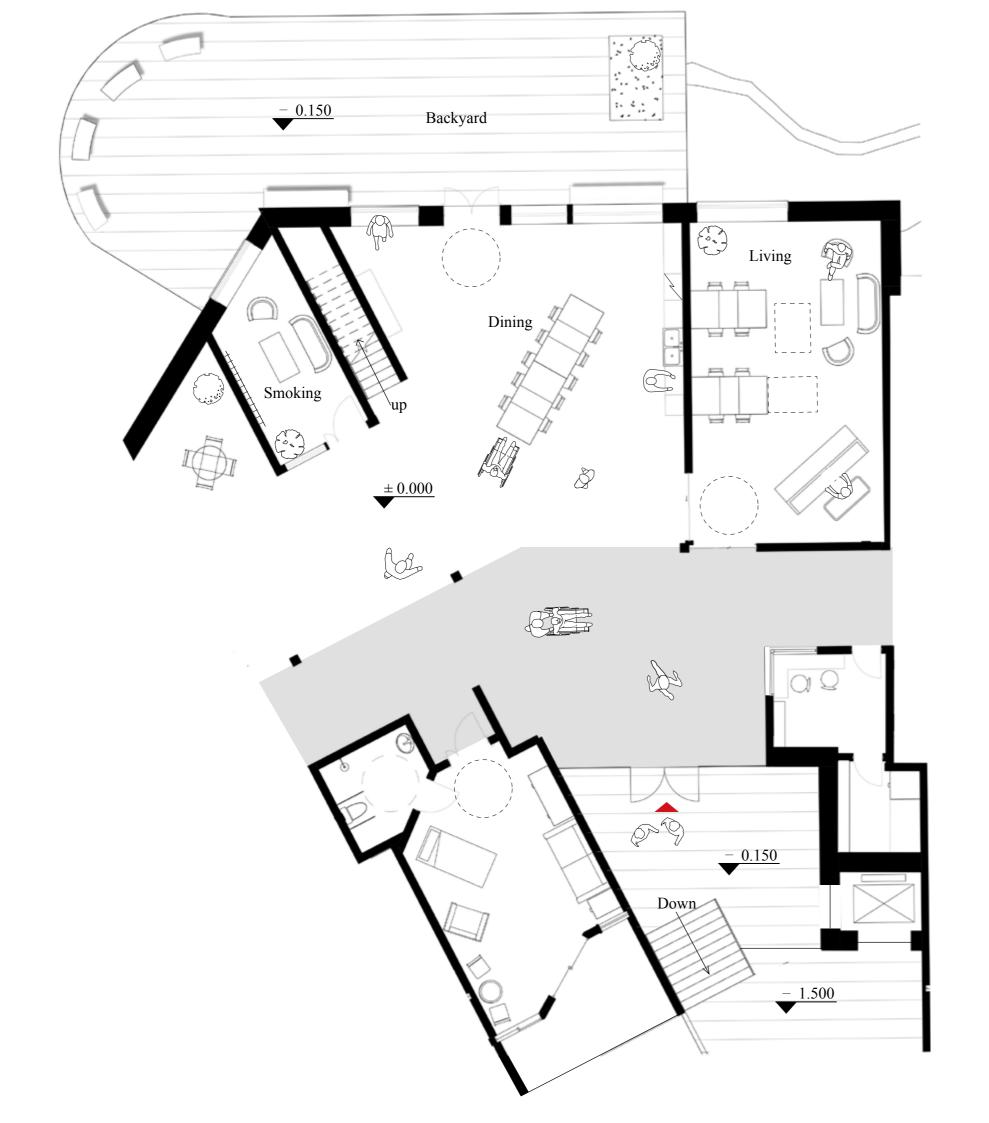




Fig. 8 Art therapy http://www.healthcareworkersalary.com/wp-content/ uploads/2014/03/art-therapy2.jpg ( 2016-1-11)



Fig. 9 Example for sunny coner inside backyard http://a2.images.divisare.com/image/upload/c\_fit,w\_1440/f\_auto,q\_80/v1/project\_images/4327106/Carl-Viggo-H%C3%B8lmebakk\_Mountain\_cottage\_Sollia\_6.jpg (2016-1-11)

#### Common Area Plan 1:100

Ccommon area faces to slope on south side of the plot. Trees and sunlight contribute vivid shadow to the interior space. Dining room has its own kitchen and it is possible to have a family dinner there for those guests who have a big family. A living room next to it is able to held salon or activities such as art therapy. Step outside the dining room can reach a backyard surrounded by slope. It offers a quiet place to enjoy sunshine.



**Dinning Room Perspective** 

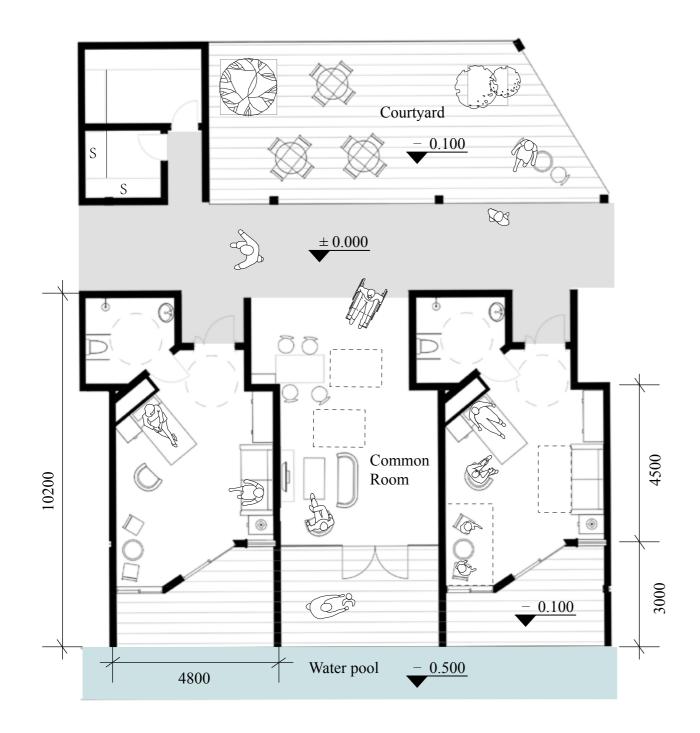




Fig. 10 Example for common room in guest room unit. http://www.henninglarsen.com/projects/0900-0999/0943-hospice-soendergaard.aspx ( 2016-1-11)

## **Guest Room Plan 1:100**

Each wing of the guest room unit has a common room. All guest rooms have a nice view to the lake. The private deck allow people to roll bed out in a sunny day. It is possible to accommodate another people in the room. The café table at the corner of the room allows guest and visitor has some individual space even in the same room. Both courtyard and patient room has skylight to bring in more daylight in this northeast side.



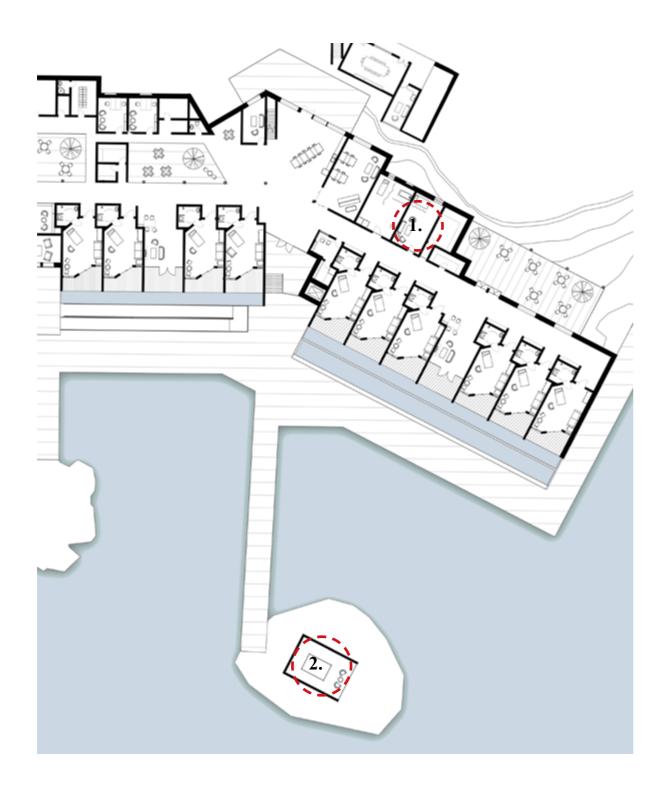




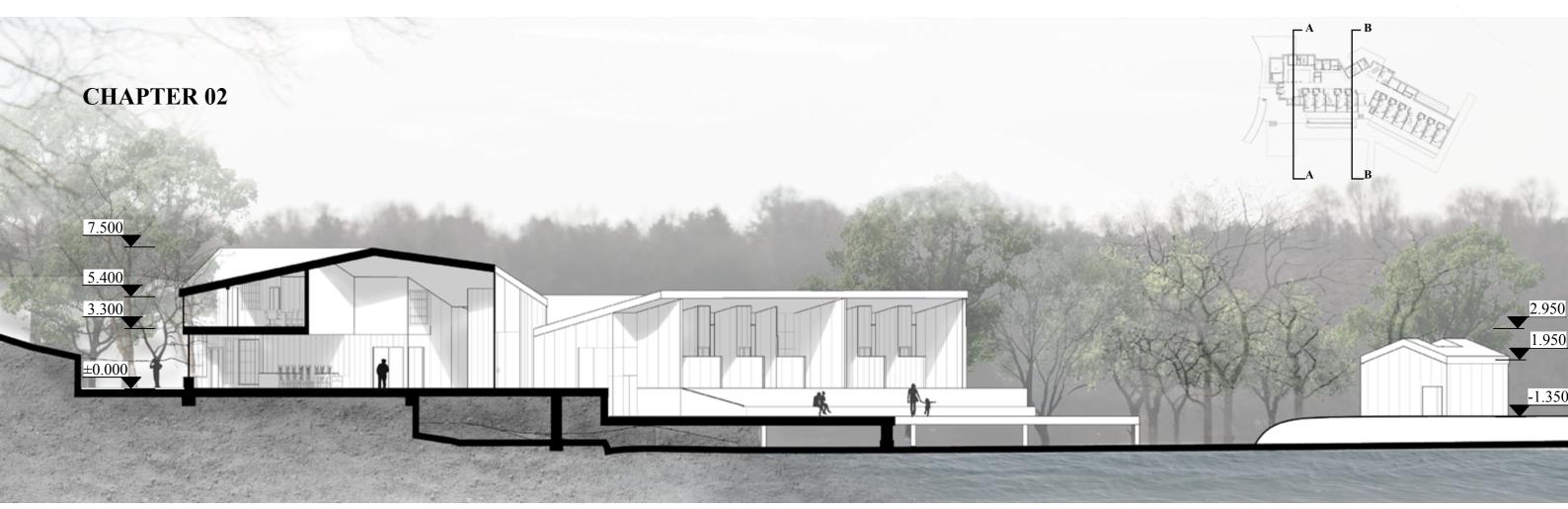
Fig. 11 Interior example for quiet room No. 1. http://www10.aeccafe.com/blogs/arch-showcase/files/2014/02/022\_EFFEKT\_Livsrum\_\_Thomas\_Ibsen.jpg ( 2016-1-11)



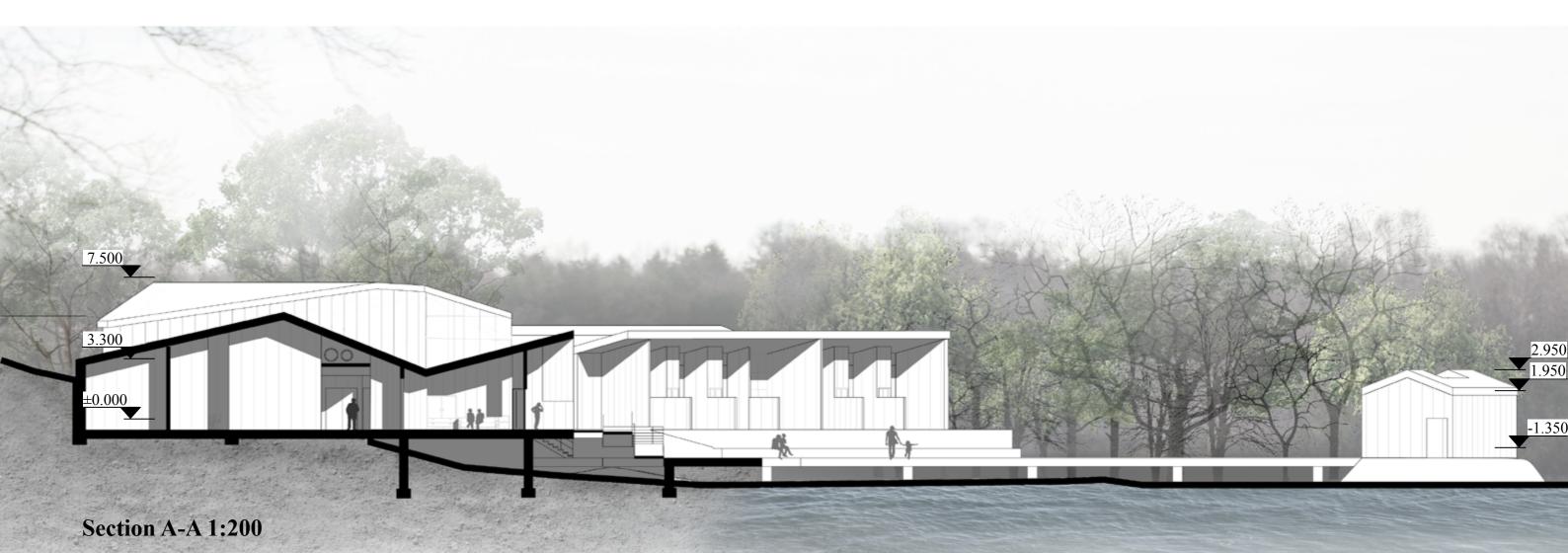
Fig. 12 Interior example for quiet room No. 2. http://old.saintjohnsabbey.org/images/guest\_meditatio.jpg ( 2016-1-11)

## **Quiet Room**

The hospice has two quiet rooms, one inside the building and the other one locates on a rock island outside of the building. The latter one has more spiritual chracter and is open to public. It has a nice and broad lake view which can be an ideal solitude place for mediatation. The quiet room inside the hospice is decorated with a cozy and home-like feeling. This one can be used only by visitors and allow them to have a short break there.



**Section B-B 1:200** 





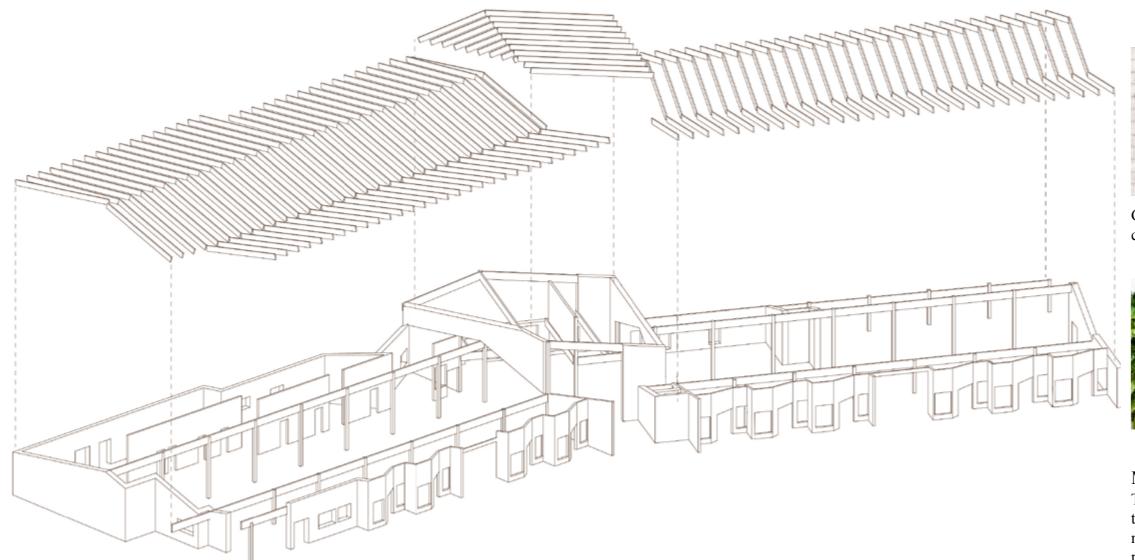
East Facade 1:200



North Facade 1:200



# CHAPTER 02 Material and Structure





The building's external walls are used as load bearing system. Inside it, to make sure about the openness for courtyard and other common area, glulam timber frames are chosen as main support system. Dimension for column is  $115 \text{mm} \times 115 \text{mm}$  with the distance of 4.8m from center to center. Roof's main structure is also built up by glulam timber. Rafters' dimension is  $90 \text{mm} \times 450 \text{mm}$  with c/c 1200. Part of the rafter system is exposed to interior to replace and reduce area of dull suspend ceiling made by gypsum board.



Facade wood panel



Eave cladding panel



Guest room's interior cladding panel



Frosted Glass: cladding around courtyard



Green wall: cladding around courtyard

#### **Material Slection**

The main outside cladding material is wood. Façades use heattreated wood panel which is weather resistance and easy for maintaining. The warm tone and familiar material can help reduce the building's institution feeling. Eaves are covered by tar-coated panel which makes the appearance darker and steadier than façade.

Inside the guest room, it is cladded by panel made of pine and with a light color. To create a peaceful feeling, bright color or too much color contrast is avoided. The simple and light interior design offer guests nice potential to decorate the room according to their own needs and also we would prefer they give more attention to the beautiful lake view framed by window.

The enclosure of courtyard is a light construction by frost glass and green wall. Combination of this two materials can have interesting shadows on the wall as well as protect the privacy for staffs' working area.



**Model 1:200** 





**Model 1:200** 

## 5. Process

#### 5.1 Workshop for homely space

In the first year of my study at Chlamers, the teacher in studio hold a workshop about finding homely place in Gothenburg. Students are asked to find home-like places in public area of the city.

#### Students' answers and teacher's comment from workshop

- 1. A stone on a mountain where can sit and look down at the city below.
- -- A private space in a higher level can enjoy both view and solitude.
- 2. Super market together with the smell of food there.
- -- Dining space both at home and alongside a road can become important bridge for social life.
- 3. A bench under a palm tree in a corner of green house in Botanic Garden.
- -- Be close to nature, palm tree provides shelter, bench defines boundary and offers a proper scale according to body.
- 4. Find a random place, mark a house's shape on the wall, have a carpet on the floor, take off shoes and sit down.
- -- It is important to use symbols to help define boundary. Wall, carpet or even a canopy is able to emphasise a territory.
- 5. Niche beside a street.
- -- A place to take refuge, seeing without be seen.
- 6. Stand in front of window or sit on river bank
- -- These actions reflect to edge space or threshold space, a blurred zone for people to switch their behavior between home and society.

#### Criteria for a homely space based on results from this workshop

- Territory: People need to define a territory: a private space as well as a boundary to feel comfortable when staying at one place. The definition of the territory can be flexible. It may be a stone, a niche, a bench or even just a carpet. In a hospice, this demand can be fulfilled easily since now many hospices offer single room and allow guests to bring some of their own furniture.
- An open view: Although people need to protect their privacy but nobody want to be isolated. In the workshop, a group of students chose a stone on a mountain as their answer. They chose it not only for its quiet surrounding but also because it overlooks the city. Seeing without being seen can always create some attractive space for people. The possibility to have contact with surrounding is important for guests in hospice especially when they are bounded on bed by diseases. They need to have a nice and open bed view and at the same time be protected from exposed to the surrounding.
- Dining area and kitchen: Cooking is usually a family-related behavior. By offering the possibility to cook in a hospice can help a lot to reduce its facility feeling. Meanwhile having dinner no matter with family or others can be a nice social chance for everybody.

#### 5.2 Study visit

#### 5.2.1 Hospice Bräke, Göteborg, Sweden 1994, 10 beds approx. 910 Sqm

The main goal for this study visit is to have a general overview of hospice and at the same time have some communication with staffs working there.

This building has a really simple and clear organization. Plan is organized by two orthogonal axis. The vertical one starts from entrance, crosses living and dining area and divides the building into two parts, the horizontal one crosses the whole building, connecting all guest rooms and nurses' working places. Public areas and staffs' working area are placed around entrance. Guest rooms are located at both sides of the wings. In the end of the corridor there is a large patio. All administration offices and staff lockers are downstairs.

#### **Feedback from visiting**

This hospice has a simple and clear plan. Public area and nurse station in the middle works as a core to support the rest part of the building. With this organization, it is efficient to reduce staffs walking distance and protect guest rooms' privacy.

But there are also shortcomings I would like to improve in my design.

- Try to avoid to have guest rooms on both sides of a corridor. This kind of arrangement cannot offer equal sunlight to all guest rooms and may turn corridor into a dull space.
- Be careful with curtain wall or French window at the end of a corridor. It may result to sharp glare if a corridor goes north-south direction.
- Private patio is suggested for guest room.
- Staffs would like to have a rest area independent from their working area.

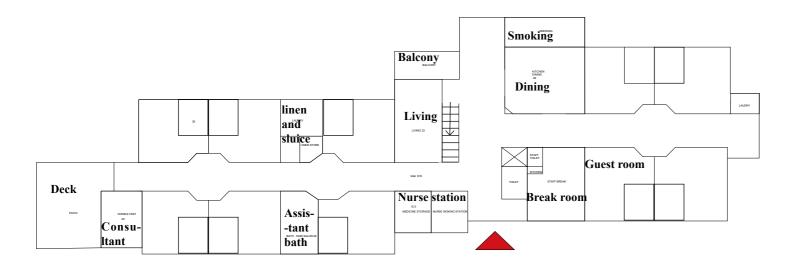


Fig.13 Plan drawing for Hospice bräke, author made



Old furnitures along corridor



Outside Deck.



Living area Photos: Hongyin Liu

## 5.2.2 Cancer counseling center LivsRum, Næstved, Denmark 800 Sqm, EFFEKT ARCHITECT 2013

"The vision is to create a homely, open and welcoming house. To create a space that is more home than an institution. A modern and yet familiar house that provides a clear alternative to the sterile and functional hospital environment."—EFFEKT<sup>13</sup>

#### Sound

The site is located next to a high-way and a driving road for ambulance. To protect building from the traffic noise, all windows and doors facing outside have installed with products which have really good sound insulation. Architectures put two courtyards in the heart of the building to create a quiet and peaceful exterior space.

#### **Daylight**

Even though the site restrict the building open too much to the surrounding, it doesn't means isolated. Skylights and courtyards are designed to allow people have fully contact with daylight. Just as staffs working there mentioned: "It's nice that in this room you can all the time see the sunlight somewhere, it changes all the time."

#### Material

White Fiber cement boards are used as main cladding material for roof and facades. The material creates an appearance looks similar with normal wood cladding but easier for maintenance. The interior uses wood a lot for both floor and furniture which creates a typical clean and elegant feeling together with white painting.

#### **Space and Geometry**

According to the designers, Instead of building a uniform building, they made a decision to shape functions into seven smaller parts in order to create a human scale. If walking outside, each part of the building looks like an individual house which has a similar scale comparing with dwellings in the surrounding.

The plan is a combination of simple rectangular form. All parts have their own dimension according to their function and joint together by two courtyards. The courtyards also help organize flow's circulation inside the building. Entrance faces to dining room directly, which includes a big dining table and a small kitchen. Next to it is a quieter and familiar living area contains sofa, a fireplace, bookshelf, TV as well as a play corner for children.

During our study visit, my classmate Wenhao and I had a short talk with manager of this cancer center. She is so proud of this building and said: "We want people just come by and drop in, sit down and grab a cup of coffee, feel free to do whatever they want. We also want they meet directly by people when they come inside, instead of facing to a machine or having no idea about what to do."

#### Feedback from visiting

We choose this project as an example to understand how to convert words like "homely, welcome" into architecture language.

- An informal entrance: The entrance has no reception and is combined with dining area. It reduces the feeling of being detected when people enter the building.
- 13. www.effekt.dk

- Suitable scale and an open plan: All rooms have reasonable scale, they are linked together by two courtyards and not separated strictly by walls. This makes people feel free to walk around the building.
- Diverse functions: Architects took users' different needs into consideration and try to design a comprehensive building. It is like a tiny "architecture complex", people come in and feel free to choose what they want. They can come here to join activities, to ask for help or only for relax.

There is another feedback has not so much connection with "homely" but also need to be considered.

• Privacy for administration area: In some staffs view, it is a problem that the building has no door to separate the administration area with the public area because visitors sometimes may disturb their work.



Fig.14 Concept illustration www.effekt.dk. (2015-5-18)



Fig.15 Plan drawing for LivsRum, www.effekt.dk. (2015-5-18)
Entrance faces to dining area to allow people come in and meet directly by people.



Fig.16 Interior view, www.effekt.dk (2015-5-18) Window seat combines with shelves.Skylight and french windows brings in enough daylight.

### 5.2.3 Paimio sanatorium Paimio, Finland Alvar Aalto, 1932

Been built in 1932, this typical modern building now is still in a good condition and used by Turku University Hospital. The main building is divided in several wings to house different functions. Column and beam system is used as main load bearing structure to allow large areas of glass walls to frame a good view. At the top level of ward building, there is a big sun-deck.

#### Sunlight

Sunlight has been an important element in this design. Patient rooms have southeast orientation in order to get morning sun. Treatment area and sun balcony faces to south directly to get sunlight as much as possible.

#### **Artificial light**

Aalto carefully placed lamps in the room out of patients' vision to avoid glare, since they spend many hours lying in bed.

#### Color

In contrast with a pure white facade, the building's interior contains a rich selection of color. Ceilings are mainly in light green and blue to offer a calm feeling. Floors in common area use lots of warm color such as yellow and light brown. Railings and columns are painted in red intend to intersperse calm interior space with some vivid color.

The site is located in the center of a forest and surrounded by pines. Aalto used several ways to attract people's attention to the beautiful surrounding.

#### **Roof Terrace**

The ward building has a big roof terrace on its top floor. Three times every day, all patients need to be brought up there to breath fresh air as part of their treatment. The terrace is designed wide enough to contain all beds. Its east orientation allows people to see beautiful sunrise in the morning.

#### Big window

Large French windows are used in many places to try to blur boundaries between in and outside. Aalto likes to place French window at the end of a room or corridor in order to guide people's sight to outside.

#### Ceiling

In activity room, the ceiling's surface is treated smooth enough to reflect outside's view. Patients lie here in special designed chairs which can help them breathe smoothly and at the same time they can enjoy nice outside forest view from the ceiling's reflection.

#### Feedback from visiting

There is a lot can be learned from this project, especially about how to use an existing site's resources.

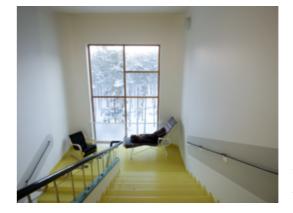
• Orientation: The building's orientation needs to be considered seriously based on different functions. For example, sunlight condition in rooms that have south orientation is different with those have southeast orientation. The former one is able to get sunlight in most time of a year but may also be overheated during summer time.

The latter one has a more gentle sunlight condition but its nature lighting in winter may become a little bit dark and cold. Guests in hospice can be sensitive to the indoor climate because of their health therefore it is better to avoid the risk of overheating in their rooms.

• Talk with surrounding: Rich natural resource on site can help improve building's quality and we should take advantage of it by design. For example, Windows not only opening for light but also helping frame scenes. Ceilings and walls can become stage for shadows in a sunny day or with a careful design of artificial light.



Ceiling to reflect the surrounding.



Window to bring in forest view at the end of stair.



Sunrise view at roof terrace Photos: Hongyin Liu

#### **5.3** Site selection

My design work of this project started with site selection in Gothenburg. In this fictitious project, I have the freedom to choose site and would like to offer it an ideal nature view. Below are some other criteria.

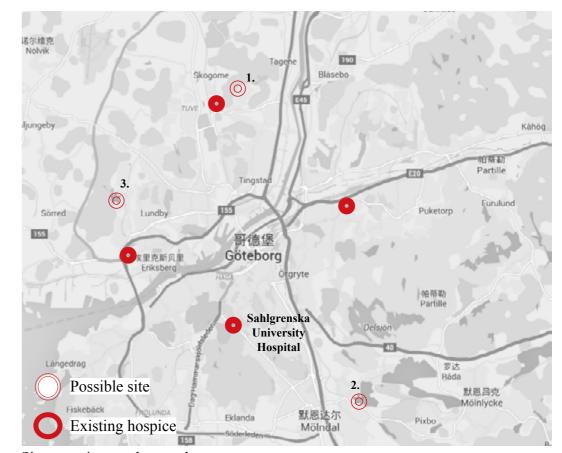
- Easy connection with major roads and public transportation.
- Accessibility to infrastructure (e.g. Medical facilities, commercial area, etc.)
- Better to have a water view.

In the illustration in right side, solid points represent present location of all four hospices in Gothenburg. Except the one sets into Sahlgrenska University Hospital, rest of three are all free-standing hospices. The dash points are possible sites that based on criteria above.

Site No.1 is located in Lillhagsparken. It is a flat area with a close relationship to Hökälla Säteri. The Sahlgrenska University Hospital has a number of departments and clinics there. There also has an existed hospice called Änggårdens Hospice which contains 11 beds. The advantage of this site is that it has a close relationship to medical service and there is a lot of possibility for cooperation with the existed hospice. The main disadvantage for me is that the site has no water view.

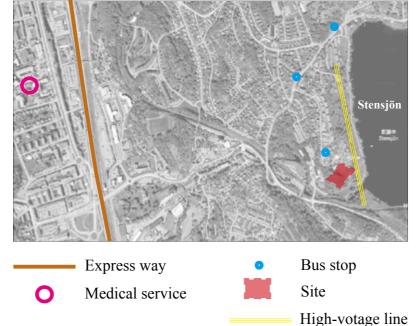
Site No.2 is on a slope next to Stensjön in Mölndal. It is 3.3 km's driving distance from Mölndal hospital and the site area is around 10 000 sqm. If without the high-voltage line crosses the area it will be a ideal site.

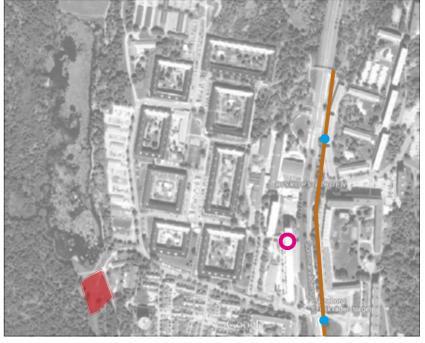
Site No.3 is near Svart Mosse in Biskopsgården. It is close to Friskväderstorget. This is a quiet place at the boundary of a recreational area. For me it is a suitable place for the building. It is close enough to city but at the same time has an attractive nature view in surrounding.



Site overview, author made





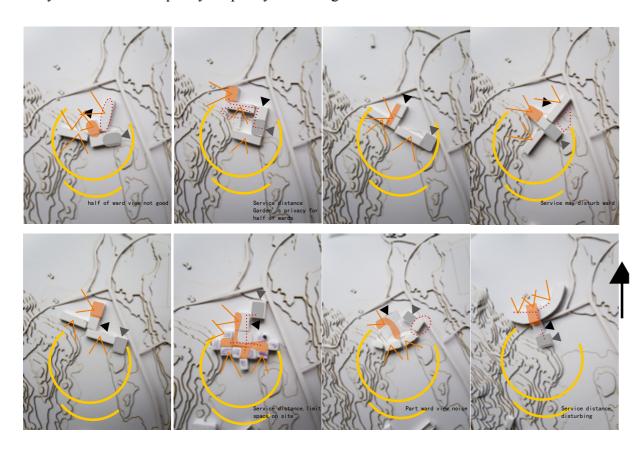


Site 3. (Slected site)

#### 5.4 Volumn and Zone

My sketch started with calirfing different zones and flows on site while examing different ways to organize the volumn. At the same time, all the sketches are tring to follow three common principles:

- Ensure view for guest room and public area
- Possibility to gain sunlight for the whole day inside guest room.
- Try to maintain an equality in quality for each guest room.

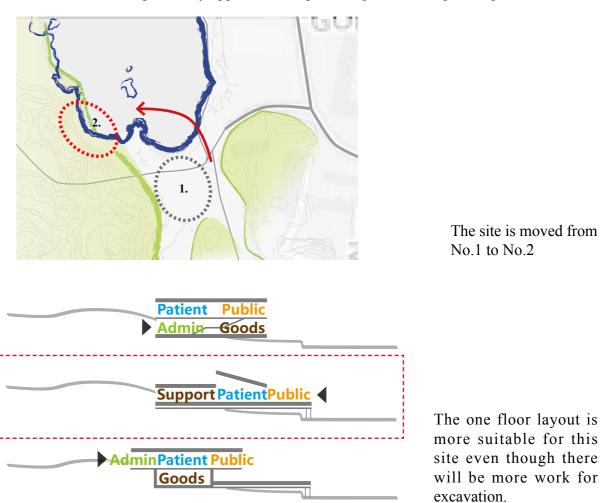


The sketches end up with a question about relationship with the plot. The attractive lake view has a really weak connection right now with the building. And the intention to build directly on flat area seems to bind by terrain.

To be more close to the waterside as well as provide a quieter and clamer surrounding, the plot is moved from No.1 to No.2. Under this condition and results from the first phase, new sketches will follow these principles:

- Build more connection with landscape
- Linear organization for guest zone.
- Try to offer some public space for neighbourhood as part of a recreation area.

To find the suitable relationship with site No.2, 3 ways are tried on section. The final choice stays with a one floor layout. It is easier for accessbility and also more suitable based on function. The building has only approx.1500 sqm and I prefer to keep it simple.



## 5.5 Shape and Daylight



Fig.17 Inspiration picture, www.pinterest.com/pin/571816483913791793/. (2015-5-18)

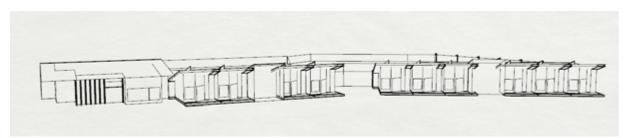
In the begining I was attracted a lot by boat house. But in my project the pitched roof adds too much ceiling height for a one-story building and it is not suitable to guest rooms' scale.



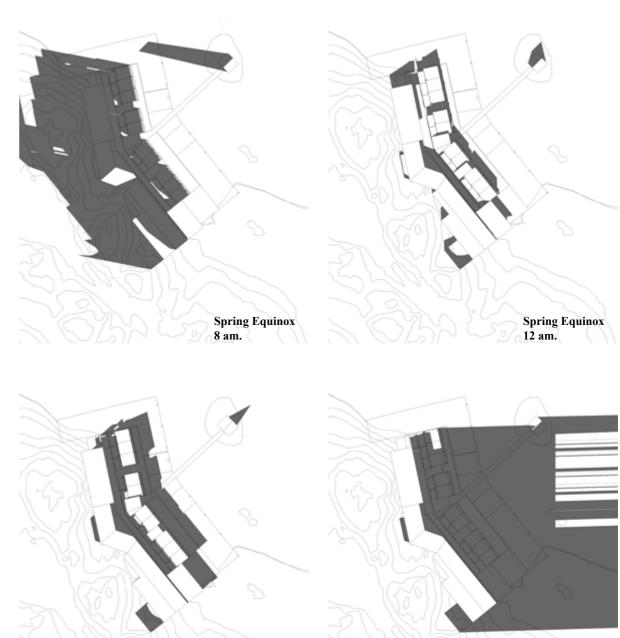


Fig.18 Inspiration picture, www.pinterest.com/pin/571816483913791813/. (2015-5-18)

A duo-pitched roof works better with guests rooms' needs. It helps the building present a residential scale.



Guest rooms face to Northeast, the morning sun can go into rooms. With the help of skylight, they can obtain enough sunlight. The south part of the building contains all common spaces and a backyard, it can be illuminated in most time of the day.



**Spring Equinox** 

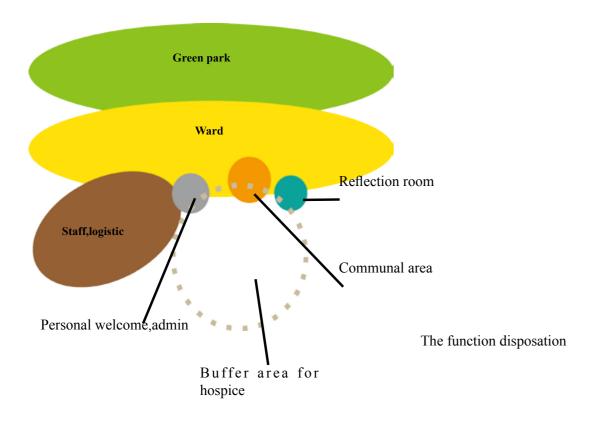
15 pm.

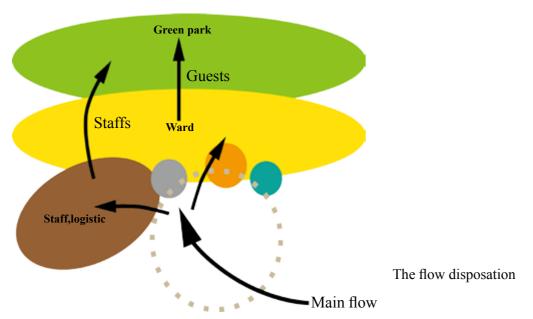
Spring Equinox

18 pm.

#### 5.6 Function relationship

Disposation Diagram based on "The good hospice program"<sup>14</sup>



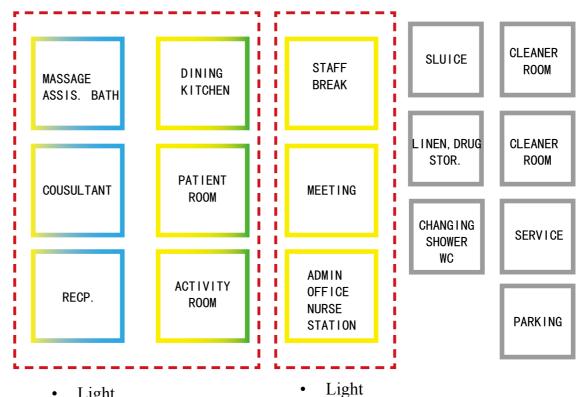


14. SIGNAL, op. cit.

The disposition diagram shows about function arrangement inside a hospice. A buffer area is suggested in front of the hospice. People's impression of a building can start before entering it. It is nice to let people encounters the building step by step to help them prepare to meet with the building. Especially for guests and visitors, a nice buffer area can give them more time to prepare their emotion or behaviour and have a better first impression. Meanwhile this is also an open area to public, it can protect the hospice from isolating with surrounding but still has its privacy

Communal area is another important part inside hospice. It is used by all groups of users inside the building. This area needs to be as open and welcome as possible to invite people to stay. From ward to green park, requirement of privacy and taking refuge will increase. These areas are better to design with a calm and peaceful mood to support users' emotional needs.

Diagram below shows a rough group division for different functions bases on their needs. Yellow presents daylight, green presents nature view, blue presents a calm and nice atmosphere and grey presents no special need for light and view.



- Light
- View
- Atmosphere

## 6. Reflection

This project had been a long journey. One of the main reason for me to choose this topic is that I want to present it as a gift and memory to my dear grandpa and my friend who had passed away because of cancer. In my memory, the cold patient room, the limited visiting hour hurts me so much that I think in the end of life everybody should be treated gently.

In Sweden, with the help of developed palliative care system and government's policy, it is possible to support people's homecare needs and the demand of hospices is not so large. But in China only few of big cities has hospices, lots of people lack knowledge about palliative care and hospitals usually don't want to hold patients who had no need to receive treatment anymore. Where to find a suitable place for our relatives who is going to pass away, who can give them proper care? This kind of conflict can become sharper in the following years with the increase of aging population and it will affect every family. As an architect student, I think it is meaningful to get more knowledge about hospice. During my study process, I am not only learning about this type of building but also knowing more about hospice care and got a chance to think seriously about death.

This thesis is mainly based on a research by design method. The design of the project started with some personal emotional feeling and imagination about "hospice" and then the concept is developed under a generalized view based on related theory. Study of literature working both as an inspiration process and a process to find theoretical foundation for my intuition. I try to translate worlds like: homely, warm, welcome into architecture language with skills I had learned in the past years. The building offers various spaces with their own characters to support guests' needs in different aspects. It allows them to have enough private space and freedom to choose how much extent they want to exposure to others. Natural resource is treated as an important design element in this building, it comes inside as light, window view or plants in courtyard. The whole interior space has a warm and gentle tone to reduce its institution feeling.

I use both 3D models and cardboard models to help me in the design process. I wish the building can help bring a kind of peaceful feeling to everybody use it. In the outcome, rendering becomes a main way to help explain my emotion, since this is a fictitious project and I'm not so skillful in examining interior light condition or materiality with models in a large scale. This definitely has some shortages and there still need lots of effort if I want to make this building a real project and let people feel the mood I want to present.

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Fig. 19 Exterior view of Hospice Djursland

Hospice Djursland, Rønde, Denmark Architect: C.F.Møller Architects Year: 2006-2007,2010-2011



Fig. 20 Green Garden

Size: 1900 m<sup>2</sup> and an 90 m<sup>2</sup> extension (orangery and garage) - 15 beds Image resource: www.cfmoller.com



Fig.21 Bird view of Hospice Søndergård

Hospice Søndergård, Måløv, Denmark Architect: Henninglarsen Archittects Year: 2009-2010



Fig.22 Courtyard view

Size: 1,800 m2

Image resource: www.henninglarsen.com

Both hospices are newly constructed project based on "The good hospice programme". Hospice Djursland aims to create a building within landscape, architects use atriums, sense garden, platform etc. in order to present the beautiful view everywhere no matter where people enter the building. Hospice Søndergård uses two courtyards to link the building. Staff facilities and common areas are close to the entrance in order to protect the privacy for all rooms.



Fig.23 Glass corridor

Louisiana Museum of Modern Art, Humlebæk, Denmark Architect: Vilhelm Wohlert, Jørgen Bo



Fig.24 View to lake

Year: Starting at 1958 and has been extended several times until 1991 Image resource: http://en.louisiana.dk/

Architects for this building spent a few months walking on site before making decision. It is the unique site defines this unique building. Slops, lake, trees on site together with a fatastic sea view give so much dramatic feeling and rich potential to the architects. Long transparent glass corridors wind on site, leading people strolling along site and enjoying both landscape and exhibition at the same time.

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