University greenhouse and Botanical park
cohesion of a research typology and the metaphysics of space
by Gerrie Venter
Chapter 1: Introduction
Real world problem and background
Possible client and requirements
Goal and objective
Sub problems
Assumptions and delimiters

Chapter 2: Theoretical discourse
2.1 Credo
2.1.1 Community relevant architecture and social responsibility
2.1.2 Architecture and metaphysics
2.1.3 Sustainable design
2.2 Deriving an architectural normative

Chapter 3: Context study
3.1 Redevelopment of the Hatfield precinct
3.2 Function of the University within the Hatfield precinct

Chapter 4: Site analysis
Site and surroundings timeline
Existing site plan
Key viewpoints
Current scenario and site constraints
Access points
4.1 The Botanical garden
4.2 Botany building [1939]: Moerdyk and Watson
4.2.1 History
4.2.2 Heritage act
4.2.3 Architectural influences
4.2.4 Building design
4.3 Buildings that are to be demolished
4.3.1 Bateman, Stoneman and Vetman buildings [1947, 1949, 1953]
4.3.2 Temperature controlled glasshouse [1989]
4.4 Ideas for intervention
4.3.1 Ecumenical urban park
4.3.2 Adjacent parking area

Chapter 5: Precedent studies
Table of studied precedents
5.1 Botanical Society Conservatory, Kirstenbosch, South Africa
5.1.1 Program
5.1.2 Design
5.2 Reganwald haus – Zoological “rainforest” glasshouse, Vienna, Austria
5.3 Dutch Plant Protection Service quarantine greenhouses, Wageningen, Netherlands
5.4 Seed Health Testing Unit, Los Baños, Laguna, Philippines
5.5 Plant quarantine regional station, Rajendranagar, Hyderabad, India
5.6 Sustainability institute, educational centre and community village, Lynedoch, South Africa
5.6.1 Development program
5.6.2 Main building
5.6.3 Ecological sustainability
5.6.4 Social sustainability
5.6.5 Economical sustainability

Chapter 6: Design development
6.1 The garden
6.1.1 Ferns
6.1.2 Succulents
6.1.3 Moderate climate: Herbs, Cycads and other subtropical plants
6.2 The building: Glasshouses and plant containment facility
6.2.1 Footprint
6.2.2 Form language exploration
6.2.3 Alternative form language explorations for glasshouses
6.2.4 Roof as unifying element
6.2.5 Tensile roof structure as a solution for creating large free areas and organic shapes
6.2 Final proposed design intervention

Chapter 7: Technical investigation
Roof and facades
7.1 Addressing the problem
7.2 Design considerations
7.3 Construction
7.3.1 Roof structure
7.3.2 Roof Structure assembly possibilities
7.3.3 Structure anchors and fixers
7.3.4 Structure façade assembly
7.4 Critical connections
7.4.1 Detail 1
7.4.2 Detail 2
7.4.3 Detail 3
7.4.4 Detail 4
Green roof, laboratories and quarantine rooms
Climate control

Bibliography and Terminology
LIST OF TABLES

TABLE 2.1 A comparison of human physiological, plant biochemical compositions and the similarities or differences of how they integrate within their environments. Collectively compiled by authors own research in McCallum, I. 2005 and Pollan, M. 2007

TABLE 5.1 Breakdown of investigated precedents and their typology. Table by author

TABLE 6.1 Research value of most common known herbs. Image by author, adapted from Loewenfeld (1967:234-243)

TABLE 6.2 Detailed summary of the 3 phases of containment and risk levels within the containment facility. Image by author, adapted from Kahn (1999:79-92)

LIST OF FIGURES

FIG 2.1 Skylfarm building, Toronto, Canada (Alter 2007:1)
FIG 2.2 La Tour Vivate, Rennes, France (Jodidio 2007:95)
FIG 2.3 La Tour Vivate, Rennes, France (Jodidio 2007:97)
FIG 2.4 La Tour Vivate, Rennes, France (Jodidio 2007: 96)
FIG 2.5 Buffalo thorn tree ranch, Ziziphus macronata (McCallum 2005:3)
FIG 2.6 Eames aluminium side chair, Charles and Ray Eames (Bond & Conran 1999:113)
FIG 2.7 BP headquarters in Greenpoint, Cape Town. Drawing by author

FIG 3.1 Proposed Gautrain Rapid Rail link route. Image by author
FIG 3.2 Overview of the Hatfield- and University precinct from the North. Image by author
FIG 3.3 Current land use patterns. Image by author
FIG 3.4 Transit Orientated Development (TOD) proposal, 2007 for the Hatfield precinct. Image by author
FIG 3.5 Alteration of the TOD proposal to allow for the University campus to integrate with the precinct over time. Image by author
FIG 3.7 Topography of site and surroundings at 1m contour intervals. Image by author
FIG 3.8 Historically significant buildings on the Hatfield campus (Older than 60 years). Image by author
FIG 3.9 Surrounding green spaces relative to the site. Image by author
FIG 3.10 Space syntax diagram showing energy flows of cars and pedestrians on exiting campus and surroundings. Image by author
FIG 3.11 Boundary screens at Musee du Quai Branly, Paris. Image with permission of Prof. B Jekot
FIG 3.12 Metal boundary markers in water features at Musee du Quai Branly, Paris. Image with permission of Prof. B Jekot
FIG 3.13 Four future developmental scenarios for University campuses (Hashimshony & Haina 2006:12)
FIG 3.14 Proposed developmental strategy for the Hatfield campus. Image by author

FIG 4.1 Context history timeline. Image by author
FIG 4.2 Existing greater site plan. Image by author
FIG 4.3 Birdseye view towards site from Southeast. Photograph by author
FIG 4.4 View towards Western site boundary from University road. Image and photograph by author
FIG 4.5 View towards South Western site boundary from Park Street. Image and photograph by author
FIG 4.6 Analysis of current site and site constraints. Image by author
FIG 4.7 Access point to site with recession planes. Image and photograph by author
FIG 4.8 Access point to site with recession planes. Image and photograph by author
FIG 4.9 Access point to site with recession planes. Image and photograph by author
FIG 4.10 Access point to site with recession planes. Image and photograph by author
FIG 4.11 Access point to site with recession planes. Image and photograph by author
FIG 4.12 Movement of sunlight rays across the site with shadow castings. Image by author
FIG 4.13 Shadows casting by southern façade of the existing Botany building in winter. Image by author
FIG 4.14 Shadows casting by southern façade of the existing Botany building in summer. Image by author
FIG 4.15 Prevailing wind directions of the area. Image by author based on information provided by the South African weather service
FIG 4.16 Botany building Northern façade. Drawing by author
FIG 4.17 Botany building Western façade. Drawing by author
FIG 4.18 Botany building Groundfloor layout plan and stages of development. Drawing by author
FIG 4.19 Botany building means of access and vertical circulation. Image by author
FIG 4.20 Botany building Southern façade. Drawing by author
FIG 4.21 Botany building Eastern façade. Drawing by author
FIG 4.22 View of Botany building from Northwest. Image by author
FIG 4.23 View of Botany building from Southeast. Image by author
FIG 4.24 Merensky library designed by Gerhard Moerdyk (1936). Photograph by author
FIG 4.25 Analysis of fundamental proportions on the Southern facade. Drawing by author
FIG 4.26 Hilversum Town Hall designed by Marinus Dudok in 1931 (Baker-johnson 2003:614)
FIG 4.27 Existing temperature controlled glasshouse. Image by author
FIG 4.28 Existing temperature controlled glasshouse. Photograph by author
FIG 4.29 View of Bateman, Vetman and Stoneman buildings from the Northeast. Image by author
FIG 4.30 View of Bateman, Vetman and Stoneman buildings from the Southeast. Image by author
FIG 4.31 Bateman building interior. Photograph by author
FIG 4.32 Plan of Paley Park on 53rd street, New York City, New York. Drawing by author
FIG 4.33 Entrance to Paley Park on 53rd street. New York City, New York. Photograph by author
FIG 4.34 View towards street inside Paley Park on 53rd street. New York City, New York. Photograph by author
FIG 4.35 Idea for new ramp- and terraced basement parking garage. Drawing by author
FIG 4.36 Idea for new ramp- and terraced basement parking garage. Image by author
FIG 4.37 Parkhaus am Bollwerksturm, Heilbronn (Henley 2007:180)
FIG 4.38 Office and residential building at Wimbergergasse, Vienna. Designed by Delugan Meissl associated architects (2001). Photograph by author
FIG 5.1 Interior view of the conservatory at Kirstenbosch, Cape Town. Image by author
FIG 5.2 View of the Western façade with openings that allows for free-/open ventilation. Drawing by author
FIG 5.3 Plan of the conservatory. Drawing by author
FIG 5.4 Section AA. Drawing by author
FIG 5.5 Section BB. Drawing by author
FIG 5.6 Reganwald haus – Zoological “rainforest” glasshouse. Exterior view. Photograph by author
FIG 5.7 Reganwald haus – Zoological “rainforest” glasshouse. Interior view. Photograph by author
FIG 5.8 Reganwald haus – Zoological “rainforest” glasshouse. Roof construction. Photograph by author
FIG 5.9 Reganwald haus – Zoological “rainforest” glasshouse. Roof construction detail. Photograph by author
FIG 5.10 Reganwald haus – Zoological “rainforest” glasshouse. Meandering interior paths. Photograph by author
FIG 5.11 Plan of the facility. Drawing by author from Kahn (1999:110)
FIG 5.12 Main compound (Kahn 1999:109)
FIG 5.13 Layout plan of the main facility at Laguna (Kahn 1999:60)
FIG 5.14 Layout plan of the main facility at Rajendranagar Photograph by author
FIG 5.15 Lynedoch sustainability institute. Greenhouses. Photograph by author
FIG 5.16 Lynedoch sustainability institute. Main school building. Photograph by author
FIG 5.17 Lynedoch sustainability institute. Photograph by author
FIG 5.18 Lynedoch sustainability institute. View towards Spier winefarm. Photograph by author
FIG 5.19 Lynedoch sustainability institute. Drie gewels guesthouse. Photograph by author
FIG 5.20 Skylights and extractor fans in main hall. Photograph by author
FIG 5.21 Section showing passive cooling and heating system. Drawing by author
FIG 5.22 General layout plan of the institute. Drawing by author
FIG 5.23 View towards classrooms down the western façade. Drawing by author
FIG 5.24 Building of low cost housing units. Drawing by author

FIG 6.1 Relationship of planting areas (Moderate sun exposure, shaded and dry arid) in garden to building interface. Image by author
FIG 6.2 Graphical representation of sun/soil-moisture requirements for Herbs planted for medicinal research purposes. Image by author, adapted from Loewenfeld (1967:234-243)
FIG 6.3 Diagram illustrating the building program for research and containment facility greenhouses. Image by author, adapted from Kahn (1999:79-92)
FIG 6.4 Primary building functions. Image by author
FIG 6.5 Kennet, William Morris, 1883 (Sachs, 2007:83)
FIG 6.6 Japanese garden in Clingendel (Gieskes 2006:4)
FIG 6.7 Algue, Ronan & Erwan Bouroullec (Sachs 2007:62)
FIG 6.8 2D Building footprint exploration - March 2008. Drawing by author
FIG 6.9 2D Building footprint exploration - March 2008. Drawing by author
FIG 6.12 Creating “pockets” within the form.
FIG 6.13 Visitor pathways are organic. It promotes changing vistas within the garden. Drawing by author
FIG 6.14 One continuing element will combine the garden and the building. Drawing by author
FIG 6.15 Leaves displaces solar energy to from metaphysical spaces. Photograph by author
FIG 6.16 Intuitive form exploration from natural archetypes founded on natural intelligence. Drawings by author
FIG 6.17 Elevation: Stacked greenhouse idea - June 2008. Drawing by author
FIG 6.18 Section: Stacked greenhouse idea - June 2008. Drawing by author
FIG 6.19 Spaceframe structure of stacked greenhouse idea - June 2008. Drawing by author
FIG 6.20 View along laboratories: Stacked greenhouse idea - June 2008. Drawing by author
FIG 6.21 Stepping greenhouses with laboratories as thermal mass - July 2008. Image by author
FIG 6.22 Stepping greenhouses with laboratories as thermal mass - July 2008. Image by author
FIG 6.23 Stepping greenhouses with laboratories as thermal mass - July 2008. Image by author
FIG 6.24 Visitors can move through the garden and between the building where the structure of the roof forms a permeable boundary - August 2008. Drawing by author
FIG 6.25 Glasshouse facade elevation - August 2008. Drawing by author
FIG 6.26 Roof structure drapes over sections of the garden and research functions. Users can move up over the building via ramps - August 2008. Drawing by author
FIG 6.27 Roof form exploration with polystyrene models. Sections of the model was then scanned and interpolated onto appropriate 3D software - August 2008. Images by author
FIG 6.28 Polystyrene model interpolation on computer - August 2008. Image by author
FIG 6.29 Manipulating surfaces - August 2008. Image by author
FIG 6.31 Experimenting with tensile cable structure for glasshouse assembly- August 2008. Image by author
FIG 6.32 View from visitor’s footpath towards glasshouse. Vegetation can be grown onto cables using hydroponics to provide essential facade shading- August 2008. Drawing by author
FIG 6.34 Cable roof structure connects the two galshouses - August 2008. Image by author
FIG 6.35 Deriving a structural logic for the roof shape - September 2008. Image by author
FIG 6.36 Exploring facade and section details of tensile structure. Deriving a language for structural supports and how these will integrate with mechanical facade elements like ventilation panels etc. September 2008. Drawings by author
FIG 6.37-38 Deriving a structural logic. Trapezium shapes for main supporting structure proved to be successful at creating the desired shape on plan between the two glasshouse facilities. September 2008. Drawings by author
FIG 6.39-40 Final concept model using rope to imitate tensile members. This was used to determine the structural integrity of the assembly and the cohesion of the form language created with the site. September 2008. Photographs by author
FIG 6.41 Final intervention proposal. Image by author
FIG 6.42 Final intervention proposal- descriptions on plan. Image by author
FIG 6.43 View from Northern corner. Image by author
FIG 6.44 View from Southern corner. Image by author
FIG 6.45 View of Southern façade and Green roof. Image by author
FIG 6.46 View of Hydroponic greenhouse – GH2. Image by author
FIG 6.47 Main building – Roof structure. Image by author
FIG 6.48 Main building – Roof garden. Image by author
FIG 6.49 Main building – Ground floor and basement. Image by author
FIG 6.50 Main building – Ground floor and basement discussion of phases of design enclosure. Drawings by author
FIG 6.51 Hydroponic greenhouse (GH2) – ground floor. Image by author
FIG 6.52 Hydroponic greenhouse (GH2) – roof cover. Image by author
FIG 6.53 Hydroponic greenhouse (GH2) – discussion of phases of design enclosure. Drawing by author

FIG 7.1 Frei Otto institute museum building (http://kubuildingtech.org/cooltour/gallery/ILEK/source/30.html)
FIG 7.2 Frei Otto institute museum building (http://kubuildingtech.org/cooltour/gallery/ILEK/source/22.html)
FIG 7.3 Munich Olympic stadium roof (Nerdinger 2005:266)
FIG 7.4 Spelter socket assembly. Drawing by author
FIG 7.5 Clevis-rod assembly with turnbuckles. Drawing by author
FIG 7.6 Urban-Loritz Platz Straßenbahn by Tillner architects in Vienna, Austria clevis-rod assembly. Photograph by author
FIG 7.7 Rainwater falloff trenches. Drawing by author
FIG 7.8 DLS operations building in Frutigen by Muller and Truniger architects, Zurich (Detail VOL.48, 2008:497)
FIG 7.9 Acrylic panel milling of Reiss flagship store, London (Detail VOL.48, 2008:502)
FIG 7.10 Acrylic panel milling of Reiss flagship store, London (Detail VOL.48, 2008:502)
FIG 7.11 Pivot window. Photograph by author
FIG 7.12 ETFE pillow membrane infill at Munich Olympic stadium, Germany (Detail VOL.48, 2008:512)
FIG 7.13 ETFE pillow membrane mechanics (Davids et al. 2007:48)
FIG 7.14 ETFE roof covering sheets at Eden project, Plymouth, UK (Davids et al. 2007:48)
FIG 7.15 Hydroponic raft system (Resh 2002:138)
FIG 7.16 Hydroponic nutrient tanks (Resh 2002:133)
FIG 7.17 Rockwool cubes (Resh 2002:316)
FIG 7.18 Basic rockwool culture system (Resh 1993:74)
FIG 7.19 BEKA CH Lighting column (Product catalogue)
FIG 7.20 Neoprene roof gutter system Munich Olympic stadium, Germany (Nerdinger 2005:268)
FIG 7.22 Cable net façade clamp with spyder (http://www.airport-technology.com/projects/seattle_terminal/images/1-Seattle-Tacoma.jpg)
FIG 7.23 Frei Otto institute museum building (http://kubuildingtech.org/cooltour/gallery/ILEK/source/67.html)
FIG 7.24 Evaporative cooling units and heat exchangers at Murdoch University in Perth, Western Australia. Image with permission of Prof. D. Berger
FIG 7.25 Evaporative cooling units cold air release ducts at Murdoch University in Perth, Western Australia. Image with permission of Prof. D. Berger
FIG 7.26 Solar curtains at Murdoch University in Perth, Western Australia. Image with permission of Prof. D. Berger
FIG 7.27 PAD screens and filters (Kahn 1999:82)
FIG 7.28 HEPA filter (http://www.americansafear.com)
FIG 7.29 Ground floor growth rooms. Image by author
FIG 7.30 Basement growth rooms. Image by author
FIG 7.31 Natural cross ventilation in greenhouses. Image by author
"Like the rain that's falling,
Like the wind that's blowing,
Like the sun upon my face
I feel the warmth in your embrace
You are everywhere."

Thank you to my Christ and Savior. For You led me to see that creativity is one of the greatest gifts of all, to be used with humility, integrity and responsibility.

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The class of 2008

Image on the right: Transverse section through a piece of living Mahogany tree branch enlarged 400 times. It shows bundles of tubular cells that makes up the tree’s vascular system, responsible for carrying water and nutrients from the soil. Drawing by author
Abstract

Architecture has a dualistic social responsibility. To provide relevant buildings with appropriate function and planning that will accommodate user needs, as well as providing habitable environments and spaces that will have positive influence on peoples daily routines. This will allow users to freely dwell within their environments and create a positive community atmosphere.

It is the aim of this dissertation to investigate the social responsibility of architecture and how ordinary spaces and buildings that call for pragmatic design solutions can also enter into the realm of the metaphysical spatial experience and to find cohesion between the two.

The selected project is a glasshouse complex and plant containment research facility within the Botanical gardens at the University of Pretoria, South Africa.

Samevatting

Argitektuur beslaan oor 'n dualistiese sosiale verantwoordelikheid. Eerstens moet die relevante geboue met 'n geskikte funksie voorsien word soos die regte beplanning wat aan die verbruiker se behoeftes voldoen, en tweedens moet daar 'n bewoonbare omgewing en ruimte verskaf word wat 'n positiewe invloed op die verbruiker se daaglikse roetine sal hê. Hierdie verantwoordelikheid sal die verbruiker toelaat om hul omgewing vrylik te bewoon en 'n positiewe gemeenskapsatmosfeer te skep.

Die doel van hierdie verhandeling is om die sosiale verantwoordelikheid van argitektuur te ondersoek, asook die wyse waarop gewone ruimtes en geboue wat pragmatiese ontwerpsoplossings verlang ook die terrein van die metafisies-ruimtelike ondervindings kan betree en 'n verband tussen die twee paradigmas te vind.

Die uitgekose projek is 'n glashuiskompleks en plantinperkingsnavorsingsfasilité binne die botaniese tuine by die Universiteit van Pretoria, Suid Afrika.

Zusammenfassung

Die Architektur trägt gesellschaftlich dualistische Verantwortung: es ist eine Schaffung von Gebäuden, die räumliche Bedürfnisse von Benutzern erfüllen, sowie auch einer qualitatsvollen Umgebung, die tägliche Routine von einer Gemeinde positiv beeinflussen wird. Es handelt sich um eine freundliche, gemeinschaftliche Atmosphäre zu schaffen.

Dieses Projekt hat zum Ziel die Gesellschaftsverantwortung von der Architektur überprüfen. Es wird untersucht, wie vernünftige Räume, die eine Antwort für die funktionelle Bedürfnisse sind, gleichzeitig eine metaphysische Erfahrung kreieren können. Die Idee ist ein Zusammenhang zwischen diesen zwei Ansätze zu identifizieren.

Das ausgewählte Projekt ist eine gegenwärtige Gewächshäuseranlage, Forschungsanstalt und botanischer Garten auf dem Gelände der Universität Pretoria, Südafrika.