P4 Reflection
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This paper reflects on my graduation project, which is designing of a “rehabilitation center for Spinal Cord Injury patients”. In graduation studio “the Healthy Environment”, we are encouraged to give priority to the quality and experience of space, instead of technical, organizational and financial issues, like in most of the existing projects.

Spinal Cord Injury (SCI), as a life-changing event, can lead to physical disabilities, impair body functions, result in psychological and social problems. The average age of injury is around 40 years old, with a bi-modal distribution between 16 and 30 years and 65+ years. Among all of them, 80.7% are males.

After Injury, patients spend one month (on average) in hospital, and once they are physical stable, they will move to a rehabilitation center, where they live for 6.5 months (for some patients, it will be as long as 2 years). After discharge, patients can choose to go back home or move into a nursing home (lying on their physical independence). But they still have to come back to the rehabilitation center regularly, for therapies or check up. Therefore, to SCI patients, a rehabilitation center should be a transition place from hospital to normal society. Besides, in consideration of patients’ long days staying there, the atmosphere in a rehabilitation center should by no means feels like in an institutional hospital, or a hotel, but more like a small town. In one rehabilitation center design in Basel, the patients clearly express the wish that they do not want the building look or feel like a hospital. They do not want the typical organization in a hospital with efficient circulation, a long corridor with countless doors on both sides.

Although the rehabilitation setting is a safe, accessible environment
where a patient is able to optimize one’s physical abilities, with a professional staff who offer positive support, the new rules of their body will lead to the psychological problems and a series of emotional reactions, because for many of them, feeling dependent on others is unfamiliar or even scary experience. These emotional reactions, including angry and depression, make it more difficult for SCI patients to relate to others, and could eventually depart themselves from a larger social network. So the atmosphere in a rehabilitation center should be social interaction-stimulating, not only encouraging more time with relatives and friends from their previous social network, but also offering enough opportunities of practicing their social skills with strangers. While at the same time, privacy is a prolonged topic when discussing a healthcare building with in-patient wards. During our interview, we heard patients talking about their needs of privacy again and again. My research was focused on “the balance between patients’ needs of privacy and social interaction”. In order to find the conclusion, I visited existing projects (two in Netherlands and one the Swizerland), and interviewed different user groups including patients, nurses and therapists. The research shows that the balance differs among different individuals and during different phases. But one thing is sure that clear hierarchy of space privacy in a building crucial to patients rebuilding sense of control, which means it contributes to patients’ rebuilding of confidence.

A SCI rehabilitation center should “facilitate SCI patients as much as possible to function independently and help them re-integrate into normal communities with their new identity”. This is the reason why I choose the site on the boundary between a big park and a large piece of neighborhood. Green space is believed as one of the factors creating the healing environment. At the same time, the neighborhood next to it, helps to create the impression of living in a normal community. An existing building sits on this site. It is two-story kindergarten built in 1930 with an area of around 600m². It’s the first kindergarten in Amsterdam, and its symmetric layout strengthens its monumentality. This is the most challenging problem for this site, to build a
6000m² health complex next to a small but monumental building. To show respect to the existing, and avoid looking too strong, my strategy is to detach the new part and the old building, functionally. A very light, steel structure colonnade connects the two parts. The 10 meter wide outdoor space is totally open to public. It can be seen as a street extends into the park, and in this case the rehabilitation center does not block the pedestrian into the park too much. In order to let patients enjoy the green space, while at the same time, leave the park to the public as much as possible, the new building will be developed to the south of the kindergarten, away from the center of the park. And it has different attitude towards the neighborhood and the park. The façade facing neighborhood is two-story high and facing the park mainly one-story high, consistent with the old building.

As mentioned before, clear hierarchy of privacy is a main topic in my design. Basically, functions become more and more private from north to south. The existing building accommodates commercial programs, including a restaurant, a café and a shop on the ground floor. There is no extra restaurant exclusive to patients in this rehabilitation center, which pushes them back into normal society. In the main part of this complex, offices and sports facilities are arranged around a lighting well. In the evening when therapies ends, these sports facilities can be open to people from neighborhood. As for the most private programs, like test, consulting and medical care, are along the courtyard faraway from entrance. All the in-patient bedrooms are on the first floor, along the street, creating the feeling of living in a normal community.

The materialization of interior also contributes to achieve different atmosphere in regard with different privacy. On the ground floor, circulation space including corridor and entrance hall are cladded with red bricks, as a mimic of the traditional streets in Amsterdam. On the first floor, wood is more used to create the living room atmosphere, to encourage patients to come out from their rooms and have a chat with their neighbors. Windows between bedrooms and the corridor
supports this idea too, but if they want, they can also turn off the curtain.