Germinate
Architecture of Growth
A mixed-use development in Salvokop
Karl-Robert Gloeck
MArch(Prof) UP 2011
Germinate
Architecture of Growth

A mixed-use housing development in Salvokop to stimulate physical and social growth in a disconnected area

by Karl-Robert Gloeck

Submitted in partial fulfilment of the requirements for the degree Master of Architecture (Professional) Department of Architecture, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria

Study leader: Gary White
Course coordinator: Jacques Laubscher

Pretoria
2011
for Tasha

Romans 5:3-5a

And not only this, but we also exult in our tribulations, knowing that tribulation brings about perseverance and perseverance, proven character, and proven character, hope and hope does not disappoint...
In accordance with Regulation 4(e) of the General Regulations (G.57) for dissertations and theses, I declare that this dissertation, which I hereby submit for the degree Master of Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my dissertation has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this dissertation is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

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Germinate: Architecture of Growth, a mixed use development in Salvokop

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Department: Department of Architecture
Faculty: Faculty of Engineering, Built Environment and Information Technology
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Project summary
A mixed-use housing development in Salvokop to stimulate physical and social growth in a disconnected area.

Programme: Mixed-use housing development

Site description: Gateway into Salvokop, activating the existing pedestrian route

Client: Mixed client, primarily Yeast City Housing.

Users: Students and facilitators of the Department of the Built Environment, the built environment Industry and the general public.

Site Location: Erf R/406, Salvokop
Address: c/o Skietpoort Avenue and Koch Street, Salvokop, Pretoria, South Africa
GPS Coordinates: 25°45'36"S, 28°11'13"E

Architectural Approach: A process-focussed approach whereby guidelines are developed, validated and, along with practical influences, used to substantiate the architectural product

Research filed: Urbanism and human settlements.
Problem & Response

Problem Statement
Hierarchy of Challenges
Proposal
Summary of Theories
Discussion

Framework
The Bigger Picture
Problem Statement
Vision & Parti
Connect & Preserve
Analysis of existing frameworks

Precedents & Testing
TAU Village - Pretoria
Joe Slovo Precinct (N2 Gateway project) - Cape Town
Brickfields - Johannesburg
34 Lower Terrace - Pretoria
Mieres Social Housing - Spain
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Acknowledgements
Abstract

The core idea of the thesis (Germinate: Architecture of Growth) provides the creative impetus, and along with the site, the program (or function), and the client, act as a set of catalysts for the arrival at the architectural product.

The product presents the practical element of the suggested solution, and concludes the exploration of the housing and wider land-use options with the proposal of a mixed-use development to create a relevant intervention in the suburb of Salvokop.

This arrival at the product is justified by guidelines developed as a response to the pressing issues of urbanisation, environmental sustainability, and the need for housing. In addition, a development framework for the entire area of Salvokop is proposed together with supporting analysis which also contributes to the establishment of these guidelines. Existing local and international theories are considered in order to strengthen the foundation of the argument as is appropriate for this level of post-graduate study.

Once the guidelines are established they are individually tested against a variety of existing local and international precedents. This testing validates the inclusion of each guideline in the entire process, thus justifying their application to the design.
Figure 0.1 Sketch illustrating the design process
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# Research & proposal

## Background
- Urbanisation
- Sustainability
- Housing in SA
- History of Salvokop
- Aerial History

## Framework
- Connect and Preserve
- Phases 1, 2 & 3

## Analysis
- Pedestrian Movement
- Vertical surfaces
- Vehicular Movement
- Existing Conditions

## Theory
- Habraken - Supports
- Lewis - Front to Back
- Hamdi - Small Change
- Brand - How buildings
  Learn

## Guidelines
1. Located in a functional environment
2. Medium to high density
3. Balanced mixed-use environment
4. Part of a long-term plan
5. Address the immediate needs of locals/residents
6. Facilitate the formation of communities
7. Appropriate & responsive pedestrian scale

# Precedents/ testing

## International
- Mieres Social Housing
- Hebertus House
- Linked Hybrid
- Duren Residential Complex
- Niewmark
- Simmons Hall
- Grenoble

## Local
- TAU Village
- N2 Gateway project
- Brickfields
Salvokop Reception Square (7-8)

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(6)

Site
2:3 Ratio
Existing buildings
Existing activities

(6)

Program
Short-term housing
Permanent rental housing
Social facilities
Retail
Public space

(6)

Client
Mixed client
YEAST City Housing

Figure 0.2 Diagram explaining the process of design