

Växjö (SE)

LÄNKÅ

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Fig 1 Sweden's Småland region is known for its blend of ecology and innovation, and Växjö, considered the commercial and cultural center, embodies this spirit of entrepreneurship and ecological awareness. The city's relationship with water and other resources has evolved over time, with a focus on restoring polluted lakes and transitioning to a fossil-free city in the 1990s.

Växjö has been an early adopter of climate adaptation strategies and is now working towards the Sustainable Växjö 2030 vision, emphasizing carbon-neutral construction and holistic, care-based development approaches that bridge the gap between nature and culture.

Fig 1 Starting towards the Central Hospital site

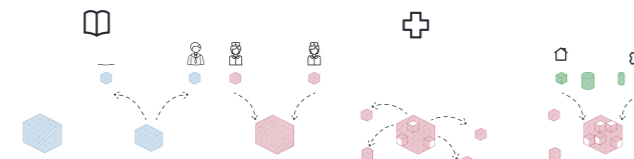


Fig 2 In this new vision of care, the hospital's future can play a significant role in the city's long-term goals by reimagining what a contemporary care environment should be. Care and wellbeing are seen as integral to everyday life, viewed as a relational process rather than a commodity. The hospital's redesign should consider relationships between buildings, landscapes, individuals, caregivers, and receivers, creating a more integrated and hybrid space that combines urban functions with care-oriented elements throughout the city.

The reenvisioning of the Central Hospital in Växjö focuses on three main aspects: connecting the site with the rest of the city, reusing existing structures, and designing new programmatic content for the site. The goal is to create a hospital that reflects the new vision of care, becoming an integral part of everyday life and seamlessly integrating care functions within the urban spaces of the city.

Fig 2 Conceptual Diagram of Fragmentation



EVOLUTION OF THE SITE



1855 The city starts off as a market town signified by the cathedral and the beginning of a grid. This form is brought following a fire in 1843.

1918 The railway's introduction to the city in 1865 leads to a rapid growth in population. The south of the railway starts becoming integrated to the city, generating a new relationship to the lake. The first treatment plant is opened in 1927.

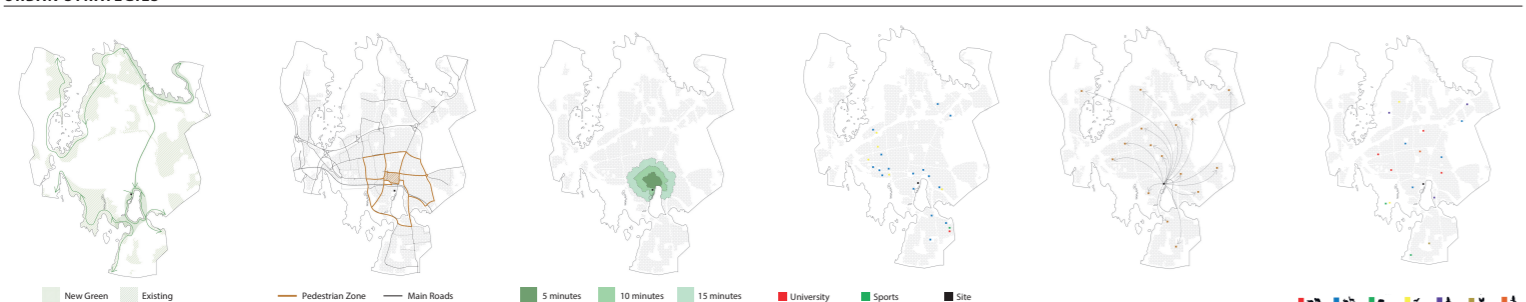
1954 The city becomes the fastest growing Swedish city. Developments in the south increase. The south marks its flexible nature when people coming back from war zones are treated in the temporarily transformed school buildings.

2023 The evolution of the hospital as a superblock detached from the rest of the city becomes clear. Simultaneously, the drive to become environmentally friendly creates a setting for reconsidering the future of existing building stock and the city.

2030 Guided by the Sustainability Vision 2030, the site is gradually transformed to a place where more permeability is created, hospital functions are revised and the lake is celebrated. Linkage is achieved through various strategies.

2050 The urban form transforms to make permeability a feature of not the site but the whole city. Programmatic diversity and formal diversity are gradually reconciled, posing an alternative to the grid and the zoning legacy of the city's past.

URBAN STRATEGIES



Hybrid Links Using the already big transport arteries of the city, the proposal connects the lakes of the area through green and blue corridors, allowing the movement of the flora and fauna between the greater areas of the region and embracing the lake all around.

Växjö Ring Drawing the example of many cities in Northern Europe such as Ghent and Belgium, the proposal limits car use in the city by creating 4 restricted traffic zones. Direct crossing between the areas is forbidden, imposing the transfer through the main roads.

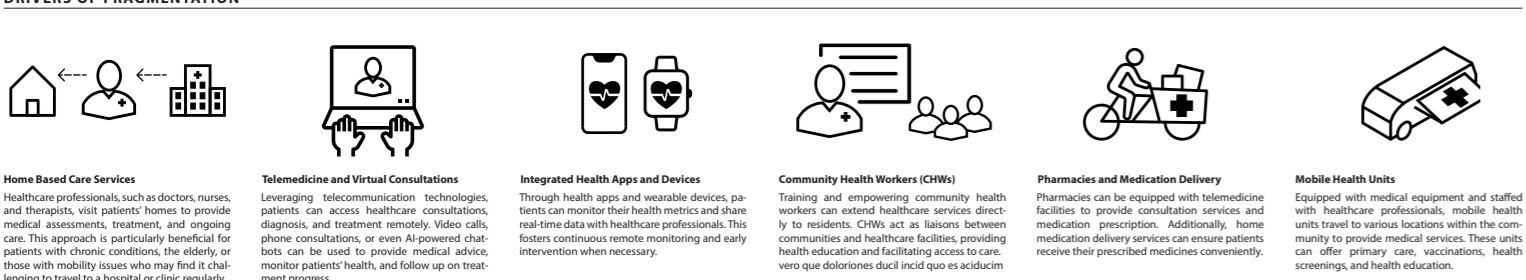
5-10-15 Given the small size of the city, it is possible to reach the main points in a short walk, considering car use in the city as a starting point, the site is easily accessible.

Stakeholders The city already has an established network of initiatives sponsored from either the municipality or the community, that focus on a number of topics, from innovation centers to circular economy markets. All these stakeholders are interconnected and need physical spaces for activation.

Wellness In the city there are already present a number of spaces for wellness, from sport centers to pharmacies to doctors' offices. A preliminary study shows the areas that lack fast access to medical centers or sport facilities.

Non-Human Life The city already has a specific environment. Different species of animals require specific environments. Other than the larger animals considered in this map, a big variety of insects, fish and amphibians inhabit the city and the waterfronts.

DRIVERS OF FRAGMENTATION



Home Based Care Services Healthcare professionals, such as doctors, nurses, and therapists, visit patients' homes to provide medical assessments, treatment, and ongoing care. This approach is particularly beneficial for patients with chronic conditions, the elderly, or those with mobility issues who may find it challenging to travel to a hospital or clinic regularly.

Telemedicine and Virtual Consultations Leveraging telecommunication technologies, patients can access healthcare consultations, diagnosis, and treatment remotely. Video calls, phone consultations, or even AI-powered chatbots can be used to provide medical advice, monitor patients' health, and follow up on treatment progress.

Integrated Health Apps and Devices Through health apps and wearable devices, patients can monitor their health metrics and share real-time data with healthcare professionals. This fosters continuous remote monitoring and early intervention when necessary.

Community Health Workers (CHWs) Training and empowering community health workers can extend healthcare services directly to residents. CHWs act as liaisons between communities and healthcare facilities, providing health education and facilitating access to care, even for those who face barriers to healthcare.

Pharmacies and Medication Delivery Pharmacies can be equipped with telemedicine facilities to provide consultation services and delivery services. Additionally, home medication delivery services can ensure patients receive their prescribed medicines conveniently.

Mobile Health Units Equipped with medical equipment and staffed with healthcare professionals, mobile health units travel to various locations within the community to provide medical services. These units can offer primary care, vaccinations, health screenings, and health education.

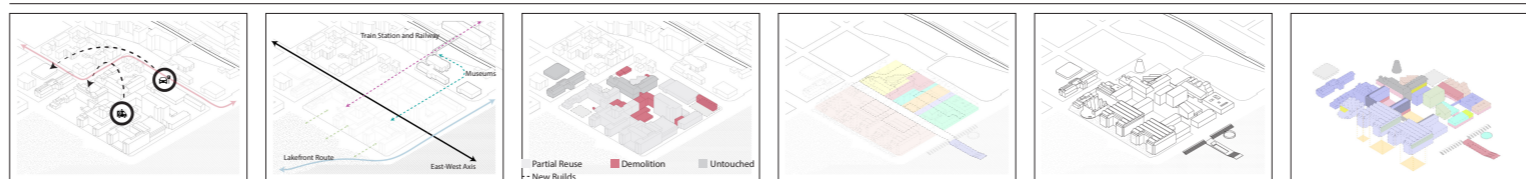
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SITE STRATEGIES & IMPLEMENTATION



Transfer of Parking & Emergency Following the limitation of cars in the city, the space occupied by car parking is also reduced, transferring part of it to the parking already present on the other side of site.

Strategic Permeability Key strategic interventions to facilitate permeability arise from links already implied by the site.

Gradient Intervention The reuse strategy goes hand in hand with the main links that need to be created. A gradient of interventions are established to support a long-term vision of adaptation.

Breaking the Superblock With the guidance of the new routes, an array of plot sizes and characters are created. Instead of strict zoning, plots are interrelated with one another, creating a fluid space at the ground level.

Assemblage of Forms Through the new builds and reuse strategies, an array of forms are created with different facades and heights. This reflects the hybridity of the new area.

Hybridity of Functions While at first glance the site may seem like it is divided into 2 zones, an x-ray look into the buildings show that each volume contains an amalgam of programs that support a new care landscape.



Outdoor Recovery In order to fasten the recovery of rehab patients and create better conditions for the geriatric wing, the volume is directly connected to sport activities in the lake.

Mobility Hub Integrating multiple transportation options, such as buses, trains, bikes, and rickshaws.

Civic Buffer Zone A civic buffer zone is created on the north side by the reuse of the car park structure, opening up the axis that follows the museums through a tunnel-like entrance.

Pediatric Wing The new building prioritizes children's well-being, harmoniously blending indoor and outdoor spaces to foster a comforting atmosphere for their recovery.

Transitional Spaces Transitional spaces along the axis are created by the negative space of the buildings. Through this, the linear rigidity is broken to allow for lingering and passing through.

Automated Subterranean Logistics Use of robotic systems to move medical supplies, equipment, and waste efficiently.

Green Buffer Zone The pedestrianation of the final part of Södra Esplanaden ensures the connection between Strandbörket park and the open courtyards of the hospital.

Reuse Strategies The reuse of the buildings are done through incisions, additions and filters.

Recycling Hub and Makers Space The reconversion of this building is used temporarily as a place to manufacture building parts and then permanently to a makers space and waste management hub.

Reuse and Repair A civic buffer zone is created on the north side by the reuse of the car park structure, opening up the axis that follows the museums through a tunnel-like entrance.

Changing Rhythms At times, the proposal uses flexible structure to facilitate mixed use civic spaces in the daytime and maintain security at night. Main axis always stay open for accessibility.

Controlled Demolition By retaining existing structures, and preferring adaptive reuse, limited demolition reduces the environmental impact associated with construction and waste generation.

Residential Program In collaboration with the municipality, residential functions can be introduced in the site, with special temporary leasing.

Self-Sufficiency The self-sufficient building incorporates water collection systems for reuse, harnesses solar power for energy needs, and utilizes a wind turbine.



Phasing Strategy Despite having a linear implementation route, the phasing strategy is based on strategic points and processes that connect various parts of the site to one another in a non-linear fashion across time. Aiming to activate a widening array of stakeholders, the phasing oversees the hospital turning into an hybrid environment with processes of reuse, new building activities and landscape strategies making it a more integral part of the city.

PREPARATION Identifying parking spaces and underground parking; Logistics Center; Temporary occupation of 2 & 6 buildings; Add; Landscaping northern edge; Establishing mobility hub; Allocation of car park; New facilities for; Identification of Eastern and Southern edge; Reconversion of building to open up east-west axis; Changing 3 existing lanes; New parking wing; Reconversion of 2; Commercial place and fence; Initiative to re-program; Make & distribute; Further adaptation of hospital building with residential activities.

TRANSFORMATIONS Simultaneous processes; Links across time.

ADDITION OF HOSPITAL VOLUMES Temporary occupation of 2 & 6 buildings; Add; Landscaping northern edge; Establishing mobility hub; Allocation of car park; New facilities for; Identification of Eastern and Southern edge; Reconversion of building to open up east-west axis; Changing 3 existing lanes; New parking wing; Reconversion of 2; Commercial place and fence; Initiative to re-program; Make & distribute; Further adaptation of hospital building with residential activities.

AFTER INTENSE FRAGMENTATION Identifying parking spaces and underground parking; Logistics Center; Temporary occupation of 2 & 6 buildings; Add; Landscaping northern edge; Establishing mobility hub; Allocation of car park; New facilities for; Identification of Eastern and Southern edge; Reconversion of building to open up east-west axis; Changing 3 existing lanes; New parking wing; Reconversion of 2; Commercial place and fence; Initiative to re-program; Make & distribute; Further adaptation of hospital building with residential activities.

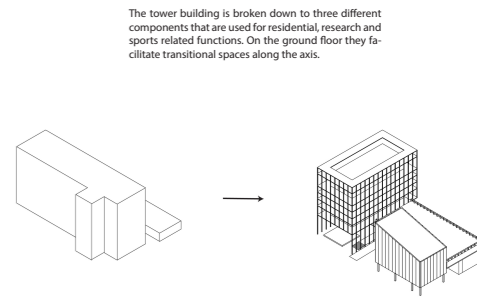
AFTER DEMOLITION Identifying parking spaces and underground parking; Logistics Center; Temporary occupation of 2 & 6 buildings; Add; Landscaping northern edge; Establishing mobility hub; Allocation of car park; New facilities for; Identification of Eastern and Southern edge; Reconversion of building to open up east-west axis; Changing 3 existing lanes; New parking wing; Reconversion of 2; Commercial place and fence; Initiative to re-program; Make & distribute; Further adaptation of hospital building with residential activities.

FUTURE Identifying parking spaces and underground parking; Logistics Center; Temporary occupation of 2 & 6 buildings; Add; Landscaping northern edge; Establishing mobility hub; Allocation of car park; New facilities for; Identification of Eastern and Southern edge; Reconversion of building to open up east-west axis; Changing 3 existing lanes; New parking wing; Reconversion of 2; Commercial place and fence; Initiative to re-program; Make & distribute; Further adaptation of hospital building with residential activities.

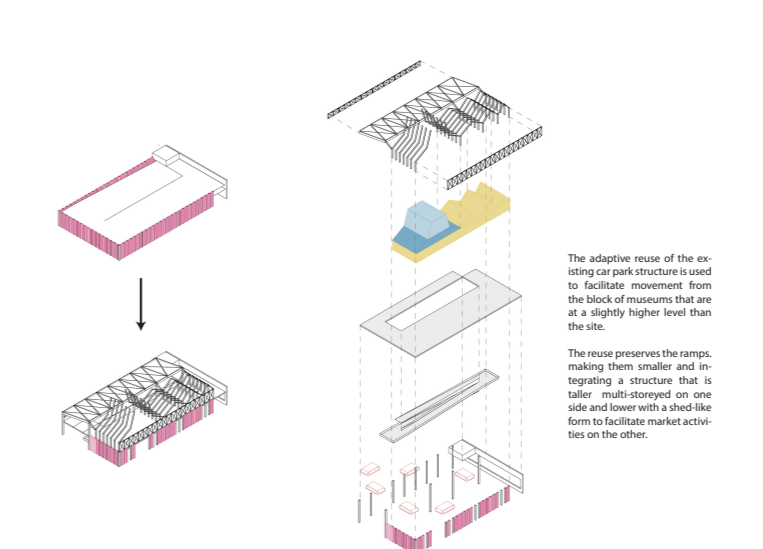
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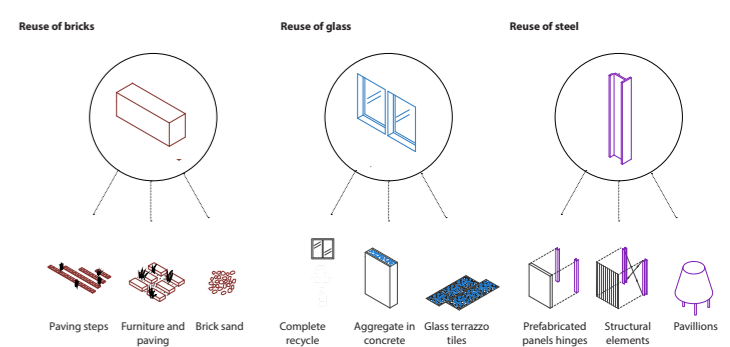
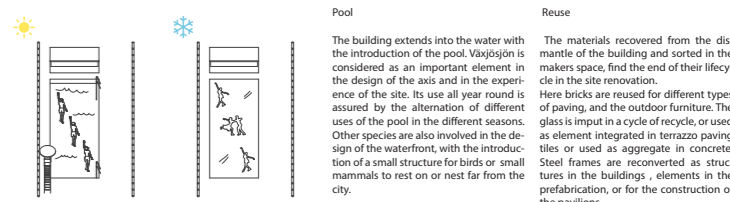


The tower building is broken down to three different components that are used for residential, research and sports related functions. On the ground floor they facilitate transitional spaces along the axis.



The adaptive reuse of the existing car park structure is used to facilitate movement from the block of museums that are at a slightly higher level than the site.

The reuse preserves the ramps, making them smaller and integrating a structure that is taller multi-storied on one side and lower with a shed-like form to facilitate market activities on the other.



Reuse of bricks The building extends into the water with the introduction of the pool. Växjö is considered as an important element in the design of the axis and in the experience of the site. Its use all year round is assured by the alteration of different uses of the pool in the different seasons. Other species are also involved in the design of a small structure for birds or small mammals to rest on or nest far from the city.

Reuse of glass The materials recovered from the dismantle of the building and sorted in the makers space, find the end of their lifecycle in the site renovation. Here bricks are reused for different types of paving, and the outdoor furniture. The glass is input in a cycle of recycle, or used as element integrated in terrazzo paving tiles or used as aggregate in concrete. Steel frames are reconverted as structures in the buildings, elements in the prefabrication, or for the construction of the pavilions.

Reuse of steel The materials recovered from the dismantle of the building and sorted in the makers space, find the end of their lifecycle in the site renovation. Here bricks are reused for different types of paving, and the outdoor furniture. The glass is input in a cycle of recycle, or used as element integrated in terrazzo paving tiles or used as aggregate in concrete. Steel frames are reconverted as structures in the buildings, elements in the prefabrication, or for the construction of the pavilions.



The add-on elements on the facade of the hospital building provide a space for multiple uses and multiple users. The permanent nature of the elements allows animals to use it as a resting space, doctors and patients can use it as a "sun room" private or shared, while the robots can use it to charge.

Different spaces are created that involve the landscape and the use of water. The small pond in the children wing can host different forms of life and provide an educational element for the children. Indoor spaces in the hospital building host "zen gardens" for the patients and visitors.

This part of the site includes also elements for the energy self-sufficiency of the site, where rainwater is collected and used in the building to then flow in the lakes when in excess. The greenhouses host solar power structures and provide to the production of plants both for pharmaceutical use and alimentation.