

UNLOCKING THE GAUTENG HIGHVELD LANDSCAPE

Exploring the experience of
regional identity along a freeway route

By Susan De Kiewit

Study Leader	Fourie Pieterse
Studio Master	Johan Prinsloo
Course Coordinator	Dr. Authur Barker

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In accordance with Regulation 4 (e) of the General Regulations (G57) for dissertations and theses, I Declare that this dissertation, which I hereby submit for the degree Masters of Landscape Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

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

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

Susan De Kiewit

Samevatting

Die skrywer argumenteer hoe imperatief die plaaslike landskap is en die voordele om die ervaring en identiteit daarvan te behou. Die snelweg landskap, as die optimale grondgebied vir menslike ervaring van 'n streek, word deur die outeur geïdentifiseer.

Die dissertasie fokus op die R21-snelweg roete wat die OR Tambo Internasionale Lughawe met die stad van Tshwane verbind. Die roete word goed gebruik deur pendelaars en vervoernetwerke binne die streek van Gauteng. Die roete dien ook as die internasionale poort na Suid Afrika.

Die huidige toestand van die pad en omliggende omgewing is die gevolg van ontwerp nalatigheid. Min inisiatiewe is geneem met die oorweging van die roete as eerste indruk van die land.

Die ontwerp ingryping vier die unieke karakter van die algemene Gauteng Hoëveld landskap en die spesifieke eienskappe van die landskap wat langs die R21-snelweg gesien kan word.

Die outeur identifiseer 'n reeks problematiese en sinvolle kulturele, sosiale en ekologiese aspekte langs die snelweg, en het ten doel om hulle aan te spreek deur die aangryping van die gees van die Gauteng Hoëveld.

Die doelwit van die ontwerp is om die elemente van die landskap wat nie noodwendig gesien of waardeer word nie, te ontsluit. 'n Poging word ook aangewend om die huidige persepsies oor skoonheid en estetika aan te spreek.

Die finale gevolgtrekking van die ondersoek is om die tegniese oplossing van die voorstelling onder lede te neem.

Abstract

The author argues the imperative of the regional landscape and the benefits of preserving experience of regional identity. The author identifies the freeway landscape as the optimal territory for one's experience of a region.

The dissertation focuses on the R21 freeway route connecting O.R Tambo International Airport to the city of Pretoria. The route is well used commuter and transportation network within the region of Gauteng. The route also serves as the international gateway to South Africa.

The current condition of the roadside environment has been neglected by design. Few initiatives have been taken in considering the route as the first impression of the country.

The design intervention celebrates the unique character of the Gauteng Highveld landscape in general and specifically the qualities of the landscape seen along the R21 freeway.

The author identifies a series of problematic and opportune cultural, social and ecological aspects along the freeway and aims to address them through embracing the spirit of the Gauteng Highveld.

The design objective is to unlock elements of the landscape that are not necessarily seen or appreciated in attempt to challenge current perceptions about beauty and aesthetics.

Thanks to

My Husband and Family
Carmen van den Einde

Fourie Pieterse
Johan N Prinsloo

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Definition of terms

Aesthetics

The attractiveness of an object or place.

Character

The essential qualities of a place or space that makes it unique

Gateway

To be a prominent entrance to or exit from area or a specific part of an area, consisting of man-made or natural features and creating a strong sense of arrival or departure.

Gauteng Highveld

The geographic region of the highveld, situated within the province of Gauteng

Identity

Uniqueness of a place or region which helps to distinguish it from another place

Illuminate

To highlight, emphasize or bring to the fore front.

Imageability

The ease in which one can recognize the patterns and meanings of their environment, the more pleasure and utility they will extract from it.

Regional

Defined as the geographical area of a place marked by visible or invisible boundaries

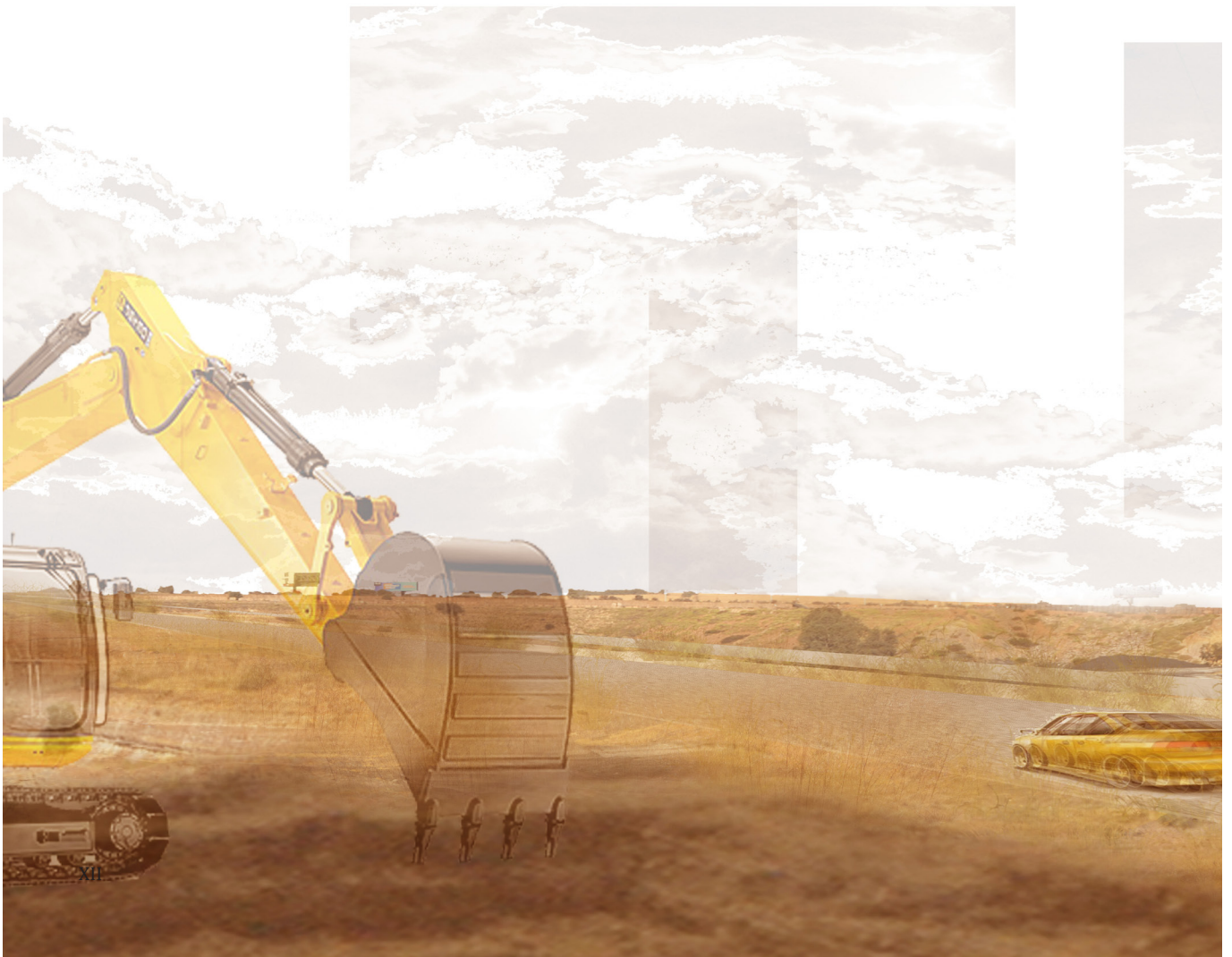
Unlocking

Making something apparent which is not necessarily seen or understood

The author by no means through the dissertation encourages or justifies the use of unsustainable transportation methods. It would be far better if our cities were designed so that everybody could walk to work. However, the author accepts the automobile as part of contemporary lifestyle and therefore seeks a means (through landscape design) of improving one's experience along the freeway, where so much time is spent.

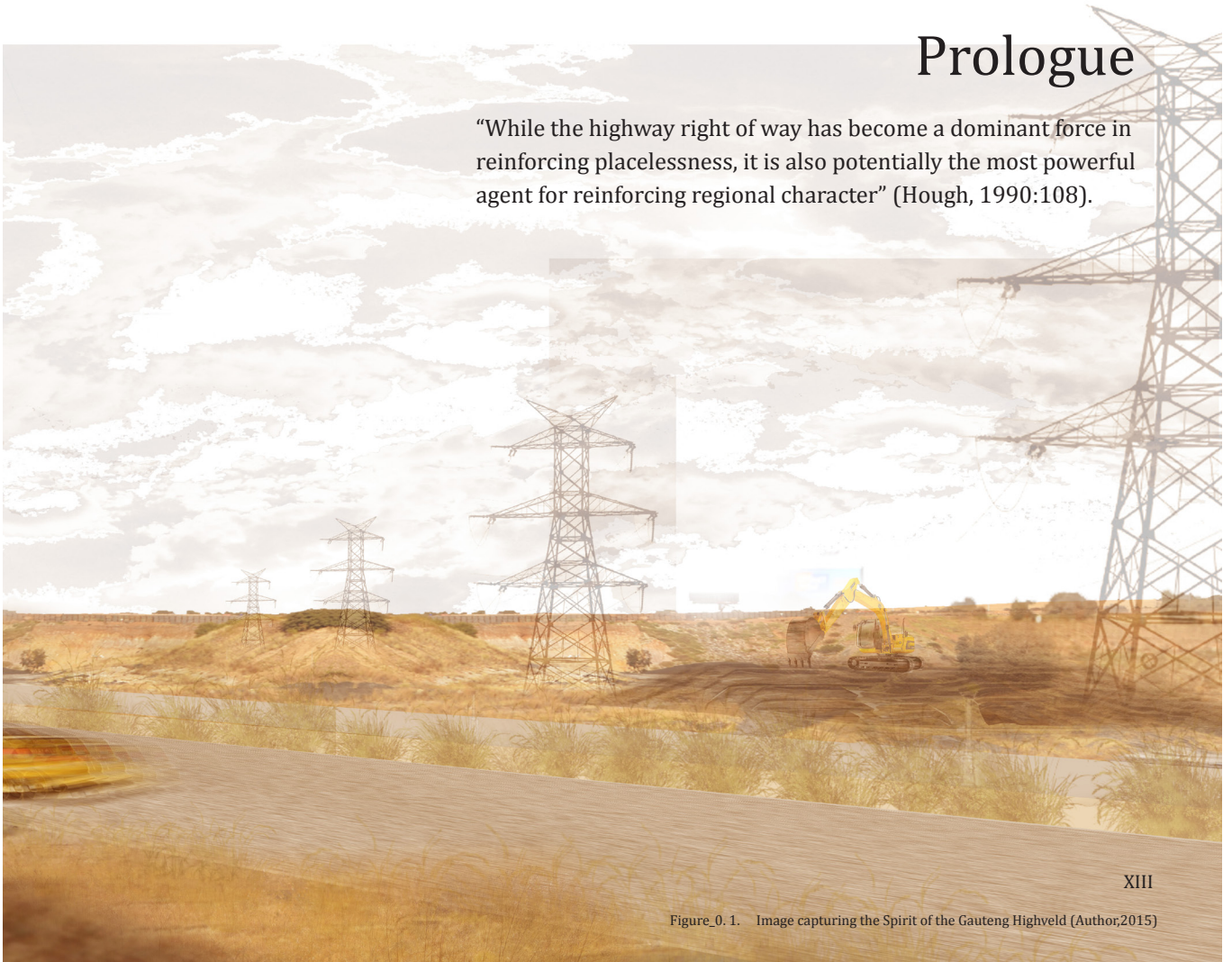






Prologue

“While the highway right of way has become a dominant force in reinforcing placelessness, it is also potentially the most powerful agent for reinforcing regional character” (Hough, 1990:108).



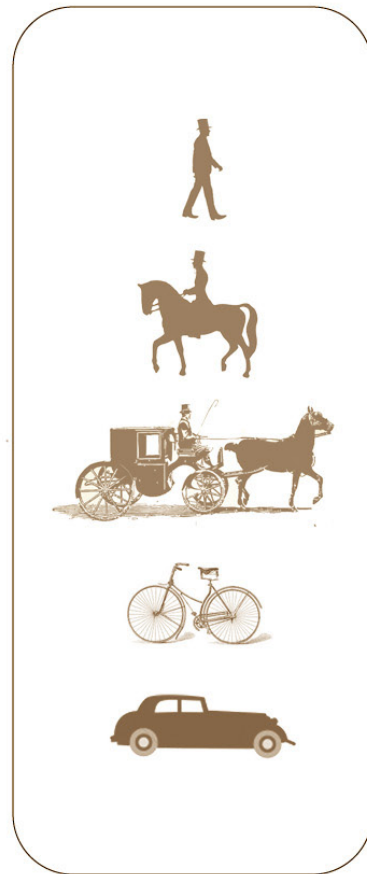
Chapter 1

Introduction

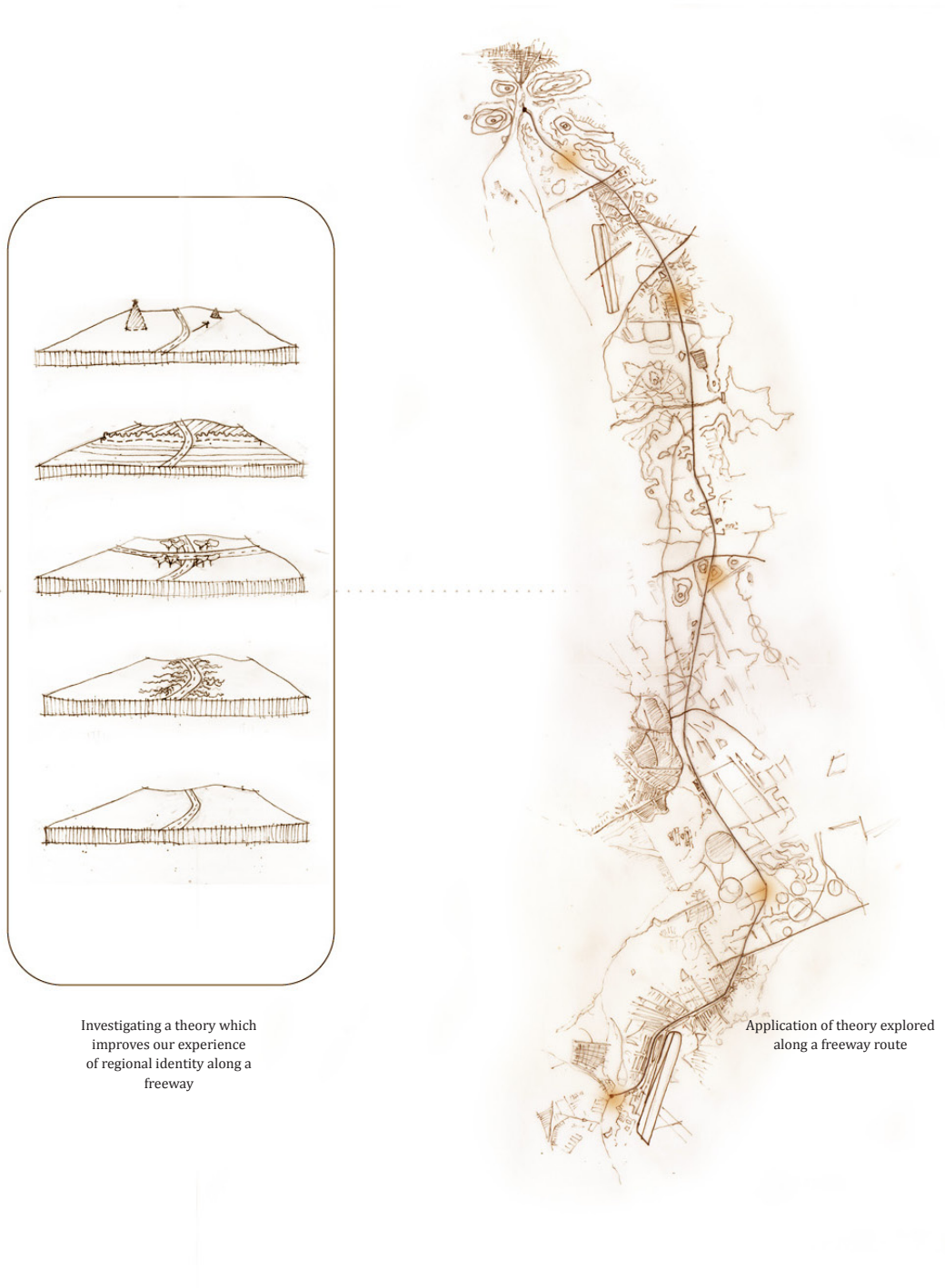




General issue:
Urbanisation has led to a
loss of the regional landscape
resulting in a loss of exposure
to the regional landscape



Landscape design opportunity:
Considering freeways as a
tool to enhance perception
of regional identity from the
automobile



Figure_1.1. Summary of the dissertation process (Author,2015)

1. Background

1.1 Placelessness and regional identity

Michael Hough, in his book *Out of Place* (Hough,1990) questions why all modern cities and landscapes seem to look the same. He searches for answers to why vernacular landscapes seem to attract people yet the profession pushes designers in the opposite direction. Why do roadside environments look alike when there are inherent differences between provincial districts. Frampton, in his hypothesis expressed his theory that if architecture responds to a particular place, with recognition of regional vernacular and its response to light and climate, the outcome will be that of an architecture of greater experiential meaning. (Frampton,1983). Our current environments are less concerned with the local but rather driven by trade, economy and profit (Hough,2004). One could argue that the contemporary city and landscape has become non-place. Philosopher Marc Auge in *The Anthropology to Super Modernity* (Auge,1995) explains if a place can be defined as relational, historical and concerned with identity, then a space which cannot be defined as relational, or historical, or concerned with identity will be a non-place. The freeway is no exception and has been blamed for the loss of identity in many of our cities. It is described as placeless. If asked to identify our whereabouts along most modern freeways, one would have a difficult time in determining in which region one was driving. Auge, together with others considers the freeway a non-place. But some thinkers have shared light that the freeway might be a very significant place in its own unique experience of how one perceives space.

“While the highway right of way has become a dominant force in reinforcing placelessness, it is also potentially the most powerful agent for reinforcing regional character” (Hough, 1990:108).

1.2 Landscape perception from the automobile

It has been brought to the attention of landscape architects that the discipline has largely overlooked designing the roadside environment for the automobile user. John Dixon Hunt in *The Afterlife of Gardens* explains that there are contemporary ways of travel that have transformed how we experience landscape, such as the motor car which has changed the speed at which we are required to respond to our surroundings. Hunt criticises the discipline’s lack of response to the modern way of perceiving landscape. “Modern landscape architecture has largely ignored the opportunities of designing for the modern world of fast transport” (Hunt,2004:174). Landscape architect, Christophe Girot explains that, “outside the home window, today’s reference frame for landscape is

almost always in motion, be it the windshield of a car, the window of a train or an airplane.” (Girot,2004:199). If the way in which we perceive our surroundings has changed, then the way in which we design our surroundings also needs to change.

Roads have been able to create equity of landscapes and made them visually accessible to a variety of road users, from the truck driver to the taxi driver. For many the drive to work in the automobile is the only experience of landscape one might encounter in a day. No matter the environment through which we pass, the travel right of way is how we see the wider landscape most of the time (Hough,1990:102). One could argue that if our limited exposure to landscape is most often on the route to work, then designers need to turn to these environments which have so often be poorly served by design.

1.3 Aesthetics and representation

Hough writes that our perceptions about what is beautiful has been greatly influenced by poets and painters. Perceptions about what is aesthetically pleasing have leaned towards the dramatic such as mountain and forest scenery. Much of this scenery has been made popular as it has been represented in paintings, on postcards and the coffee table picture books (Hough,1990:24). This study aims to challenge perceptions about beauty and practice which favours one landscape type over another. The author suggests that landscape architecture has an important role to play regarding preconceived ideas about aesthetics. The roadside environment presents the ideal opportunity for the representation of landscapes which have been disregarded, as in the case of this study, the Gauteng Highveld.

2.1 Route selection: R21 freeway

The route was identified by considering a number of freeways within the provincial landscape. The study area falls within the parameters of the Gauteng regional landscape, a well used commuter route and a potential tourism route.

2.1.1 Regional landscape

Routes that transverse the regional landscape offer potential to unlock local character and strengthen experience of a place.

2.1.2 Commuter Route

Commuting has proven to be a stressful task. The daily commute experience may be improved through design of the roadside environment.

2.1.3 Importance of Roads connecting Airports to Capital Cities

For visitors the first experience of a new destination is the drive from the airport to the city. First impressions have a lasting impact on one's memory of a place. One of the ways in which an outsider experiences the landscape of a country is from the automobile. Scenic landscapes and cultural streetscapes establish major tourist attractions. Each province and town has its own unique visual appeal, which can contribute to enhancing any tourist experience (SAMOAC, 1998). Christopher Girot describes this first encounter of a place as *Landing* or touching ground within his theory of *Four Trace Concepts*. (Girot, 1999).

This draws attention to the importance of the study route as the threshold to South Africa. The R21 regional route is the optimal route choice as it fulfils the criteria set out for the study. The R21 (Albertina Sisulu Freeway) is a provincial route situated in eastern Gauteng connecting the O.R Tambo International Airport to South Africa's capital City, Pretoria. The north-south road was constructed in the early 1970's and is one of the major freeways connecting Johannesburg to Pretoria. The freeway is a dual carriageway consisting of four lanes in either direction for most of the road. The road currently belongs to South African National Roads Agency (SANRAL). The freeway occupies two regions within the Gauteng Highveld, Ekurhuleni Municipality and Tshwane Municipality. The significance of the route lies in its capacity as a tourism route connecting the airport to the capital city of South Africa.

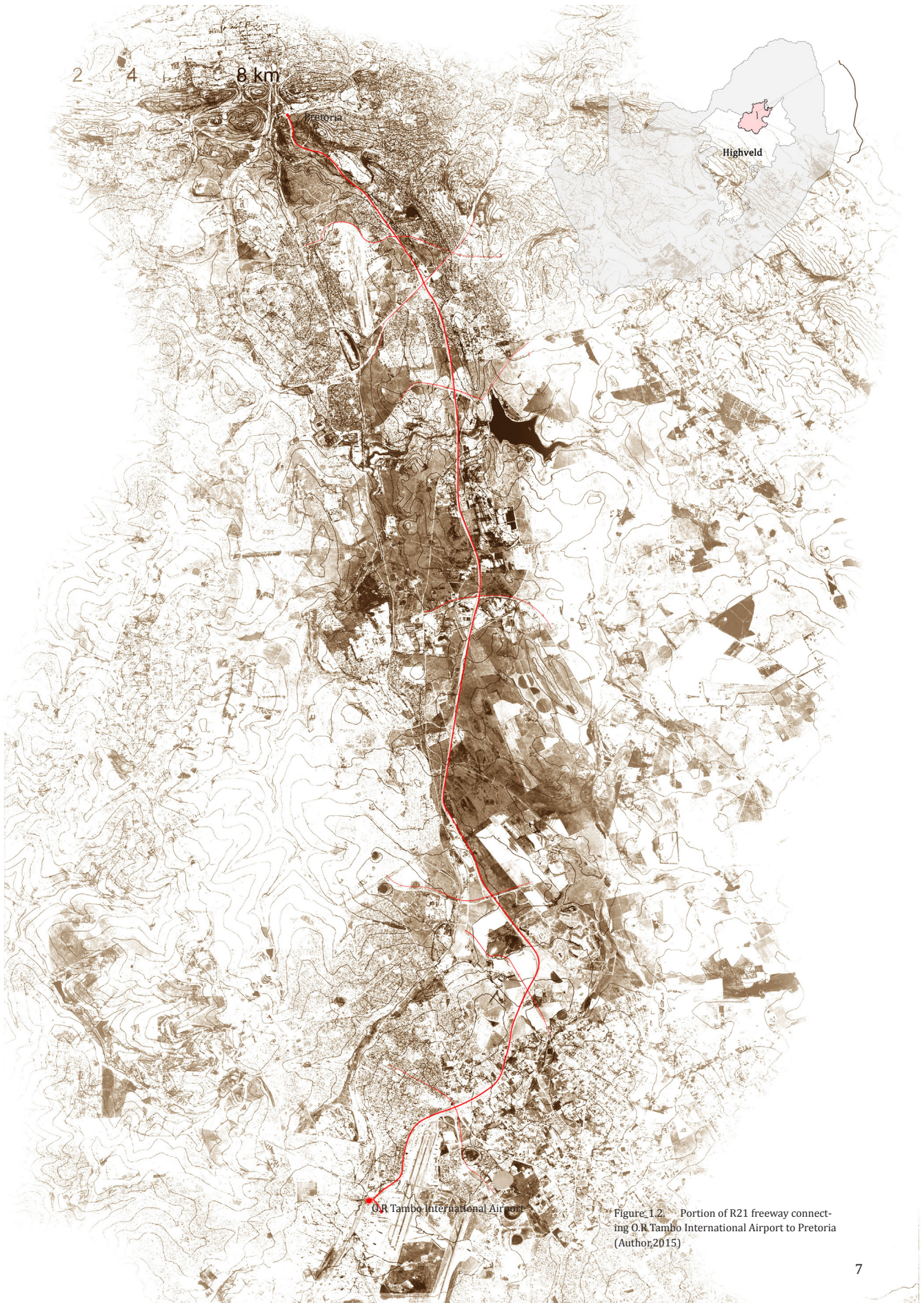


Figure 1.2. Portion of R21 freeway connecting O.R. Tambo International Airport to Pretoria (Author,2015)

3. Research Question

How can a landscape design intervention enhance experience of regional character along a freeway route in order to create a greater appreciation for the Gauteng Highveld landscape?

4. Hypothesis

Enhancing the roadside environment can create awareness of the major cultural and biophysical aspects along the R21 freeway and illuminate the perception of regional identity for an enriched experience from the automobile.

5. Sub Questions

What was, is and could be the role of landscape architecture along a freeway?

How can the experience in an automobile be enhanced through application of space motion principles?

How can the experience of regional character be enriched along a freeway through landscape design?

What are the major cultural and biophysical aspects along the R21 freeway which offer potential for a landscape design intervention?

6. Objectives

To enrich the experience from the automobile

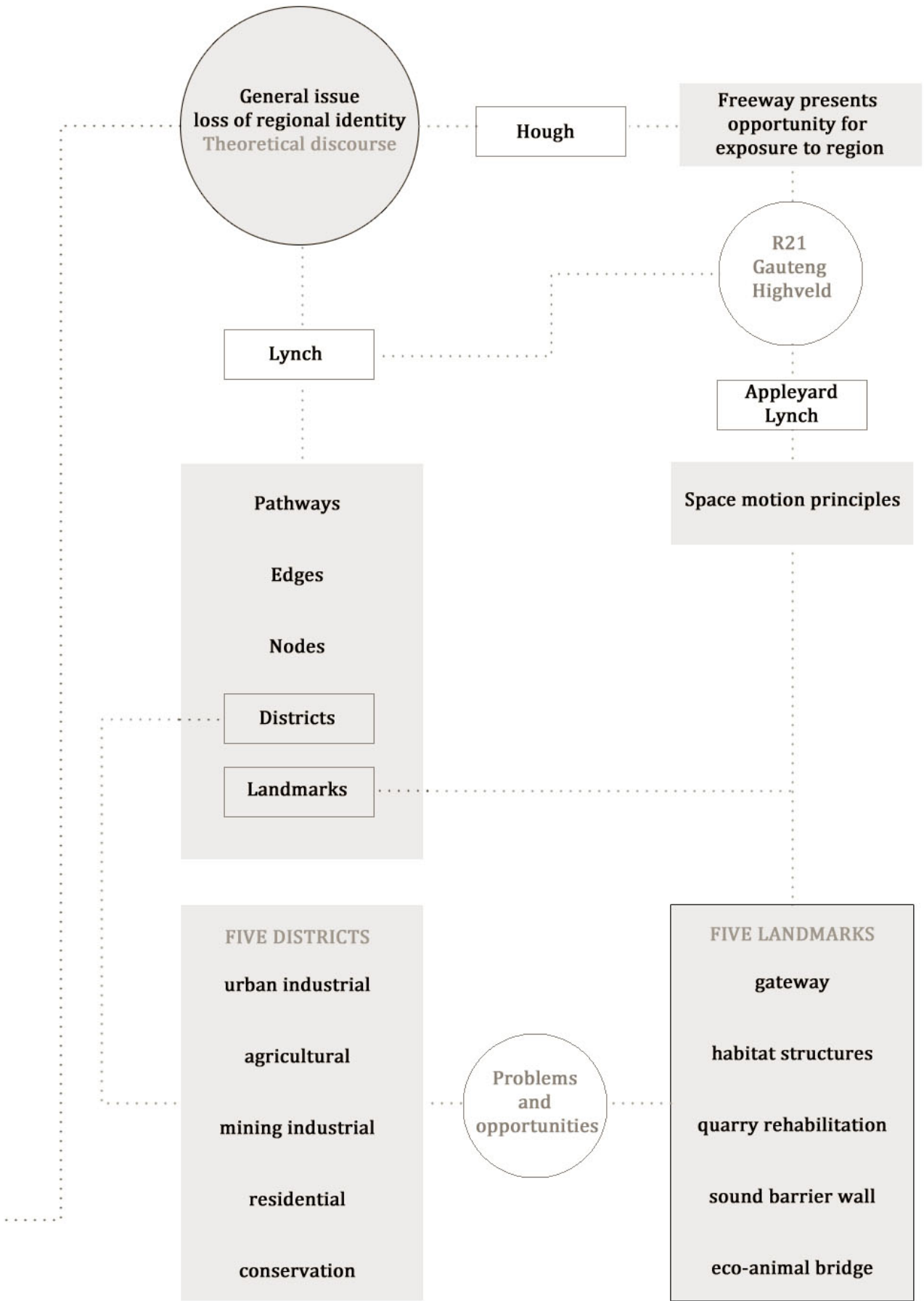
To improve the roadside environment

To strengthen experience of regional identity from the automobile

To change perceptions about what is considered beautiful and ultimately valuable

7.

Methodology



8. Limitations

The study limits the investigation to the roadside environment and does not propose to change or manipulate the road alignment. The design investigation falls in the parameters of the road reserve and adjacent land, including agricultural farmland, mining land and conservation areas. This study discusses the perceived experience of the driver and his passengers.

8. Delimitations

The study area is focused on the road reserve as well as the five selected areas along the road which includes the urban junction, the agricultural fields, the mining industrial area, the residential road reserve and the conservation area in terms of the design intention. Contextual influences and connections have been considered where applicable.

8. Assumptions

Assumptions are made that the general attitude toward the Gauteng Highveld landscape is not appreciated or considered beautiful, although a minority may appreciate its visual quality.

The study assumes various landowners would participate in the selected projects proposed along the R21 route.

9. Client User Profile

South African National Roads Agency Limited (SANRAL) is an independent, statutory company registered in terms of the Companies Act. The South African government is the owner of SANRAL. The client is committed to carry out its mandate by protecting and preserving the environment through context-sensitive solutions. SANRAL is also committed to rehabilitating and returning areas of operation, to their sustainable preoperational state, so that they may still be viable for the use of future generations. SANRAL envisage these goals to be in support of the sustainability aims of respecting and maintaining natural capital and building human capital. SANRAL encourages planting partnerships in its quest to re-populate the road reserve to a similar state it was in before the construction of the road. (SANRAL,2012)

SANRAL, together with the tourism departments of Ekurhuleni Metropolitan Municipality and Tshwane Metropolitan Municipality would sponsor the scheme as an initiative in promoting tourism in the province as well as attempting to improve the lives of commuters.

Interested and effected parties include landowners of property adjacent to the R21 who could get involved and benefit from roadside improvements. These parties include, corporate entities, agricultural landowners and mining land owners.

Site	Client	Client benefit
Site A: Gateway	Airports Company South Africa	international excellence
Site B: Habitat structures	Agricultural land owner	biological control
Site C: Quarry rehabilitation	Sterkfontein Bricks	community stewardship
Site D: Sound barrier wall	Tshwane Municipality	resident satisfaction
Site E: Eco-animal bridge	Tshwane Parks and Recreation	biological diversity

User groups include drivers of taxis, trucks, motorcycles, busses, cars as well as South African and international road users.