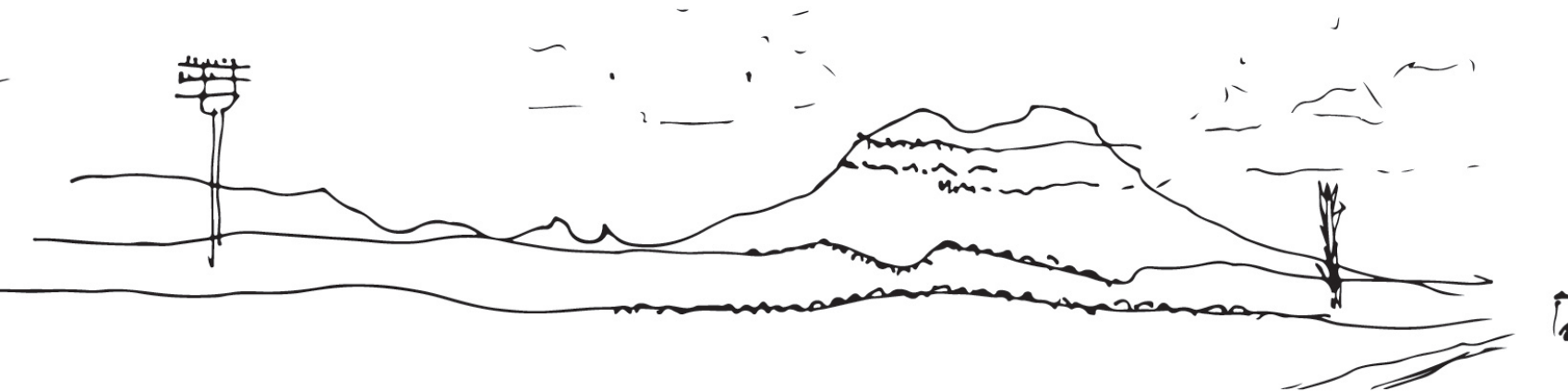
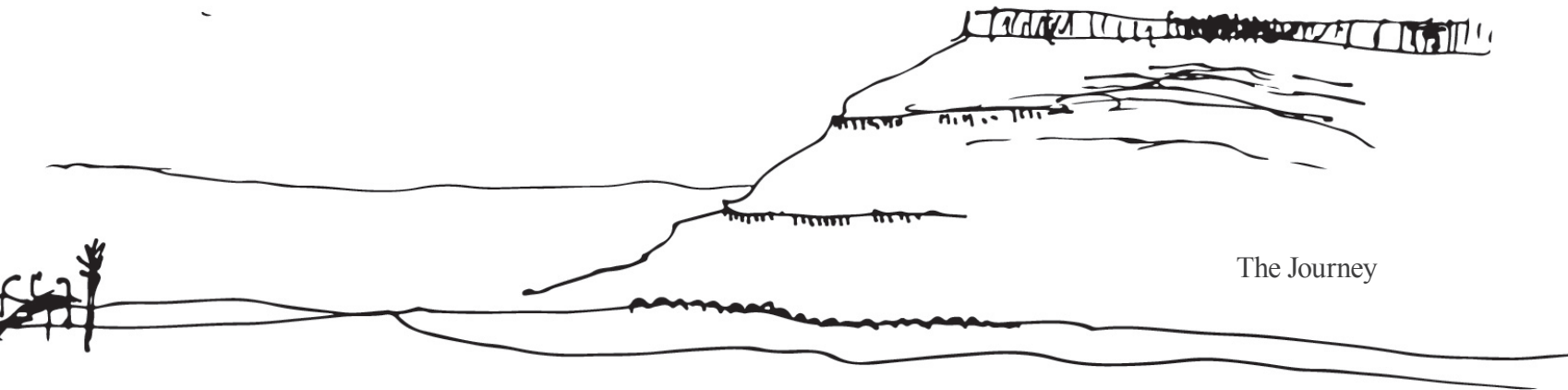




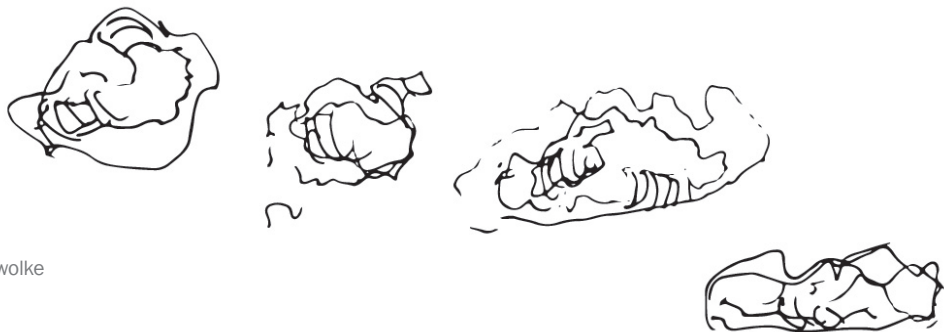
WUPPERTHAL

09:00 Calvinia, April 2015

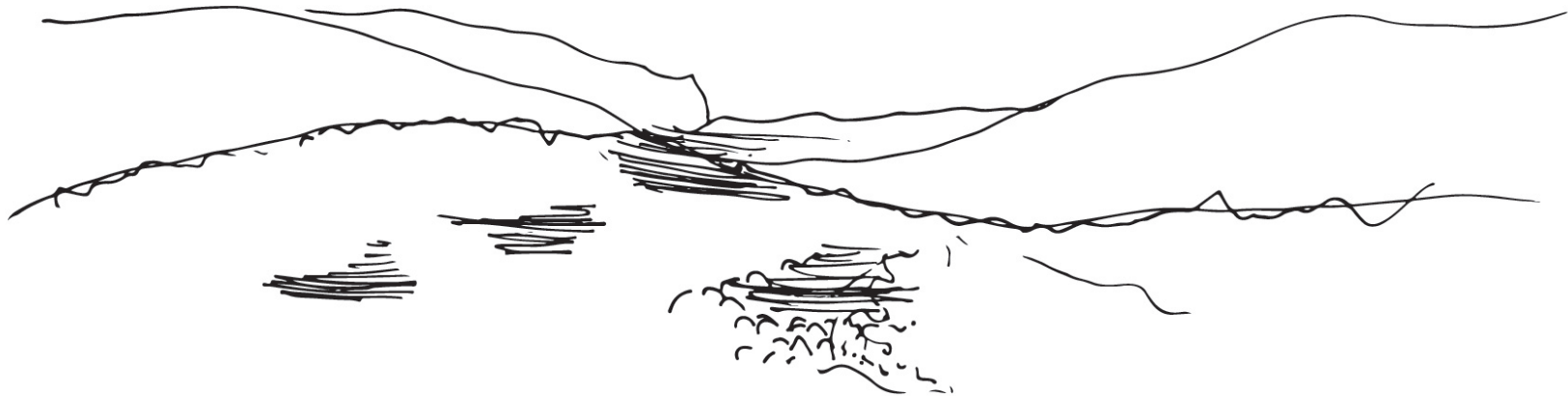




The Journey

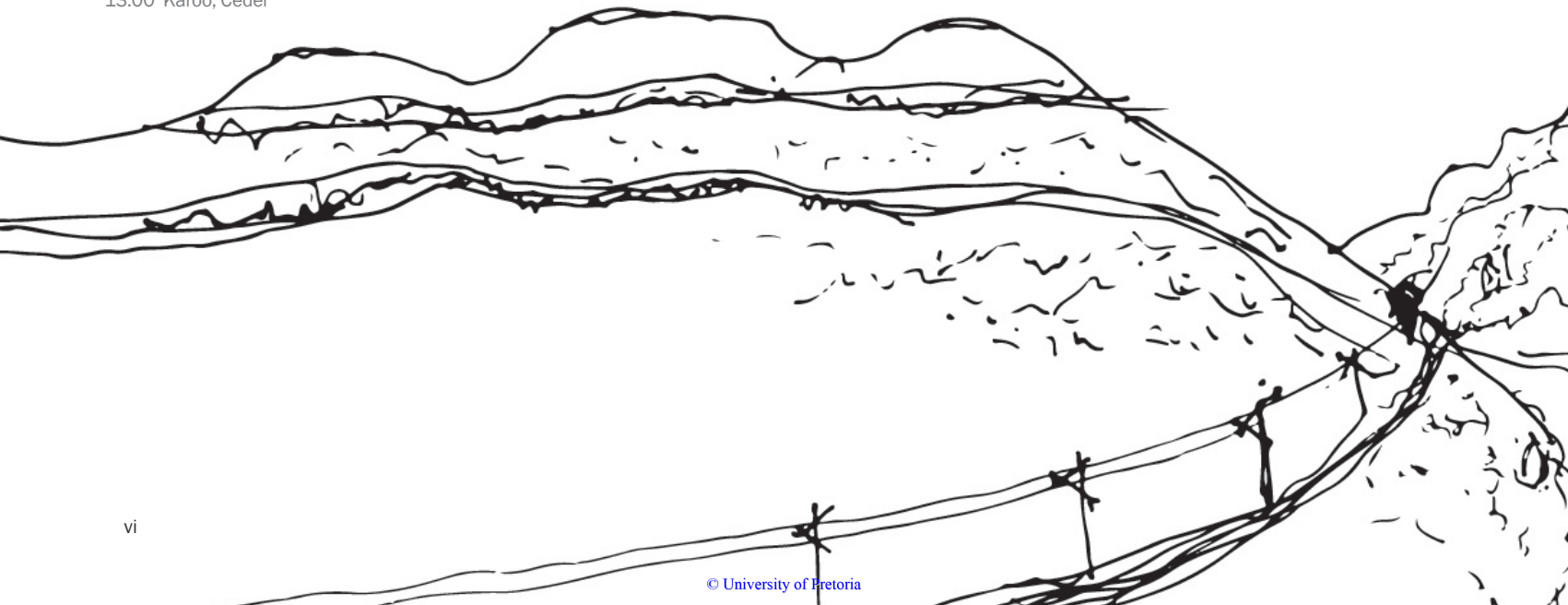


Skadu's van die wolke





13:00 Karoo, Ceder





the edge of the Cederberg
and the

14:00 Wupperthal



THE PRESERVATION OF
ABSENCE

Wuppertal

32°16' 36,10" S 19°12' 57,60" E

Western Cape

Study leader: Ida Breed

Coordinator: Johan N. Prinsloo

Clients: Department of Agriculture
Moravian Church
Community of Wuppethal

Research field: Heritage and cultural
landscapes

Submitted by: Marike Franklin
Student no: 04382544

Degree: Master of Landscape
Architecture [professional]

Faculty of Engineering , Built
Environment and Information
Technology

Department of Architecture

University of Pretoria

A dissertation submitted in partial fulfillment of the requirements for the degree of Master of Landscape Architecture. In accordance with Regulation 4(e) of the General Regulations [G.57] for dissertations and thesis, I declare that this is my own dissertation, which I hereby submit for the degree Master of Landscape Architecture [Professional] at the University of Pretoria, is my own work, and has not been submitted for a degree at any other tertiary institution.

Marike Franklin



Dennelaan

The preservation of the
historic mission station
through the regeneration of
the cultural landscape

Absence

/ˈabs(e)ns/

Noun

the state of being away from a place
or a person

Afwesig

Church established 1830

Die berggans het 'n veer laat val
van die hoogste krans by Woeperdal
my hart staan tuit al meer en meer
ek stuur vir jou die berggansveer
mits dese wil ek vir jou sê
hoe diep my liefde vir jou lê

Berggans - Boerneef

Preserve
/prɪˈze:v/

Verb
maintain [something] in its original
or existing state

maintain or keep alive [a memory or
quality]

prepare [fruit] for long-term storage
by boiling it with sugar

Bewaar



STATEMENT OF SIGNIFICANCE

Wupperthal forms part of the history with special reference to slavery in its continual occurrence in mission stations through the Western Cape. Wupperthal is the best preserved mission settlement in the Western Cape and reflects the colonial rectangular house type as part of its street village (Le Grange 1993). The street village follows the contour lines and a road forms the boundary between the agricultural fields and the houses. The agricultural fields are based on an ancient German Economic organisation that implemented the principles of sharecropping still in use today (Jackson 1984). The church forms the centre of the town and acts as administrator to the larger area that features an active community (Heyns 1980).

Wupperthal is situated on the edge of the Cederberg between the Cape Floristic Region (most northerly region) and the Succulent Karoo (Redcedar 2015). This large heritage site (Wupperthal with its 14 outposts) protected the area from development and conserved the biodiversity of the area. Its isolation from the rest of the world is one of the main factors that preserved the settlement pattern as well as the culture associated with the Afrikaans language. Wupperthal, established in 1830, functioned as a self-sustaining unit that was established as a socio-economic hub to its people (Heyns 1980). Economic activities included the production of rooibos tea, a shoe factory, a glove factory, and agriculture (Heyns 1980). The Cederberg is the only place in the world where rooibos is found. A strong sense of belonging exists in the valley where everyone forms part of a collective identity with strong traditions. Wupperthal lends itself to sustainable tourism in its unique setting.

International: Shared heritage with Germany

National: Pioneers of the colonisation and the association with slavery. Preservation of culture and traditions associated with the Afrikaans language.

Provincial: Best preserved mission station in the Western Cape

Regional: Conservation area with limited development, therefore large areas of biodiversity has been protected.

Local: Unique setting and sense of place

SAMEVATTING VAN DELE

Verval van sendingstasies in die Wes Kaap kan meestal toegeskryf word aan die onvermoë om balans tussen ontwikkeling en bewaring in sensitiewe kulturele landskappe te vind. As gevolg van hierdie onvermoë om die middeveg te vind, verloor ons juis dit wat waardevol is. Kulturele landskappe bestaan uit tasbare en nie-tasbare elemente wat die bewaring daarvan ingewikkeld maak.

Dit wil voorkom asof ontwikkeling in sendingstasies nie sensitief genoeg is vir die elemente wat die omgangstaal van die sending landskap opmaak nie, en derhalwe word die voortbestaan van ons ryk kulturele erfenis bedreig. In Wupperthal vind ontwikkeling op twee vlakke plaas; die bou van ingenieurs infrastruktuur, en die opgradering van individuele huise (Le Grange 1996). Hierdie ontwikkeling neem ongelukkig nie die skep van publieke ruimtes binne die historiese kern van Wupperthal in ag nie. 'n Meer holistiese benadering tot ontwikkeling word benodig wat ekonomiese groei, asook die volhoubaarheid van 'n gemeenskap met 'n hoë werkloosheidsyfer in ag neem.

Die landskap is 'n steeds veranderende, dinamiese omgewing wat die aandag van veelsydige individue in die ontwerpsveld verg. "Landskap" in sy Nederlandse kern beteken die aanneem van kulturele en natuurlike prosesse om 'n nuwe gebied te vorm (Domon 2011). Landskap argitektuur is opgebou uit verskeie dissiplines wat die basiese kennis opmaak om komplekse areas soos Wupperthal te kan takseer. 'n Kritiese begrip van die kulturele landskap is nodig sodat Wupperthal behoue kan bly as sosio-ekonomiese kern tot the groter Wupperthal area. Die refleksie van die landskap in die persepsies van die individue word beskou as 'n belangrike komponent om die konneksies tussen die sosio-ekonomiese elemente en die kulturele landskap te vind.

Ingesluit as deel van die omvang van die studie was 'n soeke na die opdrag in die landskap. Verskeie metodes om waarde in die kulturele landskap te bepaal is gebruik ten einde die ontginning van die opdrag. Die begrip van elemente waaruit die landskap opgebou is, het 'n meganisme geword om waarde en betekenis te gee aan feite. Die uitkoms van die landskap ontwerp moet gesien word as 'n toepassing van die waardes wat deur die ondersoek van die landskap na vore gekom het. Klem op die waarde van die proses dan eerder as die produk.

LANDSCAPE

To adopt cultural and natural processes and create a new territory (Domon 2011).

CULTURAL LANDSCAPES

The combined works of nature and humankind, they express a long and intimate relationship between peoples and their natural environment (UNESCO 2014).

PLACEMAKING

Placemaking is a multi-faceted approach to the planning, design and management of public spaces (Merriam Webster 2015).

Refer to Chapter 3 for a comparison between the different mission stations and the influence of development.

SUMMARY OF PARTS

The decline of most of the mission stations in the Western Cape is a result of the inability to find the balance between conservation and development, between the old and the new. Being unable to determine the middle ground, we fail to preserve that which is valuable to keep. Conservation becomes increasingly difficult when it includes less concrete elements such as cultural landscapes that comprise both tangible and intangible aspects.

Development in mission stations in the Western Cape appears to be insensitive to the elements that make up the vernacular mission landscape and is a threat to the rich cultural heritage of our country. Development in Wupperthal currently occurs at two levels: In the implementation of “engineered” infrastructure, and in the upgrading of individual homes (Le Grange 1996). Unfortunately the development results in the lack of public place-making within the historic core of Wupperthal. A more holistic approach to development is needed that also promotes the economic growth and the sustainability of the community that is currently facing a high level of unemployment.

Landscapes are ever-changing dynamic environments that demand the attention of versatile individuals in the field of design. “Landscap” in its Dutch origin means to adopt cultural and natural processes and create a new territory (Domon 2011). Landscape Architecture touches on a variety of disciplines to make up the knowledge base needed to assess the variety of complexities in settings such as Wupperthal. It becomes a suitable approach for critical investigation into the understanding of the mission vernacular landscape and the preservation of Wupperthal as a socio-economic nucleus to the larger Wupperthal area. The reflection of the cultural landscape in the perceptions of the individuals living in Wupperthal is important in finding connections between socio-economic components and the cultural landscape.

The scope of the study included a search for the assignment by following a combination of methods to determine value within the cultural landscape. The assignment revealed itself in parts throughout the investigation where understanding became a mechanism to give meaning and value to facts. The landscape design should be seen as the application of a set of values that revealed itself in the landscape. Emphasis rather on the significance of the process than the product.

ASKING THE QUESTIONS

RESEARCH QUESTION

How can landscape design successfully consider the apparent contradictory aspects of development and preservation in the Wupperthal cultural landscape as design informants?

HYPOTHESIS

Landscape design can regenerate public space as part of the cultural landscape within Wupperthal by reinstating socio-economic components that relate to these. A thorough investigation into the understanding of the cultural landscape is needed to find these links within the landscape.

METHODOLOGY

The methodology formed the backbone of the study and will be discussed in detail in Chapter 4. The outline of the Burra Charter was used to inform the overall methodology, while the overall approach was based on the theory of 'herbestemming' by Roos (2007). The diagram on the right shows the broad outline of the process followed. People and

their perceptions of the landscape became important informants in the discovery process.

SUB-QUESTIONS

1. What are cultural landscapes and how would they inform landscape design?
2. What are the challenges between conservation and development in cultural landscapes?
3. What components could be re-instated to establish the historic socio-economic function in Wupperthal according to the value revealed in the landscape?
4. How can landscape design regenerate public space through these socio-economic components and thereby combine development and preservation of the historic mission station?

PERCEPTION

The way you understand something or someone. Physical sensation interpreted in the light of an experience. (Merriam Webster 2015)

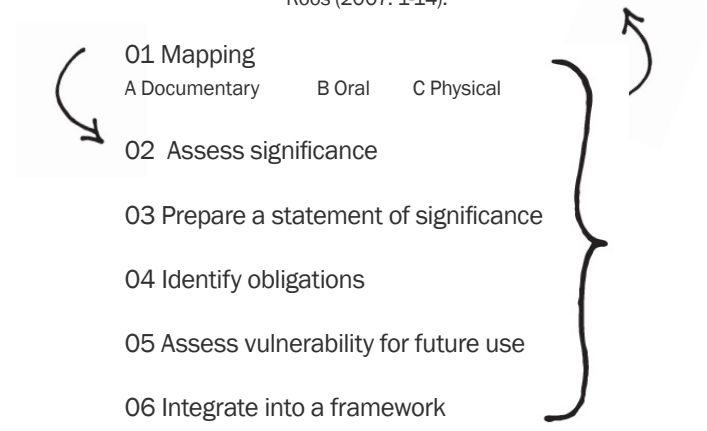
SOCIO-ECONOMIC

Relating to or concerned with the interaction of social and economic factors. (Merriam Webster 2015)

REGENERATE

(of a living organism) grow (new tissue) after loss or damage (Merriam Webster 2015)

The overall approach will be based on the theory of 'herbestemming' and general methodology by Roos (2007: 1-14).



SHARING VISION

AIMS

1. PRESERVE

- Preserve Wupperthal as a self-sustaining community in the heart of the Cederberg

2. REGENERATE

- Regenerate Wupperthal as socio-economic hub to the people of Wupperthal
- Regenerate public space within Wupperthal by improving public amenities and hosting economic activity
- Increase interest for future generations
- Regenerate a sense of identity and pride for Wupperthal residents

3. DEVELOP

- Design a robust public space as part of the cultural landscape that could be resilient for the use of future generations and adaptable to the changes created by technology.
- Develop sustainable tourism and other economic drivers for the benefit of its residents

SELECTING THE SITE

WITHIN WUPPERTHAL, SITE SELECTION

The process of site selection for design development is layered and explained in detail in the site analysis chapter. Wuppertal needed to be analysed on various levels. Each level of analysis contributed to the components to be developed in the historic core.

1. GREATER WUPPERTHAL AREA FRAMEWORK (38 000 ha)

On a regional scale the focus is on the larger Wuppertal area with its fourteen outposts seeking economic drivers within the cultural landscape.

2. WUPPERTHAL MISSION FRAMEWORK (120 ha)

The historic core of Wuppertal is the main focus of the study on a town scale, narrowing it down to the area of intervention for the investigation on a 'greenspace and communications' scale (Dee 2001:12).

3. MISSION ROUTE MASTERPLAN (120 ha)

The framework was used as guideline for the development of a masterplan for the historic core.

4. INTERPRETATION CENTRE, SEEDBASE AND RELATED PUBLIC SPACE SKETCHPLAN (3ha)

From the masterplan a suitable site was selected for a technical investigation of the study. The sketchplan is a transition area between historic nodes that form part of the daily activities of the town. One of these includes a response to ablution facilities as added infrastructural development to existing buildings over the years and the other to proposed economic activities. The economic activities include clay tile manufacturing and a seedbase. The buildup to the sketchplan will be discussed throughout this document from findings to technical investigation.

REGIONAL LANDSCAPES

Natural, semi-natural systems, agriculture, settlement. Transport systems.(Dee 2001:10)

TOWN AND CITY SCALE

Towns may take different forms, they are dynamic systems opposed to fixed structures (Dee 2001:11)

URBAN GREENSPACE AND COMMUNICATION SCALE

Roads, rivers, squares, gardens (Dee 2001:12)

PHENOMENOLOGY

The way in which one perceives and interprets events and one's relationship to them in contrast both to one's objective responses to stimuli and to any inferred unconscious motivation for one's behaviour; (Merriam Webster 2015)

SETTING OUTLINES

DELINEATIONS

The study has been limited to the Western Cape in its comparison to other mission stations and specifically to those of the Moravian Mission society. The Moravian mission society had the greatest influence on the style and layout in Wupperthal (SAHistory 2015). Moravian mission stations were limited to the Cape Colony (now the Western Cape).

LIMITATIONS

The researcher lives far away from Wupperthal. Access to the site was thus limited due to distance. Four visits were scheduled throughout the year.

For the author to get a thorough understanding of the cultural landscape and build up trust relationships in the community proved to be time consuming.

The availability of maps and information about Wupperthal was limited.

Accuracy of maps and available information could not always be

verified.

ASSUMPTIONS

All maps and available information was assumed to be taken as correct.

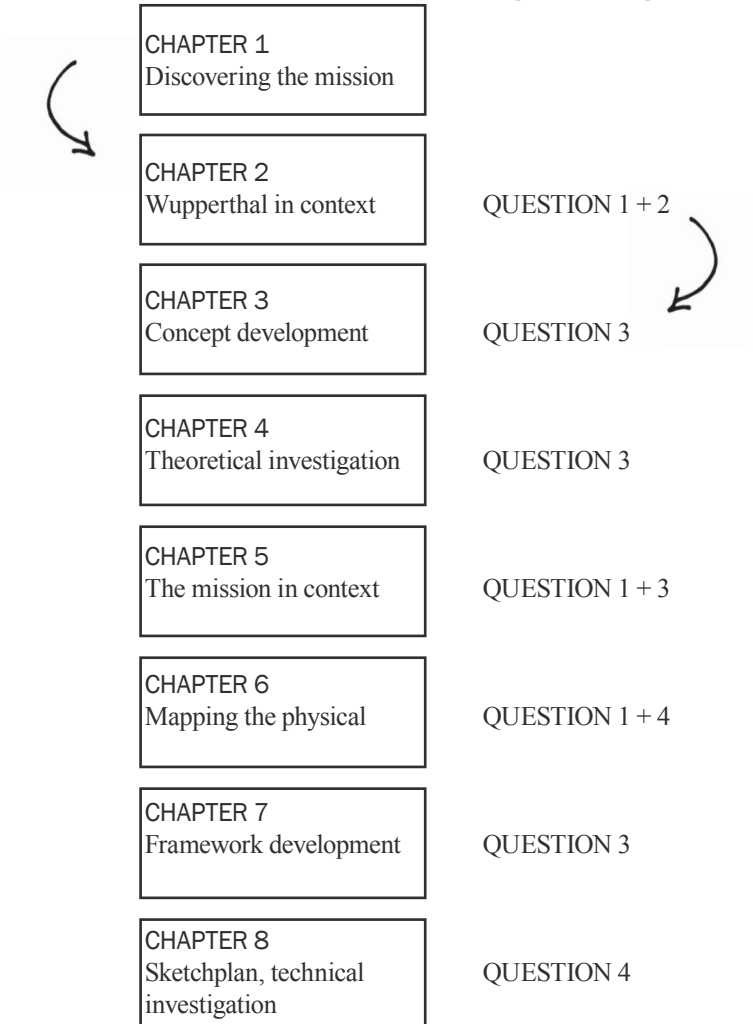
The people were honest and unbiased in their discussions.

CHAPTER OVERVIEW	XXV
1. DISCOVERING THE MISSION	3
1.1 Background, missions in the Western Cape	5
1.2 Duality, the positioning within	7
2. WUPPERTHAL IN CONTEXT	11
2.1 Genadendal 1738	13
2.2 Mamre 1808	13
2.3 Pella (outstation of Mamre) 1869	15
2.4 Elim 1824	15
2.5 Wupperthal 1830	18
2.6 Summary, Wupperthal in context	19
3. CONCEPT DEVELOPMENT	21
3.1 Dialectics, critique of everyday life	23
3.2 Concept, the preservation of absence	24
3.3 Scales of planning, application of concept	26
4. THEORETICAL INVESTIGATION	31
4.1 Cultural landscape, the value it brings	33
4.2 Cultural landscapes, challenges in conservation and development	34
4.3 Landscape, perceptions	34
4.4 Landscapes over time, people and place	35
4.5 Cultural landscapes, methods of assessment	36
4.6 Methodology, the process of discovery	37
4.7 Methods, tools to work with	38
4.8 Cultural landscapes, the representation thereof	39
4.9 Mapping	40
4.10 Significance, the assessment of value	41

CONTENTS

4.11 SAHRA, value grading	42		
4.12 Ethics, as set out by the University of Pretoria	43		
5. THE MISSION IN CONTEXT	45	8. TECHNICAL INVESTIGATION	129
5.1 Wupperthal 1830	47	8.1 Planting strategy	135
5.2 Wupperthal 1830-1890	48	8.2 Olive industry	138
5.3 Wupperthal 1965	51	8.3 Sketchplan	141
5.4 Wupperthal 1980	59	8.4 Interpretation centre	148
5.5 Wupperthal 2015	60	8.5 <i>Werf</i> -wall	150
6. MAPPING THE PHYSICAL	67	8.6 Ablution structure	152
6.1 Obligations, guidelines for new work	69	8.7 Greywater system	155
6.2 Boundaries	70	8.8 Ablution structure components	157
6.3 Form follows function	71	8.9 Lighting	157
6.4 Roads	74	8.10 Seedbase	161
6.5 Spaces, sacred and profane	75	8.11 Clay tile manufacturing	162
6.6 Visibility	81	8.12 Seedbase development	164
6.7 Natural spaces	82	8.13 Final sketchplan	166
6.8 Mobility and Immobility	86	8.14 Final presentation	168
6.9 Habitat and habit	86	REFELCTION	iii
6.10 Typology	92	LIST OF FIGURES	vii
7. FRAMEWORK DEVELOPMENT	101	REFERENCES	xiii
7.1 Greater Wupperthal Area Framework	104		
7.2 Wupperthal Mission Framework	109		
7.3 Wupperthal Mission Route Masterplan	112		
7.4 Plan of existing condition	117		
7.5 Water Strategy	121		
7.6 Rooibos drying platform	126		
7.7 Final Masterplan	128		
7.8 Sketchplan development	130		

CHAPTER OVERVIEW





CHAPTER 1

Discovering the Mission

Fig.1.1 Wuppertal, beauty in relationship (Franklin 2015).



Fig.1.2 European Imperialism 1914 (Franklin 2015).

Fig.1.3 Locality of Wupperthal (Franklin 2015).



Chapter 1 gives a broad overview to the background of mission stations and the role they played in South Africa. This is followed by a personal positioning within the notion of duality that was perceived as part of the cultural landscape of Wupperthal.

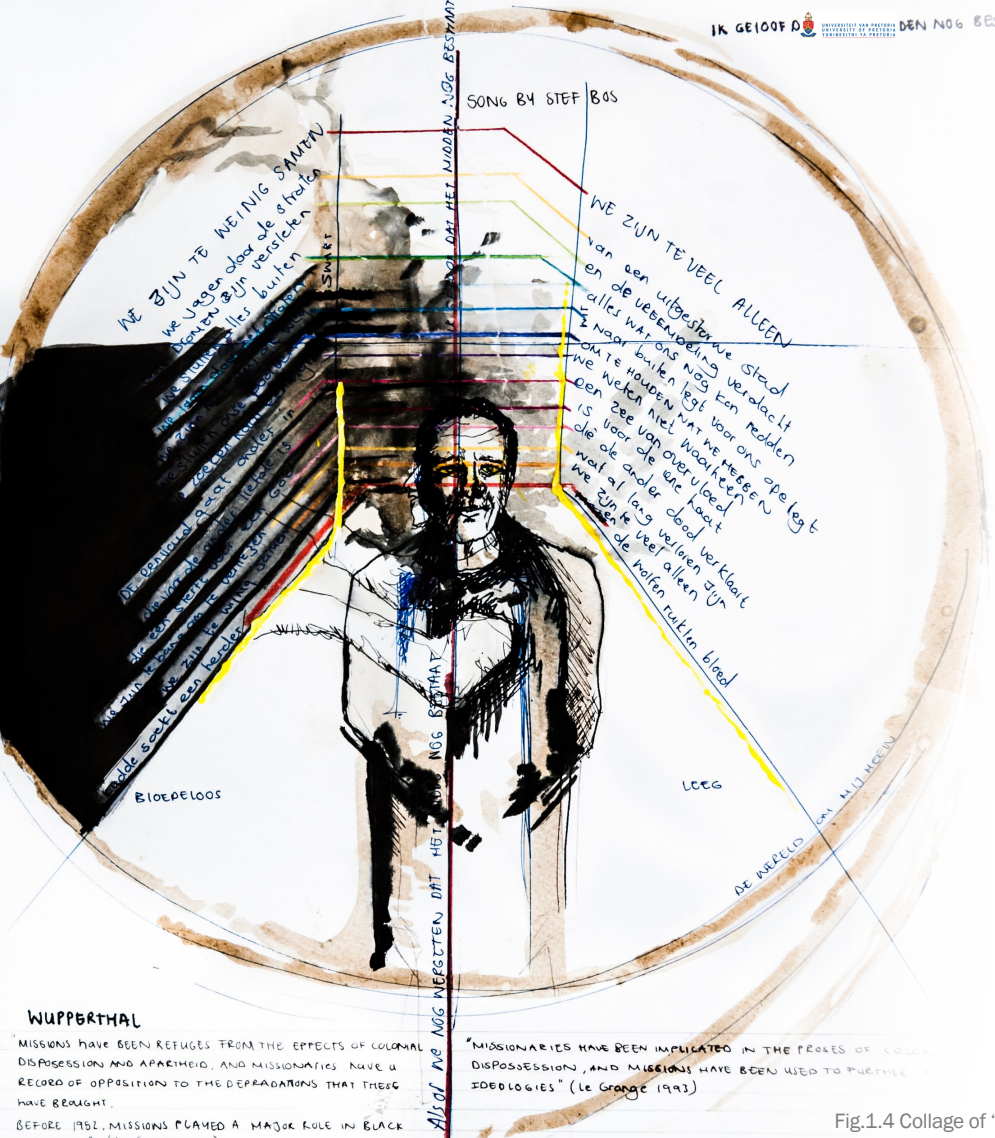
IMPERIALISM
a policy of extending a country's power and influence through colonization, use of military force, or other means.

1.1 BACKGROUND, mission stations in the Western Cape

In an increasingly homogenised world, unique cultural sites form the basis for national identity and prove to be valuable assets for future generations. These sites are used for scientific and historical research and can form a basis for economic development opportunities and sustainable tourism (Global heritage fund 2015). According to a study done by UNESCO in 2007, human action caused damage to 83% of the World Heritage Sites while 17% thereof was damaged due to natural causes. The damage caused by human action included pressure for development, unsustainable tourism, insufficient management, looting, and war.

Wupperthal forms part of a collective identity of colonial pursuit that influenced the course of history in South Africa and represents a time of spiritual revival and growing missionary drive in Europe (see Figure 1.2). By 1925 a total number of 1030 mission stations were established in South Africa (Le Grange 1993). Mission stations played a prominent role as pioneer settlement, although some contested the colonial rule by providing shelter and education for the oppressed, others formed part of the ideologies of colonisation with the introduction of their westernised world view of civilization and deliberate distribution thereof throughout the country (SA History 2015). Wupperthal was the first of 26 mission stations to be established under the Rhenish Mission Society operating from Germany. The presence of these mission stations in South-West Africa sparked the debate for a German colony to be established (SA History 2015). The ex-colony is today known as Namibia.

Wupperthal, established in 1830, remains one of three mission stations in the Western Cape (see Figure 1.3) that still function as an active community under the administration of the Church where the historic nucleus as well as the settlement are worthy of conservation (Le Grange 1993). Wupperthal consists of the core with fourteen outposts in the larger area that developed as a self-sustaining community on the edge of the Cederberg Mountain range. The historic core consisted of socio-economic functions implemented by the Church to serve the people. Today its isolation from the rest of the world and the associated lack of development and fast growth is the reason for the preservation of the 19th century colonial architecture and the rich culture and traditions associated with the Afrikaans language.



IN HET MIJDEN – STEF BOS (2008)

Er is geen kant te kiezen
 Ze maken ons wat wijs
 Ze praten over zwart en wit
 Maar wijsheid is vaak grijs
 De een sterft voor een god
 Die de ander dood verklaart
 Alsof we zijn vergeten
 Dat het midden nog bestaat

En we sluiten onze poorten
 Om te houden wat we hebben
 We sluiten alles buiten
 Alles wat ons nog kan redden
 Wij zijn bang om te verliezen
 Wat al lang verloren is
 En we zien niet dat de weg
 Naar buiten voor ons open ligt

De eenvoud gaat ten onder
 In een zee van overvloed
 De kudde zoekt een herder
 En de wolven ruiken bloed
 En de honger naar sensatie
 Maakt een koning van een dwaas,
 Alsof we zijn vergeten
 Dat het midden nog bestaat

We zoeken naar een richting
 En we weten niet waarheen
 Wij zijn te weinig samen
 We zijn teveel alleen

WUPPERTHAL

MISSIONS HAVE BEEN REFUGES FROM THE EFFECTS OF COLONIAL DISPOSSESSION AND APARTHEID, AND MISSIONARIES HAVE A RECORD OF OPPOSITION TO THE DEGRADATIONS THAT THESE HAVE BROUGHT.
 BEFORE 1951, MISSIONS PLAYED A MAJOR ROLE IN BLACK EDUCATION" (Le Grange 1993)

"MISSIONARIES HAVE BEEN IMPLICATED IN THE PROKS OF COLONIAL DISPOSSESSION, AND MISSIONS HAVE BEEN USED TO FURTHER IDEOLOGIES" (Le Grange 1993)

Fig.1.4 Collage of "In het middel" (Franklin 2015)

(Slave) 1858 SLAVES GRANTED FREEDOM IF SETTLED AT A MISSION STATION
 BUT ADHERE TO THE RULES OF THE CHURCH (FICMAN)
 er is geen kant te kiezen, ze maken ons wat
 (Free) LOCAL NOMADIC KHOI SAN LEFT WITHOUT A PLACE WHERE THEY COULD STILL STAY ON THEIR OWN
 © University of Pretoria

1.2 DUALITY, the positioning within

In his song – “In Het Midden” – Stef Bos captures some of the extremes in the world that have at times through history become the norm. He reminds us that a middle ground still exists. This form of duality has also been present in the history of Missionary movements in South Africa and their role in the pursuit of capitalism under colonial ventures.

Wuppertal as a mission station in South Africa represents:

Freedom from slavery yet obedience to the rules of the Church;

A place where wanderers could stay on their own land;

Where isolation means freedom from the rest of the world;

A core compact yet dispersed; remote yet connected;

Caught between the modern and the old; between conservation and development.

The line that represents the middle becomes thin and almost non-existent in a world where extremes exist. It is the interplay between these sides that holds the energy in motion and the world in play. The human interference is the lifeblood of the pendulum that continuously swings from one side to the other.

I believe that the middle ground still exists. The landscape represents such a grey area, between the built and natural environment, where building meets landscape through human intervention. In Wuppertal, the agricultural landscape forms an important aspect to the *genius loci* and the interface between the larger natural environment and the physical structures. The continuation of the Church to the heart of the people represents another middle ground that continues past the physical structures and mediates the slave to become truly free; even from the rules of the Church.

This concept of duality and its manifestation as part of perception in the cultural landscape influenced the author in the analysis and design process followed throughout the dissertation.

DUALITY

an instance of opposition or contrast between two concepts or two aspects of something; a dualism .

DUALISM

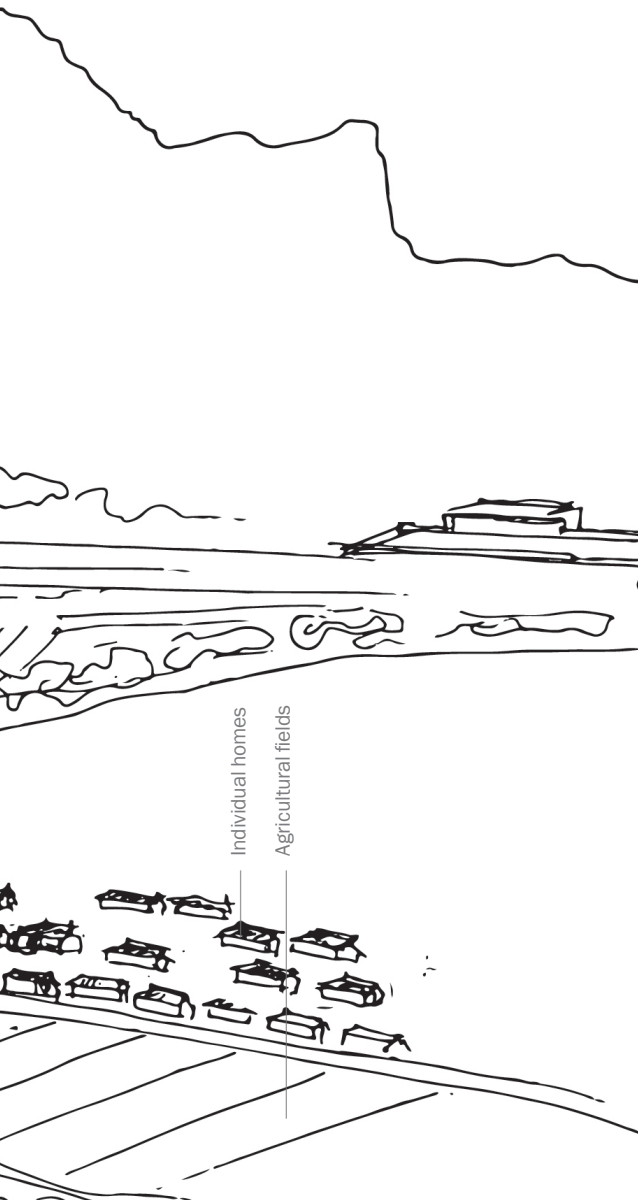
the division of something conceptually into two opposed or contrasted aspects, or the state of being so divided

GENIUS LOCI

Spirit of a place



Fig. 1.5 Town of Wupperthal, axonometric view (Franklin 2015)



WUPPERTHAL

Ek soek na jou en jou gedagtes
stad van lewe, stad van dood
jou verlate strate 'n labirint van
nood

waar le jou hart vir die verwardes,
dalk oor die verste klip formasie,
oor die rooibos baan?

of dalk net in elke son se straaltjie
wat die weg na more bepaal?

Hier waar jy jou hart uitpraat met
vriende van ver, waar lewe in
die tasbaarheid van die dag le en
persepsie die stad bedreig.

Nag is wanneer alles saamtrek...
gesels weerklink in die eens verlate
strate en word gevul met die gelag
van vroue

Wat is die ritme van die stad op die
rand van die Karoo?

Waar le die musiek wat ooit die
eerste boer betoor?

Dit word stadig maar seker tyd om
die gesketste prentjie in te kleur met
die lewe, van eenvoud wat rykdom
beteken, van oorvloed wat deel
beteken .

Ek was te bang om stil te staan

toondoof

Wat is die ritme van die nag, Vision
vir die dag?

Poem by author,
inspiration by Stef Bos
April 2015



CHAPTER 2

Wupperthal in context

Fig. 2.1 Historic church of Pella (Franklin 2015)



Fig. 2.3 Genadendal, garden (Franklin 2015)



Fig. 2.4 Genadendal, aerial photograph (Fransen 1987)

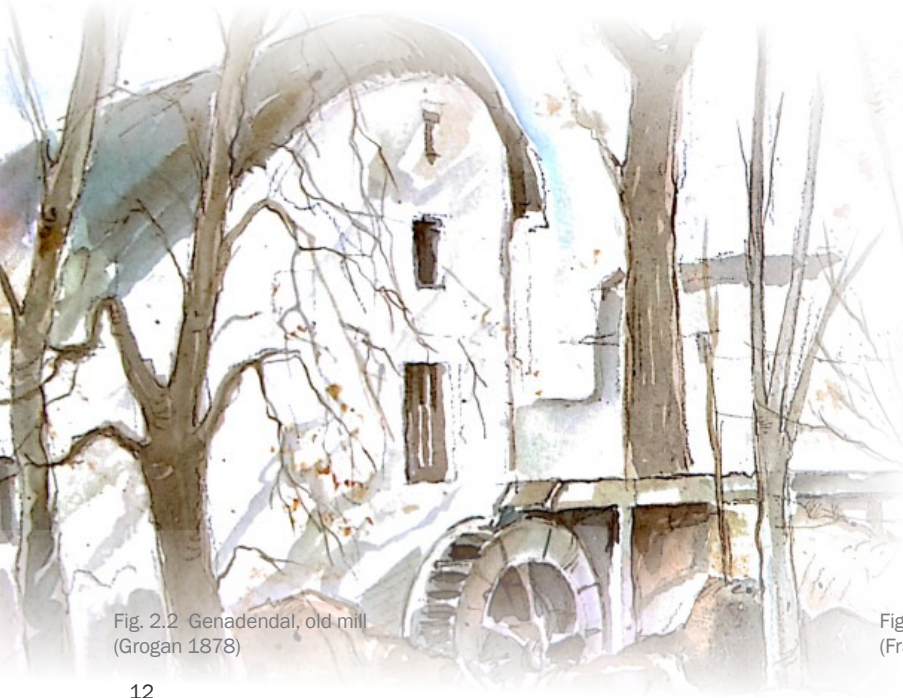


Fig. 2.2 Genadendal, old mill (Grogan 1878)

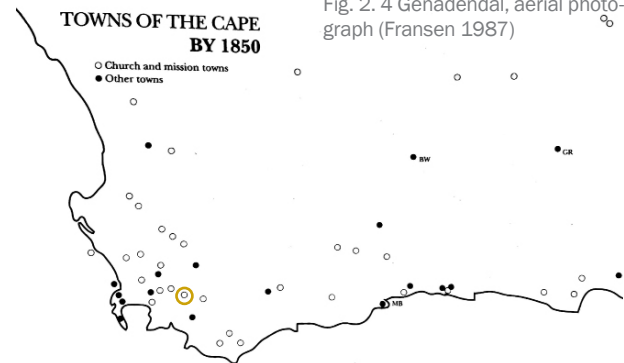


Fig. 2.5 Towns of the Cape, Genadendal (Fransen 1987)

In order to understand Wupperthal as a mission station it should be understood in the context of the larger Western Cape mission movement during the establishment of the colonial empire. Chapter 1 sketched the background to this mission movement that originated from an increased mission drive in Europe. In this chapter Wupperthal will be compared to the Moravian mission stations of Genadendal, Mamre, Pella and Elim.

2.1 GENADENDAL 1738

Genadendal was the first mission station to be established in the Western Cape. It was established by George Schmidt of the Moravian church. It was also the mission station that Leipoldt visited before establishing Wupperthal to see how a mission station was run. With efforts from the Dutch government Genadendal was restored as part of their shared heritage campaign. The restoration was mainly focused around the historic core of Genadendal where the buildings as well as elements within the landscape were restored. The restoration of Genadendal was executed in the hope that it would uplift the community and preserve the historic urban landscape yet the larger area has transformed under new development and modern building techniques (Figure 2.8 - 2.9). Greyton, situated a mere 5km from Genadendal, is an example of gentrification where an entire community has been displaced by wealthier residents.

Land tenure: Private ownership of residential homes

Current condition: Historic core has been restored and functions as a museum with an active church. Increasing development affects the historic quality of the town within the larger town. The garden in Genadendal adds to the sense of place (Figure 2.3). The use of agricultural land has declined over the years.

Historic function: Teachers college, grain mill, school, production of knives and the oldest pipe organ in South Africa

Current Function: Museum, church, school, tea garden, knives, bookshop, accommodation, printing museum and restaurant

Conservation: Declared as a world heritage site (UNESCO) for its historic urban landscape (core and settlement).

2.2 MAMRE 1808

Although the church of Mamre still plays an active role in its community, its influence is limited to the church 'werf'. All residents own their property. The agricultural lands are however still visible but not used for its original purpose. There are a variety of shops within Mamre to cater for their household needs.



Fig. 2.6 Genadendal, church (Franklin 2015)



Fig. 2.7 Genadendal, old house type (Franklin 2015)



Fig. 2.8 Genadendal, new development (Franklin 2015)



Fig. 2.9 Genadendal, new building (Franklin 2015)



Fig. 2.10 Mamre, aerial photograph (Fransen 1987)



Fig. 2.11 Mamre, church (Franklin 2015)



F12 Mamre, modern houses (Franklin 2015)



Fig. 2.13 Mamre, church office (Franklin 2015)



Fig. 2.14 Mamre, agricultural fields (Franklin 2015)



Fig. 2.15 Mamre, mission shop (Grogan 1878)

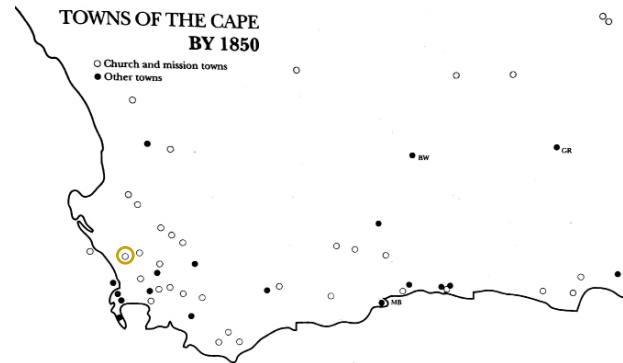


Fig. 2.16 Towns of the Cape, Mamre (Fransen 1987)

Mamre is further located in close proximity to Atlantis with direct bus access to Cape Town. The church therefore does not have to look after their ‘temporal’ well-being as was the case in historic mission stations.

Land tenure: Private ownership, historic core still belongs to the church

Current condition: Historic core is in a good condition, very little reference remains to the original house type. Agricultural land has shown a decline over the years (Figure 2.14). Outside ‘werf’ once formed part of the ambience, now subject to forgotten and over-grazed condition. Most buildings are still in use. The soup kitchen attracts individuals onto the ‘werf’ that is fairly isolated from the rest of the town.

Historic function: Grain mill, school, church

Current function: Tea house, cookhouse (soup kitchen), school and church

Conservation: ‘Werf’ buildings restored (declared National Monument)

2.3 PELLA (Outstation of Mamre) 1869

Pella is one of the outstations of Mamre with no obvious reference to a mission station. Today it merely operates as a traditional town. The only visual reference to its historic function is the old church ruins and the graveyard (Figure 2.1 and 2.17). These two elements do not form part of the formal town and will not be seen without the help of the residents living there. None of the structures have any reference left to the 19th century architecture that was prominent during the time that the mission station was established.

Land tenure: Private ownership

Current condition: Poor (little reference to mission station left)

Conservation: None

Historic function: Outstation of Mamre (church, post office and school)

Current function: Post office, new church, school and bus stations linking to Cape Town

2.4 ELIM 1824

Elim is situated close to Bredasdorp. This small mission station is still influenced by the church and although lands are privately owned, a coherence exists in the architecture of the town in the historic core and settlement. Recent upgrades re-aligned the main road on the church axis and a series of walls. These upgrades are a direct result of needed infrastructure. Although these upgrades do not directly address the economic decline of the town, it adds to the sense of place and pride for its residents.



Fig. 2.17 Pella, graveyard (Franklin 2015)



Fig. 2.18 Pella, rector's house (Franklin 2015)



Fig. 2.19 Pella, typical street (Franklin 2015)



Fig. 2.20 Pella, play park (Franklin 2015)



Fig. 2.21 Washerwoman of Pella (Grogan 1978)

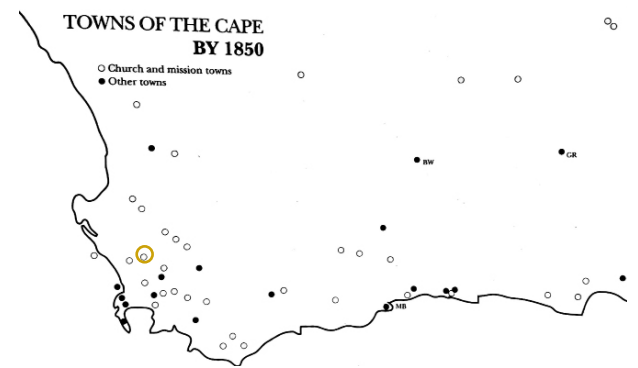


Fig. 2.22 Towns of the Cape, Pella (Fransen 1987)

Land tenure: Land claims, private ownership

Current condition: Only other mission station where the settlement (entire) as well as the core still reflects the old house type in its style. Agricultural lands are still in use.

Conservation: Core and settlement (Provincial heritage)

Historic function: Wild flower export, thatch, mission mill products, wine production, slave memorial.

Current function: tea room, dairy farm, and oldest water wheel still in use.



Fig. 2.23 Elim, mission church (Grogan 1878)



Fig. 2.24 Elim, aerial photograph (Fransen 1987)



Fig. 2.25 Upgrades to Elim (Fransen 1987)



Fig. 2.26 Elim, entrance (Google 2015)

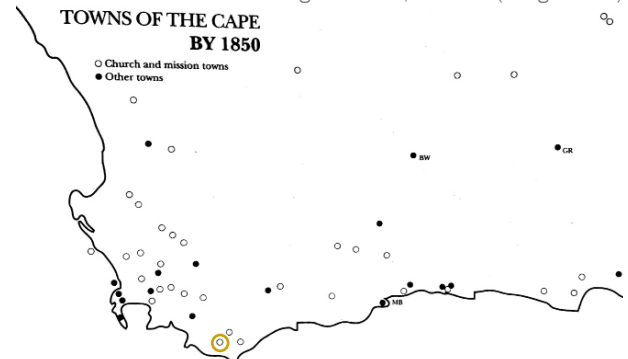


Fig. 2.27 Towns of the Cape, Genadendal (Fransen 1987)

2.5 WUPPERTHAL 1830

Wuppertal was established as a Rhenish mission station and in 1965 handed over to the Moravian mission society, Wuppertal in its isolation is situated on the edge of the Cederberg and is still under administration of the church.

Land tenure: Church own all land; fields and houses are rented at a small fee

Current condition: Core as well as settlement is in a good condition. The agricultural fields are still in use on a daily basis. The community still functions on a sharecropping system. It is completely isolated in its location on the edge of the Cederberg. The greater Wuppertal area consists of 14 outpost that form part of the mission settlement.

Conservation: Core and settlement (Provincial heritage)

Historic function: Shoe factory, glove and hat factory, tannery, livestock farming, tobacco, rooibos tea production, mission shop, post office, school and church.

Current function: Shoe factory, rooibos tea production, mission shop, post office, school and church.



Fig. 2.29 Wuppertal, aerial photograph (Franklin 2015)



Fig. 2.30 Wuppertal, mission church (Franklin 2015)



Fig. 2.28 Wuppertal (Grogan 1978)

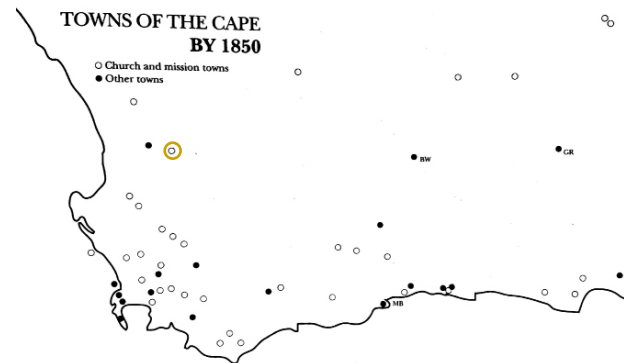


Fig. 2.31 Towns of the Cape, Wuppertal (Fransen 1987)

2.6 SUMMARY, Wupperthal in context

Wupperthal is the only mission station still under complete administration of the church. Genadendal was a good case study to understand the restoration of a mission station as well as the impact it can have on the community. In the cultural landscape of Wupperthal care should be taken not to turn the historic core into a museum, but rather continue to function as a working town in order to cater for the needs of an active community. The upgrades in Elim also proved valuable as a case study to understand the framing of historic elements with a new take on existing materials. Pella shows the complete destruction of a mission station due to change and development.

Wupperthal, Genadendal and Elim are the only three mission stations in the Cape where the core as well as the settlement is worthy of conservation. Even though modern construction material is prevalent, Wupperthal is however the only mission station that has not really been affected by new development. All additional houses constructed are built in a style to fit in with the historic house type. Some of the thatched roofs have been replaced with corrugated iron sheets and some of the old window frames with iron frames. Buildings are however subject to neglect and high maintenance cost that is difficult for all households to keep up. Wupperthal differs from the rest of the mission stations in its historic core. Genadendal and Mamre has a carefully laid out and formulated core while Wupperthal still has a werf-like feel to it.

The most important build elements in Wupperthal include the church building, the school, the factory buildings, the agricultural lands and the irrigation channel (Heyns 1980: 95). In a telephonic interview with one of the residents of Wupperthal special reference was made to the significance of the shoe factory as well as the rooibos industry. Perceptions were also tested on site amongst residents and visitors to the aspects of the land by the ordering of a series of photographs from most to least characteristic of Wupperthal. Some of the findings included the lack of appreciation for Wupperthal. Most visitors merely looked for the church, shoe factory and something to eat and then left again, failing to recognise some of the photos shown (Figure 2.32). Residents as well as visitors unanimously chose the same photographs as favourite (Figure 2.32 and 2.33) and least favourite (Figure 2.34). They all recognise the charm of Wupperthal in its historic building techniques and perceive the modern influence on the town as destructive.



Fig. 2.32 Wupperthal, residential street (Franklin 2015)



Fig. 2.33 Wupperthal, town square (Franklin 2015)



Fig 2.34 Wupperthal, rooibos factory (Franklin 2015)



Fig. 2.35 Wupperthal, pedestrian bridge (Franklin 2015)



CHAPTER 3

Concept Development

Fig. 3.1 Mountain and Valley
(Franklin 2015)



ROOIBOS - ASPALATHUS LINEARIS

100% PURE AND NATURAL
NO ADDITIVES, PRESERVATIVES OR COLOURANTS, CAFFEINE
THE LEDERBERG IS THE ONLY PLACE IN THE WORLD WHERE ROOIBOS
IS FOUND.

WUPPERTHAL - VISION

Nature
[wilderness]

DUALITY
Sides



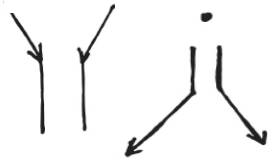
Two sides Perspective to sides

Tension between sides



Wuppertal
[town]

Energy flow



Inflow Outflow

People
[residents]

DIALECTICS



Single truth

Fig. 3.2 Vision Collage
(Franklin 2015)

Chapter 3 provides a discussion on the development of the concept, *the preservation of absence*, expanding on the notion of duality that is briefly introduced in Chapter 1. Duality is placed in context in the theory of dialectics, where after a discussion of Henry Lefebvre's view on dialectics and public space follows.

3.1 DIALECTICS, critique of everyday life

Dialectics can be explained as a method of reasoned argument that seeks to establish the truth for two opposing views. This method of reasoned argument originated in ancient Greece, but it was Georg Hegel's writing on dialectics that gave it new life (Moore 2004: 61). Dialectics usually follows a line of contradictory questions in order to test the perception and the realisation of the ultimate truth. Hegel believed that any argument needs to go through a negative phase of testing before it could reach any point of completion. Hegelian dialectic can be presented as a three-fold unit:

abstract – negative – concrete or
 thesis – anti-thesis – synthesis

Hegel also believed that the world is an external form of the 'idea' while Marxists believe that the 'idea' is the material world reflected in the mind and translated into thought (Moore 2004: 62). One of the Marxist philosophers of the 19th century, Henry Lefebvre investigated this notion of dialectics in his writing; *The critique of everyday life (1968)*. Some of his other work that proved to be valuable for this study, includes the *Production of space (1981)* and *Rhythmanalysis (1986)*.

Lefebvre (1968) argued that everyday life was the unit where most of the dualities in life presented itself. This is the space where most diverse aspects are found and played off against each other: illusion and truth, power and helplessness (Moore 2004: 71). In everyday life the line between what is in and out of man's control is much closer than in the large events of life. Public space is therefore a social product of the means of production. Every society, every mode of production produces a certain space – its own space (Moore 2004: 71). Lefebvre classified social space into three categories. These categories were used to understand public space in Wuppertal

1. Spaces of representation [*le vecu*]
 EXPERIENCE

DUALITY
 Contradictory sides to a single element.

DIALECTICS
 Method of investigating the single truth.

GEORG WILHELM FRIEDRICH HEGEL
 1770 - 1831
 German philosopher and influential figure in German Idealism

HENRY LEFEBVRE
 1901- 1999
 French Marxist philosopher and sociologist

MARXISM
The political, economic, and social theories of Karl Marx including the belief that the struggle between social classes is a major force in history and that there should eventually be a society in which there are no classes (Merriam- Webster 2015)

The everyday in short was the space in which all life occurred, and between all fragmented activities took place - Lefebvre (Moore 2004:12)

Without revolutionising everyday life, capitalism would continue to diminish the quality of everyday life, and inhibit self-expression - Lefebvre (Moore 2004:24)

Spaces of representation are influenced by the ‘imaginary’ of the time. Corenlius Castoriades writes about the ‘imaginary’ by explaining it as the element that directs life. For the Greeks it was their creation myths and for the Jews it was Yaweh. In Wuppertal it is governed by God (see Figure 3.3) and the mission movement of Europe in the 1800’s (SAHistory 2015)

2. The representation of space [*le conqu*] DESIGNED

Representation of space refers to the designed elements that remind us of the imaginary. The church is a representation of God, of the missionary movement but at the same time the line of trees in front of the church represents the church (see Figure 3.4).

3. Practice of space [*le perc*] PERCEIVED

Practice of space gives rise to spaces of representation. These spaces are only fully understood once these areas are understood in light of their function or mode of operation. Wuppertal as a landscape is only fully understood once one enters the church and sees the Bible (see Figure 3.5). This specific Bible is a representation of the Protestant church. It changes one’s perception of the entire landscape once the ‘imaginary’ or source of influence is understood. Public space in Wuppertal forms part of a more complex use of space, which directs the spatial formation. These spaces of practice form part of the intangible properties included within the cultural landscape. Without understanding these intangible properties, we miss the emotional value different users assign to these spaces (see Chapter 6 for the analysis of the different areas in Wuppertal).

3.2 CONCEPT, the preservation of absence

Lefebvre as part of his argument in the *Critique of everyday life* compares the Western worldview of music to be enjoyed in the opera house or as part of a show, while African culture assimilates music as part of the everyday in the clicking of the fingers and the stomping of their feet. Wuppertal in its core represents a political landscape introduced by the German Mission Society and a strong reference to the ‘Western world view’, the large events of life, while the residential landscape represents the people of Wuppertal and the everyday.

SR - SPACES OF REPRESENTATION



Fig. 3.3 Mission church (Franklin 2015)

RS - REPRESENTATION OF SPACE



Fig. 3.4 Tree lane in front of the church (Franklin 2015)

SP - SPATIAL PRACTICE



Fig. 3.5 Protestant Bible (Franklin 2015)

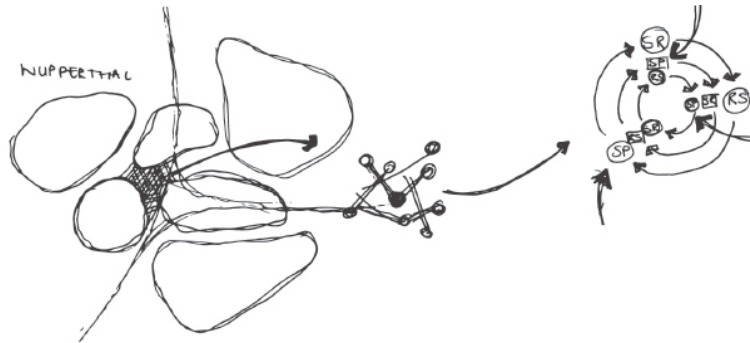


Fig. 3.6 Diagram illustrating complex use of space in Wuppertal (Franklin 2015)

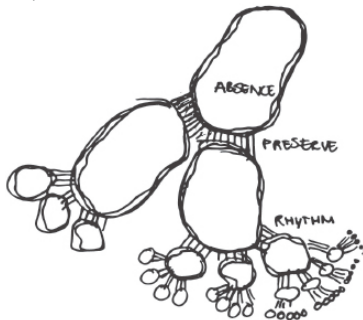


Fig. 3.7 Concept diagram

The prominence of duality in Wuppertal gave rise to the concept of the preservation of absence; a wordplay of Marc Treib's *The Presence of Absence* (1987). In Wuppertal the areas of absence (historic nodes) are almost lost between the clutter of a working farm. It is these pockets of absences that need to be preserved and rather amplified or framed by the functional needs of the town. In the presence, the everyday life of the people of Wuppertal are celebrated and made tangible in its response to their functional needs (often as a result of technological improvement). The concept extends past the mere

WESTERN WORLDVIEW OF MUSIC;
LARGE EVENTS OF LIFE, HISTORIC
BUILDINGS IN WUPPERTHAL, VOIDS



Fig. 3.8 Western worldview of music, the opera (Operawatch 2015)

AFRICAN WORLDVIEW OF MUSIC;
PEOPLE OF WUPPERTHAL, EVERYDAY
LIFE, NATURE



Fig. 3.9 African worldview, music as part of everyday life (Africacouncil 2015)

functional aspects of a working farm to the aesthetic and the inclusion of nature. In Wuppertal water is the ultimate life-giving force for the town. For this reason the proposal for the mission sought to incorporate water in the in-between moments of the town, thereby celebrating the elements of nature, framing the man-made voids. The concept therefore seeks to incorporate the overlapping of these two sets of dualistic elements of man and nature, large events of life (political landscape, historic nodes) and the everyday life (residential landscape, functional) as it reveals itself in the set of intangible features within the site.

Rhythms within a city is perceived through the five senses; smell, touch, sounds, sights and taste. Rhythm refers to the property of the presence and not the mere repetition of elements. Rhythm is always represented as a movement through time. It is important to seek the presence in the present to prevent a false representation of space. In order to do this, rhythm needs to be understood through time. It was crucial to visit the site and spend time with the people to prevent the trap of the present and the forming of false perceptions of the site and therefore the creation of a false landscape (see Chapter 6 for the mapping of perceptions in Wuppertal). Although this philosophical stance on dialectics is often criticised, I used the dialectic presence in the everyday life and the celebration thereof as a concept to inspire the design proposal. Lefebvre's writing opened my eyes to different aspects and elements within the cultural landscape of Wuppertal.

3.3 SCALES OF PLANNING, application of concept

This concept of the preservation of absence, together with the notion of duality was applied to the different scales of planning in Wuppertal. On a larger scale, in order to preserve this absence of Wuppertal (a self-sustaining community on the edge of the Cederberg), it was necessary keep Wuppertal functioning as an active community and avoid the risk of turning it into a museum.

The Greater Wuppertal Area Framework (38 000 ha) sought the understanding of the historic function of Wuppertal as socio-economic hub to its people. The regeneration of the cultural landscape included the establishment of economic drivers in the agricultural based outposts and skilled based functions within Wuppertal (See Chapter 4).

The Mission Framework (120 ha) looked at dualities in the form of views, energy flow and choices in order to understand Wuppertal as a settlement and the planned functions within. The Wuppertal Mission

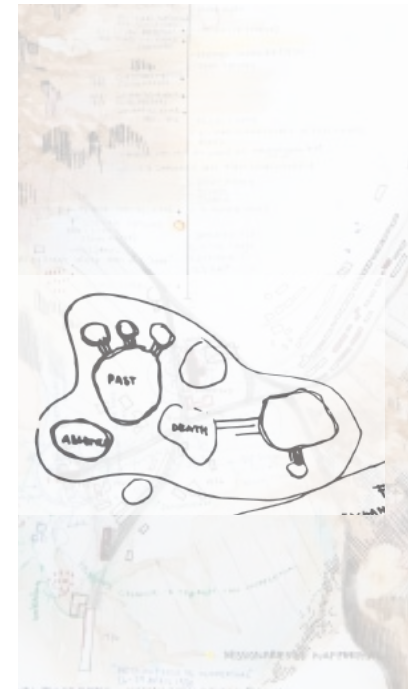
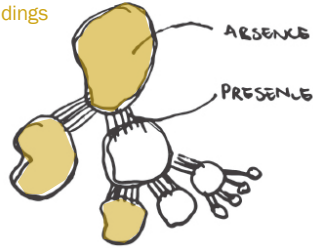


Fig. 3.10 Vision, current condition (Franklin 2015)

(text continue on page 28)

ABSENCE:

- Large events of life
- Historic buildings
- Voids



PRESENCE:

- Everyday life
- People of Wupperthal
- Nature

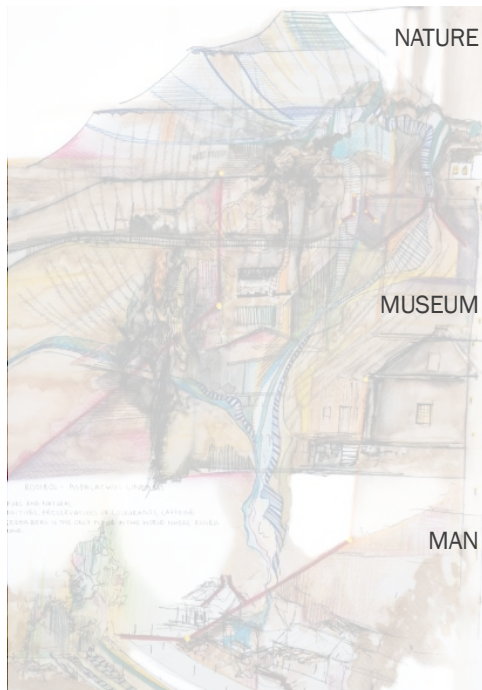
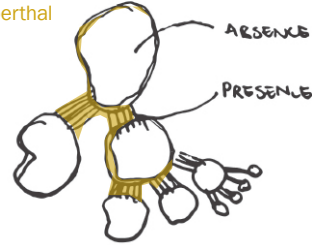


Fig. 3.11 Vision, proposed (Franklin 2015)

Framework developed guidelines for development within the cultural landscape of Wuppertal (see Chapter 7). -The Mission Route Masterplan (20 ha) was developed from the framework. The separation of man and nature in the core of Wuppertal as well as the distinct difference between the political and residential landscape informed the mission route as masterplan. In order to get a complete overview of the cultural landscape, the route will navigate through the key elements within the political as well as residential landscape. It will however not be a traditional route, but rather a series of elements that draws the user through the site by moments of absences and presences.

1. GREATER WUPPERTHAL AREA (FRAMEWORK 38 000 ha)

On a regional scale the focus is on the larger Wuppertal area with its fourteen outposts seeking economic drivers within the cultural landscape.

2. WUPPERTHAL MISSION (FRAMEWORK 120 ha)

The historic core of Wuppertal is the main focus of the study on a town scale narrowing it down to the area of intervention for the investigation on a 'greenspace and communications' scale (Dee 2001).

3. MISSION ROUTE (MASTERPLAN 20 ha)

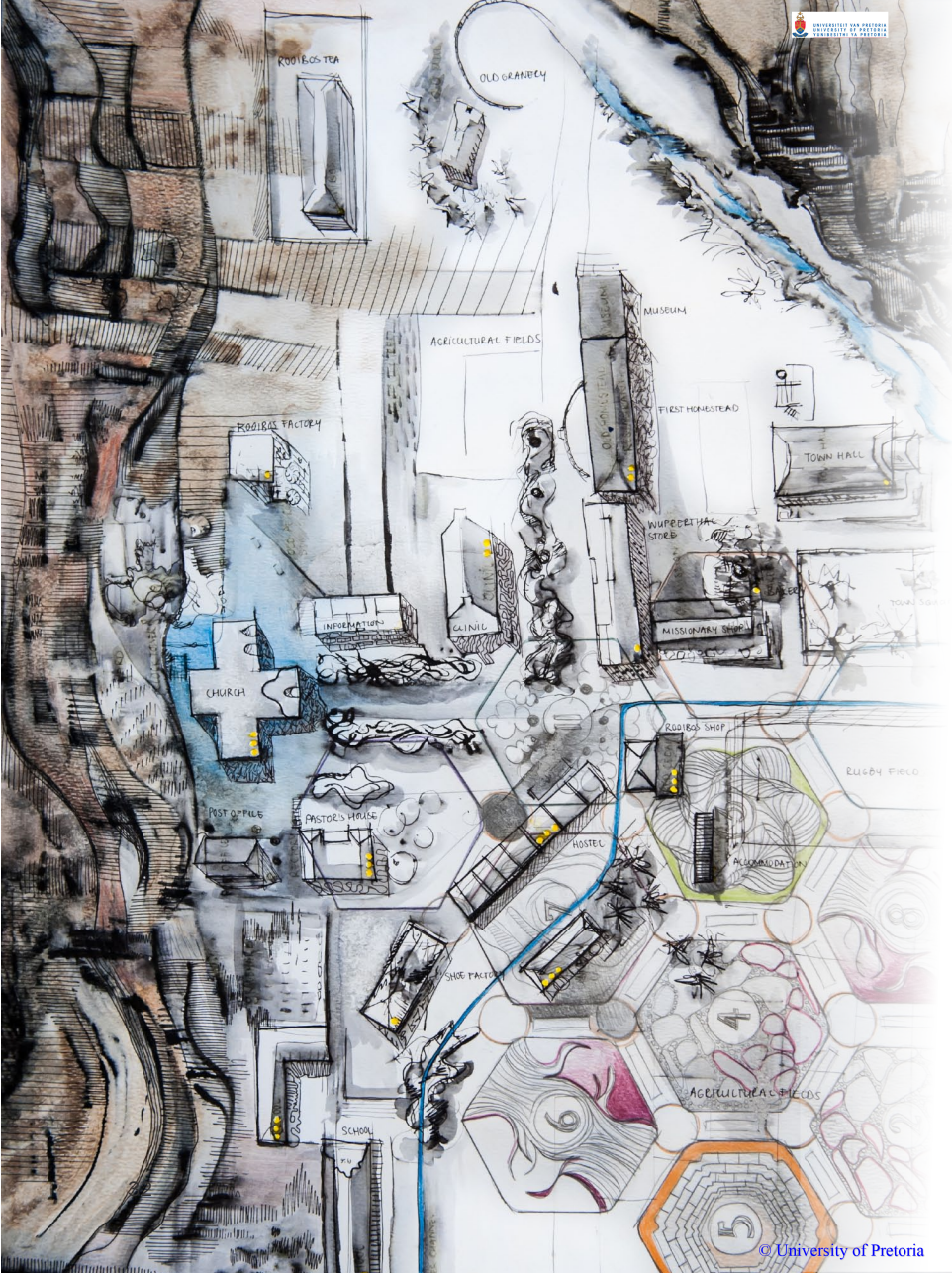
The framework was used as guideline for the development of a masterplan for the historic core.



CHAPTER 4

Theoretical Investigation

Fig. 4.1 Heuningvlei, the unintentional aesthetic (Franklin 2015)



WUPPERTHAL JEUG LIED
Tussen berge deurspoel deur die
Tratra-rivier
Lê ou Wuppertal boomryk
versier
Daar heers arbeid en vlyt daar
waar Wuppertal pryk
Tussen berge met goutrand
omsoom
En ou Sneekop die troon in sy
glorie daarbo
En sy kruin met wit sneeu
bedek
Trek ons gees omhoog maar tot
reinheid van blik,
Skep die gees wat ons hier heel
deurtrek
Ons sal roem in die eer van ou
Wuppertal
Ons sal juig oor sy berge trou,
Ons sal werk vir sy eer in die
naam van ons Heer.
Ons is trots op sy stoere naam.
Leef dan voort Wuppertal , jou
roem ver versprei
Dis 'n skaar wat wil en kan.
Ons is trots en getrou soos ou
sneekop daarbo
Ons sal handhaaf en bou, want
ons wil - en - kan.
- Mej. A. Bruwer

Fig. 4.2 Explorative sketch, remembrance of Wuppertal (Franklin 2015)

This chapter consists of four main discussions relating to cultural landscapes. The understanding of cultural landscapes is followed by a discussion on the challenges in conservation and development. The discussion continues to include the perceptions and the relationship of people and place over time, and ends with the methodology followed.

4.1 CULTURAL LANDSCAPES, the value it brings

Cultural landscapes are defined by UNESCO as the combined works of nature and humankind, and they express a long and intimate relationship between people and their natural environment. These intimate relationships formed over time and found its way around the physical constraints presented by nature to become places of people, livelihoods, identities and belief systems all over the world. UNESCO further describes cultural landscapes as being the foundation of food production systems and living gene banks in food crops for the future. Cultural landscapes illustrate the development of human society and therefore a common responsibility exists for the protection of these sites and the value they add to future generations (UNESCO 2014).

Wupperthal, in its intimate relationship with nature, represents such a complex landscape that was formed over the course of two hundred years. The history of Wupperthal tells a story of nature as a ruthless host in the series of droughts, and epidemics such as measles, that have swept through the region (Heyns 1980: 50). Above all odds Wupperthal evolved into a unit that not only sustained its own community but also contributed occasional profits to the larger Moravian Mission Society (Heyns 1980: 60). The agricultural practices found in Wupperthal support a valuable seed base (free from genetic modification) that still sustains the community today. The guideline as set out by UNESCO for the classification of cultural landscapes helped to better understand the value of Wupperthal as cultural landscape. Wupperthal has been located by the author to fall into the following category described in paragraph 39 of the World Heritage Cultural Landscapes guideline document (UNESCO 2014):

ii) Organically evolved landscape – *This results from an initial social, economic, administrative, and/ or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect process of evolution in their form and component features and fall into the subcategory of a;*

a) Continuing landscape – *Which contains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its change over time.*

UNESCO
 (United Nations educational scientific and cultural organisation)

ICOMOS
 (International council on monuments and sites)
 ICOMOS is a non-profit organisation that is made up of individuals around the world that is concerned with conservation, research projects and cultural exchange. They act as principle advisors to UNESCO on matters of world heritage (ICOMOS 2013).

BURRA CHARTER
 The Australia ICOMOS Charter for places of Cultural Significance 1999. The Burra Charter provides a basis for the conservation and management of places of high importance (ICOMOS 2013).

SAHRA
 (South African Heritage Association)

The older I grow and the longer I look at landscapes and seek to understand them, the more convinced I am that their beauty is not simply an aspect but their very essence and that beauty derives from the human presence.
 - John Brinckerhoff Jackson

Cultural landscapes often reflect characteristics of mountains as religious claims, the manifestation of water management within the landscape and the formation of an unintentional aesthetic through the practices in the land (UNESCO 2014). All of these are evident at Wuppertal and can be seen in the introductory Figures 4.1-4.2 of this chapter.

4.2 CULTURAL LANDSCAPES, challenges in conservation and development

Landscapes are complicated entities to work with and the difficulty to include them into legal frameworks needs to be recognised (UNESCO 2014). Although the definition for cultural landscapes exists in the framework of the UNESCO document, most countries' laws do not have an official definition for cultural landscapes included in their legal structure. The various definitions that exist for the word "landscape" further amplifies the difficulty to find a single universal expression (see different definitions for landscapes in the column to the right).

Landscapes are dynamic and changing entities that do not only represent the present but also a collection of past memories. These memories happen over time and each layer adds to the story the landscape has to tell. Cultural landscapes can be compared to a tapestry, consisting of layers of information that overlap and intersect (Müller and Gibbs 2011: 6). These are layers of built structures, hydrology, topography and land uses over a number of years. These layers cannot be contained and belong to all who value them. It is therefore important to follow a thorough process to understand the value each layer adds, and the value different users assign to elements within the landscape. Accessing these kind of attributes are difficult, as they often only exist in the intangible memories of a place.

Other difficulties in the conservation of cultural landscape include (UNESCO 2014):

Change of perception of the landscape values

Understanding of the relationship of people and place over time

Understanding of nature and culture over time as embedded in different cultures and contexts

Ability to address the needs of society

Pressure from tourism

Variety of disciplines involved in the integration of management systems

4.3 LANDSCAPE, perceptions

Edmund Bacon describes perceptions of cities as being their 'very life force' and argues that it will only be

Different meanings for the word 'landscape' is listed below (UNESCO 2014):

Landscape is the vehicle of our relation with Nature. It will always represent the harmony of continuous transformation, the dynamics that have configured our planet. A landscape born from titanic confrontations, violent encounters, the eternal fight between sea and earth, while time passes by. It is like an enormous growing process of signs, tracks or stigmas that mark the history of man, who at the same time cultivated, modified and transformed the landscape. It is the oldest and most complete archive of mankind; the most accurate testimony of its past. It contains the 'holy function of an unconscious telluric memory.

- Carmen Añón Feliu

Landscape as a 'temple of memories' built upon the totality of its history.

- M du Pison

Landscape belongs to the vital and imaginary experiences of the subject and is an individual construction, but when a community with a determined culture shares these values, the obvious identity of landscape becomes a social construction.

- Carmen Añón Feliu

'landscapes have created the best of my soul.'

- Ortega y Gasset

This world is a system of invisible things that are clearly seen

- Romans 1:19/20

possible to successfully intervene once the language of a particular city is understood (Bacon 1967: 20). This notion of perception is an important aspect to the understanding of the cultural landscape of Wuppertal. Not only to understand the way in which the people of Wuppertal view their own town, but also to challenge one's own perception as it is formed during the course of the investigation. Wuppertal was turned upside down, inside out, viewed from a distance, circled and rotated repeatedly in order to understand this manifestation of an intimate relationship between man and nature. Each perspective either verified or broke down the perceptions that inevitably formed. Each method of investigating cultural landscapes focused the attention on a different set of values further discussed throughout this chapter. The complete set of values are further mapped in Chapter 6 as part of the analysis.

Perceptions are built up from one's own experience and influence the way the world is viewed. This notion is part of the reason why each person experiences a place in a different way. Some of the exercises carried out during the investigation included the documentation and understanding of the different users of the site. Planners often see the people of a site as the 'other' or a mere set of statistics. Bacon (1967) however argues that only once we perceive the people of the city as an extension of ourselves, will we have the capacity to intervene. Although a designer will never get to a point of absolute knowledge of a certain site, Wuppertal demanded a more inclusive process at the understanding of the cultural landscape because of its inherent properties that include both the tangible and intangible. Without the continuous challenge of perception, subtle essentials that form part of the life-giving variations that build up the cultural landscape may have been missed (Bacon 1967: 36). Some of the general perceptions of Wuppertal are listed in the column to the right. These are a few initial perceptions that were formed and reformed by the author throughout the investigation.

4.4 LANDSCAPES OVER TIME, people and place

According to Müller and Gibbs (2011) the definition of a cultural landscape consists of three interrelated components: the permanent (static), temporary (dynamic), and eternal (invisible). For any of the intangible components to continue to exist, it needs to find a tangible materialisation within the landscape (Müller and Gibbs 2011). The designer needs to understand the emotional association with place. These associations exist in the form of memory and can often only be accessed by individuals when certain memories are triggered by physical features within the landscape. Various tools exist for determining the value of historic sites. Assessment criteria for cultural landscapes still need to be developed and tested (UNESCO 2014), a combination of methods were therefore used to investigate the value of Wuppertal as a complex cultural landscape.

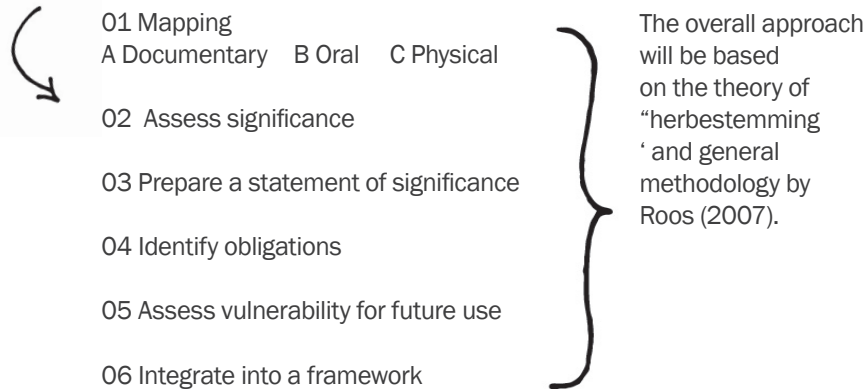
AUTHORS PERCEPTIONS

- 01 The town of Wuppertal is desolate yet every building is in use even if it is only used for a few hours in a day. (mapping chapter 6)
- 02 Public space is limited and not in use, yet each part of the town had a value assigned to it by someone. (mapping chapter 6)
- 03 The historic core (the institutional landscape; old buildings) holds the most significance yet the intimate relationship displayed in the residential units to their agricultural fields claimed to be a more sustainable and robust unit within the landscape that contains the most value. (statement of significance Intro)
- 04 The historic buildings are the most significant element to protect. yet it is in fact the agricultural land that is an important structuring element and part of a sustainable relationship between man and nature. (statement of significance chapter 6)
- 05 The entire town seemed to stop developing yet in fact some of the buildings in the nuclei were only constructed in the last 30 years. (mapping chapter 6)

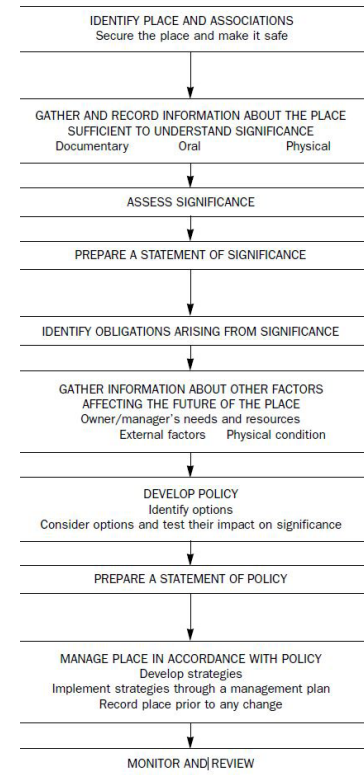
4.5 CULTURAL LANDSCAPES, methods of assessment

The outline of the Burra Charter was followed as overall methodology but filled in with additional methods for the assessment of value in cultural landscapes. The Burra Charter was chosen for its specific focus on the managing of places with cultural significance and well-defined methodology. Another method investigated was the Historic Urban Landscape approach (HUL) with its reference to a city as a continuous dynamic system rather than a static historic entity. Elements of HUL was combined into the outline of the Burra Charter, filling in the areas in the assessment of cultural significance.

A series of obligations arise from the value of the land. These obligations inform the design process as physical links and requirements are established. It is important that the land reveals the possibilities and not suffer under forced intentions. The following diagram shows the process followed by the researcher (mapping and significance assessment included in overall document):



THE BURRA CHARTER PROCESS Sequence of investigation (ICOMOS 2013)



A breakdown and explanation of the research methodology follows on the subsequent pages.

4.6 METHODOLOGY, the process of discovery

01 MAPPING

A DOCUMENTARY

- *Wupperthal 150 jaar 1830-1965*, Heyns 1980
- *Mission settlement in South Africa 1800-1925*, SAHistory
- *The old buildings of the Cape*, Fransen 2004
- *Old towns and villages of the Cape*, Fransen 1980
- *The formation of a community*, Bilbe 2011

B ORAL

- Informal discussions with residents on various site visits
- Filmed material: *Rooibos and Rocks* (Documentary by Omang)

C PHYSICAL

- Jack Brinckerhoff Jackson (1987)
- Boundaries
 - Form follows function
 - Roads
 - Spaces, sacred and profane
 - Visibility
 - The other landscape
 - Natural spaces
 - Mobility and immobility
 - Habitat and habit

Cultural landscapes theory and a toolkit developed for the reading of the land (Müller and Gibbs 2011)

Chapter 1+4

Chapter 6

02 ASSES SIGNIFICANCE

Job Roos (2007) (values) + SAHRA (2013) (value grading)

- o Historical
- o Social
- o Emotional
- o Aesthetic
- o Economic
- o Ecological

03 STATEMENT OF SIGNIFICANCE

04 OBLIGATIONS

05 VULNERABILITY

06 INTEGRATE INTO FRAMEWORK

Chapter 4-8

Burra Charter + HUL

Chapter 2-5

- 01 Greater Wupperthal Area Framework
- 02 Wupperthal Mission Framework
- 03 Mission Masterplan
- 04 Sketchplan

Chapter 7-8

Author

4.7 METHODS, tools to work with

These methods listed below were informed by a toolkit developed for the reading and representation of cultural landscapes by Müller and Gibbs (2011):

1. Literature review (Desktop and archival research)

The review of documents with reference to the history of Wuppertal, the understanding of the study theme and the various elements within the landscape were documented. It is important that the designer has a historically informed perception (Müller and Gibbs 2011: 12).

2. Fieldwork

Fieldwork forms part of the most important analysis of space as it has a three-dimensional comprehension thereof. The value of the fieldwork is proportional to the input and includes some of the following methods (Müller and Gibbs 2011, 12):

- Systematic observation (the recording of social space)
Four intensive site visits were scheduled at different times of the day, days of the week and months of the year in order to understand the various modes of exploration (day visitor vs over-night vs the life of a Wuppertal resident). Site sketches, emotive paintings and photographic documentation helped to understand the cultural landscape of Wuppertal (included throughout this document)
- Participant observation (engagement and observation of activities)
The recording of social space formed part of the documentation of perceptions in Wuppertal by different users (community members and visitors); 12 individuals of different age and gender were asked to select a photograph in order to test their perceptions of the cultural landscape. This photographic activity formed a base for informal discussions and revealed different opinions of the historic mission station (see brief discussion in Chapter 2 for more detail).
- Interviews (structured, unstructured and informal discussions)
Aspects of value in the land and the discovery of intangible elements came to light during formal and informal discussions on site. Without these discussions it would not have been possible to get any understanding into the workings of Wuppertal within its context.

TRANSECT WALK

A transect walk is a systematic walk along a defined path (transect) across the community/project in order to define elements along the way. The transect walk is normally conducted during the initial phase of the fieldwork. (Müller and Gibbs 2011)

3. Transect walks

Special emphasis was placed on the way the historic town is experienced by visitors. The author mapped the way visitors explore Wuppertal. A photographic analysis of the typical route taken and mapped is presented in Chapte 6 .

4. Documentation of existing conditions

It is important that all aspects of the landscape is documented, not only the elements of historic significance, but a comprehensive representation of the site in its current condition. This inventory needs to be completed for all the landscape defining elements. IFLA suggest the following points of departure for the tangible and intangible mapping of cultural landscapes (IFLA 2015). These points are included and discussed in Chapter 6 in the mapping of the physical features within Wuppertal.

Tangible:

- Land Uses, Patterns, Clusters
- Natural Systems
- Spatial Organization
- Visual Relationships
- Topography, Surface Drainage
- Vegetation
- Circulation Systems
- Water Features, Natural and Constructed
- Non-Habitable Landscape Structures and Buildings
- Spatial Character of Habitable Structures
- Vocabulary of Site Furnishings

Intangible:

- Location for festivals
- Setting for traditional music, dance, performance
- Route of pilgrimage
- Setting for worship
- Place of memory of past events
- Place of traditional practices
- Places where native plants grow
- Place where craft materials can be found
- Traditional place for experience at a special time of year

4.8 CULTURAL LANDSCAPES, the representation thereof

The link between reading and understanding the cultural landscape is formed through a thorough mapping process, where the mapped layers inform the design. The aim is to document the tangible and intangible forces shaping the cultural landscape and represent them in a series of alternative maps (see Chapter 6 for a series of these maps documented in Wuppertal). Layered maps help to understand the layering of the land. Ian McHarg (1969) found ways to document social and environmental features while Kevin Lynch (1960) looked at the city as a series of paths, edges, districts, nodes and landmarks

ALTERNATIVE MAP

Not a traditional map, but a more explorative map.

LAYERED MAPS

The mapping of different components within the landscape that make up a composite map.

DATASCAPES

A map that contains a form of infographic within it. For example population growth in the form on the base of a map.

MAP-LANDSCAPES

A method for the mapping of landscapes. It has an emotive component to the map.

(as cited in Müller and Gibbs 2011). Another dimension to documentation are datascares. Datascares make room for analysis in the mapping process. James Corner (2011) coined the word map-landscape to facilitate the design process. According to Corner (2011), map-landscapes has a dual function to it, in that they are able to contain qualitative and quantitative attributes within the landscape. By drawing and mapping, the formation of the landscape is understood (Müller and Gibbs 2011).

4.9 MAPPING

The theory of cultural landscapes formed the backbone to the study. Cultural landscapes opened my eyes to a different and enlightened view of the world; a view to the intimate relationship between man and nature and in Wuppertal a very dualistic relationship. In the following section the mapping process of the author is described.

A Documentary

Wuppertal, in contrast to the other mission stations, is poorly mapped and planned in terms of physical structures and the availability of plans. The Rhenish Mission Society was seen as the ‘cowboys’ in terms of planning while the Moravian Mission Society was meticulous in its planning and documentation of mission stations (Le Grange 1993). One of the maps obtained was a conservation map drawn up by Lucien le Grange and another diagrammatic hand drawn plan (date unknown) as part of a mission journal that verified the ‘werf’-like feel to Wuppertal. Most of the historic buildings on site were interpreted by the description in the *Feesalbum* (Heyns 1980) and verified by Hans Fransen’s (1987) description of the buildings and filled in with the information by Bilbe (2011) in his research of the formation of a community. The latter proved to be a well-researched thesis providing interesting insight into dynamics of the community of Wuppertal, through an abstract of the missionary journals (written in German). The findings from all these documents will be discussed in Chapter 5 with the aim of representing Wuppertal as cultural landscape. Some of these findings had a direct influence on the design decisions made later in the process.

B Oral

Various informal discussions with the residents added to a better understanding of the cultural landscape. It was important to get a better general understanding of the site before any formal participatory process with residents were recorded. Therefore any information verified through informal discussion is referenced as such. Chapter 4 describes the history and the formation of a community from 1830 until

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

2015, where some of the findings in the literature review were verified through these discussions.

C Physical

The physical documentation of Wuppertal was influenced by different theoretical approaches in the understanding of the cultural or vernacular landscape. UNESCO's reference to the importance of water, the mountain as religious objects, and the unintentional aesthetic, directed some of the focus of the mapping of the landscape (see Figure 4.1- 4.2). It was however John Birkenhoff Jackson's (1987) book *Discovering Vernacular Landscapes* that highlighted most of the physical aspects to look out for in the vernacular landscape. These aspects will be discussed in the following section. Jackson finds beauty not only in the landscape, but in the relationship displayed between human and nature. Wuppertal is a product of such an intimate relationship.

The different components that Jackson identified to consider in the vernacular landscape shed a different light on cultural landscapes. Jackson discusses the difficulty of working with landscapes in the definition of the word landscape and the ambiguity connected to this word. He locates the ambiguity of the landscape in those elements that we are quite unable to explain, mysteries that fit into no known pattern (Jackson 1987: 11). In every landscape however there are elements that are familiar and could be clearly understood. It is these elements that we start with in the analysing of the landscape: fields, houses, fences. Each of the discussed features within the landscape formed part of the significance discovered in Wuppertal. This section only serves as an introduction to the theory while the mapped features are discussed in Chapter 6.

4.10 SIGNIFICANCE, assessment of value

The theory of "Herbestemming" was used in the cultural landscape of Wuppertal as overall method to facilitate the design process. This theory developed by Job Roos uses the spiral to represent the strategy for the project as well as the design process as methodology. The spiral is represented as a three-dimensional model that provides more room for considerations than a two-dimensional model. Working on projects of Herbestemming requires more attention from the architect than a new building does (Roos 2007: 14).

The design line shaping the spiral shows the design process. Starting wide, it narrows as choices need to be made in the discovery of the assignment, the exploration of the design, the interpretation or iteration of the design process, as well as the technical investigation. These series of processes that the designer moves

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

through starts with a new spiral for each phase (Roos 2007).

Historical continuity forms the core of the model while the value lines are formed by the upward curving lines. There are six value lines that an architect must investigate within a project. Depending on the complexity of the project the architect may wish to add value lines (Roos 2007). These six core value lines are listed below:

- o Historical value
- o Social value
- o Emotional value
- o Aesthetic value
- o Economic value
- o Ecological value

The click-on lines each represent a choice the architect must make in the design process. These lines are the links between the historical continuity and the value lines (Roos 2007). The value lines will each be explored in the chapters to follow and each choice made throughout this process will be referenced back to the methodology.

Value is a difficult concept to explain or to determine, for every value it is has worth to someone and for a specific reason. Value can be further explained by character and remains one of the only values found in the existing or the present. Value in Wuppertal was found in the vulnerable, the unexpected, and coincidental (Roos 2007: 34). His six value lines will form part of the mapping chapters (5 and 6), where the mapped features are summarised according to the six value lines. These lines of value has a direct influence on the framework development and decisions made within the design process. The summary also functions as a shortened version of the document.

4.11 SAHRA, value grading

Heritage Western Cape developed a *Short Guide to and Policy Statement on Grading* according to satisfy section 7 of the National Heritage Resources Act, 1999 (Act 25 of 1999) and regulation 43 published in the Government Gazette No 6820. This guide provides a list for the establishment of value in the cultural landscape, typically for the nomination of a site for the declaration of a historic monument. SAHRA

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

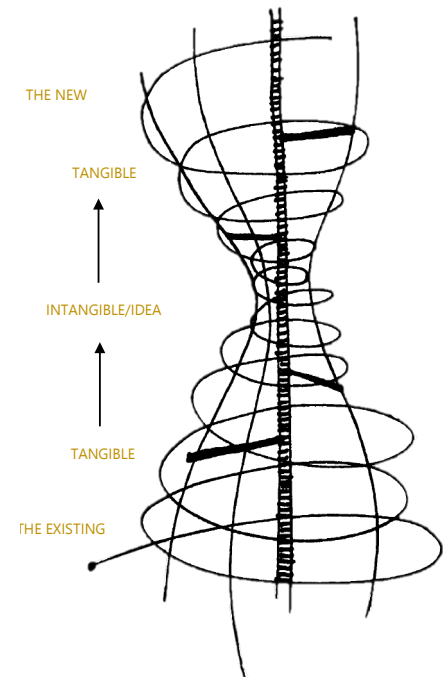


Fig. 4.3 Illustration of the spiral developed by Roos (2007)

expands on some of the values listed by Roos (2007) for an appropriate application within the South African landscape. These values include; historical, scientific, aesthetic and social value within the landscape and a special reference to slavery within South Africa (SAHRA 2014). Wupperthal forms part of this history of slavery and therefore carries significance. This list will form part of the value grading under the headings of Roos (2007) in Chapter 5 and 6.

4.12 ETHICS, as set out by the University of Pretoria

All interactions were documented and general assumptions derived from the site visits were used to inform the design process. An Ethics process set out by the University of Pretoria was followed by which all interaction with individuals was conducted in an ethical manner and the identity of the people were kept anonymous.

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

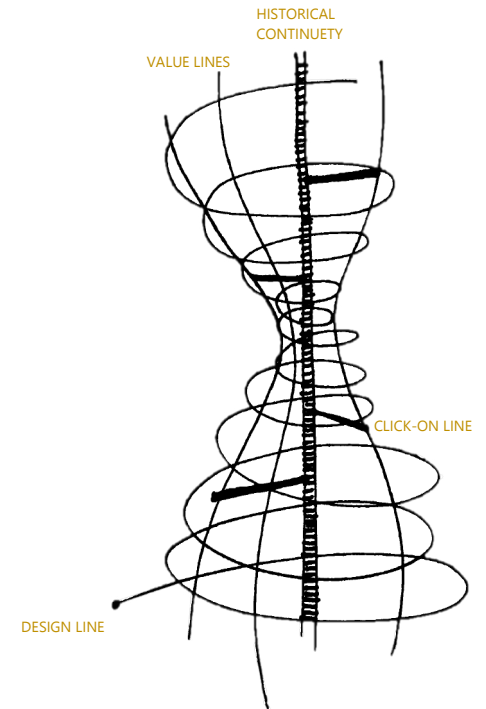


Fig. 4.4 Value lines (Roos 2007).



CHAPTER 5

The Mission in context

Fig. 5.1 Wuppertal, isolated beauty (Franklin 2015)



BLOM EN BAAIERD
 Op die groot Saaidag van die heelal het reeds 'n entjie duskant Wuppertal oor die kaal Noordweste 'n sakkie van die Here se beste saad per ongeluk gelek, gelek en uitgeval

- DJ Opperman



Fig. 5.3 First church building, 1830 (Bilbe 2011)



Fig. 5.4 'Nach der Conferens im Wuppertal' Image from museum in Wuppertal (Franklin 2015)

Fig. 5.2 Explorative sketch, Timeline (Franklin 2015)

This chapter focuses on telling the story of Wuppertal through the literary review of the available documents. It also includes the mapped layers - A Documentary and B Oral - discussed in Chapter 4 of this document. The history of Wuppertal and the formation of a community over the years are valuable sources of information. The story of Wuppertal is one of struggle for survival in a relentless environment.

5.1 WUPPERTHAL, 1830

2550 ha

Eight missionaries from the newly established Rhenish Mission Society in Germany began their journey on 1829 from Rotterdam to South Africa. Two of these missionaries undertook a journey to Clanwilliam to identify a possible location to establish a mission station in an area for growing 'mission' need. Theobolt von Wurmb and Johann Gottlieb Leipoldt (grandfather of the poet Louis Leipoldt) heard of a farm that was in the market that would suit their needs. However, with no financial support from their base in Germany they had to make the decision to borrow money for the purchase of the farm on their own accord. After visiting the Moravian Mission Station, Genadendal, and closely observing the way the mission was managed, they decided to buy the farm Rietmond on the edge of the Cederberg. Leipoldt and Von Wurmb settled among the seven Khoi families living on the farm at that time. The first church service was held on 17 January 1830 under the tree behind the first homestead (Heyns 1980: 27). See Figure 5.3 and 5.4 for the original church building and other activities. Newcomers were welcomed with a stiff handshake and all had to adhere to the rules of the church:

- Sundays were holy
- All church services needed to be attended (Sundays as well as weekday services)
- Magic, witchcraft, cursing and abuse of the Lord's name needed to be stopped
- Strife, bitterness, gossip and lies weren't allowed
- The use of strong alcohol was banned
- Couples needed to be wed officially by the church, and
- Each had to look after their property and piece of agricultural land
- No strangers were allowed to overnight without consent, and neglect of these rules set out by the church resulted in the dismissal from Wuppertal.

KEY

01 Mapping

A Documentary B Oral C Physical

RHENISH MISSION SOCIETY

Established 1828 in Barmen, Germany

First mission station in South Africa:

Wuppertal 1830

MORAVIAN MISSION SOCIETY

Established 1807 in East-Europe

First mission station in South Africa:

Genadendal 1737

INSTITUTE

Enterprises implemented to look after the 'temporal' well-being of the people.

CHURCH

Spiritual focus of the mission station

Leipoldt was a shoemaker by trade and started the first shoe factory to look after the ‘temporal’ well-being (institute) of the people in addition to the spiritual focus of the church (Heyns 1980). The institute refers to all economic enterprises implemented for the temporal well-being while the church refers to the spiritual aspects of Wupperthal. The shoe factory provided 40 permanent job opportunities, but over time struggled to keep up with other mechanised shoe factories. Today the shoe factory has only five permanent staff members (see Figure 5.5 for an image of the shoe factory). Other industries established in Wupperthal included a tannery, glove factory, tobacco and rooibos industry (Heyns 1980: 127). Agricultural fields and livestock farming are to this day still a valuable source of income (see Figures 5.6 and 5.7)

5.2 WUPPERTHAL, 1838 - 1890

14 400 ha

In 1838 slaves were emancipated in South Africa. Slaves had the choice to work out their four year apprenticeship at their current owner or settle at a mission station. Although it was suspected that Wupperthal had a sharp increase in residents, only 24 slaves settled at Wupperthal (Bilbe 2011: 125). The Wupperthal Institute spent a lot of money and effort in acquiring land in the 1850’s in order to support the needs of the mission settlement and formally acquired lands that were surveyed for the speculation thereof (Bilbe 2011). See Figure 5.10 for the current composition of the fourteen outposts. The majority of land in Wupperthal is not usable for agriculture due to its mountainous character and in general supports a low yield (Heyns 1980).

Bilbe (2011) describes the formation of a community as the ‘mission elite’ based around the mission (mostly ex-slaves) while the ‘rural elite’ formed through the acquisition of land in the larger area. It is important to note that the ‘mission elite’ were dependent on skilled based activities implemented by the church, while the ‘rural elite’ depended on agricultural based activities (see Figure 5.8).

Sub-question three of the research questions is concerned with finding the socio-economic components in the cultural landscape that could be reinstated. On a larger scale, in seeking any socio-economic components that could be reinstated, one needs to understand the formation of these two ‘elite’ groups that can still be found in Wupperthal today. Any proposed economic activities need to benefit both the mission as well as rural elite.

A report by Kretschmar, a medical practitioner from Clanwilliam, describes the possessions of the residents of Wupperthal in 1843 being a sheepskin blanket, a calabash, a rifle, a knife and a violin or



Fig. 5.5 Shoe makers in front of shoe factory (Fransen 2004)



Fig. 5.6 Tannery in Wupperthal (Fransen 2004)



Fig. 5.7 Onions from agricultural gardens (Gardin 1987)

calabash viola. He further describes each garden plot to include a peach tree, two pumkins/marrows, three calabash plants, four tobacco plants and one large dagga plant (see Figure 5.7). Garden plots were developed according to the German economic agricultural composition. The founding of Wupperthal coincides with this time in Europe where agricultural specialists came to establish the agricultural fields in Wupperthal. The implementation of this system was also recorded in a Rhenish monastery in Lorsch, Germany. German agricultural fields are characterised by their ‘strips’ based on the distance an ox could plough in one day, called a *Hufe*. The German street village was developed to take up as many people as possible where German colonisation occurred in Europe (Weber 1920). The influence of the German ‘street village’ is evident in the cultural landscape of Wupperthal (see Figure 5.9). The fact that these garden plots are still in use today adds to the significance of this component.

KEY

O1 Mapping

A Documentary B Oral C Physical

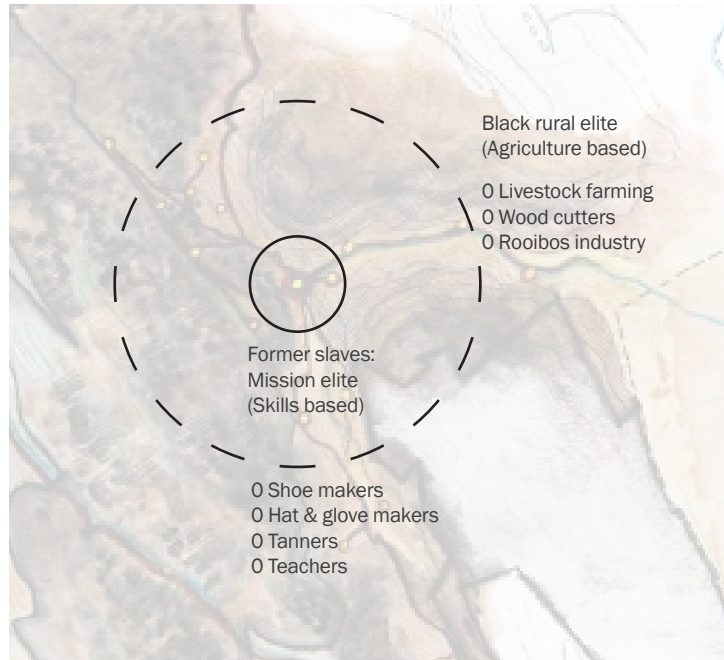


Fig. 5.8 Diagram explaining the formation of a community in Wupperthal according to Bilbe (2011). (Franklin 2015)

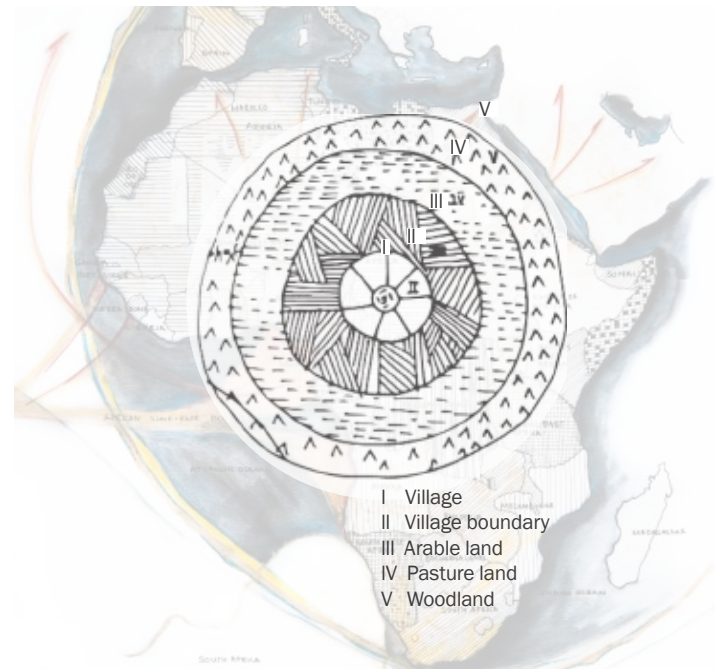


Fig. 5.9 German economic agricultural composition (Franklin 2015)



Fig. 5.10 Fourteen outposts of Wupperthal, 2015 (Franklin 2015)

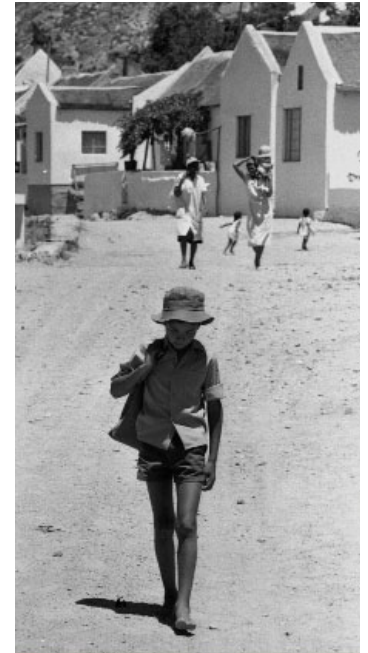


Fig. 5.11 School boy, 1987 (Gardin 2015)



Fig. 5.12 Donkey cart, 1987 (Gardin 2015)

The first spiritual revival was documented in 1847. This was largely due to the determined efforts of the ex-slaves to achieve upward mobility through education and Christianity, pulling with them the rural black elite (Bilbe 2011: 130). The emerging mission elite mostly consisted of ex-slaves dependent on the mission for income in trade industries such as the shoe and hat factory as well as teachers.

1860 Was a year of struggle for the residents of Wuppertal, especially those in the woodcutting industry. New regulations on the cutting of Cedar trees forced the independent families of the black elite into dependence on the mission. Bark stripping and leave gathering of the Wagenboom (*Protea grandiflora*), Kliphout (*Rhus thunbergii*) and Suikerbos (*Protea mellifera*) as well as the uprooting of Buchu plants (*Diosma hirsuta*) caused environmental damage. The government also implemented the laws of school fees to be paid. The children paid the small amount by carrying wood for the hat industry (See Figure 5.11 for a schoolboy in uniform). As the struggle continued, even those pennies dried up and parents had to pay in grain and fruit. Measles was another element that made 1860 a hard year. Poverty always affected the outstations first. They had a greater dependency on the land than those in the mission station.

Famine war and measles caused great distress in Wuppertal with a few good harvests that brought relief. Reverend Gerdener wrote about the greatest poverty he's seen in the valley, writing that 100 people were so impoverished that they could not attend church service simply because they had nothing to wear (Bilbe 2011: 146). Gerdener's efforts at moral and economic stability were paying off. Wuppertal showed a 69% population growth although the number of deaths more than quadrupled in 1889. Gerdener made no mention of the disease that might have caused the rise in deaths (Bilbe 2011: 147). Wuppertal grew to its largest in 1891 due to a large number of squatters around ClanWilliam forced from the area (Bilbe 2011:152). A second spiritual revival was documented in Wuppertal in 1894 (See timeline on page 56-57).

5.3 WUPPERTHAL, 1965

33 000 ha

The Rhenish mission society slowly reduced their involvement in South Africa from 1830-1950. Most of their other mission stations were already transferred to the Nederduits Gereformeerde Mission Society, but the people of Wuppertal objected to this notion (Mission as well as outstations). This event highlighted the authoritarian system of the church, at the time of Reverend Strassberger, when the 'mission and rural elite' protested together.

Better medical support led to a rise in birth numbers, while employment opportunities were limited.

KEY

01 Mapping

A Documentary B Oral C Physical



Fig. 5.13 Mission bazaar (Fransen 2004)



Fig. 5.14 Mission building (Fransen 2006: 135)



Fig. 5.15 Houses in Wuppertal (Fransen 2006: 136)

Public works implemented holding dams for the irrigation of the agricultural fields in 1930. 50 000 gallon (190 000 l) of water was needed to water the agricultural fields each day (Heyns 1987). Only two people were needed for this task. The mission supplied seeds for planting. Bilbe (2011) describes the 1930's as an intellectual shift through better communication with the outside world, radio, cinema, and the improvement of roads to Wuppertal although a lack of employment led increased alcoholism and illegitimate births (woman working in Cape Town). The effect of the loss of the farm Voelvrei (grazing land) to Heinie Strassberger in 1951 can still be seen today, with very few families with considerable livestock. In 1952 Dittmer took over management from Strassberger. He was more favourable to the well-being of the inhabitants of Wuppertal than Strassberger (Bilbe 2011:141).

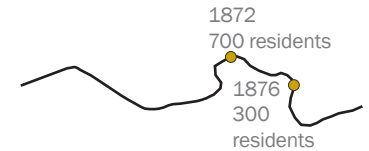
Wuppertal's setup in totality (the Church and the 'institute') made it difficult to find a mission society that was willing to take over this burden, but when the Moravian Mission Society expressed interest, Wuppertal was handed over on 17 October 1965 (Heyns 1980: 187).

1965 The transition proved to be very difficult as Wuppertal was by that time a well-established mission station with its own way of doing things in such an isolated area. Heyns describes the first 15 years under Moravian management as "challenging to fit into the traditions and spiritual arena, but they did the best they could" (Heyns 1980:187).

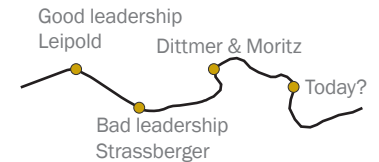
By investigating the history of Wuppertal it is evident that the village has suffered under a series of droughts and diseases with its close dependence on nature for survival. Residents of Wuppertal for the majority of the time needed to find employment elsewhere. This resulted in a large fluxuation of residents in and out of Wuppertal. Anti-Afrikaner sentiment in the community was enhanced by the distrust they felt towards Strassberger and the other white farmers in the Cederberg. Although Strassberger was one individual in Wuppertal it boiled through to a general mistrust of the Rhenish Mission Society. Poor infrastructure implemented in Wuppertal led to unsustainable development of the mission station. The Figures on the following pages indicate the physical documentation of the greater Wuppertal area.



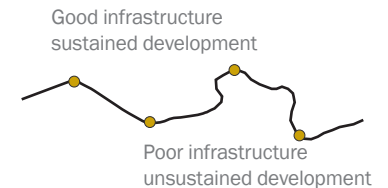
01 NATURE AS RUTHLESS HOST



02 FLUXUATION OF RESIDENTS IN SEARCH OF EMPLOYMENT



03 LEADERSHIP IN WUPPERTHAL



04 INFRASTRUCTURE DEVELOPMENT

KEY

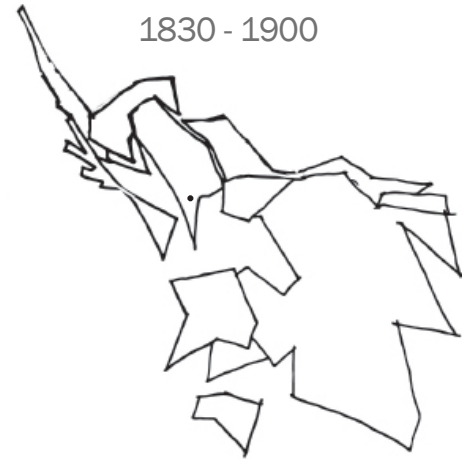
O1 Mapping
A Documentary B Oral C Physical

LAND ACQUISITION
38 000 ha

1830



1830 - 1900



WUPPERTHAL

1830 - 2015

Author's interpretation of the timeline of Wuppertal on the existing base map (Fransen 1980)

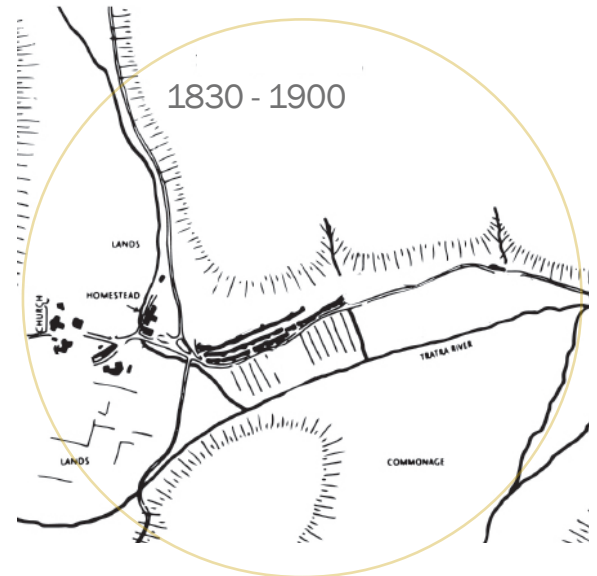
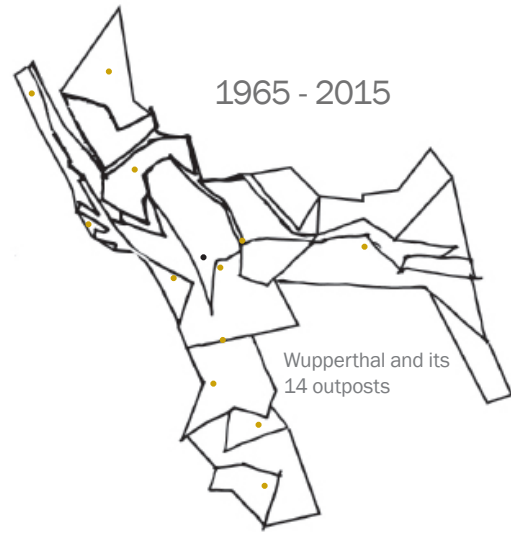
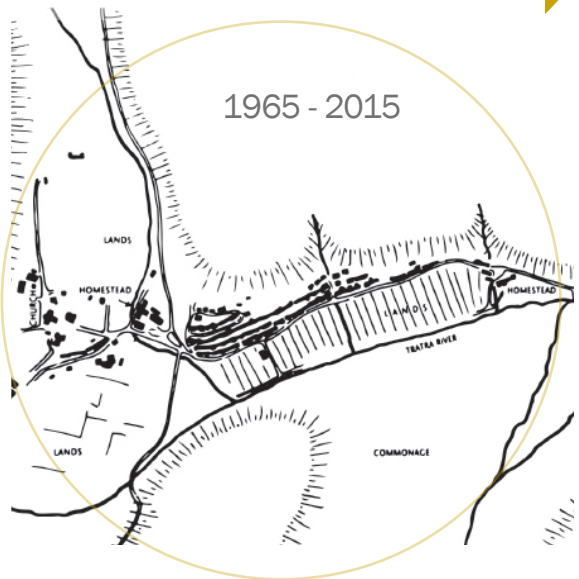


Fig. 5.16 Wuppertal Development sequence (Franklin 2015)



KEY

- O1 Mapping
- A Documentary
- B Oral
- C Physical



Wupperthal Development Sequence 1830 - 2015

LAND ACQUISITION
38 000 ha

WUPPERTHAL
1830 - 2015
Timeline

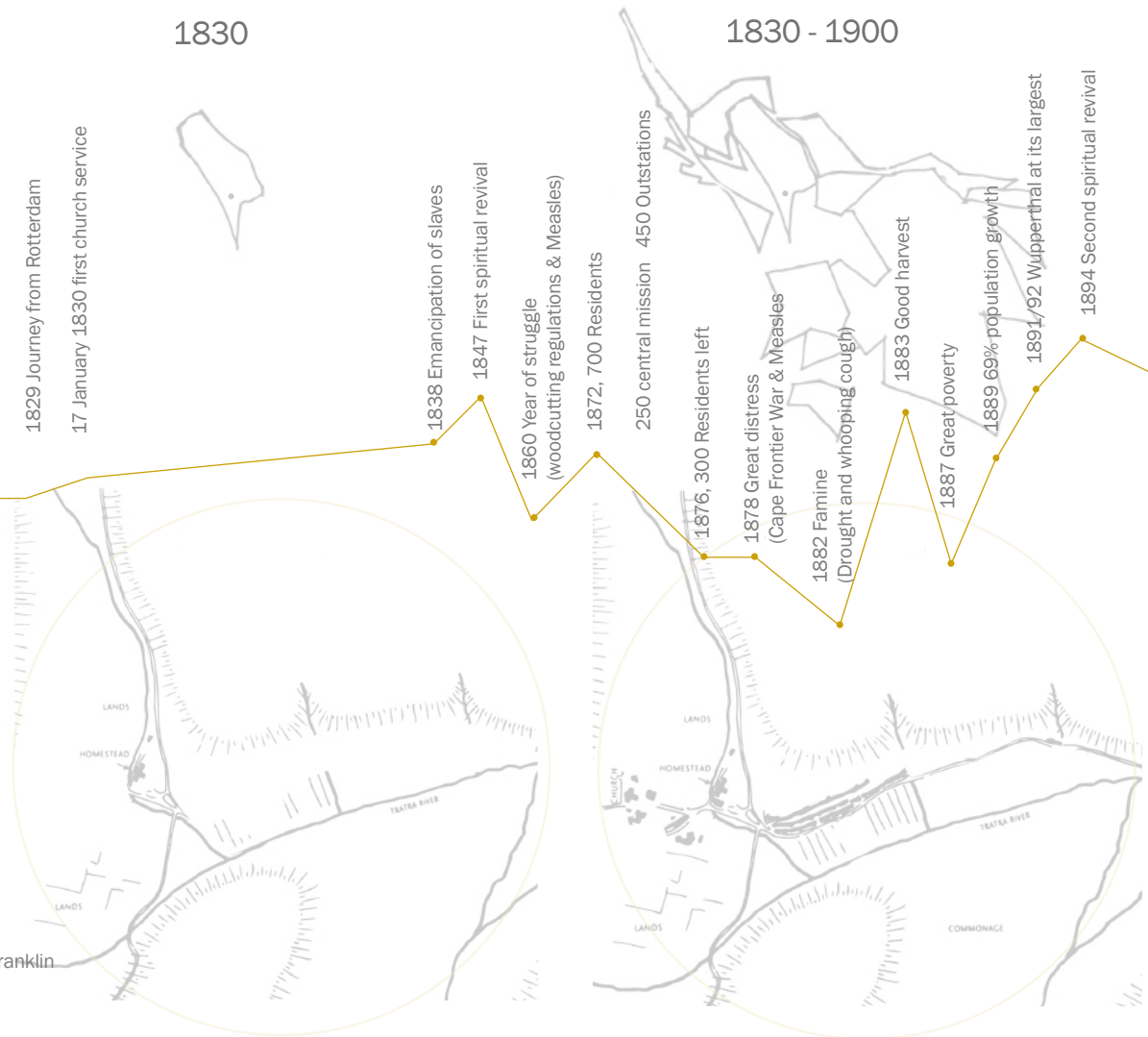


Fig. 5.17 Wuppertal timeline (Franklin 2015)

1900 -1965

1965 - 2015

KEY

O1 Mapping
A Documentary B Oral C Physical

1930- 1950 Reduced Rhenish involvement in South Africa
1930- Better medical support
1930- Holding dams for irrigation
1936 Lack of employment, increased alcoholism
1951 Loss of grazing land to Helmholtz-Strassberger



Wuppertal Timeline
1830 -2015

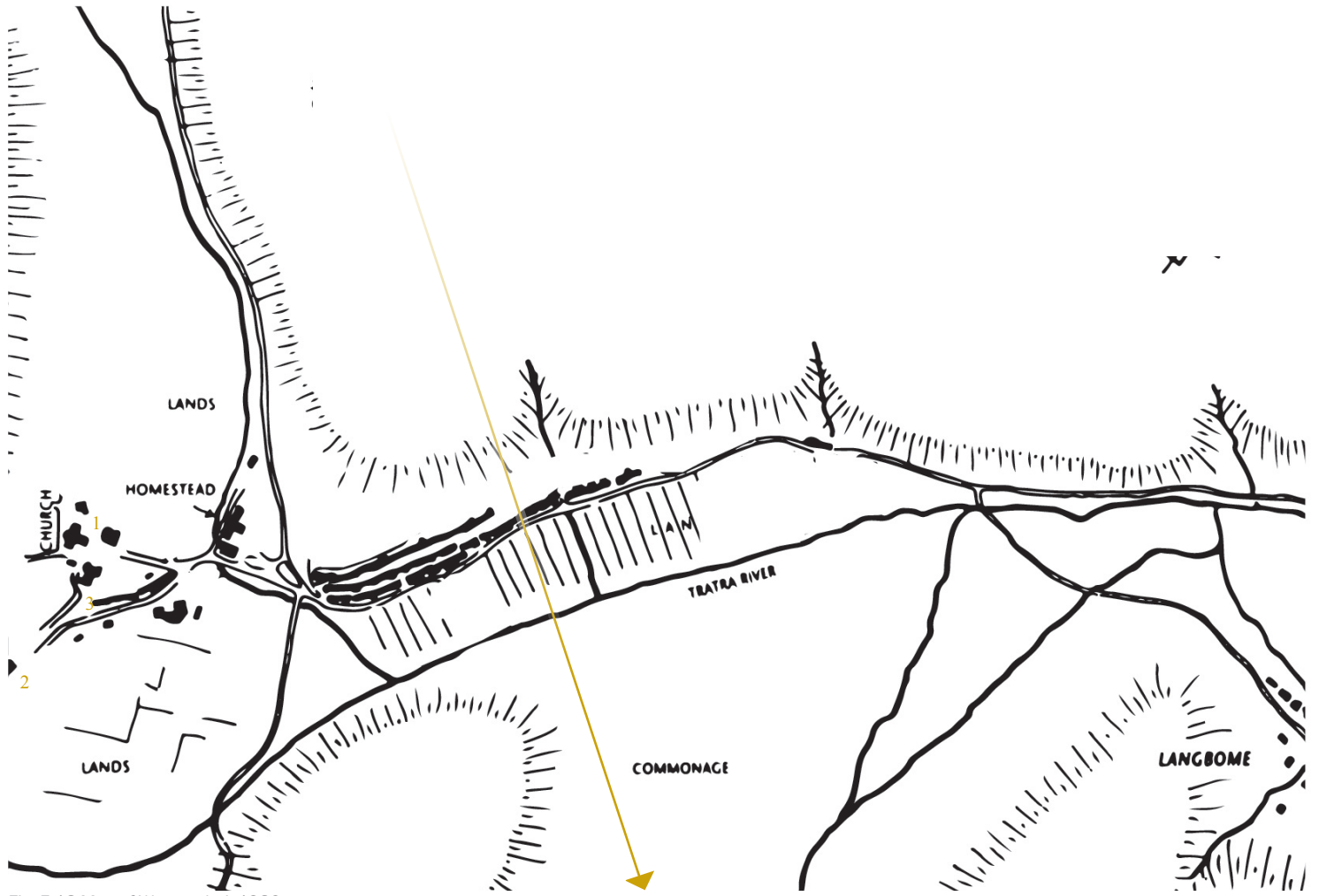


Fig. 5.18 Map of Wupperthal, 1980
(Fransen 1980)

5.4 WUPPERTHAL, 1980

36 000 ha

Ds. K. Schieffer in his preface to the remembrance of 150 years in Wupperthal describes the two faces to Wupperthal: The first “face” is the 2000 individuals that live here happily in its isolation. “Vir ons mense in Wupperthal, Heuningvei en omliggende dorpie is dit ‘n groot voorreg om te kan leef in ons tradisionele leefwyses” (Interview with resident by Omang Productions 2012). It is the place where adults sit and talk to each other after a long day and where children still play undisturbed on the streets. A world of modesty and simplicity where people know and look out for each other. The visible testimony of this town lies in the beautiful church, the school, the factory buildings, the gardens (agricultural) next to the Tra-Tra River and the irrigation channel (Heyns 1980: 40). Figures 5.19- 5.22 show these elements within Wupperthal.

The other “face” being one of poverty due to the large amount of unusable land-area and periodic dry seasons. Heyns (1980) compares the effect of human need in a place where people live so close to each other, to the same effect negative influences from outside could have on a community.

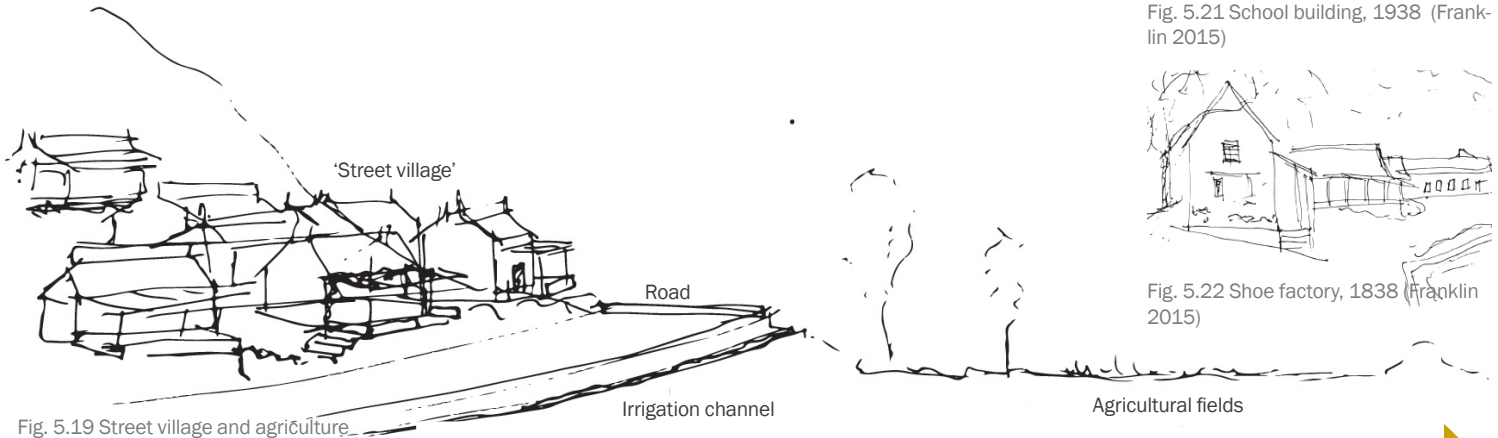


Fig. 5.19 Street village and agriculture fields

KEY

O1 Mapping

A Documentary B Oral C Physical



Fig. 5.20 Church, 1830 (Franklin 2015)



Fig. 5.21 School building, 1938 (Franklin 2015)



Fig. 5.22 Shoe factory, 1838 (Franklin 2015)

5.5 WUPPERTHAL, 2015

38 000 ha

After numerous site visits and immersing myself into the culture of Wuppertal, I was fortunate and unfortunate enough to see a glimpse of both the two faces Schieffer mentioned. Wuppertal has some of the most incredible displays of landscape in its rock formations, detailed fynbos plants of the Cederberg and the barren slopes of the Karoo Formations. The experience of this landscape is further amplified through interactions with its people: *“Ek kan nog steeds nie glo dat die Here ons hier kom plaas het tussen hierdie mooi berge”* (comment from resident, Jan 2015). Alcohol abuse does however play a large part to the other face of Wuppertal.

Over the years, strong traditions were formed that are still in use today. Potjiekos is a Sunday special and the baking of “asbrood” (Figure 5.23) by the women is noteworthy. In contrast to other traditional practices in Africa, it is not the women working in the fields, but the men that look after the crops (see Figure F30 for onions from these fields). Individuals live close to nature for their survival and the medicinal value of plants are well known. For example, rooibos tea was used as replacement for milk in the feeding of babies, although it is now contested by some (see Figures 5.25-5.26 for images of rooibos tea). “Rieldans” is a traditional dance with its root in both Khoi and colonial customs and represents the courtship between a man and a woman. The ‘Graskoue Trappers’ (Figure F33) one of the Rieldancing groups recently won a gold medal in Los Angeles under the category of ethnic dancing (Timeslive 2015). Rugby is a sport highly valued in Wuppertal and form part of their traditions. According to a resident of Wuppertal *“Ons versmoor ons in onse talente”* because they do not have a standard size rugby field (Comment from resident, Feb 2015).

“All Pay Day” is once a month and all the individuals of the larger Wuppertal Area gather in the historic core for collection of payment. This day is described as the day where one talks one’s heart out with old friends (*“dan praat ons ons harte uit”* comment from resident, Feb 2015). Although most people here are very shy, their open-heartedness is remarkable.

Wuppertal is safe because everyone knows each other and observation is an important aspect of public life. Wuppertal has been used as refuge for several other individuals. It is rumoured that Heuningvlei, one of the outposts of Wuppertal where I usually stay during site visits, was first inhabited by a man accused of murder in the Netherlands (Bilbe 2011: 272). *The Cederberg in the 1830’s was an environmentally marginal zone; an island of black elite clans, squatters, runaways and thieves. In the long run it was that*



Fig. 5.23 Asbrood (Franklin 2015)



Fig. 5.24 Onions from agricultural fields (Franklin 2015)



Fig. 5.25 Rooibos tea fields (Franklin 2015)

unique environment that most fundamentally shaped the social history of Wuppertal (Bilbe 2011: 272). Another more recent story is that of a Coloured journalist that took refuge in Wuppertal for a period in 1987 (Gardin 2015). People still regard Wuppertal as a sanctuary on the edge of the Cederberg, where visitors can find refuge from the hustle and bustle of everyday city life. Tourism is a valuable source of income for the individuals and has the potential to benefit an entire area when managed correctly.

The summary on pages 62-65 states the significance of the mapped features according to the six value lines developed by Roos (2007). These value lines include the historic, social, emotional, economic, ecological and aesthetic values. Each value activates an obligation to fulfil within the cultural landscape. The obligation is synonymous with an action that need to occur, and with the action a risk or responsibility that need to be managed (vulnerability). The landscape architectural response is diagrammatically included as an extension of the table on the adjacent page. The application of the response is integrated into one of the frameworks for Wuppertal.

KEY

O1 Mapping
 A Documentary B Oral C Physical



Fig 5.26 Dried Rooibos tea (Franklin 2015)

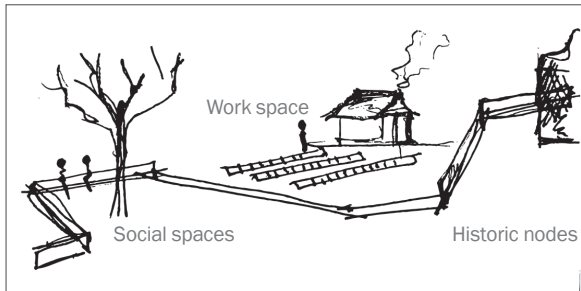


Fig 5.27 Graskoue Trappers - Rieldancing group (Timeslive 2015)

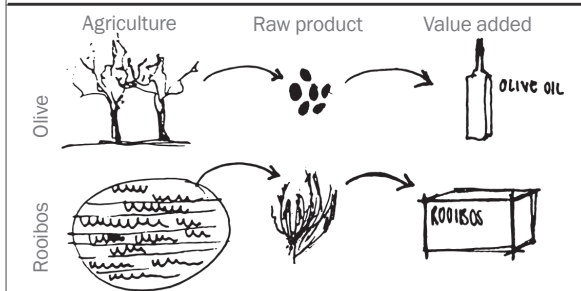
5.6 SUMMARY

	<p>01 Historic value S: 19th Century architecture O: Preserve historic elements V: Lack of needed development</p>	<p>02 Social value S: Wupperthal, social hub O: Restore as social nucleus V: N/A</p>	<p>03 Emotional value S: Mission station under administration of the church O: Keep Wupperthal as functioning mission station V: Oppression under church</p>
<p>● Wupperthal as nucleus</p>	<p>04 Aesthetic value S: Diversity of landscape O: Valuable for eco tourism V: Over development of tourism destination</p>	<p>05 Economic value S: Wupperthal, economic hub O: Restore as economic hub V: Change in historic character</p>	<p>06 Ecological value S: Large area of biodiversity conserved over the years O: Conserve biodiversity V: N/A</p>
	<p>01 Historic value ● S: Formation of traditions O: Enhance appreciation for traditions V: N/A</p>	<p>02 Social value S: Effects of slavery in SA O: Preserve mission station V: N/A</p>	<p>03 Emotional value S: Hierarchy of families O: N/A V: N/A</p>
<p>● Varied social order</p>	<p>04 Aesthetic value ● S: Tradition and formation of the vernacular O: Understand traditions and impact on environment V: N/A</p>	<p>05 Economic value S: Skilled based and agricultural based industry O: Both industries should be stimulated V: Lack of balance</p>	<p>06 Ecological value S: Cederberg is the only area in the world where rooibos tea grows O: Explore opportunities for drier karoo landscape V: Only applicable to high altitudes</p>
	<p>01 Historic value S: Settlement pattern O: Understand system that forms pattern V: N/A</p>	<p>02 Social value S: Sharecropping O: Continuation of sharecropping important V: Oppressive</p>	<p>03 Emotional value ● S: Harmonious living unit (sharecropping) O: Educate visitors V: Loss of fields</p>
<p>● German economic system</p>	<p>04 Aesthetic value S: 'Unintentional aesthetic' O: Continue as a working landscape V: Loss of system that forms landscape</p>	<p>05 Economic value ● S: Heirloom seeds as a result of its isolation O: Establish seedbase for an economic opportunity V: Change in function of fields</p>	<p>06 Ecological value ● S: Sustainable living component (House on rock slope, fields on fertile soil) O: Expose visitor to this living unit V: Loss of character</p>

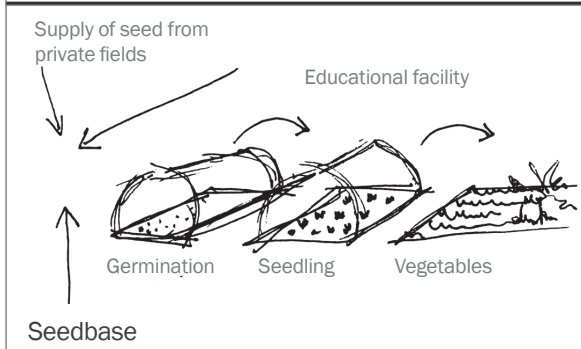
RESPONSE



Wupperthal as socio-economic hub



Value added product (agriculture and skills based) ↗



KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

FRAMEWORK DEVELOPMENT

- 01 Greater Wupperthal Area Framework
- 02 Wupperthal Mission Framework
- 03 Mission Route Master plan

TABLE KEY

- S: Significance assessment
- O: Obligation
- V: Vulnerability

SUMMARY


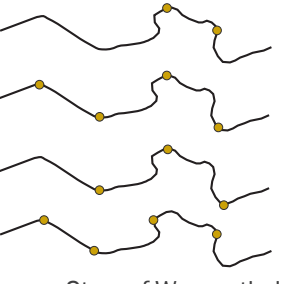
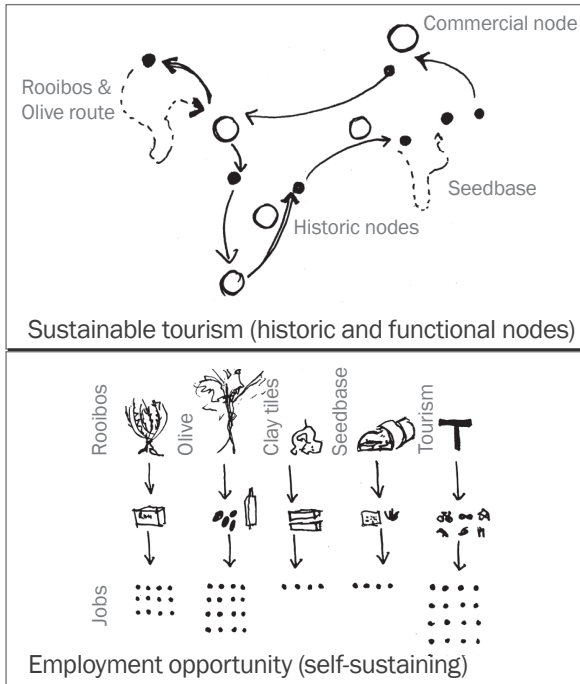
 <p>● Wupperthal historic core</p>	<p>01 Historic value S: Use of water flood irrigation O: Preserve flood irrigation system V: Water wastage</p>	<p>02 Social value ● S: All pay day O: Provide social space for this event V: Loss of character</p>	<p>03 Emotional value ● S: Pride in shoe factory O: Include shoe factory into mission route V: Expensive upkeep</p>
	<p>04 Aesthetic value S: Wupperthal as forgotten oasis O: Preserve Wupperthal as isolated unit V: Lack of needed exposure</p>	<p>05 Economic value S: Lack of employment opportunities O: Investigate sustainable tourism V: Change in historic character</p>	<p>06 Ecological value S: Wupperthal is confined to valley O: Set out development line V: N/A</p>
 <p>● Story of Wupperthal</p>	<p>01 Historic value S: Formation of a community over 200 years O: Tell the story V: N/A</p>	<p>02 Social value S: Management of Wupperthal O: Recommend management as part of framework V: Lack of management, decline</p>	<p>03 Emotional value S: Remembrance tradition O: Respect traditions V: N/A</p>
	<p>04 Aesthetic value S: Good infrastructure development O: Prevent poor development of infrastructure V: Poor infrastructure = unsustainable</p>	<p>05 Economic value S: Fluxuation of residents O: Create employment opportunities V: Poor infrastructure = unsustainable</p>	<p>06 Ecological value S: Nature as ruthless host O: Understand dependance on nature V: N/A</p>

Table 5.1 Summary

RESPONSE



KEY

- 01 Mapping
 A Documentary B Oral C Physical ●
 02 Assess significance
 03 Prepare a statement of significance
 04 Identify obligations
 05 Assess vulnerability for future use
 06 Integrate into a framework

FRAMEWORK DEVELOPMENT

- 01 Greater Wupperthal Area Framework
- 02 Wupperthal Mission Framework
- 03 Mission Route Master plan

TABLE KEY

- S: Significance assessment
 O: Obligation
 V: Vulnerability



CHAPTER 6

Mapping the physical

Fig. 6.1 View of Wuppertal from
Singkop (Franklin 2015)



Fig. 6.2 One of the few historically documented maps by a visiting German missionary (Bilbe 2011: 28)

Mapping the physical forms part of the section on the documenting of the landscape. It is not only limited to the mapping of physical features, but also to the documentation of intangible elements within the landscape physically. This chapter will be based on the methodology described in Chapter 4 according to the physical elements highlighted by Jackson (1987). The list of elements to be documented by UNESCO was included under Jackson's categories.

6.1 OBLIGATIONS, guidelines for new work

As part of the assessment of value within the landscape, certain obligations revealed itself to the approach and implementation of the project. These obligations are informed by the guidelines developed in each of the Burra Charter and Historic Urban Landscape approach (HUL) for preservation and development within the culturally significant landscapes. According to Article 22 of the Burra Charter on *new work*, the outline of the boundary becomes important (see different definitions for work done in cultural landscapes). Boundaries are determined by the understanding of the significance of a component. When the uniformity of a component forms part of its significance (a row of houses), then the scale should be adjusted to include the entire row and not only the work on the 'missing tooth' (ICOMOS 2013). The investigation of the boundary is introduced under the first section of this chapter while the discussion on the scope of work will only be discussed in the development of the masterplan in Chapter 7.

Article 22 of the Burra Charter further comments on the design of new work in its context. If the new work forms part of a larger uniformity, 'missing tooth', then the work should follow existing buildings in *bulk, form, character and complexity in detail, but the joinery or masonry should be modified to indicate new work*. There are other areas with less contextual constraints on new work, in these areas the form and scale of the work will not affect the significance adversely. *Article 15.1 states that the amount of change to a place and its use should be guided by the cultural significance of a place and its appropriate interpretation*. The ICOMOS Charter for the conservation of historic towns and urban (HUL) areas states that "*the introduction of contemporary elements in harmony with the surroundings should not be discouraged since such features can contribute to the enrichment of an area.*" (ICOMOS 1987)

The project will base its approach on these guidelines set by the Burra Charter and HUL for new work. In order to develop a contemporary architectural language, the analysis of typology and materiality within Wupperthal formed an important aspect of the physical mapping of the landscape (see Section 6.8 Mobility and Immobility).

KEY

O1 Mapping
 A Documentary B Oral C Physical

BURRA CHARTER DEFINITIONS (ICOMOS 2013)
 CULTURAL SIGNIFICANCE
 Aesthetic, historic, scientific or social value for past, present or future generations

FABRIC
 Physical material of a place

PRESERVATION
 Maintaining of the fabric of the place in its existing state and retarding deterioration

RESTORATION
 Returning to its EXISTING fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material

RECONSTRUCTION
 Returning a place as nearly as possible to a known state by the introduction of new or old materials

ADAPTION
 Modifying a place to suit proposed compatible uses

COMPATIBLE USE
 Change to the culturally significant fabric, changes which are substantially reversible, or changes which require minimal impact

6.2 BOUNDARIES

The general landscape is a web of boundaries (Figures 6.3- 6.4). Jackson defines two types of boundaries, one that is closely related to the function of the elements that form the boundary e.g. the agricultural fields in Wupperthal (drawn as closely as possible to the arable land). The other boundary is associated with the traditional political landscape and drawn with no relationship to topography or function but rather to isolate, protect and possibly even prevent contact (Jackson 1987: 14). The outside world is formalised in some way, through a gateway or structure. The standalone church or school (also evident in Wupperthal) proclaim its dignity and their legal system of autonomy (Jackson 1987: 14). Most prominent public space in Wupperthal finds itself here.

Jackson describes the difference between the political and residential landscape. The mapping of boundaries in Wupperthal focused gave way to the identification of land uses, clusters and patterns listed by UNESCO. While the political landscape and its associated boundaries take up a rather large area for the function it performs (Figure 6.11), it is in fact the residential landscape that carries the most significance within the cultural landscape as a sustainable land use unit (Figure 6.12).



Fig. 6.3 Closely associated boundary (e.g. river, road) (Franklin 2015)

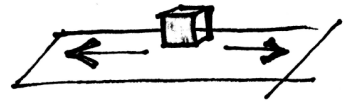


Fig. 6.4 Boundary as envelope (e.g. church) (Franklin 2015)



Fig. 6.5 Road as boundary (Franklin 2015)

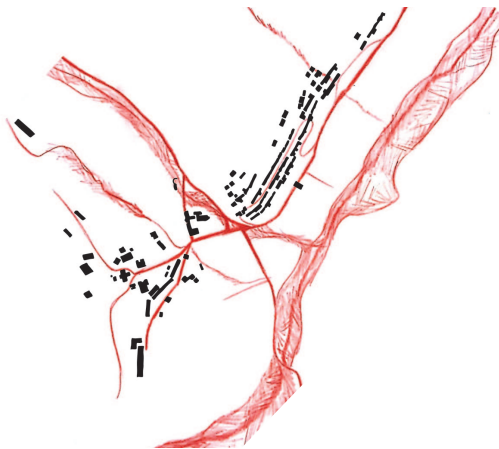


Fig. 6.6 River as boundary (Franklin 2015)

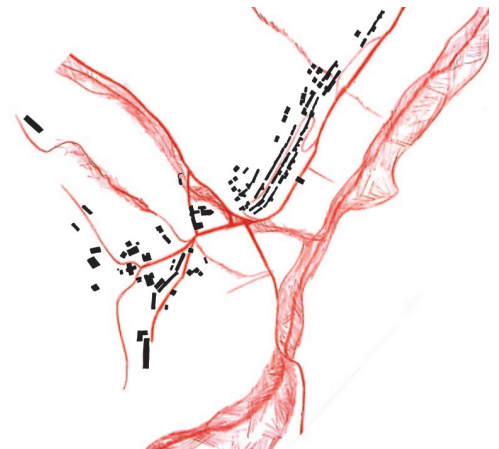


Fig. 6.7 Agricultural fields as boundary (Franklin 2015)

A distinctive pattern developed from the composition of the agricultural fields as transition between the natural and build environment. River, buildings, and agricultural fields are the three building blocks for the formation of this composition in each of the fourteen outposts (see Figures 6.13).

The spatial organisation in Wupperthal follows a specific order. All ‘inflow’ functions implemented by the church to cater for its people sit against the foot of the Cederberg mountains (Heyns 1980: 150). These inflow functions are supported by ‘enablers’. An example of this element in the landscape is the school (inflow) with the hostels (enabler) situated in the central area of the historic town. Any proposed functions that need to fulfil a specific purpose such as these should be located in the appropriate area.

6.3 Form follows function

Jackson draws direction here to the familiar, the social core, the plaza. The place where one engages with others and pass time. These spaces might be clearly defined or a mere open piece of land where individuals pass, a place of passive enjoyment (Jackson 1987: 16). Jackson believes that the greatest enjoyment for a tourist is to witness action in a public square which represents a true display of culture. He suggests that the lack of such examples in countries is a sign of social decadence. The plaza is the place where social

KEY

O1 Mapping
 A Documentary B Oral C Physical

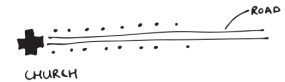


Fig. 6.11 Road leading to church

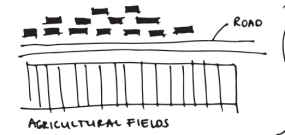


Fig. 6.12 Road between homes and fields

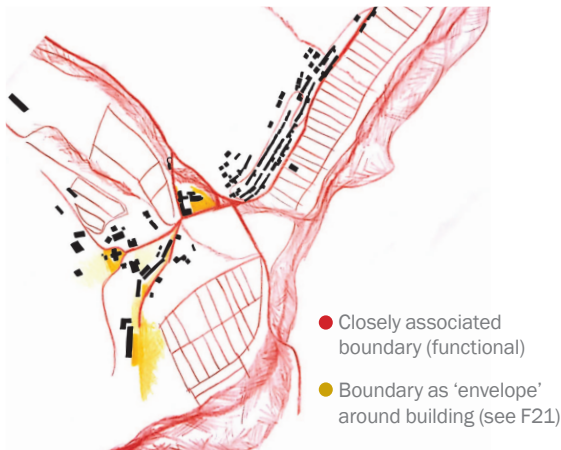


Fig. 6.8 Boundaries around prominent buildings (Franklin 2015)

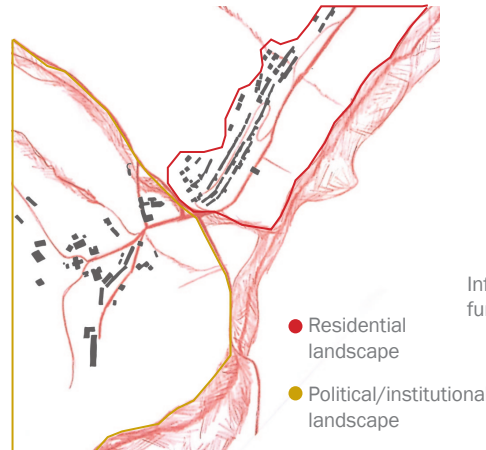


Fig. 6.9 Land use clusters in Wupperthal (Franklin 2015)

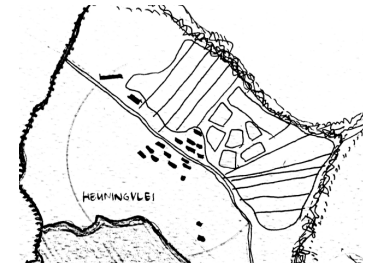
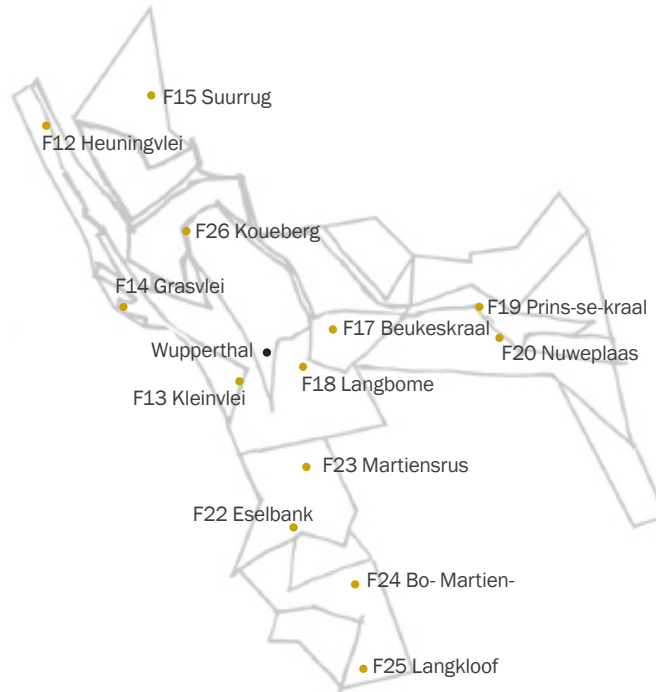


Fig. 6.10 Spatial groupings Wupperthal (Franklin 2015)

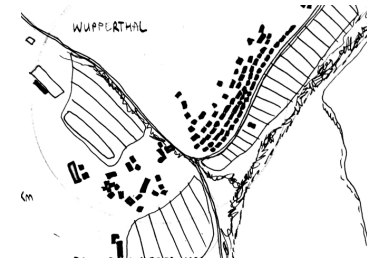
WUPPERTHAL (38 000 ha)

Fourteen outposts

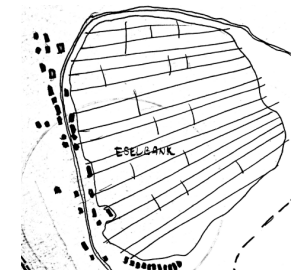
Distinct settlement and agriculture patterns within the greater Wuppertal area in the specific combination of river, agricultural fields and built structures. All sketches were traced from Google Earth.



Heuningvlei (Franklin 2015)



Wuppertal (Franklin 2015)

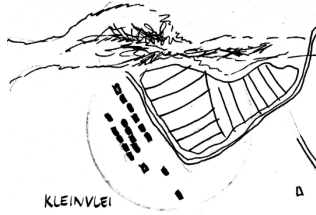


Eselbank (Franklin 2015)

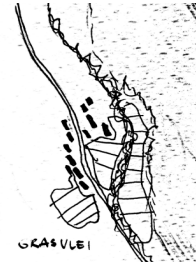
Fig. 6.13 Fourteen outposts of Wuppertal

KEY

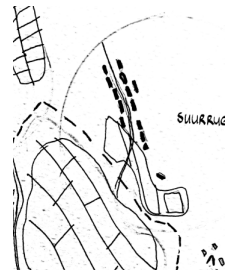
O1 Mapping
A Documentary B Oral C Physical



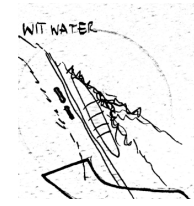
Kleinvlei (Franklin 1915)



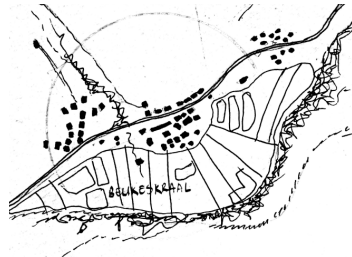
Grasvlei (Franklin 1915)



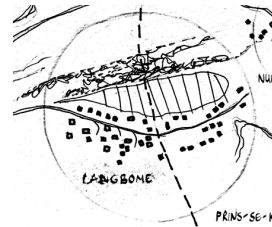
Suurrug (Franklin 1915)



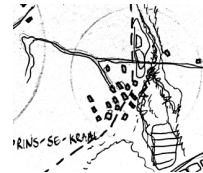
Witwater (Franklin 1915)



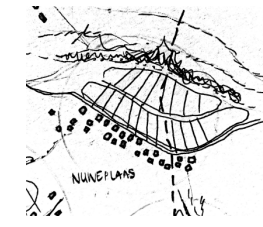
Beukeskraal (Franklin 1915)



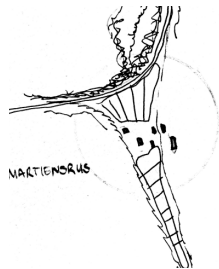
Langbome (Franklin 1915)



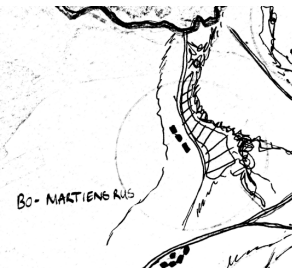
Prins-se-kraal (Franklin 1915)



Nuweplaas (Franklin 1915)



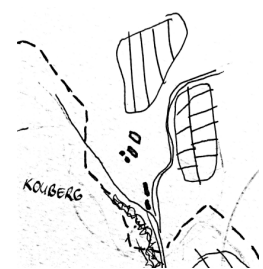
Martiensrus (Franklin 1915)



Bo-Martiensrus (Franklin 1915)



Langkloof (Franklin 1915)



Kouberg (Franklin 1915)

order is displayed, the community's relationship to the authority, and the individual's role in society is shown. Public space serves as a reminder of a communal responsibility of civic duty. Some of the most important public squares in history, thought to be celebrated as well-articulated public spaces, are in fact only periodic displays of events and the real public space occurred somewhere else.

Public space in Wuppertal displayed some of the same attributes Jackson discusses in this section. The plaza in Wuppertal is not the main area of public interface, but rather a larger market space used once a month on all pay day. Gathering space is rather found in the in-between spaces, on a small wall in front of the mission shop on the intersection of two roads. The agricultural fields close to the centre of town prove to be a space of passive enjoyment for the men working in the fields; observer without participatory obligation. The most important form of public space in fact occurs on the "stoepe" (verandas) of individual homes, relating to the intimacy of such a close-knit community in its isolation (see Figure 6.14).

6.4 ROADS

In ancient Greece, roads were sacred elements within the landscape. In mythology, they were mediators between the living and the dead. Today they still play the role of mediator, between urban and rural, public and secret space. The nucleus of the landscape was the point of intersection in roads, the *decomanus maximus* (east-west) and the *cardo maximus* (north-south). Grids were developed in Roman times around the town square and a traditionally sized piece of land (determined by use of oxen). In our modern age the road represents movement to a better sociable goal, the leaving of the family for a more stimulating place. The building of road also serves political and economic means, connecting agricultural fields with centres of distribution (Jackson 1987).

Wuppertal is dependent on the trade of products for its economic input into the community. Wuppertal is well-known for its sweet potatoes (Patats) in their tradition of bartering amongst other mission stations (informal discussion with ex-resident of Saron, January 2015). Leather shoes, Rooibos tea leaves and wood (*Widdrintonia cederbergensis*) formed part of the original traded products (Bilbe 2011). However, the trade of these products however have declined dramatically over the last decades. A large number of the community members leave Wuppertal in search for employment opportunities elsewhere.

The next spread depicts the experience of a typical visitor in Wuppertal. The user is only exposed to a limited view of Wuppertal. Roads in Wuppertal act both as a divider and connector within the cultural landscape (Figure 6.15). The main entrance road from Clanwilliam divides the political and residential

landscape, while the road into the valley forms the connection between the church and its people. There are areas in Wuppertal that cannot be accessed by a sedan as a result of the rough terrain. When tourists visit Wuppertal, they only gain access by taking a 50km gravel route through the Biedouw Valley leading to Wuppertal or a 4x4 route from the Cederberg. Visitors typically look for the church, the shoe factory and then what they can find to eat or drink and leave again (Figure 6.15). Only a few visitors take more interest in further exploring Wuppertal for its people, landscape and charm. The images marked with red show areas where the functional needs of Wuppertal detracts from the historic nodes. Improvement of these areas will address the functional needs (presence) and enhance the experience of Wuppertal (absence).

6.5 SPACES, sacred and profane

Every society forms its own set of social boundaries and spatial orientation. Currently we see a change in the traditional use of space to the creation of a more harmonious unit. For example, where eating was once a completely separate activity, eating and social space now tends to form part of the same unit. The simple family farmstead unit was frowned upon, moving to larger farms, now only to return again to the sustainable unit of harmonious living (Jackson 1987).

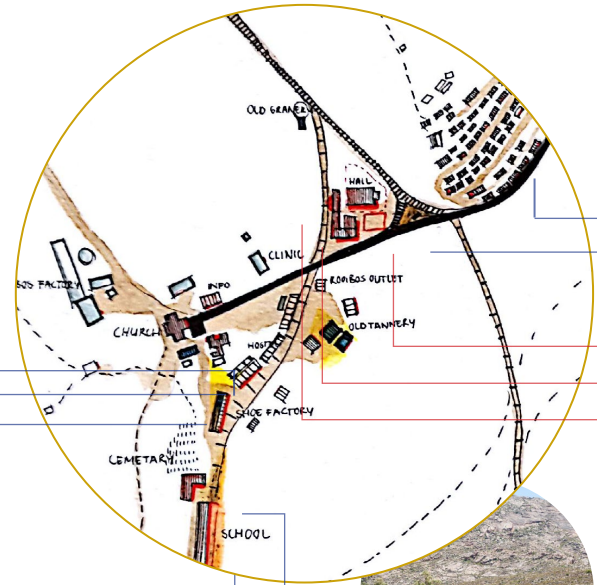
Wuppertal in its totality is a reference to the latter harmonious unit. This communal agricultural system of share-cropping that modern society tries to recreate and assimilate within our daily lives has been in existence in Wuppertal for more than 200 years. Today in South Africa very few examples still exist of such a continuing landscape. This forms part of the significance of the cultural landscape of Wuppertal and the lessons to be learnt from history. Views towards this harmonious unit expose the visitor to a different and communal way of life. The most significant view over this land unit can be found from Singkop. The mountainous terrain and the entrance to Wuppertal from Clanwilliam conceal this composition from the average tourist visiting Wuppertal. Singkop is also the place where Christmas carols are sung that form part of a sacred procession during the time of the Christian faith with celebration of the birth of their King. Another reference to a sacred place is Sneekop, one of the highest peaks in the area, seen in a distance behind the church. (See a poem written about Sneekop in Chapter 4, page 32)

KEY

O1 Mapping
A Documentary B Oral C Physical

Perception
Ill defined space

Reality
Important Rieldancing
platform



Perception
Not all buildings are in use



Reality
All the buildings are in use,
even if it is only used for a
few hours a day

Perception
Wupperthal stood still in time
and its confinement to the
valley gives the illusion that it
did not develop



Reality
Some of the buildings are not
even 60 years old



Fig. 6.14 Perceptions and public space in Wupperthal



Perception
The institutional landscape form the most prominent unit within the cultural landscape,

Reality
The most significant unit is the residential landscape with its agricultural fields

KEY

O1 Mapping
A Documentary B Oral C Physical

Perception
Wupperthal is the only town in the area,

Reality
Wupperthal consists of fourteen outposts over a diverse range of veld types (see F39 -42 for a discussion of the vegetation types)



Perception
The plaza in Wupperthal is the main area of public interface. The plaza is a larger market space used once a month on all pay day



Reality
Gathering space is rather found in the in-between spaces, on a small wall in front of the mission shop on the intersection of two roads



Perception
The agricultural fields close to the centre of town proved to be a space of passive enjoyment for the men working in the fields; observer without participatory obligation



Reality
The most important form of public space occurs on the "stoepe" (verandas) of individual homes, relating to the intimacy of such a close-knit community in its isolation

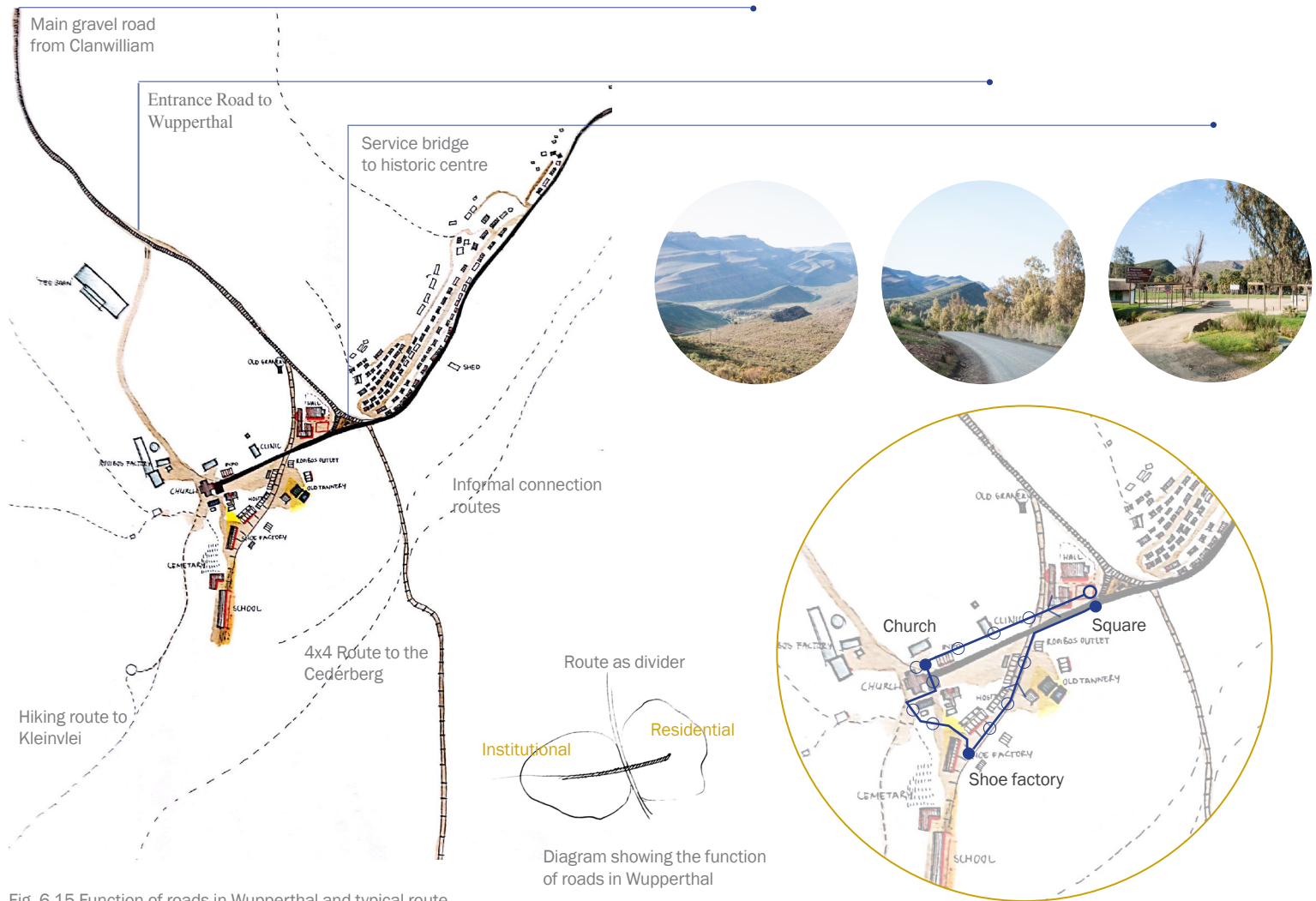


Fig. 6.15 Function of roads in Wupperthal and typical route

KEY

O1 Mapping
A Documentary B Oral C Physical



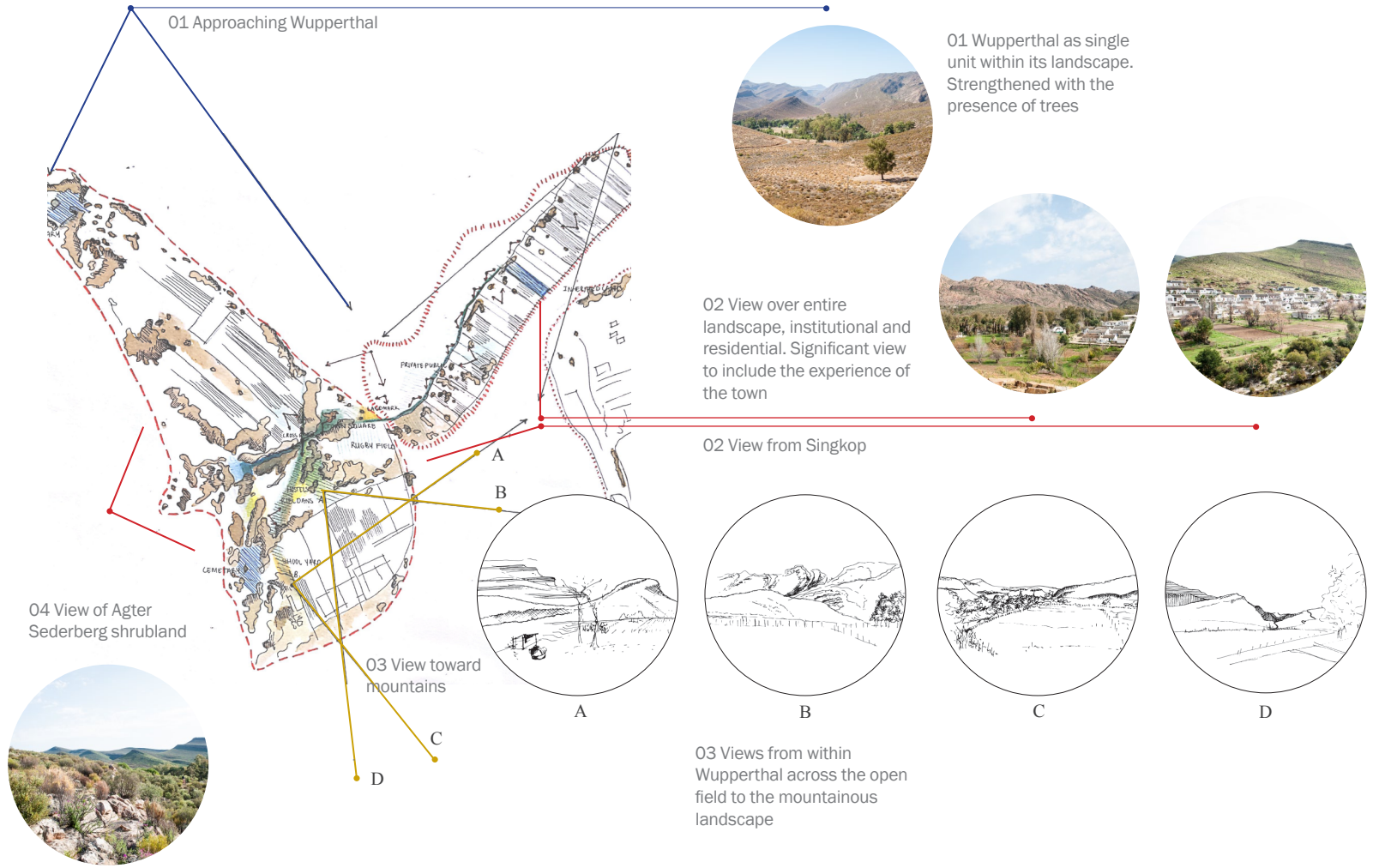


Fig. 6.16 Visibility within Wupperthal

6.6 VISIBILITY

Visibility has significance to the viewer. To the environmentalist – topography and vegetation will be visible; and to the architecture student – buildings. In the seen, one sees the commonplace of greatness. What is seen is also the material realisation of man’s principles. Property makes man visible and accessible (Jackson 1987: 35).

Visibility on various levels informed the value of different elements within the landscape. From a distance Wuppertal is confined to the flat plains of the valley that gives it an oasis-like feel in the karoo landscape. Wuppertal is framed with trees, but allows glimpses into the workings of the town as one enters. The significance of the agricultural fields are realised in the continuation of this settlement pattern and transition between nature and the build environment.

There are views from within Wuppertal where one is subtly reminded of the varied mountainous landscape. Visibility informed the development line in Wuppertal as part of the mission framework. There are areas where these views could be enhanced for the dramatic effect it creates when viewed in isolation. These ‘positive’ views are however affected by poor development and clutter that accumulated over the years (see Figure 6.15). Visibility plays an important role in safety and public space within Wuppertal. The entrance to the town needed to be reconsidered in terms of visibility while other views from within the town were noted as important.

KEY

01 Mapping
A Documentary B Oral C Physical

6.7 NATURAL SPACES

A TOPOGRAPHY

Wupperthal is situated on the edge of the Cederberg mountains and Karoo formations. The majority of land has low agricultural potential due to its mountainous terrain. The settlement pattern (Figure 6.13) is

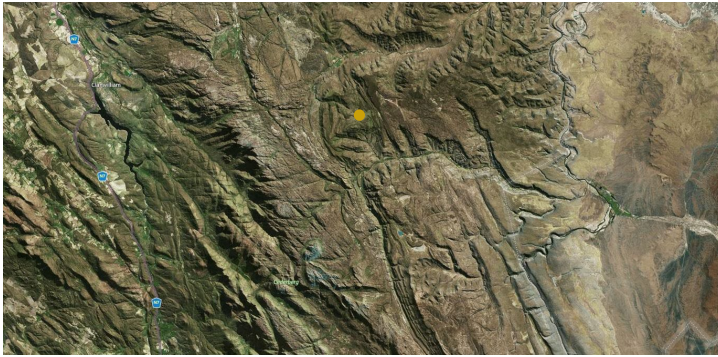


Fig. 6.17 Larger Cederberg mountain range (Google Earth 2015)



Fig. 6.18 Wupperthal in its immediate mountainous context (Google Earth 2015)

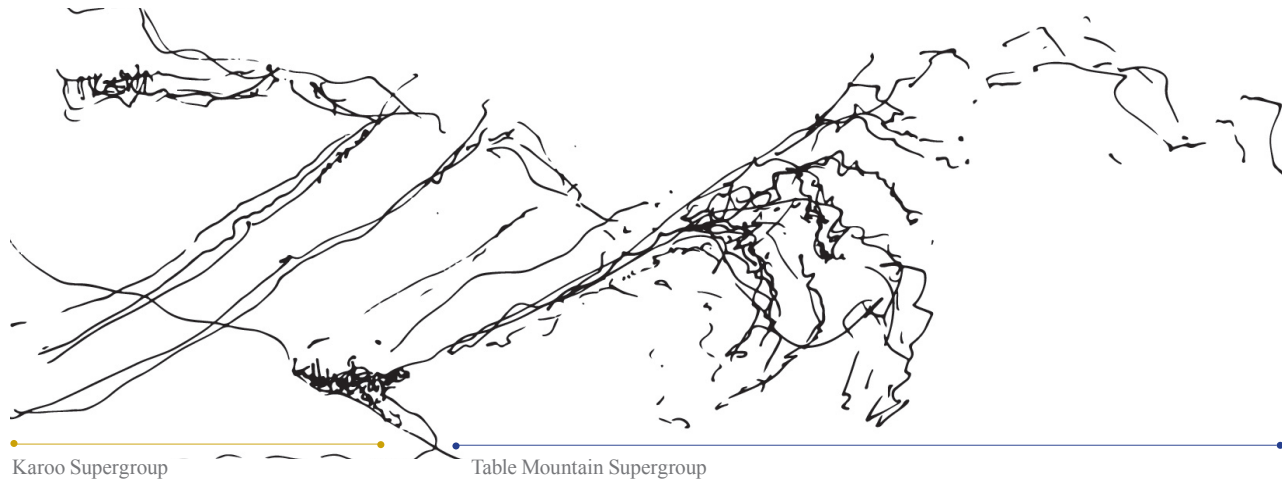


Fig. 6.19 Approaching Wupperthal. Karoo formations to the west and Cederberg mountains to the east (Franklin 2015)

a direct influence of the topography and the location of settlement around the fertile valleys. The isolation of Wuppertal can further be ascribed to the poor road network installed in this terrain. The main gravel road to Wuppertal now lends more access to Wuppertal and can be seen in the number of day visitors visiting Wuppertal. The topography, soil properties and climate directly influence the planting communities within the greater Wuppertal area.

KEY

O1 Mapping
A Documentary B Oral C Physical

B GEOLOGY

Wuppertal sits on the edge of the ‘Table Mountain supergroup’ geological formation and ‘Karoo supergroup’. The Cederberg in this area consists of predominantly sandstone and shale in close proximity to Wuppertal.

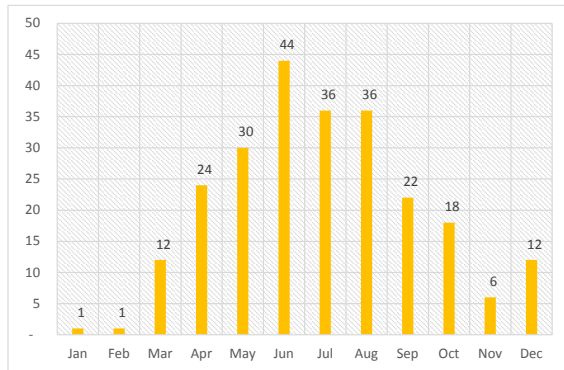


Fig 6.20 Average Rainfall for Wuppertal (Weather SA 2015)

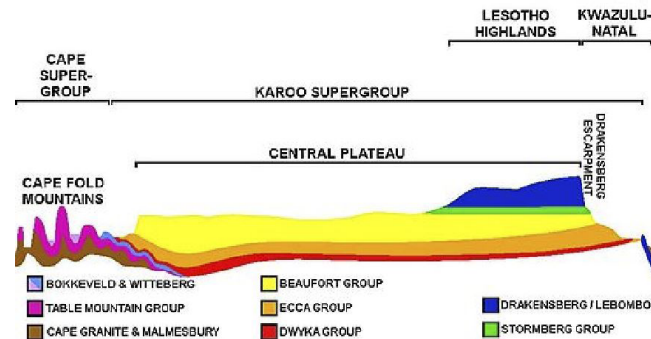


Fig. 6.21 Geological formation in Wuppertal

C CLIMATE

Wuppertal receives winter rainfall with two extreme rainfall conditions; the Cederberg receives an average of 750mm of rain per year, while the lower lying Karoo only receives an average of 300mm per year. The climate influences the proposed material to be used and the way it is constructed.

D VEGETATION

The varied landscape of the Greater Wupperthal area allows for a rich plant palette. Figure 6.26 shows the different veld types according to Mucina and Rutherford (2006). FFb 1 Northern inland shale band FFs 4 Cederberg Sandstone Fynbos, Skv 3 Agter Sederberg Shrubland, Skv 5 Tanqua Karoo (Figures 6.22-6.25). The Cederberg is a centre of endemism and therefore no other species will be included in the proposed plant palette unless historically motivated or otherwise. Unfortunately there is limited information available for their ability to be commercially grown from seed or transplanted. Some of these species are very specific to their distribution where altitude, rainfall and soil type plays an important role. There are however plant families that are easily recognised and with known growth properties.



Fig. 6.22 FFb 1 Northern inland shale band (Franklin 2015)



Fig. 6.23 FFs 4 Cederberg sandstone fynbos (Franklin 2015)



Fig. 6.24 Skv 3 Agter Sederberg shrubland (Franklin 2015)



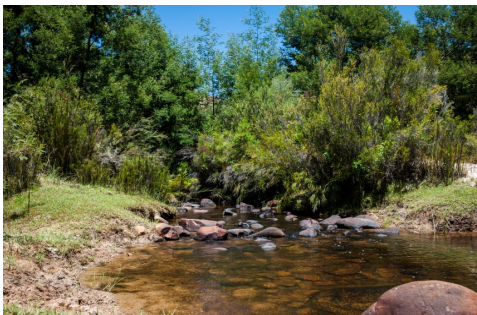


Fig.6.25 Skv 5 Tanqua Karoo (Franklin 1845)

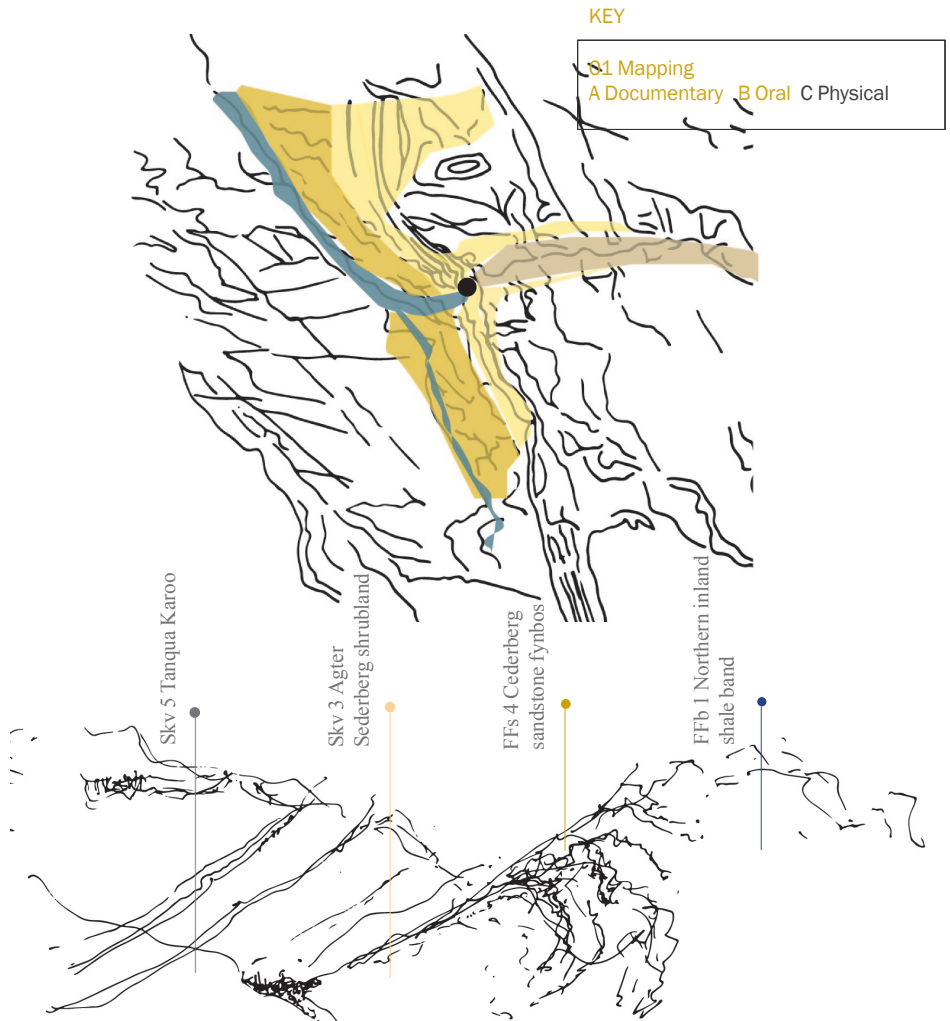


Fig. 6.26 Fourteen outposts of Wupperthal

6.8 MOBILITY AND IMMOBILITY

In the traditional landscape, when walls and fences were not practical, long-life trees and stone markers were used. Jackson describes the fields as some of the most elusive elements of the landscape (Jackson 1987). In the inhabitant landscape certain spaces are designed for temporary use. When the use changes, so does the space. Where once cattle had right of way now lays a barren land. Movable and immobile elements differ from each village where trees would be seen as permanent but rock walls as movable. The visible often signified the immobile while the intangible elements were seen as movable.

Observations in Wuppertal were directed to find the intangible properties with the way land is used in order to understand the value associated with these areas. Seemingly insignificant areas turned out to be valuable areas for cultural practices. The area in front of the old shoe factory is not only a dusty platform, but in actual fact a ‘Rieldancing’ platform where traditional dances of Wuppertal are practiced. The understanding of space is further informed by Lefebvre’s (1968) writing on public space. The series of photographs explains his concept (also discussed in more detail in Chapter 3). The spaces of representation directs attention to the ‘imaginary’ and the representation of space to the designed space; the avenue of trees. The formation of these spaces are ultimately formed through its spatial practice. Once the spatial practice changes, so does the spaces according to its need. It is important to understand the formation of space and the use thereof in order to tap into the systems that already exist and not take away from the vernacular landscape of Wuppertal and its community.

6.9 HABITAT AND HABIT

Habit over the course of time resulted in the slow adaption of place. Customs form as part of the inhabited landscape. These customs and tradition remind us who we are and where we belong and the total immersion thereof the creation of a sense of place. The farmer needs to recognise the invisible potential of the land in order to bring it to its natural perfection. Wuppertal is associated with a strong sense of tradition in its isolation from the rest of the world. These traditions include the use of the Afrikaans language, traditional food such as *potjie*, *asbrood*, and the use of plants as medicine.

One of the traditions that formed is the use of white-washed walls. The white-washed rectangular house type was introduced to Wuppertal by the Rhenish mission society. These walls are painted white with the use of white clay from one of the outstations called Witwater. A study done by Alan Kaplan in 1980 proposed the use of a rich clay quarry for the manufacturing of tiles as economic means. Clay found in the

Mission church



Fig. 6.27 Moravian church (Franklin 2015)



Fig. 6.28 Dennelaan leading to church (Franklin 2015)



Fig. 6.29 Interior of church (protestant) (Franklin 2015)

School

Shoe factory

Agricultural fields



Fig. 6.30 School building (Franklin 2015)



Fig. 6.33 Shoe factory building (Franklin 2015)



Fig. 6.36 Agricultural fields (Franklin 2015)



Fig. 6.31 Fields in front of school (Franklin 2015)



Fig. 6.34 Old tannery foundations (Franklin 2015)



Fig. 6.37 Irrigation channel (Franklin 2015)



Fig. 6.32 New toilets on school yard (Franklin 2015)



Fig. 6.35 Stoep of shoe factory (Franklin 2015)



Fig. 6.38 Onions from vegetable gardens (Franklin 2015)

Spaces or Representation
(Experience)

Representation of Space
(Designed)

Spatial Practice
(Perceived)

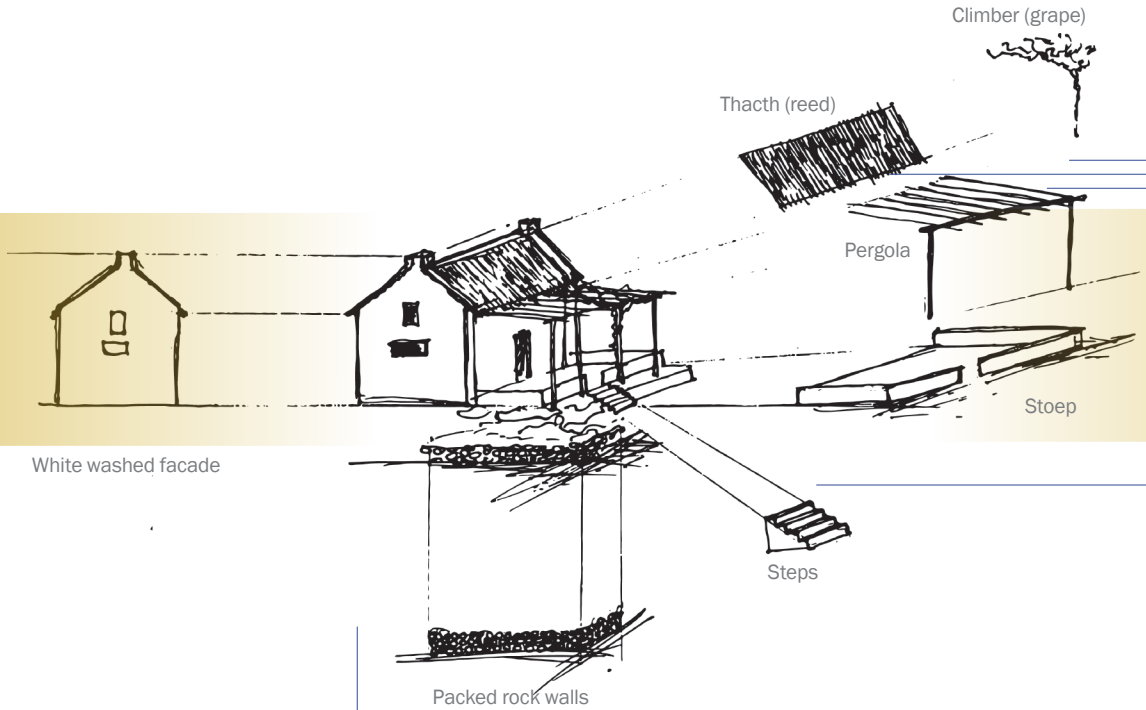
TPOLOGY

Mission house type:

White washed walls with stoep



Shoe factory, 1830



1. Rock wall as boundary



2. Retaining rock walls



3. Rock wall as fence

Fig. 6.39 Mission House typology



KEY

O1 Mapping
A Documentary B Oral C Physical



Stoep of shoe factory



Steps at residential home

larger wupperthal area include red and yellow clay used for the making of clay bricks. This clay source could be a valuable economic driver for the people of Wupperthal.

Rock walls in Wupperthal were used as fence lines and retaining walls. Retaining walls still feature according to their specific function in Wupperthal while rock walls as boundary or fence have been replaced by wire fence lines that are more adaptable to change in functions. Trees however are more permanent and accompany the historic core with a dusty void. Trees have been used in a variety of ways for specific functions. The analysis of the trees also placed attention on the buildings and the styles of the buildings that are not in line with the development of Wupperthal.

The typology within Wupperthal is linked to the formation of a community over 200 years; their customs, traditions and use of space influence the physical world in which they live. The spatial character of habitable structures documented enables one to understand the significance and use of space -by carrying a bed outside on the *stoep* with its pergola, during warm summer days, the stoep becomes an extension of the home. One tree becomes the meeting place and the discussion of important matters. The author chose to map these elements as 'presence' and 'absences' (described earlier in Chapter 3, concept development). Understanding the use of elements in the creation of space forms a vital investigation for the formation of an appropriate architectural language within Wupperthal. The interpretation of the understanding of the typology is discussed in the detail development chapter.

TYOLOGY
19th Century architecture and
the use of trees and dusty voids

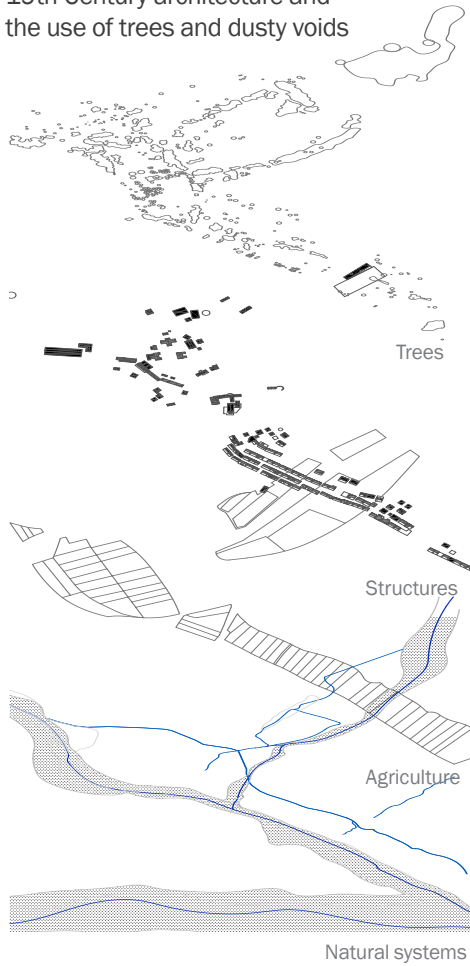
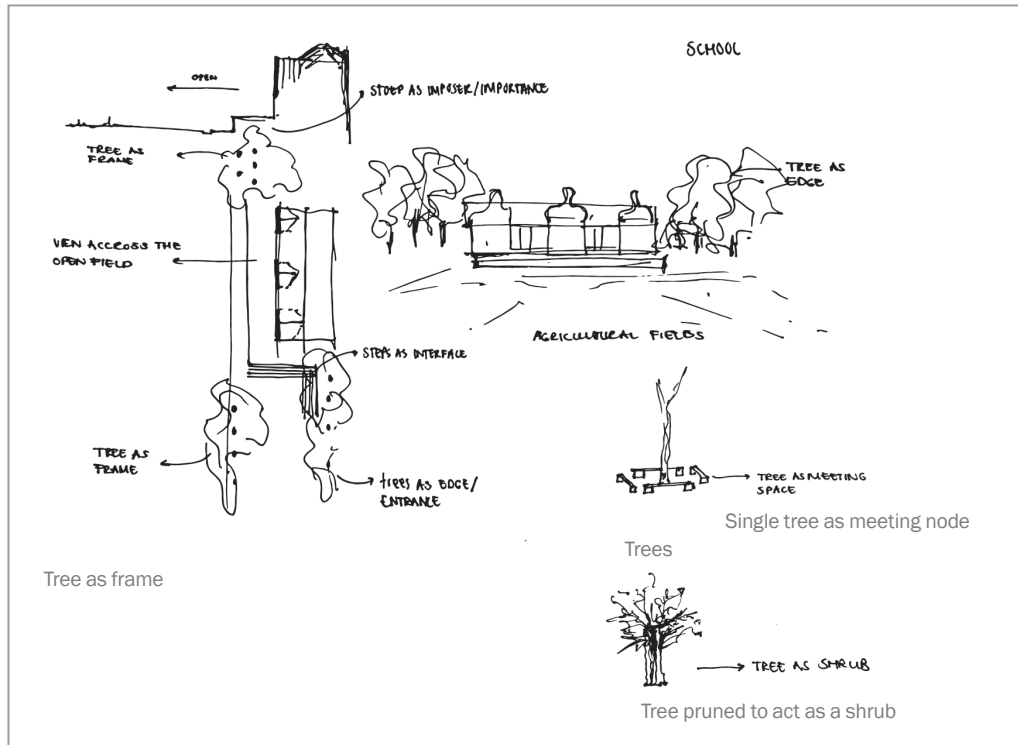


Fig. 6.40 Tree and facade



Church, 1830



Rectory, circa 1830



Post office, circa 1838

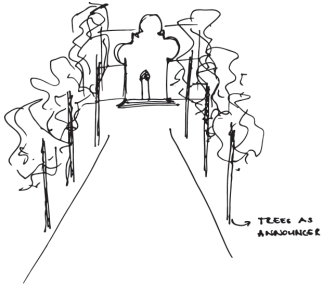


Residential unit, circa 1834

ARCHITECTURAL FACADE STYLE FROM 1830 - 2015

KEY

O1 Mapping
A Documentary B Oral C Physical



Tree as announcer



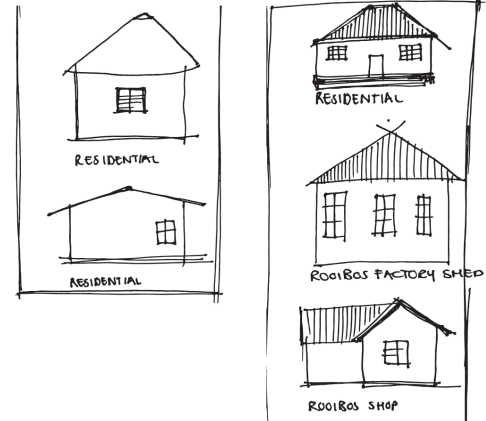
Tree as backdrop to church

Various use of trees within the Wupperthal cultural landscape (Franklin 2015)



Tree as buffer to post office on church yard

Tree as director



Architectural styles not in line with standards for Wupperthal



Old Farmstead, 1800

Mission shop, 1870

Residential home

Hostel, 1930

School, 1979

Town hall, 1980

6.10 TYPOLOGY, summary

1. Steps

Steps become an important device in the transition between spaces, threshold

2. Thatch

The continuation of thatch in the architecture is important to prevent other styles from entering the Wupperthal cultural landscape

3. Trees as buffer

The different uses of trees creates an interesting threshold device

4. Tree as meeting place

The use of trees as markers for a meeting place is an important cultural phenomenon in Wupperthal and should continue to stimulate such spaces. The single street light in Wupperthal creates this same effect in the deserted town at night.

5. Pergola structure

The juxtaposition of the light material against the solid white-washed walls is an interesting element in the creation of space in the areas classified as presences. This could possibly inform the architectural style to be proposed for infrastructural structures such as ablution facilities.

6. Rock walls

Rock walls can be adapted to be used within the landscape to clearly define zones as per the historic feel of the town in different compartments

7. Stoep

The typology of the stoep informed the use of low white-washed werf walls to define the extend of the boundary around ill-defined historic elements

8. White-washed facade

Inform the bulk and character of new elements

9. Tree as announcer

PRESENCE

ABSENCE



1. Steps



7. Stoep



2. Thatch



8. White washed facade



3. Tree as buffer



9. Tree as announcer



4. Tree as meeting place



5. Pergola Structure

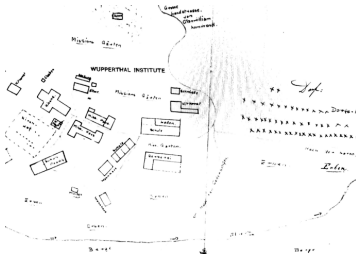
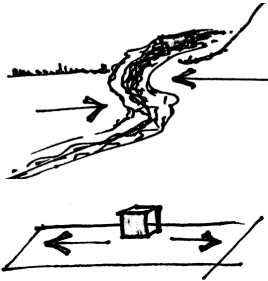
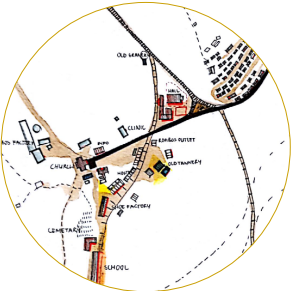


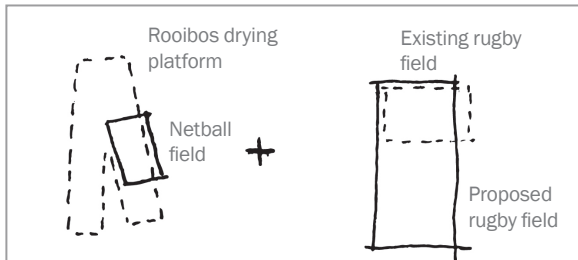
6. Rock walls

SUMMARY OF TYPOLOGY

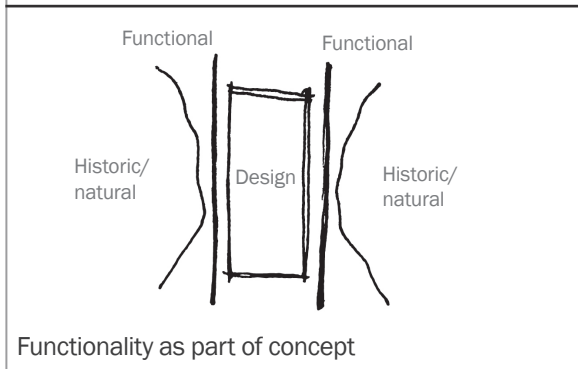
SUMMARY

The table below is a summary of the significance of each mapped feature, including obligations that arise and associated vulnerability.

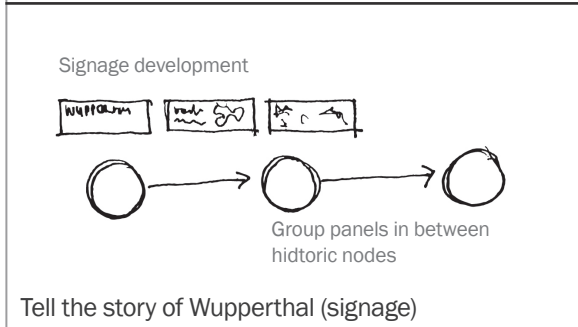
 <p>01 Wupperthal, farm werf</p>	<p>01 Historic value S: Wupperthal operates as farm O: Continues to function as active farm yard V: N/A</p>	<p>02 Social value S: Church, school O: Provide support facilities (rugby, netball) V: <i>Loss of character</i></p>	<p>03 Emotional value S: Afrikaans language O: Stimulate pride in the Afrikaans language (include poems) V: <i>Signage in a historical site</i></p>
 <p>02 Boundaries</p>	<p>01 Historic value S: Mission station principles applied to landscape O: Find the interface V: N/A</p>	<p>02 Social value S: Lack of social space O: Include social space as part of the public interface V: <i>Change in character</i></p>	<p>03 Emotional value S: Remembrance tradition O: Respect traditions V: N/A</p>
 <p>03 Perceptions, public space</p>	<p>01 Historic value S: Perceptions O: Tell the entire story of Wupperthal for personal interpretation V: N/A</p>	<p>02 Social value S: Sensitive community O: Respect community order in the implementation of the project (PP) V: <i>Rejection of project</i></p>	<p>03 Emotional value S: Strong sense of community O: Keep the community of Wupperthal as a closed community V: <i>Gentrification</i></p>
	<p>04 Aesthetic value S: Wupperthal stuck in time O: Preserve romance of Wupperthal V: <i>Lack of development</i></p>	<p>05 Economic value S: Self-sustaining unit in isolation O: Preserve as self-sustaining unit V: N/A</p>	<p>06 Ecological value S: Unique biodiversity O: Increase awareness and appreciation for natural asset V: N/A</p>



Social facilities (Netball and Rugby field)



Functionality as part of concept



Tell the story of Wuppertal (signage)

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework



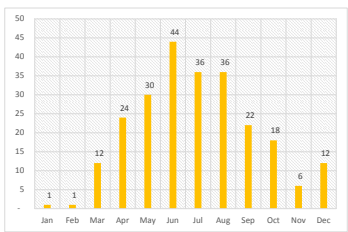
FRAMEWORK DEVELOPMENT

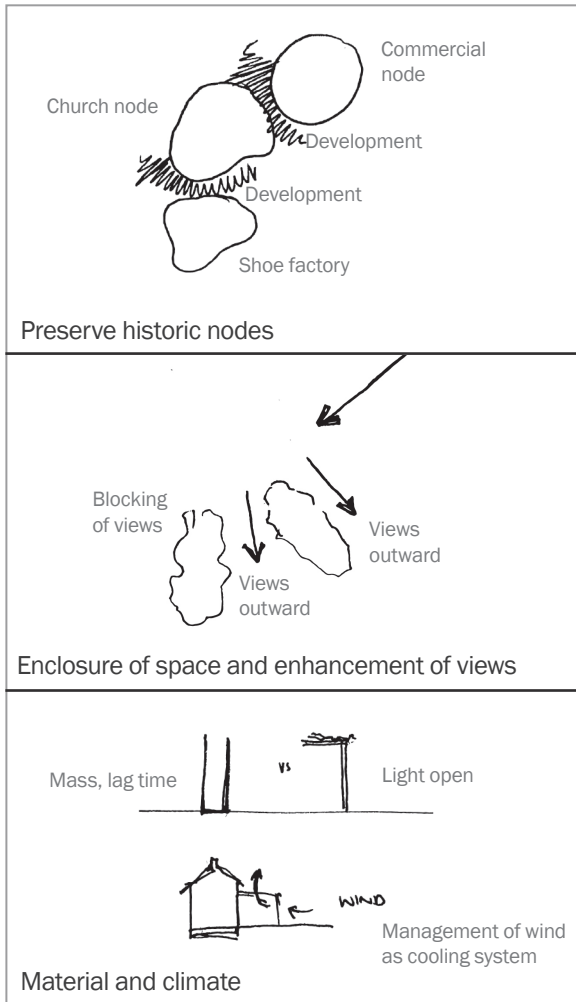
- 01 Greater Wuppertal Area Framework
- 02 Wuppertal Mission Framework
- 03 Mission Route Master plan

TABLE KEY

- S: Significance assessment
- O: Obligation
- V: Vulnerability

SUMMARY

 <p>04 Roads (mission route)</p>	<p>01 Historic value S: Formation of two 'werfs' O: Preserve two distinct historic nodes V: N/A</p>	<p>02 Social value S: Unique story O: Stimulation of pride V: N/A</p>	<p>03 Emotional value S: Distrust of church O: Opportunity of church to fulfil its original purpose V: N/A</p>
	<p>04 Aesthetic value S: Experience O: Order experience of visitor V: N/A</p>	<p>05 Economic value S: Word of mouth, experience O: Find balance between economic opportunity and community as is V: Loss of community</p>	<p>06 Ecological value S: N/A O: N/A V: N/A</p>
 <p>05 Visibility, sacred spaces</p>	<p>01 Historic value S: Historic view of space O: Challenge enclosure of space with views outward V: Change in perception</p>	<p>02 Social value S: Traditional use of space O: Respect traditional use of space but challenge for better use V: Change in perceptions</p>	<p>03 Emotional value S: Understand Christmas carol procession to Singkop O: Educate visitors V: N/A</p>
	<p>04 Aesthetic value S: Large trees with voids O: Preserve areas of absence V: N/A</p>	<p>05 Economic value S: Heirloom seeds as a result of its isolation O: Establish seedbase for as economic opportunity V: Change in function of fields</p>	<p>06 Ecological value S: Tree rich valley O: Restore edge with indigenous planting between <i>Eucalyptus</i> (edges of town) V: N/A</p>
 <p>06 Climate, soil</p>	<p>01 Historic value S: N/A O: N/A V: N/A</p>	<p>02 Social value S: Tradition as a result of climate O: Understand stoep living V: N/A</p>	<p>03 Emotional value S: Connection to land O: Include story telling V: N/A</p>
	<p>04 Aesthetic value S: Thatch and pergola O: Understand use of material in terms of the climate V: N/A</p>	<p>05 Economic value S: Vernacular material as result of availability O: Investigate use of material V: N/A</p>	<p>06 Ecological value S: Centre of endemism O: Research/eco tourism V: N/A</p>



KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

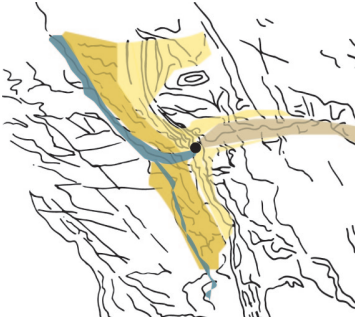
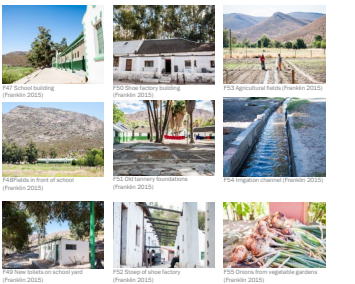
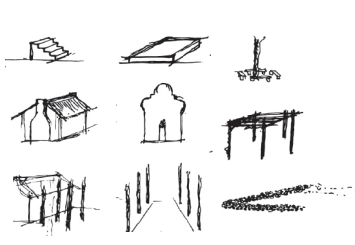
FRAMEWORK DEVELOPMENT

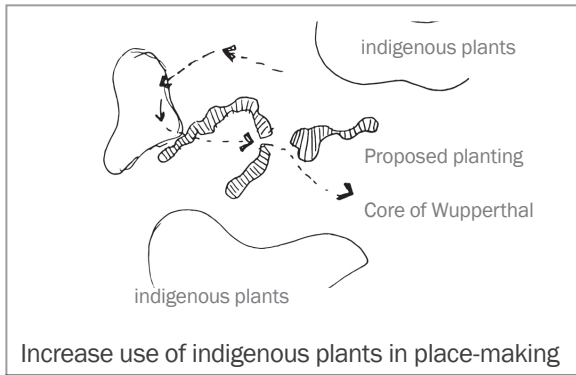
- 01 Greater Wupperthal Area Framework
- 02 Wupperthal Mission Framework
- 03 Mission Route Master plan

TABLE KEY

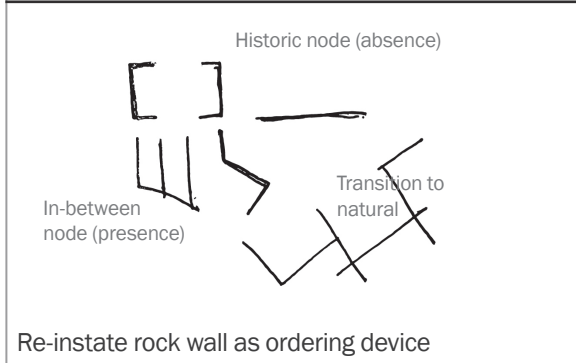
- S: Significance assessment
- O: Obligation
- V: Vulnerability

SUMMARY

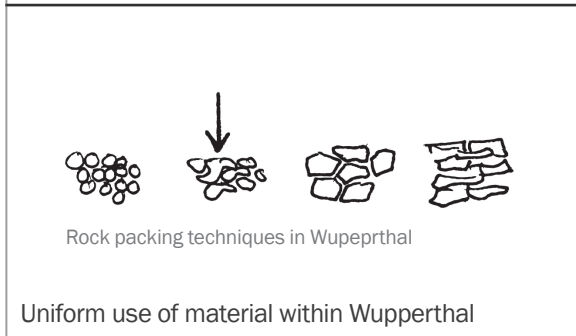
 <p>07 Vegetation</p>	<p>01 Historic value S: Unique plant variety O: Preserve biodiversity V: N/A</p>	<p>02 Social value S: Medicinal plants O: Expose visitors to plant properties V: N/A</p>	<p>03 Emotional value S: Harmonious living unit O: Educate visitors V: Over develop</p>
	<p>04 Aesthetic value S: Indigenous plants O: Increase use of indigenous plants as tool for place-making V: N/A</p>	<p>05 Economic value S: Inherent plant species O: Establish nursery as part of seedbank V: N/A</p>	<p>06 Ecological value S: Carrying capacity of lands O: Preserve open areas and limit livestock farming V: N/A</p>
 <p>08 Mobility and immobility</p>	<p>01 Historic value S: Use of rock walls as fence O: Reinstate use of rock walls as ordering device V: Lack of understanding</p>	<p>02 Social value S: Social functions not seen O: Create facilities to support those uses of space V: N/A</p>	<p>03 Emotional value S: N/A O: N/A V: N/A</p>
	<p>04 Aesthetic value S: Litter in Wupperthal affect aesthetic value of areas O: Develop litter bins for the area V: Not in line with aesthetics</p>	<p>05 Economic value S: Rich in materials O: Use materials that can be found in Wupperthal V: Change in historic character</p>	<p>06 Ecological value S: N/A O: N/A V: N/A</p>
 <p>10 Typology</p>	<p>01 Historic value S: Vernacular elements O: Use these elements as design informants V: N/A</p>	<p>02 Social value S: Tree, pergola - social stimulants O: Continuation of the use of these stimulants within the landscape V: Lack of use</p>	<p>03 Emotional value S: Pride in rock packing techniques O: Not necessary in line with look and feel appropriate for Wupperthal V: Insult</p>
	<p>04 Aesthetic value S: Uniformity of use O: Implement elements that could form part of a new vernacular V: Loss of character</p>	<p>05 Economic value S: N/A O: N/A V: N/A</p>	<p>06 Ecological value S: N/A O: N/A V: N/A</p>



Increase use of indigenous plants in place-making



Re-instate rock wall as ordering device



Uniform use of material within Wuppertal

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

FRAMEWORK DEVELOPMENT

- 01 Greater Wuppertal Area Framework
- 02 Wuppertal Mission Framework
- 03 Mission Route Master plan

TABLE KEY

- S: Significance assessment
- O: Obligation
- V: Vulnerability



CHAPTER 7

Framework development

Fig. 7.1 Entrance to Wupperthal
(Franklin 2015)

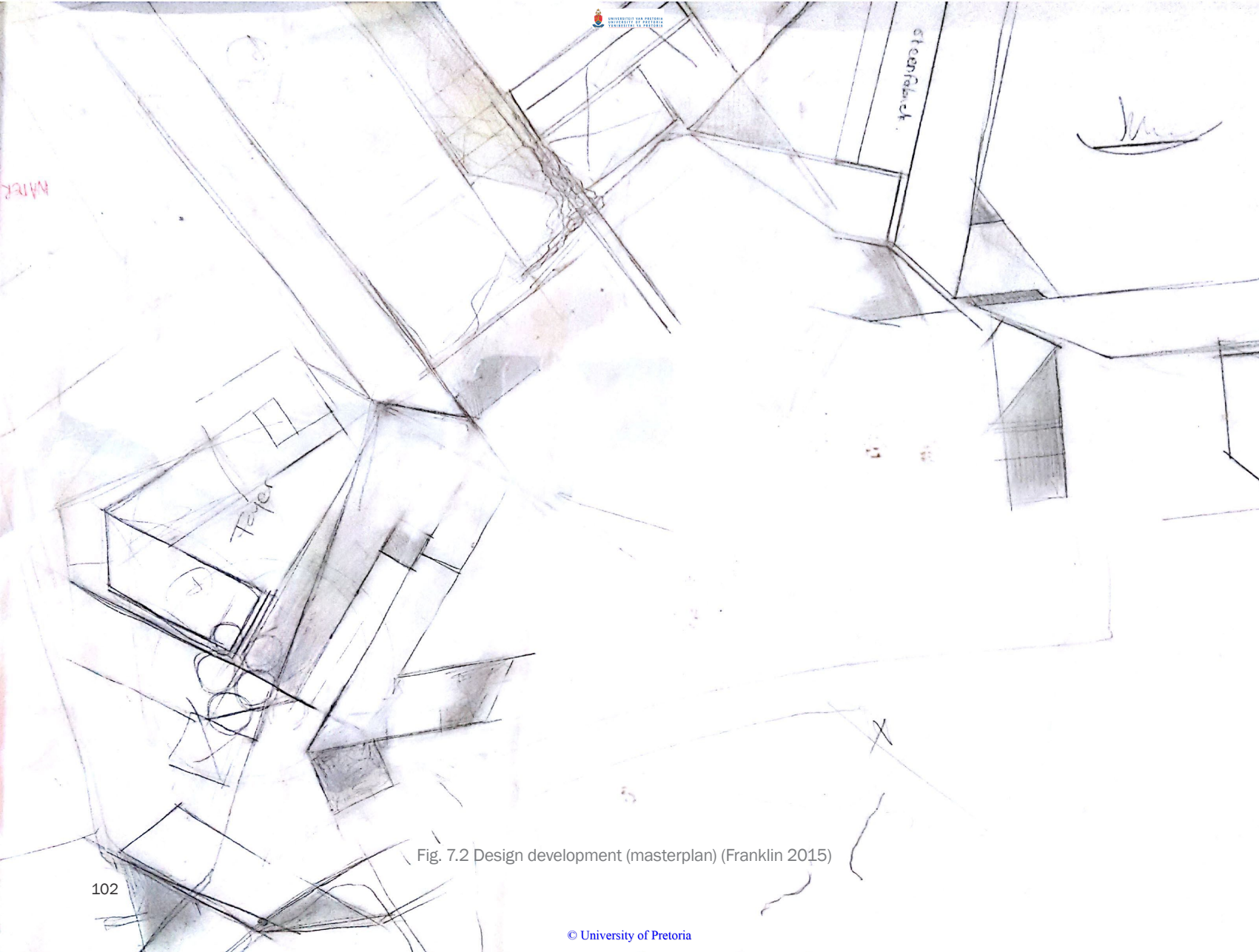


Fig. 7.2 Design development (masterplan) (Franklin 2015)

Chapter 7 discusses the formation of the frameworks based on the mapping and analysis of space and features in Wuppertal. These frameworks follow different scales, narrowing down to the masterplan. The overall water strategy as well as the rooibos drying platform will be discussed as part of the masterplan while the planting strategy will be discussed as part of the technical investigation in the next chapter leading up to the sketchplan.

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework

Greater Wuppertal Area Framework (38 000ha)

Wuppertal Mission Framework (120ha)

Wuppertal Mission Route Masterplan (20ha)

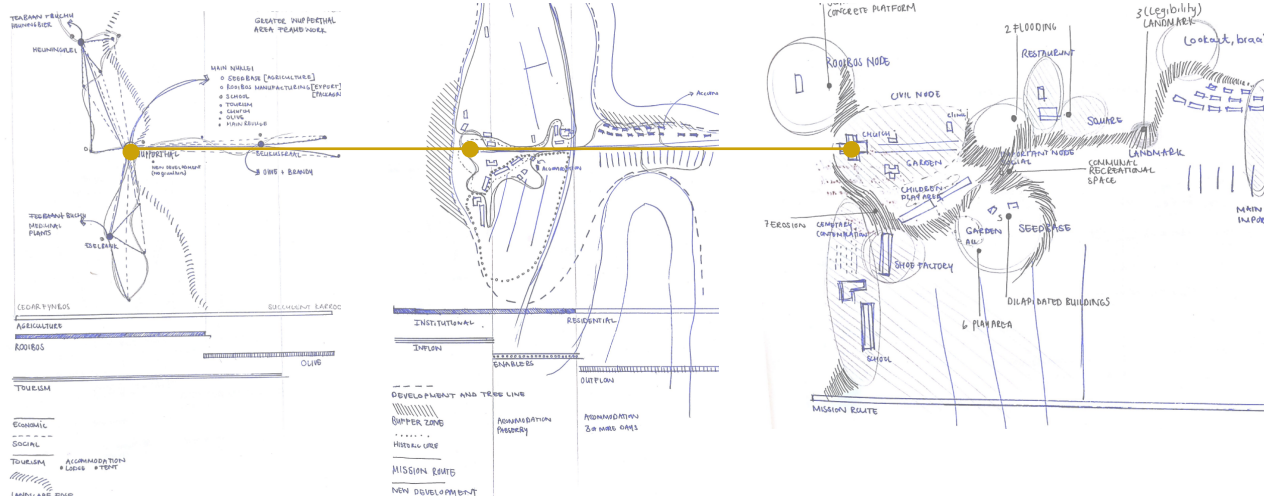


Fig. 7.3 Framework development diagrams (Franklin 2015)

7.1 GREATER WUPPERTHAL AREA FRAMEWORK

38 000 ha

The Greater Wuppertal Area Framework responds to the larger composition of Wuppertal and its fourteen outposts as it came into being over the years. The framework focuses on the economic landscape on which Wuppertal is based. In order to restore Wuppertal as socio-economic hub to its people this landscape needs to be understood in its totality. Wuppertal fulfils an important social role as central hub to the fourteen outposts.

The Greater Wuppertal Area is divided into two main landscape vegetation types. These vegetation types determine the spatial character of the area and the potential of the land. The Cederberg Sandstone Fynbos (Ceder formations) to the east and the Agter-Sederberg Shrubland (Karoo formations) to the west (see Chapter 6 for a more detailed description). Rooibos (*Aspalathus linearis*) is a dominant feature in the



Fig. 7.4 Fourteen outposts (Franklin 2015)

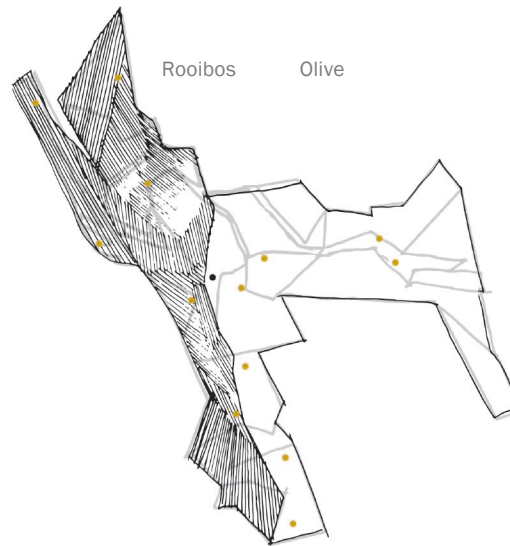


Fig. 7.5 Economic opportunity (Franklin 2015)

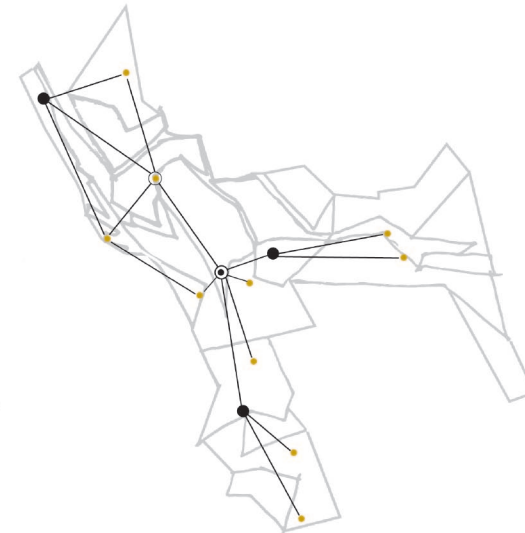


Fig. 7.6 Proposed economic links (Franklin 2015)

larger area but only located in the Cederberg Sandstone Fynbos at altitudes between 300 – 1000m above sea level (Hawkins 2011). Three types of rooibos can be found in this area. They are classified according to their growth form and distribution. Two of the three rooibos plants are harvested as wild rooibos while the third is planted for small scale commercial use. Wupperthal produces a high quality organic variety used for blending in lower quality tea to increase its taste. The Cederberg is the only area in the world where rooibos is grown (Hawkins 2011). Rooibos is well-known for its health properties.

The Karoo formations comprise of a harsh climate with an average rainfall of only 300mm rain per year. These areas provide little value for stock farming or other agricultural activities apart from the private vegetable gardening. Heyns (1987) refers to a study done for the use of olive trees in the valley, but this proposal was never implemented. Olive trees (*Olea europaea*) are adapted to grow in harsh climates and poor soil conditions. As part of the framework olive trees are proposed as an industry to support economic activity in the drier Karoo landscape to the east.



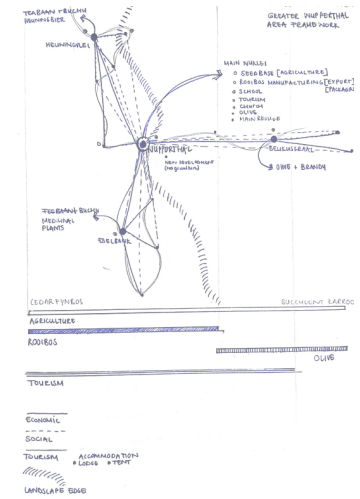
Fig. 7.7 Existing social network (Franklin 2015)



Fig.7.8 Proposed tourism network (Franklin 2015)

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework



GREATER WUPPERTHAL AREA
FRAMEWORK (38 000ha)

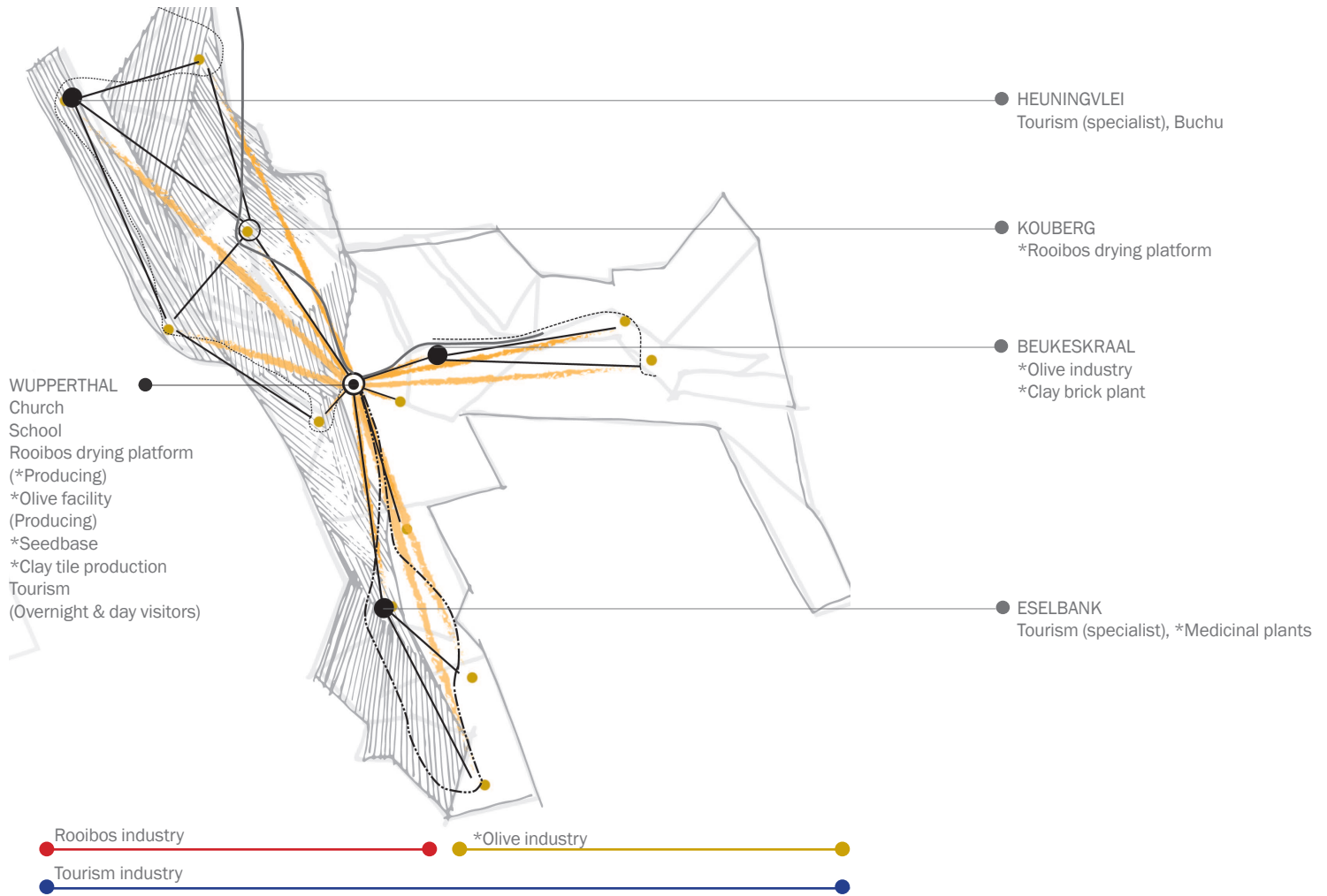


Fig. 7.9 Greater Wupperthal Area Framework (*proposed) (Franklin 2015)

Tourism, as part of Cape Nature Heritage Route, comprises of hiking routes linking some of the smaller outposts. Accommodation, catering, donkey cart rides and the use of guides are some of the economic spin-offs that occur as a result of tourism. Tourism is not only limited to these hiking routes, but outposts can be reached as a destination in itself by gravel roads, mostly only accessible by high clearance vehicles. The isolation and condition of the roads dictates the ‘specialist visitors’ to the greater area while Wuppertal itself receives more day visitors. Specialist visitors have an interest in specific activities such as hiking, birding and botany.

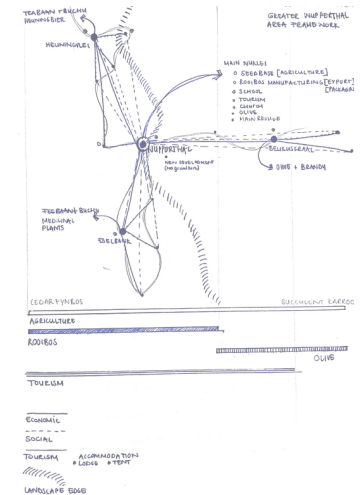
Wuppertal as socio-economic hub to its people (including all fourteen outposts) needs to support and represent these functions. The social composition of Wuppertal as described in Figure 7.9 of this document helped to understand the role the church has to play as support structure. Wuppertal needs to support both agriculture and skills based activities in the larger context. A junction exists where skills and agriculture work together in value added products. Agriculture produces the raw material, but instead of selling it immediately value is added in the form of manufacturing, where rooibos is worked into tea bags and sold at a higher price. Wuppertal would also form part of a platform to sell these products to visiting tourists and even distribute to other areas. With this proposal, jobs are created by these skill based activities support agriculture in the larger area. This would also apply to the proposed olive industry.

Design considerations

- Review the current rooibos drying facility
- Include proposed olive industry in Wuppertal, trees as well as oil pressing and bottling facility
- Explore sustainable tourism in Wuppertal

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework



GREATER WUPPERTAL AREA
FRAMEWORK (38 000ha)

7.2 WUPPERTHAL MISSION FRAMEWORK

The Wuppertal mission framework includes a set of development lines and spatial organisation guidelines that originated from the analysis and ends in a proposal for an inclusion of a mission route as ordering device for the historic town of Wuppertal. This framework follows on the Greater Wuppertal area and continues into the Mission Route Masterplan.

The mapped images on the right stems out of the mapped features in Chapter 6. These mapped features included visibility, boundaries and roads as base layers. The concept of duality was tested on these base layers that directed the decisions with regards to the placement of development lines and buffers. The layers of dualities mapped include views, energy flow, and choice diagrams that were informed by the features evident in the cultural landscape.

The strong edge in Wuppertal gave way to the development line and the two buffer areas that need to be addressed as part of the Mission Framework. The inflow and outflow functions informed the second set of boundaries. Here inflow functions (church, school, rooibos facility) are located on the foot of the Cederberg mountain range. The area in between this inflow area and the outflow area (residential area) forms the enabling functions (see Chapter 6 page 71). The mapping of choices highlights the *werf*-like functioning of Wuppertal within its historic core. It is as a result of the lack in legibility that the mission route is proposed with a series of nodes.

The development line forms the outer edge of Wuppertal. This edge is mostly well-defined in terms of its border with rivers or roads. The problematic areas for the buffer is indicated in Figure 7.19. The buffer behind the church will be addressed in the masterplan with the placement of the rooibos platform while the other buffer is a matter of management. The kraal structures are appropriate functional buffers to the larger landscape. These structures will only be allowed to be built with rocks gathered in the area. No roof structures will be allowed. The building line indicates the line in which large buildings (with roof structures) can be placed. The building line is a response to the important transition between the larger natural area, agricultural fields and the build structures. Two areas are marked for development that touches on the historic nodes or ‘absences’, these edges form an interesting interface that will be explored in the sketchplan. The proposed tourism routes are indicated in Figure 7.19. The management of the routes will be discussed in the detail development chapter. Figure 7.22 shows the exploration of nodes and buffers in the development of the framework.

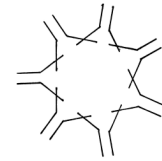


Fig 7.10 Views diagram (Franklin 2015)



Fig 7.11 Visibility analysis in Wuppertal (Franklin 2015)

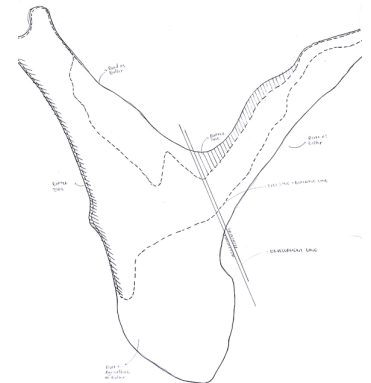


Fig 7.12 Development line, building line and buffer development (Franklin 2015)

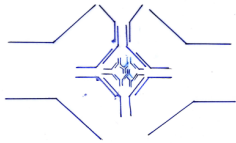


Fig 7.13 Energy flow diagram (Franklin 2015)

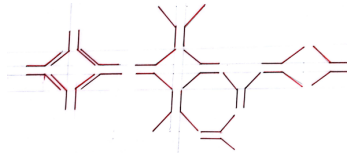


Fig 7.16 Choice diagram (Franklin 2015)

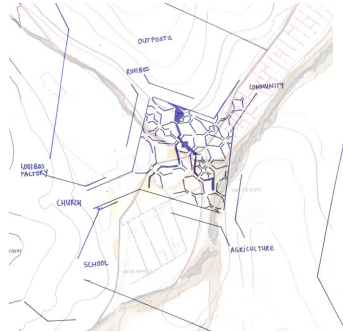


Fig 7.14 Energy flow analysis in Wuppertal (Franklin 2015)



Fig 7.17 Diagram of choices applied to Wuppertal (Franklin 2015)

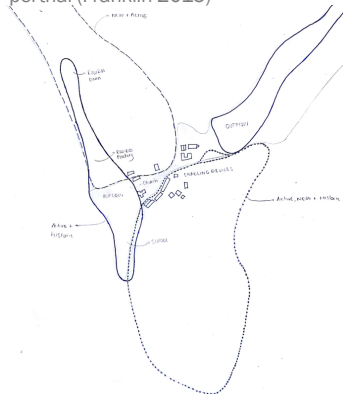


Fig. 7.15 Inflow, Enabling and outflow functions (Franklin 2015)

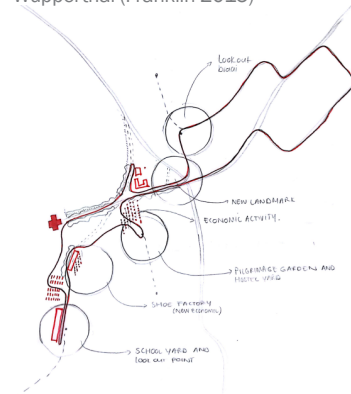
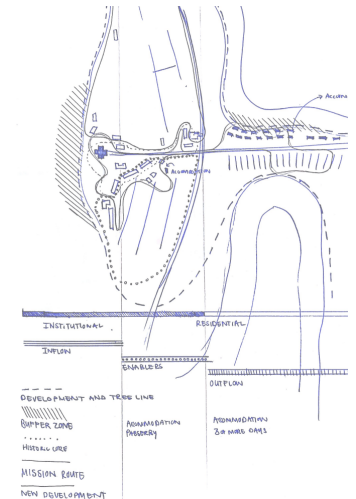


Fig. 7.18 Proposed mission route as master plan (Franklin 2015)

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework



WUPPERTHAL MISSION FRAMEWORK (1.20 ha)

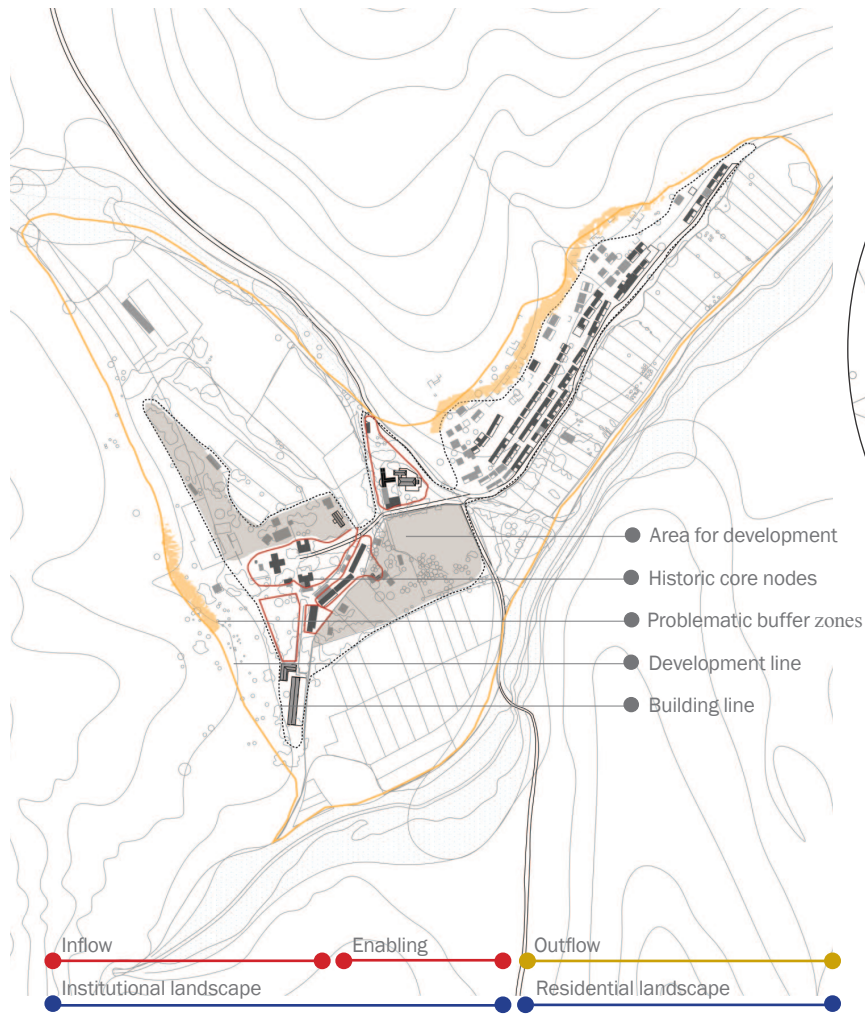


Fig. 7.19 Wuppertal Mission Framework (Franklin 2015)

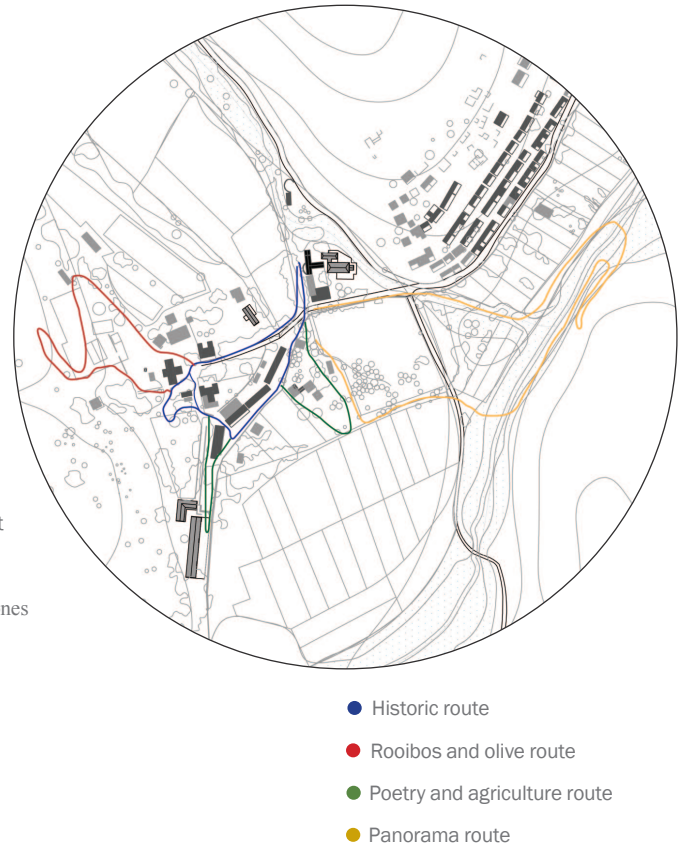


Fig. 7.20 Proposed Tourism Route (Franklin 2015)

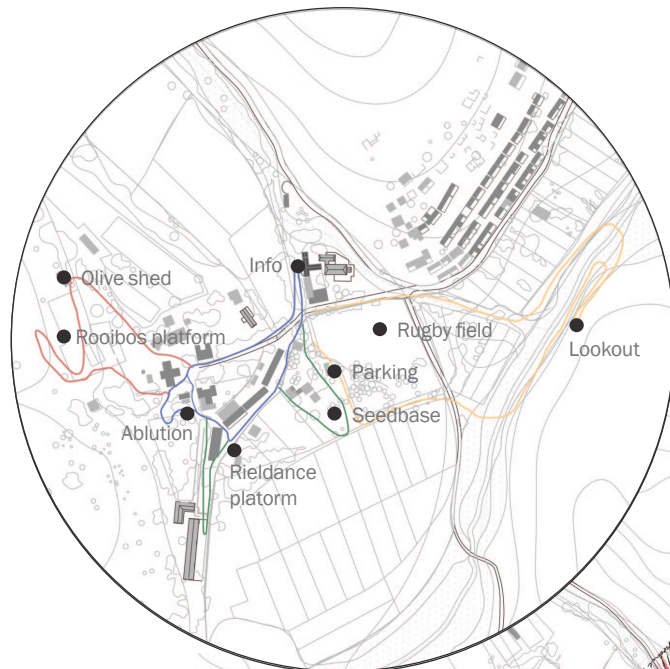


Fig. 7.21 Nodal development along routes (Franklin 2015)

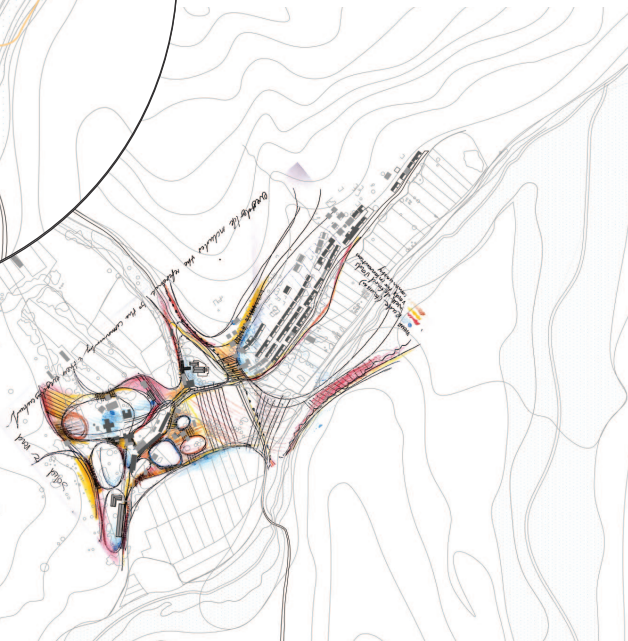
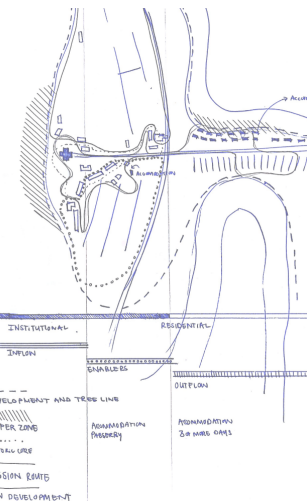


Fig. 7.22 Explorative sketch for the defining of nodes 'presence and absences' (Franklin 2015)

KEY

- O1 Mapping
- A Documentary B Oral C Physical
- O2 Assess significance
- O3 Prepare a statement of significance
- O4 Identify obligations
- O5 Assess vulnerability for future use
- O6 Integrate into a framework



WUPPERTAL MISSION FRAMEWORK (1.20 ha)

7.3 WUPPERTHAL MISSION ROUTE MASTERPLAN

The masterplan was developed from the Mission Framework and proposed nodes along the tourism route. These nodes are mostly as a result of the facilities needed for the residents of Wuppertal as discussed throughout the development of the framework. This set of concept development sketches responds to some



Fig. 7.23 Werf-like layout of the buildings in Wuppertal (Franklin 2015)

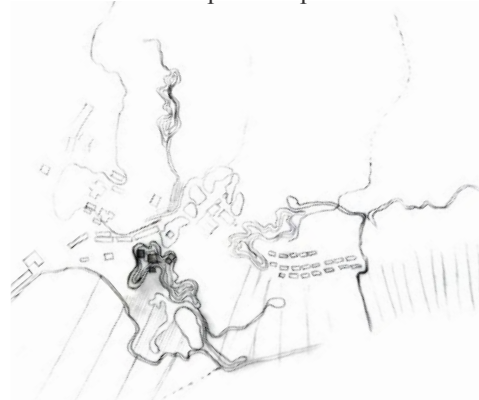


Fig. 7.24 Reaction to the incoherent layout of the buildings (Franklin 2015)

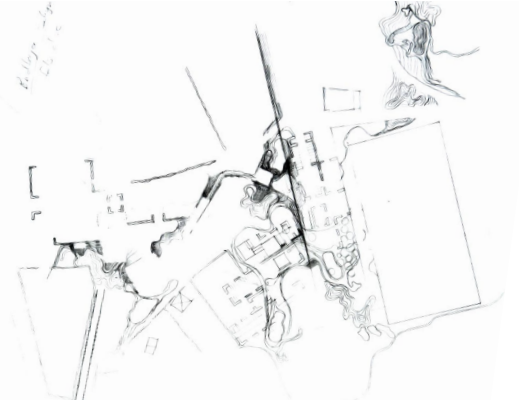


Fig. 7.25 Ordering of free forms (Franklin 2015)



Fig. 7.26 Design development of masterplan (Franklin 2015)



Fig. 7.27 Structuring lines derived from the existing condition (Franklin 2015)

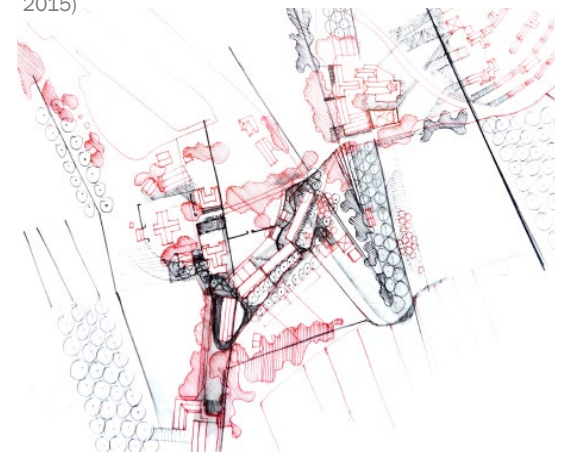
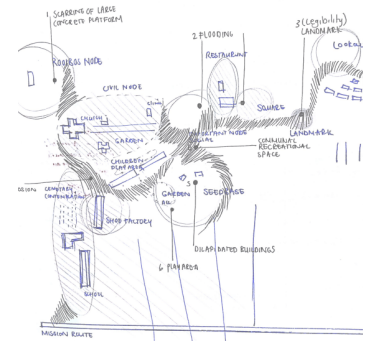


Fig. 7.28 Intuitive sketch (doodle as overlay for masterplan) (Franklin 2015)



KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework



MISSION ROUTE MASTERPLAN (20 ha)

Fig. 7.29 Masterplan development (Franklin 2015)



Fig. 7.30 Wuppertal Mission Framework, existing plan with ordering device (Franklin 2015)



Fig. 7.31 Explorative rooibos platform model (Franklin 2015)



Fig. 7.32 Cut into steep slope (Franklin 2015)



Fig. 7.33 Rooibos drying platform investigation (Franklin 2015)

of design challenges within the cultural landscape. The fragmented nodes and the *werf*-like positions of buildings in Wuppertal added an unusual layer to the design. Conventional responses to the layout of the buildings were not possible and therefore the areas of ‘presence’ were explored as a means to bring order to the areas of absence. The ordering device (Figure 7.30) for the masterplan stems from an attempt to bring balance to the plan.

These lines are drawn from existing features within the landscape. The lines also followed an investigation for an alternative platform for the drying of rooibos tea.

A ROOIBOS DRYING PLATFORM

Rooibos drying courts are half a rugby field of concrete, usually situated on valuable agricultural fields, as the fertile valleys are often the only level area to be found. The rooibos platform was explored as a means to address the problematic buffer behind the church, and the growing need for the cultivation of rooibos in the landscape. The proposal here was to look at a way to integrate this large platform gently into the slope taking into account the minimum turning circle required for a tractor (20m). After visiting the site (due to variations in the slope) it was not suitable for the first proposal of the rooibos drying platform. Further investigation of the slope behind the church opened up a natural platform for this purpose.

B NODES

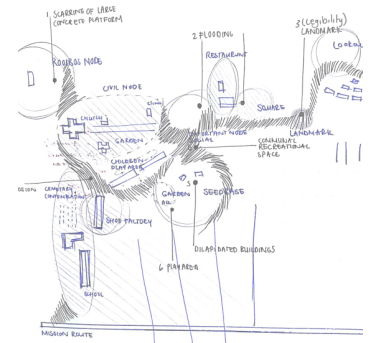
The info office is currently situated at the church. This will be moved to the commercial node to be the first point of entry for any visitor from where the historic route starts and ends. All the historic nodes ‘absences’ will be cleared from clutter and broken features restored. Most of these nodes (especially the church) is in need of a clear boundary. Here the boundary will be reinstated by means of a simple white-washed *werf*-wall.

C SEEDBASE AND CLAY TILE MANUFACTURING

A seedbase is positioned at one of the derelict area, where once the tannery could be found. This area borders the agricultural fields. The seedbase is a facility created to mainly stimulate the use of private agricultural fields (one of the most significant features of the cultural landscape). The seedbase will facilitate the buying and selling of vegetable seeds and function as an educational centre for the agricultural methods used in Wuppertal. A restaurant is proposed as part of this node to draw visitors to the seedbase. The seedbase forms part of the sketchplan and will be discussed as part of the technical investigation. A clay tile factory will also be placed in this area. In close proximity to the old foundations

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework



MISSION ROUTE MASTERPLAN (20 ha)

7.4 PLAN OF EXISTING CONDITION

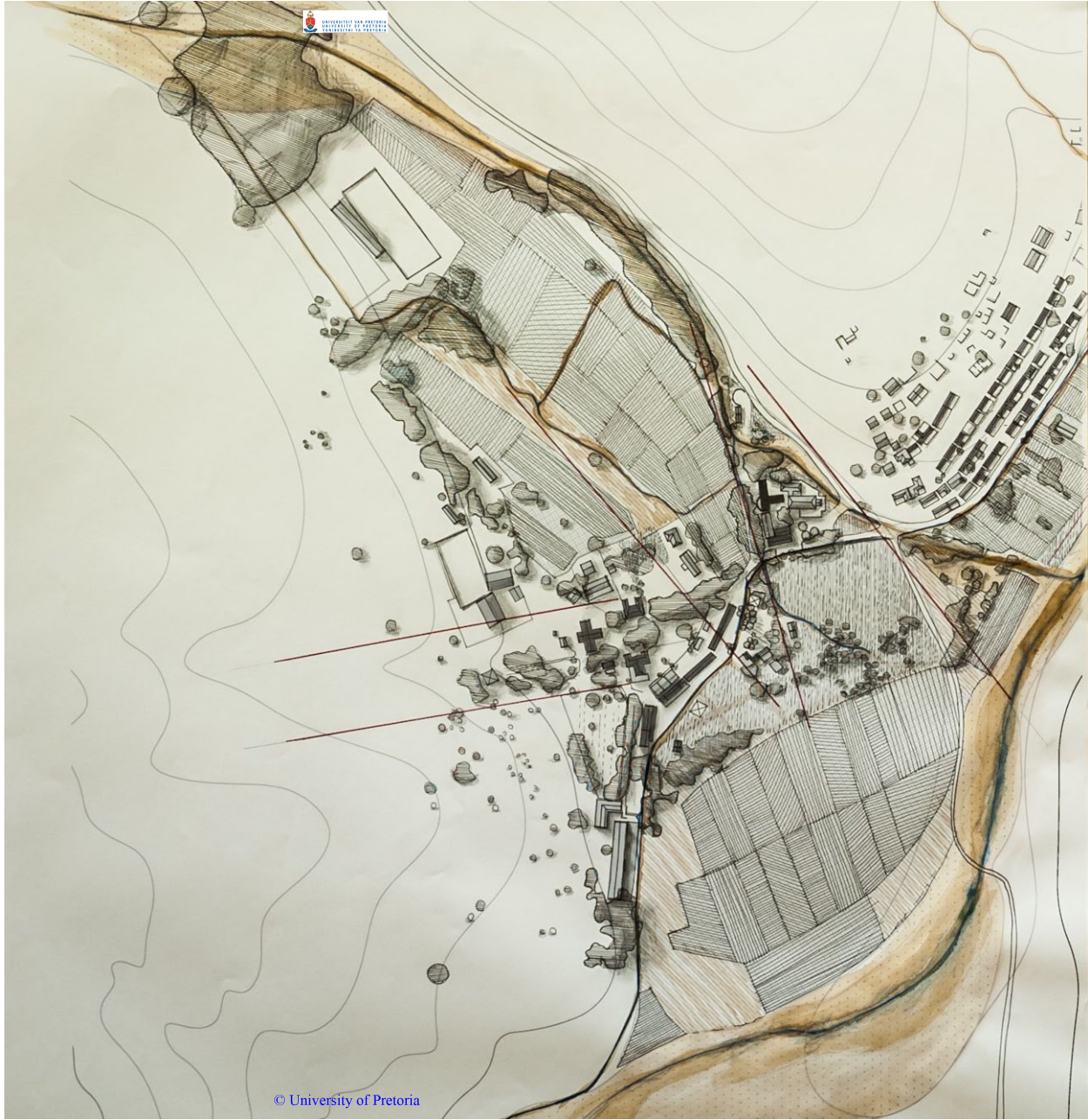


Fig. 7.34 Finding an ordering device within the existing landscape (Franklin 2015)



LEGEND





Fig. 7.35 Users of Wuppertal; resident, visitor, donkey (Franklin 2015).



Fig. 7.38 Hierarchy in Wuppertal (Franklin 2015)



Fig. 7.41 Gateways exploration (Franklin 2015)



Fig. 7.36 Separation lines (Franklin 2015)



Fig. 7.39 Strangeness mapping (Franklin 2015)

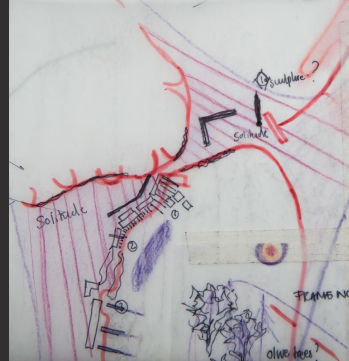


Fig. 7.42 Historic node (Franklin 2015)

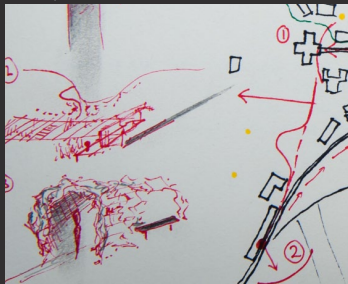


Fig. 7.37 Moment intervention (Franklin 2015)

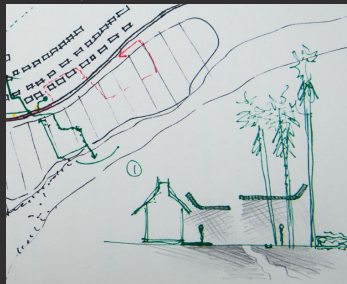


Fig. 7.40 Structure as gateway (Franklin 2015)

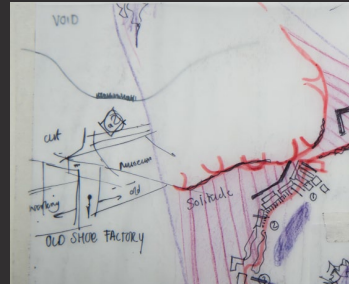


Fig. 7.43 Change in perspective (Franklin 2015)

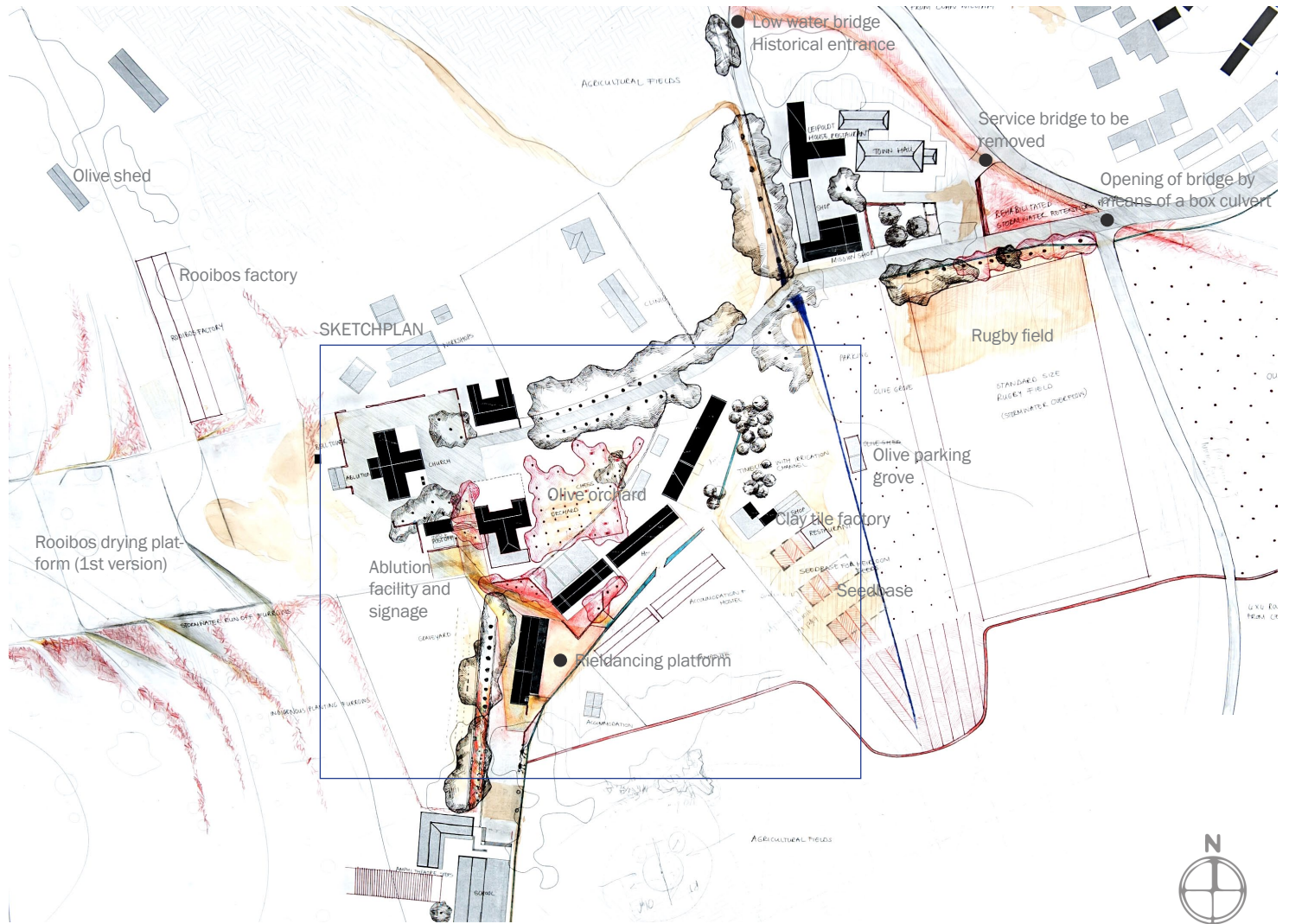


Fig. 7.44 Mission Route Masterplan Version 1 (Franklin 2015)

of the tannery, a suitable area as it once formed part of the daily working space of the town.

D Rugby field

A standard size rugby field was one of the elements proposed during an informal talk with one of the residents and a ‘parking market’ for all pay day. The standard size rugby field could be added by redirecting one of the overflow streams and the removal of some of the palm trees (*Washingtonia*’s). The rugby field will also function as an infiltration basin for the 1:100 year flood. The cut of the rugby field is used for fill of the parking area. The parking area proved to be a good solution to absorb a potential increase in tourism numbers, ensuring that the cars do not crowd the town entrance.

E Bridge structures

An obstruction in the open channel caused the flood events to occur much sooner, even at the 1:2 year flood. The proposal includes the removal of the added service bridge and rather include a low water bridge more appropriate to the historical entrance to the town . The bridge connecting the residents of Wupperthal to the historic town also needs to be opened up. Here a concrete box culvert is proposed to open the channel to its original size that allows for the 1:50 year flood to drain freely. This concrete culvert must be cladded with rock to fit into the cultural landscape.

F Olive grove

The olive industry has been introduced to the Greater Wupperthal Area Framework. Olive groves are introduced to the historic town to fulfil both a ordering as well as productive function. The parking grove is proposed with the use of olive trees and the historic fruit orchard of the rectory to be re-instated with a olive grove. The olive shed will facilitate the pressing of olive oil and processing of table olives and form part of the productive route in Wupperthal.

G Rieldancing platform

The rieldancing platform is part of the public open space in Wupperthal and the accentuation of the old shoe factory. Here the rieldancing platform, only a bare patch of soil will be framed with a raised edge enabling this area to function as a sedimentation basin for stormwater before it is released into the irrigation channel through a series of weepholes. The rest of the public space is provided with gathering areas under trees as part of a time line that tells the story of the intimate relationship between man and nature in such an isolated area (see sketchplan in the next chapter).

H Interpretation centre

The interpretation centre is situated next to the post office. This also forms part of an area in Wuppertal which is vital link for a circulation route. This link is currently the sloped backyard of the rectory and post office with signs of erosion. The backyard includes the functional components added to the historic building such as an ablution facility and shed. The response to these structures will be discussed in detail in the technical investigation chapter. Here a new structure will allow these functions to be integrated into historic fabric with the use of contrasting material showing the new additions. This structure will accommodate signage panels as part of the interpretation centre.

7.5 WATER STRATEGY

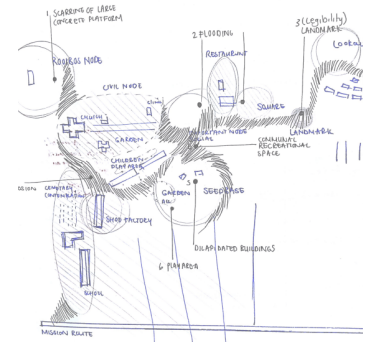
Water is the lifeblood of Wuppertal, the one element that enabled a community to settle in such isolation. Water from two perennial streams are intercepted and used for the irrigation of the agricultural fields before it is released back into the Tra-tra river. Four main aims for water strategy is discussed in the following pages.



Fig. 7.45 Water in Wuppertal (Franklin 2015)

KEY

- 01 Mapping
- A Documentary B Oral C Physical
- 02 Assess significance
- 03 Prepare a statement of significance
- 04 Identify obligations
- 05 Assess vulnerability for future use
- 06 Integrate into a framework



MISSION ROUTE MASTERPLAN (20 ha)



Fig. 7.46 Service bridge (Franklin 2015)



1. Management of occasional flooding

- Removal of service bridge
- Installation of low water bridge at historic entrance
- Implementation of concrete box culvert cladded with rock at bridge connecting to residential area



Fig. 7.47 Redirection of overflow stream (Franklin 2015)



2. Redirection of overflow stream

- Rugby field to function as 1:100 year flood infiltration basin
- Redirection of stream to form edge between seedbase and parking area



3. Treatment of greywater from ablation facilities.

- Separation of greywater and blackwater
- Greywater system to flow through a series of wetlands for cleaning
- The testing of plants endemic to the Cederberg for use in the wetlands



Fig. 7.48 Ablution facilities in Wupperthal (Franklin 2015)



4. Erosion control

- Erosion control for surface runoff to form part of the planting strategy



Fig. 7.49 Erosion next to post office (Franklin 2015)

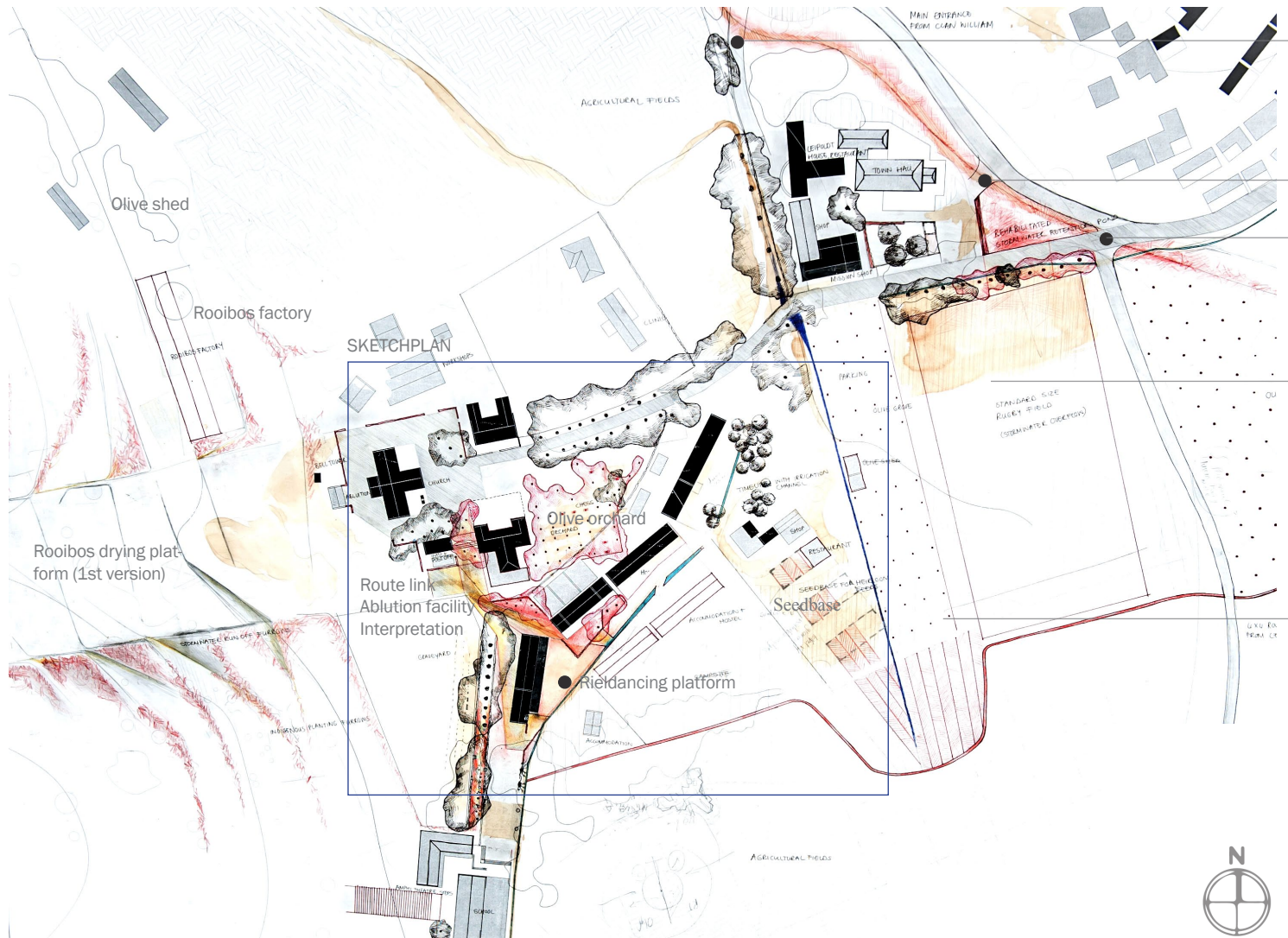
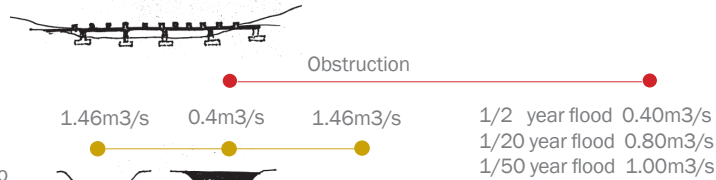


Fig. 7.50 Mission Route Masterplan version 2 (Franklin 2015)

Proposed low water bridge to re-appropriate historical entrance to Wupperthal



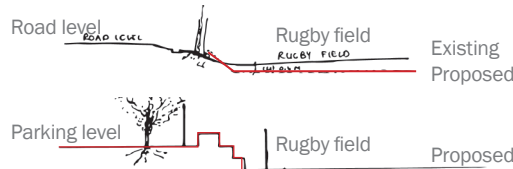
Service bridge (obstruction) to be removed



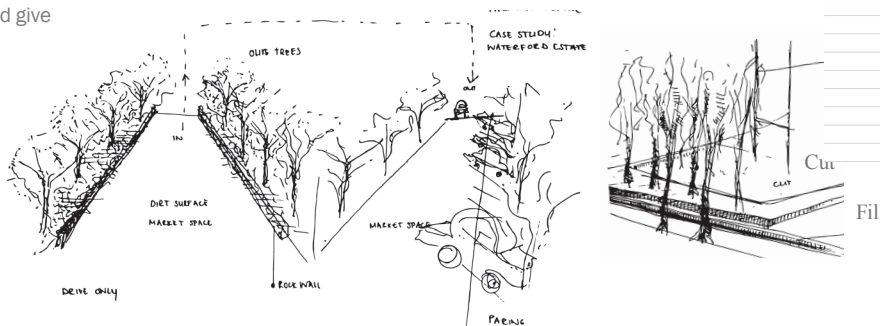
Opening of bridge by means of a box culvert



Standard size rugby field (Flood retention incorporated in level changes)



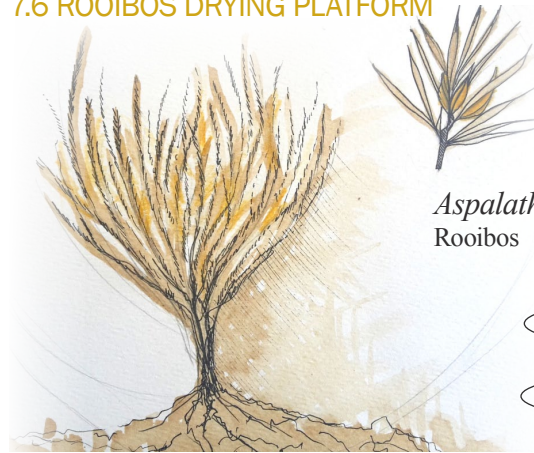
Olive parking grove (Productive plants to define spaces and give shade)



1/2 year flood (m3)	second	0.40	m ³ /s
1/20 year flood (m3)	second	0.80	m ³ /s
1/50 year flood (m3)	second	1.00	m ³ /s
Current Channel (OPEN)			
Hydraulic Radius (Rh=A/P)			
Cross sectional area flow	A=bh	2.00	m ²
Wetted perimeter	P=2h+b	4	m
	Rh	0.50	m
Current Channel (PIPED BRIDGE)			
Hydraulic Radius (Rh=A/P)			
Cross sectional area flow	A=nD ² /8	0.25	m ²
Wetted perimeter	P=nD/2	2.512	m
	Rh	0.10	m
	2x pipes	Rh	0.20
V=(1.486/n)r ^{0.67} *Vs			
manning coefficient	n	0.03	
Hydraulic radius	Rh	0.50	m
slope	s	0.0006	m/m
V=(1.486/n)r ^{0.67} *Vs	v	0.73	m/s
Q=Va	Q	1.46	m ³ /s
V=(1.486/n)r ^{0.67} *Vs			
manning coefficient	n	0.03	
Hydraulic radius	Rh	0.20	m
slope	s	0.0006	m/m
V=(1.486/n)r ^{0.67} *Vs	v	0.40	m/s
Q=Va	Q	0.40	m ³ /s

Cut		
Rugby field	a	9800 m ²
depth	d	0.4 m
Soil volume	v	3920 m ³
Fill		
soil volume	v	3920 m ³
Parking and olive grove	a	4200 m ²
depth	d	0.9 m

7.6 ROOIBOS DRYING PLATFORM



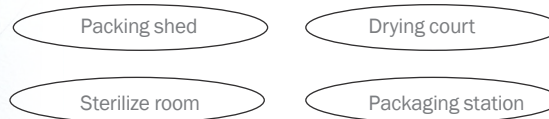
Aspalathus linearis
Rooibos



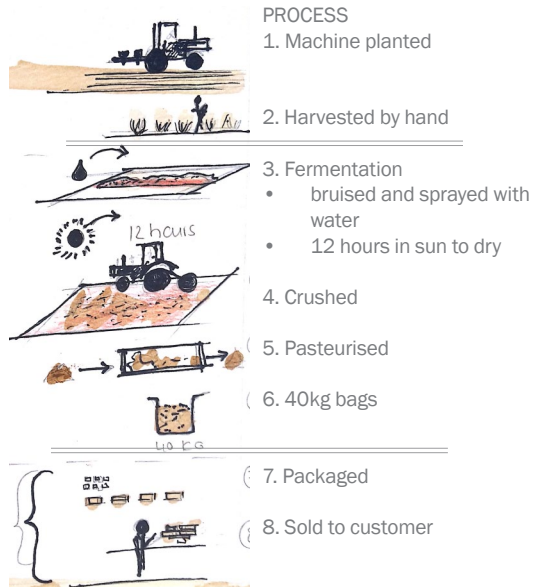
Fig. 7.51 Existing rooibos drying platform (Franklin 2015)



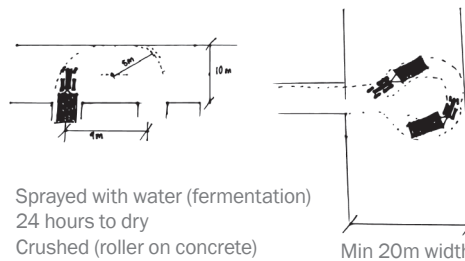
Fig. 7.52 Natural platforms on slope (Franklin 2015)



Rooibos factory



Rooibos drying platform



Sprayed with water (fermentation)
24 hours to dry
Crushed (roller on concrete)
Sweep from floor into bags
Sterilized
packaged

1/2 year flood (m3)	24h	115.94
1/20 year flood (m3)	24h	231.87
1/50 year flood (m3)	24h	289.84
1/2 year flood (m3)	second	0.03
1/20 year flood (m3)	second	0.06
1/50 year flood (m3)	second	0.08

The calculations done for stormwater runoff from such large platform proved not to be a problem for the month of the highest rainfall of 58mm spread over the entire month. Provision will be made for the runoff from a single flood event of 58mm.

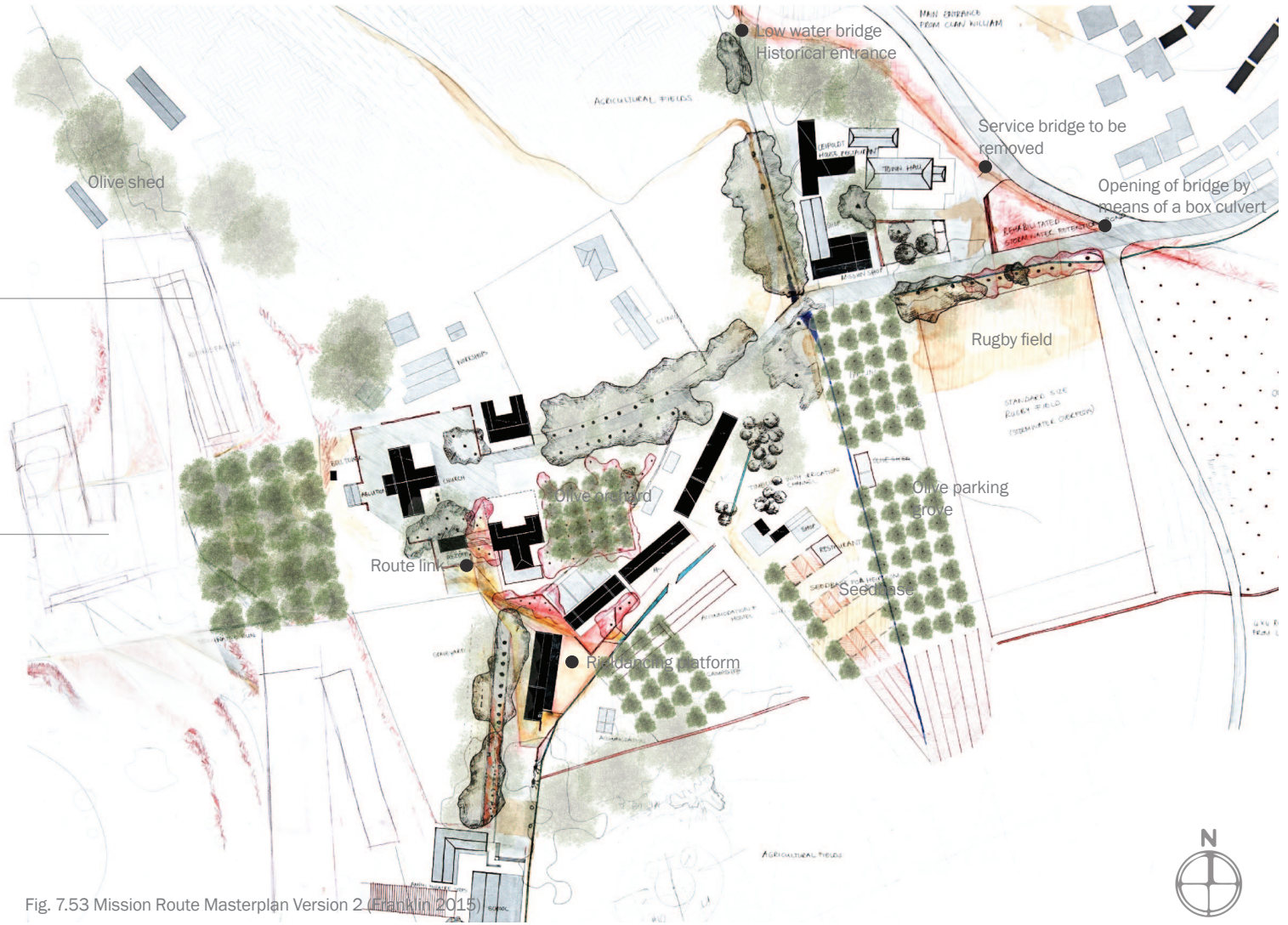


Fig. 7.53 Mission Route Masterplan Version 2 (Franklin 2015)

7.7 FINAL MASTERPLAN



Fig. 7.54 Final Masterplan (Franklin 2015)



- Existing
- Proposed
- Re-appropriated

LEGEND



7.8 SKETCHPLAN DEVELOPMENT

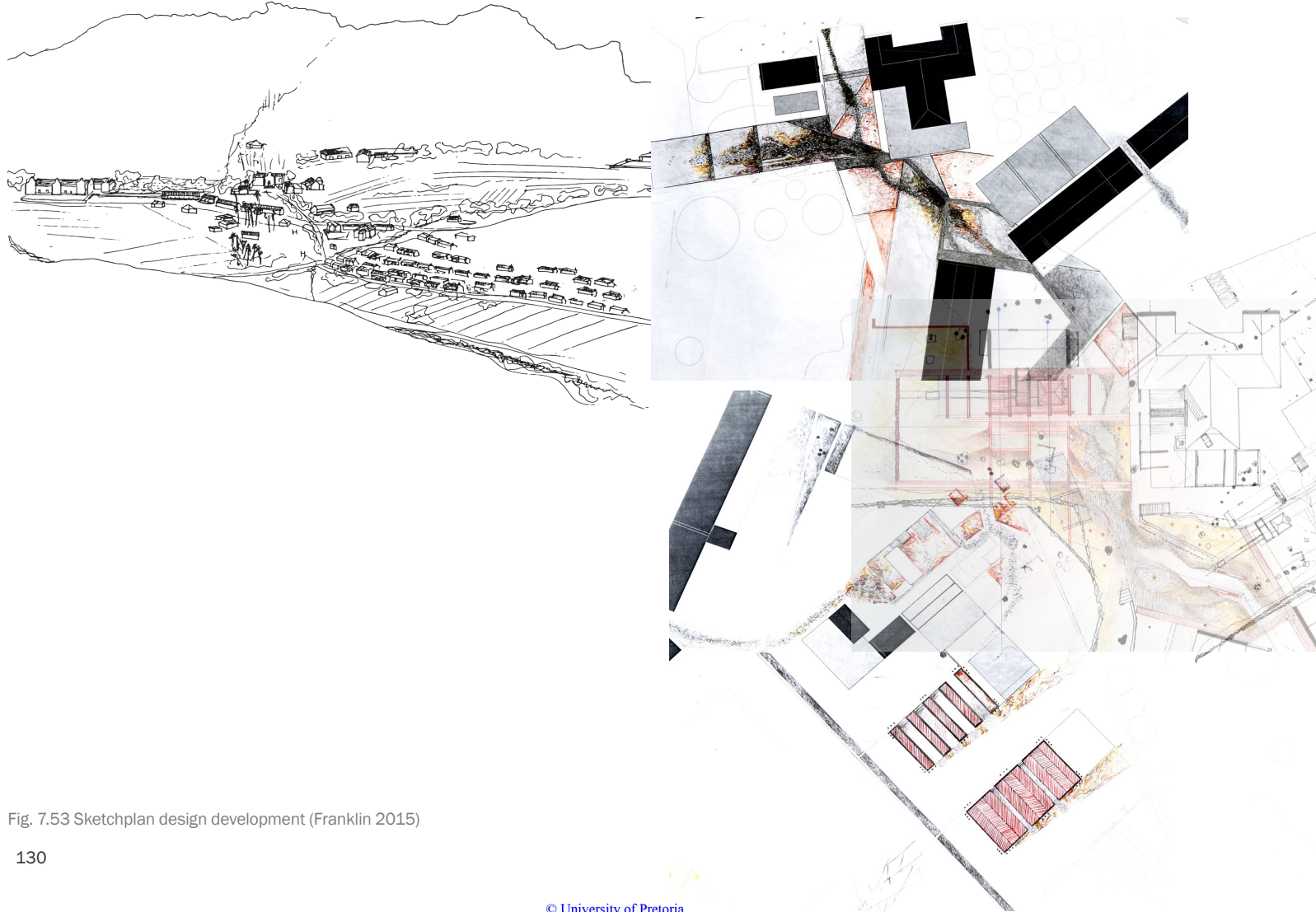
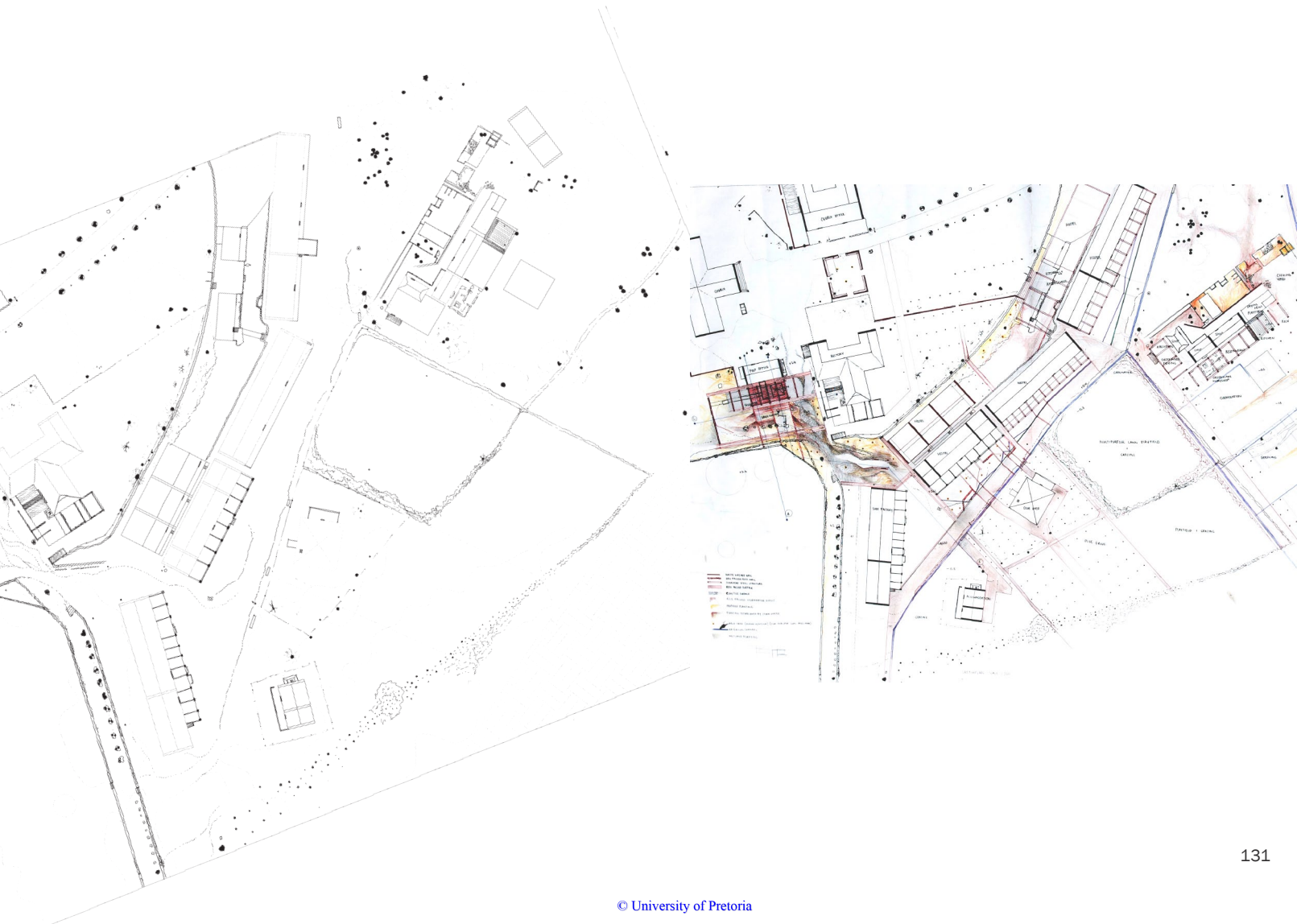


Fig. 7.53 Sketchplan design development (Franklin 2015)





CHAPTER 8

Technical investigation

Fig.8.1 Seating in Wupperthal
(Franklin 2015)

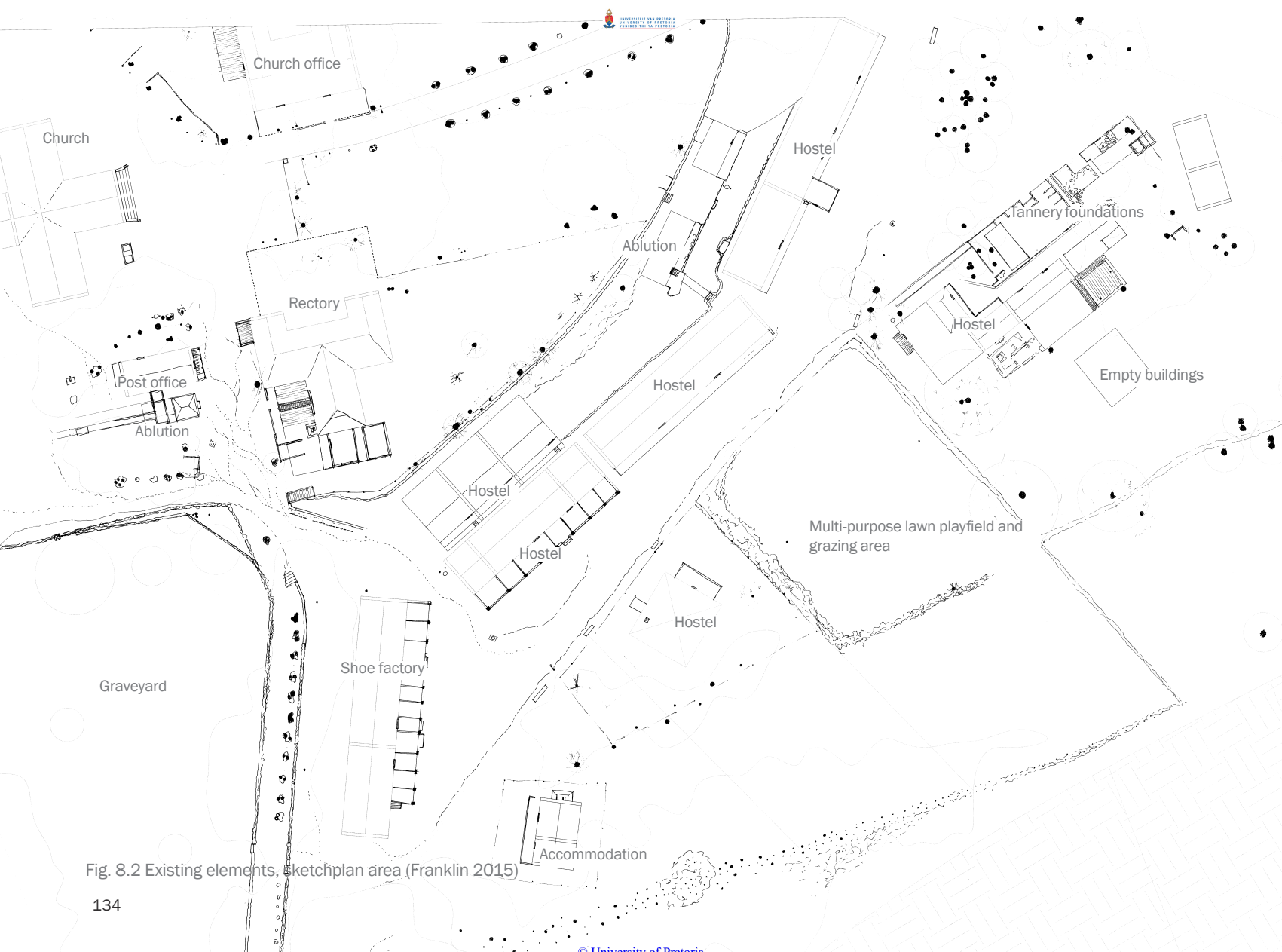


Fig. 8.2 Existing elements, sketchplan area (Franklin 2015)

This chapter will start with the planting strategy adopted in Wupperthal and move to the various industries investigated as part of the sketchplan. The sketchplan followed a different process to the traditional development of such a plan which formed part of the learning process of the author. The technical investigation preceded the development of the plan where the details and systems directed the design. Although the end product of the details and sketchplan may seem simple, it followed a rather complex investigation.

8.1 PLANTING STRATEGY

The planting strategy in Wupperthal stems from the mapping of the vegetation done in Chapter 6. The different vegetation types in the area allowed for an interesting use of plants within Wupperthal. Strict measures should be taken to ensure that only plants endemic to the Cederberg is used within the cultural landscape unless argued by historic importance. It is an important consideration that all plants are chosen from of the same drainage basin, ensuring that the Cederberg as a centre for specific endemism is maintained. The following strategies are applied to the historic town of Wupperthal; planting as restorative, place-making, and educational device.

A PLANTING AS RESTORATIVE DEVICE

The historic unit of Wupperthal is characterised by the large *Eucalyptus* trees and dusty voids. The restoration of this tree rich unit includes the substitution *Eucalyptus* with indigenous trees over a period of time. Although the Cederberg area with its various vegetation types does not include a wide range of larger trees, care was taken to select trees that does grow in the Cederberg. Species were selected on their growth form and character to ensure the continuation of the historic character of Wupperthal. Ten percent of the *Eucalyptus* trees will be replaced with these two species and they will in turn create a habitat for other indigenous species to establish themselves, some of the plants in Plant Palette A will be among these species. The *Rapanea* as well as the *Olinia* are found in the wetter kloof of the Cederberg. The edge of Wupperthal is framed by water. A part of the *Eucalyptus* forest will be maintained for the informal use of wood in the area.

The stream that runs on the edge of Wupperthal will be restored by mimicking the habitat of streams in the area. A variety of species will be tested to increase the biodiversity and formation of a habitat within the area and ensure that a reasonable success rate is obtained for the cultivation and commercial use of some of these species.



Fig. 8.3 Entrance to Wupperthal (Franklin 2015)



Olinia ventosa
(PlantZAfrica 2015)



Rapanea melanophloes
(PlantZAfrica 2015)



Zanthedescia aethiopica
(Franklin 2015)



Crassula dejecta
(PlantZAfrica 2015)



Metalasia densa
(PlantZAfrica 2015)



Stoebe plumose
(Franklin 2015)



Juncus species
(Franklin 2015)



Restio filliformis
(Franklin 2015)



Calopsis paniculata
(PlantZAfrica 2015)



Elegia capensis
(PlantZAfrica 2015)



Restio festuciformis
(PlantZAfrica 2015)



Hymenolepis parviflora
(Franklin 2015)



Brachyleana neriiflora
(PlantZAfrica 2015)



Erica caffra
(PlantZAfrica 2015)



Watsonia stokoei
(PlantZAfrica 2015)



Diosma hirsuta
(Franklin 2015)



Fig. 8.4 Perennial stream border of Wupperthal (Franklin 2015)



Fig. 8.5 Restored stream habitat (Franklin 2015)

PLANT PALETTE A
Water habitat mix



Bulbine sp.
(Franklin 2015)



Othonna coronopifolia
(Franklin 2015)



Euphorbia mauritanica
(Franklin 2015)



Rhus undulata
(Franklin 2015)



Carpobrotus edulis
(Franklin 2015)



Cotyledon orbiculata
(PlantZAfrica 2015)



Pelargonium magneteum
(Franklin 2015)



Felicia fruticosa
(Franklin 2015)



Ficus cordata
(Franklin 2015)



Aristea africana
(PlantZAfrica 2015)



Honeybush cyclopia
(PlantZAfrica 2015)



Euryops spesiosissimus
(PlantZAfrica 2015)



Euclea tomentosa
(PlantZAfrica 2015)



Dodonaea viscosa
(PlantZAfrica 2015)



Fig. 8.6 Backyard link between church and shoe factory (Franklin 2015)



Fig. 8.7 Use of plants in change of awareness and scale (Franklin 2015)

PLANT PALETTE B
Agter Sederberg shrubland mix

B PLANTS AS PLACE-MAKING DEVICE

A great appreciation for flowering plants exists in the cultural landscape of Wuppertal (Informal discussion with more than one resident, April 2015). Most of these plants are exotic species that were commonly used in traditional gardening. Plastic flower plants can be found on the graves. Although a number of indigenous flowering species exist within the area, few have been adopted in the creation of space. In the areas of absence, these plants will be used to contrast the large trees and voids with the indigenous shrub typology (Figure 8.8- 8.9) enhancing the experience of the historic nodes. Plants can be used as a privacy device, where it could be used as a low screen for workspaces. The distribution of stormwater in the creation of habitat will be tested (Figure 8.11).

C PLANTS AS EDUCATIONAL

It is proposed that medicinal plants be incorporated at the interpretation centre for educational purposes. The medicinal value of plants is well-known in the area and still assists the people of Wuppertal in some of their needs. The inclusion of these plants will need to be developed in conjunction with the community of Wuppertal in order to understand the value of each of the plants and the representation thereof in the landscape. The same applies for the development of the seedbank where plants fulfil an educational role within the landscape. This knowledge base is however limited to oral traditions and use of the agricultural fields. It was not possible during the time frame of this project to get a complete understanding of this system; a more integrated process will be needed to develop this part of the seedbase. Where the author could play an important role was in the layout of the proposed facilities to enable the trading of seeds including the germination and seedling stations (see sketchplan development).

8.2 OLIVE INDUSTRY

The olive industry was analysed for its spatial impact for the placement of trees within the landscape and the production of table olives and oil. The Mission Olive (*Olea Europaea*) was selected for this purpose and also for its ability to withstand cold. The three different styles of planting were investigated and the high density olive tree planting system proved to be the most appropriate. This system is commonly used for planting in this area. The graph to the right shows the time when olives should be harvested in order to produce the highest quality or most oil. The benefit of this industry is the amount of work created with the pruning of the trees and the harvesting of the olives by hand. The pressing of oil and processing of olives will also create employment opportunities. The production of olives enable the private individual to become a producer of the raw product and in such a way generate income from a single tree. Trees produce their first olives three years after planting.

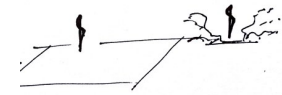


Fig. 8.8 Contrast in scale (Franklin 2015)

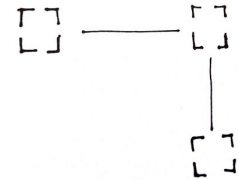


Fig. 8.9 Historic nodes (absences) in-between (presence) (Franklin 2015)

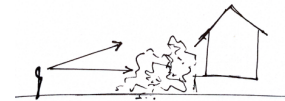


Fig. 8.10 Planting as privacy device (Franklin 2015)

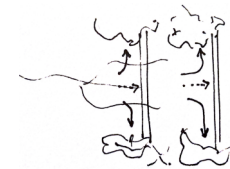


Fig. 8.11 Stormwater dispersal (Franklin 2015)



Olea europea
Mission Olive

Table + Oil
Can withstand cold



Super-High-Density (SHD) planting system

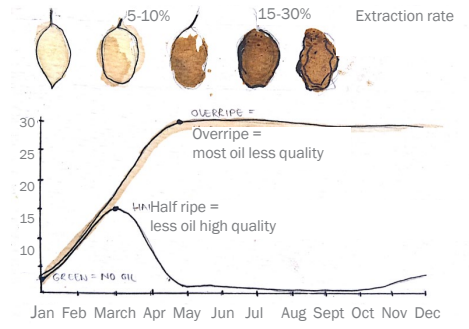


Traditional dry-farmed Olive tree planting system (commonly used on other farms in the area)



High-Density (SHD) planting system

OIL QUALITY vs RIPENESS



Harvest: April - June
(produce olives 3 years after planting, full bearing after 7 years)

Yield: 10t/ha
(1ton = 170l @ 18% extraction rate)

Cooled to 14°C before pressed

Do not plant close to water

100kg nitrogen/ha + potassium + barum (legume, cover crop and manure)

- PROCESS
1. Pressed
 2. Separated (Olives + oil)
 3. Filtered
 4. Bottled



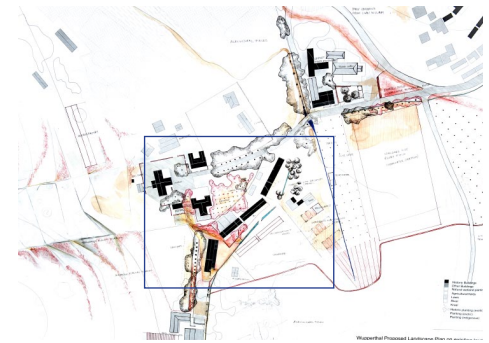
Fig. 8.12 Sketchplan (Franklin 2015)

8.3 SKETCHPLAN

The sketchplan is included here after the discussion of the planting strategy and olive industry which applies to the masterplan and the sketchplan. All items indicated in black is existing, while the red includes the proposed elements.

The majority of the buildings are currently dedicated to functions related to with the hostels. It is proposed that these functions area is consolidated to the three main hostel buildings. Two proposed buildings are in need of an upgrade. These facilities will include extra rooms, kitchen facility and study room that takes place in the other buildings. These buildings will provide space for an olive shed, the production of clay, a seedbase and a restaurant as part of the proposal.

Here one can easily see the different application of the design to the historic nodes ‘absences’ and the areas of ‘presence’ or in-between nodes (discussed in Chapter 3 concept development). The in-between areas show a reduction in scale with the use of planting in order to enhance the experience of the historic nodes, with minimal intervention. A transition can be found between the public space in front of the hostel and the agricultural fields. Even as one walks here you would be confronted with open views and bordered (trees) walkways. The development of the timeline directs the placement of the trees and the direction of the paving (to be discussed in more detail in the November crit).



Reference masterplan

Low white washed werf-wall

Clay tile production facility

Olive orchard

Restaurant

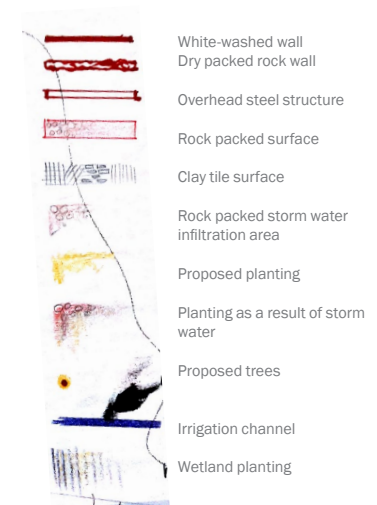
Seedbase

Interpretation centre
with proposed ablution
structure

Public space and time line
development

Olive shed

Rieldancing platform



LEGEND



Fig. 8.13 Appropriation of hostel buildings (Franklin 2015)

- Main hostel buildings
- Proposed (additional) hostel buildings
- Buildings for proposed industries



Fig. 8.14 Absences and presences development (Franklin 2015)



- 'Absences', historic nodes
- 'Presences' functional



Reference sketchplan



Fig. 8.15 Open views and closed orchards (Franklin 2015)

-  Olive orchard
-  Open views to landscape

1. Church werf
(Absence)

2. Interpretation centre
(Presence)



Fig. 8.16 Section through areas of absence and areas of presence (Franklin 2015)

3. Shoe factory (Absence)

Plants as place-making device. Creating more intimate nodes between historic dusty voids and eucalyptus trees.

Existing temporary hostel structure to fit into new building proposal for

Existing hostel building

Rethinking platform in front of shoe factory

Olive grove

1. Church werf
(Absence)

2. Interpretation centre
(Presence)

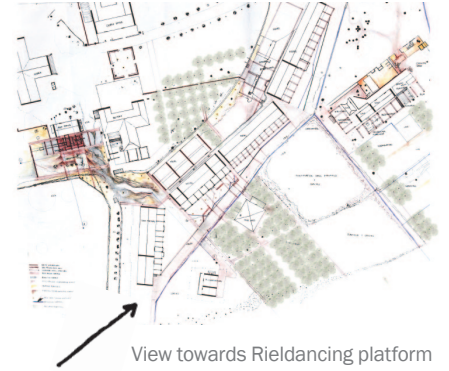
3. Shoe factory
(Absence)



Section line



Fig. 8.17 Perspective of Riedancing platform (Franklin 2015)



Full perspective image

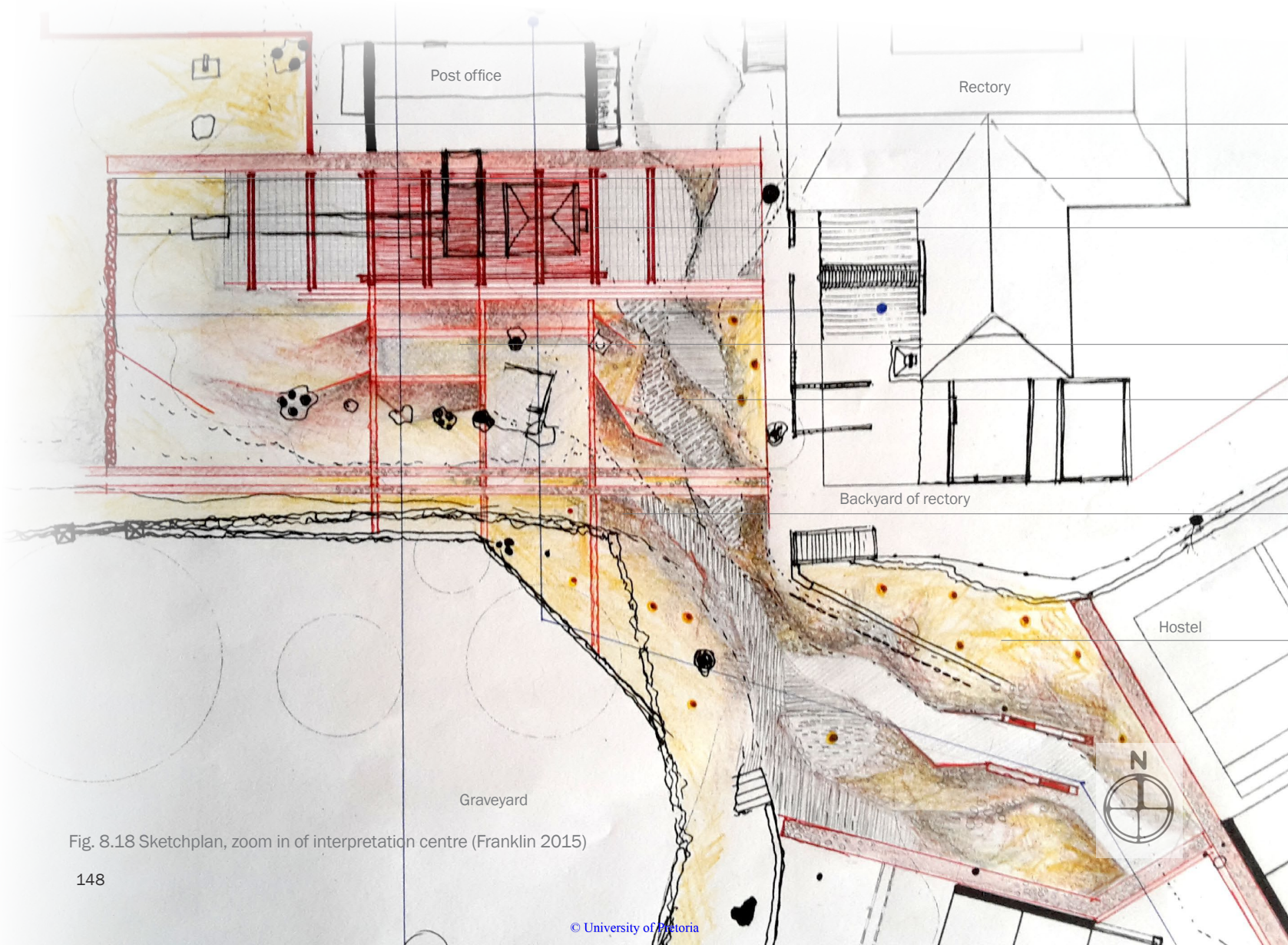


Fig. 8.18 Sketchplan, zoom in of interpretation centre (Franklin 2015)

8.4 INTERPRETATION CENTRE

The proposed interpretation centre is located next to the post office. The interpretation centre stems out of a need for ablation facilities to be added to historic buildings. This shows the effect of development on the historic town. A new typology is proposed in Section 8.6 for the development of these added structures. Here it forms part of the functional requirements of Wuppertal, located in an in-between area and should therefore contrast the existing building in mass and material, showing it as an added building while being designed to fit into the landscape and enhance the historic features (see guidelines for new build in Chapter 6 page 69).



Reference sketchplan

Low white washed werf-wall

Low dry-packed rock wall

Proposed ablation structure
(Existing in black)

Greywater (from handwash basin) recycling system

Paving pattern with locally manufactured clay tiles

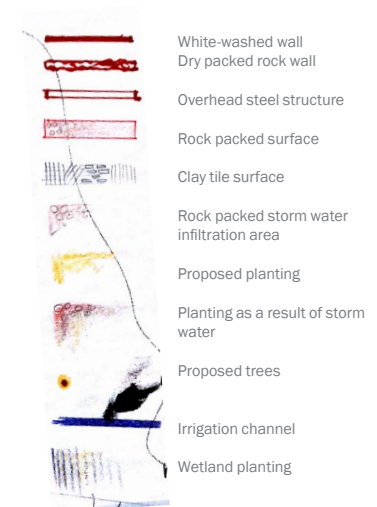
Planting established as part of habitat formation through packing of rocks

Proposed planting edge as privacy device

The greywater and blackwater from the ablation facility is separated and recycled through a series of wetlands discussed in Section 8.7.

The interpretation centre include a series of signage panels that tells the story of Wuppertal. These signs should be developed in close association with the residents. They will be developed on clay tiles manufactured in Wuppertal (proposal on page 152). The manufacturing of clay pavers is also proposed for outdoor use. This paving pattern will be developed further for the November exam.

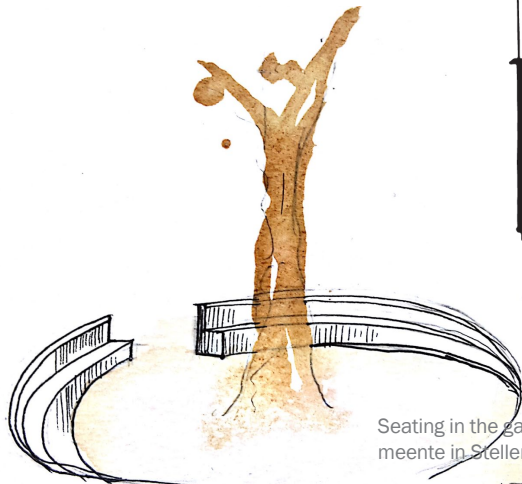
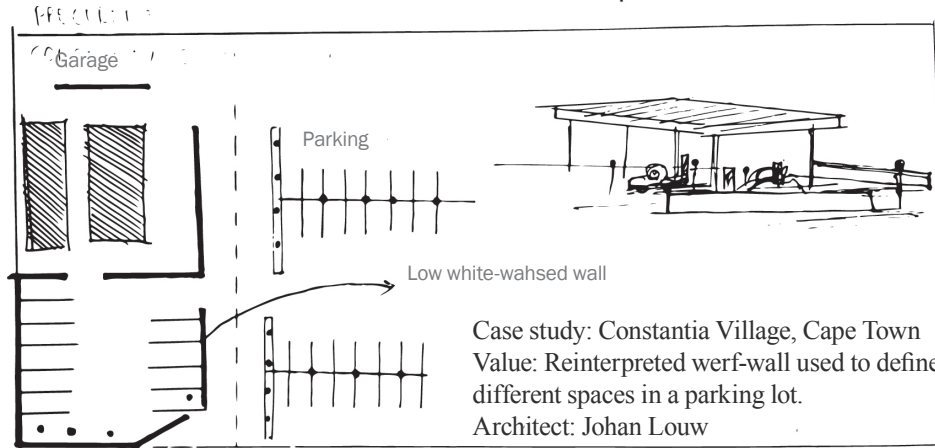
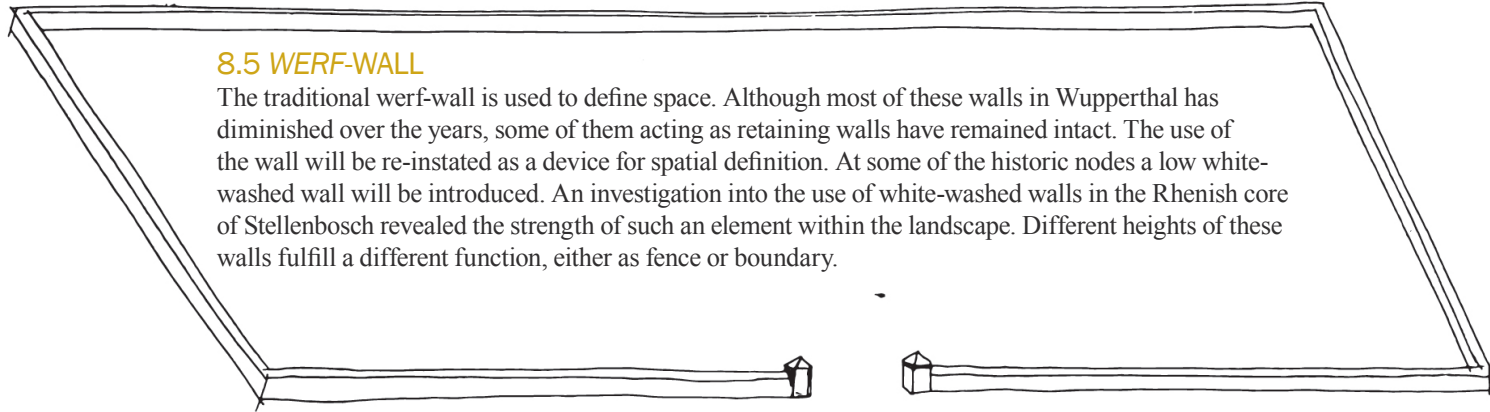
The werf-wall is interpreted within the landscape and clearly defines the edges while at other times it acts as storm water distributors within the landscape. Planting decreases the scale for better appreciation of the historic nodes.



LEGEND

8.5 WERF-WALL

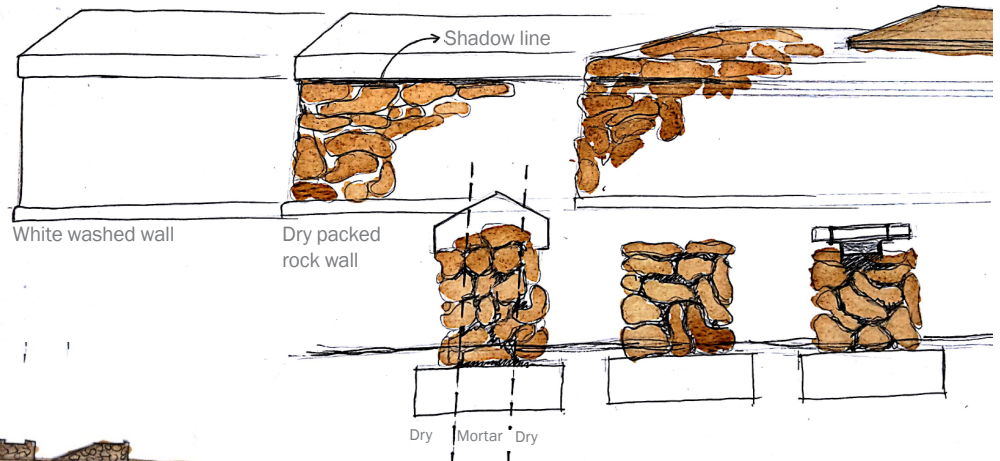
The traditional werf-wall is used to define space. Although most of these walls in Wuppertal has diminished over the years, some of them acting as retaining walls have remained intact. The use of the wall will be re-instated as a device for spatial definition. At some of the historic nodes a low white-washed wall will be introduced. An investigation into the use of white-washed walls in the Rhenish core of Stellenbosch revealed the strength of such an element within the landscape. Different heights of these walls fulfill a different function, either as fence or boundary.



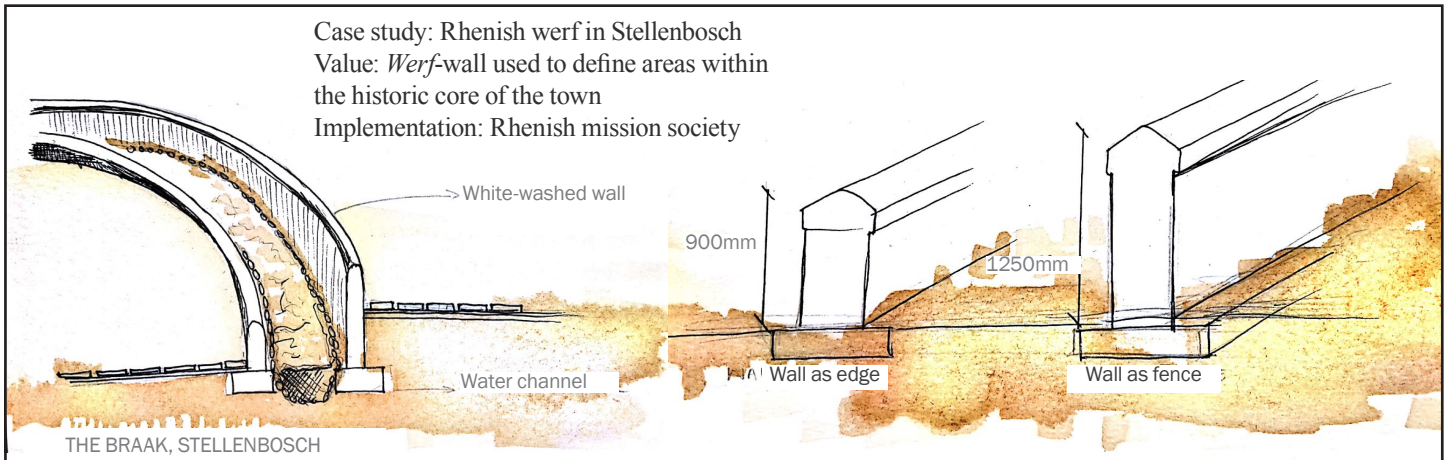
Seating in the garden of the NG-Moederge-meente in Stellenbosch



Fig. 8.19 Traditional boundary wall in Wupperthal (Franklin 2015)



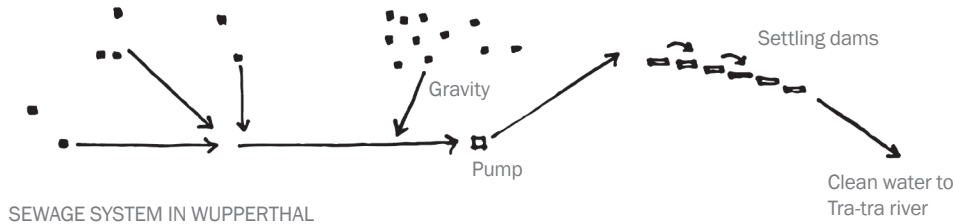
VARIATIONS OF THE WALL



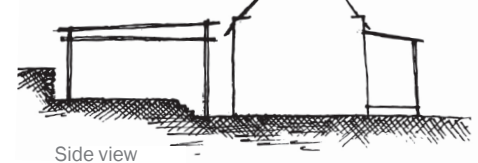
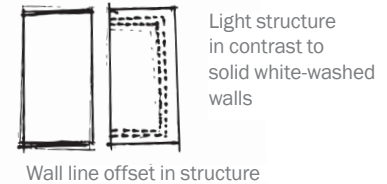
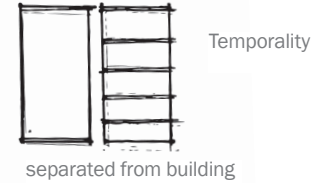
8.6 ABLUTION STRUCTURE

Ablution facilities in Wuppertal form part of infrastructural development that came with an advancement in technology (see Chapter 5 for mapped ablution facilities). The sewage in Wuppertal is gathered by means of gravitation from where it is pumped to a series of settling dams before being released back into the Tra-tra river. A new architectural typology is proposed for these structures and that area added to the existing historic building. The architectural guidelines propose that it follows the stoep typology in contrast to the mass of the solid white-washed wall facade.

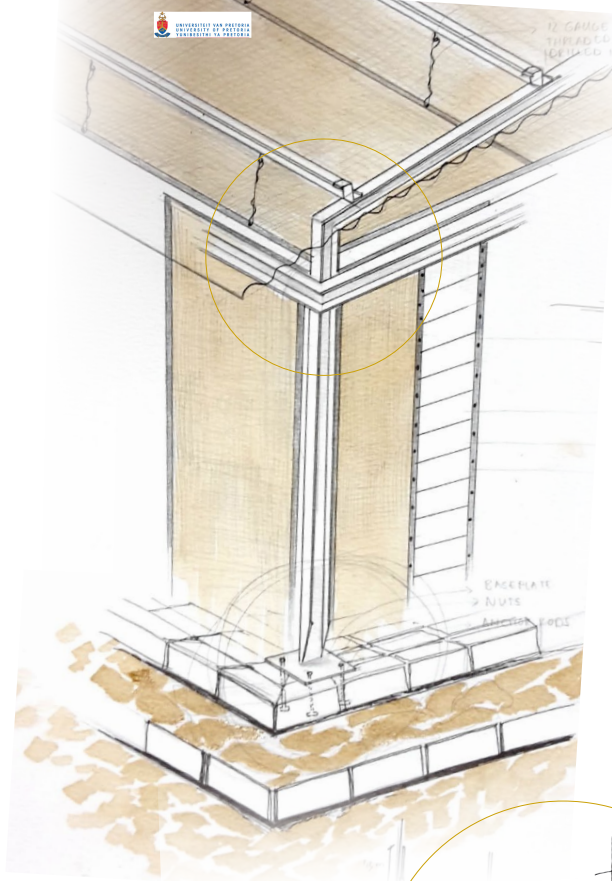
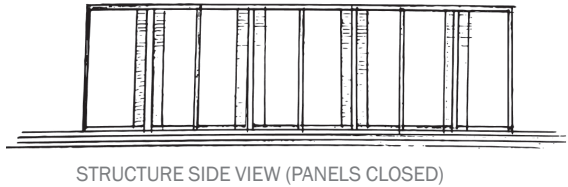
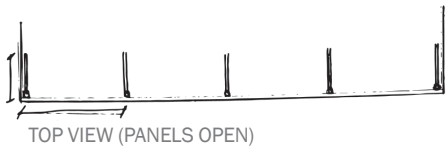
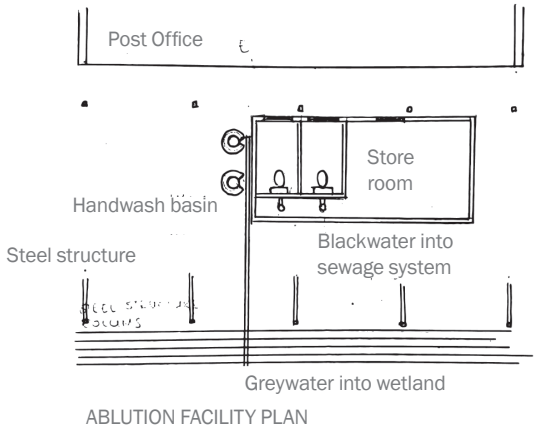
These guidelines are informed by the Burra and HUL charter discussed in Chapter 6, page 69. Any new building should follow the traditional mass of the building in Wuppertal. The proposed ablution facility of the post office will be a pergola type structure clad with thatch panels, that can open and close. Signage will be included on these panels that tells the story of Wuppertal for individual interpretation. Greywater will be treated in a series of wetlands next to the facility, thereby lessening the load on the sewage system.



ABLUTION FACILITIES ADDED IN WUP-



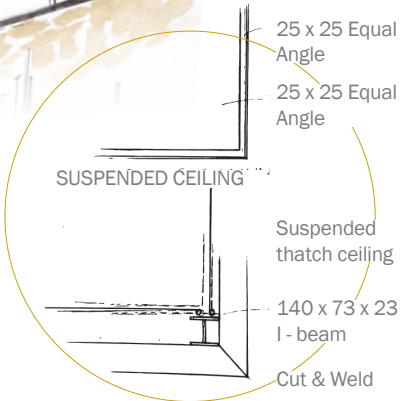
PROPOSED ARCHITECTURAL TYPOLOGY FOR ABLUTION FACILITY



100 x 50 x 20 Z-Lipped purlin fixed at 1.5m

Screw eye

12 Gauge hanger wire threaded through pre-drilled holes



I BEAM JOINT FROM TOP

Greywater produced						
ABLUTION A & B						
Application	water	unit	Amount	people served	Total (L)	Size of pond
Handbasin A	8 to 15	L/person served/day	2	3	90	
Handbasin B	8 to 15	L/person served/day	4	12	720	
					810 L/day	0.81 m ³
						1.62 m ³
						6.48 m ³ 4 day lag time

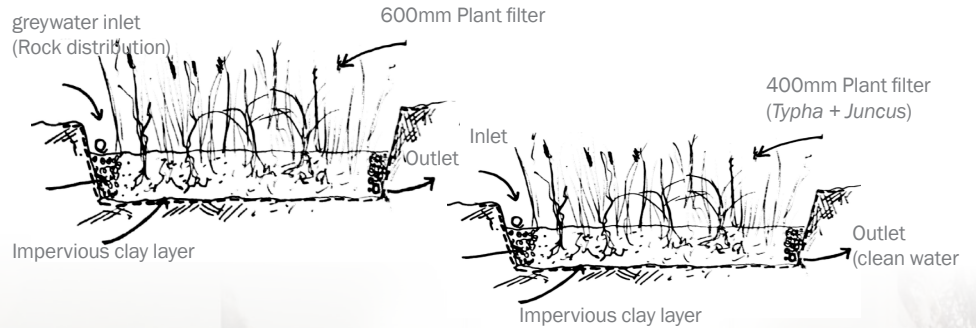


Fig. 8.20 Section through wetland and ablation structure (Franklin 2015)



Calopsis paniculata
(PlantZAfrica 2015)



Elegia capensis
(PlantZAfrica 2015)



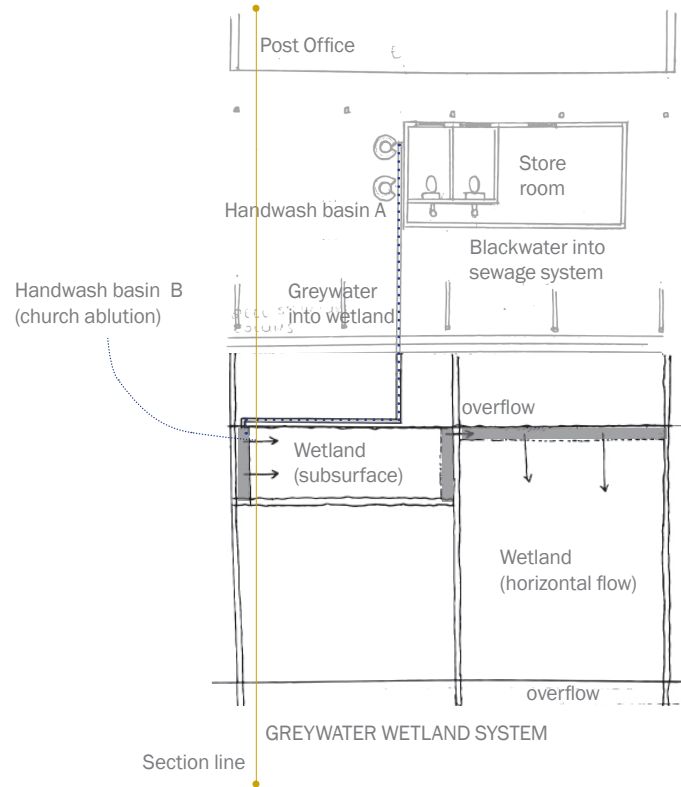
Typha capensis
(PlanZAfrica 2015)



Juncus species
(Franklin 2015)



Restio filliformis
(Franklin 2015)



8.7 GREYWATER SYSTEM

Greywater is all water generated from a household without faecal contamination. Greywater is easier to clean as it contains fewer pathogens and can be used for irrigation after treatment. Water in Wupperthal will be treated with a series of wetlands, the first a subsurface flow wetland to ensure contact with the root area, its overflow to a horizontal flow wetland system. The traditional use of *Phragmites* in the first wetland will be tested with the *Elegia capensis* that grows in the area in its ability to extract nitrates from the water. The second wetland will include the typical use of *Typha* and *Juncus*. The species selected are done to be able to continue growing should the system not receive any greywater to recycle.

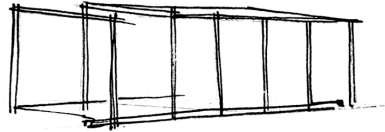




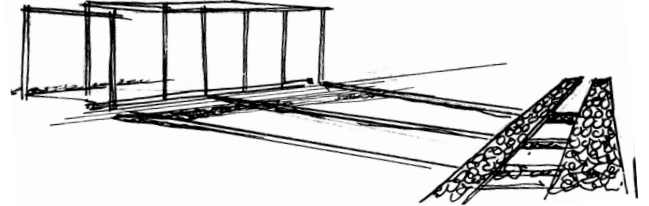
Components applied to site



1. Werf-wall



2. Steel structure



3. Dry-pack wall variation



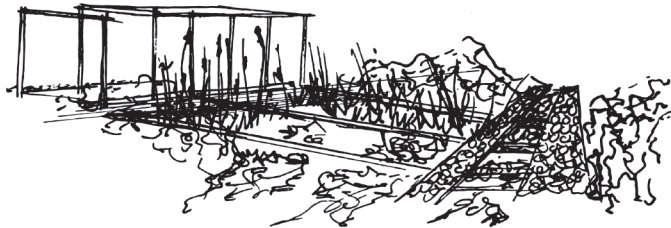
8.8 ABLUTION STRUCTURE COMPONENTS (INTERPRETATION CENTRE)

The images and sections below shows the different components that make up this part of the design and the kind of form it can take on when applied to a site. Each site will have a different interpretation of the technical investigation and the proposed components.

8.9 LIGHTING

Lighting in Wuppertal: Three existing light posts in the historic town (purely functional); on the main square, in front of the hostel and in front of the church. These single lights has the same effect at night as a tree representing a gathering place during the day.

Proposed use of lighting to remain functional, but in a different form. Uplighters under a tree or building provide the necessary light, while providing spaces for gathering at night.



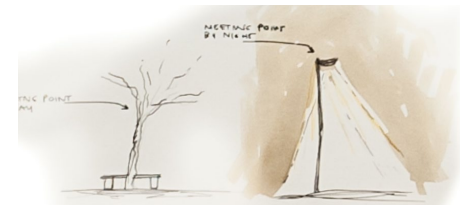
4. Greywater recycling system and planting applied to site



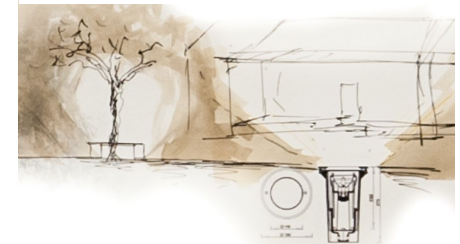
Existing use of lights in Wuppertal



Proposed use of lights in Wuppertal



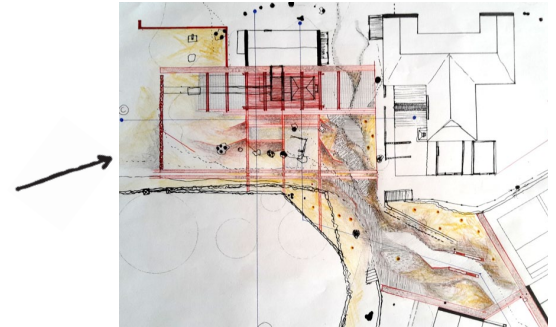
Existing lights in Wuppertal (functional)



Proposed use of lighting in Wuppertal (functional)



Fig. 8.21 Perspective of Interpretation centre (Franklin 2015)



View towards Interpretation centre



Full perspective image



Fig. 8.22 Sketchplan zoom in Clay tile workshop and Seedbase (Franklin 2015)

8.10 SEEDBASE

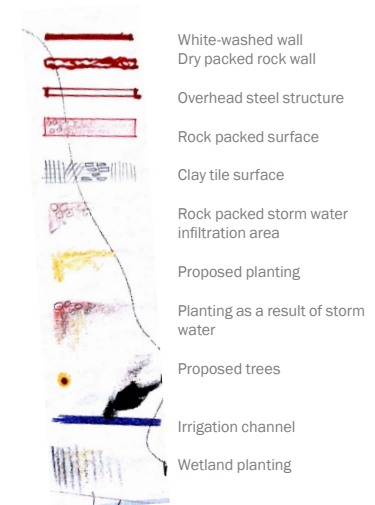
The seedbase and clay tile manufacturing area is located in the same area the tannery used to be (now only the foundations of the tannery left). The clay tile manufacturing adds the same spirit to the place that the tannery added to the space.

Clay from the outposts will be supplied to Wuppertal for the processing into the various clay tile products.

The processing of the clay is in need of the following facilities indicated on the plan:

- Storage room (raw clay)
- Greenware workshop
- Greenware drying facility (no wind)
- Kiln firing facility
- Cooling platform
- Painting and glazing workshop

The seedbase is discussed on page 154. The seedbase functions as an educational facility that expose some of the intangible processes that shape the land within the Greater Wuppertal Area. The seedbase consist of three main areas. The germination, seedling and planting area each with their different requirements. The components of the seedbase will be discussed in more detail for the november exam.



LEGEND

Proposed hostel kitchen, abluion and additional rooms needed

Proposed abluion structure (Existing in black)

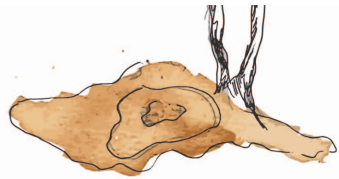
Play area behind hostel building

Seedbase

Public space

Wetland (irrigation overflow)

Olive trees



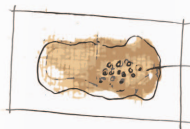
1. Dig out natural clay



2. Add water to double amount of clay



3. Mix to smooth creamy consistence



Discard gravel

4. Screen through a fine sieve



Clear water

5. Settle for 24h, remove clear water



6. Dry plaster container to drain extra water



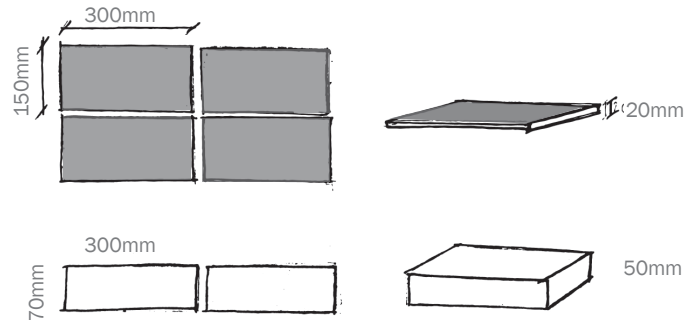
7. Clay bagged in plastic



8. Plasticity test

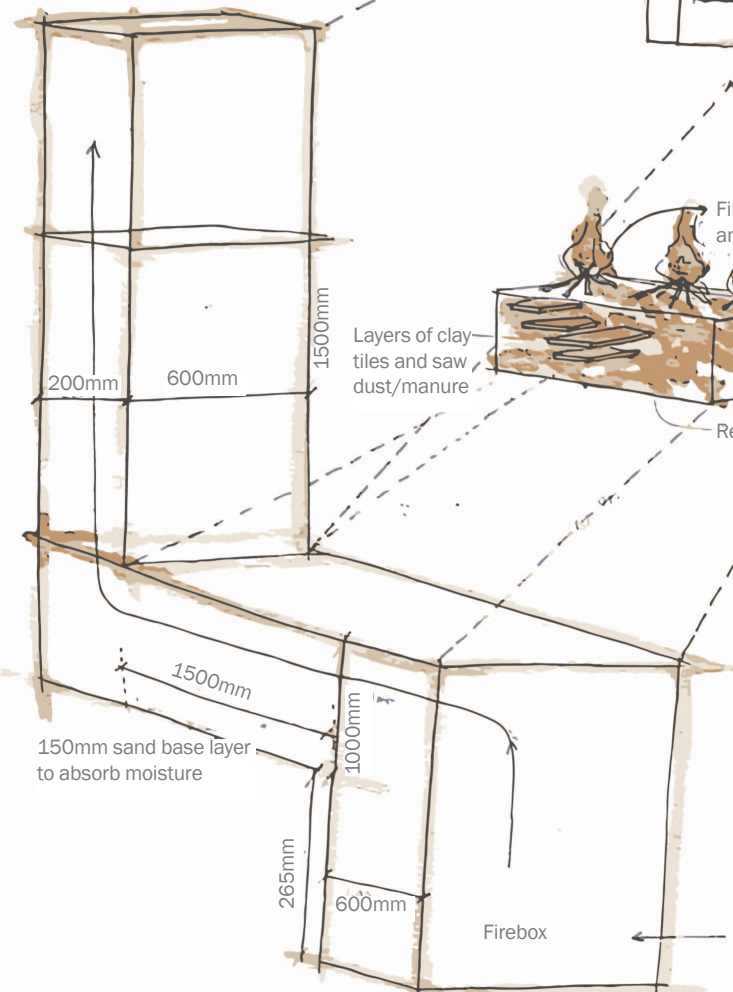
8.11 CLAY TILE MANUFACTURING

Wupperthal has a rich clay deposit in the larger landscape, as discussed in Chapter 6 and again as part of the Greater Wupperthal Area Framework in Chapter 7. It is proposed that this form part of an economic initiative in the historic core. A simple clay tile (red clay) with a black finish is to be used as surface under the steel structures. The black will complement the thatch of the roofs of the historic buildings and contrast against the white walls. The black finish is obtained from a process of a low-firing process and a reduction in air contact. The proposed kiln is built to be adaptable to different firing functions indicated in the diagram to the right. Once a year the area adjacent to the tannery is used for cooking for the church bazaar or festival. During these times the kilns will be used as the traditional oven with the removal of a few clay bricks. Clay tile pavers (yellow clay) with a thickness of 50mm will be used for outdoor paving, blending in with the dust surfaces. Clay is bagged and transported to Wupperthal for product development. Other products to consider include plates, and bottles for olive oil etc. An integrated process needs to be followed to involve the development of the products in close association with the community of Wupperthal.

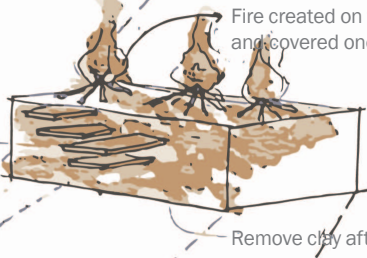


CLAY PAVER AND TILE SIZES

CLAY PRODUCTION PROCESS

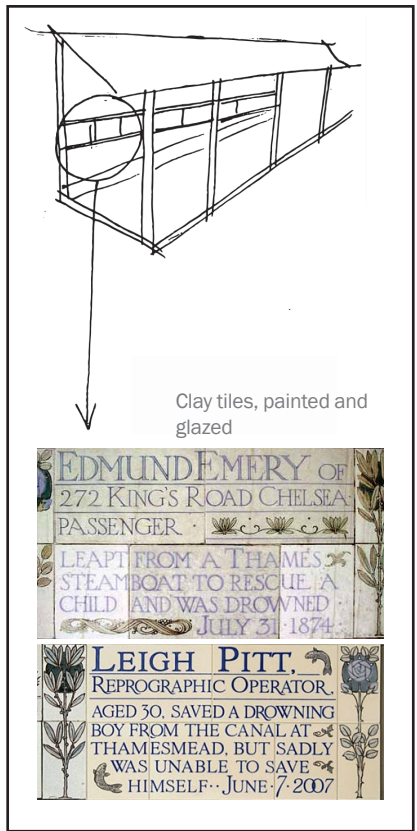


1. Traditional oven in Wuppertal (Preparation of food)



2. Low-firing pottery box for black tile finish (reduction in air contact turns red clay into black tiles, polished with river rocks afterward. No glazing needed.)

3. Glazing and wood fired Groundhog kiln (Traditional baking and glazing of clay)

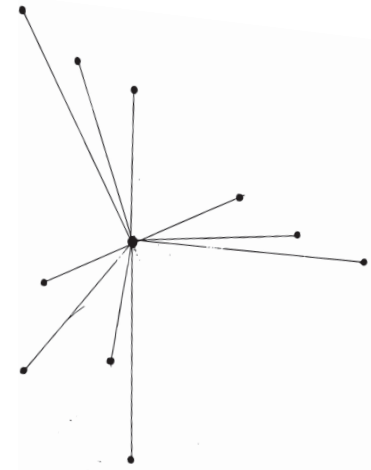


Case study: Postman's Park London Memorial to heroic sacrifice.
Value: Use of clay tiles for memorial plates
Architect: Ernst George
Ceramicist: William de Morgan

8.12 SEEDBASE DEVELOPMENT

The seedbase is a proposal that follows the isolation of Wupperthal and the use of their seed in the agricultural gardens in the larger cultural landscape. The seedbase is developed for the trade of Heirloom seeds building up a larger seedbase free from genetic manipulation. Heirloom means to pass onto next generations. Wupperthal will form the centre for trade of these seeds. Although seeds can be kept for long periods of time the best growth vigour is obtained for planting within a few months of storing. Different seed types need to be stored under different conditions. These conditions differ from seed to seed. Two categories exist, dessication-tolerant and dessication-intolerant seeds. Dessication-tolerant seeds can be prepared for long term dry storage, while dessication-intolerant seeds prefer moist cool places. Most of the seeds fall within the first category.

The seedbase forms part of the planting strategy for the educational use of plants. Part of the seedbase is also to show the germination of seeds and the development through to seedlings before they are transplanted for growing vegetables and the production of seed. The germination and seedling production both have different requirements for the conditions they need. The designing of the structure forms part of the technical investigation. The complete set of technical details will be presented as part of the final crit.



Stimulate seed production and use of agricultural fields in fourteen outposts

Case study: Oranjezicht Community Farm
Value: Integration of active farm into the urban fabric and surrounding community
Landscape Architect: Tanya de Villiers

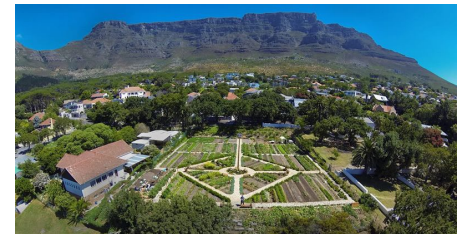


Fig. 8.23 Oranjezicht Community Farm (Franklin 2015)

1. Germination

- Soak overnight
- Light
- Bottom heat
- Cool conditions

DESIGN CONSIDERATIONS
Heat from kilns

2. Seedling

Hardening (increased expose to sunlight):

- 1-3 day (3 hours sunlight)
- 4-7 days (5 hours sunlight)
- 8-10 days (full day sunlight)

DESIGN CONSIDERATIONS
Structure that allows sun exposure to plants with different requirements

Draw people in to move through the plants (hardening of plant structure by simulating movement of animals though plants)

3. Vegetable plants

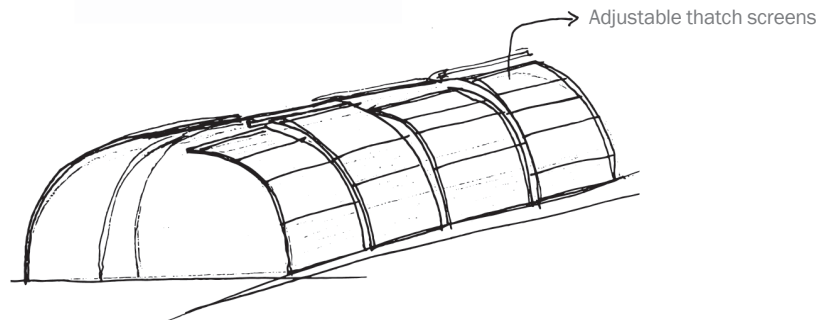
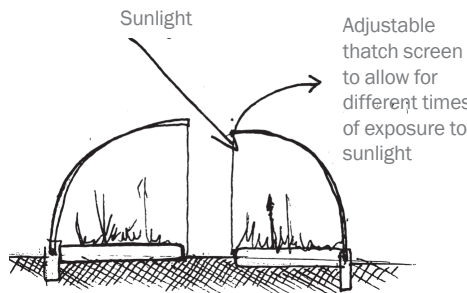
Hardening (increased expose to sunlight):

- 1-3 day (3 hours sunlight)
- 4-7 days (5 hours sunlight)
- 8-10 days (full day sunlight)

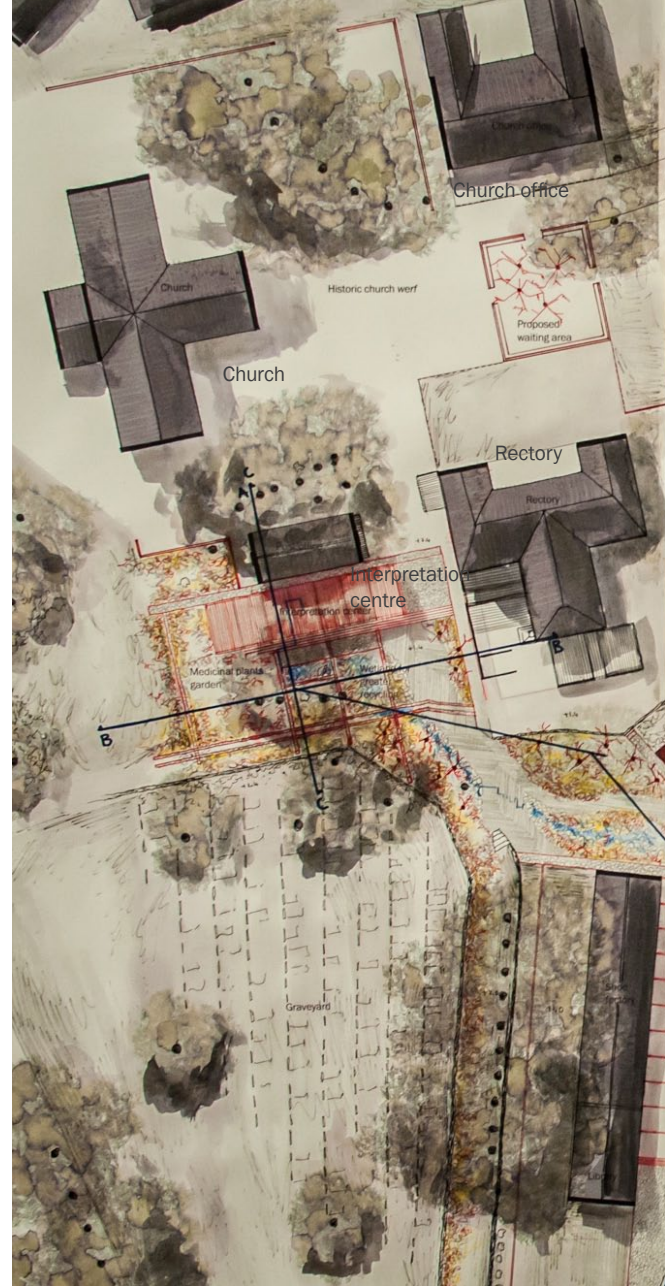
DESIGN CONSIDERATIONS
Educate visitor on traditional ways of agriculture management in Wuppertal:
E.g. Use of manure:

- Onions- pig manure
- Potatoes - Cow manure



To be developed in close relation to the people of Wuppertal and their traditional ways



8.13 FINAL SKETCHPLAN





-  Existing
-  Proposed
-  Re-appropriated

LEGEND



8.14 FINAL PRESENTATION





REFLECTION

Through Landscape Architecture, the complexities in Wupperthal could be comprehended in a way that was sensitive enough to the elements that make up the vernacular landscape, yet bold enough to react to the invisible properties of the land. The difficulty of dealing with cultural landscapes are emphasised by the comprehensive process followed through this study and the time it took to be able to make design decisions. Although Landscape Architecture has the ability to engage with different aspects of the land in a unique way, the study would have been more successful if it formed part of a multi-disciplinary team focusing on Wupperthal.

The study would not have been possible without the engagement with the people of Wupperthal and their shy passion for their land. In the same breath, for this design proposal to succeed, the implementation of the project will need to form part of an iterative design process with close cooperation of the community in the development of this design.

The study of the cultural landscapes has opened my eyes to man's close relationship with nature. Understanding this relationship inevitably informs tomorrow's journey...

Arm was ek gister, en nou is ek ryk.- C.Louis Leipold (Geskrif oor Wupperthal)

APPRECIATION

Aan God al die eer, Wupperthal is meer ingekleur, Gert met jou wysheid en ambisie vir die land en Marilyn met jou agterdog daarvan. Deleen as rigtingwyser trek julle Heuningvlei voor. Voor die verstaan van mense van vêr, en vêr bo die seder se klip formasies.

Daar waar Stef Bos alleen van kon dig, het hy my geselskap gehou as ek julle insette mis, Dan het Belinda kom gesels en kos gemaak asof dit geen moeite is.

Aan Habitat wat my voorgestel het aan Wupperthal en die ure daarna net om daarvoor te stoei. Julle insette word opreg waardeer.

Net wanneer ek 'n bietjie sin begin maak van hierdie vele kant landskap, het Johan N. Prinsloo die horison oor die volgende rantjie al raak gesien. Dan was die dagstap al sy sweet werd, maar die vervulling van die kronkelende paadjie soveel groter. Mag jy nooit ophou sien en uitwys.

Dan was dit lekker om net weer te wees in 'n wêreld saam met Chris, waar die elke dag ons lewe is, en die mense om ons, ons grootste bate is. Wat 'n voorreg om vriende en familie te hê om jou eie wêreld soveel kleur te gee. Hoe begin mens om dankie te sê vir ouers en skoolouers se liefde en omgee?

Maandag na Maandag was Ida daar om rigting te gee aan dwalende vrae. En toe selfs later, sonder verwagting die helpende hand nooit teruggetrek. Ek en Carmen kon nie vir beter vra.

Carmen het dit so mooi bymekaar getrek as dinge oral begin uitrafel, tussen haar en Sue en die res van die klas was almal van ons onder dieselfde las.

Nog 'n finale dankie aan almal wat al êrens na my stories van Wupperthal geluister het en die wat spesiaal tyd gemaak het daarvoor. Lucien le Grange, Johan van Papendorp, Liana Jansen en Graham Young.

CHAPTER 1

Fig.1.1 Wupperthal, beauty in relationship (Franklin 2015)

Fig. 1.2 Locality of Wupperthal (Franklin 2015)

Fig. 1.3 European Imperialism 1914 (Franklin 2015)

Fig. 1.4 Collage of “In het midden” (Franklin 2015)

Fig. 1.5 Poem by author, inspiration by Stef Bos (Franklin 2015)

CHAPTER 2

Fig. 2.1 Historic church of Pella (Franklin 2015)

Fig. 2.2 Towns of the Cape, Genadendal (Fransen 1987)

Fig. 2.3 Genadendal, old mill (Grogan 1878)

Fig. 2.4 Genadendal, aerial photograph (Fransen 1987)

Fig. 2.5 Genadendal, garden (Franklin 2015)

Fig. 2.6 Genadendal, church (Franklin 2015)

Fig. 2.7 Genadendal, old house type (Franklin 2015)

Fig. 2.8 Genadendal, new development (Franklin 2015)

Fig. 2.9 Genadendal, new building (Franklin 2015)

Fig. 2.10 Mamre, mission shop (Grogan 1878)

Fig. 2.11 Towns of the Cape, Mamre (Fransen 1987)

Fig. 2.12 Mamre, church (Franklin 2015)

Fig. 2.13 Mamre, modern houses (Franklin 2015)

Fig. 2.14 Mamre, church office (Franklin 2015)

Fig. 2.15 Mamre, agricultural fields (Franklin 2015)

Fig. 2.16 Mamre, aerial photograph (Fransen 1987)

Fig. 2.17 Pella, graveyard (Franklin 2015)

Fig. 2.18 Pella, rectory (Franklin 2015)

Fig. 2.19 Pella, typical street (Franklin 2015)

Fig. 2.20 Pella, play park (Franklin 2015)

Fig. 2.21 Washerwoman of Pella (Grogan 1978)

Fig. 2.22 Towns of the Cape, Pella (Fransen 1987)

Fig. 2.23 Elim, mission church (Grogan 1878)

Fig. 2.24 Elim, aerial photograph (Fransen 1987)

Fig. 2.25 Upgrades to Elim (Fransen 1987)

Fig. 2.26 Elim, entrance (Google 2015)

Fig. 2.27 Towns of the Cape, Genadendal (Fransen 1987)

CHAPTER 3

Fig. 3.1 Mountain and Valley (Franklin 2015)

Fig. 3.2 Vision Collage (Franklin 2015)

Fig. 3.3 Mission church (Franklin 2015)

Fig. 3.4 Tree lane in front of the church (Franklin 2015)

Fig. 3.5 Protestant Bible (Franklin 2015)

Fig. 3.6 Diagram illustrating complex use of space in Wupperthal (Franklin 2015)

Fig. 3.7 Concept diagram

Fig. 3.8 Western worldview of music, the opera (Operawatch 2015)

Fig. 3.9 African worldview, music as part of

everyday life (Africacouncil 2015)

Fig. 3.10 Vision, current condition (Franklin 2015)

Fig. 3.11 Vision, proposed (Franklin 2015)

CHAPTER 4

Fig. 4.1 Heuningvlei, the unintentional aesthetic (Franklin 2015)

Fig. 4.2 Explorative sketch, remembrance of Wupperthal (Franklin 2015)

Irrigation line

CHAPTER 5

Fig. 5.1 Wupperthal, isolated beauty (Franklin 2015)

Fig. 5.2 Explorative sketch, Timeline (Franklin 2015)

Fig. 5.3 First church building, 1830 (Bilbe 2011)

Fig. 5.4 ‘Nach der Conferens im Wupperthal’ Image from museum in Wupperthal (Franklin 2015)

Fig. 5.5 Shoe makers in front of shoe factory (Fransen 2004)

Fig. 5.6 Tannery in Wupperthal (Fransen 2004)

Fig. 5.7 Onions from agricultural gardens (Gardin 1987)

Fig. 5.8 Diagram explaining the formation of a community in Wupperthal according to Bilbe (2011). (Franklin 2015)

Fig. 5.9 German economic agricultural composition (Franklin 2015)

Fig. 5.10 Fourteen outposts of Wupperthal, 2015 (Franklin 2015)

Fig. 5.13 Mission bazaar (Fransen 2004)

Fig. 5.14 Mission building (Fransen 2006: 135)

LIST OF FIGURES

- Fig. 5.15 Houses in Wupperthal (Fransen 2006: 136)
 Fig. 5.16 Wupperthal Development sequence (Franklin 2015)
 Fig. 5.17 Wupperthal timeline (Franklin 2015)
 Fig. 5.18 Map of Wupperthal, 1980 (Fransen 1980)
 Fig. 5.19 Street village and agriculture fields
 Fig. 5.20 Church, 1830 (Franklin 2015)
 Fig. 5.21 School building, 1938 (Franklin 2015)
 Fig. 5.22 Shoe factory, 1838 (Franklin 2015)
 Fig. 5.23 *Asbrood* (Franklin 2015)
 Fig. 5.24 Onions from agricultural fields (Franklin 2015)
 Fig. 5.25 Rooibos tea fields (Franklin 2015)
 Fig 5.26 Dried Rooibos tea (Franklin 2015)
 Fig 5.27 Graskoue Trappers - Rieldancing group (Timeslive 2015)
- CHAPTER 6
- Fig. 6.1 View of Wupperthal from Singkop (Franklin 2015)
 Fig. 6.2 One of the few historically documented maps by a visiting German missionary (Bilbe 2011: 28)
 Fig. 6.3 Closely associated boundary (i.e. river, road) (Franklin 2015)
 Fig. 6.4 Boundary as envelope (i.e. church) (Franklin 2015)
 Fig. 6.5 Road as boundary (Franklin 2015)
 Fig. 6.6 River as boundary (Franklin 2015)
 Fig. 6.7 Agricultural fields as boundary
 Fig. 6.8 Boundaries around prominent buildings (Franklin 2015) (Franklin 2015)
- Fig. 6.9 Land use clusters in Wupperthal (Franklin 2015)
 Fig. 6.10 Spatial groupings Wupperthal (Franklin 2015)
 Fig. 6.11 Road leading to church
 Fig. 6.12 Road between homes and fields
 Fig. 6.13 Fourteen outposts of Wupperthal
 Fig. 6.14 Perceptions and public space in Wupperthal
 Fig. 6.15 Function of roads in Wupperthal and typical route of a visitor
 Fig. 6.16 Visibility within Wupperthal
 Fig. 6.17 Larger Cederberg mountain range (Google Earth 2015)
 Fig. 6.18 Wupperthal in its immediate mountainous context (Google Earth 2015)
 Fig. 6.19 Approaching Wupperthal. Karoo formations to the west and Cederberg mountains to the east (Franklin 2015)
 Fig 6.20 Average Rainfall for Wupperthal (Weather SA 2015)
 Fig. 6.21 Geological formation in Wupperthal

School Building 1838

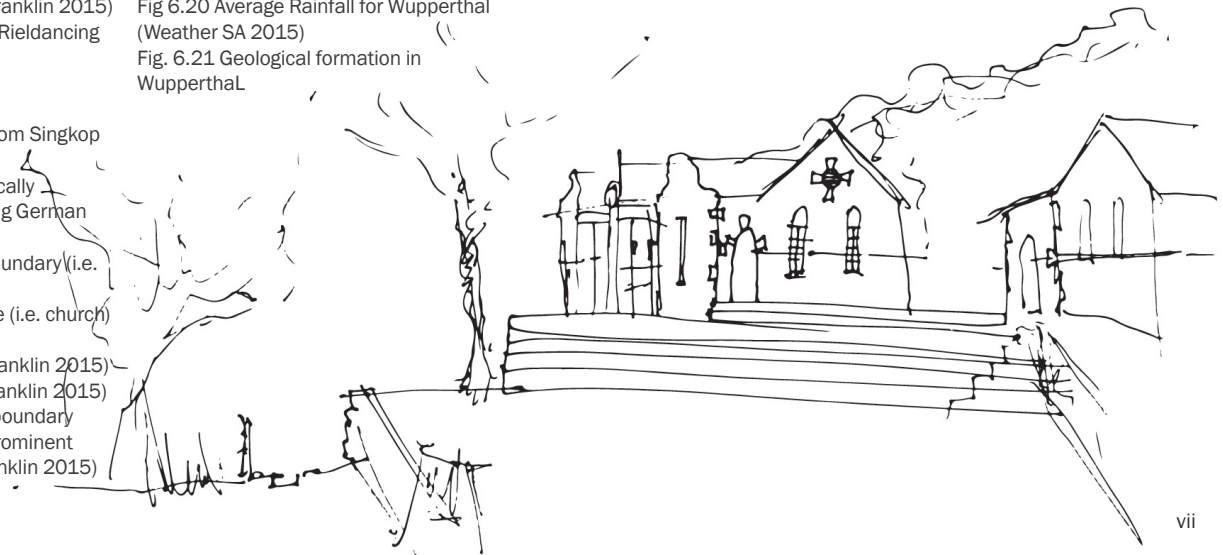


Fig. 6.22 FFb 1 Northern inland shale band (Franklin 2015)	(Franklin 2015)	Fig. 7.23 Werf-like layout of the buildings in Wuppertal (Franklin 2015)
Fig. 6.23 FFs 4 Cederberg sandstone fynbos (Franklin 2015)	Fig. 7.4 Fourteen outposts (Franklin 2015)	Fig. 7.24 Reaction to the incoherent layout of the buildings (Franklin 2015)
Fig. 6.24 Skv 3 Agter Sederberg shrubland (Franklin 2015)	Fig. 7.5 Economic opportunity (Franklin 2015)	Fig. 7.25 Ordering of free forms (Franklin 2015)
Fig. 6.25 Skv 5 Tanqua Karoo (Franklin 2015)	Fig. 7.6 Proposed economic links (Franklin 2015)	Fig. 7.26 Design development of masterplan (Franklin 2015)
Fig. 6.26 Fourteen outposts of Wuppertal	Fig. 7.7 Existing social network (Franklin 2015)	Fig. 7.27 Structuring lines derived from the existing condition (Franklin 2015)
Fig. 6.27 Moravian church (Franklin 2015)	Fig. 7.8 Proposed tourism network (Franklin 2015)	Fig. 7.28 Intuitive sketch (doodle as overlay for masterplan (Franklin 2015)
Fig. 6.28 Dennelaan leading to church (Franklin 2015)	Fig. 7.9 Greater Wuppertal Area Framework (*proposed) (Franklin 2015)	Fig. 7.29 Masterplan development (Franklin 2015)
Fig. 6.29 Interior of church (protestant) (Franklin 2015)	Fig. 7.10 Views diagram (Franklin 2015)	Fig. 7.30 Wuppertal Mission Framework, existing plan with ordering device (Franklin 2015)
Fig. 6.30 School building (Franklin 2015)	Fig. 7.11 Visibility analysis in Wuppertal (Franklin 2015)	Fig. 7.31 Explorative rooibos platform model (Franklin 2015)
Fig. 6.31 Fields in front of school (Franklin 2015)	Fig. 7.12 Development line, building line and buffer development (Franklin 2015)	Fig. 7.32 Cut into steep slope (Franklin 2015)
Fig. 6.32 New toilets on school yard (Franklin 2015)	Fig. 7.13 Energy flow diagram (Franklin 2015)	Fig. 7.33 Rooibos drying platform investigation (Franklin 2015)
Fig. 6.33 Shoe factory building (Franklin 2015)	Fig. 7.14 Energy flow analysis in Wuppertal (Franklin 2015)	Fig. 7.34 Finding an ordering device within the existing landscape (Franklin 2015)
Fig. 6.34 Old tannery foundations (Franklin 2015)	Fig. 7.15 Inflow, Enabling and outflow functions (Franklin 2015)	Fig. 7.35 Users of Wuppertal; resident, visitor, donkey (Franklin 2015).
Fig. 6.35 Stoep of shoe factory (Franklin 2015)	Fig. 7.16 Choice diagram (Franklin 2015)	Fig. 7.36 Separation lines (Franklin 2015)
Fig. 6.36 Agricultural fields (Franklin 2015)	Fig. 7.17 Diagram of choices applied to Wuppertal (Franklin 2015)	Fig. 7.37 Moment intervention (Franklin 2015)
Fig. 6.37 Irrigation channel (Franklin 2015)	Fig. 7.18 Proposed mission route as master plan (Franklin 2015)	Fig. 7.38 Hierarchy in Wuppertal (Franklin 2015)
Fig. 6.38 Onions from vegetable gardens (Franklin 2015)	Fig. 7.19 Wuppertal Mission Framework (Franklin 2015)	Fig. 7.39 Strangeness mapping (Franklin 2015)
Fig. 6.39 Mission House typology	Fig. 7.20 Proposed Tourism Route (Franklin 2015)	Fig. 7.40 Structure as gateway (Franklin 2015)
Fig. 6.40 Tree and facade	Fig. 7.21 Nodal development along routes (Franklin 2015)	Fig. 7.41 Gateways exploration (Franklin 2015)
CHAPTER 7	Fig. 7.22 Explorative sketch for the defining of nodes 'presence and absences' (Franklin 2015)	
Fig. 7.1 Entrance to Wuppertal (Franklin 2015)		
Fig. 7.2 Design development (masterplan) (Franklin 2015)		
Fig. 7.3 Framework development diagrams		

2015)
 Fig. 7.42 Historic node (Franklin 2015)
 Fig. 7.43 Change in perspective (Franklin 2015)
 Fig. 7.44 Mission Route Masterplan Version 1 (Franklin 2015)
 Fig. 7.45 Water in Wupperthal (Franklin 2015)
 Fig. 7.46 Service bridge (Franklin 2015)
 Fig. 7.47 Redirection of overflow stream (Franklin 2015)
 Fig. 7.48 Ablution facilities in Wupperthal (Franklin 2015)
 Fig. 7.49 Erosion next to post office (Franklin 2015)
 Fig. 7.50 Mission Route Masterplan version 2 (Franklin 2015)
 Fig. 7.51 Existing rooibos drying platform (Franklin 2015)
 Fig. 7.52 Natural platforms on slope (Franklin 2015)
 Fig. 7.53 Mission Route Masterplan Version 2 (Franklin 2015)
 Fig. 7.54 Final Masterplan (Franklin 2015)
 Fig. 7.55 Sketchplan design development (Franklin 2015)

CHAPTER 8

Fig.8.1 Seating in Wupperthal (Franklin 2015)
 Fig. 8.2 Existing elements, sketchplan area (Franklin 2015)
 Fig. 8.3 Entrance to Wupperthal (Franklin 2015)
 Fig. 8.4 Perennial stream border of Wupperthal (Franklin 2015)
 Fig. 8.5 Restored stream habitat (Franklin 2015)

Fig. 8.6 Backyard link between church and shoe factory (Franklin 2015)
 Fig. 8.7 Use of plants in change of awareness and scale (Franklin 2015)
 Fig. 8.8 Contrast in scale (Franklin 2015)
 Fig. 8.9 Historic nodes (absences) in-between (presence) (Franklin 2015)
 Fig. 8.10 Planting as privacy device (Franklin 2015)
 Fig. 8.11 Stormwater dispersal (Franklin 2015)
 Fig. 8.12 Sketchplan (Franklin 2015)
 Fig. 8.13 Appropriation of hostel buildings (Franklin 2015)
 Fig. 8.14 Absences and presences development (Franklin 2015)
 Fig. 8.15 Open views and closed orchards (Franklin 2015)
 Fig. 8.16 Section through areas of absence and areas of presence (Franklin 2015)
 Fig. 8.17 Perspective of Rieldancing platform (Franklin 2015)

Fig. 8.18 Sketchplan, zoom in of interpretation centre (Franklin 2015)
 Fig. 8.19 Traditional boundary wall in Wupperthal (Franklin 2015)
 Fig. 8.20 Section through wetland and abluition structure (Franklin 2015)
 Fig. 8.21 Perspective of Interpretation centre (Franklin 2015)
 Fig. 8.22 Sketchplan zoom in Clay tile workshop and Seedbase (Franklin 2015)
 Fig. 8.23 Oranjezicht Community Farm (Franklin 2015)

TABLES

Table 5.1 Summary
 Table 6.1 Summary

LIST OF FIGURES

Shoe factory



Australia ICOMOS International council on monuments and sites [online]. Available from: < <http://australia.icomos.org/publications/historic-environment/>> [8 March 2015]

Bacon, EN., (1967), 'Design of Cities'. London: Thames and Hudson.

Bilbe, MC., (2011), 'Wupperthal, The formation of a community 1830-1965'. Koln: Koppe.

Dee, C., (2001), 'Form and Fabric in Landscape Architecture, A Visual Introduction'. London and New York: Sporn Press.

Di Monte, G., (2011), 'Poetry of forgotten wastelands, transforming a wasteland in Salvokop into a designedenigmatic landscape'. University of Pretoria: Department of Architecture.

Fransen, H., (2004), 'Old Buildings of the Cape'. Johannesburg and Cape Town: Johnathan Ball Publishers.

Fransen, H., (1980), 'Old Towns and Villages of the Cape'. Johannesburg and Cape Town: Johnathan Ball Publishers.

Global Heritage Fund [online]. Available from: <<http://globalheritagefund.org/travel/>> [8 March 2015]

Graafland, A., (2010), 'Understanding the Socius through creative mapping

techniques. DSD Future Cities Project', Delft: School of Design.

Grogan, T., (1978), 'Vanishing Villages', Cape Town: Don Nelson.
Historic Urban Landscape, New Construction [online]. Available from: <<http://www.historicurbanlandscape.com/>> [8 March 2015]

Hawkins, HJ. 2011, 'Ecotypes of wild rooibos' [online]. Available from: < <http://repository.up.ac.za/handle/2263/15615>> [10 August 2015]

Heyns, H., (1980), 'Wuppethal 150 jaar, 1830 – 1980 Evangeliese Broederkerk in Suid Afrika Feesalbum', Genadendal: Genadendalse Drukkery.

Humdi, N., (2003), 'Small Change: About About the Art of Practise and the limits of Planning in Cities', London: Earthscan: publishing for a sustainable future.

Jackson, JB., (1987), 'Discovering the vernacular landscape'. Yale: University Press.

Kaplan, A., (1984), 'Wupperthal, thoughts and projections on rural development'. Available from: < <http://proteusinitiative.org/Writings/The%20Wupperthal%20Stories.pdf>> [2 October 2015]

Labuschagne, W., (2013), 'Rural Drosscape, a productive culinary terroir'.

University of Pretoria: Department of Architecture.

Le Grange, L., (1993), 'Movarian Mission Stations in the Western and Southern Cape, Conservation study'. Cape Town: School of Architecture and Planning.

Lefebvre, H. 2009, 'Dialectical Materialism' [online]. Available from: <<http://sociology.sunimc.net/htmledit/uploadfile/system/20110207/20110207121451545.pdf>> [8 March 2015]

Lefebvre, H. 2004, 'Rhythmanalysis, Space, Time and everyday life' [online]. Available from: < http://grrrr.org/data/edu/20110509-cascone/rhythmanalysis_space_time_and.pdf> [10 February 2015]

Meyer, D. 2004, 'Tourism routes and gateways, key issues for the development of tourism routes and gateways and their potential for pro-poor tourism' [online]. Available from: < <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/4040.pdf>> [10 October 2015]

Missionary Settlement in Southern Africa 1800-1925 [online]. Available from: < <http://www.sahistory.org.za/cultural-heritage-religion/missionary-settlement-southern-africa-1800-1925>> [17 February 2015]

Mitchell et al. 2009, 'World Heritage Cultural Landscapes, A handbook for conservation and management' [online].

Available from: < http://whc.unesco.org/documents/publi_wh_papers_26_en.pdf > [13 October 2015]

Muller, L., & Gibbs, D., (2011), 'Reading and representing the cultural landscape, a toolkit'. Draft 5

Roos, J., (2007), 'Discovering the assignment, Redevelopment in practice', The Netherlands CA Delft: VSSD.

Roos, J. 2001, Project 'Restoration Genadendal, South Africa' [online]. Available from: <File:///C:/Users/Marike/Documents/Academic/M(Prof)/07%20Theory%20extracts/Genadendal%20Job%20Roos.pdf >[19 Februarie 2014]

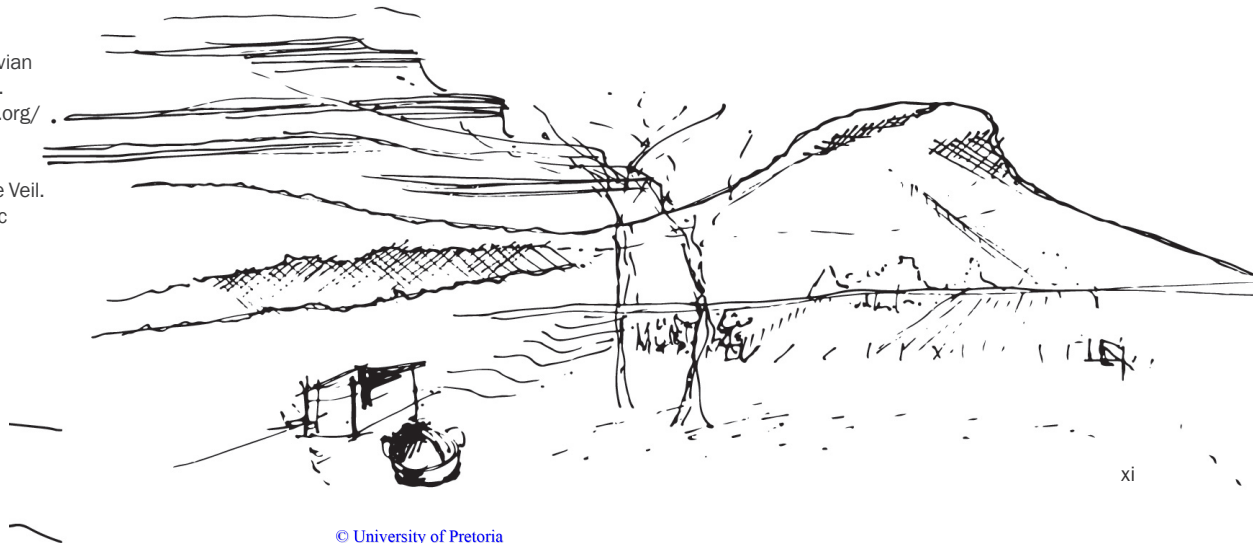
South African Heritage Resource Agency [online]. Available from: < <http://www.sahra.org.za/> > [8 March 2015]

The Moravian Mission and the Moravian Church in Southern Africa [online]. Available from: < http://www.safrika.org/morav_en.html > [17 February 2015]

Verster, M., (2014), 'The Wall and the Veil. Reclaiming woman space the historic Stone Town'. University of Pretoria: Department of Architecture.

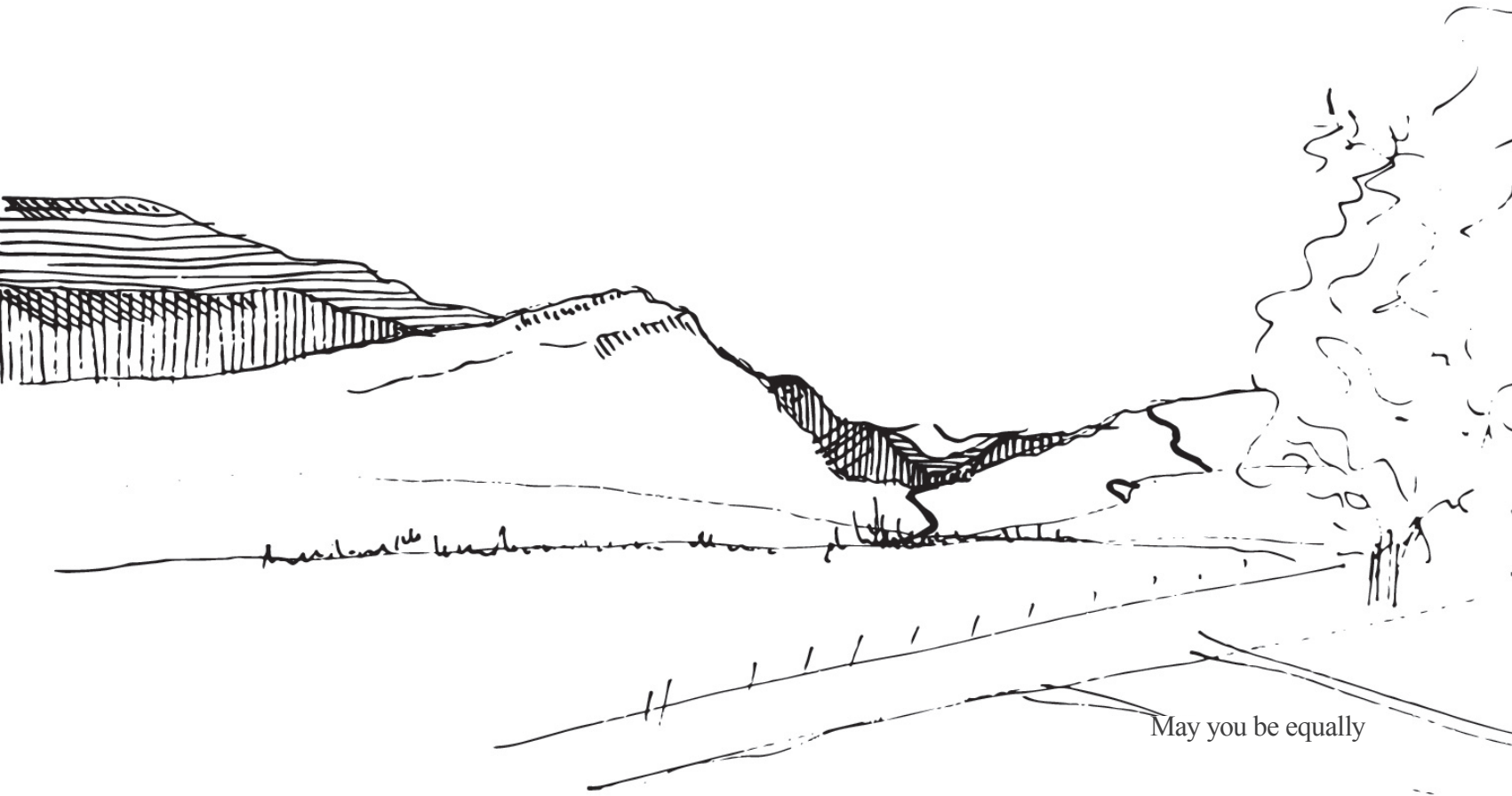
REFERENCES

Across the open field



Views from Wupperthal



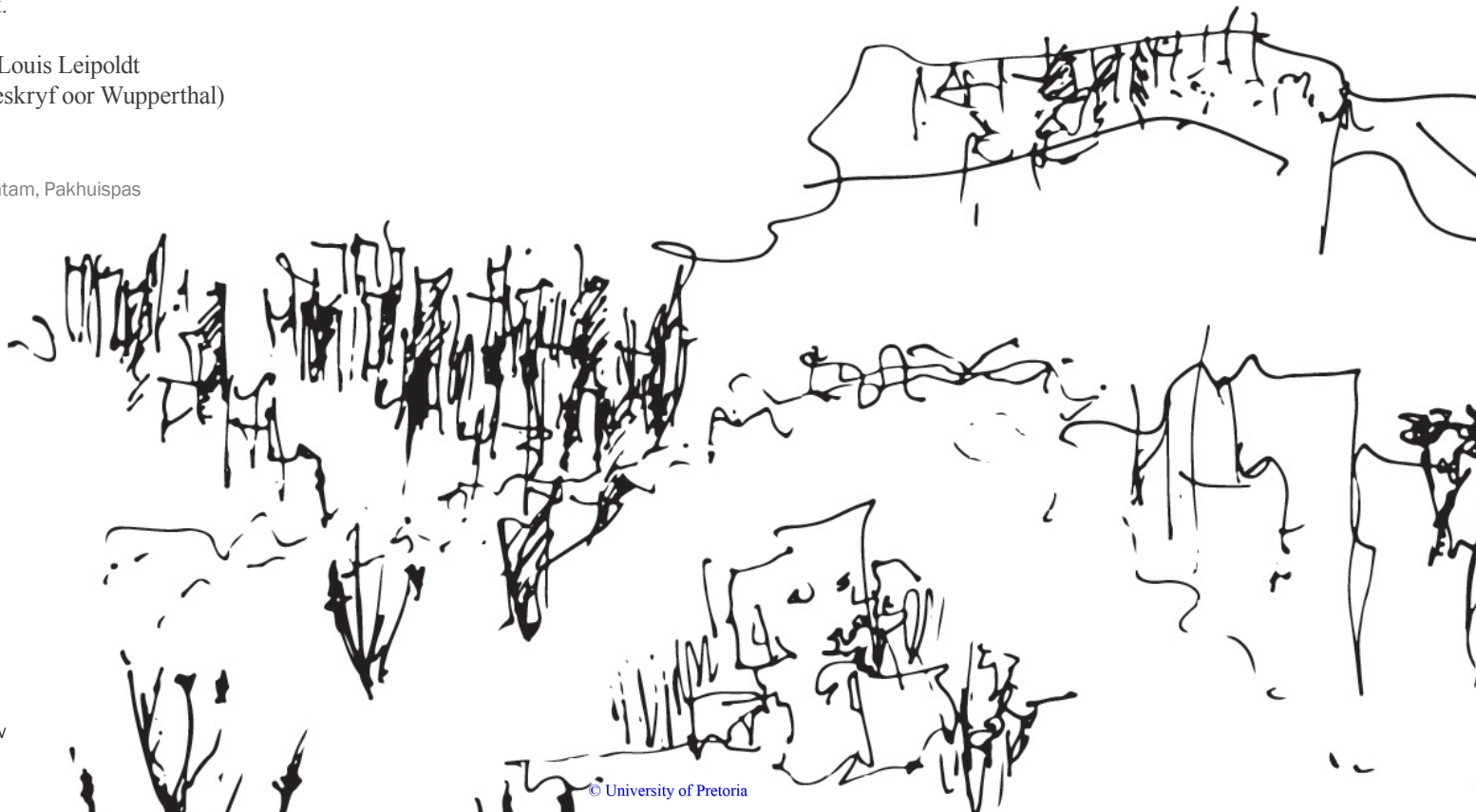


May you be equally

“ ‘n handvol gruis gedroogde
blare,
Waboom-blare, ghnarrabos-
blare!
Arm was ek gister, en nou is ek
ryk.

C. Louis Leipoldt
(Geskryf oor Wupperthal)

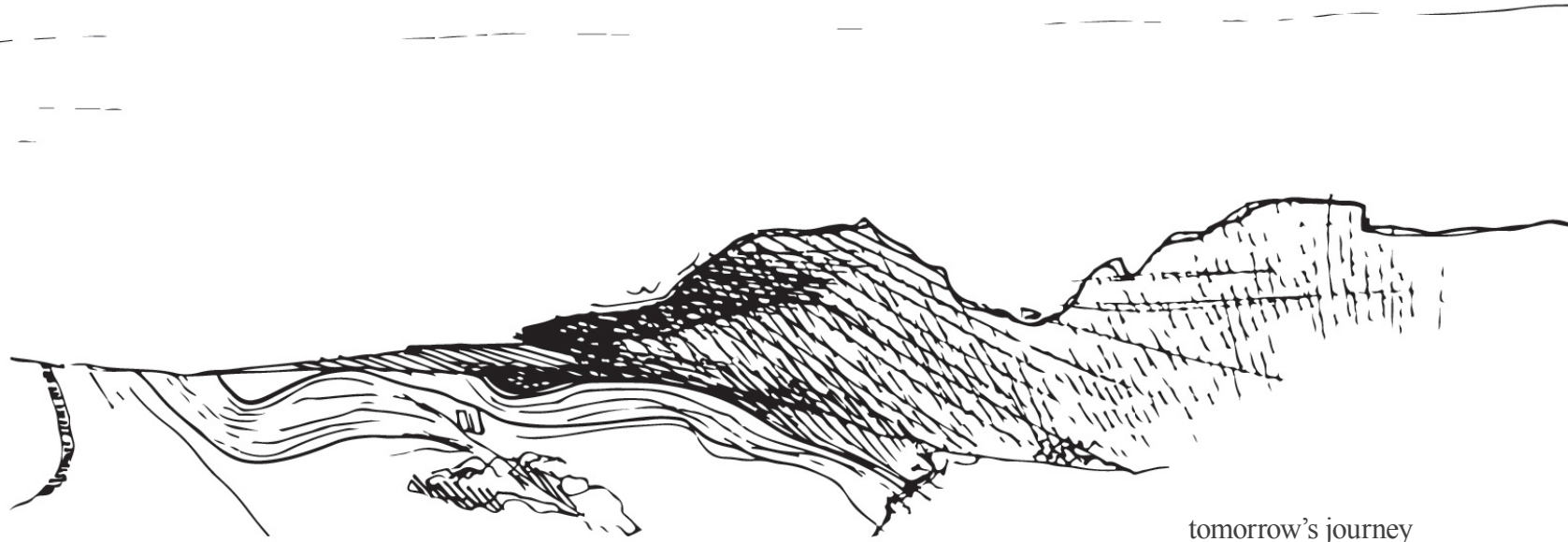
Hantam, Pakhuispas





inspired
for





tomorrow's journey