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# CANCER HEALTH CARE CENTRE COPENHAGEN -PRESENTATION

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health of the cancer patients. difficult phase of their lives.

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A Cancer Health Care Centre in Copenhagen is created through the concept of healing architecture, declaring that architecture can have a positive effect on the healing and

The centre is created with inspiration in evidence based design, concentrated on the conditions and needs of cancer diagnosed people, and five cases of cancer centres in United Kingdom and Denmark provide essential experiences of the architectural effects for creating a soothing environment with an ambience suitable for people in a

The following presents the proposal for a Cancer Health Care Centre in Copenhagen, carried out as a thesis project by group 30, Line Fogedgaard Jønsson and Anette Vilstrup Nielsen, in the department of Architecture at the institute of Architecture & Design, Aalborg University, in the spring of 2010.

An architecture competition brief from 2009 is the base of the project, which further takes its point of departure in the theme of "healing architecture", which declares that architecture can have a positive effect on the healing and health of its users.

This report is a presentation report presenting only extracts of the project, where analyses and processes are described in the process report.

## PROLOGUE

The term of healing architecture represents the concept of the architecture being able to affect human wellness and thereby help strengthen or promote the healing process of the individual human being.

The architectural design can support the healing of a patient, psychologically as well as physiologically, through the integration of the architectural means of qualitative light, acoustics, atmosphere and colors as well as through planning in the sense of creating a possibility for privacy, connection to outdoor spaces and spaces for social interaction with friends, family or other patients. Different evidence vouch for this, either in terms of physiological measurements, statistical analysis as well as through interviews and investigations of the experiences of the individual patients, the staff or the relatives. Hence, healing architecture implies an evidence based design process, where the evidence based architectural factors are important parameters throughout the design process.

The Cancer Health Care Centre in Copenhagen will provide rehabilitation and counseling and be a place, where

people with cancer can meet each others on various levels in a domestic, comfortable atmosphere. The centre is not an institution like a hospital, it does not provide medical treatments and thus it is in a different category in relation to healing architecture. owever, the concept of healing architecture still seems relevant as it plays an important role in how the architecture is welcoming, has a domestic atmosphere and how it inspires, motivates or uplifts people, who are in a very difficult phase in their lives. Furthermore evidence vouch that the architecture can help relieve stress and anxiety, which are common conditions that come along with cancer.

#### PROJECT BRIEF

The forces behind the Cancer Health Care centre are the municipality of Copenhagen (KK) and the, Kræftens Bekæmpelse (KB).

The centre is to help reestablish an everyday life for the cancer patient by means of counseling, therapy, social activities, physical rehabilitation through various activities, lectures and courses for the people with cancer as well as the families.

The Cancer Health Care Centre will collect these offers and it should contribute to keeping and improving the guality of life of the cancer patients and their families with physical, psychological and social elements.

It is the desire that the building will stand out through its architectural expression and create motivation and invite to social interaction, physical motion and personal transformation.

The centre needs to be a place which creates space for happiness as well as sorrow, contemplation and woriness, space for privacy and sociality, where people can be on their own, undisturbed, or be social with friends and family on various levels.

The program furthermore underlines the importance of the architecture's effect on human wellness and health, and how evidence based architectural design can help strengthen and improve the healing and health of the cancer patients.

"Be known in Copenhagen and by its unique architecture signal a non-institutional environment with spaces, where light, colors and acoustic contribute to a friendly, welcoming and relaxed atmosphere."

"Be a physical environment, which creates curiosity about the function of the place and attracts families with cancer, as well as it initiates a dialogue."

"Accommodate dilemmas such as joy and sorrow, laughter and silence, activity and relaxation, man and woman, old and young, poor and rich (cancer strikes all social layers and nationalities)<sup>77</sup> Translated from Danish [Københavns Kommune, 2009, s. 8-9]

#### **RELATION TO OUTDOORS**



AN ACCESSIBLE GARDEN IN CLOSE CONNECTION TO THE CENTRE. SEATING AREAS AND SHELTERS IN THE GARDEN.

#### LIGHT



DAYLIGHT INCOME FROM ALL WORLD CORNERS





BRIGHT COLORS IN DARKER

ROOMS



PREVENT GLARE THROUGH SO-LAR SHADINGS.

AVOID NORTH-SOUTH ORIENTATION

#### FLOW



AN UNEXPOSED WARDROBE

AREA BY THE ENTRANCE.



FLOWING SPACES.



PERSONAL AND SOCIAL SPACE

SEATING AREAS NEAR THE ENTRANCE CREATES A TRANSITIONAL ZONE

SEATING AREAS ON THE EDGE OF SOCIAL GATHERING POINTS PROVIDES DIFFERENT POSSIBILITIES OF SOCIAL PARTICIPATION.

#### ACOUSTICS



## EVIDENCE BASED DESIGN **GUIDE**

The project takes its point of departure in the theme of "healing architecture", and in order to determine and understand which architectural factors specifically have a healing effect on cancer patients, the users, their decease as well as different evidence based design factors have been analyzed.

Cancer patients suffer from side effects from their cancer disease and the treatment. The conditions are psychological as well as physical comprising stress, fatigue, depression, pain and anxiety. It is found highly relevant that the Cancer Health Care Centre is designed so it can relieve these conditions and help the patients in their healing and recovery from their disease.

Evidence from different research within healing architecture proves certain architectural elements' effect on health care outcomes. The factors of light, acoustics, flow, relations to nature as well as personal and social space are important to consider in relation to the Cancer Health Care Centre, as they have proven to relieve and decrease conditions like those experienced by cancer patients.

To further specify the architectural factors, cases have been studied of various cancer centres each illustrating different ways of creating a relaxing and soothing environment for cancer patients and their relatives, focusing on architectural parameters that influence the experience and atmosphere of a room.

The observations and conclusions from the studies are built on to the parameters specified through the evidence based design analysis. The parameters are summarized in the design guide shown above, that form the basis of the further design development of the new Cancer Health Care Centre.



UNEXPOSED WORKSTATIONS

CONVERSATION ROOMS.





#### RIGSHOSPITALET





THE ENTRANCES TO THE CENTRE.



PATHS AROUND THE CENTRE.

р

р

PARKING AREAS AROUND THE CENTRE.

building experience and extending the possibilities for outdoor stays around the building.

A private wooden garden terrace extends from the building towards the South, enabling the kitchen/café area to be taken out by opening up sliding doors in the South facade. The terrace is sheltered from the busy area of Nørre Allé by the administration unit of the centre and by small trees to the West of the site creating a private and tranquil atmosphere.

Additionally, a private roof terrace is in placed the fifth floor, connected to the gym spaces inside the building, defining a quiet and secluded outdoor space with no views from passers-by and providing a great view of the surrounding context.

The outdoor plan illustrates, how the horizontal administration building links to the composition of the existing red brick buildings of De Gamles By along Nørre Allé and prolongs the symmetrical rhythm of the building composition.

The rehabilitation unit stands out from the context with its shape, the vertical expression and wooden materials making it stand out as a landmark in the area of De Gamles By equal to the old church building placed in the symmetrical composition of the red brick buildings by the end of the entrance avenue and the major blocks of Rigshospitalet and the Panum Institute.

## THE OUTDOOR AREA

The Cancer Health Care Centre is situated in Nørre Allé in the urban area of Nørrebro in Copenhagen, close to Rigshospitalet, and on the edge of the quiet area of De Gamles By, characterized by classical red brick buildings and green areas. A park borders to site to the North making a buffer zone to the dense, busy Nørrebro.

The building site is kept in a green layout linking to the expression of the surrounding area with the park North of the site and De Gamles By speckled with small green grass areas and large trees creating a contemplative and peaceful atmosphere surrounding the area.

The entrance to the centre should be clear and inviting, in relation to the described design guide, easing the overcoming of stepping into the centre. The main entrance of the Cancer Health Care Centre is placed facing East towards the beginning of Nørre Allé, as most users will arrive from this direction either by car, public transportation or by foot from the hospital. Additionally, parking lots are placed along Nørre Allé creating the possibility for physically impaired users to be set off very close to the building.

A secondary entrance is placed in the library in the ground floor facing the park and linking to an existing path, creating the possibility for a peaceful walk between the tall old trees of the park. An additional path leads from the traffic junction North of the building site to the centre creating the possibility to collect one self in the quiet and calm surroundings of the park before going to or from treatments in the hospital.

The paths emphasize the link between the park and the building and draws in the green to become part of the

LANDMARKS IN THE SURROUNDING AREA.





## CONCEPT

The concept of the Cancer Health Care Centre derives from the wish to create a building design that complies with the surrounding context, has a welcoming, embracing expression with an optimal layout giving an easy overview as well as indoor conditions accommodated for the users with high illuminance levels and a pleasantly lit environment.

It is a desire to keep a clear differentiation between the two building units of the administration and the rehabilitation, emphasizing the rehabilitation unit as a landmark in the surrounding area and as the main function of the centre, making it easy for the cancer patients to recognize, where to go. Furthermore, the separation creates a more homey atmosphere in the rehabilitation unit, as the busy, institutional working atmosphere around the many office functions is removed from this part of the building.

The two buildings are differentiated through materials, shape and scale as the administration building is low and stringent linking to the symmetric composition of De Gamles By and the rehabilitation unit conforms with the tall urban context of Nørrebro, as it stands tall, and marks itself with its light wooden structure, embracing and welcoming the cancer patients.

ALL 1800 M2 LAID OUT IN TWO STORIES AT THE BUILDING SITE

2 THE BUILDING IS DIVIDED IN TWO FUNCTIONS. THE ADMINIS-TRATION UNIT FOR THE STAFF WORKING AT THE CENTRE AND THE REHABILITATION UNIT CONTAINING ALL FUNCTIONS FOR THE USERS OF THE CENTRE.

3 the rehabilitation unit is pushed back towards north TO AVOID THE SHADOW CAST FROM THE EXISTINGBUILDING TO THE SOUTH. THE UNITS ARE SEPARATED TO EMPHASIZE THEIR FUNC-TIONS.

4 THE REHABILITATION BUILDING IS RAISED TO MINIMIZE THE SCALE OF THE INTERNAL PLANS CREATING A MORE INTIMATE ATMOSPHERE AND TO CONFORM THE BUILDING SCALE TO THE SURROUNDING TALL URBAN CONTEXT. THE ADMINISTRATION UNIT IS LOW AND RECTANGULAR LINKING TO

THE SYMMETRIC COMPOSITION " DE GAMLES BY" AND PROTECTING THE REHABILITATION BUILDING AND THE OUTDOOR SPACE FROM TRAFFIC NOISE AND VIEWS INTO THE AREA.

BUILDING.

6 the rehabilitation building is angled in the southern FACADE OPTIMIZING FOR INCOMING DAYLIGHT AND VIEW OF DE GAMLES BY. THE NORTH FACADE IS KEPT RECTANGULAR OPTIMIZING FOR A VIEW OF THE GREEN PARK AREA AND CONFORMING WITH THE RECTANGULAR SHAPE OF THE ADMINISTRATION UNIT.



5 A LIGHT WOODEN FACADE STRUCTURE IS WRAPPED AROUND THE PLANS EMBRACING AND PROTECTING FROM VIEWS INTO THE BUILDING AND DIRECT SUNLIGHT. THE STRUCTURE OPEN UP TOWARDS THE ENTRANCE AREA WELCOMING PEOPLE INTO THE

/ THE FACADE STRUCTURE IS POINTED IN THE TOP SOUTH EAST CORNER EMPHASIZING THE VERTICAL EXPRESSION OF THE BUILDING CONTRASTING THE HORIZONTAL ADMINISTRATION BUILDING.





## FACADES

In relation to the outdoor concept the facade is designed as a light wooden slat structure wrapping around and embracing the rehabilitation unit protecting from incoming views and direct sunlight. The wooden material will color the reflected light in warm and golden tones creating a pleasant and tranquil atmosphere internally in the building.

To emphasize and express the inner partitioning of the private and social zones in the outer shape of the building volume the facade graduates from a strict and more regular expression in the North facade by the private zones to a more transparent and organic ambience in the South facade by the open social zones, creating a dynamic expression of the structure embracing the building.

The North wall is furthermore insulated, to comply with the energy demands of a low energy building, why special consideration is given to the transition between the two facade types.

The vertical slat structure is continued as wooden sheathing in the Northern facade and additionally on the inside of the private zones emphasizing the expression of a contiguous facade structure wrapping around the building.

To highlight the expression of a tall slim building volume the vertical slats in the Southern facade are placed in vertical bands differentiating in height emphasizing the upwards striding expression of the building and creating a dynamic and organic appearance. The vertical bands are continued in more regular window bands in the Northern facade continuing the expression of the wrapping structure.

The slats are set with a distance and shaped in a way to optimize the amount of incoming light to the required therapeutic illuminance levels, as well as to ensure a large amount of reflected light.

The rehabilitation unit and the administration unit are differentiated in scale and materials to make the rehabilitation unit stand out as a landmark in the area and as the main function of the Cancer Health Care Centre. The administration unit is low and horizontal with a heavy expression in red bricks linking to De Gamles By, whereas the rehabilitation unit is tall and vertical in light wood conforming with the tall urban context of Nørrebro.

The windows of the administration unit is furthermore placed in vertical bands complimenting the upwards striving structure of the rehabilitation unit. They are pulled back from the surface creating a depth in the facade that emphasizes the heaviness of the volume and underlines

inside the building.

the contrast created between the two units.

A slim horizontal window band is placed along the ground of the administration unit stressing the horizontal lines of the building and furthermore creating a light and pleasant environment in the staff wardrobes and the passage between the two building volumes in the basement.

A window band is furthermore placed in the roof of the administration unit above the flow corridor pulling in daylight and creating a light and pleasant atmosphere



VIEW TOWARDS THE ENTRANCE OF THE BUILDING The main entrance of the building is directed towards Nørre Allé where most users arrive both by Car, public transportation or by foot from the Hospital.

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EAST FACADE, 1:500

Elevation of the East and the West facade and the red brick buildings of De Gamles By, illustrating the connection between the administration unit and the symmetrical composition of the buildings along Nørre Allé. The rehabilitation unit stands out and marks itself through its different shape, material and height.



WEST FACADE 1:500



#### WEST FACADE 1:200

The facade graduates from the more strict and regular North facade around the private zones to the more organic and transparent structure in the South–West facade around the open social functions.



#### EAST FACADE 1:200

The vertical window bands of the administration unit complies with the upward striving structure of the rehabilitation unit, which opens up in the main entrance towards Nørre Allé creating a clear entrance and an inviting expression.



#### SOUTH FACADE 1:200

The wooden facade structure of the South facade of the rehabilitation unit is transparent and organic, opening up towards the view of De Gamles By. The South facade of the administration unit stands close to the existing building to the South of the site, why only thin window bands pulling in small beams of light are placed in this facade. A secondary entrance to the administration is furthermore placed in the South facade easing the access for staff working in this end of the building.

The North facade is more strict and regular than the South facade, embracing the private closed functions. The vertical lines of the South facade are continued in the vertical window bands of the North facade creating an expression of a continuing facade structure, ensuring good illumination qualities and a view of the green park.

#### NORTH FACADE 1:200



## FACADE DETAILS

The horizontal section detail illustrates the transition from the vertical slat structure facade to the insulated wall with vertical wooden sheathing and window bands. The wooden slats are leveled with the vertical wooden sheathing of the insulated wall on the outer facade, creating an expression of the vertical slat structure continuing around the facades emphasizing the embrac-

ing expression of facade structure. The insulated walls are furthermore covered with wood sheathing internally, which functions as an acoustical panel and creates the impression of the wooden structure continuing into the private zones.

Small vertical windows are placed where the interior walls of the closed rooms meet the wooden facade, clearly separating the structural system of the facade from the internal bearing construction.

The perspective detail of the facade illustrates the facade structure in a vertical section. The vertical slats are attaches to horizontal steel bars attaches to the bearing structure of the facade. The bearing facade structure consist of the large vertical laminated wood columns and the slated laminated wood columns functioning as wind crosses. The bearing facade structure is clearly detached from the internal bearing structure as the cantilevered plans are pulled back from the facade emphasizing the embracing function of the facade structure.



ISOMETRY OF THE VERTICAL SLAT FACADE CONSTRUCTION

HORIZONTAL WOODEN SLATS INTERNAL WOODEN SHEATHING

SLANTED LAMINATED WOOD COLUMNS

VERTICAL LAMINATED WOOD COLUMNS

VERTICAL LAMINATED WOOD COLUMNS

CONCRETE DECK

SLANTED LAMINATED WOOD COLUMNS

HORIZONTAL WINDOWS BARS IN STEEL WINDOW GLASS

VERTICAL WOODEN SLATS AS SOLAR SCREENING IN UNTREATED LARCH WOOD

INSULATION CONCRETE FOUNDATION



## INDOOR CONCEPT

The concept of the internal building layout derives from a wish to create an intimate and homey atmosphere within the building, where the cancer patients have the possibility to participate in the different functions on various levels. It is important that the building layout meets all needs of the users, why different zones of private and social character should be easily reachable within the building, as the users may want to utilize different zones during a stay or dependent on whether the user is visiting for the first time or has been visiting before. Thus, a zoning of the various functions in both vertical and horizontal direction is the essential parameter of the concept.

Each plan has areas of both social and private character with a semi private middle zone, where the users can sit on the edge of the social functions.

The functions are placed in a clear layout making it easy to overview and use different functions and change zone according to mood.

The building is zoned vertically as well, with the gyms in the top floors creating a more private atmosphere around these functions, where views into the building are limited, and where there is a pleasant view of the park and De Gamles By.

The vertical zoning evolves around a definition of functions used by first time visitors and those who know the centre well. The functions that help create a homey atmosphere and ease the way into using the centre, such as the kitchen and library, are placed in the lower floors, where they are easily accessible and overviewable. The gyms and the school kitchen are placed in the top floors as they imply having an appointment and most likely will be used by people who have visited the centre

before and know the layout of the building.

The plans are opened up vertically to ensure visual connections between the functions and to give the users an overview of what is happening above or below them. This also lets the light further into the building and creates well defined spaces in the open social space.

ALL 1800 M2 LAID OUT IN ONE PLAN

2 the rehabilitation building is raised in five levels MINIMIZING THE AREA OF EACH PLAN CREATING INTIMACY, A CLEAR OVERVIEW AND MINIMIZING THE DISTANCES TO WALK AS VERTICAL MOVEMENTS WILL BE BY LIFT.

THE RAISED LEVELS ARE ZONED VERTICALLY WITH MORE PRIVATE ZONES UPSTAIRS AND EASILY ACCESSIBLE FUNCTIONS IN THE LOWER FLOORS ADDRESSING THEMSELVES TO FIRST TIMES USERS.

 $\mathbf{3}$  the plans are partitioned into zones in the horizontal DIRECTION WITH THE PRIVATE CLOSED FUNCTIONS PLACED TO THE NORTH WITH A VIEW OF THE QUIET GREEN PARK AREA AND THE SOCIAL FUNCTIONS PLACED ON THE SUNNY SIDE TO THE SOUTH WITH A VIEW OF THE MORE LIVELY AREA OF DE GAMLES BY. THE MIDDLE ZONE IS A FLOW ZONE BETWEEN THE TWO ZONES ENABLING THE USERS TO SIT ON THE EDGE OF SOCIAL GATHER-INGS.

WARM GLOW OF WOOD.

4 the plans are modified and opened up in the middle CREATING SPACES IN THE OPEN SPACE, ENABLING VISUAL CONNEC-TIONS BETWEEN THE FUNCTIONS AS WELL AS ENABLING THE DAYLIGHT TO REACH FURTHER INTO THE BUILDING

5 the plans are embraced by a light wooden facade STRUCTURE DEFINING A CONNECTED SPACE IN THE VERTICAL DIRECTION BETWEEN THE PLANS AND CREATING A WARM AND INTIMATE ATMOSPHERE AS IT FILTERS THE LIGHT AND GIVES IT A



#### SECTION FROM WEST TO EAST 1:200

The section illustrates the partitioning of the plans into different zones complying with the needs of the users for different levels of privacy and social intercourse. The private closed zone is placed by the North facade with a view of the quiet and tranquil green park area and the social zone is placed near the South facade with a view of the more lively area of De Gamles By. A semi private sitting area and flow area is created between the two zones allowing the users to sit on the edge of the various social gatherings and furthermore creating a buffer between the two zones emphasizing the different atmospheres linked to the different functions. The cantilevered levels are extending from the private closed zone out into the social space. The levels are cut and pulled back from the South facade emphasizing the two separate structural systems of the facade and the internal bearing structure and furthermore creating a shared social space in the vertical direction between the different social functions placed on the edge of the cantilevered plans.





VISUAL CONNECTIONS





VERTICAL FLOWS

HORIZONTAL FLOWS

THE OVERVIEW FROM THE ENTRANCE

## PLANS

In relation to the indoor concept the plans are divided into zones of different social or private character complying with the needs of the users in relation to the defined parameters in the evidence based design guide. To ease the transition between the different zones and to create a more informal atmosphere around the private zone small open conversation niches are created next to the private closed rooms allowing the users to choose the level of privacy. Furthermore, the closed rooms can be opened up to the side creating a possibility for flexible use.

The ground floor of the rehabilitation unit contains the main entrance and the layout of this plan and the visual connections are especially important as this area will form the first impression and experience of the building. The entrance is a secluded niche behind the fire escape, placed in the semi private zone, allowing the users to collect themselves in privacy and get an overview of the building, before stepping into it.

The library and a reading lounge is placed ahead of the entrance area, floating from the private to the semiprivate zone, creating easy access to information for

new users and the possibility to sit privately in the library with a view of the kitchen area and the social functions. The library continues to the first floor, making it an open vertical space in the building.

The kitchen and dining area are placed in the ground floor and is an essential facility in the rehabilitation centre, as it gathers people and creates a domestic atmosphere, easing a further step into the building. There will be staff present in the kitchen area, why it is placed centrally in the room easing the access and creating good visual connections to and from the kitchen. The kitchen core continues up through the building, as a small café kitchen on the first floor, a youth cave for computer games on the second floor and as storage on the third floor. The core defines space in the semi private zone creating a possibility to sit on the edge of the various social functions.

To further define a clear building layout the plans are cut open and moved back from the facade optimizing the vertical visual connections between the plans. The plans are furthermore linked with small stairs emphasizing the vertical connections and varying the flow and experience up through the building.

The lift functions as the main and most likely preferred vertical connection in the building, as many of the users will be weak, why it is placed centrally in the building, easily accessible and visible.

The two functions; rehabilitation and administration are divided into two units, where the administration building contains offices for the staff working in the centre, where they have a space of there own to retreat without disturbances from the cancer patients.

The division of the two units emphasizes the rehabilitation unit as a landmark in the surrounding area and as the main function of the Cancer Health Care Centre, making it easy for the users to recognize where to go.

The layout of the administration unit is strict and clear, emphasizing the outer rectangular volume contrasting the vertical and angled volume of the rehabilitation building and linking to the composition of De Gamles By.

The offices are divided into four sections comprising the Centre Manager, the Danish Cancer Society, Copenhagen Municipality and the Course Centre, respectively. The offices are placed along the East facade with a view of Nørre Allé, connected by a straight flow line along the

building.

The office zones are divided by the kitchen area on each floor and a double high dining area pulling in light in the middle of the building and defining the different office zones. The offices are created as open spaces separated from the corridor by small printing or sitting niches creating an open and light interior of the building and breaking up the corridor by small light shafts through the building.



THE BASEMENT CONNECTION

West facade, creating a distance between the administration offices and the garden terrace of the rehabilitation

The rehabilitation and the administration units are connected through the basement allowing the volumes to be separated above ground, emphasizing the different functions of the volumes.

The basement contains all technical rooms and the staff changing rooms, which are placed to the North easing the access to and from rehabilitation unit or to the entrance of the administration unit.





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5TH FLOOR 1:200

- 1 View from the semi private zone in the ground floor into the kitchen area and the semi private reading lounge. The kitchen core defines space around the semi private reading lounge on the edge of the social kitchen area.
- 2 View from the flexible gym area on the 4th floor. The room is high with the wooden facade structure stretched over the roof emphasizing the protective and wrapping structure of the facade and creating a warm and pleasant lighting atmosphere as the light is reflected in the wooden facade slats.
- 3 View of the administration corridor on the 1st floor. The corridor creates a view through the building creating a clear overview of the different functions. Furthermore the corridor functions as a small lounge area where one can retrieve relaxing or reading.
- 4 View of the open conversation lounge on the 2nd floor. The open lounge creates a possibility for the users to chose level of privacy when utilizing the private zones and furthermore creates a more informal atmosphere around these rooms.









View from the first floor in the workshop area. The open space is defined by the cut in the plan creating visual connections between the various social functions encouraging for participation.



View from the ground floor into the kitchen and play area. The cantilevered plans reach out into the open rooms creating a connected social space in the vertical direction.

## EPILOGUE

The theme of healing architecture forms the base of the creation of this proposal for a Cancer Health Care Centre in Copenhagen based on a competition brief from 2009.

The site of the Cancer Health Care Centre is on one side located in a scenic area, with the park to the North and the characteristic De Gamles By with classical red brick buildings in a strict symmetrical layout and an oasis like character, defined by greenery and tranquility. On the other side it is situated in the urban, dense area of Nørrebro, with busy main streets and large building blocks, such as the Panum Institute neighbouring the site and Rigshospitalet. The location defines two different types of contexts and scales, in which the Cancer Health Care Centre should mark itself as well as complement and respect. Many cancer patients visiting the centre come from the main streets of Nørrebro bording the site, as well as from the Rigshospitalet on the other side of the traffic junction, why the relation to this part of the side is evident.

Healing architecture and the underlying concept of evidence based design is analyzed in relation to needs and conditions of cancer patients, to understand the relevance and how it can be implemented to create a soothing, healing environment, where they can retreat before, after or in between the harsh treatments, to get support, to meet others and to participate in various recreative activities.

Various cases of cancer centres are studied in Scotland and Denmark to further gain practical experience of the atmosphere and ambience and the architectural effects utilized, to supplement the theoretical knowledge gained about evidence based design factors of healing architecture. The conclusions of the theoretical and practical knowledge are summed up in a small evidence based design guide that forms the base of the design process. The evidence based design guide deals with factors of light, acoustics, relation to nature flow, personal and social space as well as the importance of a qualitative indoor climate. These parametres have together with the contextual factors formed the base of the project through different phases and combined with the desire to comply with the Low Energy Class 2, it has resulted in a proposal for the Cancer Health Care Centre which integrates evidence based design to create a comfortable, sustainable and healing environment with a domestic atmosphere that accommodates the cancer patients and their relatives and defining a retreat from the harsh reality in which they find themselves. .