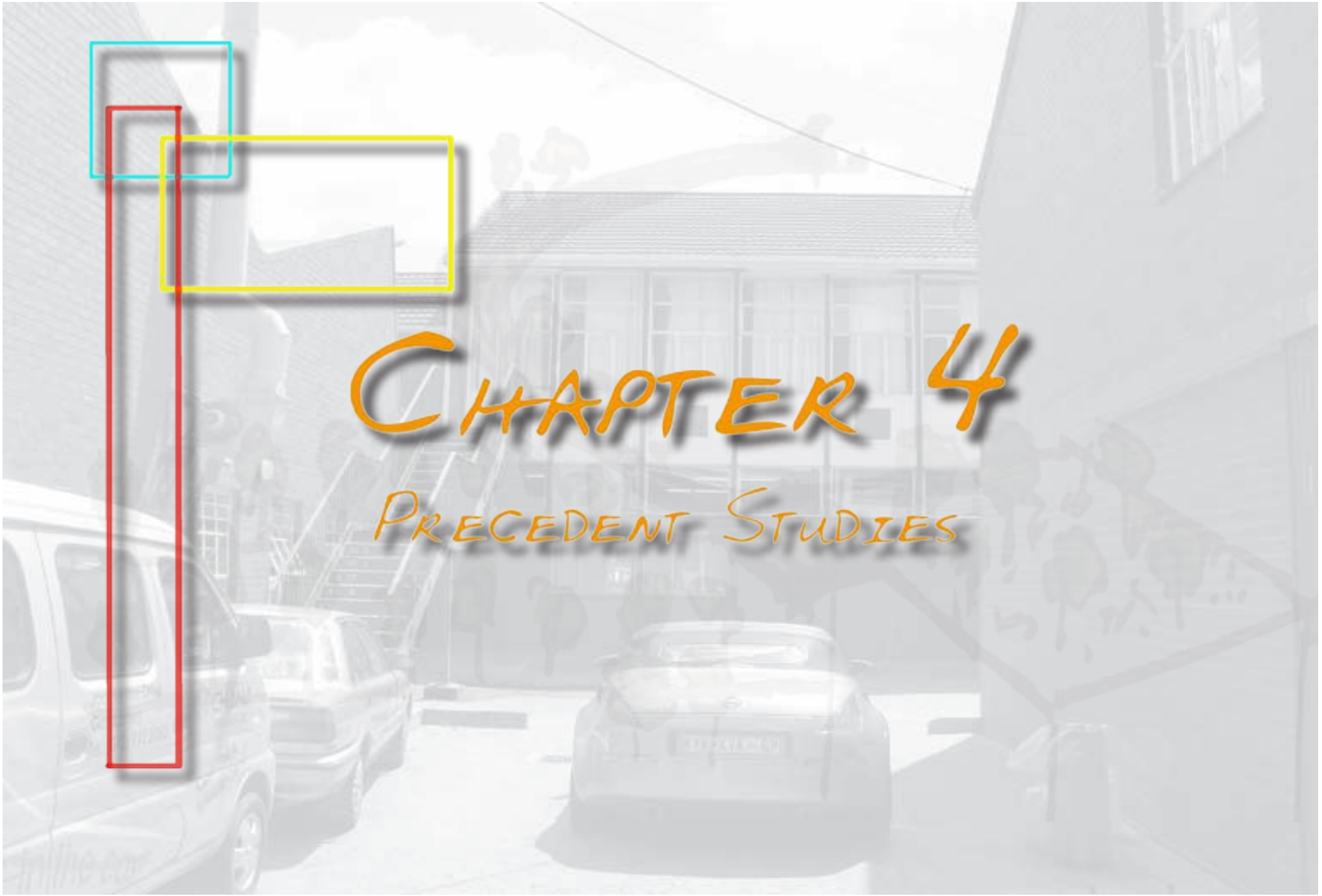

Chapter 4

Precedent Studies

CHAPTER 4
PRECEDENT STUDIES

Introduction

"Precedent refers to what has preceded us or come before in time." *(Righini,P. 2000.)* The chosen precedent studies are concerned with the issue of form, structure, scale, spatial characteristics and context.

Precedent 1

Park Duisberg Nord, Emscher park, Germany
Latz and Partners
Duisberg

Importance of study

The project illustrates how ecology and the existing infrastructure on the site can be harmoniously integrated so that it forms living structures and systems.

Background

Similar to South Campus, Park Duisberg Nord also contains existing structures which were designed for industrial use. The structures were adopted, redeveloped and reinterpreted. The design aims to celebrate the areas industrial past by integrating vegetation and industry. *(arch.hku.hk)* A specific element, the train tracks running through the site, forms the main components for linking the different spaces in the park. The various spaces are laid out based on the context, both spatially and conceptually, thus emphasising, through adaptation and reinterpretation, the transformation of the old industrial park. *(Baumeister,N & Pitz, H.2007)*

Fig. 4.1 The promenades of Duisberg Nord Landscape Park.

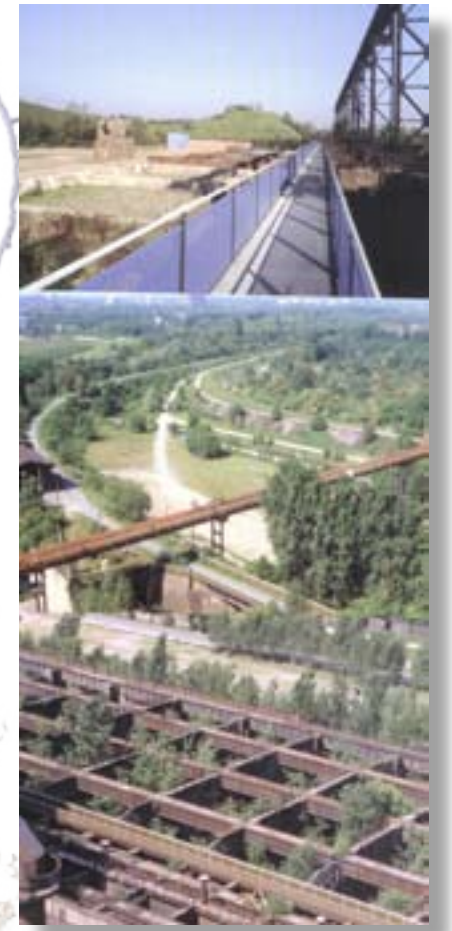

Fig. 4.2 A square of trees in the midst of steel giants.

Main design objectives:

The power of ecology as an integrating concept
Adaptive reuse of industrial buildings
The use of art in the landscape
(www.georgewright.org)

The approach to the designing of the park allows natural processes of growth and decay to take place with minimal intervention. *(www.cabe.org.uk)*

Duisberg Nord has set new platforms for reclamation. The design of the site was guided by existing infrastructure and social and environmental restoration. Ignoring the sites history and erasing its contradictions would have been less convincing. In such circumstance the role of the designer is to decide what to retain, what to transform and what to replace. *(www.gsd.harvard.edu)* By ecological restoration, isolated spaces were successfully integrated. The incorporation of natural vegetation and the process of growth and decay reduce the cost of maintenance regimes. *(Hough, M.2004)* The park challenges the way humans relate to the land, the landscape is in constant change, different seasons reveals different planting patterns. *(Architecture, November 2000)*

Summary

It offers an integrated approach and acknowledges the relationships between the physical and the biological process. The project offers an environment where users have a "thought provoking" interaction with structures, green spaces and natural processes.

Precedent 2

Parque Ecologico Xochimilco
Mario Schjetnan
Mexico City, Mexico

Importance of the study

The park is an illustration of sustainable management of a natural area, recovered in an urban area, the park functions as a model to other areas in the city and even to other cities. *(www.redscolar.icle.edu)*

Background

Xochimilco is a part of Mexico City which is a portion of a pre–conquest landscape. The landscape consists out of artificial garden islands, created in a lake that once filled a large valley of Mexico. The project addresses the challenges of urbanization in the most populous city in the world *(www.redscolar.icle.edu).* The increasing pressure of environmental degradation and urban development increased the amount of storm water runoff and subjected the area to increased flooding. The whole Xochimilco was redesigned guided by hydrological strategies. At the end of Xochimilco lies the park, whose different zones accentuate natural, recreational and interpretive areas. The park articulates remediation as well as sustainability and achieves this in multiple scales. *(www.gsd.harvard.edu)*

Summary

The park, just as my view for South Campus, is a microcosm of the larger landscape, highlighting its ecological, historic, agricultural and recreational attributes. The park does not just engage the aesthetic, but it functions as a working landscape, recovering ecosystems without forcing nature.

Fig. 4.3 Parque Ecologico Xochimilco.

Fig. 4.4 Aerial representation of Parque Ecologico Xochimilco.

Precedent 3

44 Stanley Avenue,
Brian Green
Braamfontein, Johannesburg

Importance of the study

This is a local example of how designers have dealt with the recovering of areas and spaces which were in the past used for other activities.

Background

This site falls within the Newtown precinct, an area which was previously known for its industrial activities. Presently lots of the old factory buildings in the area have been upgraded for commercial activities. A dilapidated cluster of workshops, consisting out of 1, 2 and 3 storey buildings has been transformed into a space filled with shops and restaurants. The initiative behind 44 Stanley Avenue was to create a centre driven by retailers and business people. The overall industrial character has been maintained and minimal changes have been made to the existing structures. The whole complex has a playful feel to it, with some passages leading to nowhere. *(www.44stanley.co.za)* Green says he particularly wanted to include children *"Kids keep the atmosphere light." (www.joburgnews.co.za)*. The site is situated in an immediate context which consists of several art galleries, as well as the film school Afda.

Summary

There is greater potential than to merely rehabilitate and give old industrial areas new activities like these. Correct methods of regenerative design should be applied, which not just include the social and economical but also the environmental. The site accommodates various activities which attracts a broad spectrum of people. This ensures that the site is always "alive" during night and day time.

Fig. 4.5 Alley between buildings.

Fig. 4.7 Enclosed space.

Fig. 4.6 Main entrance.

Fig. 4.8 Interior courtyard.

Precedent 4

Maurice Rose Airfield strip
GTL Gnuchtel Triebswetter Landscape Architects
Frankfurt

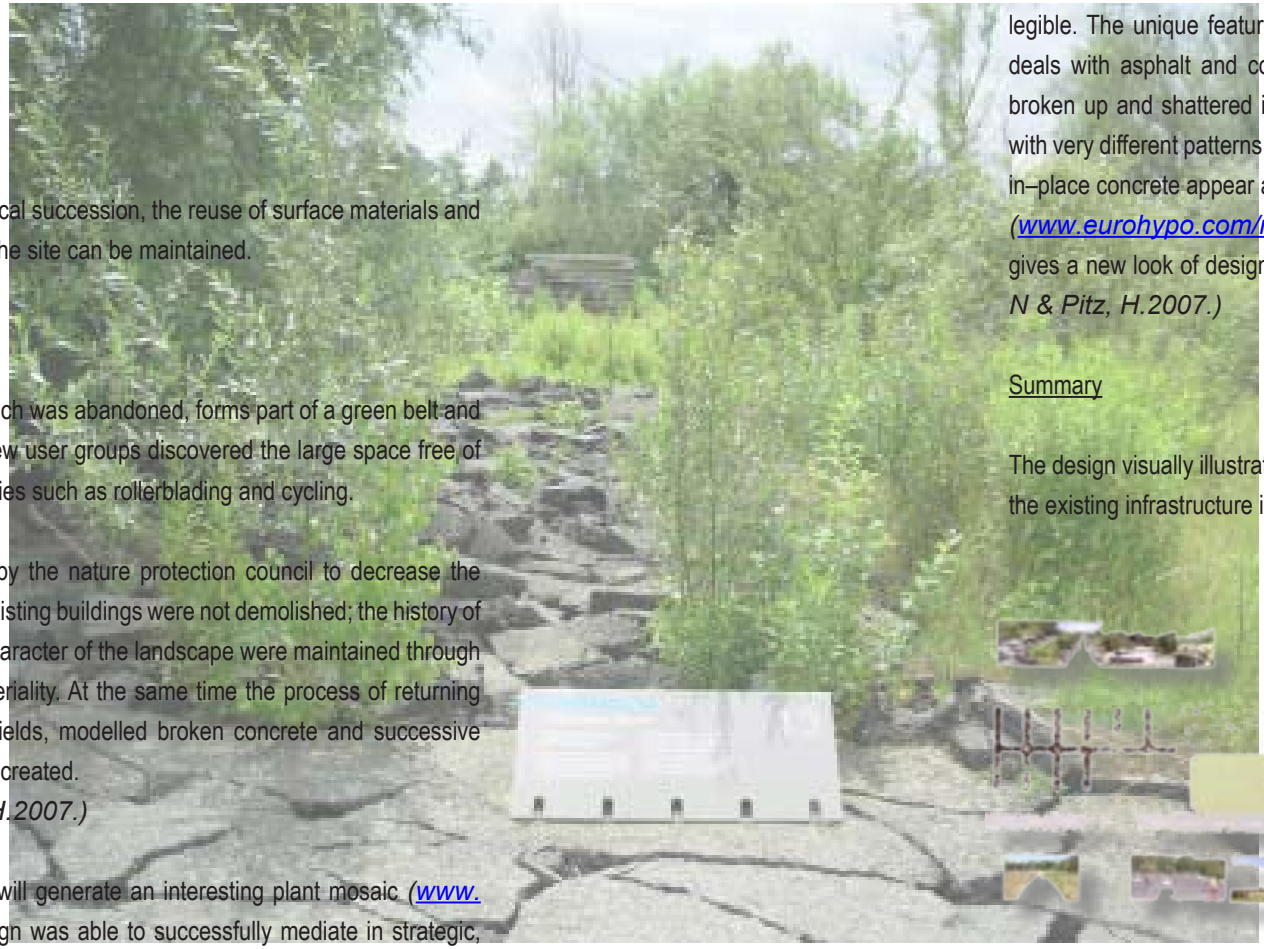

Fig. 4.9 The Nidda flood plains are coming into their own again.

Importance of the study

The project illustrates ecological succession, the reuse of surface materials and how the overall character of the site can be maintained.

Background

The site of the old airport, which was abandoned, forms part of a green belt and lies in a former floodplain. New user groups discovered the large space free of traffic and it is used for activities such as rollerblading and cycling.

There was an engagement by the nature protection council to decrease the amount of asphalt surface. Existing buildings were not demolished; the history of the military and the overall character of the landscape were maintained through its unique structure and materiality. At the same time the process of returning nature can be seen. Earth fields, modelled broken concrete and successive observation fields have been created.
(Baumeister, N & Pitz, H.2007.)

Concrete and asphalt relics will generate an interesting plant mosaic *(www.eurohypo.com)*. The design was able to successfully mediate in strategic, yet simple ways to retain the feel of the old use. Left over rubble is contained in gabions to create seating. The asphalt expanses remain on the site in some locations, but have been broken up to create drainage. The image is a reminder that all is very close to a metropolitan area. *(green–journey blogspot.)*

The underlying character and architectural structure of the ground remains legible. The unique feature in the new recreational open space is the way it deals with asphalt and concrete. More than half of the hard surfaces were broken up and shattered into grains of different sizes. This creates a mosaic with very different patterns in the course of the succession. The areas of poured in–place concrete appear as if floating in the fields of shredded concrete slabs. *(www.eurohypo.com/media/pdf.)* The roughness of the redesigned site gives a new look of design possibilities in public green space. *(Baumeister, N & Pitz, H.2007.)*

Summary

The design visually illustrates and captures the juxtapose between ecology and the existing infrastructure into a unifying whole.

Fig. 4.10 Site plan.

Precedent 5

Goteborg , Sweden

Importance of the study

This framework design for the city of Goteborg, shows various methods of how lost spaces can be conceptually integrated back into the city structure. The city experienced, although in a much larger scale, the same problems as the site and its surrounding context.

Background

The centre of the city was intersected by canals with parallel streets on either sides of the canal. The pressure of increasing traffic jams resulted that the canals were filled which created wide streets, sometimes up to 34m in width. By the end of the 1950's serious problems faced the transport system. By the mid 1960's the average speed of cars were the same as horse drawn cars. This resulted that the public transport system became unreliable and pedestrians was in a constant struggle to cross streets. *(Organisation for Economic Co Operation and Development. 1974.)*

The City Planning and Development Office identified five major sites of lost space within central Goteburg. Most of these spaces were misguided or simply a result of historical transformation as previously mentioned. These spaces were identified at points of pedestrian transition between districts.

Recommendations for these areas included, infill, building of public spaces, arcades, bridges, platforms, plants and water.

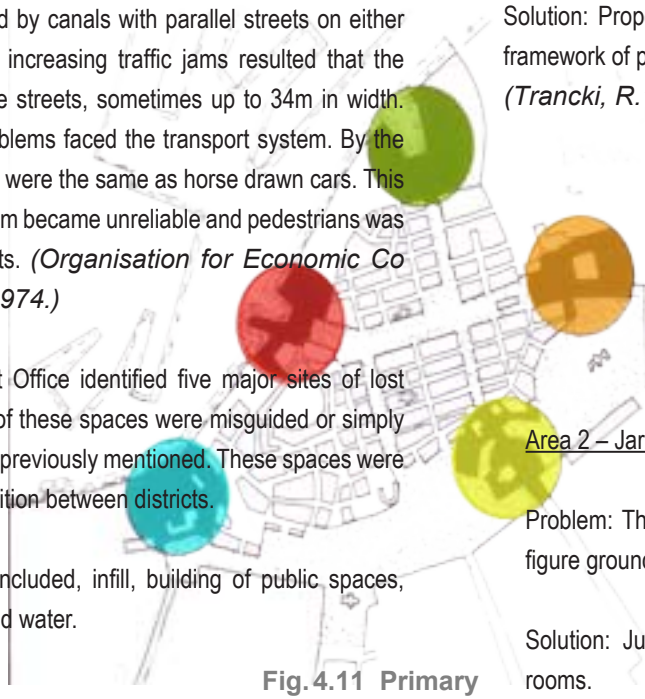

Fig. 4.11 Primary spatial structure of the city.

Area 1 – Lilla Bommen

Problem: At the Lilla Bommen harbour the highway separates the formal connection to the waterfront.

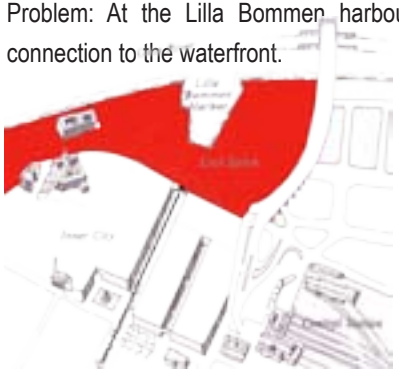

Fig. 4.12 Diagram of lost space at the Lilla Bommen.

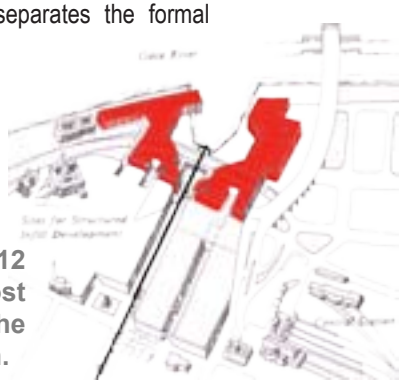

Fig. 4.13 Proposed infill development at Lilla Bommen.

Solution: Proposed infill development. The important concept is to impose a framework of public space into which individual buildings can be attached. *(Trancki, R.1986)*

Area 2 – Jarntarget

Fig. 4.14 Diagram of lost space at the Jorntorget.

Fig. 4.15 Proposed infill at the Jorntorget.

Problem: The new buildings fail to provide the enclosed structure and a new figure ground needs to hold the site together.

Solution: Judicious infill could restructure the spaces as a series of urban rooms.

(Trancki, R.1986)

Area 3 - Kingsportsplaten

Problem: This entry is a formless zone and the entry announcement is destroyed by vast expenses of paved surfaces and parking lots.

Solution: Proposed infill buildings create a strong defined entry.
(Trancki, R.1986)

Fig. 4.16 Diagram of lost space at the Kingsportsplaten.

Fig. 4.17 Proposed infill at the Kingsportsplaten.

Area 4 – Stenpiren

Problem: Stenpiren is a gateway from the water as one enters the city from the water. Traffic is a major barrier between the site and the river.

Solution: The area could be incorporated into the city by bridge buildings across the roadway.
(Trancki, R.1986)

Fig. 4.18 Diagram of lost space at Stenpiren.

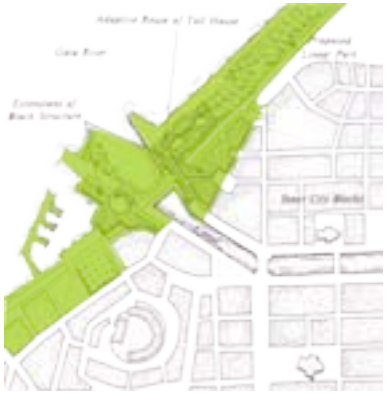

Fig. 4.19 Proposed infill at Stenpiren.

Area 5 – Drottningtarget

Problem: The Square is ill formed with the central station in the centre a post office and dispersed retail buildings. Confused transportation systems and wind from all directions leaves the pedestrian at a complete loss.

Solution: The main concept is to carve a pedestrian sanctuary in the centre of the square. Additional buildings were added to close off the edges and corners. The proposed reconstruction creates an axial connection to tie the buildings into a coherent space and provide a strong central focus. *(Trancki, R.1986)*

Summary

These precedents shows broad scale integration, but they are also valuable for the integration of spaces on a smaller scale.

Fig. 4.20 Proposed infill at Drottningtarget.

Precedent 6

Shenyang Architectural University
Turenscape
Shenyang, China

Importance of the study

This precedent demonstrates the ability and the opportunity of a campus landscape to become a model of innovative ecological thinking for future students. The concept of agriculture as a non traditional campus form gives the university a progressive identity.

Background

The most important aspect of this non conventional campus design was the acknowledgment that an innovative university design affects the thinking of people at a critical point in personal development. This innovative design was aimed at raising awareness amongst students that productive landscapes can become useable spaces through careful design. The illustrated regenerative process becomes transparent and accessible to all students on the campus.

Not only were physical links achieved by designing paths through the rice fields, but also symbolic and functional links which are achieved through the design of a rice paddy which produce food consumed in the campus dining facilities.

Negative aspects of this design include the lack of visual variety in open spaces and physical links between buildings and the landscape were insufficient. Courtyard spaces in between buildings became inaccessible; the design could have been more successful if the courtyards were designed for leisure and study. The level of environmental awareness, applied in the landscape, was not employed in the buildings.
(Landscape Architecture, December 2006.)
(www.asla.org.)

Summary

Although this campus design is primarily focused on the regenerative aspects of food production it illustrates how physical links between students and the regenerative landscape can be achieved.

Fig. 4.21 Aerial view of Shenyang Architectural University.