

# **Marijke van Suijdam**

## **The loop**

**A rehabilitation centre for spinal cord  
lesion patients in the city of Utrecht**

**Wagendwarsstraat 40  
3581 WN Utrecht  
+31 6 111 26 448  
marijkevansuijdam@hotmail.com**

## **Amsterdam Academy of Architecture**

## **Graduation Projects 2014-2015**

## **Architecture**

# Marijke van Suijdam

## The loop

### A rehabilitation centre for spinal cord lesion patients in the city of Utrecht

Can architecture, in combination with the city, make a positive contribution to the rehabilitation process of a spinal cord lesion patient?

#### Health care

The influence of the environment on the recovery process is discussed within the public health sector with increasing frequency. A role which has become smaller over time due to the development of modern medical science.

The focus is on the practicability of a building; architecture as a tool serving medicine. The rationalisation of healthcare and the international shift in the perception of disease have caused a change in this mentality to come to light. Today, the matter is not limited to healing the human body, it also deals with the relationship between people and their environment. In my graduation project, I play into this shift. The person, the patient is central in the design.

#### Design

The rehabilitation centre consists of four different volumes. These volumes relate to the various psychological phases a patient goes through after a trauma. The positioning of the volumes and the relationship it creates with the city and the city-dwellers, also relates to this.

The volumes function as separate building components but together they function as one complex. A three-dimensional web. The loop, connects the different volumes. This web penetrates the volumes and are, in addition to a connecting route, also a component of the rehabilitation programme. The loop also generates interaction and meetings with the city and the city-dwellers.

The city and the architecture have been deployed to support and, where possible, accelerate the recovery process of the spinal cord lesion patient. This has led to a new kind of rehabilitation; the entire building revolves around rehabilitation. The city connects to this web and offers a programme to facilitate reintegration into society.

**Graduation date**  
09 10 2014

**Commission members**  
Marcel van der Lubbe  
Ed. Bijman  
Rob Aben

**Additional members for the examination**  
Machiel Spaan  
Rik van Dolderen



# Architecture



Building block in the city of Utrecht



Building block level



Buildings to demolish



New situation



City as scenery



Edges of the building block



Buildings to demolish



Internal area in building block



Moving in public space



Obstacles in the city



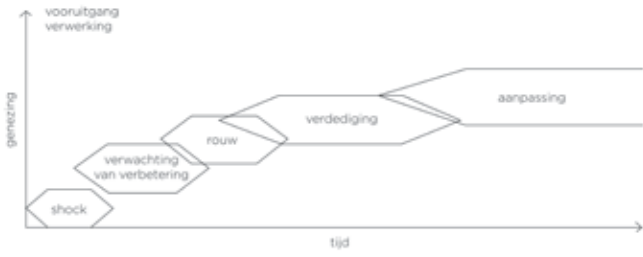
Traveling by public transport



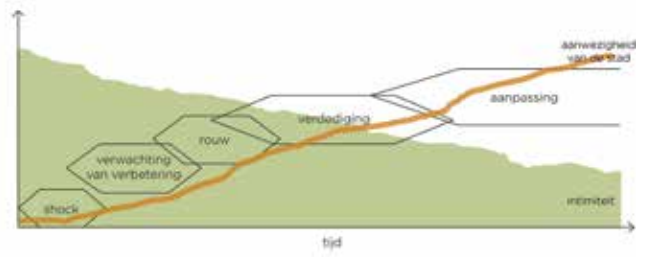
Using facilities



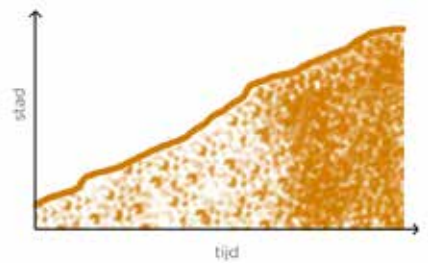
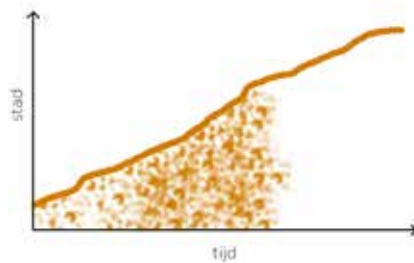
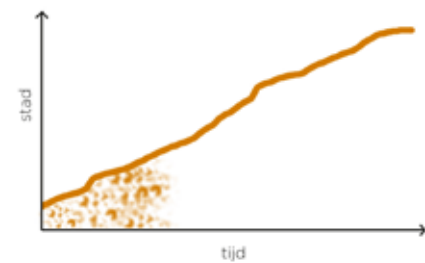
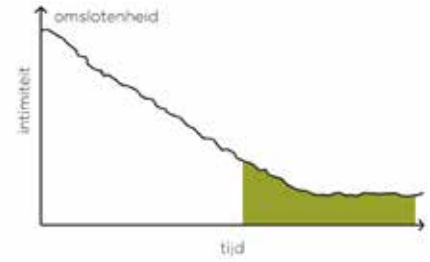
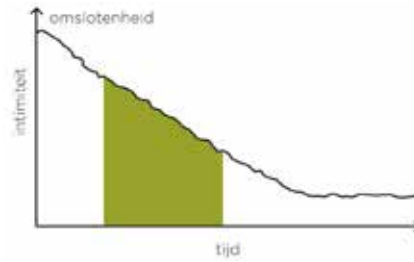
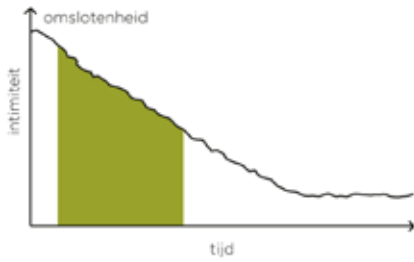
The square which embeds the rehabilitation centre in the city



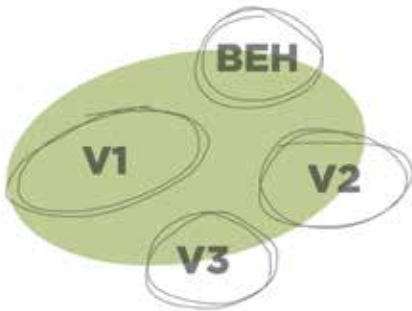
The model of Kerr (1976), which discusses phases/stages in the rehabilitation process.



The model of Kerr translated to the city and building level



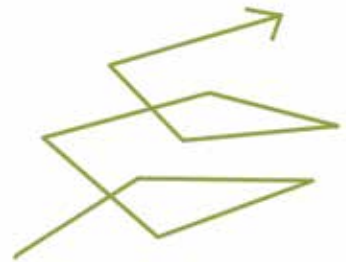
Cutting up nursing ward into three different departments, causing the building to become a supporting element in rehabilitation and the psychological process.



Four different building volumes



Connecting the building volumes for efficiency



Connection by three-dimensional web  
The loop

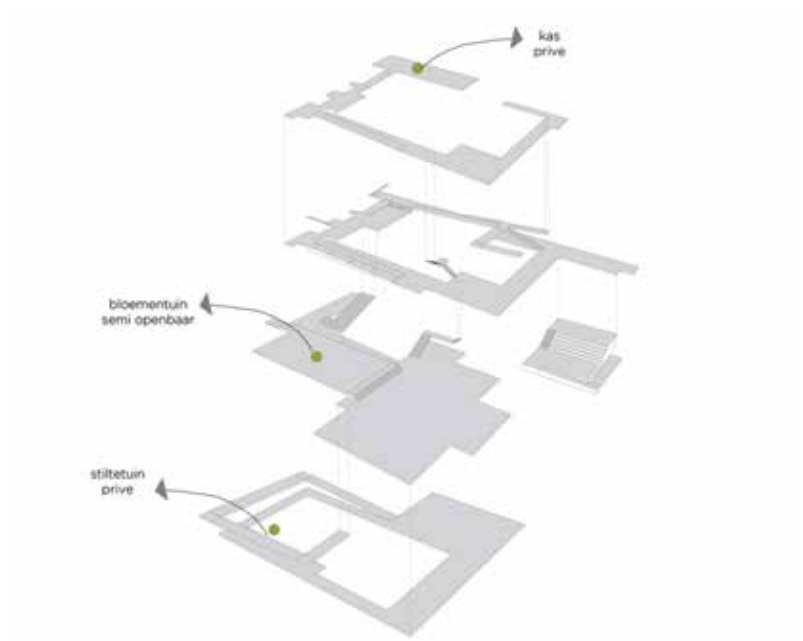
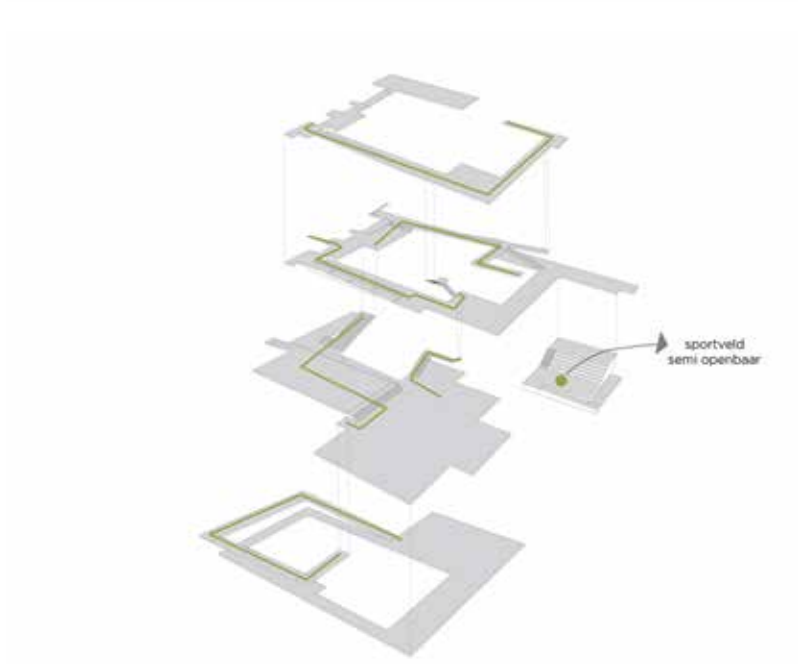
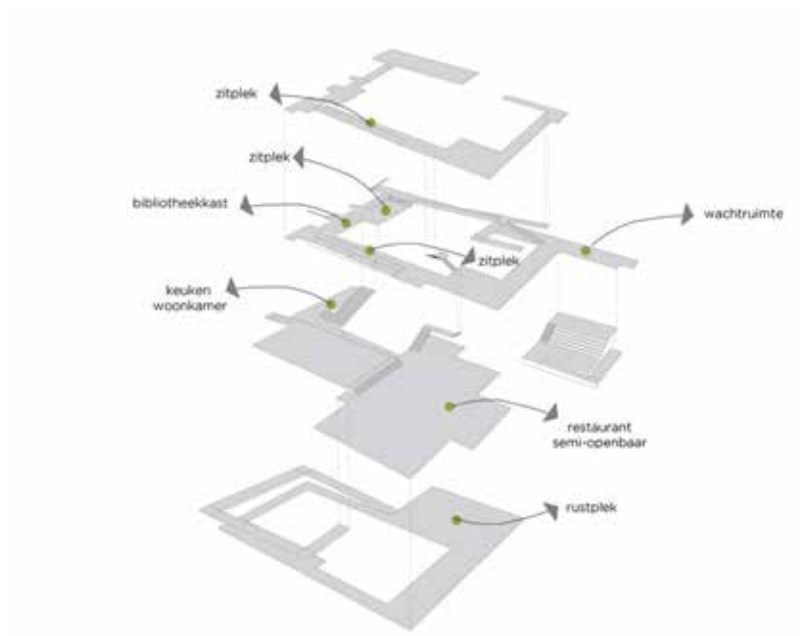


The loop penetrates the building volumes - The loop is extravert



Programme components have been designed as mass - programme components are introvert







The loop - supporting programme



The loop - exercise and sports



The loop - healing environment

# Master of Architecture / Urbanism / Landscape Architecture Amsterdam Academy of Architecture

Architects, urbanists and landscape architects learn the profession at the Amsterdam Academy of Architecture through an intensive combination of work and study. They work in small, partly interdisciplinary groups and are supervised by a select group of practising fellow professionals. There is a wide range of options within the programme so that students can put together their own trajectory and specialisation.

With the inclusion of the course in Urbanism in 1957 and Landscape Architecture in 1972, the Academy is the only architecture school in the Netherlands to bring together the three spatial design disciplines under one roof.

Some 350 guest tutors are involved in teaching every year. Each of them is a practising designer or a specific expert in his or her particular subject. The three heads of department also have design practices of their own in addition to their work for the Academy. This structure yields an enormous dynamism and energy and ensures that the courses remain closely linked to the current state of the discipline.

The courses consist of projects, exercises and lectures. First-year and second-year students

also engage in morphological studies. Students work on their own or in small groups. The design projects form the backbone of the syllabus. On the basis of a specific design assignment, students develop knowledge, insight and skills. The exercises are focused on training in those skills that are essential for recognising and solving design problems, such as analytical techniques, knowledge of the repertoire, the use of materials, text analysis, and writing. Many of the exercises are linked to the design projects. The morphological studies concentrate on the making of spatial objects, with the emphasis on creative process and implementation. Students experiment with materials and media forms and gain experience in converting an idea into a creation.

During the periods between the terms there are workshops, study trips in the Netherlands and abroad, and other activities. This is also the preferred moment for international exchange projects. The Academy regularly invites foreign students for the workshops and recruits wellknown designers from the Netherlands and further afield as tutors.

Graduates from the Academy of Architecture are entitled to the following titles: Master of Architecture (MArch), Master of Urbanism (MUrb), or Master of Landscape Architecture (MLA).