A photograph of a dirt path winding through a forest. The path is light-colored and leads into the distance. The trees on either side have green and yellow foliage, suggesting autumn. The text is overlaid on the upper part of the image.

**A Century of Geography
at Stellenbosch University
1920–2020**

Gustav Visser and Jan de Waal

**A CENTURY OF GEOGRAPHY AT
STELLENBOSCH UNIVERSITY
1920–2020**

Gustav Visser
Jan de Waal

SPRINGER

A Century of Geography at Stellenbosch University 1920-2020

Published by African Sun Media under the SUN PReSS imprint

All rights reserved

Copyright © 2020 African Sun Media and the authors

This publication was subjected to an independent double-blind peer evaluation by the publisher.

The authors and the publisher have made every effort to obtain permission for and acknowledge the use of copyrighted material. Refer all enquiries to the publisher.

No part of this book may be reproduced or transmitted in any form or by any electronic, photographic or mechanical means, including photocopying and recording on record, tape or laser disk, on microfilm, via the Internet, by e-mail, or by any other information storage and retrieval system, without prior written permission by the publisher.

Views reflected in this publication are not necessarily those of the publisher.

First edition 2020

ISBN 978-1-928480-74-7

ISBN 978-1-928480-75-4 (e-book)

<https://doi.org/10.18820/9781928480754>

Set in Crimson Text 11/13,2

Cover design, typesetting and production by African Sun Media

SUN PReSS is an imprint of African Sun Media. Scholarly, professional and reference works are published under this imprint in print and electronic formats.

This publication can be ordered from:

orders@aficansunmedia.co.za

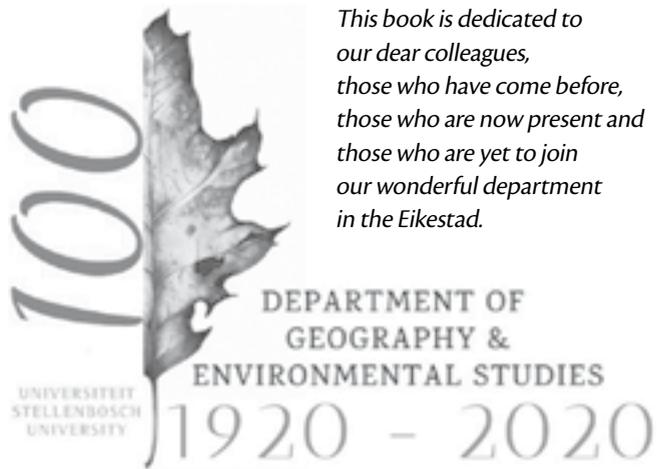
Takealot: bit.ly/2monsfl

Google Books: bit.ly/2k1Uilm

aficansunmedia.store.it.si (*e-books*)

Amazon Kindle: amzn.to/2ktL.pK

Visit aficansunmedia.co.za for more information.



*This book is dedicated to
our dear colleagues,
those who have come before,
those who are now present and
those who are yet to join
our wonderful department
in the Eikestad.*

CONTENTS

Acknowledgements	xi
Foreword	xiii

CHAPTER 1

INTRODUCING A CENTURY OF GEOGRAPHY AT STELLENBOSCH UNIVERSITY	1
---	---

CHAPTER 2

FOUNDING THE DEPARTMENT OF GEOGRAPHY	5
2.1 Introduction	5
2.2 Establishing geography at Stellenbosch	5
2.3 The first years of the department of Geography	16
2.4 Establishing a research tradition	24
2.5 Research activities, 1920-1947	30
2.6 Conclusion	31

CHAPTER 3

THE DEPARTMENT OF GEOGRAPHY MATURES	33
3.1 Introduction	33
3.2 An expanding department	33
3.3 Research activities, 1948-1993	41
3.4 Conclusion	48

CHAPTER 4

TURBULENT TIMES AND INNOVATION	49
4.1 Introduction	49
4.2 Staffing changes and a new era	49
4.3 The birth of geographical information systems and expansion into geographic information technology	54
4.4 Merger/demerger and expansion phase, 2007-2010	57
4.5 Further changes	60
4.6 Research activities, 1994-2019	64
4.7 Conclusion	68

CHAPTER 5

RESEARCH CENTRES IN THE DEPARTMENT	69
5.1 Introduction	69
5.2 Centre for Geographical Analysis née Institute for Cartographic Analysis	69
5.3 Establishing two new research centres in the department	73
5.4 Conclusion	79

CHAPTER 6

POSTGRADUATE STUDENT RESEARCH IN THE DEPARTMENT
AND RELATED CENTRES 81

6.1 Introduction 81

6.2 Geography honours degree research at Stellenbosch 81

6.3 Geography master's degrees 86

6.4 Geography doctoral degrees at Stellenbosch 90

6.5 Conclusion 92

CHAPTER 7

CONCLUDING THOUGHTS ON A CENTURY OF GEOGRAPHY
AT STELLENBOSCH UNIVERSITY 93

REFERENCES 99

ARCHIVAL REFERENCES BY ORDER OF APPEARANCE 113

BIBLIOGRAPHY 115

List of Stellenbosch geography publications by year, 1922-2019 115

List of Stellenbosch geography edited collections by year, 1954-2019 155

List of geography honours research projects by year, 1972-2019 156

List of geography master's theses by year of submission, 1927-2019 180

List of geography PhD dissertations by year of submission, 1937-2019 196

INDEX 199

LIST OF FIGURES

2.1	Professor GG Cillie	7
2.2	Professor JT Morrison	8
2.3	Professor SJ Shand	9
2.4	Professor EJ Goddard	11
2.5	Professor W Blommaert	12
2.6	Professor Petrus (Piet) Serton	15
2.7	Marguerite Marchand le Roux	17
2.8	Dutch Central Hall	18
2.9	CL Marais Library	19
2.10	Dr DJ Conradie	20
2.11	Dr JH Moolman	21
2.12	Dr A Nel	21
2.13	Ou Hoofgebou (Old Main Building) at Stellenbosch University	22
2.14	Serton's first published paper as a member of Stellenbosch University	23
2.15	<i>Zuid-Afrika: een economisch-geografische studie</i>	25
2.16	<i>Zuid-Afrika: land van Goede Hoop</i>	26
2.17	<i>Suid-Afrika en Brasilië: Sosiaal-geografiese vergelyking</i>	28
2.18	Contestation of the Separate Universities Bill	29
2.19	Publications by year, 1922-1947	30
3.1	Natural Sciences Building	35
3.2	1959 Honours class with Professor Andries Nel	37
3.3	Drawing of staff members in 1985	37
3.4	Some appointed staff, 1950-1993	38
3.5	Glass-encased statue of German geographer Carl Ritter	39
3.6	Postgraduate administration officers	40
3.7	Publications by year, 1948-1993	42
3.8	<i>Ruimtelike Ordening: 'n Ekonomies-Geografiese Perspektief</i>	45
3.9	<i>Die stad en sy omgewing</i>	47
4.1	Chamber of Mines Building	58
4.2	Departmental secretary, Catherine Liederman	59
4.3	Bennie Schloms on a field excursion with honours students	61
4.4	Professor SLA Ferreira	62
4.5	Rotational chairpersons	63
4.6	Publication output by year, 1994-2019	65
4.7	Geography publications by year, 1922-2019	65
5.1	Dr JH van der Merwe	70
5.2	Professor A van Niekerk	71
5.3	CGA permanent and contract staff, 2019	72
5.4	Professor HS Geyer	74
5.5	The first graduating group and CRUISE staff, 2011	75
5.6	CRUISE graduates and staff, 2015	76
5.7	Dr A Holloway	77
6.1	Honours projects by year, 1972-2019	84
6.2	Master's theses submitted by year, 1927-2019	89
6.3	PhD dissertations submitted by year, 1937-2019	91

LIST OF TABLES

2.1	First geography syllabus at Victoria College/ Stellenbosch University, 1914	10
2.2	Proposed course content for geography (historical) and geography (scientific)	13
4.1	Academic staff members in the department, 1920-2020	50
4.2	Departmental chairpersons, 1920 to present	63
5.1	CRUISE staff, 2009-2020	75
5.2	RADAR staff, 2011-2020	77

ACKNOWLEDGEMENTS

Gustav Visser acknowledges support from the staff of the Department of Geography and Environmental Studies during the development of this book; Caro Kotze for designing our centenary logo; the honours classes of 2018 and 2019, who assisted in verifying parts of the Bibliography; and Lauren Buchanan for checking the Bibliography and “discovering” various original texts hidden in all sorts of obscure places. Gustav also thanks Anzelle, Brigitte and Jos Visser for their unwavering support. Finally, it was an honour to develop this book with his colleague, Jan de Waal – thank you.

Jan de Waal thanks his colleague and friend, Gustav Visser, for bringing him on board for this fantastic project. To Debbi de Waal for putting up with the late nights and your overwhelming support, thank you. To all those who helped contribute to this book, your input is greatly appreciated.

Collectively, we express our gratitude to all the individuals, who participated in this project by providing information and sharing their insights. The contributions by Karlien Breedt, Senior Archivist at Stellenbosch University, for finding all sorts of incredible information and photographs, are especially commendable and are immense. Thank you, Karlien. To Manfred Spocter, who acted as a first reader and labouriously cross-checked references, thank you. Ronnie Donaldson as the second reader of the initial text, baie dankie. The authors also thank editor Pieter de Necker and gratefully acknowledge his contributions. We also thank the book reviewers and recognise their insights, suggestions and final adjustments to the text.

FOREWORD

The book celebrates 100 years of the variously styled Department of Geography and Environmental Studies at Stellenbosch University – the founding geography department in South Africa and also amongst the first departments in the English-speaking higher education sector of the British colonised world. This investigation emanates from a programme of events to mark the occasion of the department's centenary. The history of the department is tracked, from its origins in 1920, through the dark apartheid years, into post-1994 democratic South African society. We recognise the lack of inclusive reflections, on many fronts, of South African society in past teaching programmes and research foci, but are certain that the department is committed to multiculturalism, equity, inclusivity, equality, service and scientific enquiry for the benefit of all humankind and the natural world. This is an open-access book, the content of which is freely available to all via the departmental website or African Sun Media. The book has also received support from a number of key role players who have made the following remarks.

In June 2019, I had the privilege of attending the centenary celebrations of the Geography degree *tripos* at my *alma mater*, the University of Cambridge. I think it says much for the vision and foresight of individuals such as Professors Shand, Goddard and Blommaert that the teaching of a curriculum in Geography was already underway several years earlier at Stellenbosch, under the banner of the University of the Cape of Good Hope, even as the Cambridge department was made manifest. That it has prospered so well since then is testimony to the prescience of those initiates. Indeed, the influence that Stellenbosch has had on education and research in Geography in South Africa speaks volumes for the quality of academics that walked in the footsteps, or stood on the shoulders perhaps, of its pioneers. It is a fascinating and sometimes disquieting story, and what Gustav Visser and Jan de Waal have done in their engaging research is to bring to life not only the factual details about the growth and development of a department, but also of the characters that have forged it. The appointment of the first Professor of Geography at any university in South Africa, Petrus (Piet) Serton in February 1920, was indeed a resourceful intervention and was fundamental to the unique character and strong European roots of the Stellenbosch department as it evolved over subsequent decades. It was to be almost two decades before a Professor of Geography would be appointed down the road in Cape Town.

Sadly, Serton's impressive research output appears to have been largely bypassed due to the fact that it was mainly published in Dutch, but it is clear that, in an outstanding record of postgraduate supervision, he laid the initial foundations for a rich research tradition in Stellenbosch Geography that has now really flourished and matured. The history of this development presented by Visser and De Waal goes way beyond the merely descriptive, as it offers an honest and reflective critique of its evolution and ongoing transformation. On behalf of the community of geographers in South Africa and, indeed, beyond, I congratulate the authors on the publication of a thoughtful and considered analysis of 100 years of our important discipline at Stellenbosch.

MICHAEL E MEADOWS

Professor Emeritus: University of Cape Town

President: International Geographical Union

As with many artefacts of our society, the articles, books and dissertations that embody academic output do not, in themselves, fully reveal the conditions of their own production. They appear as fully formed and often definitive pronouncements about particular subjects, and together they stack up as knowledge about the world. In this volume, Gustav Visser and Jan de Waal do a remarkable job of revealing the capacities, energies, resources and motivations behind a century of knowledge production at the Department of Geography and Environmental Studies at Stellenbosch University. As a result, we are able to situate knowledge in the institutional, ideological, economic and political contexts within which it was formed, and to reflect on how knowledge production shifted in relation to changing context. We are able, too, to appreciate who it was that produced, taught and learned this knowledge. Today, the Department of Geography and Environmental Studies at Stellenbosch University is one of 24 geography departments in South Africa. Having collectively celebrated a century of geography in South Africa with Stellenbosch, many geographers work to sustain the conditions under which they can continue to produce and share knowledge. This introspection is greatly assisted by detailed historiographies of the discipline, for which this book provides an excellent model.

RICHARD BALLARD

President: Society of South African Geographers

After a century of geography at Stellenbosch University, the discipline is still very much alive and well. A research tradition was established early on, leading to the expansion of the department. This led to the establishment of geographical information systems and the expansion into geographic information technology, and the Centre for Geographical Analysis née Institute for Cartographic Analysis

and two new research centres, i.e. the Centre for Urban and Regional Innovation and Statistical Exploration, and the Research Alliance for Disasters and Risk Reduction. The department has been very productive delivering degrees at the undergraduate level and especially at the postgraduate level all the way through the very competitive honours programme, structured and research master's degrees and doctoral degrees. Staff and postgraduate students also contributed to numerous publications over the past 100 years and have made a major contribution to Geography in South Africa and beyond. The stage has been set for the next century of Geography at Stellenbosch University.

EUGENE CLOETE

Vice-Rector: Research, Innovation and Postgraduate Studies, Stellenbosch University

The authors must be congratulated on completing this immensely readable and comprehensive account of a century of the geography discipline at Stellenbosch University. The text comes alive with the many photos of departmental stalwarts of the past and present, as well as useful tables and illustrations. This is a book that will be of interest to those within the discipline. However, it also provides an enriching record, which is of interest to the department's alumni, related industries, the associated faculties, and the university. Yet, I venture to say that the book is not merely an excellent empirical record. It also captures the nuances and dynamics that characterise and chart the intellectual history of an academic department, both through its academic leaders and staff, its academic offering and the changes in its organisational (re)structuring. The contributions over the years by the various centres bear testimony to a rich variety in academic offering and thought. The book does not shy away from criticism either, and leaves the reader with some pertinent ontological and normative questions about the future.

ANTHONY LEYSENS

Dean: Faculty of Arts and Social Sciences, Stellenbosch University

This book reflects on the distinct characteristics, intellectual contributions, and challenges associated with the different periods in the 100-year history of the department. During 2020, the department was challenged like never before when a year of meticulously planned centenary celebrations were abruptly replaced by the realities of the global Covid-19 pandemic. Despite the enormous challenges experienced during the departmental centenary year, it also offered some glimpses – and experiences – of what elements of future higher education in geography may look like. The ability to bring this book to fruition under these circumstances, and the efforts of all staff to transform the format of an entire academic programme within months is testimony to the remarkable ability of the human spirit to conquer during times of adversity. This manifestation of resilience may well be

the critical catalyst in overcoming the familiar human-physical divide within geography, and in the years to come may be recognised as the turning point for reinventing our discipline, while stepping into the next century of geography at Stellenbosch University.

DANIE DU PLESSIS

Head: Department of Geography and Environmental Studies, Stellenbosch University



CHAPTER 1

INTRODUCING A CENTURY OF GEOGRAPHY AT STELLENBOSCH UNIVERSITY

The book focuses on the establishment and development of geography as an academic discipline at Stellenbosch University, South Africa's founding geography department (Van der Merwe et al., 2016). It serves as a companion publication to other contributions which have explored the genesis and expansion of geography at Stellenbosch (Barnard, 1995; Van der Merwe et al., 2016) and papers published in the 2020 *South African Geographical Journal Special Issue* celebrating the department's centenary (De Waal & Williams, 2020; Donaldson, 2020; Donaldson & Ferreira, 2020; Spocter, Visser & De Waal, 2020; Van Niekerk & Münch, 2020). The authors seek to highlight the development of the discipline and its institutionalisation as part of the academic offerings of the university, while providing details about the teaching and research conducted, as well as the people who contributed to these endeavours. It also furnishes the academic geography community at Stellenbosch, and geography more broadly, with some insights into its past development and more recent changes. The ways in which the department currently operates are deemed fundamentally joined to its past and pave the way for the evolution of geography and its various subdisciplines going forward.

“To know thyself is the beginning of wisdom”, a quote often attributed to Socrates, frames our ambition to write this book. For this to occur, one needs to delve into one's history. Cicero's claim, “To know nothing of what happened before you were born is to forever remain a child”, looms large in thinking through what was and how one deals with history in the present and a possible future. The book aims to sketch something of the historical past of a particular self and how it came about as the currently styled Department of Geography and Environmental Studies at Stellenbosch University. It is argued that a small academic department relative to those of the disciplinary powerhouses of Cambridge, University College London, Durham, Oxford or Utrecht, to name a few, has made its own distinctive contributions to the discipline generally and to South African geography in particular. After all, Stellenbosch University was the birthplace of South African tertiary geography teaching and research. In this book, we reflect on the staff and students of the department and their work during the past century.

It should be noted that documenting the department's history was undertaken by two geographers, one interested in human geography and the other in physical geography, so representing the (historically) two main branches of the discipline. The authors are, however, not historians by training, and those readers who are historians, should keep this in mind when engaging with this text. A key purpose of the book is to provide as complete a record as practicable of who taught in the department and what they and their students contributed to the academic project at Stellenbosch University and further afield. An essential feature of this book is the compilation of a bibliography of research published in the department over the past century. This is a unique contribution as very few geography departments in the world have penned such a comprehensive resource.

From a methodological point of view, some observations need to be made. The book was inspired by a booklet compiled by Professor WS (Barnie) Barnard for the commemoration of the department's 75th anniversary (Barnard, 1995). His work provided a reference point to the publication output of the department up to that point and outlined the staff complement and their activities. It was, however, in many ways an incomplete project. This book draws on numerous collections in the Stellenbosch library system and archives, as well as on the recollections of current and former staff members. Some obstacles were encountered, most of which related to incomplete and inaccurate documentation of past research output, finding the many original physical artefacts and the arduous task of having to record them. In total, over 2000 entries have been captured and are now available in open access to aid future reference and analysis.

Chapter 2 aims to reflect on the establishing of geography at Victoria College, the predecessor institution from which Stellenbosch University emerged. Attention is given to the key role players in this endeavour and their motivations. Thereafter, the focus turns to the first professor and supporting staff that led the newly established department. Some details are provided about the staff members and their research. It is observed that for the most part the teaching and research undertaken were direct reflections of the small staff complement and, epistemologically and methodologically, expressions of the broader trends in geography at the time. Finally, some conclusions are drawn.

Chapter 3 considers the expansion of geography at the university from the late 1940s to the early 1990s. This is an era in which geography at Stellenbosch developed a certain self-confidence in the local Afrikaans geography arena. This is a legacy we argue later that created notable future advantages but also some formidable challenges. In the main, the department expanded its teaching offering to more specifically present physical geography themes beyond the limited scope of the previous decades. This trend was also evidenced in the research record.

Chapter 4 first considers the basic changes in the staff complement and makes the key observation that there was a sudden and considerable movement on this front. The old guard of the previous decades made way for a whole new cohort of academics and a rising number of students was recorded. There was also the looming re-organisation of the department's contribution to academic degree programmes, rather than just being a major in a degree programme. This introduction of new teaching and research foci leads to the next chapter that deals with the increased commercialisation of the department in its academic research offering.

Chapter 5 examines the reasons behind the establishing of the three centres that have, in various formats, been part of the department, the people that worked there and the research they conducted. Consideration is first given to the development of the first self-funded academic and applied unit in the department in the 1970s, an era long before what we now might label as the corporatisation of higher education, a trend seen globally. Currently, the idea of self-funded research units has become increasingly prevalent and been supported by most university administrations for various reasons, most of them perhaps not that noble. In the case of the department of geography at Stellenbosch University, the centres have all had considerable successes in various matrices of analysis, although the commitment of the university to them has, for the most part, been questionable. The exposition of the creation of the centres is chronological and, as will be highlighted, each had different academic and practical mandates. First, the setting up and transfiguring of the Institute for Cartographic Analysis (ICA) – later the Centre for Geographical Analysis (CGA) – is considered, after which the establishing of the Centre for Urban and Regional Innovation and Statistical Exploration (CRUISE) and later the Research Alliance for Disasters and Risk Reduction (RADAR) comes into view.

Chapter 6 highlights the contributions that the department's students have made to the production of new knowledge. Students can, and do, play a part in the larger research output of the academy – be it as fieldworkers for one-off research projects, members of a research group or by virtue of their own independent research activities in the form of honours projects, master's theses and doctoral dissertations. This new knowledge has both informed and been included in the department's published research. This chapter aims to indicate and analyse the flow, as well as general research foci of student research at postgraduate level in the department. The first section reviews the output of the honours research programme which constitutes small-scale studies. Thereafter, master's degree theses come into view, followed by the most academically significant student research contributions in the form of completed doctoral research dissertations.

Chapter 7 contemplates the history and development of the department and comments on the geography “project” at Stellenbosch University. Some challenges to providing a record from which scholars can draw are discussed. In this regard, the authors have aimed to be as comprehensive as possible and the hope is expressed that it provides a starting point for researchers to interrogate further. One key conclusion drawn from the exercise is that while the department was productive in the generation of new knowledge and home to a number of influential academics throughout its history, it was also never collectively and particularly focused on specific themes of analysis over its century of existence. There has been, however, the emergence of certain areas of teaching excellence and research publication related to urban studies, tourism, geographic information technology (GIT), urban and regional planning, environmental studies, as well as a revival of physical geography.



CHAPTER 2

FOUNDING THE DEPARTMENT OF GEOGRAPHY

2.1 INTRODUCTION

This chapter firstly documents the establishing of geography at Victoria College, the institution from which Stellenbosch University would emerge. Attention is given to the key role players in this endeavour and their reasons for doing so. Thereafter, the first professor and his supporting staff in the newly founded department in the renamed university are considered. Information is provided about the staff members and the nature of their research. It is seen that the teaching and research undertaken were principally direct reflections of the small staff complement's epistemological and methodological views of the broader trends in geography at the time. A pronounced move from physical geography to human geography is discerned quite early in the department's evolution. For much of this formative period, the ideas and approaches to geography were led by the founding professor, Petrus Sereton. Finally, some conclusions are drawn.

2.2 ESTABLISHING GEOGRAPHY AT STELLENBOSCH

Geography had been taught in what is now South Africa since 1839 as a primary school subject and after 1858 as a secondary school subject in the Cape Colony (Wesso, 1992). Victoria College led the drive in 1912 for geography to be included in both the matriculation examination and as a subject option at the university level. At the formation of the Union of South Africa in 1910, Victoria College, the largest of the colleges under the federal University of the Cape of Good Hope, was a bastion of Afrikaner nationalism. Despite being in Barnard's (2016, p. 66) view "still under an uncertain goal", Victoria College was well respected. In a motivation for establishing Rhodes University College, around 1904 the Cape Town secretary of the Rhodes Trust noted to his London superiors that the establishment of an institution of higher learning was required "... [which] is designed ... to extend and strengthen the Imperial Idea in South Africa, where so far the only decent university education to be had [in South Africa], is at Stellenbosch, under the influence of notoriously anti-Imperialists" (Currey, 1970, p. 12, in Wesso, 1992).

Nevertheless, the general, although by no means only, (often highly contested) objective was to gain institutional independence and identity from a somewhat amorphous university body granting degrees in Cape Town (Grundlingh, 2018) along with the pursuit of educational ideals that were not controlled by a British-led Imperial administration or ideal.

Establishing geography at Stellenbosch has a bit of a backstory worth some consideration here as it would impact in various, perhaps subtle, ways the development trajectory of the discipline at Stellenbosch. While the Victoria College Council negotiated with the Union government for independence from the University of the Cape of Good Hope,¹ its Senate was focusing on curriculum issues. Amongst these was the training of schoolteachers and the inclusion of “a new geography” at school level. The content of this “new geography” remains uncertain (Barnard, 2016; Grundlingh, 2018). In the context of higher education, it is procedure that new disciplines be introduced from within institutional structures, such as Senate. This would not be the case at Stellenbosch.

Regarding the early genesis of geography as a discipline in South Africa, Wesso (1992) made a key recounting of the early history of geography at Stellenbosch. The first concrete step to have geography recognised as a subject at a university, namely the University of the Cape of Good Hope, was that higher examinations be taken during the early 1910s. He noted that on 13 May 1912 the senate of Victoria College discussed correspondence from the president (GC Tomlinson) of the Student Representative Council requesting the introduction of a course in “physiography” for theology (admission) students. This was a rather unexpected source for petitioning the introduction of a new subject or discipline at an institution of higher learning – certainly for those times. The request was an affirmation of the possible link which the emerging Afrikaner identity saw between theology and geography. With hindsight we can speculate that more general notions of social Darwinism and eugenics were at play against the backdrop of environmental determinism in emerging disciplines such as geography at that time. The request brought a significant new dimension supporting the institutionalisation of geography. In the view of the protagonists, there was a need to formalise the link between theology and physiography (a form of geography) at tertiary level. The matter was referred to the chairman of the Senate, Professor GG Cillie (Figure 2.1), who did little about it. But nine months later, on 19 February 1913,

1 The University of the Cape of Good Hope, renamed the University of South Africa in 1916, was created when the Molteno government passed Act 16 of 1873 in the Cape of Good Hope Parliament. Modelled on the University of London, it offered examinations but not tuition and had the power to confer degrees on successful examination candidates. Today this function still exists within the Department of Music where for over 100 years music students have been examined.

the request was again considered by the Senate and this time it was referred to the chairman's committee under the headship of Professor John Morrison (Figure 2.2), a Scottish scientist and meteorologist.²



FIGURE 2.1: Professor GG Cillié (Source: Watson-Lockley, 1927)

2 In 1891, Professor John Todd Morrison was appointed as lecturer in physics and chemistry at Victoria College. From 1906 until 1923, he held the research chair in applied mathematics, followed by the research chair in physics until his retirement in 1934.



FIGURE 2.2: Professor JT Morrison (Source: Watson-Lockley, 1932)

A month later on 17 March 1913, the Senate was presented with an outline of a proposed course in physiography, as well as the lecturers responsible to teach it; namely physiography for junior admissions students taught by Dr SJ Shand (meteorology, geography and geology), Prof WE Malherbe (physics), Prof CD van der Merwe (chemistry) and Prof JT Morrison (astronomy).

During the Senate meeting, Samuel James Shand (Figure 2.3) moved that a course in *geography* be offered rather than *physiography*. This was more in line with the nature and content of the discipline in Britain. Given the British-trained presence in the senate, the proposal was agreed to but with a different working team – the reasons unknown to the authors. On 28 May 1913, a special committee for the further development of the geography course (with Shand as convenor) made four important recommendations, namely (1) the institution of a course in

geography must involve the co-operation of the departments of geology, zoology, and history; (2) the course was to commence in 1914; (3) that the provision made for teaching geography be regarded as of a temporary nature only; and (4) that as soon as a proven demand existed for geographical instruction that demand be met by the appointment of an independent professor of geography. The eventual aim of all this was to establish a department of geography and not just to specify what geography as a discipline would involve.



FIGURE 2.3: Professor SJ Shand (Source: Watson-Lockley, 1932)

Shand, who received a DSc from the University of St Andrews in 1910, was an igneous petrologist who was appointed as professor of geology and mineralogy at Victoria College in 1911 and later gained international standing. He was the driving force behind the proponents of geography, and he emphasised the educational value of geography. Shand compiled a draft syllabus for Geography I in 1913. The question of implementing the theoretical course was referred to the chairman's committee which, in consultation with Shand, had to come up with

ways and means of how to present it. This led to a reimagination of the contents of the proposed geography course. Issues relating to the practical course were referred to a special committee comprising Shand, as convenor, W Blommaert and EJ Goddard. The presentation of this new course of study did, however, have financial implications for Victoria College. The £120 required to purchase the equipment necessary for the course in geography could not be provided by the Union government’s Department of Education (DoE). Instead, the DoE suggested that funds be made available by the university’s departments of zoology, botany and geology (from a £15 000 grant by the DoE to these departments), funds to which Shand, Blommaert and Goddard all had access (Wesso, 1992; Barnard, 2016; Grundlingh, 2018).

The one-year course was first implemented in 1914 in three blocks (Table 2.1). Shand was responsible for physical geology, climatology and cartography during the first two quarters. He was joined by Goddard (Figure 2.4) a Scottish, Australian-trained zoologist, who obtained his DSc from the University of Sydney, and used the third quarter to teach biography and ethnography. Blommaert (Figure 2.5), a Flemish historian who received his PhD from the University of Ghent, would lecture political geography along with the history of discovery in the final quarter. The course of study did not contain much of what would now be taught in a typical geography course, rather it was determined by staff members’ interests. The content was representative of that period of the emerging discipline of geography at all Western universities and taught by academics who came from other, related disciplines. The only exception would probably have been the German Universities where modern geography had been established as a discipline in a degree context in the 1880s (Barnard, 2001). This course outline focused largely on physical geography and stands in sharp contrast to the “Stellenbosch geography” that would be developed in the 1920s and that of later years.

TABLE 2.1: First geography syllabus at Victoria College / Stellenbosch University, 1914

COURSE TYPE	TERM	TOPICS
Theoretical	1 & 2	Meteorology, climatology and physical geography as relating to (a) the world in general and (b) South Africa in particular
	3	Geographical distribution of animals and plants; anthropogeography, and the elements of ethnology
	4	Political geography (a) in general and (b) of South Africa. A selected subject from the history of geographical discovery
Practical	1 & 2	The study of maps, meteorological observations and records and simple survey methods

(Source: SU Archives, 1914)

Regarding the course content, the only reference to “man” was in its relationship to climate and topography, or more specifically, a concern with the geographical factors which affect(ed) early civilisations and migration. These issues were inherently problematic intellectual starting points as the demise of environmental determinism so clearly demonstrated soon afterwards (Livingstone, 1992). This initiated a significant dimension of the development of geography in South Africa, namely a more overt focus on Friedrich Ratzel’s conception of human geography. He was a pioneer in developing the school of anthropogeography and was the founder of modern political geography. He emphasised the importance of the physical environment as a factor determining human activity. This was an echo from the habitation theories of ancient work in geography which was, in current science, fundamentally flawed on many fronts including its obvious racist foundations. It also fitted in well with the initial request for the introduction of physiography without theological aspects.



FIGURE 2.4: Professor EJ Goddard (Source: University of Queensland Archives, n.d.)

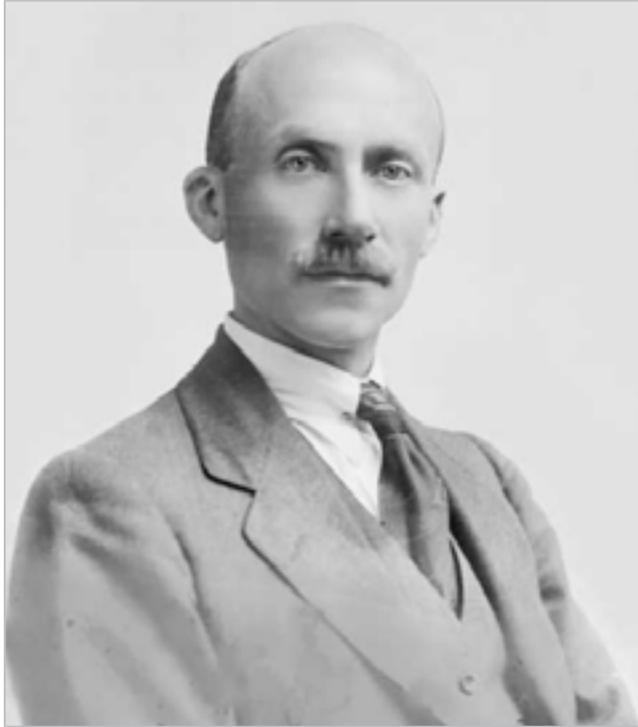


FIGURE 2.5: Professor W Blommaert (Source: Watson-Lockley, 1924)

In 1913, Victoria College had a teaching staff of 20 and 367 students. The Scottish professors who were the founding academics of the college were still there, but they were increasingly being joined by Dutch and young Afrikaners with Continent-acquired doctorates. The professors, most of whom were natural scientists, took the initiative to find a niche for geography. By the end of 1913, they had persuaded the College Senate to offer a one-year course in geography and convinced the University of the Cape of Good Hope to recognise geography as a BA pass subject. There is some deep irony here, in that Stellenbosch tied itself to two decidedly colonial stances: Geography as knowledge necessary to understand the world at large (and the colonised world in particular) and the expatriates that would lead the charge. None of those who led the establishing of geography at Stellenbosch was born in South Africa and none, at least at the time, spoke Afrikaans or had any affiliation to the growing Afrikaner nationalism. It was one thing to establish a new discipline at Victoria College, it would be quite another to make it part of a fully fledged degree component.

The commencement of the geography course in 1914 was just a year-long “intervention” in a degree, not a full course of study. However, on 25 July 1917 in their report, the Science Committee agreed to consider making arrangements for a geography course with greater scope, the detail of which would be provisional

pending the appointment of a professor in geography. Given the Scottish backgrounds of these Senate members, the proposed geography course had a four-year format and had distinct characteristics, namely courses in either geography (historical) or in geography (scientific) reminiscent of contemporary BA and BSc streams of geographical investigation at degree level (Table 2.2).

For the most part, this would not be the structure of the geography degrees at Stellenbosch after the appointment of the first professor of geography at the newly minted University of Stellenbosch (1918), the human geographer, Petrus Serton (appointed in 1920). Shand's course was popular, although its block structure and the divergent backgrounds of the lecturers proved uncomfortable. For three consecutive years – 1916 to 1918 – the College Council unsuccessfully petitioned the Union Department of Education for funds for a chair in geography. In the meantime, the options in geography were extended to two year levels: a one-year course for second-year education students, a final year for education students and a final-year course for degree students, both with Geology 1 as prerequisite. In April 1918, the University Senate went a step further by stipulating that the geographer they intended to appoint would be an all-rounder but with specialisations on the sciences side. However, two unexpected events occurred later that year that would fundamentally alter the direction geography at Stellenbosch would take, the impact of which continues to define Stellenbosch geography's character a century later. First, Shand, still a British citizen, was called up for military service during the final stages of the Great War. Second, the remaining lecturers who were annoyed at the University's refusal to pay extra remuneration, confronted the Council with an ultimatum: unless a full-time professor of geography was appointed, they would present the course only for a further year. After all, none of the academics presenting geography courses was a trained geographer. Then, in 1918 the Joint Matriculation Board of the Union of South Africa (not only the Cape Province) recognised geography as a university subject. The subject now occupied a niche at the University.

TABLE 2.2: Proposed course content for geography (historical) and geography (scientific)

YEAR OF STUDY	GEOGRAPHY (HISTORICAL)	GEOGRAPHY (SCIENTIFIC)
First	Geography, mathematics, history or a modern language, and one of: physics, chemistry, geology	Geography, history, mathematics and one of: physics, chemistry, geology
Second	Geography, history and economics or politics or a modern language	Geography, surveying plus meteorology and another science
Third	Geography and history, or economics or philosophy	Geography and a suitable group of science courses equivalent to two full courses
Fourth	Geography	Geography

(Source: SU Archives, 1917)

In 1919, the prospective position of a chair of geography with no candidate yet in mind became entangled with the University's ambition to establish a Faculty of Commerce. For the Stellenbosch academic community, the newly acquired university status was an opportunity to extend its mission by defining an Afrikaner identity, maintaining the "Hollands" languages (and an emerging Afrikaans language) and wiping out Afrikaner poverty. Barnard (2016) noted that, during the Great War years, the first Afrikaner firms were established – Nasionale Pers in 1915 and Sanlam in 1918 – and a director of companies, JG van den Horst, who had Afrikaner nationalism at heart, joined the University Council. However, the world of finance, commerce and industry remained an English preserve. It was then "generally accepted that a tough battle still await(ed)s the Afrikaner on the economic front ... [it] is as if nobody really knows (knew) how the struggle should be organised. One reason for this is (was) undoubtedly the fact that attention at school and university is (was) not attuned to the economic problems which pupils will be (were) facing later in life" (Barnard, 2016, p. 68). Stellenbosch, the self-proclaimed Afrikaner *volksuniversiteit* (people's university) took the initiative and obtained the go-ahead to institute a chair of economics. The Union Department of Education, however, blocked the University's candidate, JFW Grosskopf, because he was a participant in the 1914 rebellion against the Great War and the occupation of German South-West Africa and, as such, was barred from a teaching position.

While still anxious to start a Faculty of Commerce but uncertain about Grosskopf, the University discovered a new niche for geography. On 7 November 1919, the Senate decided to institute a chair of geography financed from its own funds if necessary. The discipline was to be accommodated in all undergraduate years. The person to be appointed should be someone "who has undertaken a complete course in the subject but with specialisation in commercial geography" (Barnard, 2016, p. 68). The 1919 decision was a complete reversal from the previous year's stipulation but there was no one to argue the case for physical geography. Shand, geography's mainstay since the early 1910s, was just back from military service but still finding his feet and Goddard's attention was elsewhere in planning an Antarctic expedition that never came off the ground. Blommaert would retire in 1926 as the head of the department of history.

Barnard (2016) noted that in light of very limited academic staff resources in the Union of South Africa, a commercial geographer was not to be found in the country and the university had good reason to start its quest in the Netherlands. They might have looked to Great Britain as the colonial master could have served this purpose, too, but given the anti-British sentiment of the time this move was no surprise. An added incentive to appoint someone from the Netherlands was the promise of the Jan Marais Fund to support a chair on condition that half the

courses should be presented in either Dutch or Afrikaans. The Dutch consulate in Cape Town passed the Stellenbosch enquiry to Prof Jan Niemeyer, a geographer at the Utrecht State University (Rijksuniversiteit Utrecht) who happened to have the person that Stellenbosch was looking for: his first and only doctoral student – Petrus Serton (Figure 2.6) (1888-1963) had completed his dissertation on an economic geography theme at Utrecht in 1916.



FIGURE 2.6: Professor Petrus (Piet) Serton (Source: Watson-Lockley, 1958)

Serton had also followed courses in physical geography which would, at least in part, facilitate the physical undergraduate courses – the initial focus of geography teaching at Stellenbosch. In addition, as a staff member of commerce at the Rotterdam Advanced School of Commerce (Hogere Handelschool Rotterdam,

today Erasmus University), he was well acquainted with the structuring of tertiary-level courses in commerce. The University Council appointed Serton to the chair of geography in February 1920. This made him the first full professor of geography at any South African university. Serton and council were relieved to hear shortly afterwards that its other anxieties regarding the post were solved. In March 1920, the Department of Education notified the university that it would fund a chair of geography concurrent with the appointment of Grosskopf as professor of economics. As Serton was a human geographer who presented courses in economic, political and regional geography, the department of geography was consequently placed in the Faculty of Arts, a move in stark contrast to nearly all other South African university geography departments until the 1960s. It is noteworthy that, in one decade, geography had been elevated from a one-year course of study to a full four-year major in a degree course.

2.3 THE FIRST YEARS OF THE DEPARTMENT OF GEOGRAPHY

The appointment of Serton led to the foundation of South Africa's first geography department with its main mandate being to teach geography to future school-teachers. Research in geography, as in most other disciplines at the time, was not a major concern of universities, certainly not in the colonies. The "department" was essentially a two-person endeavour for many years. Besides Serton, between 1920 and 1932 a post of lecturer was shared between the history and geography departments. This post was filled by Marguerite le Roux (Figure 2.7), who was one of the first two female geography lecturers at any South African university (the other was at Pretoria where Ms Vaughan worked for a year) (Van der Merwe et al., 2016). Le Roux obtained her BA degree at Victoria College in 1906. She must have been a woman with keen intellect and a strong personality given the male dominance of higher learning at the time. In 1915, she had been appointed as a lecturer in the history department and from 1920 she lectured both geography and history. Staffing of the department would grow very slowly and lectures were originally presented in the Dutch Central Hall (Figure 2.8) at the College Square. The chairperson's office was in the CL Marais Library in Crozier Street (Figure 2.9). A new lecturer post in geography was created in 1929 and filled by DJ Conradie from 1929 to 1965 (Figure 2.10). Conradie was appointed owing to a rapid increase in both the number of students and lectures (Thom, 1966). Le Roux left the department in 1932 to teach geography to students in the education faculty.

A notable trend started to emerge at this time – the staffing of the department with its own graduates. This is illustrated by departmental leadership which for many decades was never headed by a staff member who did not complete a PhD at Stellenbosch. Also remarkable is that, after Serton's appointment, there would be no further appointments from outside the country. This stands in stark contrast to what would happen at English university geography departments in South Africa (Visser et al., 2016).



FIGURE 2.7: Marguerite Marchand le Roux (with an unknown student)
(Source: Watson-Lockley, 1917)

Serton and Conradie were the only full-time lecturers in the department until 1940 when JH (Jan) Moolman (1940-1948) (Figure 2.11), a graduate of the department, joined the staff as a lecturer on a permanent basis. Moolman had assisted in the department on a temporary basis for various periods of time since 1935 (University of South Africa (UNISA), 1960). Moolman left the department in 1948 to take up a position as Director of the Division of Planning in the Natural Resources Development Council, a position he held until 1959.³ Wesso (1992) notes that during this period Moolman contributed significantly to research concerning planning and development in South Africa and he served on various government commissions, including the highly influential Tomlinson Commission in 1956. The Commission found that the black reserves, later black homelands, were incapable of supporting South Africa's black population without significant enlargement and state investment. Its conclusions and recommendations were wholly rejected by the apartheid government of the day.

3 Moolman was later the head of UNISA's department of geography and director of the Africa Institute.

Andries Nel (Figure 2.12) replaced Moolman in 1949. While the department had long been small and always shared lecture halls with other departments, in 1949 the department was centralised in the Old Main Building (Figure 2.13), with two large halls for lectures and practical classes.



FIGURE 2.8: Dutch Central Hall (Source: US Fotos, c. 1951)

The inevitable question arises as to what geography was being taught? Harold Wesso's (1992) doctoral dissertation gives an informative answer. He points out that, with the appointment of Serton, very little of the French tradition in Dutch geography was initially transplanted to Stellenbosch geography. Why would it be? The initial curriculum had been developed by non-geographers, and the key protagonist was British. The syllabus Serton introduced in 1921 differed substantially from that which was previously taught at Victoria College. It was gradually transformed to more explicitly reflect the German and British traditions. Wesso (1992) points out that in his Serton Memorial Lecture at Stellenbosch, Andries Nel recalled the content of Serton's lectures during the late 1920s and early 1930s. What he taught his students was largely determined by the work of Germans, such as Richthofen, Hettner and Ratzel, as well as by the work of British geographers like Herbertson, Mackinder, Fawcett and Baker. This meant that the geography degree course emphasised a systematic theme of investigation, such as economic geography in the case of Serton, and a more general regional specialisation, particularly South Africa. More generally, climatic, biotic, economic and racial classifications were largely based on the work of British and German geographers.



FIGURE 2.9: CL Marais Library (Source: US Fotos, 1930)

The social context of racial classification in geography is specifically bound in a larger regional geography synthesis (Wesso, 1992). Wesso argues further that Serton had to conform academically (although not personally in later years) and he had to be responsive to the needs of Afrikaner society. He was not an intellectual supporter of the nationalist ideal with its rather unscientific connection between theology and geography. The observation goes further when one notes Serton's doctoral supervisor Niemeyer's influence on his thinking, particularly as far as environmental determinism⁴ and possibilism⁵ were concerned, the Western approach *de jure*. Niemeyer was not a supporter of the German geographic tradition

4 *Environmental determinism* (also referred to as climatic determinism or geographical determinism) promotes the idea that the physical environment predisposes societies and states to certain development trajectories. There are a number of applications of this idea in geographic thought, which reach back as far as Ancient Greece and the so-called habitation theory.

5 *Possibilism* was a response to environmental determinism based upon the assumption that environments set certain constraints or limitations on man, but culture is otherwise determined by social conditions. This theory argues that the true (and only) geographical problem is that of the utilisation of possibilities. In geography, Paul Vidal de la Blache was arguably its most noted proponent.

(the most influential at the time) in terms of the content of theoretical intent (in contrast to the style of geographical academic accomplishment), particularly Ratzel's *anthropogeographie* which could very easily, and did, descend into essentially highly problematic racist ontologies. He rather favoured the French tradition in geography, such as Vidal de la Blache's *geographie humaine* and specifically the notion of *genre de vie*. This approach to geography was more ecological and socio-economic in nature. Although Serton taught Ratzel's organic state theory,⁶ in addition to Darwin's biological evolution theory (which in geography was the foundation of environmental determinism), he was not altogether enthusiastic about the potential outcomes of such thinking (Barnard, 2016). It was suggested by Nel (Barnard, 2016) that there were two reasons for this lack of enthusiasm with which Serton taught the work of Ratzel, namely (1) the organic state theory would become the cornerstone of Hitler's National Socialism as propagated by Haushofer and, after 1939, Serton's own homeland was one of its first victims; and (2) he simply had an affinity with the French idea of possibilism.



FIGURE 2.10: Dr DJ Conradie (Source: US Fotos, 1965)

6 *Organic state theory* was proposed by Herbert Spencer. This school of thought argues that states are more powerful than individuals. It advocates for a spirit of political collectivism because, as an organism, the state determines the outcomes of its organs (i.e. the people or citizens of a certain region, usually a nation state).



FIGURE 2.11: Dr JH Moolman (Source: Watson-Lockley, 1940)



FIGURE 2.12: Dr A Nel (Source: US Fotos, n.d.)



FIGURE 2.13: *Ou Hoofgebou* (Old Main Building) at Stellenbosch University
(Source: US Fotos, c. 1966)

ROTTERDAM AND THE RHINE.

BY

P. SERTON, Ph.D.,

Head of the Department of Geography, Stellenbosch.

Textbooks, as a rule, take it for granted that the geographical position of a town is one of the principal factors in its economic development. If, however, we try to show this to be true for some definite case, we usually discover that things are less simple than we supposed. In analysing the growth of a large city we often get the impression of a tissue of historical incidents, blind luck, and arbitrary human decisions in which the geographical threads are by no means always clearly visible. One of the best ways of obtaining a real understanding of geographical influences, of their importance and their limits, is the detailed study of those cases where they are evidently predominant. Rotterdam may be called a typical example of a commercial centre whose growth was, in a high degree, geographically determined.

Between the Seine and the Elbe-Oder valley, between the Alps and the North Sea lies the part of the European continent that is most developed industrially. There we find the principal mining areas, the biggest textile and iron industries, the densest population, the best railway communications, and the largest oversea trade. On the coast of this region—a coast which measures less than 500 miles as the crow flies—eight big seaports share a traffic that was divided as follows in 1918:—

(Net registered tonnage entered.)	
Havre	3.7 millions
Dunkirk	2.5 ..
Antwerp	12.0 ..
ROTTERDAM	12.8 ..
Amsterdam	3.2 ..
Emden	1.5 ..
Bremen	14.2 ..
Hamburg	14.2 ..

It is clear that these shipping centres, so near to one another, cannot divide the hinterland into well-defined portions, dominated each by its own seaport. There exists, on the contrary (especially between the Belgian, Dutch and German ports), a severe competition for the trade of the great industrial areas, and the decisive factor in this struggle may be a very small saving in time, railway freight, or dock charges. This leads to incessant improvements of traffic facilities, and constant efforts by each town to make the utmost use of its own geographical advantages.

The map shows that most of the ports are situated on river-mouths. Among these rivers the Rhine is conspicuous for its size and the peculiar orographical conditions of its basin, which open a route right into the heart of the continent. Moreover, the Rhine does not only

FIGURE 2.14: Serton's first published paper as a member of Stellenbosch University (Source: Serton, 1922, p. 84)

2.4 ESTABLISHING A RESEARCH TRADITION

At the time, most academics, once appointed as a professor, were not really expected to conduct any original research after obtaining their doctoral degrees or having been habilitated in the European Continental university tradition, or tenured as was the case in the United State of America. Teaching and postgraduate supervision were the primary assignments of a professor. Consequently, research was not a primary focus in geography departments, at least for some time. But not in Serton's department. Serton excelled in postgraduate supervision and writing up research. His first paper since becoming affiliated to Stellenbosch University was *Rotterdam and the Rhine* published in the *South African Geographical Journal* (Figure 2.14) (Serton, 1922). Many would follow (but in Dutch) in the journal *Tijdschrift voor Economische Geografie* (later *Tijdschrift voor Economische en Sociale Geografie*). His publication outlets in terms of language were natural given his academic training in the Netherlands and the Stellenbosch context of promoting a non-British sentiment. It is worthy to note that the first geography research in South Africa that emanated from an ostensibly Afrikaans/Dutch-speaking learning environment would be in English, a practice that would soon disappear at Stellenbosch geography only to be re-established in the 1990s.

Serton published 12 research papers, mostly in the Royal Dutch Geographical Society's journal *Tijdschrift voor Economische (en Sociale) Geografie* (see for example Serton, 1923, 1925, 1926, 1927, 1929, 1933, 1948), five contributions to books and four books and monographs (Serton, 1936, 1953, 1954, 1960; Serton et al., 1971; Serton & Moolman, 1951). Serton would also go on to play a leading role in establishing the Faculty of Commerce at Stellenbosch University in 1923 and was dean of this faculty from 1926 to 1930. After all, his appointment in the first instance was based on his academic dexterity. A number of Serton's seminal texts should be highlighted (Barnard, 2016). They were important contributions in that they demonstrated a highly productive researcher and leader of his geography peers at other departments in the country at the time. Barnard (2016) has argued that Serton's academic journal articles of the 1920s paved the way for a more comprehensive monograph that was published in Dutch as an 82-page double number of Volume 24 (1933) of the *Journal of Economic Geography* as an economic geography of South Africa (Serton, 1933) (Figure 2.15). This was a regional geography against the backdrop of a specific subdiscipline – the research practice of the time (regional focus and thematic systematic specialisation). Interestingly, and perhaps oddly, the work was aimed at the informed Dutch public – not South Africans – and it focused on comparisons with European features with economic statistics artfully weaved into the text. The primary theme was the economic system as developed and maintained by white South Africans. In Barnard's (2016, p. 75) assessment, "the resolution at which he wrote was coarse although less so than Passarge[s]" reflection on the region. Serton's viewpoint

was that geographers could learn from comparative analysis, an idea he would pursue throughout his career and the value of which has only quite recently been rediscovered (e.g. Robinson, 2008) in the notion of comparative urbanism.

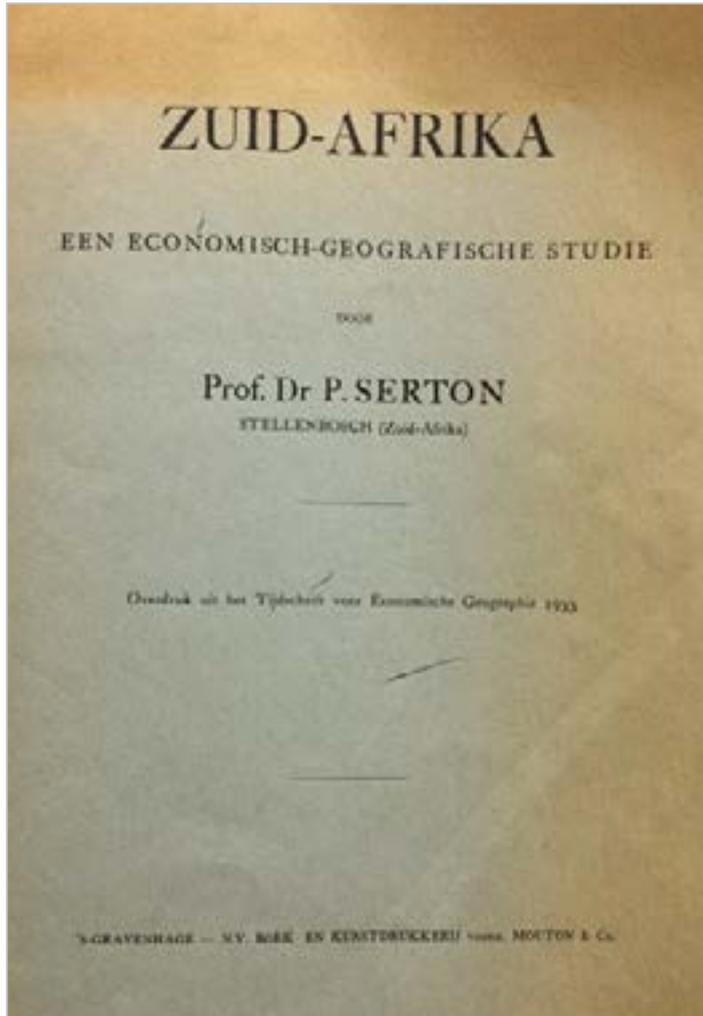


FIGURE 2.15: *Zuid-Afrika: een economisch-geografische studie*
(*South Africa: an economic geographical study*)
(Source: Serton, 1933)

Serton's *Zuid-Afrika – land van Goede Hoop* (South Africa – land of Good Hope) (1953) (Figure 2.16) was different from other regional geographies of the time in its comprehensive review of social and political relations in South Africa relative to economic development. It was a significant contribution in that it argued for racial integration and resource investment in all South Africans as the only viable future trajectory for South Africa (Barnard, 2016). A strategic problem viewed from the current and contemporary English-dominated mode of academic communication is that Serton's books were published in Dutch. There is no evidence of any local critical responses being made to this book at the time. Even in South African, social science academic talk about comparative research and imaginaries confirm that these works have, in the main, not been consulted in recent debates over this intellectual movement.

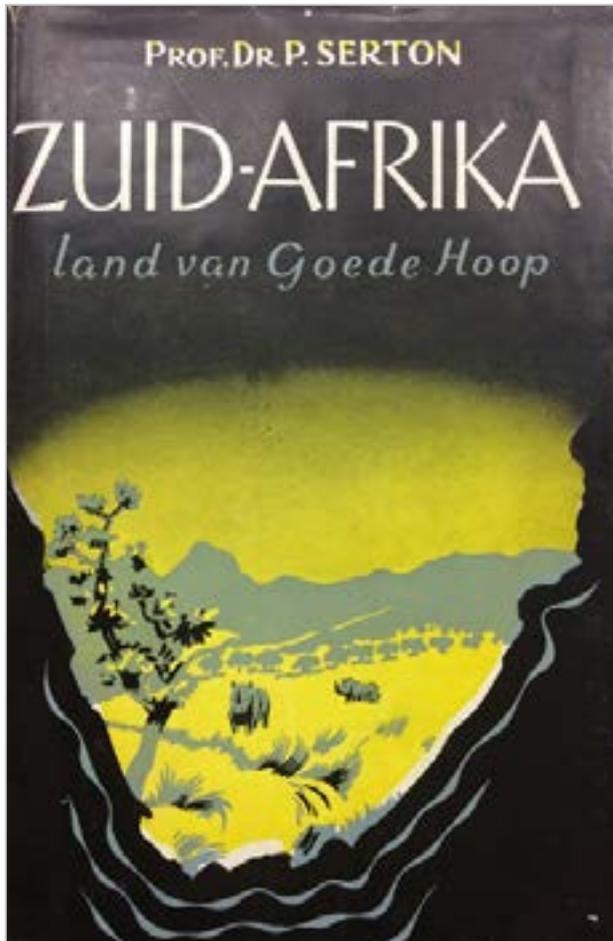


FIGURE 2.16: *Zuid-Afrika – land van Goede Hoop*
(South Africa – land of Good Hope)
(Source: Serton, 1953)

The result was that the pioneering South African geographer was essentially invisible to the local and international academic audience, geography or otherwise. While he proved to be an inspirational supervisor and colleague, this publishing mainly in Afrikaans/Dutch would isolate not only his own work but Stellenbosch geography and all Afrikaans geography departments from a larger international geographical community, particularly the then growing Anglo-American hub of academic geography. One of the tragic examples of publishing in Dutch, and later in Afrikaans, was that comparative studies such as Serton's book (1960), comparing the social geography of South Africa and Brasil (Figure 2.17) (now advocated by authors such as Robinson [2008]), were never considered by international authors. The life and times of Serton are extensively described and critically analysed in Barnard's (2016) posthumous publication, *Encountering Adamastor: South Africa's founding geographers in time and place*. It revealed that Serton did not share the political sentiments emerging from the 1930s against the backdrop of imminent war in Europe, his place of origin. It is not the intention here to concentrate on those world views, as Barnard had already done so. Rather, we stress that he was not sympathetic to the growing Afrikaner nationalism of the time nor supported the Separate Universities Bill.⁷ A letter to the *Cape Times* signed by a handful of Stellenbosch academics, including Serton, stated clearly that "In connection with the Separate Universities Bill, we, the undersigned university teachers, wish to place on record our belief that the autonomy of its university matters is of fundamental importance to the healthy intellectual life of a country" (*Cape Times*, 1957) (Figure 2.18).

7 The Separate Universities Bill, proposed in 1957, would lead to the University Education Act, no. 45 of 1959, which formed part of the apartheid government's racial segregation policy in South Africa. This Act made it a criminal offense for students who were not 'white' to register at a formerly open university (notably Cape Town, Natal, Rhodes and Witwatersrand) without the written permission of the minister of Internal Affairs. Subsequently, new universities were established ostensibly to cater to other racial or ethnic communities/groups. This led, for example, to the establishment of the universities of Durban-Westville, the North, Western Cape and Zululand at the time to be followed by others later on.

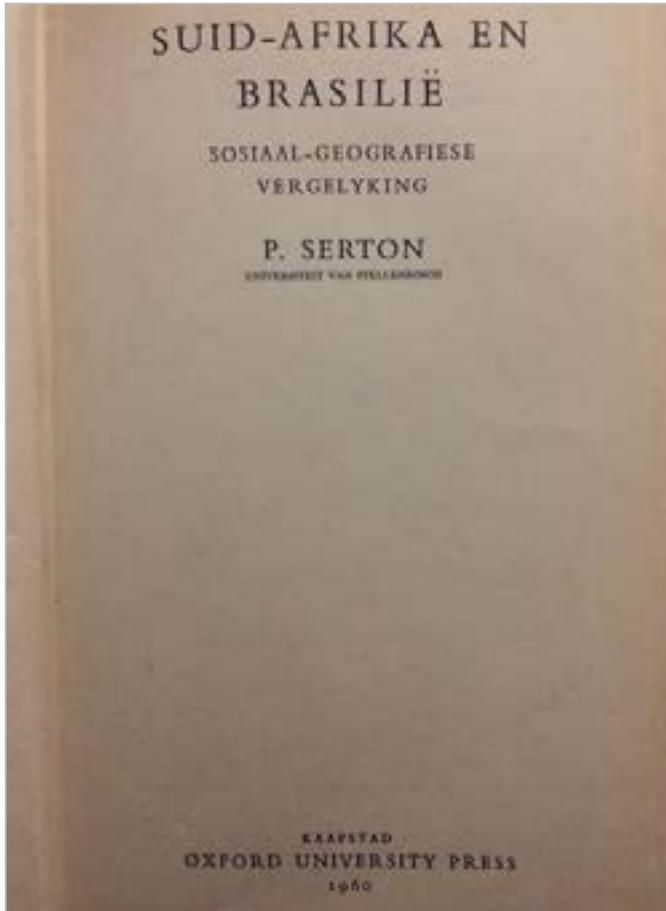


FIGURE 2.17: *Suid-Afrika en Brasilië: Sosiaal-geografiese vergelyking* (South Africa and Brazil: Socio-geographical comparison) (Source: Serton, 1960)

Serton's pioneering status in South African geography scholarship was not forgotten in the South African context. His work was also respected abroad, particularly in the Dutch academic community. One would be hard pressed to see his work cited in contemporary works about that period of South Africa's development. However, in honour of Serton's role in establishing geography at the higher education level, the Society for Geography (an initiative led by Afrikaans geography departments and separate from the mainly English South African Geographical Society) created the Serton Memorial Lectures in 1972 as a communication channel to recognise current geographers of standing. As for his contemporaries in the department, Conradie and Moolman made few research contributions (Conradie, 1942, 1958, 1959; Moolman, 1933, 1939, 1946; Serton & Moolman, 1951) in mainly local geography journals. The published works were on regional economic and population geographies.



FIGURE 2.18: Contestation of the Separate Universities Bill
(Source: Cape Times, 1957, p. 1)

After his retirement in 1958, Serton was succeeded as head of department by one of his students, Andries Nel. Nel's appointment coincided with profound structural innovations at Stellenbosch University and in the discipline of geography, all marking the beginning of a period of consolidation in the department. The geographies produced in the department at the time (in effect those of Serton) did not really address issues of race and politics, but demonstrated the ideas of regional development and comparative analysis, along with thematic issues typical of the general international geographical tradition of the time. However, larger thematic areas would follow, accompanied by an interest in regional geography as a theme of analysis.

2.5 RESEARCH ACTIVITIES, 1920-1947

The period immediately following the department's establishment was characterised by a limited output of published research. Indeed, between 1920 and 1947 only 14 publications were produced, eleven of these by Serton himself (Figure 2.19). The small staff component of the department in that period accounts for this paucity. Nonetheless, due to the efforts of Serton, 35 higher degrees in geography were awarded by Stellenbosch in this period, four of which were doctoral degrees (Conradie, 1942; Hugo, 1944b; Moolman, 1939; Pienaar, 1937). The first higher degree in geography was a master's degree conferred in 1927 on EGJ van der Merwe for his thesis on the modern development of the Ceres district as explained by improved traffic routes and other (Van der Merwe, 1927). This was the beginning of a steady flow of graduate students from the department, whose research reflected the research interests of Serton. Pienaar (1937) produced the first PhD in the department on the topic of an economic geography of the Witwatersrand. This signalled a notable event in the development of geography at the University.

Many of the theses concentrated on regional geographies and descriptions of places in South Africa (Fischer, 1931; Louw, 1938; Maree, 1945; Naude, 1944; Nel, 1945; Potgieter, 1931; Raubenheimer, 1943; Schmidt, 1932; Stander, 1936; Strydom, 1939; Vermeulen, 1940). Other areas of investigation included population dynamics (Hugo, 1944a; Moolman, 1933, 1939) and economic geographies of various areas (Brink, 1943; Conradie, 1942; Conradie, 1942; Pienaar, 1937; Theron, 1932; Van der Merwe, 1939; Vermeulen, 1942).

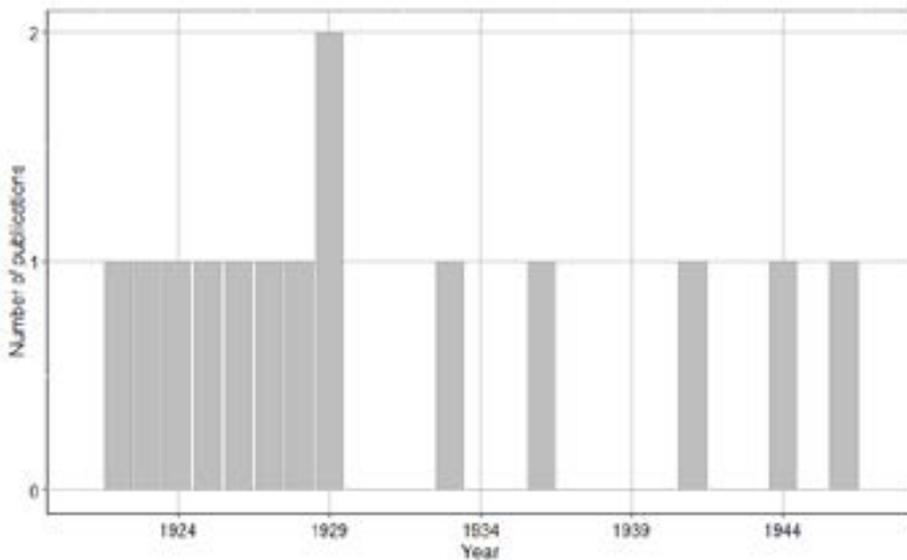


FIGURE 2.19: Publications by year, 1922-1947 (Source: Authors' survey)

2.6 CONCLUSION

Geography as an academic discipline taught at multiple South African institutions of higher learning was initiated at Stellenbosch University in 1920. As was the case in continental Europe and the Anglo-American context, geography at Stellenbosch was established by academics who were not geographers by training. However, these academics recognised the value of an integrative field of investigation that could synthesise various aspects of the natural and social sciences into a coherent whole. The department of geography was initially small in both its staff and student complements. It produced the first professor of geography in South Africa and was, as outlined in the following chapter, the alma mater of many of the geography teaching staff at other national universities. Its teaching and research profiles centred in human geography themes and were, by current standards, very modest in volume. Nevertheless, by the late 1940s geography at Stellenbosch University was established in many administrative and academic modes. The following decades would consolidate this position, but in a certain epistemological fashion. In particular, it would galvanise positivist geography at Stellenbosch, the subject of the following chapter.



CHAPTER 3

THE DEPARTMENT OF GEOGRAPHY MATURES

3.1 INTRODUCTION

The previous chapter outlined the establishment of the discipline of geography as a component of a wider degree course, followed as a fully-fledged major course for a degree and ultimately the creation of a chair in geography and an academic department at Stellenbosch. The main protagonists and the types of research conducted were also outlined. In many ways, this era reflected the times of the Union of South Africa and segregationist rule which echoed at other, mainly Afrikaans-language universities.

The period of the department's history recounted in this chapter broadly coincides with the apartheid era. Thus, the timeline of the chapter is loosely framed by the late 1940s to the early 1990s. This period represents an era in which geography at Stellenbosch developed a particular kind of self-confidence in the South African geography community. This confidence, we will argue in this and the following chapter, created certain future advantages but also some concomitant challenges. The chapter first considers the expansion of the department and its changing physical location. Thereafter, the research output and staff changes are considered. The general tenor of the chapter is one of a department with considerable self-assurance in terms of both teaching and research output.

3.2 AN EXPANDING DEPARTMENT

This era is noted for expansion and technical innovation on many fronts, not least in Afrikaans geography higher education. Although politically a very challenging and deeply problematic era on many fronts, it was, for the first two decades, one of vigorous economic growth in South Africa, albeit that the main beneficiaries were white and white Afrikaners in particular. Stellenbosch, as the apex white Afrikaans university arguably gained disproportionately. This economic expansion resulted not only in greater financial resources for white Afrikaans higher education, but mobility in the white population along with expanded social and educational opportunities for them, too. This was seen in the steady growth in university student numbers nationally, so too at Stellenbosch.

The total number of students at Stellenbosch University grew from 4 500 in 1960 to 14 100 by 1990. Along with such student growth came the associated physical infrastructure and considerable recreational facilities to boot (Kapp, 2015). Much of the current core campus infrastructure was developed during the apartheid era through some considerable assistance from funds from the Het Jan Marais Nationale Fonds (Kapp, 2015).

Over this period, the geography department's undergraduate student numbers grew from 232 students with geography as a major in their degrees in 1960 to 612 in 1990 and the number of research students increased from 27 graduating in 1960 to 83 postgraduates in 1990 (Barnard, 1995). These trends had very practical implications. Geography lectures were originally presented in the Dutch Central Hall at the College Square and the chairperson's office was in the CL Marais Library in Crozier Street. In 1949, the department was centralised in the Old Main Building with two large halls at its disposal for lectures and practical classes. The larger and more complex departmental configuration created new accommodation and management needs. As a consequence, in 1963 the department moved to the upper floor of the Natural Sciences Building (Figure 3.1) that was renovated periodically to meet the demands of an expanding student enrolment, including major, year-long renovations to the whole building in 1987. There were also innovations resulting from the greater student numbers, probably academic egos, and new academic needs – whichever way one would like to construe the need for the development of new academic units or departments. During the mid-1960s, two new academic departments developed from the geography discipline: The Department of African Studies (1965-1990) and the Department of Urban and Regional Planning (1965-1996). The latter was serviced by geography, and later geographical information systems (GIS), modules from the department. Generally, this had little impact on student numbers for the department per se and they actually provided expanded routes for degree articulations at postgraduate level. Ultimately, student numbers in general were increasing year-on-year and all departments could gain irrespective of real-world demand or qualification utility.

Building on the solid foundations laid by Serton, the 1960s and 1970s witnessed expansion of research activities and included contributions from a range of staff members, all alumni of the department, except WA Nieman (1966) and PH de Necker (1974). Geography at Stellenbosch University during this era developed in a certain way, given the Afrikaans geography community's position relative to the political establishment. Evidence of this positioning was revealed by staff members JP Jansen, A Nel and CJ Swanevelder being members of the Afrikaner Broederbond⁸ (Wilkins & Strydom, 1980). It also consolidated the dominance

8 The Afrikaner Broederbond was a secret, all-male organisation for the advancement of Afrikaner interests.

of Stellenbosch in the expansion of geography as a discipline at Afrikaans *volksuniversiteite* in South Africa (i.e. universities in the service of white Afrikaans speakers in the country).



FIGURE 3.1: Natural Sciences Building (Source: US Fotos, n.d.)

Wesso (1992) has noted that the late 1950s, and we would argue going into the 1960s, turned out to be a significant period for geography at Stellenbosch University for a number of reasons. We first consider a rather surprising curriculum development prior to reviewing the more mainstream offering. One of these events, and part of the department spinning off new departments, was the development of a Division for War Studies (*Krygskunde*) in the Faculty of Science (1957), established to present military geography courses. This “*Krygskunde afdeling*” provided new challenges to the teaching of geography. These involved what constituted military geography, where it would be taught and by whom? Both Serton and Nel served on the Committee for Military Studies that investigated the need for and possibility of establishing such a division at Stellenbosch University.

The first lecturers appointed to teach this newly founded military geography were Derick Nel (later head of the geography department at the University of the Free State), JP (Hans) Jansen and Wynand F Senekal (previously appointed as technical assistant in the department and also later a head of department at the University of the Free State) (Visser & Barker, 2016). They were appointed by Swanevelder in 1961 (or 1966 depending on the source). After the establishment of the Faculty of Military Science, located in Saldanha, JC Kotze (also a *broederbonder*) was appointed as head of the new department, which offered a degree in

Geography (Mil). Once Serton had retired in 1958 after 38 years at the helm, the professorship in geography briefly lay vacant until Andries Nel was promoted to professor and head of the department.

The further development of geography at Stellenbosch was now firmly in the hands of Afrikaner geographers, all of them graduates of the department. During the 1960s, 36 scholarly articles, nine books and two edited collections were published. In the same period, 15 master's theses and six doctoral dissertations were completed. This was followed by 33 articles, six books, two edited collections and an atlas in the 1970s and nine master's degrees and eight PhDs. The cohort of research students from the 1960s and 1970s would provide the future academic leaders not only at Stellenbosch but at a range of South African universities. Serton and Nel's research tradition enabled many students to graduate with higher degrees and many of these graduates were to subsequently distinguish themselves in their varied professions such as F Smit (Figure 3.2).

Andries Nel, who took over as the head of department, would retire in 1988 as dean of the Faculty of Arts. Degree offerings of geography broadened to a full BSc course in 1963, and a BEcon was introduced in 1970. In 1973, Prof WS (Barnie) Barnard, an alumnus who had joined the department in 1960, succeeded Nel as chairperson. By 1981, the geography teaching staff peaked at eight white men, with two professors (WS Barnard and CJ Swanevelder), two senior lecturers (WA Nieman⁹ and IJ van der Merwe) and four lecturers (GL de Kock;¹⁰ PH de Necker; PJ Eloff and MKR van Huyssteen). Nieman was the first appointment in this period who did not conduct his undergraduate studies at Stellenbosch and De Necker the second (De Necker was also the first English home language speaker appointed in the department). BHA Schloms, a soil scientist, transferred to the department from the provincial agriculture department in 1986. The first female geographer to be appointed in the department since Le Roux's resignation in 1932 was a climatologist, Ms (later Dr) J Olivier in 1985. This appointment was notable in that Olivier (like Nieman and De Necker) was a total outsider to the department and female. Olivier counted the University of the Witwatersrand as her alma mater, and the acclaimed Peter Tyson as one of her academic mentors. Figure 3.3 is a Fred Mouton drawing of the staff members in 1985, while Figure 3.4 shows some staff members appointed in this apartheid era.

9 When Nieman was appointed as head of department (HoD) at the University of Zululand in 1984, he left the surplus of his research funding to the department to annually award a certain amount to the student who produced the best honours research report – the so-called Nieman Award.

10 De Kock was well remembered for his field trips to the then South West Africa – he was responsible for all the logistics, food supply, was also driver and mechanic – an enormous yet often unappreciated task.



FIGURE 3.2: 1959 Honours class with Professor Andries Nel. *Back, left to right:* F Smit,¹¹ BM Griesel, PJ Rootman; *Front:* Prof Dr A Nel, Dr DJ Conradie, Dr JP Jansen (Source: Authors)



FIGURE 3.3: Drawing of staff members in 1985. *Left to right:* Haldenwang (part of the Institute for Cartographic Analysis), De Necker, Zietsman, Eloff, Swanevelder, Van der Merwe (II), De Kock, Van Huyssteen and Barnard (Source: Van der Merwe et al, 2016, p. 13)

11 In later years, Smit would become Vice-chancellor and Principal of the University of Pretoria (1992-1996).

In 1982, a system of a rotating HoD/ chairpersonship of the department was introduced. Consequently, CJ Swanevelder and then IJ van der Merwe became chairpersons of the department. A glass-encased statue (Figure 3.5) of German geographer Carl Ritter (1779-1859), considered one of the founders of modern Geography as an international university discipline, and who founded the first university geography department in 1820 at the University of Berlin, was bequeathed to Stellenbosch University by the Ritter family and traditionally accompanies the departmental chair for display in the incumbent's office during his/her term.



FIGURE 3.4: Some appointed staff, 1950-1993. *Left to right, top first:* Jansen (Edrich, 1987), Barnard (Edrich, 1970), Jooste (Edrich, 1961), Nieman (US Fotos, n.d.), Swanevelder (Edrich, 1975), Van der Merwe (IJ) (Edrich, 1972), Steyn (Edrich, 1972), De Necker (US Fotos, n.d.), Eloff (US Fotos, n.d.), Van Huyssteen (US Fotos, n.d.), Olivier (Research Gate, 2020) and Zietsman (US Fotos, n.d.)



FIGURE 3.5: Glass-encased statue of German geographer Carl Ritter
(Source: Van der Merwe et al., 2016, p. 13)

In 1975, the department received a large collection of books and journals from the university's Carnegie Library and managed to establish a well-stocked geography library in the department (a privilege that lasted until 2003, when the library was amalgamated with the main JS Gericke Library). Marianne Cronje was appointed in the early 1990s to the post of departmental librarian that was, with the centralisation of the university library system, converted to the principal departmental officer, a position she held until her retirement in 2014. She was replaced by Selene Ortell in 2015 and by Deidre Davids in 2017 (Figure 3.6).



FIGURE 3.6: Postgraduate administration officers. Left to right: Marianne Cronje, Selene Ortell and Deidre Davids

In an era before the outsourcing of contract service workers, Pauline Davids, Fred Damonse, Henry Fritz and Hennie Jacobs were the last four employed by the university who kept the department clean, assisted staff with printing work, collating papers for binding, setting up audio-visual apparatuses, preparing and mailing all the copies of the *Journal for Geography/ South African Geographer* to subscribers all over the world, and so on (Van der Merwe et al., 2016).

Much can be learnt about geography departments' traditions from their organisational placement in a university. Geography is a hybrid science allowing accommodation in a range of faculty formations and specialising in various scientific domains. Serton's human geography background and expertise contributed largely to geography's positioning at Stellenbosch University in the Faculty of Arts and Social Sciences, in contrast to most other South African universities where a physical geography point of departure fostered location in their faculties of natural sciences (Barnard, 2001). Not only did the department's physical location change in the early 1960s, but so too its teaching offering and research practices. By following international Anglo-American trends in geography, there was a move away from the classical academic mode of developing a regional geographic specialism towards a systematic research focus. Specialisation in a systematic geographic subdiscipline became the new mode of teaching and research. Consequently, during Nel's tenure as head of the department, urban geography replaced political and regional geography in the curriculum, the teaching of climatology and geomorphology was strengthened and lectures in cartography became a pivotal practical component. The lecturers, not only senior staff, also began to engage increasingly in research and publication.

As already noted, themes in human geography were taught since the advent of geography at Stellenbosch. Over time, the undergraduate offering changed not only in response to international trends, but also significantly in accordance with

staff abilities and interests. For geography at Stellenbosch, this meant the introduction of spatial science – quantification, statistical analysis, spatial organisation and visual representation through cartography. Further changes in curriculum occurred in 1963, where two courses of study in geography – Geography A (for students in the Arts Faculty) and Geography B (for those registered in the Natural Sciences Faculty) – were now presented (De Waal & Williams, 2020). Geography A contained an overwhelming focus on economic, urban and political geography, with limited content on the study of geomorphology at second-year level. Geography B on the other hand would provide detailed, in-depth instruction in physical geography. Geomorphology as a dedicated field of study would be added to both the Geography A and B curricula at second- and third-year levels after Swanevelder’s arrival in 1966 (De Waal & Williams, 2020).

By the end of the 1960s, the focus on European landscapes had also disappeared and greater attention was given to the African continent and South Africa, perhaps the result of both Serton’s retirement and the establishment of South Africa as a Republic in 1961. Climatology offerings were also expanded in second-year during the 1970s in Geography B, while the importance of geography’s origins, the relevance of the African continent and its connections to the rest of the world were still emphasised (De Waal & Williams, 2020). By 1980, the need for more integration between physical and human geography training resulted in human geography and resource studies modules being added to the Geography B curriculum. This would represent the beginning of the substantial changes to come in the 1990s.

Stellenbosch University, which was still an all-white institution into the late 1970s, began to see its student numbers in the geography department decline. Consequently, two academic posts were lost in the post-1985 period and some of the department’s activities were downsized. Over the next two decades, the department would undergo dramatic changes regarding its staff, identity, focus areas and direction to position itself as a top performing department in the Faculty and Stellenbosch University.

3.3 RESEARCH ACTIVITIES, 1948-1993

The research publication rate in the department in the 1940s and 1950s continued at a gentle pace until the expansion of the department in the 1960s (Figure 3.7). Most of the active research in the department in this time was undertaken by Serton (until his retirement in 1958) and by Nel. Much of Nel’s early research focused on population dynamics in South Africa (Nel, 1954, 1957, 1958) and Serton made several book contributions. While the 1940s had produced only four publications, followed by 17 in the 1950s, the 1960s recorded an increased research output of 48 publications. Central to this were the contributions of Barnard (14) and Nel (12). Barnard had broad research interests and published

several papers on a variety of themes, including regional geographical descriptions (Barnard, 1965a, 1965d), water resources (Barnard, 1965c, 1967), physical geography (Barnard, 1965b, 1966) and, surprisingly, country terrain and borders (Barnard, 1961, 1962, 1964). Barnard, affectionately known as Prof Bernie by his colleagues, was the department’s most well-rounded geographer and took a keen interest in geographical tradition (Barnard, 2001, 2016). In fact, much of this book is inspired by his early contributions. Nel’s later research concentrated on regional development in Africa (Nel, 1963; Nel & Jansen, 1961; Nel & Van Zyl, 1962; Smit & Nel, 1960). His appointment as the dean of the Arts Faculty in 1967 led to declining productivity in the research sphere (Nel served two terms as dean – 1967-1969 and 1974-1988).

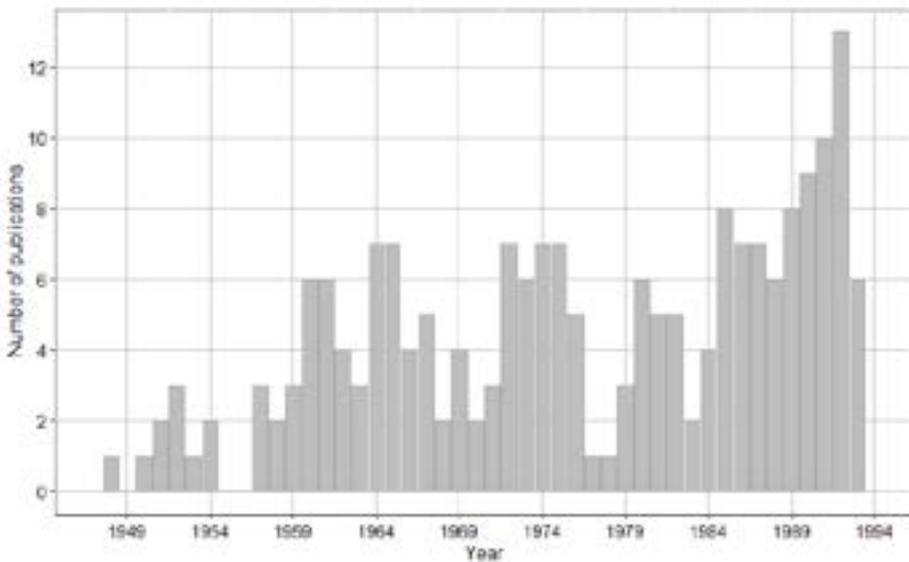


FIGURE 3.7: Publications by year, 1948-1993 (Source: Authors’ survey)

A significant addition to the department’s research agenda in this time was themes in physical geography. Until 1960, no research output in physical or environmental geography topics had been published. The first paper of this ilk to appear was by Jansen and Potgieter (1960) on the deflection of winds due to earth rotation. Further regional geography papers followed (Barnard, 1965c, 1965d; Nel, 1964) and Nieman published research on the sea-ice extent in the Southern Ocean (Nieman, 1965). The appointment of Swanevelder, a geomorphologist, in 1966 led to an upsurge in research output and postgraduate research in physical geography. He conducted studies in multiple sites in the Western Cape and in South West Africa (Namibia) (Harmse & Swanevelder, 1987; Swanevelder, 1965, 1968, 1974, 1981). One of his doctoral students, JT Harmse, was appointed to the departmental staff in 1977, but left in 1984 to join the Rand Afrikaans University (RAU, now University of Johannesburg [UJ]).

Barnard conducted physical geography research and published many descriptive studies on dunes in the Namib (Barnard, 1972, 1973, 1988), denudation forms (Barnard & Greef, 1993), landform development (Barnard, 1966, 1980), water resources (Barnard, 1965c, 1970) and the broader geomorphology discipline (Barnard, 1965d, 1975a, 1975b). The most active researcher in physical geography during this period was Jana Olivier. Olivier was a climatologist who studied hail dynamics and hail impacts in the Highveld (Olivier, 1988a, 1988b, 1990; Olivier & Van Rensburg, 1992, 1995) and rainfall (Olivier & Van Rensburg, 1985, 1987). Overall, Olivier produced 14 peer-reviewed research articles in her time at Stellenbosch University. During her tenure, she also laid the foundations for her later acclaimed research on fog harvesting. Her departure to the University of the North in 1994 left a substantial gap in the department's research agenda.

De Necker contributed to the research activities of the department through publication of reports via various outlets. His full contribution is, unfortunately, not recorded in this book as we have only considered peer-reviewed studies. Additionally, his extensive work as an editor for numerous theses, dissertations, books and journal articles by staff and students after his retirement is noteworthy. Eloff, a human geographer, also found an interest in climatology and meteorology, teaching and publishing in these fields for many years (Eloff, 1979; Eloff & Nieman, 1980; Van der Mescht & Eloff, 2013). Schloms – a well-respected soil scientist (Grondklassifikasiewerkgroep, 1991; Verster et al., 1992) – also contributed physical geography research. In total, 40 academic articles and five book contributions in physical geography were published in this period (1960-1994). Because the department was founded and its initial curriculum was developed by a human geographer, and as it is institutionally located in the arts faculty, most of the teaching and research output is not in physical geography, and the products do not have the sophistication of those produced in the geography departments at the Universities of Natal (UN) (Pietermaritzburg and Durban), Cape Town (UCT) and the Witwatersrand (Wits). The relocation of Harmse in 1984 to Johannesburg, Swanevelder's retirement in 1990 and Olivier's move to Polokwane in 1994 severely weakened the physical geography arm of the department and their positions were never occupied by physical geography specialists. For the most part, climatology and geomorphology were left in the hands of geography generalists such as Eloff and Schloms whose remits were undergraduate teaching.

The department of geography appointed Dr Izak van der Merwe in 1966 and his first publication in 1967 marked the beginning of an illustrious academic career, lasting until long after his official retirement from the department in 1995. Van der Merwe's career includes over 60 journal articles, six atlases, seven book sections and a book. The full scope of his work is too wide to cover here but his primary interests were in urban geography and language geography. As the leading human

geographer in the department, the themes of his writing were often linked to spatialising socio-economic change in the greater Cape Town area. He made some unique contributions to South African geographical discourse through probing the relationship between geography and language (Van der Merwe, 1989a, 1993a, 1993b; Van der Merwe & Le Roux, 1989) and the medical geography of cancer (Haldenwang & Van der Merwe, 1992). On the whole, the department did not, beyond a positivist epistemology, have any shared research theme(s) or focus that it aimed to excel at on either a national or an international front.

One notable publication is the book by Steyn and Barnard (1976) on spatial ordering from an economic-geographical perspective, an excellent economic geography text embodying the main currents of positivism in geography at the time (Figure 3.8). The department also created an Afrikaans academic geography journal – *Tydskrif vir Aardrykskunde/ Journal for Geography* (1957-1972), later renamed *Die Suid-Afrikaanse Geograaf/ The South African Geographer*¹² (1973-1993) – which soon became an alternative to the *South African Geographical Journal*. This also provided a forum in which existing geographical concepts could be translated to compile an Afrikaans lexicon for the discipline. This journal was closed after the merger of the two learned geography societies. The school textbook contributions (e.g. Swanevelder, Kotze & Myburgh, 1985; Swanevelder, Kotze & Van Kradenburg, 1985; Swanevelder et al., 1985) are significant as they provided school learners with clearly defined Afrikaans definitions and insight into key geographic concepts: “...Afrikaans-writing geographers have spent considerable energy on publishing for their students ...” (Pirie, 1985, p. 481).

There was a divide between the Afrikaans geography departments, whose academic leaders at the time were essentially all trained at Stellenbosch, and the English geography departments with their decidedly different academic training (and international) lineages. Eventually, the marginalisation of Afrikaans geography led to the collapse of an academic geographical lexicon by the early 2000s. The narrow view of South African geographies and an uncritical engagement with these views during the last three decades of the 20th century also meant that the standing of the Stellenbosch department suffered nationally and its impact and legacies were invisible to the international scholarly gaze until fairly recently. The language issue is perhaps paramount in the sense that the potential readership was very limited and debates rather circular to the national Afrikaans geographical debates. In retrospect, it seems that these geographers were not that concerned

12 Most of the editors of this journal were from Stellenbosch University: *Journal for Geography*: Editors Mr JW van der Spuy (1957-66), Dr WS Barnard (1967-72); *South African Geographer*: Editors Prof WS Barnard (1973-74), Dr IJ van der Merwe (1975), Mr PH de Necker (1976-77), Dr WA Nieman (1978-84), Prof WS Barnard (1985-92), Prof IJ van der Merwe (1993).

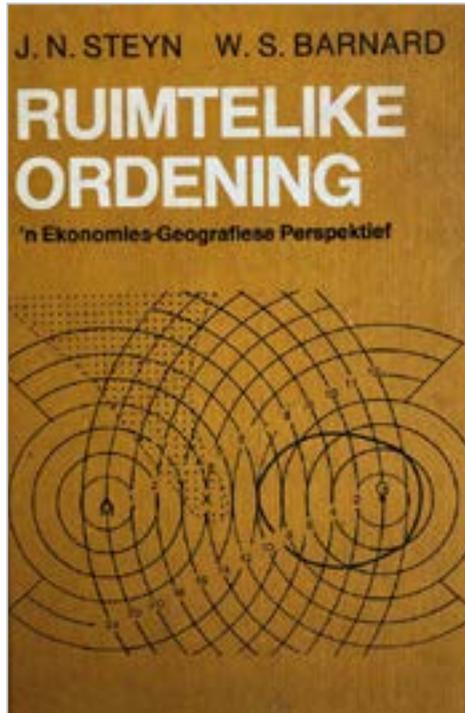


FIGURE 3.8: *Ruimtelike Ordening: 'n Ekonomies-Geografiese Perspektief*
 (Spatial Ordering: an Economic Geographical Perspective)
 (Source: Steyn & Barnard, 1976)

with these issues. This observation must be set against South Africa's increasingly marginalised global position owing to apartheid. In terms of the production of new knowledge, the following might illuminate this point.

When considering this period in the South African geographical discourse, Beavon and Rogerson (1981, p. 164) noted, in mirroring the growing critiques of the time more generally (e.g. Aitken & Valentine, 2015), that

... the earliest papers in the spatial organisation tradition concentrated upon techniques of analysing urban data. Rather than being concerned with human beings per se and their problems, geographers examined the delimitation, size, and nature of work and business places and their spatial patterns ... yet in the heyday of positivist Human Geography in southern Africa ... during the 1960s and 1970s the legitimacy of apartheid ideology rarely was challenged *a priori* by geographers.

This observation epitomises what was happening at Stellenbosch where human geography retained its quantitative positivist origins. In the process, a very apolitical human geography was taught and researched throughout the 1970s to 1990s (Van der Merwe et al., 2016).

Despite the analytical reimagination that Marxist geography brought to the discipline during the late 1970s and 1980s, its impact on and relevance to human geography were never mentioned in the department's curricula or research. The call for a people's geography in the 1980s to decolonise the research and teaching agenda of South African human geographers also went unheeded (Rogerson & Parnell, 1989). Moreover, the "cultural turn" and postmodern geographical discourses came and went with very little thereof manifesting in the teaching and research of human geography at Stellenbosch. The "lilywhite geographies and continuing interrogation of research questions which obviously, to a large extent, by-pass the uncomfortable, often cruel and, by and large, pretty disgusting spatial implications of apartheid" (Rogerson & Parnell, 1989, p. 16) became the silent voice in geography academia at most departments in the country and Stellenbosch was no exception. This resulted in the geography department becoming isolated from the local "liberal" powerhouses of human geography – Natal, Wits, UCT, University of Durban-Westville (UDW) and the University of the Western Cape (UWC) at the time – so that meaningful contact with the Anglo-American heart of geography in the country did not exist (Van der Merwe et al., 2016).

Taken as a whole, it is difficult to understand why this was the case. Those who led the department are no longer alive so that obtaining clear insight is not possible. In retrospect, these omissions could be linked to a number of factors. The first was that the staff contingent was locally trained. Those who were not, were taught by lecturers who obtained most, if not all their education at Stellenbosch (hence a largely positivist research tradition). Those with doctorates were Stellenbosch graduates. Thus, there was little circulation of new ideas coming from universities outside the Afrikaans geography fold nationally and little in terms of international geography powerhouses in the United Kingdom or the United States. These debates and their proponents had no connection to staff members' academic training and induction into the academic world. This contrasts sharply with the South African English university departments where most academics held qualifications, in part, or in toto, from universities with leading departments (mainly the Anglo-America heartland of geography) from which these new ideas (such as Marxist and postmodern geography) in geography and social science more generally emanated.

Another issue is that the task of the department, for the most part, remained the training of future geography teachers. These (Marxist and postmodern) debates and perspectives were, seen from the perspective of school curricula in the 1970s to the 1980s, not relevant. Moreover, given the apartheid context it was hardly desirable to introduce Marxist geography to a nearly all-white Afrikaans student body. There was, after all, the looming *Rooi gevaar* (Communist menace) that defined many aspects of the national white political and social discourses. Additionally, as has already been acknowledged, some (though certainly not all)

of the staff members were supporters of the apartheid government or involved with the Afrikaner Broederbond. A further remark would be that the staff complement was aging and might not have wanted to change their understanding of geography and its purpose. By the mid-1980s, most of the full-time academic staff were in their 40s and, like most academics, had adopted a certain style of conducting geographical research.

Notwithstanding the uncritical, positivist reflection on the impacts of apartheid on society and the city through scholarly research, students were nevertheless exposed amidst the state of emergency era of the 1980s, to the fundamental flaws of apartheid spatial planning. In fieldwork visits to townships under surety of military safety, the students were exposed to life in Khayelitsha and Mitchell's Plain. It is telling that it was not until 1990 that the first piece of research in the department (honours level) was conducted on a black township (Donaldson, 1990; Van der Merwe et al., 2016). No definitive text on the nature and character of urban South Africa existed in the 1970s. Although the textbook of Nel and Van Zyl (1962) was widely used as a prescribed textbook at Afrikaans universities, this was considered to be furnishing only "a somewhat sterile picture relative to the unfolding events and struggles in the region" (Beavon & Rogerson, 1981, p. 172). IJ van der Merwe's (1983) book on the city and its environment succeeded Nel and Van Zyl's book and became a widely used set text (Figure 3.9). It is debatable whether this was much of an improvement given that it was a textbook and not a critical analysis of the city such as the works of David Harvey and Doreen Massey (for example) at the time. Their books drew heavily on mainstream international literature and then worked in materials from local examples.

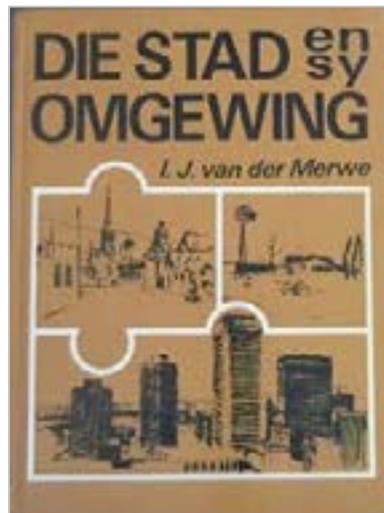


FIGURE 3.9: *Die stad en sy omgewing* (The city and its environment)
(Source: Van der Merwe, 1983)

At Stellenbosch, cartography was promoted as a necessary skill and knowledge field in “practical” modules and the use of maps and graphics in facilitating geographical research was emphasised. This interest in cartography would lead to the establishing of a dedicated research unit that will generate major teaching and commercial research outcomes later. This enterprise is described in Chapter 5. On the whole, the 1980s and early 1990s were productive years in the department – it was increasingly more research-active and graduated many undergraduate students. Many of the staff who had completed their postgraduate studies in the 1960s and 1970s had matured by then and were at the zenith of their careers, many more were at other universities. Staff members published on a wide range of fronts and themes, the West Coast of South Africa and Namibia receiving considerable attention (Barnard, 1988; Harmse & Swanevelder, 1987; Olivier & Stockton, 1989; Van der Merwe, 1989b). A total of 204 recorded publications were produced between 1948 and 1993, with 42 in the 1970s and 58 in the 1980s (Figure 3.7).

3.4 CONCLUSION

After a rather protracted gestation period from the 1920s to the 1950s, the subsequent decades, loosely framed as the 1960s to the early 1990s, witnessed a certain self-confidence in geographic research. Although critical reflection can be cast on the body of knowledge produced, as done to a degree in this chapter, it did deliver research on a wide front of issues, mainly in what might be loosely called human geography with a strong fixation on urban geographic themes. Essentially, all the research was done within a positivist tradition. All manner of other styles of conducting geographical research were absent. Research was published nearly exclusively in South African journals, the most prominent being those of the two learned geography societies (Society for Geography and South African Geographical Society). The scholarship produced was generally led by a few individuals. It cannot be claimed that all the academic staff were active researchers in the contemporary (2020) understanding thereof. The beginning of the 1990s ushered in a new and very uncertain period in the evolution of geography at Stellenbosch. This is considered in the following chapter.



CHAPTER 4

TURBULENT TIMES AND INNOVATION

4.1 INTRODUCTION

The early 1990s were economically, but particularly politically, very unstable times for South Africa which manifested on nearly all campuses across the country, too. Intellectually, the investigatory terrain of South African society and its universities was in flux. Changes were felt in many ways at Stellenbosch as an institution, but certainly in the department. In particular, new questions of what was being taught and researched by whom, in what format and for what purpose were being deliberated. The overall narrative arc was one of a turbulent context and a department that had to be agile. The certainties (for white Afrikaans universities) of the previous three or so decades had evaporated and various changes were required.

This chapter first considers the basic changes in the staff complement where there were sudden and considerable adjustments. The old guard of the previous decade made way for a whole new contingent of academics and there was a concerted drive to increase student numbers. There was also the looming reorganisation of the department's contribution to components of academic degree programmes, rather than geography being just a major in a generic degree. The implementation of new teaching and research foci is considered as an introduction to Chapter 5 that deals with the increased commercialisation of the department in its research and academic offerings.

4.2 STAFFING CHANGES AND A NEW ERA

What was generally taught at Stellenbosch, and in the discipline of geography particularly, was contingent on the available staff complement and the department's institutional placement. Regarding the latter, the department continued to function administratively under the Faculty of Arts and Social Sciences (variously named over the decades), but has observer status in the Faculty of Natural Sciences owing to the department's contribution to shared degrees and its offering of proprietary programmes (BSc, BSc Hons, MSc, MSc in GeoInformatics and PhD)

in that faculty. Because the content of courses was for the most part a function of the department’s staff, particularly at the more senior levels, we first turn our attention to these role players.

Over the first 70 years, a total of 19 permanent academic staff were employed in the department. In the subsequent 25 years (1995-2020), another 16 were to be appointed (Table 4.1). On the whole, over time to the early 1990s, there had been an exceptionally low staff turnover. This would create significant academic and teaching in-breeding relative to larger geography departments both nationally and internationally. However, during the mid-1990s the department saw significant changes to staffing and a resultant recasting of academic offerings and research trajectories.

Leading the department through these times was Izak van der Merwe, who took over the departmental leadership from 1991 until 1996. He was a product of the department and had a deep-seated commitment to it. While at the helm, the department was not only witnessing major societal change, but was also beginning to engage with the broader geographical community in South Africa – where intellectually the department was probably not at its best relative to rival geography departments at Natal and Witwatersrand at the time. There was considerable flux on many fronts – all of which impacted universities and the department by default. As reflected in the department’s publication record and staffing, there was a great imbalance between those members who were active researchers and those whose academic roles revolved mainly around teaching and administration. As such, the department was disproportionately dependent on relatively few staff members for research output. This could, in part, be linked to the significant proportion of the permanent academic staff that did not hold doctoral degrees. In turn, research by postgraduates was limited (particularly at the doctoral level). As a result, academic research publication in top-tier academic journals suffered greatly.

TABLE 4.1: Academic staff members in the department, 1920-2020

PERIOD	NAME	YEARS	POSITION
Founding phase 1920-1947	Serton P	1920-1958	Professor
	Le Roux MM	1920-1932	Lecturer
	Conradie DJ	1929-1965	Lecturer, Senior Lecturer
	Moolman JH	1940-1948	Lecturer, Senior Lecturer
Maturation phase 1948-1993	Nel A	1949-1974	Lecturer, Senior Lecturer, Professor
	Jansen JP	1959-1965	Senior Lecturer
	Barnard WS	1960-1995	Lecturer, Senior Lecturer, Professor

PERIOD	NAME	YEARS	POSITION
Maturation phase 1948-1993 (continued)	Jooste PG	1965-1975	Lecturer, Senior Lecturer
	Nieman WA	1966-1984	Lecturer, Senior Lecturer
	Swanevelder CJ	1966-1990	Senior Lecturer, Associate Professor, Professor
	Van der Merwe IJ	1966-1995	Junior Lecturer, Lecturer, Senior Lecturer, Professor
	Steyn JN	1969-1974	Lecturer
	De Kock GL	1971-1985	Junior Lecturer, Lecturer
	De Necker PH	1974-2005	Lecturer, Senior Lecturer
	Eloff PJ	1974-2012	Junior Lecturer, Lecturer
	Harmse JT	1977-1984	Junior Lecturer, Lecturer
	Van Huyssteen MKR	1977-2002	Senior Lecturer
	Olivier J	1985-1994	Lecturer
	Schloms BHA	1986-2013	Lecturer
	Zietsman HL	1992-2005	Associate Professor, Professor
	Postapartheid phase 1994-2020	Van der Merwe JH	1994-2014
Van Niekerk A		1997-	Lecturer, Senior Lecturer, Associate Professor, Professor
Ferreira SLA		2003-2019	Senior Lecturer, Associate Professor, Professor
Smith N		2005-2008	Lecturer
Donaldson SE		2007-	Associate Professor, Professor
De Klerk H		2010-	Senior Lecturer, Associate Professor
Kemp J		2010-	Lecturer, Senior Lecturer
Münch Z		2010-	Lecturer
Poona N		2010-2019	Lecturer
Spocter M		2013-	Lecturer, Senior Lecturer
De Waal JH		2014-	Lecturer
Visser GE		2015-	Professor
Mashimbye ZE		2016-	Lecturer
Williams S		2016-	Lecturer
Grenfell S		2020-	Lecturer
Loggenberg K	2020-	Lecturer	

(Source: Adapted from Van der Merwe et al., 2016, p. 17)

Izak van der Merwe was replaced by Larry Zietsman in 1997 and this opened the position for a new geographical information systems (GIS) lecturer, which was filled by a promising young MSc graduate of the department, Adriaan van Niekerk (later professor and the director of the Centre for Geographical Analysis). By the turn of the millennium, trends in the higher education sector began to alter the structure of the geography department at Stellenbosch. Educational reforms in the late 1990s resulted in the demise of large numbers of teacher trainees and the geography department's offering in that regard. This was, as noted earlier, not altogether new. During the early 1990s, the first signs of change were the rapid decline in student numbers studying geography. The department responded to demands for greater relevance in response to global and national environmental concerns through the development of geographical technologies. One early response was that in 1995 the department, like many others, changed its name to Geography and Environmental Studies (Van der Merwe et al., 2016).

The module offerings since the founding of the department were determined mostly by the available staff complement, their research profiles and their general academic interests. There were also concerns about how these modules would academically translate between different faculties and degree offerings (there was, as noted, the BEcon involvement with the Faculty of Economic Sciences). Historically, in terms of the "core of the offering", this was so, for example the case of Piet Jooste's interest in population geography, Andries Nel in political geography and Kobus Steyn, later Pieter de Necker in economic geography, all of which were closely linked to their particular personalities and research interests which spoke to disciplines in other faculties. Jooste's interests in the spatio-temporal depiction of demographic change was enhanced by Larry Zietsman, who pushed for a market-driven and practical application of this style of investigation. The economic geography modules were the only contributions by the department to the commercial sciences via a BEcon degree qualification.

During that time, there were conversations with UCT geography, led by Richard Fuggle, whether geography in the region, and the respective geography departments, would follow a "hard sciences" environmental studies/science approach (see Meadows & Fuggle (2016) in this regard) or perhaps a more social science type of approach. At UCT, there was a merger between a very successful research centre and a struggling geography department that resulted in the Department of Environmental and Geographical Sciences. Such decisions were taken in various formats elsewhere in South Africa, too. Yet Stellenbosch, as so often in its history (see Grundlingh, 2018, vis-à-vis UCT), took a different view and a practical approach. The essence of the difference, in the view of the Stellenbosch staff, was that the department would not take instructions from the "other university" on the slopes of Devil's Peak and that Stellenbosch's approach to geography would be their own understanding of the discipline and its position in both the academic

sphere and labour market. The department would, therefore, decide a different course of action. The department, as often the case in the past, needed to consider the existing expertise at hand. The department's historically strong bonds with the social sciences (unlike most other geography departments in South Africa) resulted in a softer geographical approach (Barnard, 2001, 2016).

When JH (Hannes) van der Merwe was appointed to the lecturing staff of the department, after the closure of the Institute of Geographical Analysis and its related staff movements, the internal repositioning at Stellenbosch and its host faculty, in particular, began. When the last truly physical geographer, Jana Olivier, left the university and Barnard, who was a regional geographer with interests in the softer side of physical geography and the history of the discipline retired, any departmental claim to expertise in physical geography evaporated. It was clear that there was simply not a strong enough staff complement to support any extensive academic offering relative to other universities in the region, let alone the country. The department's viewpoint was not comparable to what was happening intellectually at English South African university geography departments. Nevertheless, the softer environmental studies route would be followed so leading to the department adding 'Environmental Studies' to its name. On the human geography side, particularly the urban geography component of the degree offering, Izak van der Merwe, reluctantly became dean of the Faculty of Humanities and Social Sciences in 1995. Thereafter, Konrad van Huyssteen retired. In many ways, this represented something of a cataclysmic series of events for the department and a new era was effectively forced upon the department by the late 1990s.

The following phase, set against the already swiftly changing internal workings of the department, was even more confusing. The university was required to follow a programme-based approach to degree qualifications. This was, in fact, the new national higher education mantra and certainly not unique to Stellenbosch. Thus, the systematic modules in geography needed to be fundamentally rethought and this limited the department of choices concerning what was presented relative to the strengths of the dwindling staff complement.

The department needed to rework its composition and functioning to fit the hard rules of the programme approach. Therefore, the department had to design modules that followed the principle of synergies and complementarity (the buzzwords of the time in higher education) that would adhere to the various new programmes in the faculty. The department had, in other words, needed to enter the "faculty marketplace" and develop programme content that joined across disciplinary lines, as well as programme content that would (1) be coherent in content, but also complementary to other modules in the degree programme; (2) expansive enough in credit value; and (3) have an aim to satisfy market needs that would make it attractive to entice students to enrol for the programme(s).

It has to be noted that while the notion of cohesion between different module contributions, in different faculties, to a given degree programme was initially strictly enforced by faculties and university administration at the beginning 2000s, it soon fell by the wayside. In truth, though the department did rethink its offerings, many modules were simply repackaged and renamed to fit into the new programme approach. Programmes in the mid-2000s became more flexible in content and structure. Indeed, logic prevailed and programmes were developed to simply reflect the skills and research interests of the staff complements of the various departments in faculties. So the initial iron-fisted instructions to rigid programme content started to fade quite soon after implementation.

Although the intention of the degree programme approach was to develop greater synergies between different departments in different faculties, this did not necessarily occur. Ultimately, each faculty prioritised its own departments and it was increasingly difficult to find partner departments in other faculties to collectively present a specific degree programme – particularly at the undergraduate level. This had a negative effect on physical geography, especially where no BSc or BA programmes were searching for geomorphology as a part of their offerings. Although the department did see a decline in student numbers registered in the 1990s, it did successfully consolidate its programme offering with other departments in the Faculty of Arts and Social Sciences in the early 2000s. Notably, the links with programmes in other faculties such as Commerce and the Natural Sciences unravelled, with a significant twist in the second half of the first decade of the 2000s.

4.3 THE BIRTH OF GEOGRAPHICAL INFORMATION SYSTEMS AND EXPANSION INTO GEOGRAPHIC INFORMATION TECHNOLOGY

In reviewing the development of geography at its first centenary, it is difficult to imagine it without the teaching of and research into the fields of geographical information systems (GIS) and geographic information technology (GIT). This line of thinking and practising geography was certainly not new to the department. The mapping of various geographies of different phenomena has been standard teaching in the department and has formed an integral part of research outcomes as demonstrated in the publication of a range of atlases and the incorporation of practical mapping classes into early curricula. Expertise in this regard was established in the 1970s and is covered in the following chapter that highlights the research centres established in the department over the years. Although the creation of mapping technologies was in many ways a gesture to a commercialisation of geographical knowledge and techniques, there is a tale as to how it made its way to Stellenbosch.

Zietsman (2002, p. 30, in Van der Merwe et al., 2016, p. 19) recalled years later that, as a young geographer in 1972, he was

... ordered by senior colleagues to attend a two-week short course in FORTRAN programming to produce computer maps required in an urban research project ... At that time microcomputers did not exist and computing was done using mainframes in a batch-processing environment. Computer programme instructions were keypunched onto punched cards, assembled into stacks (decks) and fed into a mainframe by a card reader. This meant that the user stood in a queue to access the keypunch. After laboriously punching the cards, another wait followed in a queue to access the card reader. Having fed the computer programme and the data into the computer another unpredictable time-lapse would follow, whilst waiting for the output to appear on a line printer, usually only to discover that there had been some key punching error(s). This sequence would have to be repeated a number of times until finally the required output was achieved ... there was no computer interactivity, no visualisation, no colour graphic screens, single pen plotting had just become available, relational database management systems rarely existed, and digitising was mechanical and slow ... [and] density-shaded maps, for example, were generated by overprinting characters using a line printer!

Between 1972 and 1990, Zietsman was the only geographer in the department with an interest in geo-spatial technologies and this culminated in 1990 with him introducing the first postgraduate course in GIS in the department. He would almost single-handedly take this sub-branch of the department to a higher level in the next decade and was eventually joined by one of his first GIS students, Adriaan van Niekerk (Van der Merwe et al., 2016). Technologies involved in GIT are often lumped together, somewhat erroneously in the term 'geographical information systems', whereas it includes photogrammetry (accurate map-making from remotely sensed imagery), computer cartography (electronic map-making and plan construction) and satellite remote sensing (RS) such as aerial photographic analysis and global positioning systems (GPS). GIS is the apex spatial information technology platform that allows the integrated analysis of information from remote sensors and GPS sources with secondary information concerning natural resource data bases and human development patterns and manifestations. In applications, its aim is to monitor, inventorise, analyse and model spatially distributed natural and human phenomena in an integrated mode to support essential planning and management decision making across a broad range of government and private institutions from international to local levels (Van der Merwe et al., 2016).

Regarding GIS, Hill et al. (2000, p. 87) have noted that "the challenge for academic departments, over and above the question of acquiring the technology and skills, is the issue of whether we are offering a conceptual course or merely a new 'tool' in the same way that map skills have always been an important and integral part of

Geography courses”. A GIS standards-generating body was established in 2003 to generate and register unit standards-based qualifications (USBQs) with the South African Qualifications Authority (SAQA). Stellenbosch University, particularly Zietsman, was actively involved in this process. During the GIS explosion at Stellenbosch, GIS was, from the start, viewed from a technology (i.e. training in its use) and not a conceptual (which required analytical education) point of view. This emphasis prevails until today with the development of educational standards in GIS to meet the South African Council for Professional and Technical Surveyors (PLATO) (renamed the South African Geomatics Council) registration when requirements for the accreditation as GIS practitioner in 2012 reaffirmed the applied nature of GIS. When applying for registration, “an applicant’s competence as a Geographical Information Science (GISc) practitioner is related to his/her knowledge and understanding of GISc concepts and experience in applying geo-spatial technologies, in particular Geographical Information Systems (GIS)” (Du Plessis & Van Niekerk, 2012, p. 331). The first GIS-related publications between 1985 and 1989 were produced by researchers at UCT, Wits and Stellenbosch (Cilliers et al., 2013). Initially, at Stellenbosch GIS was only practised in the classroom and not in research applications, but this was to change markedly with significant adjustments in the department in the coming years. This, too, has a backstory (Van der Merwe et al., 2016).

In the mandatory departmental review report of 1999, the department received accolades for the prominent role it played in research applications and teaching of GIS in the national context. The shortage of staff (only Zietsman and Van Niekerk), however, prevented any further growth in this section of the department. A task team, appointed in 2001 by the institution’s management, concluded that Stellenbosch University is seen as a leader in GIS research in the South African context and that additional staff were essential to enhance this status of the department. The enhanced prominence of GIS precipitated by earth observation (EO), GPS and GIS industries and sciences globally, and consequently also in South Africa, made it exigent to cement the department’s leadership in the field. This was ensured through a number of initiatives.

Nadia Smith (a Stellenbosch graduate but not a geographer) was appointed in 2005 to strengthen the RS training and research, but she left the department soon after (2008). In 2007, the department commissioned a formal enquiry into instituting a recognised geoinformatics (elsewhere also known as geomatics) programme at Stellenbosch University. The enquiry, by the then retired Zietsman, made substantive recommendations which, when the University afforded the option in 2009, were submitted as one of the proposals for an Overarching Strategic Plan (OSP) (so-called flagship initiatives) in what became known as the University’s HOPE project under the leadership of the institution’s first black rector, Professor Russel Botman. Under the new chairpersonship of Hannes van

der Merwe, the application was successful, resulting in the appointment of three new staff members in 2010 (Jaco Kemp, Nitesh Poona and Helen de Klerk), while Nadia Smith's position was filled by Zahn Münch. As its brief, the task team had to establish a professional programme in GIT with national accreditation in mind. By laboriously pursuing and participating in the national standard-setting and accreditation process through SAQA, the team-designed programme was formalised in the structure, content and performance of the degree BSc (GeoInformatics). The three-year BSc programme articulates into a fourth year BSc (Hons) degree, followed by the research-based MSc (GeoInformatics) and a PhD (GeoInformatics) programme. The importance of a postgraduate qualification in GIS/GIT is confirmed in the survey of Moolman and Donaldson (2017) which found that most (36%) of the Stellenbosch graduates are positioned in GIS- or IT-related jobs.

4.4 MERGER / DEMERGER AND EXPANSION PHASE, 2007-2010

Organisationally, the worldwide disciplinary drift and cycles in the (interdisciplinary) development of geography have affected the status of the discipline internationally and, arguably, brought the discipline to an existential crisis threatening its independent departmental structures through forced mergers (Van der Merwe, 2009). These tendencies regarding geography followed cycles of shifting emphasis between applied and basic knowledge pursuits in tandem with longer cycles in response to global economic cycles and because regimes mould academia to their own requirements. The competition between geography and the earth and environmental sciences is acute and has split the disciplines in unsustainable human and physical branches more starkly, emphasising the need to maintain a coherent disciplinary profile (Johnston, 1991). Experience shows an inability to relate coherently between disciplines without shared dialects, metaphor and articulation (shared vocabularies and understandings) in interdisciplinarity that incorporates the "positionality" of individual practitioners (Lau & Pasquini, 2004, 2008) in forced mergers. Academics' sense of belonging is threatened by such potential identity crises with ramifications for the writing of interdisciplinary work through simple differences in style, presentation and format between scientific, environmental and social sciences. Paradoxically, successful interdisciplinary work fosters subdisciplinary growth and eventually new disciplines – impermanence becoming permanence (Evans & Randalls, 2008; Van der Merwe et al., 2016).

These observations were acutely on display during the imposed merger of geography and geology at Stellenbosch and fuelled the inevitable split that followed only three years later. In 2007, at the direction of the university's management to consolidate departments, the department was amalgamated with the then department of geology to form a "cross-cutting entity" named the Department of

Geology, Geography and Environmental Studies. In some ways, this was ironic in the sense that it was Shand – a geologist – that enabled the foundation of geography at Stellenbosch. The geography department had to vacate the Natural Sciences Building they had occupied since 1963 by July 2007 and relocate to the Chamber of Mines Building (Figure 4.1). The amalgamated department was placed under the executive chairpersonship of Australian geologist professor JC Clemens, with JH van der Merwe serving as the chairperson of the geography arm of the new departmental entity (Van der Merwe et al., 2016).



FIGURE 4.1: Chamber of Mines Building (Source: Authors)

The international concern over the loss of identity and the disciplinary decline of geography in amalgamations is omnipresent in the literature (Johnston, 1991). Fairhurst et al. (2003, p. 12), in commenting on forced mergers and transformation in South Africa, gave warning that “if university restructuring is to lead to this type of relationship in the interests of administrative economies, questions on the importance and maintenance of disciplinary identity arise and need to be urgently addressed”. Other than the sharing of two semester modules at first-year level (Introduction to Human-Environmental Systems offered by geography staff and Introduction to Earth Systems Science offered by geology staff) the envisaged academic synergies did not materialise and the Department of Geography and Environmental Studies regained its independence and remained in the same

building from 2010 onwards. Personality clashes, incompatible curricula and disciplinary synergy, coupled with the sudden rapid growth of the geology component also added to the unbundling of the two disciplines hosted in one department. On reflection, a possible factor in the inability of the departments of Geography and Environmental Studies and Geology to find any middle ground was the department's relatively weak physical geography and environmental geography offerings, which could thus not provide a bridge between the two disciplines (De Waal & Williams, 2020). From a management point of view, this presented serious challenges, particularly in a context in which essentially few staff members were interested in heading the re-established geography department. Appointments made in subsequent years would lead to some innovations in management. With the departmental demerger complete in 2010, Catherine Liederman (Figure 4.2) was appointed as the department's secretary, a role she has filled with distinction to present.



FIGURE 4.2: Departmental secretary, Catherine Liederman

An individual entity in 2010 once more, the department faced substantial change on a variety of fronts. The creation of new research centres (the subject of Chapter 5), the imminent retirement of long-serving staff (Eloff, Schloms and Van der Merwe) and an explosion of research output were all in store during the 2010s.

4.5 FURTHER CHANGES

Given the change in emphasis in teaching in the 1990s, owing to the departure of lecturers linked to physical geography specialisations (e.g. climatology and geomorphology) and to environmental geography studies, the revised focus was accompanied by a modular switch to a more theme- and problem-directed approach (e.g. South African water management, South African environmental management). The human geography accent of the department became concentrated on urban and tourism concerns from the late 2000s decade onwards.

The broad undertaking of geography from 2000 forward was to accentuate technological advances (such as GIT) and a dedicated engagement with Africa. Over the past decade, a number of theses, dissertations and publications in the department have dealt with phenomena in neighbouring and sub-Saharan countries, for example Reunion (Kemp et al., 2009), Ghana (Fuseini & Kemp, 2015; Yakubu, 2018), Lesotho (Moeti, 1997), Malawi (Mwathunga, 2014), Mauritius (Wortman et al., 2016), Mozambique (Nhantumbo, 2009), Nigeria (Onyebueke, 2013), Rwanda (Gatsinzi & Donaldson, 2009), Tanzania (Tilumanywa, 2013; Yamungu, 2019) and Zimbabwe (Dube, 2008; Gumbo, 2013). In a sense, these students and their research might represent the beginnings of the decolonisation of the department, certainly in terms of the location of these projects. However, this did not translate into an overt ontological move towards a decolonised conception of knowledge. At best, it meant that there is a greater awareness of geographical questions on the African continent and inclusivity of students from other regions in Africa in the department. These changes were also linked to the university's drive for greater continental representation in the student body as a component of "internationalisation" of the institution (see Chapter 6).

In 2000, the annual tradition (initiated in 1983 by De Necker) of the honours class camp at the start of the academic year was sadly discontinued owing to financial constraints. At these camps, students were inducted into postgraduate studies and topics for their research projects were selected. De Necker coordinated a rigorous process of research reporting, which continued during the honours year, culminating in final oral presentations (the 'honours conference'). It could be argued that the Stellenbosch honours students have habitually won awards at the annual South African Geography Student Conferences owing to these events setting the scene for the year. After a long absence, the honours camp was reintroduced in 2016 and written into the requirements of the research module of what is essentially the fourth year of study. From a research training and group-building perspective, this has, in a very short time, proven to produce very positive results. Declining finances for student training was a theme of the 1990s and early 2000s. The research component of the honours degree has traditionally been aided by field work training in taught modules and courses in

research methods. Bennie Schloms (Figure 4.3) noted that funding for field trips at honours level gradually decreased in the 1990s and students eventually received much less training in this regard.



FIGURE 4.3: Bennie Schloms on a field excursion with honours students

Over the next two decades, there was a gradual expansion of the urban geography offering that also branched into tourism geography. Sanette Ferreira (previously at UNISA) (Figure 4.4), joined the department in 2000 as a part-time senior lecturer (as a temporary replacement for Van Huyssteen) that became a permanent position in 2003. Ferreira was only the third full-time female appointment to the core departmental teaching staff over nearly 80 years of geography teaching and research at Stellenbosch and became the first female professor in the department in 2016. Ronnie Donaldson, with interests in urban, particularly small towns, and tourism geography joined the department as associate professor in 2007 to fill the position De Necker left vacant when he retired in 2005. These new appointments resulted in significant changes to the curriculum of geography at Stellenbosch and an injection of renewed research vigour in the department. The core of human geography became tourism and urban studies while the remaining physical geography modules were repackaged as environmental studies.

Essentially, physical geography per se, was not taught during the early 2000s. The retirement of long-serving undergraduate teaching lecturers Piet Eloff and Bennie Scholms¹³ in the early 2010s, and the departure of Hannes van der Merwe from the department in 2014 signalled the end of an era. They were the last long-serving staff members appointed in the department prior to 1990. In addition, a generalist geography offering would make way for more specialised teaching and research practices.



FIGURE 4.4: Professor SLA Ferreira

The department has come a long way in terms of demographic profile since the all-white male eras of the 1930s to the 1980s. By 2016, half of full-time non-administration staff composition of the department (inclusive of its three centres) were female. However, the department had to wait until 2010 when the first black academic (Nitesh Poona from UKZN, 2010-2019) was appointed followed by a second such appointee (Manfred Spocter from the Council for Scientific and Industrial Research (CSIR)) in 2013 and another two appointments made in 2016 (Zama Eric Mashimbye from the Agricultural Research Council [ARC] and Samantha Williams from SANParks). Beginning in 2014, and contrary to the faculty norm, the chairperson of the department served on a one-year rotational basis in a three-person management team. Ferreira became the first female departmental chairperson in 2014. The one-year rotating chair

13 Both lecturers annually received extremely high student evaluations. Eloff was also recipient of the Rector's Award for Teaching Excellence in 2004. De Necker was the first in the department to receive the award in 2001.

has allowed senior staff in the department to build management expertise, while sharing the managerial load and still pursuing productive research careers. This model has been replaced with a two-year chairship from 2020. The serving chairs from 2014 to the present are shown in Figure 4.5, while the full list of departmental chairpersons is given in Table 4.2.

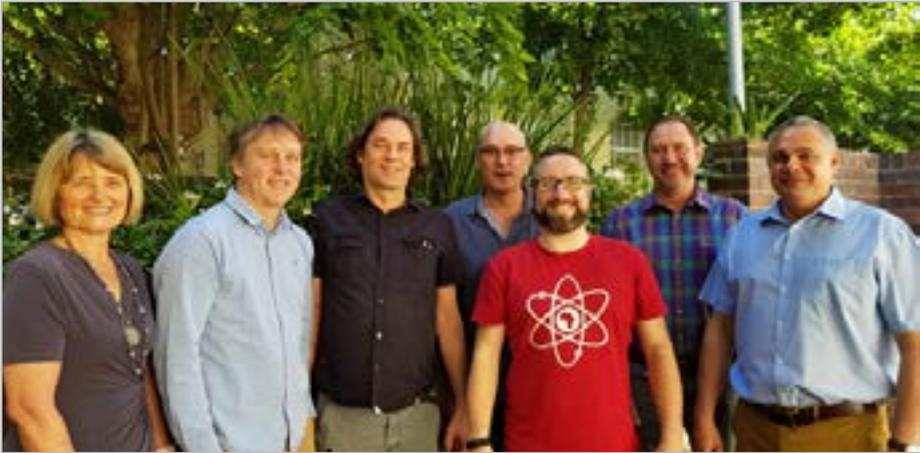


FIGURE 4.5: Rotational chairpersons. *Left to right:* Profs Sanette Ferreira (2014), Adriaan van Niekerk (2015), Ronnie Donaldson (2016), Gustav Visser (2017) and Drs Jaco Kemp (2018), Danie du Plessis (2020) and Manfred Spocter (2019)

TABLE 4.2: Departmental chairpersons, 1920 to present

CHAIRPERSON	YEARS SERVING
Serton P	1920-1958
Conradie DJ	1959
Nel A	1960-1972
Barnard WS	1973-1982
Swanevelder CJ	1982-1990
Van der Merwe IJ	1991-1996
Zietsman HL	1997-2004
Van der Merwe JH	2005-2013
Ferreira SLA	2014
Van Niekerk A	2015
Donaldson R	2016
Visser GE	2017
Kemp J	2018
Spocter M	2019
Du Plessis D	2020-

The vision of developing a strong urban-tourism critical mass led to the appointment of a further urban and tourism scholar in 2015, when Gustav Visser joined the department from the University of the Free State. Collectively, the human geography appointments also brought in new perspectives, as Ferreira had no previous connection with Stellenbosch, Donaldson and Visser, both graduates, were away from the department for two decades, while Spocter was mainly educated at UWC. In 2014, Jan de Waal, from UCT, was to be the only “pure” physical geography appointee in decades after the departure of the previous three long-serving members from the department. He would be joined by environmental geographer Samantha Williams in 2016 (educated at UWC and UCT) and Suzanne Grenfell, a physical geographer from UWC in 2020. The staff profile of the department has clearly undergone transformation on a range of fronts and in a brief period has become more diverse and representative of South African society.

By 2019, the department had a comprehensive teaching offering that involved 16 undergraduate modules packaged in some 20 programmes across four faculties, while nine honours level modules, five MA/MSc programmes, 12 MPhil modules (in two programmes), as well as a PhD in both geography and GIT are on offer. Teaching is largely structured into human geography programmes and modules or environmental studies programmes and modules, while the GIT programmes and modules are all undergirded by a specialised spatial analytical and problem-solving focus in research. In addition, eight short courses in GIT are offered by the Centre for Geographical Analysis (CGA) and the Centre for Urban and Regional Innovation and Statistical Exploration (CRUISE) presents two. The Research Alliance for Disaster and Risk Reduction (RADAR), part of the department from 2011-2017, presents another short course, so servicing a growing market of in-service learning and further education.

4.6 RESEARCH ACTIVITIES, 1994-2019

The 1994-2020 period has seen significant change in the volumes and nature of research produced by the department. Central to this has been the work of senior staff, Van Niekerk (over 65 publications since 1997), Ferreira (over 45 publications since 2000), Donaldson (over 55 publications since 2007) and Visser (over 20 publications since his arrival in 2015). Initially, research in the department continued at a normal pace, with little change from the output of the 1980s and early 1990s. Indeed, from 1994 to 2009, 111 documented research contributions were recorded. Departmental expansion in the 2010s through the arrival of the CRUISE and GIT academic personnel, and a renewed focus on research, saw a significant increase in the research productivity. The past decade (2010-2019) has seen 390 documented research output from journal articles, book contributions and edited collections (Figure 4.6). This is more than half the total research output of the entire 100-year history of the department (719) (Figure 4.7).

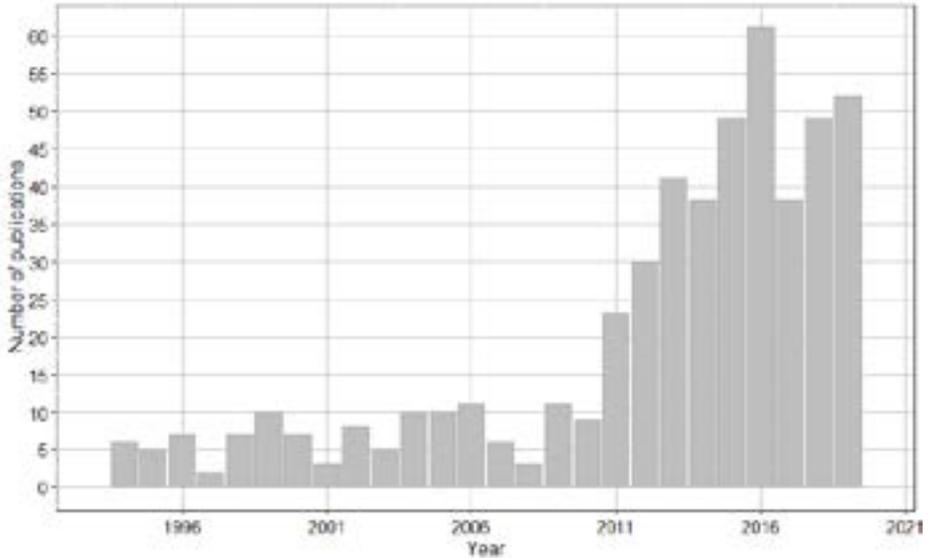


FIGURE 4.6: Publication output by year, 1994-2019 (Source: Authors' survey)

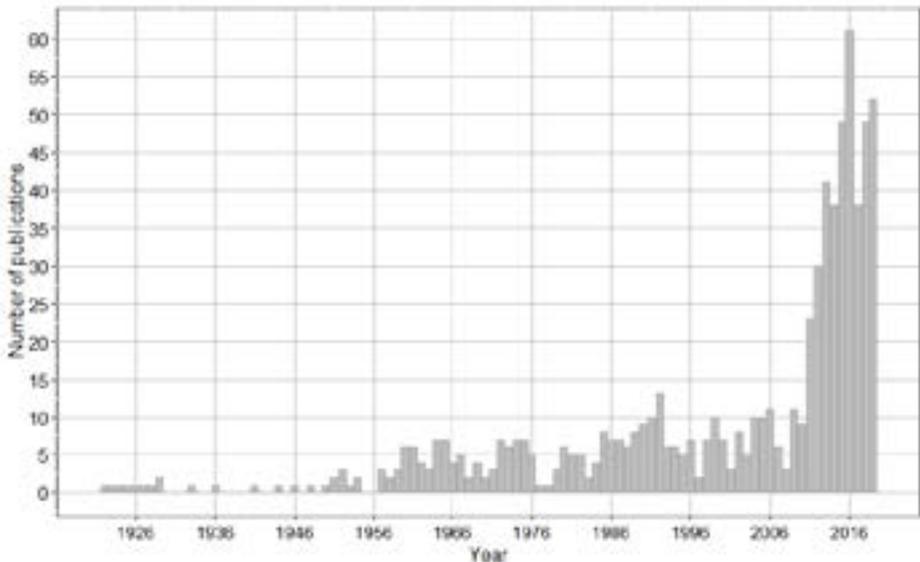


FIGURE 4.7: Geography publications by year, 1922-2019 (Source: Authors' survey)

The mid-1990s saw continued research productivity from the two Van der Merwes (Izak and Hannes). Izak would, however, leave the department in 1997 to serve as dean of the Faculty of Arts and Social Sciences until 2002. Despite this, the venerable professor still managed to supervise students and co-author papers during his term as dean – no small feat. This work, particularly with Donaldson, covered deracialisation of areas (Donaldson & Van der Merwe, 1999; Donaldson

& Van der Merwe, 1998), urban restructuring and renewal (Donaldson & Van der Merwe, 2000; Kotze & Van der Merwe, 2000) and urban change (Van der Merwe, 1998, 2002). Hannes van der Merwe produced three atlases (Van der Merwe & Van der Merwe, 2006, 2009; Vlok & Van der Merwe, 1999) and valuable environmental research (JH van der Merwe, 1998; Van der Merwe et al., 2013; Van der Merwe & Steyl, 2005), while balancing the pressures of departmental chairship and amalgamation/separation in his later career. The two Van der Merwe's proved to be the mainstay of research in the department in the late 1990s and early 2000s and they laid the foundations for the research explosion that was to come.

As stated, Adriaan van Niekerk's career in the department began in 1997. He has contributed significantly through student supervision and research. He has produced over 50 research publications since 2010 and has led the growth of GIS and GIT as a discipline and research field with aplomb. While balancing the departmental chairship (2015) and directorship of the CGA (2009 to present), his research has focused on remote sensing (Harris & Van Niekerk, 2019; Stuckenberg et al., 2013), data analysis, terrain and landcover analysis (Myburgh & Van Niekerk, 2013, 2014; Stuckenberg et al., 2013), machine learning (Bangira et al., 2019; Bekker et al., 2019; Macintyre et al., 2018; Vermeulen & Van Niekerk, 2017) and interpolation (Van Niekerk & Joubert, 2011).

Donaldson's research interests include the geographies of small towns (Donaldson, 2018; Donaldson & Vermeulen, 2012) and growth potential of towns (Donaldson, Spocter et al., 2012; Donaldson, Van Niekerk et al., 2012), as well as urban transformation, township studies and renewal (Donaldson & Du Plessis, 2013; Donaldson & Van der Merwe, 2000). Donaldson is also well known for his role in postgraduate supervision, winning the Vice-Rector's Award for Research for PhDs delivered in 2019 and having supervised one third of all the department's PhD candidates from 2010 to date.

Ferreira is one of the foremost tourism geographers in the country and had a reputation as an all-rounder, with excellent teaching evaluations and research output. Her research has typically centred on tourism in national parks (Ferreira, 2011; Ferreira & Harmse, 2014) and tourism spaces (Ferreira, 2020; Ferreira & De Villiers, 2014; Ferreira & Visser, 2007). She inspired countless young geographers to pursue their love for the discipline and has been an excellent role model to young women. Her love of her home language, Afrikaans, also led her to teach parallel English and Afrikaans classes. Her career in the department from 2000 to 2019 has left a significant imprint on colleagues and students alike and a major contribution to the department's DNA and culture. Visser was appointed to the departmental staff in 2015 and he has been a substantial boon to its overall research profile. He has also taken on the role of academic mentorship and advisor to many younger colleagues. An urban geographer by training, he has published

widely on the tourism system and emerging tourism products (Visser, 2017, 2019b, 2019c; Visser et al., 2017), gentrification and studentification (Ackermann & Visser, 2016; Visser, 2019a; Visser & Kisting, 2019) during his time in the department. He is well known for organising staff and student events and his teaching of an honours module on the philosophy and traditions of geography as a discipline.

Other contributions from staff members include those of Helen de Klerk who was appointed from a conservation background with research foci on fire ecology (Altwegg et al., 2015; Magadzire et al., 2019) and the use of remote sensing in conservation management (De Klerk et al., 2016; De Klerk & Buchanan, 2017). Manfred Spocter's work on security in urban areas and gated communities is notable (Spocter, 2011, 2013, 2016, 2018), while Jaco Kemp concentrates on remote sensing of land and water surfaces (Callaghan et al., 2015; Engelbrecht et al., 2017; Theron et al., 2017). Zahn Münch – a GIS generalist and outstanding teacher¹⁴ – has produced applied research, covering many topics including water management, climate change, conservation and land cover change (Archer et al., 2009; Gibson et al., 2018; Gibson et al., 2010; Münch et al., 2019). Zama Mashimbye paid attention to digital elevation models and land delineation (Mashimbye et al., 2012, 2014, 2019) and Nitesh Poona has done much work on hyperspectral imaging (Loggenberg et al., 2018; Poona et al., 2016; Poona & Ismail, 2019). After the retirement of Eloff, Schloms and Hannes van der Merwe, research and teaching in physical geography has fallen to Jan de Waal whose main area of interest has been on climate and water (De Waal et al., 2017; De Waal & Vogel, 2016; Jacklin et al., 2019). Enhanced ways to cope with climate change and environmental change are being made at various levels across the world. In the southern African region, despite the regions' potential for economic growth, several disasters associated with climate stresses (particularly evidence made for repeated floods and droughts). He is joined by Samantha Williams, the first female academic appointment from the historically disadvantaged groups, who publishes in the environmental subdiscipline (e.g. Hagan & Williams, 2016). The appointment of Suzanne Grenfell in 2020 holds promise for the rejuvenation of research in physical geography. Similarly, the arrival of Kyle Loggenberg (Loggenberg et al., 2018) in 2020 should further strengthen the GIT offerings of the department. The staff and students of the research centre CRUISE have contributed substantially to research output in this period of review. Greater attention is given to the department's research centres in Chapter 5.

The postapartheid period recorded 70% (501) of all the department's publications over the past century. However, while the annual publication total had peaked at 13 in 1992 (Figure 3.7), it would only reach near that number again in 2011

14 Münch won a Rector's award in 2018 in recognition of her excellence in teaching.

(Figure 4.6). The average annual output in the 1990s and for the first decade of the 21st century was approximately seven. However, the final ten years (to 2019) of the centenary have been markedly different with the average shooting up to almost 40 publications per year, reaching an average of 50 publications per annum in the five years to 2019. In many ways, the South African National Research Foundation's rating system of individual researchers and its role in various metrics, amongst them staff promotion, is playing an increasing role in the pursuit of publishing research in international journals and, inevitably, in English (Visser, 2007). The accelerated rate is also a reflection of the internationalisation, corporatisation, managerialism and neoliberalisation of universities in South Africa and international academia as a whole (Hammett, 2012).

Collectively, there has been increased quality of the research standing of staff on the international academic stage as evidenced by the growing number of staff members holding National Research Foundation (NRF) ratings.¹⁵ Clearly, for long the department's agenda had, for the most part, not been an endeavour to pursue a common research theme. However, more recently there has grown greater synergy between some of the research produced and the department's main teaching foci.

4.7 CONCLUSION

The chapter has reviewed the recent past of the department's developmental trajectory. It was a period during which many aspects of the department changed. Attention was given to the changing staff complement and the diversity of the new appointees regarding their educational backgrounds and prior employment histories. In addition, significant strides were made towards greater gender and race equity. This spotlighted the stark contrast to the long historic trend of appointing staff educated in the department and from similar backgrounds. The institutional rearrangement of a short-lived amalgamation with the former geology department to form a new departmental entity was reviewed. Ultimately, this attempt at creating some form of interdisciplinary teaching and research platform failed because economic expediency was the more likely motivation for this endeavour. The vast increase in the count of research publications during this period is also witness to a significant restyling of the department's research profile. Both can in no small measure be attributed to contributions from the research centres housed in the department, to which the attention turns in the following chapter.

15 The National Research Foundation's rated former and current staff members since the inclusion of Social Science in the rating scheme: H de Klerk, R Donaldson, S Ferreira, HS Geyer, S Grenfell, M Spocster, IJ van der Merwe, JH van der Merwe, A van Niekerk and G Visser.

CHAPTER 5

RESEARCH CENTRES IN THE DEPARTMENT

5.1 INTRODUCTION

The aim of the chapter is to record the reasons for establishing the three centres that have, in various formats, been integral to the department, the people employed there and the research they conducted. Consideration is first given to the development, in the 1970s, of the first self-funded academic and applied unit in an era long before the present-day global corporatisation of higher education. The idea of self-funded research units has become increasingly prevalent and has been supported by most university administrations for various reasons, most of them perhaps not that noble. In the case of the Department of Geography and Environmental Studies at Stellenbosch University, the centres have all had considerable successes in various matrices of analysis, although the commitment to them by the university has, for the most part, been questionable. The order of exposition is chronological and, as will be highlighted, each centre has different academic and practical mandates. The creation and transfiguration of the Institute for Cartographic Analysis (ICA) – later the Centre for Geographical Analysis (CGA) – is considered first; thereafter the establishment of the Centre for Urban and Regional Innovation and Statistical Exploration (CRUISE) is discussed; and finally the Research Alliance for Disasters and Risk Reduction (RADAR) is given attention.

5.2 CENTRE FOR GEOGRAPHICAL ANALYSIS NÉE INSTITUTE FOR CARTOGRAPHIC ANALYSIS

Historically, cartography was an important niche in the department that was expanded through the formal founding of the ICA in 1975. The ICA, the predecessor of the CGA, was a self-funded research unit in the department and initially tasked with publishing a series of atlases (e.g. Van der Merwe & Zietsman, 1977; Van der Merwe, 1983; Jackson et al., 1984; Zietsman & Van der Merwe, 1981, 1986). In 1997, the ICA was formally replaced – with substantial investment of its own funds in GIT infrastructure – as a research and service institution by the renamed CGA to be led by JH (Hannes) van der Merwe, later head of the department (Figure 5.1).



FIGURE 5.1: Dr JH van der Merwe

The CGA's mandate was to conduct basic and applied research in a range of geography fields upon request from private and public institutions. In addition, they were to support university staff with GIS-related projects and training. The CGA's development paralleled the acquisition and use of enhanced spatial data technology in the department as a whole. This aided the department in rapidly building a reputation as one of South Africa's leading academic establishments in GIT. The CGA, as the business and service-delivery arm of the department, is headed by a part-time director elected from departmental staff and it functions without institutionally funded support staff. Directors of the units have been Profs IJ van der Merwe (ICA, 1975-1990), HL Zietsman (ICA, 1991-1997), JH van der Merwe (CGA, 1997-2008) and since 2009, A van Niekerk (Figure 5.2).



FIGURE 5.2: Professor A van Niekerk

The mid- to late 1990s were not particularly good years for the ICA. However, in association with the flagship Stellenbosch University HOPE Project since 2010, the CGA has seen a major expansion of staff numbers, structure and activity spheres. It provides three types of service: project work for the private and public sectors at commercial rates; short courses in GIT (closely aligned with the geoinformatics programmes) aimed at the public (learn-and-earn) market; and aid to students enrolled in GIT programmes or technical GIT research support to the department and the other two units. To enable these expanded roles, the CGA employed two permanent staff (Garth Stephenson and Ilse Boonzaaier) in 2015, several full-time contract GIT specialists and varying numbers of interns from the GIT programme. Stephenson and Boonzaaier had previously been appointed on a renewable contract basis. This promoted shorter response times to external contracts and has boosted the CGA's annual income – a notable and growing contributor to third-stream funding for the university.

The increased capacity provided by the HOPE Project has enhanced the CGA's aim. Key objectives are to attract larger and longer-term (e.g. multi-year) research projects to facilitate human capacity development (i.e. through attaining advanced degrees while working on research projects) and staff expansion. It also increased research output (e.g. Stephenson et al., 2015; Van Niekerk et al., 2016) and strengthened existing expertise in the specialised field of land cover change using RS technologies. Large research projects are attracted to the CGA through increased internal (e.g. CRUISE, RADAR, other departments) and external

(e.g. CSIR, ARC, Water Research Commission (WRC), private companies, other universities and international partners) collaborations. The permanent staff members in 2019 were Garth Stephenson, Theo Pauw, Divan Vermeulen, Jascha Muller and Jessica Eichhoff. Additionally, a number of contract workers are involved in the centre (Figure 5.3).



FIGURE 5.3: CGA permanent and contract staff, 2019. *Back:* Garth Stephenson, Adriaan van Niekerk, Christiaan Theron, Ockert Malan, Jascha Muller; *Middle:* Divan Vermeulen, Jessica Eichhoff, Lauren McCarthy, Theo Pauw, Tara Southey; *Front:* Adriaan Prins, Caley Higgs, Hanu Mostert

A notable study undertaken by the CGA in 2004 was on the growth potential of towns by Izak van der Merwe, Larry Zietsman and Sanette Ferreira. This was the first contract study conducted by the CGA and was subsequently updated in 2010 and 2013 by Ronnie Donaldson, Danie du Plessis, Manfred Spocter and Adriaan van Niekerk. This work has had far-reaching applications and still informs professional and local spatial development plans in the province.

Most of the CGA's recent activities involve the application of GIT for solving environmental and agricultural problems. For instance, the CGA recently (2018) completed a project funded by the Water Research Commission (WRC) in which all the actively irrigated areas in South Africa were mapped. The water used by each irrigated field was quantified using satellite RS. This enabled detailed analyses of the water use efficiencies of different crop types in different regions throughout South Africa. It also provided an estimation of how much water is available for additional irrigation and other uses. The findings are currently being operationalised to monitor irrigation on a seasonal basis.

Another 2019 CGA study funded by the WRC developed a web application by which farmers can monitor their fields, orchards and vineyards to detect whether

and when crops are being influenced by salt accumulation and/or waterlogging. The system, called the South Accumulation and Waterlogging Monitoring System (SALT – SAWMS), uses satellite images to detect changes in agricultural fields. This saves time and costs as it directs attention to specific problem areas where field inspections (visual observations and/or soil sample collections) are needed. SAWMS was implemented and tested in several irrigation schemes throughout South Africa and judged by end users to be a major forward step in soil conservation. The CGA developed TerraClim in 2018-2019, a web application (funded by Winetech) by which wine and fruit producers can obtain high temporal resolution (hourly) climate data at vineyard and orchard level. Users can compare recent climatic conditions of a specific location with historical climate data to make better decisions about irrigation scheduling, fertilisation applications, pest management and harvesting planning. The system is also useful for identifying areas suitable for specific crops or cultivars. The CGA also provides services to several other key players in the agricultural industry, including the South African Wine Industry Information and Systems (SAWIS), CITRII, Hortgro, and GWK, so confirming that the CGA has developed a niche set of capabilities of geo-spatial technologies for the agricultural sector.

Apart from contract research, the CGA is also developing a range of software and products that have commercial potential. One such product is the Stellenbosch University Digital Elevation Model (SUDEM) which was commercialised through a spinout company, GeoSmart Space (Pty) Ltd. The SUDEM was generated using a combination of RS and GIS data sources, and the methodology was patented. A new, higher resolution digital elevation model (DEM), called the DEM of South Africa (DEMSA), is currently being developed using photogrammetry techniques.

5.3 ESTABLISHING TWO NEW RESEARCH CENTRES IN THE DEPARTMENT

Since 2009, the department has been strengthened by the incorporation of two more centres: the Centre for Urban and Regional Innovation and Statistical Exploration (CRUISE) in 2009 and the Disaster Mitigation for Sustainable Livelihoods Programme (DiMP) in 2011, the latter being renamed the Research Alliance for Disaster and Risk Reduction (RADAR) in 2013. The funding model of each centre varies, but the common denominator is that the university bears no financial responsibility for them. A direct management oversight link extends from all the centres through the department and its chairperson to the dean of the Faculty of Arts and Social Sciences. These centres have been very successful at many levels, but their relationship with the university has frankly been one-sided and exploitative by the university. The centres have generated considerable income for the institution with essentially little support or reward in return.

5.3.1 Centre for urban and regional innovation and statistical exploration

CRUISE, externally funded by Statistics South Africa (StatsSA), was established in the department in 2009 with an urban planner, Professor HS (Manie) Geyer (Snr) (Figure 5.4), appointed as the first Statistics South Africa Chair. Geyer was appointed to the university as a full professor and director of the centre at Stellenbosch.

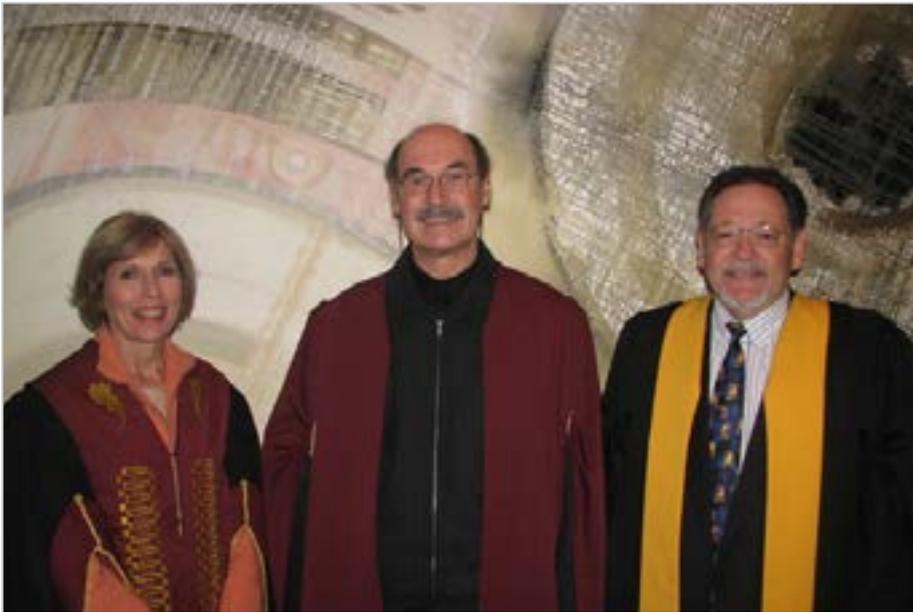


FIGURE 5.4: Professor HS Geyer. *Left to right:* Professors Magda Fourie, Manie Geyer and Hennie Kotze

Financial support from StatsSA enabled the CRUISE to create seven new offices in the department and another three were added through adaptive use. The core activities of CRUISE relate to basic and applied research, as well as to the building of capacity in the public and private sectors. The lack of capacity amongst senior and second-level decision makers in local government for effectively managing planning activities on the ground, correctly interpreting and using data that inform development planning activities, underlies the centre's training and research mandate. Because StatsSA, the official provider of development planning information, found its effectiveness hampered, it resolved to fund a centre of excellence at a university in South Africa to create capacity planning execution and statistical expediency as a priority. CRUISE at Stellenbosch University was the result. To fulfil their mandate, two geographers (Anita Adendorff who was later succeeded by Lodene Willemse, and Amanda van Eeden), three urban planners (Danie du Plessis, Anele Horn and Herman Geyer Jnr) and an administrative officer (Yvette Regue) were appointed (Table 5.1).

TABLE 5.1: CRUISE staff, 2009-2020

STAFF MEMBER	PERIOD	POSITION
Geyer HS Snr	2009-2019	Professor and director
Adendorff A	2009-2010	Lecturer
Du Plessis D	2009-	Senior lecturer and director (since 2020)
Van Eeden A	2009-2017	Lecturer
Willemse L	2010-	Lecturer
Geyer HS Jnr	2011-	Lecturer
Horn A	2011-	Lecturer
Regue Y	2013-	Senior departmental officer

In addition to offering a range of short courses mainly for StatsSA staff, the centre has offered a taught master's programme in Urban and Regional Science since 2011 (Figure 5.5) and reintroduced a master's programme in Urban and Regional Planning (the previous urban and regional planning department at Stellenbosch was closed in 1996). The first intake of town and regional planning students was in 2015 (Figure 5.6).

**FIGURE 5.5: The first graduating group and CRUISE staff, 2011**



FIGURE 5.6: CRUISE graduates and staff, 2015

Academically, the centre has functioned autonomously from the geography department, but CRUISE staff and students have contributed significantly in its short existence to the research output of the department (Van der Merwe et al., 2016). Since 2011, the centre has produced over 90 journal articles and book contributions in the spatial planning and urban geography spheres. Under the leadership of Geyer and Du Plessis, the centre has gone from strength to strength and its invaluable contribution to the department is commendable.

5.3.2 Research Alliance for Disasters and Risk Reduction

RADAR became part of the department in 2011. A New Zealander, Dr Ailsa Holloway (Figure 5.7) (a qualified nurse with a doctorate in Public Health and founder and director of the unit), joined the geography department with two of her key full-time staff members: risk reduction programme coordinator Trish Zweig (an honours graduate from the Stellenbosch geography department and MA graduate in geography from UCT) and knowledge coordinator Gillian Fortune. In 2012, the unit was strengthened with the appointment of Jan de Waal and Vimbai Chasi as researchers (Chasi left the unit in 2015) and in 2013 by Dr Robyn Pharoah (UCT PhD geography graduate) as senior researcher, with an additional two researchers joining the unit later (Table 5.2).



FIGURE 5.7: Dr A Holloway

TABLE 5.2: RADAR staff, 2011-2020

STAFF MEMBER	PERIOD	POSITION
Holloway A	2011-2020	Director
Zweig P	2011-	Lecturer / Periperi U coordinator
Fortune G	2011-2020	Knowledge manager
Chasi V	2012-2015	Researcher
De Waal J	2012-2013	Researcher
Pharoah R	2013-	Senior researcher
Francioli A	2014-2020	Periperi U liaison / Researcher
De Kock C	2017-2020	Researcher
Gabier M	2017-2020	Data capturer / Research assistant
Harber I	2017-2019	Periperi U coordinator

Between 2006 and 2020, RADAR acted as the secretariat and project manager for Periperi U (Partners Enhancing Resilience for People Exposed to Risks), a consortium of research units and departments from 12 African universities working to build capacity for disaster risk-related capacity on the continent. RADAR staff have generated several publications (e.g. Cutter et al., 2015; Hemstock et al., 2016; Pharoah, 2014; Zweig, 2015) and they have undertaken nationally and provincially commissioned research, as well as regional studies for clients such as Southern Africa's Regional Inter-Agency Standing Committee (RIASCO) on humanitarian trends.

RADAR was based in the Department of Geography and Environmental Studies from 2011 until September 2017 when the unit was upgraded as a Type 2 Centre within the University and no longer housed in the department. Nevertheless, strong links still exist between geography and RADAR. RADAR's history goes back to 1996 when it was established at UWC from where it later moved to UCT. It was originally known as the Disaster Mitigation for Sustainable Livelihoods Programme (DiMP), but was renamed shortly after relocating to Stellenbosch. Although its name and bases of operation may have changed, RADAR's mission has remained largely the same since its inception nearly a quarter of a century ago. The centre operates on a mixed-source funding model, with external funding supplemented increasingly by self-generated funding. RADAR draws heavily on its disciplinary foundation in applied geography and environmental studies, with specific emphasis on urban risk, as well as hydro-meteorological threats and fire.

RADAR places much emphasis on advancing capacity building in the field of disaster risk through participation in academic programmes and short courses. RADAR currently contributes a postgraduate module in the geography department's BA honours programme and it hosts a postgraduate diploma in disaster risk studies and development and an MPhil in disaster risk science and development. RADAR also does training through week-long short courses, designed to provide knowledge and enhance understanding of disaster risk theory and paradigms, as well as to strengthen community-based risk assessment capabilities in disaster-prone informal settlements. By the end of 2019, RADAR had already trained more than 400 development and disaster management practitioners in disaster risk reduction and had taught well over 100 honours or master's graduates in disaster risk science. The honours mini-thesis research of at least 40 of these students was in the field of disaster risk.

A secondary focus of RADAR's activities has been to conduct research on and contribute to knowledge about hazards, vulnerabilities and risks in southern Africa and the African continent. RADAR has given priority to building an understanding of disaster risks that predominate in the Western Cape of South Africa through extensive applied research into risks in informal settlements, as well as of the impacts of recurrent extreme weather events. Such knowledge is key to addressing these issues and contributing to risk reduction and foundation building for more resilient and sustainable societies. RADAR has also been active in creating opportunities for multi-site, transboundary disaster risk research that involves partnerships in Zimbabwe, Senegal, the Gambia, Uganda, Mozambique and Kenya. RADAR also engages with a diversity of stakeholders and role players, including international non-governmental organisations, international and bilateral assistance partners, as well as local, provincial and national governments.

For example, in 2015, representatives from RADAR attended the Third United Nations (UN) World Conference on Disaster Risk Reduction (UN WCDRR) in Sendai Japan and assisted in organising and hosting an open forum event on “the role of higher education institutions in advancing disaster risk knowledge”.

The Periperi U consortium’s efforts at local and national levels, as well as across the continent, have helped to reframe Africa’s self-view on its disaster reduction capacity by shifting from an entrenched history of aid dependency to an awareness of emerging local agency and capability (see www.riskreductionafrica.org). Since 2014, Periperi U has been recognised as an Integrated Research on Disaster Risk (IRDR) International Centre of Excellence for Risk Education and Learning (ICoE-REaL). As such, RADAR has contributed richly to the department’s (and the university’s) international profile.

RADAR has also undertaken a range of complex and influential research projects. In 2012, the RIASCO study included primary data collection in thirteen countries with over 200 interviews conducted by more than ten researchers. One of RADAR’s most influential projects piloted the use of smoke alarms in fire-prone informal settlements. A post-event review of the 2017 Knysna fires, the most destructive peri-urban fires in South Africa’s history, has also had a tangible impact. The research, commissioned by Santam and undertaken in collaboration with Stellenbosch University’s Fire Engineering Research Unit (FireSUN) and the Council for Scientific and Industrial Research (CSIR), was central in motivating the industry in South Africa to create a Disaster Relief Fund aimed at providing responsive financial assistance to governmental and non-governmental institutions following disasters.

5.4 CONCLUSION

The research centres discussed in this chapter have made significant contributions to the research outcomes and teaching activities of the department. They were established for various reasons and their core research mandates and training functions have changed in response to various university, industry and societal needs. The CGA is clearly focused on the commercial opportunities that applied geography presents to industry, as well as to various levels of government. It has been highly successful in earning considerable revenue for Stellenbosch University through their activities. CRUISE performs the dual purpose of generating significant income through professional postgraduate programmes for national planning and monitoring agencies, while simultaneously contributing substantially to the published research output of the department. RADAR has mainly contributed towards teaching and practical training endeavours and has also contributed significant research for social impact. Collectively, these centres

have expanded the reach of the department into various levels of society ranging from academia, local communities and national government to the upper reaches of international humanitarian aid organisations. This chapter has reviewed the establishment and development of these centres and shown that their stable leadership has led to many contributions being made which are linked to their involvement in postgraduate research programmes and the related research outcomes. The next chapter reviews some of these contributions.



CHAPTER 6

POSTGRADUATE STUDENT RESEARCH IN THE DEPARTMENT AND RELATED CENTRES

6.1 INTRODUCTION

The idea of students making research contributions is complex and fluid over time and between various disciplines. Students can, and do, contribute to the larger body of research output of the academy in various ways and at many levels – be that as fieldworkers for once-off projects, members of a research group or by their independent research activities in the form of honours research reports, master’s theses or doctoral dissertations. The aim of this chapter is to consider and analyse the flow and general research foci of student research at the postgraduate level in the department. The first section reviews the research output of the honours programmes which involve small-scale studies. Thereafter, the results of master’s theses come into view, followed by the most academically significant student research contributions in the form of completed doctoral research dissertations.

6.2 GEOGRAPHY HONOURS DEGREE RESEARCH AT STELLENBOSCH

The single largest contribution to new research by students in the department has been the independent honours research projects – the defining course component of the honours programme. This requirement was, however, not always part of the honours course and is, in fact, a relatively recent addition. The honours degree has various meanings in the context of different degrees and education systems. Most commonly it refers to a variant of the undergraduate bachelor’s degree containing a larger volume of material or a higher standard of study, four years of study, or both, rather than an “ordinary”, “general” or “pass” bachelor’s degree (three years of study). In many Anglo-American university traditions, an honours bachelor’s degree would include that a dissertation or independent research project be conducted during the fourth year of study. The structure and content of that requirement is extremely diverse and not the focus here. What is important to note is that we have classified honours research projects as postgraduate research when in different international contexts that would not be the case. This is a broader reflection on the South African higher education model. In South Africa,

non-professional bachelor's degrees (e.g. BA, BSc, BCom) are three-year degrees (professional degrees such as engineering degrees or medicine are longer). The honours degree is an optional fourth year of study and is an additional one-year qualification. Usually the honours degree specialises in one subject field. Intake into honours degree study is often highly selective. Currently, the bachelor's degree is at level 7 and the honours degree at level 8 on the National Qualifications Framework of the South African Qualifications Authority. Research components must comprise at least 25% of the honours degree.

Regarding Stellenbosch University, it should be noted that the founder academics of Victoria College are important, because they defined the idea of what constituted an honours degree. These academic founders essentially set the format of undergraduate degree courses, which drew on the academic traditions from which the professors came. For Stellenbosch University, that would mean very heavy influences from the English and Scottish university traditions. By the early 1890s, the college was, in academic character, a typical Scottish-English institution (Heese, 2018), despite the fact that the student body was nearly exclusively Afrikaans-Dutch. This was important to the development of geography at Stellenbosch as the person who proposed the introduction of geography, Samuel Shand, was a Scot. Thus, the structure of the degree programme, if not the content, was copied from his background.

The basic starting curriculum has already been remarked on (Chapter 2). What is important is that the requirements for independent research in an honours degree were then not as they are now. From the historical records in the department itself, it is evident that the idea of an independent research project solidified by 1972.

Barnard (2016) noted that by the early 1940s, as set against the backdrop of international and national turmoil, political geography as a systematic teaching course was popular amongst geography students. In the middle of a war, naturally Serton's perspective was Eurocentric and most of his relatives lived in occupied Netherlands. Serton's lectures were essentially a regional geography (typical of the time in geography) of the European family of state and their continental and transoceanic extension interpreted through the lens of power relationships. For what is now referred to as the honours year, Serton's approach merely extended this world view. Area studies also dominated Serton's course on geographical methods for fourth-year (honours) research students. Suitable for the time in international human geographical research, the French School of regional geography and possibilism (as also the American cultural geography debates of the time) were lauded.

According to Barnard (2016), the honours research topics most students chose were small, well-delineated areas – precincts, wards, irrigation districts. They

conducted research through fieldwork and acquired a grassroots knowledge of their study area, observed visually, conducted interviews and made their own conclusions. Contrary to later projects, no large-scale mapping was expected, no analysis was attempted, and the studies lacked historical depth. Much of what Serton established during his tenure for the later research component is still present in the exposition of honours research projects but with significantly more depth and analysis of collected data.

From 1972 to 2019, 647 recorded honours research projects have been submitted for examination as part of the requirements for the honour degree in geography (Figure 6.1). A list of these is given in the bibliography of this book. Starting with only three projects in 1972, the volume increased so that by the end of the 1970s a total of 37 honours projects were submitted in the department. At this level of study, it is difficult to really aim for in-depth analysis and ultimately the express purpose of these projects is to teach students how to conduct research. There was, broadly speaking, a balance between human and physical themes which reflected the teaching and research interests of the lecturing staff at the time. In terms of methodology, these were empirical investigations in the tradition of positivism. Generally, themes related on the one hand to geomorphology and urban geography on the other. Given the broader language context of the university, almost all the research was communicated in Afrikaans.

A noticeable expansion in the size of the honours year group is registered in the 1980s. There were nearly always more than ten students who submitted a total of 114 research projects in the decade. There are a number of reasons for this trend, some related to students, some to the institution itself and some to the broader national funding environment in which Stellenbosch University was functioning. From a student perspective, there was increased employment competition where vastly greater numbers of employment applicants would be in possession of a first degree. The 1980s were dismal years for the South African economy, and the relative advantage of an academic qualification became more pronounced. Many of the geography students were aiming towards a teaching career and the requirements for the more senior teaching positions increasingly required a four-year degree. There were also geography-related specialisations, such as urban and regional planning for which an honours degree gave applicants an advantage over others with bachelor's degrees. Other forces were also at play that related primarily to funding requirements for universities in South Africa and these caused a general drive to increase postgraduate student numbers as they attracted greater fee income and state subsidy.

An in-house publication called GeoStell existed in the 1980s to mid-1990s where honours students were required to submit a proto-article to their supervisors based on their research. These articles were vetted and honed by study leaders for inclusion in GeoStell, a further mechanism for student training in research.

Some supervisors, rather than selecting articles for GeoStell, reconditioned these articles even further for publication in peer-reviewed academic journals. GeoStell was discontinued in the mid-1990s when the department was under pressure from faculty to publish in state-subsidised academic journals. A tradition of a final honours ‘conference’ was also implemented in this time. Students were required to present their research studies at a final report session, which was often a formal affair. This tradition still stands today, though perhaps less formal than it once was.

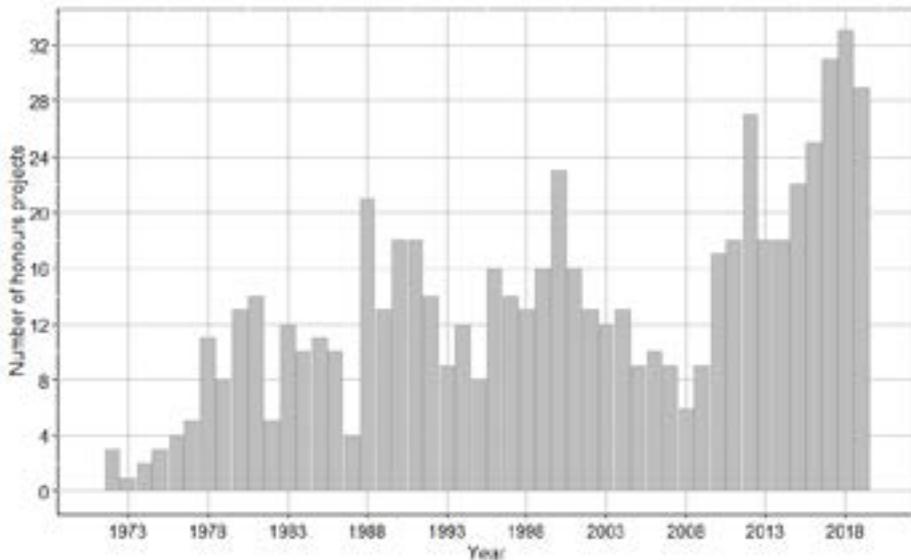


FIGURE 6.1: Honours projects by year, 1972-2019 (Source: Authors’ survey)

Considering what was being investigated in these projects in the 1980s a widening schism started to emerge between themes related to human as opposed to physical geography. About two thirds of research projects were in human geography subdisciplines and the remainder in physical geography domains. Nearly half of the physical geography projects might be classified as environmental studies as opposed to a strong representation of natural science orientated themes in climatology or geomorphology. Most of the human geography studies entailed urban themes. This was a clear reflection of the shifts in the staff complement’s research interests and teaching abilities. Afrikaans remained the language mode of communication, but this would change rapidly in the following decades.

The 1990s was a decade of flux in South African society as a whole and consequently in higher education as well. Student numbers in the honours degree programme had increased by some margin over the previous decade and this continued in the 1990s with 138 research projects being produced, most in human

geography subdisciplines. A new subdisciplinary niche that emerged related to GIS and its application to various geographic phenomena. In many ways, this focus intersects with essentially any discipline requiring spatio-temporal analysis. Going forward, this trend consolidated into a key research area in Stellenbosch geography, a separate degree offering, and hence the honours research projects as well.

The first decade of the new millennium were good years for South Africa as a whole, but an extremely turbulent period for South African higher education where considerable education reforms were put in place. Massification of higher education was one of them, with the underlying intent to broaden access to this sector. This did not really manifest in student numbers at the geography honours level at Stellenbosch. Then again, the language policy of the time, the university still predominantly teaching in Afrikaans, did not make it an attractive university study destination for those cohorts massification was intended to include in higher education. In fact, somewhat of a decline was registered (120 honours projects were submitted). The types and subjects of research conducted by departmental staff were reflected in the nature of the honours research projects and varied so widely that it is difficult to categorise this body of student work. As noted in Chapter 4, these were uncertain times for the department itself. Suffice it to say that there was a relative decline in student numbers although the prominence of human geography research themes remained. The only marked difference was that the honours projects in the department were, since 2000, almost without exception communicated in English. The overwhelming reason was that the relevant student cohort, still largely Afrikaans-speaking, wanted to be prepared for English-language work environments in South Africa or, increasingly, abroad.

The second decade of the century witnessed a significant increase in student enrolment at geography honours level. This was a natural outcome of the gradual increase in total student numbers at Stellenbosch University and not necessarily a greater interest in geography per se. Consequently, the total number of students graduating in this course of study increased to 238 in the 2010s. Where physical and environmental geography had featured previously, a fundamental shift occurred in the research foci to themes in GIS/GIT and, more prominently, urban and tourism geography. These concentrations relate to the introduction of a professionally accredited degree in GIT and to the reorientated expertise of the human geography staff. Consequently, the research themes of the honours projects can be classified in broad terms as urban, tourism, GIT and environmental geographies. Vitaly, the greatest gains were in the GIS/GIT projects and notably the era is exceptional for all the honours research project submissions being in English. Significantly greater gender and racial diversities were registered.

6.3 GEOGRAPHY MASTER'S DEGREES

Unlike the requirement of an honours research project as a component of the degree programme, the master's degree at Stellenbosch University followed the British tradition in which a relatively consistent academic requirement is a research-based thesis, with no or little formal coursework components. This generally amounts to a course of self-study demonstrating mastery of a high-order overview of a specific discipline or field of investigation or area undertaken typically over the course of two years. As in Britain, this remained the model at Stellenbosch for many decades. However, in the mid-1990s, and set against the backdrop of an international trend towards the expansion of postgraduate student numbers, the notion of structured master's degrees was introduced in the South African higher education system. Stellenbosch University, along with most South African universities, embraced this model. Two different types of master's degree would be on offer, the traditional master's degree by research and the new master's by coursework and a mini-thesis, typically designated as MPhil. The introduction of the coursework master's was, in large part, one of financial expediency. Research master's could drag on over the two-year mark, after which the university would not receive any additional subsidy funding by central government. The idea was that the structured master's option would be more efficient in getting students through the system, so releasing more government funding. This innovation would have various implications for the department over the past three decades. Most importantly, the structured master's was not more efficient in the delivery of degrees, the quality of the research was often lower, and it did not articulate well into a potential doctoral course of study. In total, the department has delivered 385 recorded master's degrees (traditional and structured) in its 100-year history (Figure 6.2). In the next two subsections, attention is first given to the traditional master's degrees in the department and then to the structured master's degrees.

6.3.1 *The traditional master's*

A record and brief analysis of the extent and main research foci of this body of research follow. Serton excelled in postgraduate supervision and writing. He was for many years the only staff member qualified to supervise postgraduate students as no other staff members held doctorates. The department's first master's degree student, and indeed the first master's in geography at a South African university, was Ernst Gabriel Jordaan van der Merwe who graduated in 1927 (Van der Merwe, 1927). A second master's thesis was submitted shortly afterwards in 1928. The 1930s saw a slow escalation in master's theses to total 12 by the end of the decade. By the 1940s, master's degrees were an established feature in the department and a further 20 were completed by the end of that decade. These 32 master's graduates in geography were more than those produced by all the

other geography departments in South Africa collectively, although many of the other geography departments in the country had not been established yet. An important effect of this delivery of master's graduates is that many academics in other geography departments, particularly in Afrikaans-medium universities, received their master's degrees from Stellenbosch.

The rate of completing master's degrees would remain almost the same through the following three decades, with 14 submitted successfully in the 1950s and another 15 in the 1960s, but notably during the 1970s when the department was arguably at its apartheid-era zenith, only nine master's degrees were awarded. A few explanations for the low rate come to mind. First, there was not really a need for a master's degree for most students in the department who would quite likely enter the teaching profession. Moreover, degrees, let alone master's degrees, were still in relatively short supply in the national labour market. Also, there were considerably more alternatives to Stellenbosch for obtaining a master's in geography as there were, by the 1960s and 1970s, similar offerings at various universities located in the considerably more economically active and attractive settings of Johannesburg and Pretoria. Finally, because these were turbulent times politically and economically, most students simply wanted to get into the job market as soon as possible and they could not easily afford a master's education, particularly when the mode of delivery tended to be full-time residency. This trend continued in the 1980s when a further nine master's theses were successfully submitted.

Most of the early master's studies (1920s-1950s) were regional descriptions of geographic areas or places in South Africa. The prominent locales were in the Western Cape (Saldanha Bay, Breede River Valley, Hex River Valley, Koue Bokkeveld, Caledon, Garden Route and Cape Winelands) while others looked further afield to the Orange River, Karoo, Natal and Transvaal. There was a spotlighting on small town geographies, particularly developing towns in the Western Cape, and the description of their development and economies. Economic geography, population dynamics and cartography were common themes in these early degrees. Climatology and tourism themes would emerge in the 1970s and 1980s, as well as a few geomorphology studies. The first master's thesis written in English was by Taylor (1974).

A watershed decade followed in the 1990s, the decade in South Africa defined by radical political, social, economic and educational shifts. In this decade, more master's degrees (39) would be awarded than in the previous three decades combined (34). This was, in large part, the result of the introduction of structured master's degrees in 1996. Greater concentration on the tourism system began in the 1990s which, concomitant with the change in the department's name, also saw environmental themes emerge. This growth in tourism research would see

the creation of a structured master's in cultural tourism and heritage studies in the early 2000s. However, growth in human geography topics dwindled over the past decade (2010s), with only one human geography thesis submitted in 2019. Of those human geography master's theses submitted, most have focused on themes in tourism, leisure and recreation, as well as to urban form, studentification and gated communities. Some of the master's research has explored environmental topics relating to climatic change, water resource development and management, coastal management, and conservation themes. The GIT master's component of the department has performed well in this time (over 25 master's graduates produced). This is largely explicable in terms of the availability of funding possibilities in the GIT domain, whereas bursary opportunities are difficult to come by for human geography.

6.3.2 *The structured master's*

In following international and national trends, structured master's programmes were introduced in the department in 1996. The main purpose was to increase postgraduate student numbers as they attracted substantial subsidy funding per student in a situation where public universities in South Africa were being allocated increasingly lower funding support from the central fiscus. The introduction of these programmes also formed part of a wider national and international trend of massification of higher education, particularly at universities. The first products of geography's endeavour to introduce such programmes were registered in the late 1990s and the results are clear in the number of master's degrees awarded in the second part of the 1990s (33 master's degrees awarded from 1995 to 1999, compared to just six between 1990 and 1994) (see Figure 6.2). Also, in the early 2000s, a programme approach was introduced at master's level. Moreover, there was a national government drive in higher education for more interdisciplinary teaching and research programmes. Hence, cross-disciplinary master's programmes were developed. In the geography department, there was participation in a number of the programmes, and geography took the lead in a programme in cultural tourism and heritage studies. This programme, now such a strong focus of research in the department, was established in the mid-1990s by De Necker with some considerable assistance by the dean of Arts and Social Sciences, Izak van der Merwe. Their efforts enabled the department to create an MPhil in Cultural Tourism and Heritage Studies, which included modules on township tourism, waterfront tourism, wine tourism and industrial heritage tourism, while also including field excursions to Kayamandi and the wine routes amongst many others, led by De Necker. Thus, De Necker initially compiled the programme and was coordinator until his retirement when Ferreira, who had a keen interest in this area of teaching and research, took over.

The structured master's programmes in geography were phased out when the national government changed the subsidy rules in 2009, prescribing that the degree output at master's level, for most academic degrees as opposed to professional degrees, had to be research driven only. This imposition does not really manifest in the master's thesis output of the department because the introduction of vocational degrees through CRUISE largely disguised significant drops in the production of traditional master's degrees.

The founding of CRUISE reintroduced the idea of a structured master's degree but as a professional qualification that was not affected by the rule change and it catered for a national scarce skill. The programme was successful in delivering student research output, but in the format of mini-theses. The effect is clear with output since 2010 having escalated to 163 master's for the period to 2019. It must be noted though that most of these products were not full research theses.

Overall, the department has produced 385 documented master's theses from 1927 to present (an average of approximately four per year) (see Figure 6.2). Taking the themes of both types of master's together, the unfocused nature of the individual research topics remains, although there are greater linkages to the research programmes of the individual staff members that supervised the candidates. However, significant changes have occurred regarding the gender and racial composition of the candidates, the institutions at which they completed their undergraduate education and the locales of their various research investigations over the last two decades.

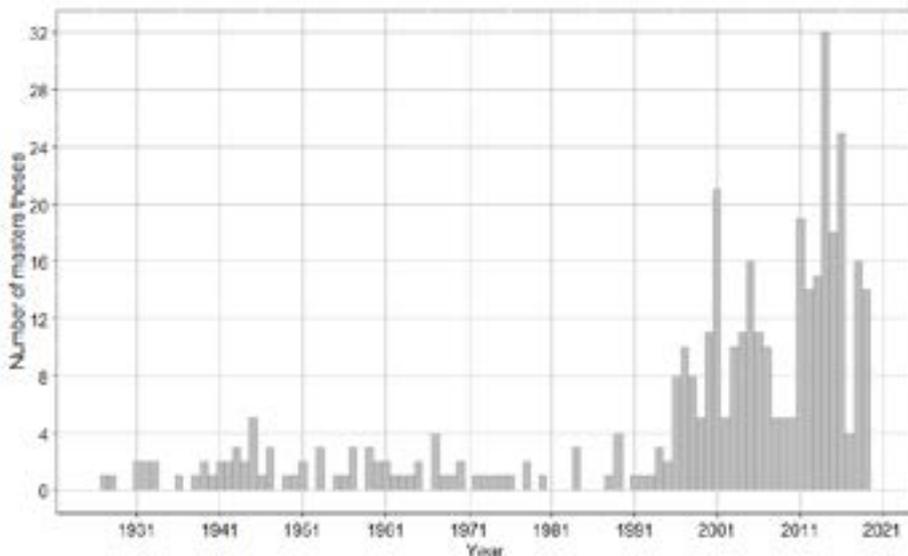


FIGURE 6.2: Master's theses submitted by year, 1927-2019 (Source: Authors' survey)

6.4 GEOGRAPHY DOCTORAL DEGREES AT STELLENBOSCH

The degree Doctor of Philosophy, which has various mutations in its naming, is the highest university degree that is conferred after a course of study in most countries. As an exclusively research degree, those studying for a PhD degree are usually required to produce original research that expands the boundaries of knowledge, normally in the form of a thesis or dissertation, and they must defend their work against experts in the field. The format of the PhD at Stellenbosch has, by international standards, changed very little over time. This stands in contrast to new PhD programme innovations in developed countries over the past decades where these are mostly full-time residential degrees, spanning coursework and thesis components. In this section, we consider the span and foci of this academic apex degree and its place in the department's history. The department has delivered 64 recorded PhDs since inception in 1920 (Figure 6.3).

The first geography doctorate at Stellenbosch was awarded to Pienaar (1937), a decade after the first master's degree. There would be four more doctoral theses awarded before 1950. The studies, being on economic geography, development and population dynamics, reflected Serton's expertise and research interests. At the time, Serton supervised more than half (55%) of all the research students receiving advanced degrees in geography in South Africa (Barnard, 1995). Many of the future professors of geography at a range of universities in the country completed their master's and doctoral work at Stellenbosch University's department of geography between 1920 and Serton's retirement in 1958. This inevitably led to academic inbreeding, the recirculation of concepts in and approaches to geography, a growing disconnect between Afrikaans and English geography departments and limited exposure to the international arena. From the 1950s onwards, the research foci changed from regional geographies to more systematic themes in urban geography, all done in the positivist tradition. Dissertations on economic geography themes dwindled, and a few cartographic studies were conducted (Jooste, 1968; Nel, 1951). The first PhD in physical geography was awarded to CJ Swanevelder in the mid-1960s (Swanevelder, 1965), while the first study on the tourism system was completed by JN Steyn in the early 1970s (Steyn, 1972). Until the 1980s, most PhD theses had been written in Afrikaans (the first English dissertation being submitted by Coetzee (1974)). This changed in the 1980s when Vincent Taylor (1984) submitted his dissertation in English, followed by De Necker (1987). This marked the beginning of a reduction of PhDs written in Afrikaans, the last two in 1998 and 2004 (Froneman, 2004; Reyneke, 1998). The first PhD in the GIS/GIT field was completed in the late 1990s (Moeti, 1997). Since then, one third of the PhDs in the department have been GIS/GIT-related, so signifying the significance of these fields and related to the introduction of the BSc GIT degree in 2010.

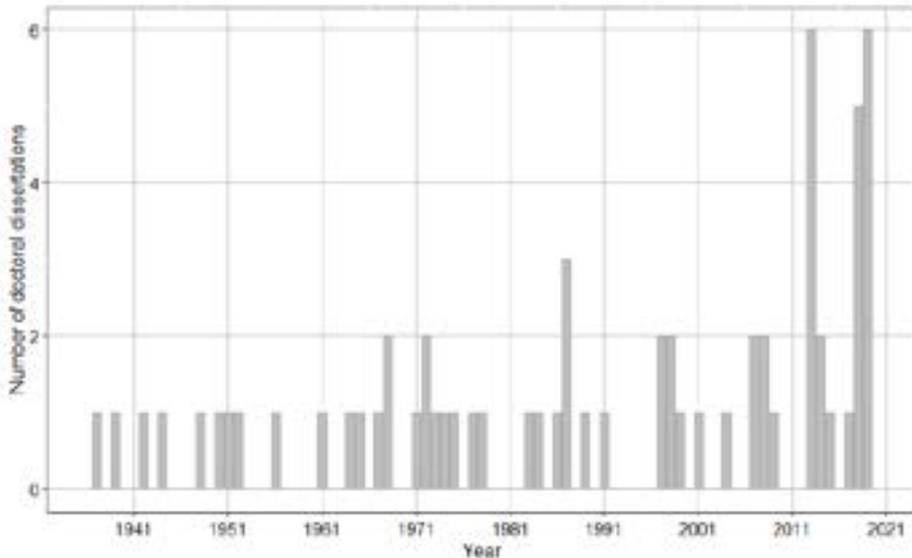


FIGURE 6.3: PhD dissertations submitted by year, 1937-2019 (Source: Authors' survey)

Thematically, most PhDs have been in human geography with various topics in urban geography, population dynamics and the tourism system. However, there is no singularity of research theme in the studies and no clear geographical distribution either. Studies have been conducted in the Western Cape, Free State, Northern Cape, Northern Transvaal (now Limpopo) and North West provinces, as well as abroad (Ghana, Lesotho, Malawi, Nigeria, Tanzania and Zimbabwe). By comparison, far fewer studies have been conducted in physical geography. The department has not delivered a PhD in physical geography in over 30 years, the last one in geomorphology in the late 1980s (Harmse, 1987). GIS/GIT research has focused on the use of RS in the detection of land use change and the use of GIS as a support system in resource management.

For the first 80 years, with very few exceptions, these PhDs were awarded to white men, most having had their undergraduate training in the department. Over the past two decades, this has changed notably, in large part owing to a university-wide drive for more PhDs and greater continental expansion in the name of internationalisation of the student body. This is particularly evident in the successful roll-out of full-time PhD scholarships through the African Doctoral Academy and other funding mechanisms. The topics these students investigated and the diverse range of places where they are located indicate the diversity of student backgrounds.

6.5 CONCLUSION

This chapter provided an overview of the contributions that postgraduate students have made to the research output of the department. The tempo of these research contributions was modest at first but gathered pace over the past three decades (1990-2020). The past decade was particularly productive. The fields in which these investigations fall are thematically diverse, although there remains a clear focus on the four primary subdisciplines of the department (human, environmental, physical geography and GIS). Four key contributing factors to the expansion of student research in the 2010s were the introduction of the CRUISE postgraduate programmes, momentum in the postgraduate GIS/GIT programmes, the growing internationalisation of the postgraduate student body through initiatives such the African Doctoral Academy and sustained pressure from the university to expand postgraduate enrolment.



CHAPTER 7

CONCLUDING THOUGHTS ON A CENTURY OF GEOGRAPHY AT STELLENBOSCH UNIVERSITY

This investigation set out to discover the origins and trace the evolution of geography as an academic discipline at Stellenbosch University. A first attempt at documenting the establishment of geography as a discipline was made by Barnard (1995) and this book has aimed to add more detail to those narratives. It has sought to shed light on the beginnings of the discipline at Stellenbosch, its institutionalisation as part of degree programmes and provide information about the teaching and research conducted in the department, as well as the people who contributed to these endeavours. How the department currently operates is deemed fundamentally joined to its past and sets the course for the further evolution of geography and its various subdisciplines at Stellenbosch. The general paucity of recorded histories of the department, the absence of its pioneers and the fickleness of institutional memories have severely complicated the task of recalling and documenting many of the major moments and achievements of the department since its inception a hundred years ago. We nevertheless trust that the product will provide a foundation on which future generations of geographers at Stellenbosch can build when they one day reflect on the department's journey yet to come.

The first lesson we learnt in recording the general history of the department and the various geographies it produced is as simple as stating the case for good record-keeping. Visser et al. (2016) noted that the compilation of the centennial review of the Society of South African Geographers, *The origin and growth of geography as a discipline at South African universities*, was complicated by a general shortcoming of record-keeping at other geography departments around the country, too. The format of record-keeping requires consistency at many levels. Consistency and depth were certainly not to be found in the source material from which this investigation drew. A major achievement of this book is that it provides as comprehensive a record as possible of individual staff members who worked in the department and what they and their research students were engaged with in terms of teaching, research and publications through a range

of different modalities. If anything, the investigation provides an electronic and physical record of those achievements, the formats in which to order such information and a factual foundation from which subsequent reflections on geography at Stellenbosch and its links to other geographical communities across the world will emanate. This book is more of a repository of information about the achievements and less a critical analysis of their content. That task is left to future scholars for interrogation.

A second observation is that the main teaching and research thrusts in the department varied considerably over the past century, although from an epistemological point of view they remained remarkably similar. It is noteworthy that the discipline of geography was introduced through a physical geography lens, after all Shand was a geologist, and his suggested curriculum, overwhelmingly located geography in his fields of interest from the natural sciences of the day. Although the need for a course in geography was recognised by the university, the resultant four-year geography course was fundamentally human geography in content at the birth of the department in 1920. Perhaps the only binding epistemological thread was one of a belief in empirical data to support descriptive investigations of the earth and societal interactions at large in a positivist frame.

The narrative also highlights that the department was in many ways the kindergarten of Afrikaans-speaking South African academic geographers, many of its alumni went on to teach, conduct research and hold university rectorships elsewhere in the country. What they did take with them to these other geography departments was a deep commitment to a positivist, empirically-driven style of geographic research, which would not seriously deviate from that foundation. Indeed, in many ways, as highlighted by Wesso (1992) and echoed by Van der Merwe et al. (2016), even the basic structure and content of geography courses at other historically Afrikaans universities emanated from the geographies taught at Stellenbosch.

Research at the department was seldom led by a truly clear ontology. The world view of what society should look like was in many ways an uncritical parroting of that which was produced by positivist geographies in the broader Western world with no real critical local engagement nor universal project of its geographic translation. Debates and categories of analysis seen in the “heartland of the discipline” were for the most part translated to the local context, particularly in the second half of the 20th century. In some ways, that did encourage some form of comparative geographical exploration, but with local cases nearly always the subaltern to the theories emanating from the Western geographical tradition. In other cases, the uniqueness of a case or region was the only analytic ambition and contribution, dislocated in a sea of similar investigations. Nevertheless, this style of teaching and research was embraced by many South African geographers

for decades, even at the apparently more progressive universities at the time, such as Natal and Witwatersrand. Where there was a divergence with the South African English universities, however, that became apparent in the late 1970s and throughout the 1980s. The rise of a Marxist geography, sometimes styled as a “geography of the people“, if only implicitly so (Pirie & Mather, 2016), did usher in a marked divergence between Stellenbosch and these universities. It was in many ways that step too far to totally question the why behind the geographies that were so studiously analysed. Further theoretical innovations and very different ways in which to envisage the geographies we lived in emerged during the 1990s in the form of postmodern geographic ontologies and their accompanying epistemological and methodological innovations and were, for the most part, absent in Stellenbosch geography teaching and research. It is the task of future investigators to really unpack this trend. It is, however, safe to observe that these new geographic practices did not sit particularly well with the all-male, all-white staff complement of the time. Barnard (2001, p. 65) for one, spoke dismissively of the “anything goes” tenor of these discourses.

The value of quantitative, empirically based research was always at the front line of practising research in the department. Strategically, and perhaps in response to an emerging discomfort with the contemporary political currents in South Africa, there was an increased interest in geographical technologies such as GIS and later GIT and their application to urban environments and other contexts. The hallmark of this work would, however, mainly be that of detailed description. We submit that it probably felt safer and arguably more politically natural to spatially analyse without addressing the root causes of what was being mapped. Perhaps a similar remark could be made concerning the initial rise of tourism geography in the department, although that field of study did develop a decidedly more critical tone over the past decade or so. But now, rooted in a positivist tradition and deeply committed to a strong empirical base, the department is a leading one in Africa on matters concerning GIS/GIT technical development and application.

Since the turn of the 2000s, the department has undergone substantial transformation in terms of its staff complement. At the founding of the department, geography was taught by a male and female combination, although in a particularly patriarchal fashion where Serton was the professor and Le Roux his assistant. Subsequently, the department’s lecturing staff would, for the most part, be a white male preserve for decades. Moves towards greater gender representation are recent. However, since 2000, six of the 14 academic appointments in the department have been female and the department’s first female professor, Ferreira, was promoted to the position in 2016. Change in its racial profile took even longer, but transformation reflective of the South African demography has occurred since 2010. Thus, strides have been made and similar transformation has been registered in the postgraduate student body.

On approaching the new millennium, rapid change was registered not only in the staff complement, but also in a major drive towards the internationalisation of research output in non-South African-based journals and publishing houses. It is noticeable that research was increasingly published in English and in journals of a considerably higher international standing. There were many drivers of this trend, but the most significant was no doubt the inclusion of human geography in the NRF rating system which necessitated international recognition. Hence, a substantial increase in research output.

This, however, also links to another issue: funding. How the university and then its departments are funded have changed considerably since the late 1980s. Universities are increasingly having to find financial resources beyond the government block grants they receive which are linked to the number of students registered at an institution. This has led to the massification of higher education in South Africa and Stellenbosch was no different. Subsidy contributions to the university come from many directions, of which state vehicles remain important if less so in the past decade. In this regard, the establishment and growth of externally funded, income-generating research centres stand testament – they are part of the neoliberalisation of higher education seen internationally, although the motivation for their creation is not as clear-cut. Approximately half of the total departmental staff compliment over the past decade was externally funded. This means that the focus and aim of research and teaching produced in that context does not necessarily align with the latest academic discourses seen either locally or internationally. A number of debates, including decolonisation and Southern urban theoretical concerns, have seen little direct consideration in the department, as often these issues are not seen as directly relevant to the funders, although we would argue they are critically important. Perhaps the department has unwittingly become neoliberal in its workings, as it focuses on industry demands where key elements of the qualifications on offer are vetted by professional bodies. In many ways, this will direct future investigatory paths in which applied geographies with a solid empirical base, from most likely a positivist ontology, will trump whichever latest turn academic thinking might take. In that regard, we would rather see a discipline serve societal needs than those that are mainly or purely academic – but hopefully in a responsible and intellectually aware manner.

As much as this investigation reflected on the past, it has been purposefully descriptive and summative. Investigations like these are not the platform from which to launch major critiques of former staff members' work. There is, however, considerable room for examining why Stellenbosch geography in the main remained empirical and positivist in its methodological and epistemological approach within a rather opaque ontology. It is unclear what staff members really sought in terms of a current or future world of geographical imaginations. The fact

that the department never engaged any notion of the “ought” is telling. In the end, the department lacked something of a “things to do” for an undefined ontological purpose. What we do have are extremely strong teaching programmes that are in many ways technical and methodological in outcome. Research has been, for the most part, empirically robust. In terms of volume, the current geography department is amongst the most productive in South Africa and on the continent.

As authors, we are fully confident that the department will be favourably responsive to the current and future needs of society by providing clear analyses of spatio-temporal challenges and problems, but with an emphasis on the underlying causes. As Virgil stated, *Rerum cognoscere causas* (knowing the causes of things) achieves the Stellenbosch University mandate of *Pectora roborant cultus recti ...* a sound education strengthens the spirit. May this be so for the future of the department and the university.



REFERENCES

- Ackermann, A. & Visser, G. (2016). Studentification in Bloemfontein, South Africa. *Bulletin of Geography: Socio-Economic Series*, 31(31), 7-17.
- Aitken, S. & Valentine, G. (Eds.). (2015). *Approaches to human geography: philosophies, theories, people and practices* (2nd ed.). Sage, Dorchester.
- Altwegg, R., De Klerk, H.M. & Midgley, G.F. (2015). Fire-mediated disruptive selection can explain the reseeder-resprouter dichotomy in Mediterranean-type vegetation. *Oecologia*, 177(2), 367-377.
- Archer, E., Conrad, J., Münch, Z., Opperman, D., Tadross, M. & Venter, J. (2009). Climate change, groundwater and intensive commercial farming in the semi-arid northern Sandveld, South Africa. *Journal of Integrative Environmental Science*, 6(2), 139-155.
- Bangira, T., Alfieri, S.M., Menenti, M. & Van Niekerk, A. (2019). Comparing thresholding with machine learning classifiers for mapping complex water. *Remote Sensing*, 11(11), 1-21.
- Barnard, W.S. (1961). Die oosgrens van Suidwes-Afrika. *Journal for Geography*, 1(9), 23-34.
- Barnard, W.S. (1962). Die Walvisbaai grensgeskil (1884-1911). *Journal for Geography*, 1(10), 46-53.
- Barnard, W.S. (1964). Die streekpatrone van Suidwes-Afrika. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Barnard, W.S. (1965a). 'n Streeksklassifikasie van die landelike hulpbronne van Suidwes-Afrika. *Journal for Geography*, 2(6), 61-71.
- Barnard, W.S. (1965b). 'n Kaart van die klimaatstreke van Suidwes-Afrika. *Tydskrif van die S.W.A. Wetenskaplike Vereniging*, 18/19, 74-84.
- Barnard, W.S. (1965c). Recent development and trends in Africa: a summary of the water resources of South West Africa. *Journal for Geography*, 2(7), 54-59.
- Barnard, W.S. (1965d). *Die droë streke*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Barnard, W.S. (1966). Bespreking van nuwe terminologie oor die aardkors en landvorme. *Journal for Geography*, 2(9), 53-59.
- Barnard, W.S. (1967). Waterbewaring in Ovamboland: 'n geografiese studie. *Acta Geographica*, 1, 79-95.
- Barnard, W.S. (1970). Water, die kritieke hulpbron. *Journal for Geography*, 3(7), 685-697.
- Barnard, W.S. (1972). Die onbekende kern: 'n literatuuoroorsig oor Namibduinmorfologie. *South African Geographer*, 4(1), 75-84.
- Barnard, W.S. (1973). Dune formations of the central Namib. *Tegnikon*, 22(4), 2-23.
- Barnard, W.S. (1975a). Geomorfologiese prosesse en die mens: die geval van die Kuisebdelta, S.W.A. *Acta Geographica*, 2, 20-44.
- Barnard, W.S. (1975b). Gondwanaland: 'n avontuur in die aardwetenskappe. *South African Geographer*, 5(1), 77-84.

- Barnard, W.S. (1980). Aardkors en landvorme: 'n verbandhoudende geheel. In I.G. Nicol (Ed.), *Geography and the school: a selection of papers from The South African Geographer* (pp. 125-129). Society of Geography, Stellenbosch.
- Barnard, W.S. (1988). Die sandsee van die Namib en hul verbreiding. *South African Geographer*, 16(1/2), 14-38.
- Barnard, W.S. (1995). 75 Jaar van geografie op Stellenbosch. Stellenbosch University.
- Barnard, W.S. (2001). *Conceptions of geography*. Centre for Geographical Analysis, Stellenbosch University, Stellenbosch.
- Barnard, W.S. (2016). *Encountering Adamastor: South Africa's founding geographers in time and place*. African Sun Media, Stellenbosch.
- Barnard, W.S. & Greef, R. (1993). 'Grys en grillig': 'n verkenning van denudasievorme in die Sederberge, K.P. *South African Geographer*, 20(1/2), 128-141.
- Beavon, K.S.O. & Rogerson, C.M. (1981). Trekking on: recent trends in the human geography of southern Africa. *Progress in Human Geography*, 5, 159-189.
- Bekker, G.F.H.V.G., Addison, M.F., Addison, P. & Van Niekerk, A. (2019). Using machine learning to identify the geographical drivers of *Ceratitidis capitata* trap catch in an agricultural landscape. *Computers and Electronics in Agriculture*, 162, 582-592.
- Brink, D. (1943). Kimberley: 'n ekonomies-geografiese studie. Master's thesis. Department of Geography, Stellenbosch University.
- Callaghan, K., Engelbrecht, J. & Kemp, J. (2015). The use of Landsat and aerial photography for the assessment of coastal erosion and erosion susceptibility in False Bay, South Africa. *South African Journal of Geomatics*, 4(2), 65-79.
- Cape Times*. (1957, May 2). Matie lecturers attack bill: 'A threat to intellectual life of community' (p. 1).
- Cilliers, D.P., De Klerk, T.C. & Sandham, L.A. (2013). Reflecting on GIS-related research in South Africa: 1980-2012. *South African Geographical Journal*, 95(1), 70-90.
- Coetzee, I.G. (1974). The retail patterns of greater Johannesburg with particular reference to the incidence of large scale retailing. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Conradie, D.J. (1942). Port Elizabeth as industrie-sentrum. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Conradie, D.J. (1958). Enkele gedagtes oor ekonomiese aardrykskunde, deel 1. *Journal for Geography*, 1(2), 41-44.
- Conradie, D.J. (1959). Enkele gedagtes oor ekonomiese aardrykskunde, deel 2. *Journal for Geography*, 1(5), 53-56.
- Conradie, R.P. (1942). Die ekonomiese ontwikkeling van die Koue Bokkeveld. Master's thesis. Department of Geography, Stellenbosch University.
- Currey, R.F. (1970). *Rhodes University, 1904-1970: a chronicle*. Rhodes University.
- Cutter, S.L., Ismail-Zadeh, A., Alcantara-Ayala, I., Altan, O., Baker, D.N., Briceno, S., Gupta, H., Holloway, A., Johnston, D., McBean, G.A., Ogawa, Y., Paton, D., Porio, E., Silbereisen, R.K., Takeuchi, K., Valsecchi, G.B., Vogel, C. & Wu, G. (2015). Global risks: pool knowledge to stem losses from disasters. *Nature News*, 522(7556), 277-279.
- De Klerk, H.M. & Buchanan, G. (2017). Remote sensing training in African conservation. *Remote Sensing in Ecology and Conservation*, 3(1), 7-20.

- De Klerk, H.M., Gilbertson, J., Luck-Vogel, M., Kemp, J. & Münch, Z. (2016). Using remote sensing in support of environmental management: a framework for selecting products, algorithms and methods. *Journal of Environmental Management*, 182, 564-573.
- De Necker, P.H. (1987). Industrial linkages in greater Cape Town: spatial patterns of purchases and sales. Doctoral dissertation. Stellenbosch University.
- De Waal, J.H., Chapman, A. & Kemp, J. (2017). Extreme 1-day rainfall distributions: analysing change in the Western Cape. *South African Journal of Science*, 113(7-8), 43-50.
- De Waal, J. & Vogel, C. (2016). Disaster risk profiling in southern Africa: inventories, impacts and implications. *Natural Hazards*, 84, 1921-1942.
- De Waal, J.H. & Williams, S. (2020) [online]. Reflections on 100 years of geography at Stellenbosch University: the role of physical and environmental geography. *South African Geographical Journal*, 102(3), 282-296.
- Donaldson, R. & van der Merwe, I.J. (2000). Urban restructuring during transition: A model for South African urban development in the 21st century? *Africa Insight*, 30(1), 45-57.
- Donaldson, R. (2018). *Small town tourism in South Africa*. Springer International Publishing, Cham.
- Donaldson, R. (2020). Introduction to reflections on a century of geography at Stellenbosch University. *South African Geographical Journal*, 102(3), 273-281.
- Donaldson, R. & Du Plessis, D. (2013). The urban renewal programme as an area-based approach to renew the townships: the experience from Khayelitsha's central business district, Cape Town. *Habitat International*, 39, 295-301.
- Donaldson, R. & Ferreira, S. (2020). A century of human geography at Stellenbosch University: Reflections on urban and tourism geography, *South African Geographical Journal*, 102(3), 327-343.
- Donaldson, R., Spocter, M., Du Plessis, D. & Van Niekerk, A. (2012). Towards generic interventions to stimulate growth potential in small towns of the Western Cape province, South Africa. *South African Geographical Journal*, 94(2), 120-136.
- Donaldson, R. & Van der Merwe, I.J. (2000). Apartheid urban development and transitional restructuring in Pietersburg and environs. *Historia*, 45(1), 118-134.
- Donaldson, R., Van Niekerk, A., Du Plessis, D.J. & Spocter, M.A. (2012). Non-metropolitan growth potential of Western Cape municipalities. *Urban Forum*, 23(3), 367-389.
- Donaldson, R. & Vermeulen, L. (2012). Book town tourism as a private development initiative for small town revival: the case of Richmond, South Africa. In R. Donaldson & L. Marais (Eds.), *Small town geographies in Africa: experiences from South Africa and elsewhere* (pp. 163-180). Nova Science Publishers, New York.
- Donaldson, S.E. (1990). Kaya Mandi: eksterne skakeling van 'n swart stedelike gemeenskap. Honours report. Department of Geography, Stellenbosch University.
- Donaldson, S.E. & Van der Merwe, I.J. (1998). Social space and racial identity of colonial Pietersburg (1886-1910). *Historia*, 43(1), 29-40.
- Donaldson, S.E. & Van der Merwe, I.J. (1999). Urban transformation and social change in Pietersburg during transition. *Society in Transition*, 30(1), 69-83.
- Du Plessis, H. & Van Niekerk, A. (2012). A curriculum framework for geographical information science (GISc) training at South African universities. *South African Journal of Higher Education*, 26(2), 329-345.

- Dube, C. (2008). The impact of Zimbabwe's drought policy on Sontala rural community in Matabeleland South Province. Master's thesis. Department of Geography and Environmental Studies, Stellenbosch University.
- Eloff, P.J. (1979). Die sinoptiese weerkaart as onderrigmiddel. *South African Geographer*, 7(2), 147-155.
- Eloff, P.J. & Nieman, W.A. (1980). Geostrofiese en verwante winde. *South African Geographer*, 8(2), 151-160.
- Engelbrecht, J., Theron, A., Vhengani, L. & Kemp, J. (2017). A simple normalized difference approach to burnt area mapping using multi-polarisation C-band SAR. *Remote Sensing*, 9(8), 1-13.
- Evans, J. & Randalls, S. (2008). Geography and paratactical interdisciplinarity: views from the ESRC-NERC PhD studentship programme. *Geoforum*, 39, 581-592.
- Fairhurst, J., Fox, R., Goldschagg, M., Ramutsindela, M., Bob, U. & Khosa, M. (2003). Geography: the state of the discipline in South Africa (2000-2001). *South African Geographical Journal*, 85(2), 81-89.
- Ferreira, S. & De Villiers, R. (2014). The Victoria and Alfred Waterfront as playground for Capetonians. *Urbanni Izziv*, 25, 63-88.
- Ferreira, S. & Harmse, A. (2014). Kruger National Park: tourism development and issues around the management of large numbers of tourists. *Journal of Ecotourism*, 13(1), 16-34.
- Ferreira, S.L.A. (2011). Balancing people and park: towards a symbiotic relationship between Cape Town and Table Mountain National Park. *Current Issues in Tourism*, 14(3), 275-293.
- Ferreira, S.L.A. (2020). Wine tourism development: life cycles of wine routes, wine resorts and lifestyles in the Cape Winelands. In J.M. Rogerson & G. Visser (Eds.), *New directions in South African tourism geographies* (pp. 203-233). Springer, Cham.
- Ferreira, S.L.A. & Visser, G. (2007). Creating an African Riviera: revisiting the impact of the Victoria and Alfred Waterfront development in Cape Town. *Urban Forum*, 18(3), 227-246.
- Fischer, P.U. (1931). Saldanhaabaai. Master's thesis. Department of Geography, Stellenbosch University.
- Froneman, C.A. (2004). Die rol van aftree-orde in die behuisingsvoorsiening vir bejaardes in Groter Kaapstad: 'n stedelik geografiese perspektief. Doctoral dissertation. Department of Geography and Environmental Studies, Stellenbosch University.
- Fuseini, I. & Kemp, J. (2015). A review of spatial planning in Ghana's socio-economic development trajectory: a sustainable development perspective. *Land Use Policy*, 47, 309-320.
- Gatsinzi, J. & Donaldson, R. (2009). Investment in the tourism industry: the experience of Rwanda. *Journal for Development Support*, 1(1), 33-49.
- Gibson, L.A., Münch, Z., Engelbrecht, J. & Conrad, J.E. (2010). Uncertainties in using remote sensing for water use determination: a case study in a heterogeneous study area in South Africa. *Hydrology and Earth System Sciences Discussion*, 7, 6581-6612.
- Gibson, L., Münch, Z., Palmer, A. & Mantel, S. (2018). Future land cover change scenarios in South African grasslands – implications of altered biophysical drivers on land management. *Heliyon*, 4(7), 1-35.
- Grondklassifikasiewerkgroep (1991). Memoirs oor die natuurlike landbouhulpbronne van Suid-Afrika no. 15. In C.N. MacVicar (Ed.), *Grondklassifikasie: 'n Taksonomiese sisteem vir Suid-Afrika*. Departement van Landbou-ontwikkeling, Pretoria.

- Grundlingh, A. (Ed.). (2018). *Universiteit Stellenbosch 100: 1918-2018*. Stellenbosch University, Stellenbosch.
- Gumbo, T. (2013). On ideology change and spatial and structural linkages between formal and informal economic sectors in Zimbabwean cities. Doctoral dissertation. Department of Geography and Environmental Studies, Stellenbosch University.
- Hagan, K. & Williams, S. (2016). Oceans of discourses: Utilizing Q methodology for analyzing perceptions on marine biodiversity conservation in the Kogelberg Biosphere Reserve, South Africa. *Frontiers in Marine Science*, 3(188), 1-13.
- Haldenwang, B.B. & Van der Merwe, I.J. (1992). Kankermortaliteit in die stad en platteland: 'n Suid-Afrikaanse vergelyking. *South African Geographer*, 20(1/2), 62-73.
- Hammett, D. (2012). W(h)ither South African human geography? *Geoforum*, 43(5), 937-947.
- Harmse, J.T. (1987). *Die geomorfologiese geskiedenis en huidige vervorming van oppervlaksand langs die Suid-Afrikaanse weskus*. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Harmse, J.T. & Swanevelder, C.J. (1987). Die oorsprong van Weskusoppervlaksand: 'n alternatiewe verklaring. *South African Geographer*, 15(1/2), 15-26.
- Harris, D. & Van Niekerk, A. (2019). Radiometric homogenisation of aerial images by calibrating with satellite data. *International Journal of Remote Sensing*, 40(7), 2623-2647.
- Heese, H. (2018). Die ontstaan van Universiteit Stellenbosch (US). In A. Grundlingh (Ed.), *Universiteit Stellenbosch 100 1918-2018*. African Sun Media, Stellenbosch.
- Hemstock, S.L., Buliruarua, L.-A., Chan, E.Y.Y., Chan, G., Des Combes, H.J., Davey, P., Farrell, P., Griffiths, S., Hansen, H., Hatch, T., Holloway, A., Manuella-Morris, T., Martin, T., Renaud, F.G., Ronan, K., Ryan, B., Szarzynski, J., Shaw, D., Yasukawa, S., Yeung, T. & Murray, V. (2016). Accredited qualifications for capacity development in disaster risk reduction and climate change adaptation. *Australasian Journal of Disaster and Trauma Studies*, 20(1), 15-34.
- Hill, T.R., Nel, E.L. & Bodington, A.M. (2000). Integrating geographical information systems with tertiary level geography in South Africa. *South African Geographical Journal*, 82(2), 86-91.
- Hugo, C.F. (1944a). Die geografiese verbreiding van bevolking in die sentrale en noordelike Transvaal. In *Annale van die Universiteit van Stellenbosch, Jaargang XXII, Reeks B, no. 1*. Nasionale Pers, Kaapstad.
- Hugo, C.F. (1944b). Die geografiese verbreiding van bevolking in die sentrale en noordelike Transvaal. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Jacklin, D.M., Brink, I.C. & De Waal, J. (2019). Laboratory method design for investigating the phytoremediation of polluted water. *Water SA*, 45(4), 608-615.
- Jackson, L.F., Lipschitz, S., Van der Merwe, J.H. & Zietsman, H.L. (1984). *Kussensitiwiteitsatlas van Suidelike Afrika*. Department of Transport, Pretoria.
- Jansen, J.P. & Potgieter, S. (1960). Enkele gedagtes oor die defleksie van winde as gevolg van aardrotasie. *Journal for Geography*, 1(7), 21-27.
- Johnston, R.J. (1991). *Geography and geographers, Anglo-American human geography since 1945*. Edward Arnold, London.
- Jooste, P.G. (1968). 'n Kartografiese studie van die nie-blanke bevolkingsgroepe van Suidwes-Kaapland met die oog op die verwydering van die Bantoe uit die streek. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Kapp, P. (2015). *Nalatenskappe sonder einde: die verhaal van Jannie Marais en die Marais-broers*. Tip Africa Publishing, Cape Town.

- Kemp, J.N., Villeneuve, N., Chevallier, L., Servadio, Z. & Jacquard, F. (2009). *A study of riverbed dynamics using remote sensing: a 3D case study of Rivière des Galets, La Réunion Island. 2009 IEEE International Geoscience and Remote Sensing Symposium, University of Cape Town, Cape Town, South Africa, IEEE, Conference Management Ser.* 753-756.
- Kotze, N.J. & Van der Merwe, I.J. (2000). Neighbourhood renewal in Cape Town's inner city: Is it gentrification? *Journal of Family Ecology and Consumer Sciences*, 28, 39-46.
- Lau, L. & Pasquini, M. (2004). Meeting grounds: perceiving and defining interdisciplinarity across the arts, social sciences and sciences. *Interdisciplinary Science Reviews*, 29(1), 49-64.
- Lau, L. & Pasquini, M. (2008). Jack of all trades? The negotiation of interdisciplinarity with geography. *Geoforum*, 39, 552-560.
- Livingstone, D. (1992). *The geographical tradition: episodes in the history of a contested enterprise*. Blackwell, Oxford.
- Loggenberg, K., Strever, A., Greyling, B. & Poona, N. (2018). Modelling water stress in a Shiraz vineyard using hyperspectral imaging and machine learning. *Remote Sensing*, 10(2), 202.
- Louw, J.K. (1938). Graaff-Reinet of die bo-vallei van die Sondagsrivier. Master's thesis. Department of Geography, Stellenbosch University.
- Macintyre, P.D., Van Niekerk, A., Drobowski, M.P., Tsakalos, J.L. & Mucina, L. (2018). Impact of ecological redundancy on the performance of machine learning classifiers in vegetation mapping. *Ecology and Evolution*, 8(13), 6728-6737.
- Magadzire, N., De Klerk, H.M., Esler, K.J. & Slingsby, J.A. (2019). Fire and life history affect the distribution of plant species in a biodiversity hotspot. *Diversity and Distributions*, 25(7), 1012-1023.
- Maree, S.D. (1945). 'n Geografiese studie van die dorpe en gebiede Caledon, Bredasdorp en Somerset-Wes. Master's thesis. Department of Geography, Stellenbosch University.
- Mashimbye, Z.E., Cho, M.A., Nell, J.P., De Clercq, W.P., Van Niekerk, A. & Turner, D.P. (2012). Model-based integrated methods for quantitative estimation of soil salinity from hyperspectral remote sensing data: a case study of selected South African soils. *Pedosphere*, 22(5), 640-649.
- Mashimbye, Z.E., De Clercq, W.P. & Van Niekerk, A. (2014). An evaluation of digital elevation models (DEMS) for delineating land components. *Geoderma*, 213, 312-319.
- Mashimbye, Z.E., De Clercq, W.P. & Van Niekerk, A. (2019). Assessing the influence of DEM source on derived streamline and catchment boundary accuracy. *Water SA*, 45(4), 672-684.
- Meadows, M. & Fuggle, R. (2016). Environmental and geographical science on the slopes of Devil's Peak. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 117-142). African Sun Media, Stellenbosch.
- Moeti, D.M. (1997). An assessment of the Lesotho Highlands Water Project for irrigation: a geographical information system application. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Moolman, J.H. (1933). Die bevolking van Kaapstad. Master's thesis. Department of Geography, Stellenbosch University.
- Moolman, J.H. (1939). Die verspreiding van die bevolking in die Suid-Westelike Kaapprovinsie. Doctoral dissertation. Department of Geography, Stellenbosch University.

- Moolman, J.H. (1946). The Orange River, South Africa. *Geographical Review*, 36(4), 653-674.
- Moolman, T. & Donaldson, R. (2017). Career paths of geography graduates. *South African Geographical Journal*, 99(3), 252-266.
- Münch, Z., Gibson, L. & Palmer, A. (2019). Monitoring effects of land cover change on biophysical drivers in rangelands using albedo. *Land*, 8(33), 1-25.
- Mwathunga, E. (2014). Contesting space in Malawi: a Lefebvrian analysis. Doctoral dissertation. Department of Geography and Environmental Studies, Stellenbosch University.
- Myburgh, G. & Van Niekerk, A. (2013). Effect of feature dimensionality on object-based land cover classification: a comparison of three classifiers. *South African Journal of Geomatics*, 2(1), 13-27.
- Myburgh, G. & Van Niekerk, A. (2014). Impact of training set size on object-based land cover classification: a comparison of three classifiers. *International Journal of Applied Geospatial Research*, 5(3), 49-68.
- Naude, L.P. (1944). Die dorpe en distrikte Worcester, Robertson, Swellendam, Riversdal en Ceres. Master's thesis. Department of Geography, Stellenbosch University.
- Nel, A. (1945). 'n Geografiese studie van die dorpe en distrikte Tulbagh, Piketberg en Moorreesburg. Master's thesis. Department of Geography, Stellenbosch University.
- Nel, A. (1951). 'n Kartografiese studie van die vernaamste dorpe in Suidwes-Kaapland. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Nel, A. (1954). Nie-blanke kolle in Paarl: die probleem van interpretasie en begrening in die stedelike geografie. *South African Geographical Journal*, 36, 24-30.
- Nel, A. (1957). Twee kaarte van bevolkingsdigtheid in Suid-Afrika. *Journal for Geography*, 1(1), 34-38.
- Nel, A. (1958). Plattelandsontvolking van blankes in Suid-Afrika, 1946-1951. *Journal for Geography*, 1(2), 48-58.
- Nel, A. (1963). Recent developments and trends in Africa: African-U.N.O. financial relations. *Journal for Geography*, 2(2), 53-55.
- Nel, A. (1964). *Warm reënstreek*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Nel, A. & Jansen, J.P. (Eds.) (1961). *Aspects of recent African development in maps*. Society for the Teaching of Geography, Stellenbosch.
- Nel, A. & Van Zyl, J.A. (1962). *Stad en dorp*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Nhantumbo, E.S.N. (2009). Tourism development in the Inhambane Coastal Zone, Mozambique. Master's thesis. Department of Geography and Environmental Studies, Stellenbosch University.
- Nieman, W.A. (1965). See-ys tussen Kaapstad en Polarsirkelbukta Antarktika, gedurende Januarie-Februarie 1964. *Journal for Geography*, 2(7), 26-38.
- Olivier, J. (1988a). Some temporal aspects of hail in the Transvaal. *South African Geographer*, 16(1/2), 39-52.
- Olivier, J. (1988b). The relationship between altitude and hail frequency in the Transvaal. *South African Journal of Science*, 84, 587-588.
- Olivier, J. & Stockton, P.L. (1989). The influence of upwelling on fog incidence at Lüderitz, southern Africa. *International Journal of Climatology*, 9(1), 69-75.

- Olivier, J. & Van Rensburg, P.A.J. (1985). Vector analysis as a means of indicating rainfall seasonality in the Transvaal. *South African Geographer*, 13(2), 163-169.
- Olivier, J. & Van Rensburg, P.A.J. (1987). The delimitation of homogeneous rainfall regions in the southeastern Transvaal. *South African Geographical Journal*, 69(1), 47-59.
- Olivier, J. & Van Rensburg, P.A.J. (1992). The impact of hail on Transvaal maize production. *Agrekon*, 31(2), 62-73.
- Olivier, J. & Van Rensburg, P.A.J. (1995). Links between the Southern Oscillation and hail in the Transvaal: a preliminary assessment. *South African Journal of Science*, 91(3), 245-248.
- Onyebueke, V.U. (2013). Policy implications of the spatial and structural relationships of the informal and formal business sectors in urban Nigeria: the case of Enugu (1990-2010). Doctoral dissertation. Department of Geography and Environmental Studies, Stellenbosch University.
- Pharoah, R. (2014). Built-in risk: linking housing concerns and flood risk in subsidized housing settlements in Cape Town, South Africa. *International Journal of Disaster Risk Science*, 5(4), 313-322.
- Pienaar, J.H. (1937). Witwatersrand: ekonomies-geografiese ondersoek. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Pirie, G. (1985). Geography in South Africa. *The Professional Geographer*, 37(4), 479-482.
- Pirie, G. & Mather, C. (2016). Geography at the University of the Witwatersrand. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 71-93). African Sun Media, Stellenbosch.
- Poona, N.K. & Ismail, R. (2019). Developing optimized spectral indices using machine learning to model *Fusarium circinatum* stress in *Pinus radiata* seedlings. *Journal of Applied Remote Sensing*, 13(3), 34515.
- Poona, N.K., Van Niekerk, A., Nadel, R.L. & Ismail, R. (2016). Random forest (RF) wrappers for waveband selection and classification of hyperspectral data. *Applied Spectroscopy*, 70(2), 322-333.
- Potgieter, C. (1931). Die klimaat van die Oostelike Karoo, uit ou reisbeskrywinge. Master's thesis. Department of Geography, Stellenbosch University.
- Raubenheimer, H.P.M. (1943). Die distrik George en die dorpe George en Mosselbaai. Master's thesis. Department of Geography, Stellenbosch University.
- Research Gate. (2020). *Jana Olivier*. https://www.researchgate.net/profile/Jana_Olivier
- Reyneke, H.J. (1998). Die effek van die apartheidstelsel op die struktuur en funksionering van Mmabatho/Mafikeng stedelike kompleks en sy toekomstige rol as provinsiale hoofstad. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Robinson, J. (2008). Developing ordinary cities: city visioning processes in Durban and Johannesburg. *Environment and Planning: Economy and Space*, 40(1), 74-87.
- Rogerson, C.M. & Parnell, S. (1989). Fostered by the laager: apartheid human geography in the 1980s. *Area*, 21(1), 13-26.
- Schmidt, A.A. (1932). Die Brederiviervallei. Master's thesis. Department of Geography, Stellenbosch University.
- Serton, P. (1922). Rotterdam and the Rhine. *South African Geographical Journal*, 5, 34-40.
- Serton, P. (1923). De haven van Kaapstad. *Tijdschrift voor Economische Geographie*, 14(10), 293-301.
- Serton, P. (1925). Basoetoland. *Tijdschrift voor Economische Geographie*, 16(6), 170-177.

- Serton, P. (1926). Sprinkhaanbestrijding in Zuid-Afrika. *Tijdschrift voor Economische Geographie*, 17(4), 147-148.
- Serton, P. (1927). De Zuid-Afrikaansche spoorwegen. *Tijdschrift voor Economische Geographie*, 18(5), 161-170.
- Serton, P. (1929). Laingsburg: de economische ontwikkeling van een gebied met woestijnklimaat. *Tijdschrift voor Economische Geographie*, 20(7), 281-295.
- Serton, P. (1933). Zuid-Afrika, een economische geografische studie. *Tijdschrift voor Economische Geographie*, 24(1 & 2), 1-82.
- Serton, P. (1936). The geographical environment. In A.P. Newton, E.A. Benians & E.A. Walker (Eds.), *South Africa, Rhodesia and the Protectorates* (pp. 3-19). Cambridge University Press, London.
- Serton, P. (1948). De watervoorziening van een Kaaps dorp (Stellenbosch). *Tijdschrift voor Economische en Sociale Geographie*, 39(12), 705-711.
- Serton, P. (1953). *Zuid-Afrika: land van goede hoop* (1st ed.). JA Boom & Zoon, Mappel.
- Serton, P. (Ed.) (1954). *The narrative and journal of Gerald McKiernan, 1874-1879*. The Van Riebeeck Society, Cape Town.
- Serton, P. (1960). *Suid-Afrika en Brasilië: sosiaal-geografiese vergelyking*. Oxford University Press, Kaapstad.
- Serton, P. & Moolman, J.H. (1951). *Algemene aardrykskunde*. Maskew Miller, Kaapstad.
- Serton, P., Raven-Hart, R., De Kock, W.J. & Raidt, E.H. (Eds.) (1971). *Description of the Cape of Good Hope with the matters concerning it: Amsterdam 1726*. Van Riebeeck Society, Cape Town.
- Smit, P. & Nel, A. (1960). Recent developments and trends in Africa. Africa's changing political pattern. *Journal for Geography*, 1(7), 55-60.
- Spocter, M. (2011). Spatio-temporal aspects of gated residential security estates in non-metropolitan Western Cape. *Urban Forum*, 22(2), 169-181.
- Spocter, M. (2013). Rural gated developments as a contributor to post-productivism in the Western Cape. *South African Geographical Journal*, 95(2), 165-186.
- Spocter, M. (2016). Non-metropolitan gated retirement communities in the Western Cape. *Urban Forum*, 27(2), 211-228.
- Spocter, M. (2018). A toponymic investigation of South African gated communities. *South African Geographical Journal*, 100(3), 326-348.
- Spocter, M., Visser, G. & De Waal, J.H. (2020). An overview of trends in geographical publication at Stellenbosch University. *South African Geographical Journal*, 102(3), 297-309.
- Stander, E. (1936). Die George-Knysna Tszikammabosstreek. Master's thesis. Department of Geography, Stellenbosch University.
- Stephenson, G., Donaldson, R., Du Plessis, D. & Van Niekerk, A. (2015). Compiling a land audit in large rural areas: results from the methodology applied in the non-urban areas of the Matzikama Municipal area. *Town and Regional Planning*, 66(1), 32-47.
- Steyn, J.N. (1972). Die Suid-Kaapse toeristebedryf: geografiese patrone en invloed op regionale ontwikkeling. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Steyn, J.N. & Barnard, W.S. (1976). *Ruimtelike ordening: 'n ekonomies-geografiese perspektief*. JL van Schaik, Pretoria.

- Strydom, A.E. (1939). 'n Geografiese studie van Agter-Hexrivier. Master's thesis. Department of Geography, Stellenbosch University.
- Stuckenberg, T., Münch, Z. & Van Niekerk, A. (2013). Multi-temporal remote sensing land-cover change detection for biodiversity assessment in the Berg River catchment. *South African Journal of Geomatics*, 2(3), 189-205.
- Swanevelder, C.J. (1965). 'n Geografiese opname van die Breërivieropvangsgebied met klem op die landelike grondgebruik. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Swanevelder, C.J. (1968). Granietmorfologie: enkele waarnemings op Paarlberg. *Journal for Geography*, 3(3), 304-306.
- Swanevelder, C.J. (1974). 'n Morfometriese studie van die Tsauchabvallei van die sentrale Namib. *South African Geographer*, 4(4), 325-334.
- Swanevelder, C.J. (1981). Utilising South Africa's largest river: the physiographic background to the Orange River Scheme. *GeoJournal Supplementary Issue 2: Southern Africa*, 29-41.
- Swanevelder, C.J., Kotze, J.C. & Myburgh, D.W. (1985). *Junior Geography Standard 7*. Nassou, Cape Town.
- Swanevelder, C.J., Kotze, J.C. & Van Kradenburg, L.P. (1985). *Junior Geography Standard 6*. Nassou, Cape Town.
- Swanevelder, C.J., Van Kradenburg, L.P., Hattingh, L.L., Hanekom, F., Els, W.C. & Myburgh, D.W. (1985). *Senior Geography Standard 8*. Nassou, Cape Town.
- Taylor, V. (1974). Spatial patterns of tourism in the East London area. Master's thesis. Department of Geography, Stellenbosch University.
- Taylor, V. (1984). Outdoor recreation of whites in the Cape Town metropolitan area: the resource base and utilization patterns. Doctoral dissertation. Department of Geography, Stellenbosch University.
- Theron, A., Engelbrecht, J., Kemp, J., Kleynhans, W. & Turnbull, T. (2017). Detection of sinkhole precursors through SAR interferometry: radar and geological considerations. *IEEE Geoscience and Remote Sensing Letters*, 14(6), 871-875.
- Theron, H. (1932). Die geografiese invloed op die wynboubedryf in die Suid-Westelike distrikte van die Kaapprovinsie. Master's thesis. Department of Geography, Stellenbosch University.
- Thom, H.B. (1966). *Stellenbosch 1866-1966: Honderd jaar hoër onderwys*. Nationale Boekhandel, Stellenbosch.
- Tilumanywa, V.T. (2013). Land use and livelihood change in the Mount Rungwe ecosystem, Tanzania. Doctoral dissertation. Department of Geography and Environmental Studies, Stellenbosch University.
- UNISA. (1960). *Meet the new staff members*, 30 & 34.
- Van der Merwe, A.C. (1939). Die suikerindustrie van Natal en Zululand. Master's thesis. Department of Geography, Stellenbosch University.
- Van der Merwe, E.G.J. (1927). Die moderne ontwikkeling van die distrik Ceres: die vooruitgang van die distrik na 1910 verklaar uit die algemene verbeterde verkeerswee en meewerkende faktore en nie alleen uit die Wolseley-Ceres taklyn nie. Master's thesis. Department of Geography, Stellenbosch University.
- Van der Merwe, I.J. (1983). *Die stad en sy omgewing: inleiding tot nedersettingsgeografie*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.

- Van der Merwe, I.J. (1989a). The geography of the Afrikaans language in South Africa. *South African Geographical Journal*, 71(2), 89-93.
- Van der Merwe, I.J. (1989b). The urban structure of South West Africa/Namibia viewed within a Third-World framework. *Geography Research Forum*, 9, 109-126.
- Van der Merwe, I.J. (1993a). A conceptual home for geolinguistics: implications for language mapping in South Africa. In Y.J.D. Peeters & C.H. Williams (Eds.), *The cartographic representation of linguistic data, Discussion Papers in Geolinguistics*, 19-21, 21-33.
- Van der Merwe, I.J. (1993b). The urban geolinguistics of Cape Town. *GeoJournal*, 31(4), 409-417.
- Van der Merwe, I.J. (1998). Urbanization in South Africa: a frontier between the first and third world. *Geography Research Forum*, 18, 83-98.
- Van der Merwe, I.J. (2002). Current perspectives on urban change in South Africa. In H.S. Geyer (Ed.), *International handbook of urban systems: studies of urbanization and migration in advanced and developing countries* (pp. 563-592). Edward Elgar, Cheltenham.
- Van der Merwe, I.J. & Le Roux, P.J. (1989). Geolinguistiek van Afrikaans in die metropolitaanse gebied van Kaapstad. *Suid-Afrikaanse Tydskrif vir Taalkunde*, 7(2), 92-96.
- Van der Merwe, I.J. & Van der Merwe, J.H. (2006). *Linguistic atlas of South Africa: language in space and time*. African Sun Media, Stellenbosch.
- Van der Merwe, I.J. & Van der Merwe, J.H. (2008). The linguistic atlas of South Africa: mapping diversity in space and time. In M. Barni & G. Extra (Eds.), *Mapping linguistic diversity in multicultural contexts* (pp. 265-292). Mouton de Gruyter, Berlin.
- Van der Merwe, I.J. & Zietsman, H.L. (1977). *Sosiale atlas van die Kaapstad metropolitaanse gebied*. Institute for cartographic analysis, Stellenbosch.
- Van der Merwe, J.H. (1983). *National atlas of South West Africa (Namibia) / Nasionale atlas van Suidwes-Afrika (Namibië)*. Directorate of Development Coordination, SWA, Windhoek.
- Van der Merwe, J.H. (1998). Climate and water. In P. Lubbe (Ed.), *An introduction to Africa* (pp. 76-89). Pat Lubbe publications, Still Bay.
- Van der Merwe, J.H. (2009). Geography: reflections on the image and status of a bridging discipline – Inaugural Lecture. Stellenbosch University.
- Van der Merwe, J.H., Ferreira, S.L.A. & Van Niekerk, A. (2013). Resource-directed spatial planning of agritourism with GIS. *South African Geographical Journal*, 95(1), 16-37.
- Van der Merwe, J.H. & Steyl, I. (2005). Rural solid waste management: a planning strategy for higher-density agricultural regions. *Journal of Public Administration*, 40(3), 295-313.
- Van der Merwe, H., Visser, G. & Donaldson, R. (2016). Stellenbosch: the birthplace of geography teaching at South African universities. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 9-32). African Sun Media, Stellenbosch.
- Van der Mescht, D. & Eloff, P.J. (2013). Mountain wave-induced rotors in the lee of the Hex River Mountains. *South African Geographical Journal*, 95(1), 117-131.
- Van Niekerk, A., Du Plessis, D., Boonzaier, I., Spocter, M., Ferreira, S., Loots, L. & Donaldson, R. (2016). Development of a multi-criteria spatial planning support system for growth potential modelling in the Western Cape, South Africa. *Land Use Policy*, 50, 179-193.

- Van Niekerk, A. & Joubert, S.J. (2011). Input variable selection for interpolating high-resolution climate surfaces for the Western Cape. *Water SA*, 37(3), 271-280.
- Van Niekerk, A. & Münch, Z. (2020). The GIS revolution as Stellenbosch's anchor identity. *South African Geographical Journal*, 102(3), 310-326.
- Vermeulen, D.C. (1940). Die Klein Karoo. Master's thesis. Department of Geography, Stellenbosch University.
- Vermeulen, D. & Van Niekerk, A. (2017). Machine learning performance for predicting soil salinity using different combinations of geomorphometric covariates. *Geoderma*, 299, 1-12.
- Vermeulen, M.C. (1942). Die geografiese, ekonomiese en sosiale ontwikkeling van die Caledonse distrik as gevolg van motorvervoer. Master's thesis. Department of Geography, Stellenbosch University.
- Verster, E., Du Plessis, W., Schloms, B.H.A. & Fuggle, R.F. (1992). Soil. In R.F. Fuggle & M.A. Rabie (Eds.), *Environmental Management in South Africa* (pp. 181-211). Juta, Cape Town.
- Visser, G. (2007). On citations, rating games and other pesky animals: Which zoo for South African human geography? *South African Geographical Journal*, 89(2), 135-144.
- Visser, G. (2017). Reflections on student tourism research in South Africa. *African Journal of Hospitality, Tourism and Leisure*, 6(2), 1-18.
- Visser, G. (2019a). Gentrification in South African cities. In J. Knight & C.M. Rogerson (Eds.), *The geography of South Africa: contemporary changes and new directions* (pp. 195-202). Springer, Cham.
- Visser, G. (2019b). Leisure tourism space and urban change: lessons from Cape Town and Stellenbosch to contemplate in urban South Africa. In R. Massey & A. Gunter (Eds.), *Urban geography in South Africa – perspectives and theory* (pp. 173-188). Springer, Cham.
- Visser, G. (2019c). The challenges of tourism and urban economic (re)development in Southern cities. In D.K. Müller (Ed.), *A research agenda for tourism geographies* (pp. 107-116). Edward Elgar, Cheltenham.
- Visser, G. & Barker, C. (2016). A brief history of the Department of Geography at the University of the Free State. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 55-70). African Sun Media, Stellenbosch.
- Visser, G., Donaldson, R. & Seethal, C. (Eds.). (2016). *The origin and growth of geography as a discipline at South African universities*. African Sun Media, Stellenbosch.
- Visser, G., Erasmus, I. & Miller, M. (2017). Airbnb: the emergence of a new accommodation type in Cape Town, South Africa. *Tourism Review International*, 21(2), 151-168.
- Visser, G. & Kisting, D. (2019). Studentification in Stellenbosch, South Africa. *Urbani Izziv*, 30, 158-177.
- Vlok, A.C. & Van der Merwe, J.H. (1999). *Senior desk atlas*. Kagiso Education, Pinelands.
- Wesso, H.M. (1992). The colonisation of the geographical mind: a critical contextual analysis of the institutionalisation and establishment of Geography as an academic discipline in South Africa. Doctoral dissertation. University of the Western Cape.
- Wilkins, I. & Strydom, H. (1980). *The super-Afrikaners: inside the Afrikaner Broederbond*. Jonathan Ball, South Africa.
- Wortman, T., Donaldson, R. & Van Westen, G. (2016). 'They are stealing my island': residents' opinions on foreign investment in the residential tourism industry in Tamarin, Mauritius. *Singapore Journal of Tropical Geography*, 37(2), 139-157.

- Yakubu, I. (2018). Residential mobility practices in low-income communities of Tamale, Ghana. Doctoral dissertation. Department of Geography and Environmental Studies, Stellenbosch University.
- Yamungu, N. (2019). Piecemeal planning: an analysis of local realities and adoption of urban planning approaches in Tanzanian small towns of Mlandizi and Sirari. Doctoral dissertation. Department of Geography and Environmental Studies, Stellenbosch University.
- Zietsman, H.L. (2002). Geographic information science in South Africa. *South African Geographical Journal*, 84(1), 30-37.
- Zietsman, H.L. & Van der Merwe, I.J. (1981). *Ekonomiese atlas van Suid-Afrika/Economic atlas of South Africa*. Institute for Cartographic Analysis, Stellenbosch.
- Zietsman, H.L. & Van der Merwe, I.J. (1986). *Bevolkingsensusatlas van Suid-Afrika/Population census atlas of South Africa*. Institute for Cartographic Analysis, Stellenbosch.
- Zweig, P.J. (2015). Everyday hazards and vulnerabilities amongst backyard dwellers: a case study of Vredendal North, Matzikama Municipality, South Africa. *Jàmá: Journal of Disaster Risk Studies*, 7(1), 1-8.



ARCHIVAL REFERENCES

BY ORDER OF APPEARANCE

- Professor GG Cillié, 1927, CillieGG_1927, Watson-Lockley, SU Archives, Stellenbosch University, Stellenbosch.
- Professor JT Morrison, 1932, Lockley_00930, Watson-Lockley, SU Archives, Stellenbosch University, Stellenbosch.
- Professor SJ Shand, 1932, Lockley_00975, Watson-Lockley, SU Archives, Stellenbosch University, Stellenbosch.
- Calendar of the Victoria College and Boy's High School, Stellenbosch 1914. US Argief, Universiteit van Stellenbosch, Stellenbosch.
- Professor EJ Goddard, n.d., s177 p1437, University of Queensland Archives, University of Queensland, Brisbane, Australia.
- Professor W Blommaert, 1924, 08708, Watson-Lockley, SU Archives, Stellenbosch University, Stellenbosch.
- Report of the Science Committee, 25 July 1917. In: Vergadering van Senaat gehouwen Maandag 30 Julie 1917. US Argief, Universiteit van Stellenbosch, Stellenbosch.
- Professor Petrus (Piet) Serton – the founding Professor of Geography at Stellenbosch University, 1958, 02011, Watson-Lockley, SU Archives, Stellenbosch University, Stellenbosch.
- Marguerite Marchand le Roux with an unknown student, 1917, 4597, Watson-Lockley, SU Archives, Stellenbosch University, Stellenbosch.
- Dutch Central Hall – original venue for lectures in Geography, c. 1951, 03519, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.
- CL Marais Library where Serton had his offices, 1930, CLMaraisBiblioteek_1930, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.
- DJ Conradie, 1965, 00284, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.
- JH Moolman, 1940, Lockley_07282, Watson-Lockley, SU Archives, Stellenbosch University, Stellenbosch.
- Andries Nel, n.d., 1649, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.
- Ou Hoofgebou (Old Main Building) at Stellenbosch University: home of the Department of Geography from 1949 to 1962, c. 1966, REG_OuHoofgebou, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.
- Natural Sciences Building: home of the Department of Geography, 1963-2006, n.d., Natuurwet_gebou, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.
- Jansen, 1987, Edrich_40946, Edrich, SU Archives, Stellenbosch University, Stellenbosch.
- Barnard, 1970, Edrich_14988, Edrich, SU Archives, Stellenbosch University, Stellenbosch.
- Jooste, 1961, Edrich_07210, Edrich, SU Archives, Stellenbosch University, Stellenbosch.
- Nieman, n.d., 1659, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.

Swanevelder, 1975, Edrich_18606, Edrich, SU Archives, Stellenbosch University, Stellenbosch.

Van der Merwe (IJ), 1972, Edrich_17714, Edrich, SU Archives, Stellenbosch University, Stellenbosch.

Steyn, 1972, Edrich_17684, Edrich, SU Archives, Stellenbosch University, Stellenbosch.

De Necker, n.d., DeNecker_P, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.

Eloff, n.d., 00637, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.

Van Huyssteen, n.d., 2406, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.

Zietsman, n.d., 2985, US Fotos, SU Archives, Stellenbosch University, Stellenbosch.



BIBLIOGRAPHY

LIST OF STELLENBOSCH GEOGRAPHY PUBLICATIONS BY YEAR, 1922-2019

- Serton, P. (1922). Rotterdam and the Rhine. *South African Geographical Journal*, 5, 34-40.
- Serton, P. (1923). De haven van Kaapstad. *Tijdschrift voor Economische Geographie*, 14(10), 293-301.
- Serton, P. (1924). Die aardrykskundige grondslag van ons geskiedenis. In S.F.N. Gie (Ed.), *Geskiedenis van Suid-Afrika, of ons verlede* (pp. 255-275). Pro Ecclesia, Stellenbosch.
- Serton, P. (1925). Basoetoland. *Tijdschrift voor Economische Geographie*, 16(6), 170-177.
- Serton, P. (1926). Sprinkhaanbestrijding in Zuid-Afrika. *Tijdschrift voor Economische Geographie*, 17(4), 147-148.
- Serton, P. (1927). De Zuid-Afrikaanse spoorwegen. *Tijdschrift voor Economische Geographie*, 18(5), 161-170.
- Serton, P. (1928). Snelheid en afstand in die politieke geografie. *South African Geographical Journal*, 11, 5-13.
- Serton, P. (1929). The desert in human geography. *South African Geographical Journal*, 12, 26-31.
- Serton, P. (1929). Laingsburg: de ekonomiese ontwikkeling van een gebied met woestijnklimaat. *Tijdschrift voor Economische Geographie*, 20(7), 281-295.
- Serton, P. (1933). Zuid-Afrika, een ekonomisch-geografiese studie. *Tijdschrift voor Economische Geographie*, 24(1 & 2), 1-82.
- Serton, P. (1936). The geographical environment. In A.P. Newton, E.A. Benians & E.A. Walker (Eds.), *South Africa, Rhodesia and the Protectorates* (pp. 3-19). Cambridge University Press, London.
- Moolman, J.H. (1941). Die verspreiding van die bevolking in die Suidwestelike Kaapprovinsie. In *Annale van die Universiteit van Stellenbosch, Jaargang XIX, Reeks B, no. 1*. Nasionale Pers, Kaapstad.
- Hugo, C.F. (1944). Die geografiese verbreiding van bevolking in die Sentrale en Noordelike Transvaal. In *Annale van die Universiteit van Stellenbosch, Jaargang XXII, Reeks B, no. 1*. Nasionale Pers, Kaapstad.
- Moolman, J.H. (1946). The Orange River, South Africa. *Geographical Review*, 36(4), 653-674.
- Serton, P. (1948). De watervoorziening van een Kaaps dorp. *Tijdschrift voor Economische en Sociale Geographie*, 39(12), 705-711.
- Brink, D. (1950). Noord-Kaapland: Die geografiese faktore wat sy ontwikkeling bepaal. In *Annale van die Universiteit van Stellenbosch, Jaargang XXV, Reeks B, no. 1*. Universiteit van Stellenbosch, Stellenbosch.
- Cornelissen, P.J. & Serton, P. (1951). Kanon-eiland: polderbedrijf in woestijnklimaat. *Tijdschrift voor Economische en Sociale Geografie*, 42(1), 39-45.
- Serton, P. & Moolman, J.H. (1951). *Algemene aardrykskunde*. Maskew Miller, Kaapstad.

- Nel, A. (1952). Worcester: 'n Proefneming in funksionele differensiasie. *South African Geographical Journal*, 34, 63-77.
- Serton, P. (1952). Van Riebeeck se roete na die Kaap. In D.B. Bosman & H.B. Thom (Eds.), *Dagregister gehouden by den Oppercoopman Jan Anthonisz van Van Riebeeck*, Deel 1, 1651-1655 (pp. 465-473). Balkema, Kaapstad.
- Serton, P. (1952). Inleiding en aantekeninge. In L.C. van Oordt (Ed.), *Klare besgrywing van Cabo de Bona Esperança (1652)* (pp. iv-xv and pp. 32-35). Komitee vir Boekuitstelling, Van Riebeeck-fees, Kaapstad.
- Serton, P. (1953). *Zuid-Afrika: land van Goede Hoop*. JA Boom & Zoon, Mappel.
- Nel, A. (1954). Nie-blanke kolle in Paarl: die probleem van interpretasie en begrening in die stedelike geografie. *South African Geographical Journal*, 36, 24-30.
- Nel, A. (1957). 'n Pleidooi vir stedelike aardrykskunde aan ons universiteite. *South African Geographical Journal*, 39, 51-54.
- Nel, A. (1957). Twee kaarte van bevolkingsdigtheid in Suid-Afrika. *Journal for Geography*, 1(1), 34-38.
- Serton, P. (1957). Die Internasionale Geografiese Kongres, Rio de Janeiro, Augustus 1956. *Journal for Geography*, 1(1), 9-16.
- Conradie, D.J. (1958). Enkele gedagtes oor ekonomiese aardrykskunde, deel 1. *Journal for Geography*, 1(2), 41-44.
- Nel, A. (1958). Plattelandsontvolking van blankes in Suid-Afrika, 1946-1951. *Journal for Geography*, 1(2), 48-58.
- Conradie, D.J. (1959). Enkele gedagtes oor ekonomiese aardrykskunde, deel 2. *Journal for Geography*, 1(5), 53-56.
- Nel, A. (1959). Some problems in compiling a population map of Africa. *Journal for Geography*, 1(5), 66-68.
- Serton, P. (1959). Brasilië as immigrasieland. *South African Geographical Journal*, 41, 3-14.
- Jansen, J.P. (1960). Recent developments and trends in Africa: the Owen Falls scheme, Uganda. *Journal for Geography*, 1(6), 63-66.
- Jansen, J.P. & Potgieter, S. (1960). Enkele gedagtes oor die defleksie van winde as gevolg van aardrotasie. *Journal for Geography*, 1(7), 21-27.
- Serton, P. (1960). *Suid-Afrika en Brasilië: sosiaal-geografiese vergelyking*. Oxford University Press, Kaapstad.
- Serton, P. (1960). Uranium produksie in Zuid-Afrika. *Tijdschrift voor Economische en Sociale Geografie*, 51(10), 261-266.
- Smit, P. & Nel, A. (1960). Recent developments and trends in Africa. Africa's changing political pattern. *Journal for Geography*, 1(7), 55-60.
- Van Zyl, J. & Nel, A. (1960). Die aanwending van skakerings. *Journal for Geography*, 1(7), 50-54.
- Barnard, W.S. (1961). Die oosgrens van Suidwes-Afrika. *Journal for Geography*, 1(9), 23-34.
- Jansen, J.P. & Potgieter, J.E. (1961). Die Mercator-projeksie met spesiale verwysing na die beginsels van 'n grafiese konstruksie. *Journal for Geography*, 1(8), 67-73.
- Jansen, J.P., Van Rensburg, W.M. & Myburgh, D.W. (1961). Rail transport, import and export. *Journal for Geography*, 1(9), 50-56.
- Nel, A. (1961). Recent developments and trends in Africa: map indications of African development. *Journal for Geography*, 1(8), 61-66.

- Smit, F. (1961). Die posisie van Suidwes-Afrika t.o.v. die Republiek van Suid-Afrika. *Journal for Geography*, 1(9), 43-49.
- Barnard, W.S. (1962). Die Walvisbaai grensgeskil (1884-1911). *Journal for Geography*, 1(10), 46-53.
- Jansen, J.P. (1962). Recent developments and trends in Africa: pan-Africanism. *Journal for Geography*, 2(1), 37-52.
- Nel, A. (1962). Onlangse neigings in geografiese navorsing in Suid-Afrika. *Journal for Geography*, 1(10), 15-18.
- Nel, A. & Van Zyl, J.A. (1962). *Stad en dorp*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Jansen, J.P. (1963). Recent developments and trends in Africa. *Journal for Geography*, 2(3), 45-47.
- Nel, A. (1963). Recent developments and trends in Africa: African-U.N.O. financial relations. *Journal for Geography*, 2(2), 53-55.
- Nel, A. (1963). Stedelike ligging: nog enkele opmerkings oor die terminologie. *Journal for Geography*, 2(3), 53-56.
- Barnard, W.S. (1964). Die geografiese agtergrond. In S.P. Cilliers (Ed.), *Wes-Kaapland: 'n sosio-ekonomiese studie* (pp. 9-44). Kosmo-Uitgewery, Stellenbosch.
- Barnard, W.S. (1964). Die Suidwes-Afrikaanse karakoelbedryf: 'n studie in ariede aanpassing. *Journal for Geography*, 2(5), 21-34.
- Barnard, W.S. (1964). 'n Terreintipekaart van Suidwes-Afrika. *Journal for Geography*, 2(4), 66-71.
- Jansen, J.P. (1964). Recent developments and trends in Africa: Kenya. *Journal for Geography*, 2(4), 39-44.
- Jansen, J.P. (1964). Recent developments and trends in Africa: the United Arab Republic. *Journal for Geography*, 2(5), 49-53.
- Nel, A. (1964). *Die warm reënstreke*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Nel, A. (1964). Geografiese verskeidenheid en wetenskaplike diepte. *South African Geographical Journal*, 46, 3-7.
- Barnard, W.S. (1965). *Die droë streke*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Barnard, W.S. (1965). 'n Streeksklassifikasie van die landelike hulpbronne van Suidwes-Afrika. *Journal for Geography*, 2(6), 61-71.
- Barnard, W.S. (1965). 'n Kaart van die klimaatstreke van Suidwes-Afrika. *Tydskrif van die S.W.A. Wetenskaplike Vereniging*, 18/19, 74-84.
- Barnard, W.S. (1965). Recent development and trends in Africa: a summary of the water resources of South West Africa. *Journal for Geography*, 2(7), 54-59.
- Nel, A. (1965). Kaartprojeksies volgens die nuwe leerplan. *Journal for Geography*, 2(7), 60-69.
- Nel, A. & Fensham, F.C. (1965). *Palestina, die Heilige Land*. HAUM, Kaapstad.
- Nieman, W.A. (1965). See-ys tussen Kaapstad en Polarsirkelbukta Antarktika, gedurende Januarie-Februarie 1964. *Journal for Geography*, 2(7), 26-38.
- Barnard, W.S. (1966). Bespreking van nuwe terminologie oor die aardkors en landvorme. *Journal for Geography*, 2(9), 53-59.

- Nel, A. (1966). Afbakening van die natuurstreke volgens die nuwe Kaaplandse leerplan. *Journal for Geography*, 2(9), 47-49.
- Van der Spuy, J.W., Barnard, W.S. & Oosthuysen, J.J. (1966). *Ons nuwe wêreld: deel 1*. Maskew Miller, Kaapstad.
- Barnard, W.S. (1967). Waterbewaring in Ovamboland: 'n geografiese studie. *Acta Geographica*, 1, 79-95.
- Barnard, W.S. (1967). Die veranderende verspreidingspatroon van goudmynbou in die Vaalrivierbekken. *Journal for Geography*, 2(10), 60-68.
- Jooste, P.G. (1967). *Inleiding tot die kartografie*. Balkema, Kaapstad.
- Swanevelder, C.J. (1967). Die geomorfologie van die Breërivieropvanggebied in Suidwes-Kaapland. *Acta Geographica*, 1, 145-154.
- Van der Merwe, I.J. (1967). Grondwaardes as element in stedelik-geografiese studies. *Journal for Geography*, 3(3), 19-25.
- Jooste, P.G. (1968). Die driehoekdiagram as grafiese voorstellingsmiddel van drie veranderlikes. *Journal for Geography*, 3(3), 259-267.
- Swanevelder, C.J. (1968). Granietmorfolgie: enkele waarnemings op Paarlberg. *Journal for Geography*, 3(3), 304-306.
- Nieman, W.A. (1969). Gemiddelde temperatuur: 'n weerspieëling van die temperatuur-regime. *Journal for Geography*, 3(4), 399-402.
- Van der Spuy, J.W., Barnard, W.S. & Oosthuysen, J.J. (1969). *Ons nuwe wêreld: deel 2*. Maskew Miller, Kaapstad.
- Swart, M.J. & Steyn, J.N. (1969). Enkele opmerkings oor Richardsbaai as toekomstige hawegebied. *Journal for Geography*, 3(4), 369-375.
- Van der Merwe, I.J. (1969). Uitleg en grondgebruik op 'n koringplaas en 'n wingerdplaas – 'n studie in landelike nedersetting. *Journal for Geography*, 3(5), 525-528.
- Barnard, W.S. (1970). Water, die kritieke hulpbron. *Journal for Geography*, 3(7), 685-697.
- Steyn, J.N. (1970). Differensiële ekonomiese ontwikkeling: 'n evaluering van parameters en die gebruik van faktor-ontleding by die afbakening van streke. *Journal for Geography*, 3(6), 579-593.
- Barnard, W.S. (1971). Die kragraamwerk van Suid-Afrika. *Journal for Geography*, 3(8), 843-854.
- Steyn, J.N. (1971). Perspektief op die Suid-Afrikaanse toeristebedryf. *Journal for Geography*, 3(9), 967-973.
- Barnard, W.S. (1972). Die onbekende kern: 'n literatuuroorsig oor Namibduinmorfolgie. *South African Geographer*, 4(1), 75-84.
- Barnard, W.S., Smit, P. & Van Zyl, J.A. (1972). *Suid-Afrika: die land en sy streke*. Nasou, Kaapstad.
- Jooste, P.G. (1972). Die nuwe aardrykskunde. *Journal for Geography*, 3(10), 989-998.
- Steyn, J.N. (1972). Die lokalisering van karavaanparke in Suid-Kaapland. *South African Geographer*, 4(1), 19-24.
- Swanevelder, C.J. (1972). Aardrykskunde-onderrig: die vak moet lewe. *Journal for Geography*, 3(10), 1057-1061.
- Van der Merwe, I.J. (1972). Faktor-analise as afbakeningstegniek van intra-stedelike sub siste me. *South African Geographer*, 4(1), 53-62.

- Zietsman, H.L. (1972). Agtergrondbibliografie vir die nuwe G.M.R. Senior Sertifikaat kernleergang. *South African Geographer*, 4(1), 91-96.
- Barnard, W.S. (1973). Dune formations of the central Namib. *Tegnikon*, 22(4), 2-23.
- Steyn, J.N. (1973). 'n Bewaringsmodel vir ontspanningshulpronnie. *South African Geographer*, 4(2), 157-163.
- Nel, A., Barnard, W.S. & Jooste, P.G. (1973). *Ons nuwe wêreld* 8. Maskew Miller, Kaapstad.
- Van der Merwe, I.J. (1973). Differential urbanization in South Africa. *Geography*, 58(4), 335-339.
- Van der Merwe, I.J. (1973). Die meting van differensiële groei binne intra-stedelike ruimtes. *South African Geographical Journal*, 55, 48-55.
- Van der Merwe, I.J. (1973). Die uitdaging van stedelike groei: in literatuuroorsig. *South African Geographer*, 4(2), 169-172.
- De Necker, P.H., Smit, P. & Booyesen, J.J. (1974). *Die bevolkingsverbreiding, stedelik en plattelands, in die Republiek van Suid-Afrika – 1970*. UNISA, Pretoria.
- Jooste, P.G. (1974). Bevolkingsgeografie in Suid-Afrika: veertig jaar van ontwikkeling. *South African Geographer*, 4(5), 438-444.
- Jooste, P.G. & Zietsman, H.L. (1974). *Die Warm Bokkeveld en die Hexriviervallei*. Die Suid-Afrikaanse Geografiese Vereniging, Stellenbosch.
- Steyn, J.N. (1974). 'n Evaluering van die ontspanningshulpbronpotensiaal van die Suid-Kaapse kus. *South African Geographer*, 4(4), 297-307.
- Steyn, J.N. (1974). 'n Evaluering van die invloed van enkele beïnvloedende faktore op ontspanningspatrone in Suid-Kaapland. *South African Geographical Journal*, 56(1), 67-78.
- Swanevelder, C.J. (1974). 'n Morfometriese studie van die Tsauchabvallei van die sentrale Namib. *South African Geographer*, 4(4), 325-334.
- Van der Merwe, I.J. (1974). Die stedelike evolusiegang van Kimberley – 'n sisteembenadering. *Humanitas: Journal for Research in the Human Sciences*, 2(3), 293-300.
- Barnard, W.S. (1975). Gondwanaland: 'n avontuur in die aardwetenskappe. *South African Geographer*, 5(1), 77-84.
- Barnard, W.S. (1975). Geomorfologiese prosesse en die mens: die geval van die Kuisebdelta, S.W.A. *Acta Geographica*, 2, 20-44.
- De Kock, G.L. (1975). 'n Groeimodel vir die padroetenetwerk van Suidwes-Afrika. *South African Geographer*, 5(2), 132-138.
- Steyn, J.N. (1975). Vakansiehuise: 'n nuwe komponent in die Suid-Afrikaanse geografiese spektrum. *Acta Geographica*, 2, 148-172.
- Swanevelder, C.J. (1975). Die veldekskursie as onderrigmetode in geomorfologie. *South African Geographer*, 5(2), 155-161.
- Van der Merwe, I.J. (1975). Die evolusiebaan van die sentrale sakekern – die geval van Kimberley. *Acta Geographica*, 2, 127-147.
- Zietsman, H.L. (1975). 'n Ontleding van die grondwaardepatroon van Oudtshoorn. *South African Geographer*, 5(1), 46-55.
- Nieman, W.A. (1976). Gebiedsklassifikasie en gebiedsisteme. *South African Geographer*, 5(3), 237-246.
- Steyn, J.N. (1976). Die geografie van ontspanning: 'n jong navorsingsveld. *South African Geographer*, 5(4), 332-341.

- Steyn, J.N. & Barnard, W.S. (1976). *Ruimtelike ordening: 'n ekonomies-geografiese perspektief*. Van Schaik, Pretoria.
- Liebenberg, E.C., Rootman, P.J. & Van Huyssteen, M.K.R. (1976). *Die Suid-Afrikaanse landskap: werkboek vir kaart- en lugfotovertolking / The South African landscape: exercise manual for map and airphoto interpretation*. Butterworth, Durban.
- Van der Merwe, I.J. & Zietsman, H.L. (1977). *Sosiale atlas van die Kaapstad metropolitaanse gebied*. Instituut vir Kartografiese Analise, Stellenbosch.
- Van der Merwe, I.J. (1978). Konsepte in die nedersettingsgeografie: 'n bate of las vir die onderwyser? *South African Geographer*, 6(2), 199-203.
- Barnard, W.S. (1979). What is a plateau? The Walvis Bay boundary dispute (1884-1911). *South West Africa Annual*, 61-65.
- Eloff, P.J. (1979). Die sinoptiese weerkaart as onderrigmiddel. *South African Geographer*, 7(2), 147-155.
- Van der Merwe, I.J. (1979). Residensiële vestigingspatrone van blanke bejaardes in Kaapstad. *South African Geographer*, 7(1), 11-20.
- Barnard, W.S. (1980). Aardkors en landvorme: 'n verbandhoudende geheel. In I.G. Nicol (Ed.), *Geography and the school: a selection of papers from the South African Geographer* (pp. 125-129). Society of Geography, Stellenbosch.
- Eloff, P.J. & Nieman, W.A. (1980). Geostrofiese en verwante winde. *South African Geographer*, 8(2), 151-160.
- Van der Merwe, I.J. (1980). Verstedeliking in die Kaapstadse metropolitaanse gebied. *Journal for Regional Planning*, 11, 4-8.
- Zietsman, H.L. (1980). Ruimtelike patrone van blanke residensiële mobiliteit in die Kaapstadse metropolitaanse gebied. *South African Geographer*, 8(2), 113-125.
- Zietsman, H.L. (1980). Intra-urban residential mobility in Cape Town: Who moves? In J.W. Scott (Ed.), *The Pacific Northwest and beyond: Essays in honor of Howard J Critchfield*. (pp. 101-108). Western Washington University, Bellingham.
- Zietsman, H.L. (1980). 'n Toepassing van die Markov-model op residensiële mobiliteit van die Kaapse metropolitaanse gebied. *South African Geographical Journal*, 62(1), 18-32.
- Swanevelder, C.J. (1981). Utilising South Africa's largest river: the physiographic background to the Orange River Scheme. *GeoJournal Supplementary Issue 2: Southern Africa*, 29-41.
- Van der Merwe, I.J. (1981). Cape Town as a focus for urban research. *GeoJournal Supplementary Issue 2: Southern Africa*, 105-109.
- Zietsman, H.L. (1981). Woonbuurttevredenheid in die Kaapse metropolitaanse gebied. *South African Geographical Journal*, 63(2), 132-146.
- Zietsman, H.L. & Van der Merwe, I.J. (1981). *Ekonomiese atlas van Suid-Afrika / Economic atlas of South Africa*. Instituut vir Kartografiese Analise, Stellenbosch.
- Barnard, W.S. (1982). Die geografie van 'n revolusionêre oorlog: SWAPO in Suidwes-Afrika. *South African Geographer*, 10(2), 157-174.
- Harmse, J.T. (1982). Geomorphologically effective winds in the northern part of the Namib sand desert. *South African Geographer*, 10(1), 43-52.
- Van der Merwe, I.J. (1982). Die klein dorp in verval. *Contree*, 12, 15-22.
- Van der Merwe, I.J. & Zietsman, H.L. (1982). Ruimtelike patrone van geestesiektes in Kaapstad. *South African Geographer*, 10(1), 9-18.

- Van der Merwe, J.H. (1982). Grondgebruikverandering in die landelik-stedelike oorgangsones van Kaapstad. *South African Geographer*, 10(1), 33-42.
- Van der Merwe, I.J. (1983). *Die stad en sy omgewing: inleiding tot nedersettingsgeografie*. Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Van der Merwe, J.H. (1983). *National atlas of South West Africa (Namibia) / Nasionale atlas van Suidwes-Afrika (Namibië)*. Directorate of Development Co-ordination, SWA, Windhoek.
- Barnard, W.S. (1984). Gebiede en streke: 'n oorsig van die veranderende plek van gebiedstudie in geografie. *South African Geographer*, 12(2), 161-177.
- De Kock, G.L. (1984). 'n Stedelik-morfologiese vergelyking tussen die twee oudste Sentraal-Weskusdorpe: Clanwilliam en Vanrhynsdorp. *South African Geographer*, 12(1), 27-41.
- Haldenwang, B.B. (1984). Die rol van omgewingsfaktore in die verbreiding van geestesiektes in Kaapstad. *South African Geographer*, 12(2), 123-131.
- Jackson, L.F., Lipschitz, S., Van der Merwe, J.H. & Zietsman, H.L. (1984). *Kussensitiwiteitsatlas van Suidelike Afrika / Coastal sensitivity atlas of Southern Africa*. Department of Transport, Pretoria.
- Barnard, W.S. (1985). The Border War: after 19 years. In W.S. Barnard (Ed.), *Kompas op Suidwes-Afrika/Namibië. Spesiale Publikasie 5* (pp. 188-207). Vereniging vir Geografie, Stellenbosch.
- Swanevelder, C.J., Kotze, J.C. & Myburgh, D.W. (1985). *Junior Geography Standard 7*. Nassou, Cape Town.
- Swanevelder, C.J., Kotze, J.C. & Van Kradenburg, L.P. (1985). *Junior Geography Standard 6*. Nassou, Cape Town.
- Swanevelder, C.J., Van Kradenburg, L.P., Hattingh, L.L., Hanekom, F., Els, W.C. & Myburgh, D.W. (1985). *Senior Geography Standard 8*. Nassou, Cape Town.
- Olivier, J. & Van Rensburg, P.A.J. (1985). Vector analysis as a means of indicating rainfall seasonality in the Transvaal. *South African Geographer*, 13(2), 163-169.
- Van der Merwe, I.J. (1985). Die stedelike sisteem van Suidwes-Afrika. In W.S. Barnard (Ed.), *Kompas op Suidwes-Afrika/Namibië. Spesiale Publikasie 5* (pp. 43-64). Vereniging vir Geografie Stellenbosch.
- Van der Merwe, I.J. (1985). The significance of maps in property investment. *South African Journal of Property*, 2(3), 24-28.
- Eloff, P.J. & Van Rooyen, E. (1986). Die historiese verbreiding en hervestiging van die Kaapse bergkwagga (*Equus Zebra Zebra*) in die Kaapprovinsie. *Suid-Afrikaanse Geograaf*, 14(1/2), 88-100.
- Swanevelder, C.J., Kotze, J.C. & Roos, T.J. (1986). *Senior Geography Standard 9*. Nassou, Cape Town.
- Van der Merwe, I.J. (1986). Ruimtelike afbakening van streeksdiensteraadgebied: hoe raak dit metropool en platteland? *Tydskrif vir Stads- en Streekbepanning*, 21, 1-4.
- Van der Merwe, I.J. (1986). 'n Ruimtelike en sosio-ekonomiese analise van werkkritpatrone in Kaapstad. *South African Geographical Journal*, 68(1), 77-88.
- Van Deventer, W. & Van der Merwe, I.J. (1986). 'n Ruimtelike en sosio-ekonomiese profiel van ekonomies aktiewe vroue in Kaapstad. *South African Geographer*, 14(1/2), 65-76.
- Van Huyssteen, M.K.R. (1986). Welstandmeting en owerheidsbeleid: die onvervulde belofte. *Tydskrif vir Publieke Administrasie*, 21(3), 146-158.

- Zietsman, H.L. & Van der Merwe, I.J. (1986). *Population census atlas of South Africa / Bevolkingsensusatlas van Suid-Afrika*. Stellenbosch: Institute for Cartographic Analysis.
- Barnard, W.S. (1987). The political geography of an exclave: Walvis Bay. *South African Geographer*, 15(1/2), 85-99.
- Harmse, J.T. & Swanevelder, C.J. (1987). Die oorsprong van Weskusoppervlaksand: 'n Alternatiewe verklaring. *South African Geographer*, 15(1/2), 15-26.
- Olivier, J. & Van Rensburg, P.A.J. (1987). The delimitation of homogeneous rainfall regions in the southeastern Transvaal. *South African Geographical Journal*, 69(1), 47-59.
- Lutjeharms, J.R.E. & Stockton, P.L. (1987) Kinematics of the upwelling front off southern Africa, *South African Journal of Marine Science*, 5(1), 35-49.
- Stockton, P.L. & Lutjeharms, J.R.E. (1987). Observations of vortex dipoles on the Benguela upwelling front. *South African Geographer*, 15(1/2), 27-35.
- Swanevelder, C.J., Van Huyssteen, M.K.R., Kotze, J.C. & Els, W.C. (1987). *Senior Geography Standard 10*. Nassou, Cape Town.
- Vlok, A.C. & Zietsman, H.L. (1987). Wingerdidentifikasie in Suidwes-Kaapland met behulp van Landsat digitale beeldverwerking. *South African Geographer*, 15(1/2), 43-58.
- Barnard, W.S. (1988). Die sandsee van die Namib en hul verbreiding. *South African Geographer*, 16(1/2), 14-38.
- Olivier, J. (1988). Some temporal aspects of hail in the Transvaal. *South African Geographer*, 16(1/2), 39-52.
- Olivier, J. (1988). The relationship between altitude and hail frequency in the Transvaal. *South African Journal of Science*, 84, 587-588.
- Harmse, J.T. & Swanevelder, C.J. (1988). Further evidence for the applicability of BESLER's "response" diagram. *Zeitschrift für Geomorphologie*, 32(4), 471-479.
- Van der Merwe, I.J. (1988). A geographical profile of the South African population as a basis for epidemiological cancer research. *South African Medical Journal*, 74(10), 513-518.
- Zietsman, H.L. (1988). Regional patterns of migration in South Africa (1975-80). *South African Geographical Journal*, 70(2), 85-99.
- Bührmann, M.H. & Van der Merwe, I.J. (1989). Die ruimtelike gedrag van stadskinders in Stellenbosch. *South African Geographer*, 17(1/2), 53-64.
- Olivier, J. & Stockton, P.L. (1989). The influence of upwelling extent on fog incidence at Lüderitz, southern Africa. *International Journal of Climatology*, 9(1), 69-75.
- Van der Merwe, I.J. (1989). The urban structure of South West Africa/Namibia viewed within a Third-World framework. *Geography Research Forum*, 9, 109-126.
- Van der Merwe, I.J. (1989). The role of war in regional development and urbanization of Namibia. *African Urban Quarterly*, 4(1/2), 263-274.
- Van der Merwe, I.J. (1989). The geography of the Afrikaans language in South Africa. *South African Geographical Journal*, 71(2), 89-93.
- Van der Merwe, I.J. & Le Roux, P.J. (1989). Geolinguistiek van Afrikaans in die metropolitaanse gebied van Kaapstad. *Suid-Afrikaanse Tydskrif vir Taalkunde*, 7(2), 92-96.
- Van der Merwe, I.J. & Reyneke, I. (1989). Identifisering van 'n metropolitaanse streek: Ruimtelike interaksie tussen Kaapstad en sy soonegebied. *Tydskrif vir Stads- en Streekbeplanning*, 27, 7-14.

- Van der Merwe, J.H. (1989). Die geografie van onderwys: nuwe fronte. *South African Geographer*, 17(1/2), 97-113.
- Barnard, W.S. (1990). Diverging geography and the radical contribution: a review. In J. Mouton & D. Joubert (Eds.), *Knowledge and method in the human sciences* (pp. 493-508). Human Sciences Research Council, Pretoria.
- Barnard, W.S. (1990). Walvis Bay and the Penguin Islands. In E. Leistner, P. Esterhuysen & R. Cornwell (Eds.), *Namibia 1990: an Africa Institute country survey* (pp. 86-95). Africa Institute of South Africa, Pretoria.
- Barnard, W.S. & Visser, D.deV.B. (1990). Riglyne vir 'n stedelike bewaringstrategie: die geval van Robertson, Kaapprovinsie. *South African Geographer*, 18(1/2), 73-84.
- Grobler, E., Prinsloo, K.P. & Van der Merwe, I.J. (1990). *Language atlas of South Africa: Language and literacy patterns*. Pretoria: Human Sciences Research Council.
- Kotze, N. & Van Huyssteen, M.K.R. (1990). Rooi-omlyning in die behuisingsmark van Kaapstad. *South African Geographer*, 18(1/2), 97-122.
- Van der Bank, J. & Van der Merwe, I.J. (1990). Die ligging en funksionering van plaasstalletjies in Suidwes-Kaapland. *Agrekon*, 29(2), 122-128.
- Van der Merwe, J.H. (1990). Ruimtelike variasie in die vraag na Kleurlingonderwys in die Kaapprovinsie. *Acta Academica*, 22(4), 19-45.
- Warkotsch, P.W., Brink, M.P. & Zietsman, H.L. (1990). Slope classification and mapping of the forestry area in the R.S.A. *South African Forestry Journal*, 155, 16-26.
- Zietsman, H.L. & Vos, J. (1990). HyperGIS: a grid cell-based geographical information system. *The South African Journal for Photogrammetry, Remote Sensing and Cartography*, 15(5), 201-206.
- Barnard, W.S. (1991). "Om de Ngami en Makarikari Meren op nieuw te vullen": die Schwarzplan as dwaling. *South African Geographer*, 19(1/2), 59-75.
- Grondklassifikasiewerkgroep (1991). Memoirs oor die natuurlike landbouhulpbronne van Suid-Afrika no. 15. In C.N. MacVicar (Ed.), *Grondklassifikasie: 'n Taksonomiese sisteem vir Suid-Afrika*. Departement van Landbou-Ontwikkeling, Pretoria.
- Olivier, J. (1991). Surface fronts of False Bay and vicinity. *Transactions of the Royal Society of South Africa*, 47(4/5), 433-445.
- Olivier, J. (1991). Some spatial and temporal aspects of fog in the Namib. *South African Geographer*, 19(1/2), 106-126.
- Olivier, J. & Ritter, A. (1991). A preliminary assessment of potential air pollution zones in the Strand-Somerset West area. *Transactions of the Royal Society of South Africa*, 47(4), 535-550.
- Smit, H. & Olivier, J. (1991). Agro-environmental analogues for jojoba production in South Africa. *South African Geographical Journal*, 73(1), 3-9.
- Van der Merwe, I.J. (1991). Geografie in die nuwe Suid-Afrika. *Suid-Afrikaanse Geograaf* 18(1/2), 5-11. Oorgeneem en gepubliseer in *Tijdschrift van de Belgische Vereniging voor Aardrijkskundige Studies*, 62, 211-219.
- Van der Merwe, I.J., Van der Merwe, J.H. & De Necker, P.H. (1991). A spatial and socio-economic profile of urbanization in Southern Africa. *Africa Insight*, 21(2), 97-106.
- Van der Merwe, I.J., Van der Merwe, J.H. & Vlok, A.C. (1991). Land use and population characteristics in the False Bay coastal frame. *Transactions of the Royal Society of South Africa*, 47, 693-702.

- Vlok, A.C. (1991). School desk atlases: South African practice and international trends. *South African Geographer*, 19(1/2), 146-157.
- Barnard, W.S. & Greef, R. (1992). 'Grys en grillig': 'n verkenning van denudasievorme in die Sederberge, K.P. *South African Geographer*, 20(1/2), 128-141.
- Eloff, P.J. (1992). Die aktiwiteitspatrone van jagters in die Westelike Kaapprovinsie. *South African Geographer*, 20(1/2), 86-99.
- Haldenwang, B.B. & Van der Merwe, I.J. (1992). Kankermortaliteit in die stad en platteland: 'n Suid-Afrikaanse vergelyking. *South African Geographer*, 20(1/2), 62-73.
- Olivier, J. & Grobler, E. (1992). Weather-malaria relationships in the Nelspruit regions. *South African Journal of Science*, 88(8), 452-454.
- Olivier, J. & Van Rensburg, P.A.J. (1992). The impact of hail on Transvaal maize production. *Agrekon*, 31(2), 62-73.
- Verster, E., Du Plessis, W., Schloms, B.H.A. & Fuggle, R.F. (1992). Soil. In R.F. Fuggle & M.A. Rabie (Eds.), *Environmental Management in South Africa* (pp. 181-211). Juta, Cape Town.
- Van der Merwe, I.J. & Brand, J.V. (1992). Houdings van die Blanke 'elite'-groep in Walvisbaai: Implikasies vir die staatkundige toekoms van die enklave. *Acta Academica*, 24(2), 79-96.
- Van der Merwe, I.J. (1992). In search of an urbanization policy for South Africa: towards a secondary city strategy. *Geography Research Forum*, 12, 102-127.
- Van der Merwe, I.J. & Lubbe, A.P. (1992). Die morfologie en funksie van dorpsgrond in Suidwes-Kaapland. *Tydskrif vir Publieke Administrasie*, 27(2), 97-111.
- Van der Merwe, J.H. (1992). Ruimtelike ongelykheid in die aanbod van onderwyspersoneel: 'n evaluering in die Suid-Afrikaanse konteks. *South African Journal of Education*, 12(2), 211-220.
- Van der Merwe, J.H. (1992). Beplanningsevaluering van openbare diensaanbod: onderwysgeriewe in die Kaapprovinsie. *Tydskrif vir Stads- en Streekbeplanning*, 32, 31-38.
- Vlok, A.C. & Zietsman, H.L. (1992). Digital analysis of satellite imagery: an art or a science? *South African Geographer*, 20(1/2), 23-36.
- Zietsman, H.L. (1992). Geographical information systems and their applicability to regional services councils in the Republic of South Africa. *South African Journal of Geo-Information*, 16(3), 76-83.
- Olivier, J. (1993). Tropical cyclones. In W.J.R. Alexander (Ed.), *Flood risk reduction measures* (pp. 23-37). University of Pretoria, Pretoria.
- Van der Merwe, I.J. (1993). The urban geolinguistics of Cape Town. *GeoJournal*, 31(4), 409-417.
- Van der Merwe, I.J. (1993). The South African city in relation to the international city form. *Development Southern Africa*, 10(4), 481-496.
- Van der Merwe, I.J. (1993). A conceptual home for geolinguistics: implications for language mapping in South Africa. In Y.J.D. Peeters & C.H. Williams (Eds.), *The cartographic representation of linguistic data, Discussion Papers in Geolinguistics*, 19-21, 21-33.
- Van Huyssteen, M.K.R. & Thom, Q. (1993). Plaasaankope deur buitelanders in 'n gedeelte van die Boland. *Acta Academica*, 25(4), 118-151.
- Zietsman, H.L. (1993). GIS and the role of university education: a case study. *South African Journal of Geo-Information*, 16(4), 111-119.

- Barnard, W.S. (1994). From obscurity to resurrection: the lower Orange River as international boundary. In W.A. Gallusser (Ed.), *Political boundaries and co-existence*. (pp. 125-134). Peter Lang, Berne.
- De Wet, B., Van der Spuy, J., Abrahams, N., Strydom, M., Peden, M., Van Schalkwyk, D., Bradshaw, D. & Zietsman, L. (1994). *RISS: A guide to rural injury data capture. The Western Cape experience and some results*. South African Medical Research Council, Tygerberg.
- Penderis, S.P. & Van der Merwe, I.J. (1994). Kaya Mandi hostels, Stellenbosch: place, people and policies. *South African Geographical Journal*, 76(1), 33-38.
- Van der Merwe, I.J. & Van Niekerk, L.O. (1994). *Language in South Africa: distribution and change*. Stellenbosch University, Stellenbosch.
- Van Niekerk, L.O. & Van der Merwe, I.J. (1994). Socio-demographic neighbourhood change: a case study of Stellenbosch. *Journal for Town and Regional Planning*, 36, 31-38.
- Vlok, A.C. & Van der Merwe, J.H. (1994). *Junior desk atlas*. Kagiso Education, Pinelands.
- Olivier, J. (1995). Spatial distribution of fog in the Namib. *Journal of Arid Environments*, 29(2), 129-138.
- Olivier, J., Heunis, J.C. & Bourne, D.E. (1995). Short-term relationships between winter temperature and cardiac disease mortality in Cape Town. *Suid-Afrikaanse Mediese Tydskrif*, 85(10), 1016-1019.
- Olivier, J. & Van Rensburg, P.A.J. (1995). Links between the Southern Oscillation and hail in the Transvaal: a preliminary assessment. *South African Journal of Science*, 91(3), 245-248.
- Van der Merwe, I.J. (1995). Profile of urbanization in South Africa. In *Urbanization and health in South Africa*. Medical Research Council, Cape Town.
- Van der Merwe, I.J. (1995). Language change in South-Africa: a geographical perspective. *GeoJournal*, 37(4), 513-523.
- Beyers, N., Gie, R.P., Zietsman, H.L., Kunneke, M., Hauman, J., Tatley, M. & Donald, P.R. (1996). The use of a geographical information system (GIS) to evaluate the distribution of tuberculosis in a high-incidence community. *South African Medical Journal*, 86(1), 40-44.
- Mackay, C.H. & Zietsman, H.L. (1996). Assessing and monitoring rangeland condition in extensive pastoral regions by using satellite remote sensing and GIS techniques: an application to the Ceres Karoo region of South Africa. *African Journal of Range and Forage Science*, 13(3), 100-112.
- Van der Merwe, I.J. (1996). From apartheid to integration: A role for the Society of South African Geographers. *The South African Geographical Journal*, 78(2), 55-58.
- Van der Merwe, I.J. (1996). Geolinguistics of European minority groups in Cape Town. *Tijdschrift voor Economische en Sociale Geografie*, 87(2), 146-160.
- Van der Merwe, I.J. (1996). Language related rural-urban differences in South Africa. *Geography Research Forum*, 16, 63-79.
- Van der Merwe, W. & Eloff, P.J. (1996). Byeboere en vrugteboere in Suid-Wes Kaapland: 'n Simbiose. *Acta Academica*, 28(1), 62-76.
- Williams, C.H. & Van der Merwe, I.J. (1996). Mapping the multilingual city: A research agenda for urban geolinguistics. *Journal of Multilingual and Multicultural Development*, 17(1), 49-66.
- Barnard, W.S. (1997). Classics in physical geography revisited: Wellington, J.H. 1955: Southern Africa: a geographical study. Part 1. Physical geography. Cambridge: Cambridge University Press. *Progress in Physical Geography*, 21(1), 137-144.

- Van der Merwe, J.H. (1997). GIS-aided land evaluation and decision-making for regulating urban expansion: A South African case study. *GeoJournal*, 43(2), 135-151.
- Donaldson, S.E. & Van der Merwe, I.J. (1998). Social space and racial identity of colonial Pietersburg (1886-1910). *Historia*, 43(1), 29-40.
- Lochner, F.C. & Zietsman, H.L. (1998). Using Geographical Information Systems (GIS) for policing in South Africa: A case study in Paarl. *South African Geographical Journal*, 80(1), 60-72.
- Van der Merwe, I.J. (1998). Defining a university hinterland: a case for the University of Stellenbosch. *South African Journal of Higher Education*, 12(2), 104-109.
- Van der Merwe, I.J. (1998). Urbanization in South Africa: a frontier between the first and third world. *Geography Research Forum*, 18, 83-98.
- Van der Merwe, J.H. (1998). Climate and water. In P. Lubbe (Ed.), *An introduction to Africa* (pp. 76-89). Pat Lubbe Publishers, Still Bay.
- Van der Merwe, J.H. (1998). Geographical features. In P. Lubbe (Ed.), *An introduction to Africa* (pp. 52-75). Pat Lubbe Publishers, Still Bay.
- Walters, N.M., Zietsman, H.L. & Bhagwandin, N. (1998). The geographical distribution of diagnostic medical and dental X-ray services in South Africa. *South African Medical Journal*, 88(3), 383-389.
- Barnard, W.S. (1999). Encountering Adamastor: South African founding geographers and their regional geographies. In A. Buttimer, S. Brunn & U. Wardenga (Eds.), *Text and image: the social construction of regional knowledge* (pp. 231-242). Institut für Länderkunde, Leipzig.
- Barnard, W.S. (1999). Die weg na 'n omgewingsgeografie. *Acta Academica*, 31(2), 131-161.
- Cedras, L. & Van der Merwe, I. (1999). Landelik-stedelike interaksie en plaaslike owerheidsbestuur in die Stellenbosch-distrik. *Acta Academica*, 31(2), 185-202.
- Donaldson, R. & Van der Merwe, I.J. (1999). Deracialisation of urban business space: Street traders in Pietersburg. *Acta Academica*, 31(1), 140-166.
- Donaldson, S.E. & Van der Merwe, I.J. (1999). Restructuring of informal business space in Pietersburg, South Africa. In A. Aguilar & E. Escamilla (Eds.), *Problems of megacities: social inequalities, environmental risks and urban governance* (pp. 99-110). UNAM, Mexico City.
- Donaldson, S.E. & Van der Merwe, I.J. (1999). Urban transformation and social change in Pietersburg during transition. *Society in Transition*, 30(1), 69-83.
- Donaldson, S.E. & Van der Merwe, I.J. (1999). Residential desegregation and the property market in Pietersburg, 1992-1997. *Urban Forum*, 10(2), 235-257.
- Van Rie, A., Beyers, N., Gie, R.P., Kunneke, M., Zietsman, L. & Donald, P.R. (1999). Childhood tuberculosis in an urban population in South Africa: Burden and risk factor. *Archives of Disease in Childhood*, 80(5), 433-437.
- Visser, G. & Van Huyssteen, K. (1999). Guest houses: The emergence of a new tourist accommodation type in the South African tourism industry. *Tourism & Hospitality Research* 1(2), 155-175.
- Vlok, A.C. & Van der Merwe, J.H. (1999). *Senior desk atlas*. Kagiso Education, Pinelands.
- Barnard, W.S. (2000). 'Cheaper than fences': the functional evolution of the lower Orange River boundary. *Die Erde*, 131(3), 205-220.
- Donaldson, R. & Van der Merwe, I.J. (2000). Apartheid urban development and transitional restructuring in Pietersburg and environs. *Historia*, 45(1), 118-134.

- Donaldson, R. & Van der Merwe, I.J. (2000). Urban restructuring during transition: A model for South African urban development in the 21st century? *Africa Insight*, 30(1), 45-57.
- Ferreira, S.L.A. & Harmse, A.C. (2000). Crime and tourism in South Africa: international tourists perception and risk. *South African Geographical Journal*, 82(2), 80-85.
- Kotze, N.J. & Van der Merwe, I.J. (2000). Neighbourhood renewal in Cape Town's inner city: Is it gentrification? *Journal of Family Ecology and Consumer Sciences*, 28, 39-46.
- Rush, K., Van Huyssteen, M.K.R. & Olivier, J. (2000). Patterns of domestic water inadequacy on the South African West Coast. *Water SA*, 26(4), 537-554.
- Van der Merwe, H. & Van der Merwe, I. (2000). Population: structure and dynamics in a crowded world. In R. Fox & K. Rowntree (Eds.), *The geography of South Africa in a changing world* (pp. 158-185). Oxford University Press, Oxford.
- Barnard, W.S. (2001). *Conceptions of geography*. Centre for Geographical Analysis, Stellenbosch University, Stellenbosch.
- Deacon, H.J. & Wurz, S. (2001). Middle Pleistocene populations and the emergence of modern behaviour. In L. Barham & K. Robson Brown (Eds.), *Human Roots: Africa and Asia in the Middle Pleistocene* (pp. 55-63). Western Academic and Specialist Press, Bristol.
- Van der Merwe, J.H. & Lohrentz, G. (2001). Demarcating coastal vegetation buffers with multicriteria evaluation and GIS at Saldanha Bay, South Africa. *Ambio*, 30(2), 89-95.
- Barnard, W.S. (2002). Bespreking: so het Afrikaans in Namibië gekom, deur ELP Stals & FA Poneis. *Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis*, 16(1), 149-151.
- Conradie, W.J., Carey, V.A., Bonnardot, V.M.F., Saayman, D. & Van Schoor, L.H. (2002). Effect of different environmental factors on the performance of Sauvignon blanc grapevines in the Stellenbosch/Durbanville districts of South Africa. I. Geology, soil, climate, phenology and grape composition. *South African Journal of Enology and Viticulture*, 23(2), 78-91.
- Dabrowski, J.M., Peall, S.K.C., Van Niekerk, A., Reinecke, A.J., Day, J.A. & Schulz, R. (2002). Predicting runoff induced pesticide input in agricultural sub-catchment surface waters: linking catchment variables and contamination. *Water Research*, 36(20), 4975-4984.
- Sinske, S.A. & Zietsman, H.L. (2002). Sewer-system analysis with the aid of a geographical information system. *Water SA*, 28(3), 243-248.
- Van der Merwe, I.J. (2002). Social work practice: new directions in a changing scene. *Social Work*, 38(2), 13-14.
- Van der Merwe, I.J. (2002). Current perspectives on urban change in South Africa. In H.S. Geyer (Ed.), *International handbook of urban systems: studies of urbanization and migration in advanced and developing countries* (pp. 563-592). Edward Elgar, Cheltenham.
- Wurz, S.J.D. (2002). Variability in the middle Stone Age lithic sequence, 115,000-60,000 years ago at Klasies River, South Africa. *Journal of Archaeological Science*, 29(9), 1001-1015.
- Zietsman, H.L. (2002). Geographic information science in South Africa. *South African Geographical Journal*, 84(1), 30-37.
- Ferreira, S.L.A. (2003). Sustainable tourism in post-colonial southern Africa. *Africa Insight*, 33(1/2), 36-42.
- Münch, Z., Van Lill, S.W.P., Booysen, C.N., Zietsman, H.L., Enarson, D.A. & Beyers, N. (2003). Tuberculosis transmission patterns in a high-incidence area: a spatial analysis. *International Journal of Tuberculosis and Lung Disease*, 7(3), 271-277.

- Van der Merwe, I. & Bekker, S. (2003). Urbanization: an interdisciplinary approach to a complex phenomenon. *Social Work*, 39(1), 18-25.
- Van Schoor, L.H. & Van der Merwe, J.H. (2003). EUREPGAP environmental issues: a formula for the quantification and prioritization of negative environmental impacts in the fruit industry. *Scientifica [Online]*, 6(15).
- Wurz, S., Le Roux, N.J., Gardner, S. & Deacon, H.J. (2003). Discriminating between the end products of the earlier middle Stone Age sub-stages at Klasies River using biplot methodology. *Journal of Archaeological Science*, 30(9), 1107-1126.
- Barnard, W.S. (2004). Darwin at the Cape. *South African Journal of Science*, 100(5/6), 243-248.
- Conard, N.J., Soressi, M., Parkinton, J.E., Wurz, S. & Yates, R. (2004). A unified lithic taxonomy based on patterns of core reduction. *South African Archaeological Bulletin*, 59(179), 13-17.
- Ferreira, S.L.A. (2004). Problems associated with tourism development in southern Africa: the case of Transfrontier Conservation Areas. *Geojournal*, 60(3), 301-310.
- Ferreira, S.L.A. (2004). Sustainable tourism in post-colonial southern Africa. In C.M. Rogerson & G. Visser (Eds.), *Tourism and development issues in contemporary South Africa* (pp. 290-306). Africa Institute of South Africa, Pretoria, South Africa.
- Froneman, C.A., Van Huyssteen, M.K.R. & Van der Merwe, I.J. (2004). Retirement villages and related care services: perceptions, preferences and needs of elderly consumers and providers in Cape Town. *Social Work: A Professional Journal for the Social Worker*, 40(4), 413-429.
- Hesseling, P.B., Hartley, P., Zietsman, L., Van Lill, S., Preston-Martin, S. & Wessels, G. (2004). Incidence of acute lymphoblastic leukaemia in white and coloured children in the Western Cape. *South African Medical Journal*, 94(7), 533-536.
- Leggatt, H. & Rust, C. (2004). An unusual rock painting of a ship found in the Attakwaskloof. *The Digging Stick*, 21(2), 5-8.
- Sinske, S.A. & Zietsman, H.L. (2004). A spatial decision support system for pipe-break susceptibility analysis of municipal water distribution systems. *Water SA*, 30(1), 71-79.
- Van der Merwe, I.J. (2004). The humanities in a changing South Africa: challenges and opportunities. *South African Journal of Higher Education*, 18(1), 127-139.
- Van der Merwe, I.J. (2004). The global cities of sub-Saharan Africa: Fact or fiction? *Urban Forum*, 15(1), 36-47.
- Deacon, H.J. & Wurz, S. (2005). A Late Pleistocene archive of life at the coast, Klasies River. In A.B. Stahl (Ed.), *African archaeology: a critical introduction* (pp. 130-149). Blackwell, London.
- Du Toit, D.A., Mouton, P.F.N., Flemming, A.F. & Van Niekerk, A. (2005). Climate and the presence of generation glands in female girdled lizards: a case study of the *cordylus-niger-oelofseni* complex. *Journal of Herpetology*, 39(3), 384-388.
- Eloff, P.J. & Van Niekerk, A. (2005). Game, fences and motor vehicle accidents: spatial patterns in the Eastern Cape. *South African Journal of Wildlife Research*, 35(2), 125-130.
- Van der Merwe, I., Ferreira, S. & Zietsman, L. (2005). An investment strategy for effective town development in the Western Cape, South Africa. *Urban Forum*, 16(4), 295-312.
- Van der Merwe, J.H. & Steyl, I. (2005). Rural solid waste management: a planning strategy for higher density agricultural regions. *Journal of Public Administration*, 40(3), 295-313.

- Van der Merwe, H. & Steyl, I. (2005). Solid waste management in intensively farmed rural areas: practices and problems in a South African case study. *Acta Academica*, 37(3), 184-211.
- Van der Merwe, J.H. & Von Holdt, D.S. (2005). Aircraft noise management through controlled area demarcation in South Africa: its application at Cape Town International Airport. *South African Journal of Science*, 101(9), 400-408.
- Van Niekerk, L., Van der Merwe, J.H. & Huizinga, P. (2005). The hydrodynamics of the Bot River Estuary revisited. *Water SA*, 31(1), 73-85.
- Wurz, S.J.D. & Van der Merwe, J.H. (2005). Gauging site sensitivity for sustainable archaeotourism development in the Western Cape province of South Africa. *South African Archaeological Bulletin*, 60(181), 10-19.
- Wurz, S., Van Peer, P., Le Roux, N., Gardner, S. & Deacon, H.J. (2005). Continental patterns in stone tools: a technological and biplot-based comparison of early late Pleistocene assemblages from Northern and Southern Africa. *African Archaeological Review*, 22(1), 1-24.
- Barnard, W.S. (2006). Suid-Afrika en die klimatologie van ras: grepe uit 'n vroeë 20ste eeuse omgewingsdiskoers. *Journal of Social Sciences*, 46(1), 138-153.
- Botes, A., McGeoch, M.A., Robertson, H.G., Van Niekerk, A., Davids, H.P. & Chown, S.L. (2006). Ants, altitude and change in the northern Cape Floristic Region. *Journal of Biogeography*, 33(1), 71-90.
- Ferreira, S.L.A. (2006). Communities and transfrontier parks in the Southern African Development Community: the case of Limpopo National Park, Mozambique. *South African Geographical Journal*, 88(2), 166-176.
- Geyer, H.S. & Van der Merwe, I.J. (2006). Sub-Saharan Africa: a region economically delayed. In H.S. Geyer (Ed.), *Global regionalization: core peripheral trends* (pp. 187-223). Edward Elgar, Cheltenham, United Kingdom.
- Mucina, L., Adams, J.B., Knevel, I.C., Rutherford, M.C., Powrie, L.W., Bolton, J.J., Van der Merwe, J.H., Anderson, R.J., Bornman, T.G., Le Roux, A. & Janssen, J.A.M. (2006). Coastal Vegetation of South Africa. In L. Mucina & M.C. Rutherford (Eds.), *The Vegetation of South Africa, Lesotho and Swaziland* (pp. 659-696). South African National Biodiversity Institute, Pretoria, South Africa.
- Mucina, L., Rutherford, M.C., Palmer, A.R., Milton, S.J., Scott, L., Lloyd, J.W., Van der Merwe, B., Hoare, D.B., Bezuidenhout, H., Vlok, J.H.J., Euston-Brown, D.I.W., Powrie, L.W. & Dold, A.P. (2006). Nama Karoo Biome. In L. Mucina & M.C. Rutherford (Eds.), *The Vegetation of South Africa, Lesotho and Swaziland* (pp. 325-347). South African National Biodiversity Institute, Pretoria, South Africa.
- Van der Merwe, I. & Davids, A. (2006). Demographic profiles of Cape Town and Johannesburg. In S. Bekker & A. Leildé (Eds.), *Reflections on identity in four African cities* (pp. 25-44). African Minds, Cape Town.
- Van der Merwe, I.J. & Van der Merwe, J.H. (2006). *Linguistic atlas of South Africa: language in space and time*. African Sun Media, Stellenbosch.
- Van der Merwe, I.J. & Van der Merwe, J.H. (2006). Vegetation atlas of South Africa, Lesotho and Swaziland. In L. Mucina & M. Rutherford (Eds.), *The vegetation of South Africa, Lesotho and Swaziland* (pp. 748-790). South African National Biodiversity Institute, Pretoria, South Africa.

- Van der Merwe, J.H. & Von Holdt, D. (2006). Environmental footprint of aircraft noise exposure at Cape Town International Airport. *South African Geographical Journal*, 88(2), 177-193.
- Zietsman, H.L., Ferreira, S.L.A. & Van der Merwe, I.J. (2006). Measuring the growth potential of towns in the Western Cape, South Africa. *Development SA*, 23(5), 685-700.
- Donaldson, R. & Ferreira, S.L.A. (2007). Crime, perceptions and touristic decisionmaking: some empirical evidence and prospects for the 2010 World Cup. *Politikon*, 34(3), 353-371.
- Ferreira, S. (2007). Role of tourism and place identity in the development of small towns in the Western Cape, South Africa. *Urban Forum*, 18(3), 191-209.
- Ferreira, S.L.A., Van der Merwe, I.J. & Zietsman, H.L. (2007). Natural resource base as predictor of town growth and development potential in Western Cape province. *Geography*, 92(1), 25-40.
- Ferreira, S.L.A. & Visser, G. (2007). Creating an African Riviera: revisiting the impact of the Victoria and Alfred Waterfront development in Cape Town. *Urban Forum*, 18(3), 227-246.
- Smith, N. & De Klerk, H. (2007). Geo-information pyramids for up-to-date and flexible conservation plans: a case study for transfrontier conservation areas. *South African Journal of Science*, 103(11/12), 442-448.
- Walter, B.A., Schäffer, N., Van Niekerk, A., Thuiller, W., Rahbek, C. & Chown, S.L. (2007). Modelling the winter distribution of a rare and endangered migrant, the Aquatic Warbler *Acrocephalus paludicola*. *Ibis*, 149(4), 701-714.
- Donaldson, R., Cornelissen, S., Swart, K. & Bob, U. (2008). Expectations of urban residents in the Western Cape on the 2010 FIFA World Cup. *Africa Insight*, 38(3), 35-48.
- Eloff, P. & Van Niekerk, A. (2008). Temporal patterns of animal-related traffic accidents in the Eastern Cape, South Africa. *African Journal of Wildlife Research*, 38(2), 153-162.
- Van der Merwe, I.J. & Van der Merwe, J.H. (2008). The linguistic atlas of South Africa: mapping diversity in space and time. In M. Barni & G. Extra (Eds.), *Mapping linguistic diversity in multicultural contexts* (pp. 265-292). Mouton de Gruyter, Berlin.
- Archer, E., Conrad, J., Münch, Z., Opperman, D., Tadross, M. & Venter, J. (2009). Climate change, groundwater and intensive commercial farming in the semi-arid northern Sandveld, South Africa. *Journal of Integrative Environmental Science*, 6(2), 139-155.
- Barnard, W.S. (2009). Siegfried Passarge (1866-1958) en die begin van 'n Suider-Afrikaanse geomorfologiese diskoers: baanbrekers. *South African Journal for Science and Technology*, 28(1), 423-432.
- Bird, R. & Donaldson, R. (2009). Sex, sun, soccer: stakeholder opinions on the sex industry in Cape Town in anticipation of the 2010 FIFA Soccer World Cup. *Urban Forum*, 20(1), 33-46.
- Donaldson, R. (2009). The making of a tourism gentrified town: Greyton, South Africa. *Geography*, 94(2), 88-99.
- Donaldson, R. & Ferreira, S. (2009). (Re-)creating urban destination image: opinions of foreign visitors to South Africa on safety and security. *Urban Forum*, 20(1), 1-18.
- Gatsinzi, J. & Donaldson, R. (2009). Investment in the tourism industry: the experience of Rwanda. *Journal for Development Support*, 1(1), 33-49.
- Geyer, H.S. (2009). Notes on spatial-structural change in urban South Africa – the 1990s. *Journal of Urban and Regional Analysis*, 1, 27-39.

- Geyer, H.S. (2009). The continuing urban form controversy: toward bridging the divide. In H.S. Geyer (Ed.), *International handbook of urban policy, volume 2: issues in the developed world* (pp. 152-198). Edward Elgar, Aldershot, Hants, United Kingdom.
- Geyer, H.S. (2009). Winds of change: controversies underlying the urban policy debate. In H.S. Geyer (Ed.), *International handbook of urban policy, volume 2: issues in the developed world* (pp. 276-312). Edward Elgar, Aldershot, Hants, United Kingdom.
- Janse van Rensburg, D.A., Mouton, P.L.N. & Van Niekerk, A. (2009). Why *cordylid* lizards are black at the south-western tip of Africa. *Journal of Zoology*, 278(4), 333-341.
- Donaldson, R. (2010). Die hervorming van de urbane struktuur in Zuid-Afrika. *Geografie*, 19(5), 8-11.
- Eslser, K.J., Van Wilgen, B.W., Te Roller, K.S., Wood, A.R. & Van der Merwe, J.H. (2010). A landscape-scale assessment of the long-term integrated control of an invasive shrub in South Africa. *Biological Invasions*, 12, 211-218.
- Ferreira, S. (2010). Grenzeloos Zuidelijk Afrika: Peace Parks en duurzaam toerisme. *Geografie*, 19(5), 12-15.
- Gatsinzi, J. & Donaldson, R. (2010). Investment challenges in the hotel industry in Kigali, Rwanda: hotel managers' perspectives. *Development Southern Africa*, 27(2), 225-240.
- Gibson, L.A., Münch, Z., Engelbrecht, J. & Conrad, J.E. (2010). Uncertainties in using remote sensing for water use determination: a case study in a heterogeneous study area in South Africa. *Hydrology and Earth System Sciences Discussion*, 7, 6581-6612.
- Maumbe, K.C. & Donaldson, R. (2010). Tracking the visitors to Cape Town and the Western Cape: the relationship between visitor characteristics and travel patterns and the implications to destination marketing. *Journal of Tourism*, 11(1), 1-20.
- Van Niekerk, A. (2010). A comparison of land unit delineation techniques for land evaluation in the Western Cape, South Africa. *Land Use Policy*, 27(3), 937-945.
- Van Wilgen, B.W., Forsyth, G.G., De Klerk, H.M., Das, S., Khuluse, S. & Schmitz, P. (2010). Fire management in Mediterranean-climate shrublands: a case study from the Cape fynbos, South Africa. *Journal of Applied Ecology*, 47(3), 631-638.
- Wilson, A.M., Latimer, A.M., Silander, J.A., Gelfand, A.E. & De Klerk, H.M. (2010). A hierarchical Bayesian model of wildfire in a Mediterranean biodiversity hotspot: implications of weather variability and global circulation. *Ecological Modelling*, 221(1), 106-112.
- Aregbeshola, M., Mearns, K. & Donaldson, R. (2011). Interested and affected parties (I & APS) and consultants' viewpoints on the public participation process of the Gautrain environmental impact assessment (EIA). *Journal of Public Administration*, 46(4), 1274-1287.
- De Klerk, H.M., Wilson, A.M. & Steenkamp, K. (2011). Evaluation of satellite-derived burned area products for the Fynbos, a Mediterranean shrubland. *International Journal of Wildland Fire*, 21(1), 36-47.
- Donaldson, R. & Van der Westhuizen, J.E. (2011). Built in a field of dreams? Spatial engineering and political symbolism of South Africa's rapid rail link development, Gautrain. In S.D. Brunn (Ed.), *Engineering earth: the impacts of mega-engineering projects* (pp. 683-695). Springer, Netherlands.
- Du Plessis, D.J., Geyer, H.S. & Van Eeden, A. (2011). On the role of the informal sector in the changing socio-economic landscape of the Cape Town metropolitan area. *Social Space Journal*, 1(1), 49-68.

- Ferreira, S.L.A. (2011). Balancing people and park: towards a symbiotic relationship between Cape Town and Table Mountain National Park. *Current Issues in Tourism*, 14(3), 275-293.
- Ferreira, S.L.A. (2011). South African tourism road to economic recovery: 2010 FIFA Soccer World Cup as vehicle. *Tourism Review International*, 15(1-2), 91-106.
- Ferreira, S.L.A. (2011). One decade of transfrontier areas in southern Africa. In D. Wastl-Walter (Ed.), *Ashgate research companion to border studies* (pp. 643-663). Ashgate, Aldershot.
- Geyer, H., Schloms, B., Du Plessis, D. & Van Eeden, A. (2011). Land quality, urban development and urban agriculture within the Cape Town urban edge. *Town and Regional Planning*, 59, 43-55.
- Geyer, H.S., Coetzee, H.C., Du Plessis, D., Donaldson, R. & Nijkamp, P. (2011). Recent business transformation in intermediate-sized cities in South Africa. *Habitat International*, 35(2), 265-274.
- Gibson, L.A., Münch, Z. & Engelbrecht, J. (2011). Particular uncertainties encountered in using a pre-packaged SEBS model to derive evapotranspiration in a heterogeneous study area in South Africa. *Hydrology and Earth System Sciences*, 15, 295-310.
- Gumbo, T. & Geyer, M. (2011). 'Picking up the pieces': reconstructing the informal economic sector in Bulawayo, Zimbabwe. *Town and Regional Planning*, 59, 53-64.
- Horn, A.J. (2011). Who's out there? A profile of informal traders in four South African city central business districts. *Town and Regional Planning*, 59, 1-6.
- Mookherjee, D. & Geyer, M. (H.S.) (2011). Urban growth in the national capital region of India: testing the differential urbanisation model. *Journal of Economic and Social Geography*, 102(1), 88-99.
- Onyebueke, V.U. & Geyer, M. (2011). Informal sector in urban Nigeria: reflections from almost four decades of research. *Town and Regional Planning*, 59, 65-76.
- Rust, C. & Van der Poll, J. (2011). *Water, stone and legend: rock art of the Little Karoo*. Struik Travel and Heritage.
- Smit, E. & Donaldson, R. (2011). The home as informal business location: home-based business (HBB) dynamics in the medium-sized city of George. *Town and Regional Planning*, 59, 24-33.
- Spocter, M.A. (2011). Spatio-temporal aspects of gated residential security estates in non-metropolitan Western Cape. *Urban Forum*, 22(2), 169-181.
- Taljaard, S., Slinger, J.H. & Van der Merwe, J.H. (2011). Criteria for evaluating the design of implementation models for integrated coastal management. *Coastal Management*, 39(6), 628-655.
- Van Eeden, A. (2011). The geography of informal arts and crafts traders in South Africa's four main city centres. *Town and Regional Planning*, 59, 34-40.
- Van Niekerk, A. & Joubert, S.J. (2011). Input variable selection for interpolating high-resolution climate surfaces for the Western Cape. *Water SA*, 37(3), 271-280.
- Visser, G. & Ferreira, S. (2011). Global change and economic crisis in tourism. *Tourism Geographies*, 13(2), 325-327.
- Willemse, L. (2011). Opportunities and constraints facing informal street traders: evidence from four South African cities. *Town and Regional Planning*, 59, 7-15.
- Adendorff, A. & Donaldson, R. (2012). Knowledge-based service industry in a South African university town: the case of Stellenbosch. *Development Southern Africa*, 29(3), 418-433.

- Bijkerk, C., De Ridder, R. & Donaldson, R. (2012). An assessment of a non-host city on the fringe of the FIFA 2010 World Cup: the planning, benefits and failure of the Drakenstein Municipality. *African Journal for Physical Health Education, Recreation and Dance, Supplement 2*, 81-92.
- Donaldson, R. (2012). Coastal spaces as "Walls": gated developments in small towns on the West Coast. In R. Donaldson & L. Marais (Eds.), *Small town geographies in Africa: experiences from South Africa and elsewhere* (pp. 263-274). Nova Science Publishers, New York.
- Donaldson, R. & Morkel, J. (2012). Urban spaces: quartering Stellenbosch's urban space. In M. Swilling & B. Sebitosi (Eds.), *Sustainable Stellenbosch 2030* (pp. 57-67). African Sun Media, Stellenbosch.
- Donaldson, R., Spocter, M., Du Plessis, D. & Van Niekerk, A. (2012). Towards generic interventions to stimulate growth potential in small towns of the Western Cape province, South Africa. *South African Geographical Journal*, 94(2), 120-136.
- Donaldson, R., Van Niekerk, A., Du Plessis, D. & Spocter, M.A. (2012). Non-metropolitan growth potential of Western Cape municipalities. *Urban Forum*, 23(3), 367-389.
- Donaldson, R. & Vermeulen, L. (2012). Book town tourism as a private development initiative for small town revival: the case of Richmond, South Africa. In R. Donaldson & L. Marais (Eds.), *Small town geographies in Africa: experiences from South Africa and elsewhere* (pp. 163-180). Nova Science Publishers, New York.
- Du Plessis, H. & Van Niekerk, A. (2012). A curriculum framework for geographical information science (GISc) training at South African universities. *South African Journal of Higher Education*, 26(2), 329-345.
- Ferreira, S.L.A. (2012). Moulding urban children towards environmental stewardship: the Table Mountain national park experience. *Environmental Education Research*, 18(2), 251-270.
- Fourie, C., Van Niekerk, A. & Mucina, L. (2012). Semi-automated segment generation for geographic novelty detection using edge and area metrics. *South African Journal of Geomatics*, 1(2), 133-148.
- Geyer, H.S. (Jnr), Geyer, H.S., Du Plessis, D.J. & Van Eeden, A. (2012). Differential urbanisation trends in South Africa – regional and local equivalents. *Environment and Planning A*, 44(12), 2940-2956.
- Geyer, H.S., Du Plessis, D.J., Geyer, H.S. (Jnr) & Van Eeden, A. (2012). Urbanisation and migration trends in South Africa: theory and policy implications. In *Redefining urban: a new way to measure metropolitan areas* (pp. 59-89). OECD Publishing, Paris.
- Geyer, H.S., Geyer, H.S. (Jnr) & Du Plessis, D.J. (2013). Migration, geographies of marginality and informality – impacts on upper and lower ends of urban systems in the North and South. *European Planning Studies*, 21(3), 411-431.
- Goldhaber, R. & Donaldson, R. (2012). An 'age-regation' process as theoretical understanding of the gated retirement village. *Acta Academica*, 44(3), 1-23.
- Goldhaber, R. & Donaldson, R. (2012). Alternative reflections on the elderly's sense of place in a South African gated retirement village. *South African Review of Sociology*, 43(3), 64-80.
- Grellier, S., Kemp, J.N., Janeau, J.-L., Florcsh, N., Ward, D., Barot, S., Podwojewski, P., Lohrenz, S. & Valentin, C. (2012). The indirect impact of encroaching trees on gully extension: a 64-year study in a sub-humid grassland of South Africa. *Catena*, 98, 110-119.

- Jürgens, U. & Donaldson, R. (2012). A review of literature on transformation processes in South African townships. *Urban Forum*, 23(2), 153-163.
- Linder, H.P., De Klerk, H.M., Born, J., Burgess, N.D., Fjeldsa, J. & Rahbek, C. (2012). The partitioning of Africa: statistically defined biogeographical regions in sub-Saharan Africa. *Journal of Biogeography*, 39(7), 1189-1205.
- Mashimbye, Z.E., Cho, M.A., Nell, J.P., De Clercq, W.P., Van Niekerk, A. & Turner, D.P. (2012). Model-based integrated methods for quantitative estimation of soil salinity from hyperspectral remote sensing data: a case study of selected South African soils. *Pedosphere*, 22(5), 640-649.
- Mwathunga, E. (2012). 'Informal settlements': A product of deficient formal land management policies? In R. Donaldson & L. Marais (Eds.), *Small town geographies in Africa: experiences from South Africa and elsewhere* (pp. 433-449). Nova Science Publishers, New York.
- Naude, S., Kleynhans, T.E., Van Niekerk, A., Ellis, F. & Lambrechts, J.J.N. (2012). Application of spatial resource data to assist in farmland valuation. *Land Use Policy*, 29(3), 614-628.
- Nhantumbo, E. & Ferreira, S.L.A. (2012). Tourism development and community response: the case of the Inhambane Coastal Zone, Mozambique. In R. Donaldson & L. Marais (Eds.), *Small town geographies in Africa: experiences from South Africa and elsewhere* (pp. 365-382). Nova Science Publishers, New York.
- Paquet, T. & Donaldson, R. (2012). Local implementation of national policy: breaking new ground in the coastal towns of the Overberg Municipal area. In R. Donaldson & L. Marais (Eds.), *Small town geographies in Africa: experiences from South Africa and elsewhere* (pp. 297-310). Nova Science Publishers, New York.
- Spocter, M.A. (2012). Using geospatial data analysis and qualitative economic intelligence to inform local economic development in small towns: a case study of Graaff-Reinet, South Africa. In R. Donaldson & L. Marais (Eds.), *Small town geographies in Africa: experiences from South Africa and elsewhere* (pp. 65-81). Nova Science Publishers, New York.
- Spocter, M.A. (2012). Gated developments: international experiences and the South African context. *Acta Academica*, 44(1), 1-27.
- Taljaard, S., Slinger, J.H., Morant, P.D., Theron, A.K., Van Niekerk, L. & Van der Merwe, J.H. (2012). Implementing integrated coastal management in a sector-based governance system. *Ocean & Coastal Management*, 67, 39-53.
- Van der Merwe, J.H. (2012). Locating opportunities for outdoor action and adventure recreation and tourism in the Western Cape: a GIS application. *South African Journal for Research in Sport Physical Education and Recreation*, 34(2), 197-214.
- Van Eeden, E.S., Barnard, W.S., Du Pisani, K., Kirkaldy, A., Pretorius, F. & Swart, S.S. (2012). 'n Omgewingsgeskiedenis van Suid-Afrika. In F. Pretorius (Ed.), *Geskiedenis van Suid-Afrika: van voortye tot vandag* (pp. 495-523). Tafelberg, South Africa.
- Willemse, L. & Donaldson, R. (2012). Community neighbourhood park (CNP) use in Cape Town's townships. *Urban Forum*, 23(2), 221-231.
- Booyesen, D. & Van Eeden, A. (2013). Deprivation among unemployed South African youth: Intergenerational or transitional? *Town and Regional Planning*, 63, 64-75.
- Brill, G.C. & Raemaekers, S.J.P.N. (2013). A decade of illegal fishing in Table Mountain National Park (2000-2009): trends in the illicit harvest of abalone *Haliotis midae* and West Coast rock lobster *Jasus lalandii*. *African Journal of Marine Science*, 35(4), 491-500.

- Donaldson, R. (2013). Conference tourism: What do we know about the business tourist in South Africa? *African Journal for Physical Health Education, Recreation and Dance, Supplement 3*, 24-38.
- Donaldson, R. & Du Plessis, D. (2013). The urban renewal programme as an area-based approach to renew the townships: the experience from Khayelitsha's central business district, Cape Town. *Habitat International, 39*, 295-301.
- Donaldson, R., Du Plessis, D., Spocter, M. & Massey, R. (2013). The South African area-based urban renewal programme: experiences from Cape Town. *Journal of Housing and the Built Environment, 28*(4), 629-638.
- Donaldson, R., Kotze, N., Visser, G., Park, J., Wally, N., Zen, J. & Vieyra, O. (2013). An uneasy match: neoliberalism, gentrification and heritage conservation in Bo-Kaap, Cape Town, South Africa. *Urban Forum, 24*(2), 173-188.
- Donaldson, R., Mehlomakhulu, T., Darkey, D., Dyssel, M. & Siyongwana, P. (2013). Relocation: To be or not to be a black diamond in a South African township? *Habitat International, 39*, 114-118.
- Du Plessis, H. & Van Niekerk, A. (2013). A comparison of geographical information science competency requirements. *South African Journal of Geomatics, 2*(3), 206-217.
- Engelbrecht, H.M., Van Niekerk, A., Heideman, N. & Daniels, S.R. (2013). Tracking the impact of pliocene/pleistocene sea level and climatic oscillations on the cladogenesis of the cape legless skink, *Acontias meleagris* species complex, in South Africa. *South African Journal of Biogeography, 40*(3), 492-506.
- Engelbrecht, J., Musekiwa, C., Kemp, J. & Inggis, M.R. (2013). Parameters affecting interferometric coherence – the case of a dynamic agricultural region. *IEEE Transactions on Geoscience and Remote Sensing, 52*(3), 1572-1582.
- Ferreira, S. (2013). Hallmark events as a counter to economic downturn: the 2010 FIFA Soccer World Cup. In G. Visser & S. Ferreira (Eds.), *Tourism and crisis* (pp. 76-93). Routledge, London.
- Ferreira, S.L. & Müller, R. (2013). Innovating the wine tourism product: food-and-wine pairing in Stellenbosch wine routes. *African Journal for Physical Health Education, Recreation and Dance, Supplement 3*, 72-85.
- Hamilton, J.G. & Ferreira, S.L. (2013). Leisure and tourism activities of international students at Stellenbosch University. *African Journal for Physical Health Education, Recreation and Dance, Supplement 3*, 234-246.
- Jürgens, U., Donaldson, R., Rule, S. & Bähr, J. (2013). Townships in South African cities – literature review and research perspectives. *Habitat International, 39*, 256-260.
- Khoza, C. & Willemse, L. (2013). Socio-economic performance of municipalities along the Maputo Development Corridor (MDC): implications for the National Development Plan (NDP) of 2011. *Town and Regional Planning, 63*, 49-63.
- Laldaparsad, S., Geyer, H. & Du Plessis, D. (2013). The reshaping of urban structure in South Africa through municipal capital investment: evidence from three municipalities. *Town and Regional Planning, 63*, 37-48.
- Macey, P.H., Miller, J.A., Rowe, C.D., Grantham, G.H., Siegfried, P., Armstrong, R.A., Kemp, J. & Bacalau, J. (2013). Geology of the Monapo Klippe, NE Mozambique and its significance for assembly of central Gondwana. *Precambrian Research, 233*, 259-281.
- Maluleke, R. & Van Eeden, A. (2013). The relationship between settlement type and undercount in the South African census of 2011. *Town and Regional Planning, 62*, 1-11.

- Morudu, H. & Du Plessis, D. (2013). Economic and demographic trends of municipalities in South Africa: an application of Zipf's rule. *Town and Regional Planning*, 63, 24-36.
- Mucina, L., Daniel, G., Stephenson, G., Boonzaaier, I., Van Niekerk, A., Barrett, M.D., Barrett, R.L., Tichý, L. & Valachovic, M. (2013). Floristic-ecological mapping in the Northern Kimberley: field survey methods and mapping protocols. In L. Mucina & G. Daniel (Eds.), *Vegetation mapping in the Northern Kimberley, Western Australia* (pp. 26-87). Curtin University, Perth, Australia.
- Mucina, L., Stephenson, G., Daniel, G., Van Niekerk, A. & Boonzaaier, I. (2013). A floristic-ecological vegetation map of the Mitchell Plateau Region (Northern Kimberley, Western Australia). In L. Mucina & G. Daniel (Eds.), *Vegetation mapping in the Northern Kimberley, Western Australia* (pp. 88-113). Curtin University, Perth, Australia.
- Mucina, L., Stephenson, G., Daniel, G., Van Niekerk, A. & Boonzaaier, I. (2013). A floristic-ecological vegetation map of the Pantijan Area (Northern Kimberley, Western Australia). In L. Mucina & G. Daniel (Eds.), *Vegetation mapping in the Northern Kimberley, Western Australia* (pp. 114-131). Curtin University, Perth, Australia.
- Münch, Z., Conrad, J.E., Gibson, L.A., Palmer, A.R. & Hughes, D. (2013). Satellite earth observation as a tool to conceptualize hydrogeological fluxes in the Sandveld, South Africa. *Hydrogeology Journal*, 21(5), 1053-1070.
- Musakwa, W. & Van Niekerk, A. (2013). Implications of land use change for the sustainability of urban areas: a case study of Stellenbosch, South Africa. *Cities*, 32, 143-156.
- Myburgh, G. & Van Niekerk, A. (2013). Effect of feature dimensionality on object-based land cover classification: a comparison of three classifiers. *South African Journal of Geomatics*, 2(1), 13-27.
- Poona, N.K. & Ismail, R. (2013). Discriminating the occurrence of pitch canker fungus in *Pinus radiata* trees using QuickBird imagery and artificial neural networks. *Southern Forests: A Journal of Forest Science*, 75(1), 29-40.
- Schmidt, I. & Du Plessis, D. (2013). A critical evaluation of the operational application of various settlement typologies in South Africa. *Town and Regional Planning*, 63, 12-23.
- Shuttleworth, C., Mouton, P.L.F.N. & Van Niekerk, A. (2013). Climate and the evolution of group-living behaviour in the armadillo lizard (*Ouroborus cataphractus*). *African Zoology*, 48(2), 367-373.
- Spocter, M. (2013). Rural gated developments as a contributor to post-productivism in the Western Cape. *South African Geographical Journal*, 95(2), 165-186.
- Stuckenberg, T., Münch, Z. & Van Niekerk, A. (2013). Multi-temporal remote sensing land-cover change detection for biodiversity assessment in the Berg River catchment. *South African Journal of Geomatics*, 2(3), 189-205.
- Taljaard, S., Slinger, J.H. & Van der Merwe, J. (2013). Dual adaptive cycles in implementing integrated coastal management. *Ocean and Coastal Management*, 84, 23-30.
- Van der Merwe, J. (2013). Food for body and soul: tourism development opportunities in the Western Cape. *Acta Academica*, 45(1), 150-186.
- Van der Merwe, J.H., Ferreira, S.L.A. & Van Niekerk, A. (2013). Resource-directed spatial planning of agritourism with GIS. *South African Geographical Journal*, 95(1), 16-37.
- Van der Merwe, J.H. & Van Niekerk, A. (2013). Application of geospatial technology for gap analysis in tourism planning for the Western Cape. *South African Journal of Science*, 109(3-4), 1-10.

- Van der Mescht, D. & Eloff, P.J. (2013). Mountain wave-induced rotors in the lee of the Hex River Mountains. *South African Geographical Journal*, 95(1), 117-131.
- Van Eeden, A. (2013). Small business perceptions in the central business district fringes of four metropolitan areas in South Africa. *South African Geographical Journal*, 95(2), 135-148.
- Visser, G. & Ferreira, S. (2013). Tourism and crisis: A never ending story? In G. Visser & S. Ferreira (Eds.), *Tourism and Crisis* (pp. 1-11). Routledge, London.
- Willemse, L. (2013). A Flowmap-geographic information systems approach to determine community neighbourhood park proximity in Cape Town. *South African Geographical Journal*, 95(2), 149-164.
- Willemse, L. (2013). Trading hope: working conditions of sub-Saharan immigrant street traders in Johannesburg and Tshwane. *Africa Insight*, 42(4), 166-185.
- Aina, Y.A., Van der Merwe, J.H. & Alshuwaikhat, H.M. (2014). Spatial and temporal variations of satellite-derived multi-year particulate data of Saudi Arabia: an exploratory analysis. *International Journal of Environmental Research and Public Health*, 11(11), 11152-11166.
- Chasi, V., Holloway, A. & Orach, C.G. (2014). Health sector shortcomings associated with measles outbreaks in Cape Town, South Africa. *Planet@ Risk*, 2(4), 228-240.
- Didukh, Y.P. & Mucina, L. (2014). Validation of names of some syntaxa of the Crimean vegetation. *Lazaroa*, 35, 181-190.
- Donaldson, R. (2014). La remodelación de la forma urbana (in Spanish). *Vanguardia Dossier*, 51, 56-59.
- Donaldson, R. (2014). South African township transformation. In A.C. Michalos (Ed.), *Encyclopedia of quality of life and well-being research* (pp. 623-628). Springer, Dordrecht.
- Donaldson, R., Benn, J., Campbell, M. & De Jager, A. (2014). Reshaping urban space through studentification in two South African urban centres. *Urbani Izziv*, 25, 176-188.
- Donaldson, R., Hyman, G., Chang, D., Confiado, A., Ruiz, A.M., Salud, S. & Yildiz, S. (2014). Urban land restitution in Cape Town: demanding the return of land rights in Constantia and Kensington/Ndabeni. *Bulletin of Geography: Socio-Economic Series*, 26, 107-120.
- Du Plessis, D.J. (2014). A critical reflection on urban spatial planning practices and outcomes in post-apartheid South Africa. *Urban Forum*, 25(1), 69-88.
- Du Plessis, H. & Van Niekerk, A. (2014). A new GISc framework and competency set for curricula development at South African universities. *South African Journal of Geomatics*, 3(1), 1-12.
- Ferreira, S.L. & Boshoff, A. (2014). Post-2010 FIFA Soccer World Cup: oversupply and location of luxury hotel rooms in Cape Town. *Current Issues in Tourism*, 17(2), 180-198.
- Ferreira, S. & De Villiers, R. (2014). The Victoria and Alfred Waterfront as playground for Capetonians. *Urbani Izziv*, 25, 63-88.
- Ferreira, S.L.A. & Donaldson, R. (2014). Global imaging and branding: source market newspaper reporting of the 2010 FIFA World Cup. *Tourism Review International*, 17(4), 253-265.
- Ferreira, S. & Harmse, A. (2014). Kruger National Park: tourism development and issues around the management of large numbers of tourists. *Journal of Ecotourism*, 13(1), 16-34.

- Gabriels, H. & Horn, A. (2014). The relationship between access to information and communications technology (ICT) and poverty in South Africa. *Africanus*, 44(1), 21-33.
- Geyer, H.S. & Geyer, H.S. (Jnr) (2014). Residential transformation in South Africa – reopening the ‘dead’ capital debate. *Urban Forum*, 25(1), 35-55.
- Geyer, H.S., Geyer, H.S. (Jnr), Du Plessis, D.J. & Van Eeden A. (2014). Recent morphological trends in metropolitan South Africa. In D.P. O’Donoghue (Ed.), *Urban transformations: centres, peripheries, and systems* (pp. 171-184). Ashgate, Farnham, Surrey, United Kingdom.
- Joubert, U. & Van der Merwe, J.H. (2014). Managing environmental impact of bouldering as a niche outdoor-climbing activity. *South African Journal for Research in Sport, Physical Education and Recreation*, 36(1), 229-251.
- Kaplan, H., Van Niekerk, A., Le Roux, J.J., Richardson, D.M. & Wilson, J.R.U. (2014). Incorporating risk mapping at multiple spatial scales into eradication management plans. *Biological Invasions*, 16(3), 691-703.
- Lombard, A. & Ferreira, S. (2014). Residents’ attitudes to proposed wind farms in the West Coast region of South Africa: a social perspective from the south. *Energy Policy*, 66, 390-399.
- Magee, A.R., Boatwright, J.S. & Mucina, L. (2014). Four new species of *Ursinia* (Asteraceae, Anthemideae) from South Africa, with an updated key to the genus in Namaqualand. *Phytotaxa*, 177(3), 137-145.
- Mashimbye, Z.E., De Clercq, W.P. & Van Niekerk, A. (2014). An evaluation of digital elevation models (DEMS) for delineating land components. *Geoderma*, 213, 312-319.
- Massey, R.T. (2014). Exploring counter-conduct in upgraded informal settlements: the case of women residents in Makhaza and New Rest (Cape Town), South Africa. *Habitat International*, 44, 290-296.
- Mookherjee, D., Geyer, H.S., Hoerauf, E. (2014). Delhi and its peripheral region: perspectives on settlement growth. In D.P. O’Donoghue (Ed.), *Urban transformations: centres, peripheries, and systems* (pp. 197-206). Ashgate, Farnham, Surrey, United Kingdom.
- Musakwa, W. & Van Niekerk, A. (2014). A monitoring urban sprawl and sustainable urban development using the Moran index: a case study of Stellenbosch, South Africa. *International Journal of Applied Geospatial Research*, 5(3), 1-20.
- Myburgh, G. & Van Niekerk, A. (2014). Impact of training set size on object-based land cover classification: a comparison of three classifiers. *International Journal of Applied Geospatial Research*, 5(3), 49-68.
- Naidoo, A.G.V., Van Eeden, A. & Münch, Z. (2014). Spatial variation in school performance: a local analysis of socio-economic factors in Cape Town. *South African Journal of Geomatics*, 3(1), 78-94.
- Parry, K. & Van Eeden, A. (2014). Measuring racial residential segregation at different geographic scales in Cape Town and Johannesburg. *South African Geographical Journal*, 97(1), 31-49.
- Pharoah, R. (2014). Built-in risk: linking housing concerns and flood risk in subsidized housing settlements in Cape Town, South Africa. *International Journal of Disaster Risk Science*, 5(4), 313-322.
- Poona, N.K. & Ismail, R. (2014). Using Boruta-selected spectroscopic wavebands for the asymptomatic detection of *Fusarium circinatum* stress. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 7(9), 3764-3772.

- Randrianalijaona, M.T. & Holloway, A. (2014). Advancing disaster risk governance in Madagascar: the role of higher education institutions. In A. Ismail-Zadeh, J.U. Fucugauchi, A. Kijko, K. Takeuchi & I. Zaliapin (Eds.), *Extreme natural hazards, disaster risks and societal implications* (pp. 234-240), Cambridge University Press, Cambridge, United Kingdom.
- Rebello, A.G., Low, A.B., Holmes, P.M., Diw, E.B. & Mucina, L. (2014). Vegetation Map of the Cape Peninsula (Western Cape, South Africa). In L. Mucina, M.C. Rutherford, L.W. Powrie, A. van Niekerk & J.H. van der Merwe (Eds.), *Vegetation Field Atlas of the Continental South Africa, Lesotho and Swaziland* (pp. 47). South African National Biodiversity Institute, Pretoria, South Africa.
- Šmarda, P., Bureš, P., Horová, L., Leitch, I.J., Mucina, L., Pacini, E., Tichý, L., Grulich, V. & Rotreklová, O. (2014). Ecological and evolutionary significance of genomic GC content diversity in monocots. *Proceedings of the National Academy of Sciences of the United States of America*, 111(39), 4096-4102.
- Van Laar, S., Cottyn, I., Donaldson, R., Zoomers, A. & Ferreira, S. (2014). 'Living apart together' in Franschhoek, South Africa. The implications of second-home development for equitable and sustainable development. In M. Janoschka & H. Haas (Eds.), *Contested spatialities, lifestyle migration and residential tourism* (pp. 190-204). Routledge, London.
- Villeneuve, N., Bachelery, P. & Kemp, J. (2014). La Réunion island: a typical example of a basaltic shield volcano with rapid evolution. In M. Fort & M.F. Andre (Eds.), *Landscapes and Landforms of France* (pp. 261-270). Springer, Dordrecht, Netherlands.
- Von Gerhardt, K., Van Niekerk, A., Kidd, M., Samways, M. & Hanks, J. (2014). The role of elephant *Loxodonta africana* pathways as a spatial variable in crop-raiding location. *Oryx*, 48(3), 436-444.
- Welman, L. & Ferreira, S.L.A. (2014). Regional development of Saldanha Bay region, South Africa: the role of Saldanha Steel. *Bulletin of Geography: Socio-Economic Series*, 26, 219-231.
- Willemse, L. (2014). The role of economic factors and Guanxi networks in the success of Chinese shops in Johannesburg, South Africa. *Urban Forum*, 25(1), 105-123.
- Adesuyi, A.S. & Münch, Z. (2015). Using time-series NDVI to model land cover change: a case study in the Berg River catchment area, Western Cape, South Africa. *International Journal of Geological and Environmental Engineering*, 9(5), 553-558.
- Akhani, H. & Mucina, L. (2015). The *Tamaricetea arceuthoidis*: a new class for the continental riparian thickets of the Middle East, Central Asia and the subarid regions of the lower Volga valley. *Lazaroo*, 36, 61-66.
- Altwegg, R., De Klerk, H.M. & Midgley, G.F. (2015). Fire-mediated disruptive selection can explain the reseeders-resprouter dichotomy in Mediterranean-type vegetation. *Oecologia*, 177(2), 367-377.
- Callaghan, K., Engelbrecht, J. & Kemp, J. (2015). The use of Landsat and aerial photography for the assessment of coastal erosion and erosion susceptibility in False Bay, South Africa. *South African Journal of Geomatics*, 4(2), 65-79.
- Callaghan, K.L. & Kemp, J. (2015). Coastal erosion mapping in False Bay. In C. Musekiwa (Ed.), *South African geological hazards observation system atlas* (pp. 33-37). Council for Geoscience, Pretoria.
- Čarni, A. & Mucina, L. (2015). Validations and typifications of some South European syntaxa. *Hacquetia*, 14(2), 1-11.

- Chytrý, M., Daniëls, F.J.A., Di Pietro, R., Koroleva, N. & Mucina L. (2015). Nomenclature adjustments and new syntax of the Arctic, Alpine and Oro-Mediterranean vegetation. *Hacquetia*, 14(1), 277-288.
- Chobokoane, N. & Horn, A. (2015). Urban compaction and densification in Bloemfontein, South Africa: measuring the current urban form against Mangaung Metropolitan Municipality's spatial planning proposals for compaction. *Urban Forum*, 26(1), 77-93.
- Cross, A.T., Turner, S.R., Merritt, D.J., Van Niekerk, A., Renton, M., Dixon, K.W. & Mucina, L. (2015). Vegetation patterns and hydro-geological drivers of freshwater rock pool communities in the monsoon-tropical Kimberley region, Western Australia. *Journal of Vegetation Science*, 26(6), 1184-1197.
- Cutter, S.L., Ismail-Zadeh, A., Alcantara-Ayala, I., Altan, O., Baker, D.N., Briceno, S., Gupta, H., Holloway, A., Johnston, D., McBean, G.A., Ogawa, Y., Paton, D., Porio, E., Silbereisen, R.K., Takeuchi, K., Valsecchi, G.B., Vogel, C. & Wu, G. (2015). Global risks: pool knowledge to stem losses from disasters. *Nature News*, 522(7556), 277-279.
- Di Pietro, R., Theurillat, J.P., Capelo, J., Fernández-González, F., Terzi, M., Čarni, A. & Mucina, L. (2015). Nomenclature and syntaxonomic notes on some high-rank syntaxa of the European grassland vegetation. *Lazaroa*, 36, 79-106.
- Du Plessis, D.J. (2015). Land-use mix in South African cities and the influence of spatial planning: Innovation or following the trend? *South African Geographical Journal*, 97(3), 217-242.
- Du Plessis, D.J. & Boonzaier, I. (2015). The evolving spatial structure of South African cities: a reflection on the influence of spatial planning policies. *International Planning Studies*, 20(1-2), 87-111.
- Ferreira, S., Strydom, J., Kriel, M. & Gildenhys, S. (2015). Tourism and development after civil war in Malange Province, Angola. *South African Geographical Journal*, 97(2), 158-182.
- Ferreira, V. & Visser, G. (2015). A spatial analysis of gating in Bloemfontein, South Africa. *Bulletin of Geography: Socio-Economic Series*, 28, 37-51.
- Fuseini, I. & Kemp, J. (2015). A review of spatial planning in Ghana's socio-economic development trajectory: a sustainable development perspective. *Land Use Policy*, 47, 309-320.
- Gama, N. & Willemse, L. (2015). A descriptive overview of the education and income levels of domestic workers in post-apartheid South Africa. *GeoJournal*, 80(5), 721-741.
- Geyer, H.S. (Jnr) (2015). The growth and decline of the West Midlands region: an integrated evolutionary perspective. *International Planning Studies*, 20(1-2), 52-70.
- Geyer, H.S. (Jnr), Geyer, H.S. & Du Plessis, D. (2015). Primary cities in sub-Saharan Africa: quasars, loose connections, and black holes. *International Planning Studies*, 20(1-2), 39-51.
- Geyer, H.S., Geyer, P. & Geyer, M. (2015). The South African functional metropolis – a synthesis. *Town and Regional Planning*, 67(1), 13-26.
- Hoogendoorn, G. & Visser, G. (2015). Focusing on the “blessing” and not the “curse” of second homes: notes from South Africa. *Area*, 47(2), 179-184.
- Horn, A. (2015). Urban growth management best practices: towards implications for the developing world. *International Planning Studies*, 20(1-2), 131-145.

- Kleinsmith, D. & Horn, A. (2015). Impacts of new universities on hosting cities and the implications for Kimberley, Northern Cape, South Africa. *Development Southern Africa*, 32(4), 494-510.
- Lombard, A. & Ferreira, S.L.A. (2015). The spatial distribution of renewable energy infrastructure in three particular provinces of South Africa. *Bulletin of Geography Socio-Economic Series*, 30, 71-85.
- Lottering, N., Du Plessis, D. & Donaldson, R. (2015). Coping with drought: the experience of water sensitive urban design (WSUD) in the George Municipality. *Water SA*, 41(1), 1-7.
- Lysenko, T. & Mucina, L. (2015). Nomenclatural notes on some alliances of the halophytic vegetation of southern Ural and the Caspian lowlands. *Haquetia*, 14(2), 301-306.
- Mandakova, T., Winter, P., Al-Shehbaz, I.A., Mucina, L., Mummenhoff, K. & Lysak, M.A. (2015). IAPT/IOPB chromosome data 19: Brassicaceae. *Taxon*, 64(5), 1073.
- Matevski, V., Carni, A., Custerevicka, R., Kostadinovski, M. & Mucina, L. (2015). Syntaxonomy of the rocky grasslands on carbonate bedrocks in the west and southwest of the Republic of Macedonia. *Applied Ecology and Environmental Research*, 13(4), 1197-1214.
- Meyburg, B.U., Mendelsohn, S., Mendelsohn, J. & De Klerk, H.M. (2015). Revealing unexpected uses of space by wintering *Aquila pomarina*: How does satellite telemetry identify behaviour at different scales? *Journal of Avian Biology*, 46(6), 648-657.
- Mookherjee, D., Geyer, H.S. & Hoerauf, E. (2015). Dynamics of an evolving city-region in the developing world: the national capital region of Delhi revisited. *International Planning Studies*, 20(1-2), 146-160.
- Mucina, L. & Theurillat, J.P. (2015). Descriptions and validation of the names of some high-rank syntaxa in the European *Asplenietea trichomanis* and *Plypodietea*. *Lazaroa*, 36, 75-78.
- Musakwa, W. & Van Niekerk, A. (2015). Monitoring sustainable urban development using built-up area indicators: a case study of Stellenbosch, South Africa. *Environment, Development and Sustainability*, 17(3), 547-566.
- Musakwa, W. & Van Niekerk, A. (2015). Earth observation for sustainable urban planning in developing countries: needs, trends and future directions. *Journal of Planning Literature*, 30(2), 149-160.
- Parry, K. & Van Eeden, A. (2015). Measuring racial residential segregation at different geographic scales in Cape Town and Johannesburg. *South African Geographical Journal*, 97(1), 31-49.
- Singh, R.G., Engelbrecht, J. & Kemp, J. (2015). Change detection of bare areas in the Xolobeni region, South Africa using Landsat NDVI. *South African Journal of Geomatics*, 4(2), 138-148.
- Spocter, M. (2015). Gating in the Western Cape, South Africa: post-apartheid planning and environmental legacy. In S. Bagaean & O. Uduku (Eds.), *Beyond gated communities* (pp. 130-153). Routledge, Oxford.
- Steffen, S., Ball, P., Mucina, L. & Kadereit, G. (2015). Phylogeny, biogeography and ecological diversification of *Sarcocornia* (*Salicornioideae*, *Amaranthaceae*). *Annals of Botany*, 115(3), 353-368.
- Stephenson, G., Donaldson, R., Du Plessis, D. & Van Niekerk, A. (2015). Compiling a land audit in large rural areas: results from the methodology applied in the non-urban areas of the Matzikama Municipal area. *Town and Regional Planning*, 66(1), 32-47.

- Theurillat, J.P., Mucina, L. & Hajek, M. (2015). Validations of high-rank syntaxa in *Potamogetonetea* and *Scheuchzerio-Caricetea fuscae*. *Lazaroa*, 36, 67-73.
- Verhoef, H. & Van Eeden, A. (2015). Identifying the challenges of creating an optimal dissemination geography for census. *South African Journal of Geomatics*, 4(1), 50-64.
- Visser, G. (2015). The tourism geography of South Africa. In R. George (Ed.), *Tourism Management in Southern Africa* (pp. 41-60). Oxford University Press, Cape Town.
- Visser, G. (2015). Thinking beyond exclusionary gay male spatial frames in the developing world. In P.L. Doan (Ed.), *Planning and the LGBTQ communities: the need for inclusive queer spaces* (pp. 81-93). Routledge, London.
- Walther, B.A. & Van Niekerk, A. (2015). Effects of climate change on species turnover and body mass frequency distributions of South African bird communities. *African Journal of Ecology*, 53(1), 25-35.
- Willemse, L. (2015). The role of economic factors and guanxi networks in the success of Chinese shops in Johannesburg. In J. Crush, A. Chikanda & C. Skinner (Eds.), *Mean streets: migration, xenophobia and informality in South Africa* (pp. 113-131). Southern African Migration Programme, African Centre for Cities & International Development Research Centre, Cape Town, South Africa.
- Willemse, L. (2015). Some perceptions and preferences of residents' use of community neighbourhood parks in Mitchell's Plain, Cape Town. *Town and Regional Planning*, 66, 15-30.
- Willner, W., Theurillat, J.P., Pallas, J. & Mucina, L. (2015). On the nomenclature of some high-rank syntaxa of European forest vegetation. *Phytocoenologia*, 45(1-2), 175-181.
- Wisner, B., Pelling, M., Mascarenhas, A., Holloway, A., Ndong, B., Faye, P., Ribot, J. & Simon, D. (2015). Small cities and towns in Africa: insights into adaptation challenges and potentials. In S. Pauleit, A. Coly, S. Fohlmeister, P. Gasparini, G. Jorgensen, S. Kabisch, W.J. Kombe, S. Lindley, I. Simonis & K. Yeshitela (Eds.), *Urban vulnerability and climate change in Africa: a multidisciplinary approach* (pp. 153-196). Springer, Switzerland.
- Zweig, P.J. (2015). Community risk assessment and disaster mitigation: case studies from Philippi informal settlement. In M. Brown-Luthango (Ed.), *State/Society synergy in Philippi, Cape Town* (pp. 263-289). African Centre for Cities, Cape Town, South Africa.
- Zweig, P.J. (2015). Everyday hazards and vulnerabilities amongst backyard dwellers: a case study of Vredendal North, Matzikama Municipality, South Africa. *Jàmbá: Journal of Disaster Risk Studies*, 7(1), 1-8.
- Ackermann, A. & Visser, G. (2016). Studentification in Bloemfontein, South Africa. *Bulletin of Geography: Socio-Economic Series*, 31(31), 7-17.
- Barnard, W.S. (2016). *Encountering Adamastor: South Africa's founding geographers in time and place*. African Sun Media, Stellenbosch.
- Cross, A.T., Myers, C., Mitchell, C.N.A., Cross, S.L., Jackson, C., Waina, R., Mucina, L., Dixon, K.W. & Andersen, A.N. (2016). Ant biodiversity and its environmental predictors in the North Kimberley region of Australia's seasonal tropics. *Biodiversity and Conservation*, 25(9), 1727-1759.
- Daniëls, F.J.A., Elvebakk, A., Matveyeva, N.V. & Mucina, L. (2016). The *Drabo corymbosae-Papaveretea dahliani* – a new vegetation class of the High Arctic polar deserts. *Hacquetia*, 15(1), 5-13.

- De Klerk, H.M., Gilbertson, J., Luck-Vogel, M., Kemp, J. & Münch, Z. (2016). Using remote sensing in support of environmental management: a framework for selecting products, algorithms and methods. *Journal of Environmental Management*, 182, 564-573.
- De Waal, J. & Vogel, C. (2016). Disaster risk profiling in southern Africa: inventories, impacts and implications. *Natural Hazards*, 84, 1921-1942.
- Donaldson, R., Ferreira, S., Didier, S., Rodary, E. & Swanepoel, J. (2016). Access to the urban national park in Cape Town: where urban and natural environment meet. *Habitat International*, 57, 132-142.
- Donaldson, R., Rule, S. & Mearns, K. (2016). The rise and demise of geography at Vista University. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 419-434). African Sun Media, Stellenbosch.
- Du Plessis, D.J. (2016). The influence of post-1994 spatial planning policies – Can we improve the effectiveness? In *Land use planning law reform in the Western Cape: the road to transformation* (pp. 166-177). Western Cape Government Department of Environmental Affairs and Development Planning, South Africa.
- Ferreira, S.L.A. & Van Zyl, G.W. (2016). Catering for large numbers of tourists: the McDonaldization of casual dining in Kruger National Park. *Bulletin of Geography: Socio-Economic Series*, 33, 39-53.
- Francioli, A.P. (2016). Investigating the knowledge and preparedness of proximal residents to a general-emergency event at the Koeberg Nuclear Power Station. *Jàmá: Journal of Disaster Risk Studies*, 8(2), 1-10.
- Fuseini, I. & Kemp, J. (2016). Characterising urban growth in Tamale, Ghana: an analysis of urban governance response in infrastructure and service provision. *Habitat International*, 56, 109-123.
- Geyer, H. (2016). Poverty traps in South African agriculture. *Agrekon*, 55(4), 356-376.
- Geyer, H.S. (Jnr) & Geyer, H.S. (2016). Polarisation reversal in South Africa: How widespread is the trend? *South African Geographical Journal*, 98(2), 289-307.
- Geyer, H.S. (Jnr) & Mohammed, F. (2016). Hypersegregation and class-based segregation processes in Cape Town 2001-2011. *Urban Forum*, 27(1), 35-58.
- Gwate, O., Mantel, S.K., Finca, A., Gibson, L.A., Münch, Z. & Palmer, A.R. (2016). Exploring the invasion of rangelands by *Acacia mearnsii* (black wattle): biophysical characteristics and management implications. *African Journal of Range and Forage Science*, 33(4), 265-273.
- Hagan, K. & Williams, S. (2016). Oceans of discourses: Utilizing Q methodology for analyzing perceptions on marine biodiversity conservation in the Kogelberg Biosphere Reserve, South Africa. *Frontiers in Marine Science*, 3(188), 1-13.
- Hemstock, S.L., Buliruarua, L.-A., Chan, E.Y.Y., Chan, G., Des Combes, H.J., Davey, P., Farrell, P., Griffiths, S., Hansen, H., Hatch, T., Holloway, A., Manuella-Morris, T., Martin, T., Renaud, F.G., Ronan, K., Ryan, B., Szarzynski, J., Shaw, D., Yasukawa, S., Yeung, T. & Murray, V. (2016). Accredited qualifications for capacity development in disaster risk reduction and climate change adaptation. *Australasian Journal of Disaster and Trauma Studies*, 20(1), 15-34.
- Hoogendoorn, G. & Visser, G. (2016). South Africa's small towns: a review on recent research. *Local Economy*, 31(1-2), 95-108.

- Isunju, J.B. & Kemp, J. (2016). Spatiotemporal analysis of encroachment on wetlands: a case of Nakivubo wetland in Kampala, Uganda. *Environmental Monitoring and Assessment*, 188(4), 1-17.
- Isunju, J.B., Orach, C.G. & Kemp, J.N. (2016). Community-level adaptation to minimize vulnerability and exploit opportunities in Kampala's wetlands. *Environment and Urbanization*, 28(2), 475-494.
- Isunju, J.B., Orach, C.G. & Kemp, J.N. (2016). Hazards and vulnerabilities among informal wetland communities in Kampala, Uganda. *Environment and Urbanization*, 28(1), 275-293.
- Jacobs, W. & Du Plessis, D.J. (2016). A spatial perspective of the patterns and characteristics of main- and substream migration to the Western Cape, South Africa. *Urban Forum*, 27(2), 167-185.
- Jiménez-Alfaro, B., Chytrý, M., Mucina, L., Grace, J.B. & Rejmánek, M. (2016). Disentangling vegetation diversity from climate-energy and habitat heterogeneity for explaining animal geographic patterns. *Ecology and Evolution*, 6(5), 1515-1526.
- Lück, W. & Van Niekerk, A. (2016). Evaluation of a rule-based compositing technique for Landsat-5 TM and Landsat-7 ETM+ images. *International Journal of Applied Earth Observation and Geoinformation*, 47(1), 1-14.
- Lück-Vogel, M., Mbolambi, C., Rautenbach, K., Adams, J. & Van Niekerk, L. (2016). Vegetation mapping in the St Lucia estuary using very high-resolution multispectral imagery and LiDAR. *South African Journal of Botany*, 107, 188-199.
- Marais, L., Nel, E. & Donaldson, R. (2016). The international literature and context. In L. Marais, E. Nel & R. Donaldson (Eds.), *Secondary cities and development* (pp. 27-48). Routledge, London.
- Marais, L., Nel, E. & Donaldson, R. (2016). The role of secondary cities in South Africa's development. In L. Marais, E. Nel & R. Donaldson (Eds.), *Secondary cities and development* (pp. 159-178). Routledge, London.
- Marais, L., Nel, E. & Donaldson, R. (2016). Secondary cities in South Africa: national settlement patterns and urban research. In L. Marais, E. Nel & R. Donaldson (Eds.), *Secondary cities and development* (pp. 1-26). Routledge, London.
- Mohale, M., Geyer, H.S. (Jnr) & Geyer, H.S. (2016). Undervaluations of real estate properties in disadvantaged areas in the City of Johannesburg. *South African Journal of Economics*, 84(2), 217-229.
- Mucina, L., Bültmann, H., Dierßen, K., Theurillat, J.P., Raus, T., Carni, A., Šumberová, K., Willner, W., Dengler, J., García, R.G., Chytrý, M., Hajek, M., Di Pietro, R., Lakushenko, D., Pallas, J., Daniels, F.J.A., Bergmeier, E., Guerra, A.S., Ermakov, N., Valachovic, M., Schaminee, J.H.J., Lysenko, T., Didukh, Y.P., Pignatti, S., Rodwell, J.S., Capelo, J., Weber, H.E., Solomeshch, A., Dimopoulos, P., Aguiar, C., Hennekens, S.M. & Tichy, L. (2016). Vegetation of Europe: hierarchical floristic classification system of vascular plant, bryophyte, lichen, and algal communities. *Applied Vegetation Science*, 19(1), 3-264.
- Muller, S.J. & Van Niekerk, A. (2016). An evaluation of supervised classifiers for indirectly detecting salt-affected areas at irrigation scheme level. *International Journal of Applied Earth Observation and Geoinformation*, 49, 138-150.
- Muller, S.J. & Van Niekerk, A. (2016). Identification of worldview-2 spectral and spatial factors in detecting salt accumulation in cultivated fields. *Geoderma*, 273, 1-11.

- Ngcofe, L. & Van Niekerk, A. (2016). Advances in optical earth observation for geological mapping: a review. *South African Journal of Geomatics*, 5(1), 1-16.
- Ottaviani, G., Marcantonio, M. & Mucina, L. (2016). Soil depth shapes plant functional diversity in granite outcrops vegetation of Southwestern Australia. *Plant Ecology and Diversity*, 9(3), 263-276.
- Pettorelli, N., Wegmann, M., Skidmore, A., Múcher, S., Dawson, T.P., Fernandez, M., Lucas, R., Schaepman, M.E., Wang, T., O'Connor, B., Jongman, R.H.G., Kempeneers, P., Sonnenschein, R., Leidner, A.K., Böhm, M., He, K.S., Nagendra, H., Dubois, G., Fatoyinbo, T., Hansen, M.C., Paganini, M., De Klerk, H.M., Asner, G.P., Kerr, J.T., Estes, A.B., Schmeller, D.S., Heiden, U., Rocchini, D., Pereira, H.M., Turak, E., Fernandez, N., Lausch, A., Cho, M.A., Alcaraz-Segura, D., McGeoch, M.A., Turner, W., Mueller, A., St-Louis, V., Penner, J., Vihervaara, P., Belward, A., Reyers, B. & Geller, G.N. (2016). Framing the concept of satellite remote sensing essential biodiversity variables: challenges and future directions. *Remote Sensing in Ecology and Conservation*, 2(3), 122-131.
- Pillay, X. & Geyer, H.S. (2016). Business clustering along the M1-N3-N1 corridor between Johannesburg and Pretoria, South Africa. *South African Journal of Geomatics*, 5(3), 340-357.
- Poona, N., Van Niekerk, A. & Ismail, R. (2016). Investigating the utility of oblique tree-based ensembles for the classification of hyperspectral data. *Sensors*, 16(11), 1-16.
- Poona, N.K., Van Niekerk, A., Nadel, R.L. & Ismail, R. (2016). Random forest (RF) wrappers for waveband selection and classification of hyperspectral data. *Applied Spectroscopy*, 70(2), 322-333.
- Schuermans, N. & Spocter, M. (2016). Avoiding encounters with poverty: aesthetics, politics and economics in a privileged neighbourhood of Cape Town. In M. De Backer, L. Melgaço, G. Varna & F. Menichelli (Eds.), *Order and conflict in public space* (pp. 79-100). Routledge, London.
- Selemela, P.A. & Du Plessis, D.J. (2016). A comparative analysis of urban growth and development in traditional authority and non-traditional areas: the case of Rustenburg and Mahikeng Municipalities in the North West Province, South Africa. *Urban Forum*, 27(4), 433-446.
- Smit, H. & Donaldson, R. (2016). Military geography at Stellenbosch University's Military Geography Department in Saldanha. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 245-254). African Sun Media, Stellenbosch.
- Spocter, M. (2016). Non-metropolitan gated retirement communities in the Western Cape. *Urban Forum*, 27(2), 211-228.
- Tait, N., Donaldson, R., Hattingh, P. & Ramudzuli, M. (2016). Geography at the iconic "Bush University" of Turfloop: From University of the North to Limpopo University. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 255-276). African Sun Media, Stellenbosch.
- Todoroff, P. & Kemp, J. (2016). Contribution of remote sensing to crop monitoring in tropical zones. In N. Baghdadi & M. Zribi (Eds.), *Land surface remote sensing in agriculture and forest* (pp. 179-220). Elsevier, London, United Kingdom.
- Toerien, D. & Donaldson, R. (2016). George. In L. Marais, E. Nel & R. Donaldson (Eds.), *Secondary cities and development* (pp. 101-124). Routledge, London.

- Van der Merwe, H., Visser, G. & Donaldson, R. (2016). Stellenbosch: The birthplace of geography teaching at South African universities. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 9-32). African Sun Media, Stellenbosch.
- Van Niekerk, A., Du Plessis, D., Boonzaaier, I., Spocter, M., Ferreira, S., Loots, L. & Donaldson, R. (2016). Development of a multi-criteria spatial planning support system for growth potential modelling in the Western Cape, South Africa. *Land Use Policy*, 50, 179-193.
- Verhulp, J. & Van Niekerk, A. (2016). Effect of inter-image spectral variation on land cover separability in heterogeneous areas. *International Journal of Remote Sensing*, 37(7), 1639-1657.
- Vermeulen, D. & Van Niekerk, A. (2016). Evaluation of a WorldView-2 image for soil salinity monitoring in a moderately affected irrigated area. *Journal of Applied Remote Sensing*, 10(2), 1-17.
- Visser, G. (2016). South African tourism geographies: progress and prospects. *South African Geographical Journal*, 98(3), 428-438.
- Visser, G. (2016). Sexualities and urban life. In G. Brown & C. Browne (Eds.), *The Routledge research companion to geographies of sex and sexualities* (pp. 79-84). Routledge, London.
- Visser, G. (2016). Urban leisure and tourism-led redevelopment frontiers in central Cape Town since the 1990s. *Tourism: An International Interdisciplinary Journal*, 64(4), 397-408.
- Visser, G. & Barker, C. (2016). A brief history of the Department of Geography at the University of the Free State. In G. Visser, R. Donaldson & C. Seethal (Eds.), *The origin and growth of geography as a discipline at South African universities* (pp. 55-70). African Sun Media, Stellenbosch.
- Welman, L. & Ferreira, S.L.A. (2016). The co-evolution of Saldanha Bay (town and hinterland) and its port. *Local Economy*, 31(1-2), 219-233.
- Wiese, L., Ros, I., Rozanov, A., Boshoff, A., De Clercq, W. & Seifert, T. (2016). An approach to soil carbon accounting and mapping using vertical distribution functions for known soil types. *Geoderma*, 263, 264-273.
- Willner, W., Solomeshch, A., Carni, A., Bergmeier, E., Ermakov, N. & Mucina, L. (2016). Description and validation of some European forest syntaxa – a supplement to the EuroVegChecklist. *Hacquetia*, 15(1), 15-25.
- Wortman, T., Donaldson, R. & Van Westen, G. (2016). 'They are stealing my island': residents' opinions on foreign investment in the residential tourism industry in Tamarin, Mauritius. *Singapore Journal of Tropical Geography*, 37(2), 139-157.
- Zweig, P.J. (2016). Lost in space? Considering young men as drivers of urban informal settlement risk. *Urban Forum*, 27(4), 383-398.
- Adeniyi, S.A., De Clercq, W.P. & Van Niekerk, A. (2017). Development of a composite soil degradation assessment index for cocoa agroecosystems in Southwestern Nigeria. *Solid Earth*, 8(4), 827-843.
- Bangira, T., Alfieri, S.M., Menenti, M., Van Niekerk, A. & Vekerdy, Z. (2017). A spectral unmixing method with ensemble estimation of endmembers: application to flood mapping in the Caprivi floodplain. *Remote Sensing*, 9(10), 1-24.
- Bordelon, L.A. & Ferreira, S.L.A. (2017). Tourist photographs and destination imagery on social media: reading the Stellenbosch winelands through the tourist lens. *Tourism Review International*, 21(3), 317-329.

- Brand, A., Geyer, H.S. & Geyer, H.S. (Jnr) (2017). Corridor development in Gauteng, South Africa. *GeoJournal*, 82(2), 311-327.
- Chikowore, T. & Willemse, L. (2017). Identifying the changes in the quality of life of Southern African Development Community (SADC) migrants in South Africa from 2001 to 2011. *South African Geographical Journal*, 99(1), 86-112.
- Cronje, C.J. & Spocter, M. (2017). Open-plan suburb to fortified suburb: home fortification in Soneike, Cape Town, South Africa. *Journal of Housing and the Built Environment*, 32(4), 713-732.
- De Klerk, H.M. & Buchanan, G. (2017). Remote sensing training in African conservation. *Remote Sensing in Ecology and Conservation*, 3(1), 7-20.
- De Waal, J.H., Chapman, A. & Kemp, J. (2017). Extreme 1-day rainfall distributions: analysing change in the Western Cape. *South African Journal of Science*, 113(7-8), 43-50.
- Descals, A., Szantoi, S., Beck, P.S.A., Brink, A. & Strobl, P. (2017). Automated detection of selective logging using smallsat imagery. *IEEE Geoscience and Remote Sensing Letters*, 14(2), 2180-2184.
- Donaldson, R. (2017). Managing national parks: counting visitors to the open-access urban National Park of Table Mountain. *Journal of Public Administration*, 52(1), 74-88.
- Dzumbira, W., Geyer, H.S. (Jnr) & Geyer, H.S. (2017). Measuring the spatial economic impact of the Maputo Development Corridor. *Development Southern Africa*, 34(5), 635-651.
- El-Sheikh, M.A., Thomas, J., Alfarhan, A.H., Alatar, A.A., Mayandy, S., Hennekens, S.M., Schaminee, J.H.J., Mucina, L. & Alansari, A.M. (2017). SaudiVeg ecoinformatics: aims, current status and perspectives. *Saudi Journal of Biological Sciences*, 24(2), 389-398.
- Engelbrecht, J., Theron, A., Vhengani, L. & Kemp, J. (2017). A simple normalized difference approach to burnt area mapping using multi-polarisation C-band SAR. *Remote Sensing*, 9(8), 1-13.
- Ferreira, S.L.A. & Hunter, C.A. (2017). Wine tourism development in South Africa: a geographical analysis. *Tourism Geographies*, 19(5), 676-698.
- Geyer, H. (2017). An impact evaluation of area-based interventions in Cape Town using multivariate regression analysis. *Town and Regional Planning*, 69(1), 17-25.
- Geyer, N.P. & Geyer, H.S. (2017). Counterurbanisation: South Africa in wider context. *Environment and Planning A*, 49(7), 1575-1593.
- Gilbertson, J.K., Kemp, J. & Van Niekerk, A. (2017). Effect of pan-sharpening multi-temporal Landsat 8 imagery for crop type differentiation using different classification techniques. *Computers and Electronics in Agriculture*, 134, 151-159.
- Gilbertson, J.K. & Van Niekerk, A. (2017). Value of dimensionality reduction for crop differentiation with multi-temporal imagery and machine learning. *Computers and Electronics in Agriculture*, 142(Part A), 50-58.
- Kalusová, V., Chytrý, M., Van Kleunen, M., Mucina, L., Dawson, W., Essl, F., Kreft, H., Pergl, J., Weigelt, P., Winter, M. & Pyšek, P. (2017). Naturalization of European plants on other continents: the role of donor habitats. *Proceedings of the National Academy of Sciences*, 114(52), 13756-13761.
- Mahlakanya, I. & Willemse, L. (2017). The changes in the quality of life of rented free-standing and backyard shack and backyard room tenants in the three Gauteng metropolitan municipalities. *Urban Forum*, 28(3), 293-312.

- Moolman, T. & Donaldson, R. (2017). Career paths of geography graduates. *South African Geographical Journal*, 99(3), 252-266.
- Mora, B. & Szantoi, S. (2017). Emerging approaches. In M. Gill, S. Szantoi, R. Jongman, S. Luque, B. Mora & M. Paganini (Eds.), *A sourcebook of methods and procedures for monitoring essential biodiversity variables in tropical forests with remote sensing* (pp. 183-222). GOF-C-GOLD land cover project office, Wageningen, Netherlands.
- Mucina, L. (2017). *Caroxylon* (*Chenopodiaceae s.str.*) in continental southern Africa and Madagascar: a preliminary nomenclatural synopsis and biogeographical considerations. *Phytotaxa*, 312(2), 151-178.
- Mucina, L., Bustamante-Sánchez, M.A., Pedra, B.D., Holmes, P.M., Keeler-Wolf, T., Armesto, J.J., Dobrowolski, M., Gaertner, M., Smith-Ramirez, C. & Vilagrosa, A. (2017). Ecological restoration in mediterranean-type shrublands and woodlands. In S.K. Allison & S.D. Murphy (Eds.), *Routledge handbook of ecological and environmental restoration* (pp. 173-196), Routledge, New York, USA.
- Münch, Z., Okoye, P.I., Gibson, L., Mantel, S. & Palmer, A. (2017). Characterizing degradation gradients through land cover change analysis in rural Eastern Cape, South Africa. *Geosciences*, 7(1), 1-22.
- Palmer, A.R., Finca, A., Mantel, S.K., Gwate, O., Münch, Z. & Gibson, L.A. (2017). Determining fPAR and leaf area index of several land cover classes in the Pot River and Tsitsa River catchments of the Eastern Cape, South Africa. *African Journal of Range and Forage Science*, 34(1), 33-37.
- Roux, D.J. & Geyer, H.S. (2017). Demographic transitions in South African cities: an analysis of household structures in the City of Tshwane. *Regional Science Policy and Practice*, 9(3), 165-181.
- Ruch, W. & Geyer, H.S. (Jnr) (2017). Public capital investment, economic growth and poverty reduction in South African municipalities. *Regional Science Policy and Practice*, 9(4), 269-284.
- Singh, V. & Van Eeden, A. (2017). Are the walls giving way to fences? Is racial integration within Kwadukuza municipality leading to income-based class segregation? *South African Journal of Geomatics*, 6(3), 461-476.
- Spocter, M. (2017). Citizen-driven privatisation of public space in Cape Town, South Africa. In A.A.M. da Fonseca, A. Puentes & B.E. Vilariño (Eds.), *Digital cities and spatial justice* (pp. 161-181). Urban Geography Commission, Salvador, Brazil.
- Spocter, M. (2017). Privatisation of municipal golf courses in small towns in the Western Cape, South Africa. *South African Geographical Journal*, 99(2), 113-133.
- Theron, A., Engelbrecht, J., Kemp, J., Kleynhans, W. & Turnbull, T. (2017). Detection of sinkhole precursors through SAR interferometry: radar and geological considerations. *IEEE Geoscience and Remote Sensing Letters*, 14(6), 871-875.
- Tuoane-Nkhasi, M. & Van Eeden, A. (2017). Spatial patterns and correlates of mortality due to selected non-communicable diseases among adults in South Africa, 2011. *GeoJournal*, 82(5), 1005-1034.
- Verhulp, J. & Van Niekerk, A. (2017). Transferability of decision trees for land cover classification in a heterogeneous area. *South African Journal of Geomatics*, 6(1), 30-46.
- Vermeulen, D. & Van Niekerk, A. (2017). Machine learning performance for predicting soil salinity using different combinations of geomorphometric covariates. *Geoderma*, 299, 1-12.

- Visser, G. (2017). Reflections on student tourism research in South Africa. *African Journal of Hospitality, Tourism and Leisure*, 6(2), 1-18.
- Visser, G., Erasmus, I. & Miller, M. (2017). Airbnb: the emergence of a new accommodation type in Cape Town, South Africa. *Tourism Review International*, 21(2), 151-168.
- Welman, L. & Ferreira, S.L.A. (2017). Sea Harvest back(fish)bone in Saldanha Bay's local and regional economy. *Local Economy*, 32(6), 487-504.
- Baffi, S., Turok, I. & Vacchiani-Marcuzzo, C. (2018). The South African urban system. In C. Rozenblat, D. Pumain & E. Velasquez (Eds.), *International and transnational perspectives on urban systems* (pp. 285-314). Springer, Singapore.
- Bordelon, L.A. & Ferreira, S.L.A. (2018). Going off-road: the Stellenbosch winelands as a mountain biking destination. *African Journal for Physical Activity and Health Sciences*, 24(4), 659-672.
- Brink, A.B., Schmidt, C. & Szantoi, Z. (2018). Introduction to remote sensing for conservation practitioners. In A.K. Leidner & G.M. Buchanan (eds.) *Satellite remote sensing for conservation action: case studies from aquatic and terrestrial ecosystems* (pp. 26-53). Cambridge University, United Kingdom.
- Buchanan, G., Beresford, A.E., Hebblewhite, M., Escobedo, F.J., De Klerk, H.M., Donald, P.F., Escribano, P., Koh, L.P., Martínez-López, J., Pettorelli, N., Skidmore, A.K., Szantoi, Z., Tabor, K., Wegmann, M. & Wich, S. (2018). Free satellite data key to conservation. *Science*, 361(6398), 139-140.
- De Klerk, H.M., Burgess, N.D. & Visser, V. (2018). Probabilistic description of vegetation ecotones using remote sensing. *Ecological Informatics*, 46, 125-132.
- De Smedt, P., Ottaviani, G., Wardell-Johnson, G., Sýkora, K.V. & Mucina, L. (2018). Habitat heterogeneity promotes intraspecific trait variability of shrub species in Australian granite inselbergs. *Folia Geobotanica*, 53(2), 133-145.
- Donaldson, R. (2018). *Small town tourism in South Africa*. Springer International Publishing, Cham.
- Ferreira, S. (2018). Tourism through the lens of a human geographer: a view from the South. *Tourism Geographies*, 20(1), 178-181.
- García, M.A., Nickrent, D.L. & Mucina, L. (2018). *Thesiumnautimontanum*, a new species of *thesiaceae* (*Santalales*) from South Africa. *Phytokeys*, 109, 41-51.
- Geyer, H.S. & Molayi, R.S.A. (2018). Job-employed resident imbalance and travel time in Gauteng: exploring the determinants of longer travel time. *Urban Forum*, 29(1), 33-50.
- Geyer, H., Ngidi, M. & Mans, G. (2018). Do social grants contribute to the jobless population growth in the former South African homelands? *Town and Regional Planning*, 72(1), 58-69.
- Gibson, L., Münch, Z., Palmer, A. & Mantel, S. (2018). Future land cover change scenarios in South African grasslands – implications of altered biophysical drivers on land management. *Heliyon*, 4(7), 1-35.
- Gwate, O., Mantel, S.K., Gibson, L.A., Münch, Z. & Palmer, A.R. (2018). Exploring dynamics of evapotranspiration in selected land cover classes in a sub-humid grassland: a case study in quaternary catchment S50E, South Africa. *Journal of Arid Environments*, 157, 66-76.
- Gwate, O., Mantel, S.K., Palmer, A.R., Gibson, L.A. & Münch, Z. (2018). Measuring and modelling evapotranspiration in a South African grassland: comparison of two improved Penman-Monteith formulations. *Water SA*, 44(3), 482-494.

- Hammer, T.A., Macintyre, P.D., Nge, F.J., Davis, R.W., Mucina, L. & Thiele, K.R. (2018). The noble and the exalted: a multidisciplinary approach to resolving a taxonomic controversy within *Ptilotus* (Amaranthaceae). *Australian Systematic Botany*, 31(3), 262-280.
- Harris, D. & Van Niekerk, A. (2018). Feature clustering and ranking for selecting stable features from high dimensional remotely sensed data. *International Journal of Remote Sensing*, 39(23), 8934-8949.
- Harris, D., Vlok, J. & Van Niekerk, A. (2018). Regional mapping of spekboom canopy cover using very high resolution aerial imagery. *Journal of Applied Remote Sensing*, 12(4), 046022-1-046022-22.
- Horn, A. (2018). Letting go: evaluating spatial outcomes and political decision-making heralding the termination of the urban edge in Cape Town, South Africa. *Land Use Policy*, 78, 176-184.
- Horn, A. & Van Eeden, A. (2018). The application of an urban sprawl index: comparing towns and cities in the Western Cape province, South Africa. *South African Journal of Geomatics*, 7(3), 257-267.
- Horn, A. & Van Eeden, A. (2018). Measuring sprawl in the Western Cape province, South Africa: an urban sprawl index for comparative purposes. *Regional Science Policy and Practice*, 10(1), 15-23.
- Kelly, P.J. & Geyer, H.S. (2018). The regulatory governance of retail electricity tariff setting in South Africa. *Regional Science Policy and Practice*, 10(3), 203-220.
- Kgantsi, E.M., Geyer, H.S. & Geyer, H.S. (Jnr) (2018). Intra-metropolitan corridor development in the City of Johannesburg and social welfare. *Regional Science Policy and Practice*, 10(2), 69-86.
- Lengyel, A., Landucci, F., Mucina, L., Tsakalos, J.L. & Botta-Dukat, Z. (2018). Joint optimization of cluster number and abundance transformation for obtaining effective vegetation classifications. *Journal of Vegetation Science*, 29(2), 336-347.
- Loggenberg, K., Strever, A., Greyling, B. & Poona, N. (2018). Modelling water stress in a Shiraz vineyard using hyperspectral imaging and machine learning. *Remote Sensing*, 10(2), 202.
- Lötter, M.C., Mucina, L., Tichý, L., Siebert, S.J. & Scott-Shaw, C.R. (2018). Classification of the Eastern scarp forests. In F. Pedrotti (Ed.), *Vegetation survey and classification of subtropical forests of southern Africa* (pp. 125-226). Springer, Switzerland.
- Lück-Vogel, M. & Mbolambi, C. (2018). Assessment of coastal Strandveld integrity using WorldView-2 imagery in False Bay, South Africa. *South African Journal of Botany*, 116, 150-157.
- Macintyre, P.D., Van Niekerk, A., Drobowski, M.P., Tsakalos, J.L. & Mucina, L. (2018). Impact of ecological redundancy on the performance of machine learning classifiers in vegetation mapping. *Ecology and Evolution*, 8(13), 6728-6737.
- Matevski, V., Carni, A., Custerevicka, R., Kostadinovski, M. & Mucina, L. (2018). Syntaxonomy and biogeography of dry grasslands on calcareous substrates in the central and southern Balkans. *Applied Vegetation Science*, 21(3), 488-513.
- Mokhele, M. & Geyer, H.S. (2018). A theoretical framework for airport-centric developments: the cases of OR Tambo and Cape Town International airports in South Africa. *African Journal of Science, Technology, Innovation and Development*, 10(4), 493-506.
- Mucina, L. (2018). Classifying subtropical forests of South Africa: rationale and objectives. In F. Pedrotti (Ed.), *Vegetation survey and classification of subtropical forests of southern Africa* (pp. 1-6). Springer, Switzerland.

- Mucina, L. (2018). Lessons for a forest vegetation survey. In F. Pedrotti (Ed.), *Vegetation survey and classification of subtropical forests of southern Africa* (pp. 227-236). Springer, Switzerland.
- Mucina, L. (2018). Vegetation of Brazilian campos rupestres on siliceous substrates and their global analogues. *Flora*, 238, 11-23.
- Mucina, L., Abbott, A. & Tichý, L. (2018). Classification of Pondalund Scarp Forests. In F. Pedrotti (Ed.), *Vegetation survey and classification of subtropical forests of southern Africa* (pp. 91-124). Springer, Switzerland.
- Mucina L., Dold, A.P., Tichý, L. & Van Niekerk, A. (2018). Classification of the Albany Coastal Forests. In F. Pedrotti (Ed.), *Vegetation survey and classification of subtropical forests of southern Africa* (pp. 59-90). Springer, Switzerland.
- Mucina, L., Podani, J. & Feoli, E. (2018). David W. Goodall (1914-2018): an ecologist of the century. *Community Ecology*, 19(1), 93-101.
- Mucina, L. & Tichý, L. (2018). Forest classification: Data-analytical experiments on vertical forest layering and flattened data. In F. Pedrotti (Ed.), *Vegetation survey and classification of subtropical forests of southern Africa* (pp. 47-57). Springer, Switzerland.
- Mwathunga, E. & Donaldson, R. (2018). Urban land contestations, challenges and planning strategies in Malawi's main urban centres. *Land Use Policy*, 77, 1-8.
- Ottaviani, G., Tsakalos, J.L., Keppel, G. & Mucina, L. (2018). Quantifying the effects of ecological constraints on trait expression using novel trait-gradient analysis parameters. *Ecology and Evolution*, 8(1), 435-440.
- Ritchie, M., Debba, P., Lück-Vogel, M. & Goodall, V. (2018). Assessment of accuracy: systematic reduction of training points for maximum likelihood classification and mixture discriminant analysis (Gaussian and t-distribution). *South African Journal of Geomatics (Formerly South African Journal of Surveying and Geo-Information)*, 7(2), 132-146.
- Ruch, W. & Geyer, H.S. (Jnr) (2018). Public capital investment, economic growth and poverty reduction in South African municipalities. *Regional Science Policy and Practice*, 9(4), 269-285.
- Smit, H.A.P. & Van der Merwe, J.H. (2018). Military environmental literacy in the South African Army. *Scientia Militaria: South African Journal of Military Studies*, 46(1), 59-77.
- Spocter, M. (2018). A toponymic investigation of South African gated communities. *South African Geographical Journal*, 100(3), 326-348.
- Strona, G., Stringer, S.D., Vieilledent, G., Szantoi, Z., Garcia-Ulloa, J. & Wich, S.A. (2018). Small room for compromise between oil palm cultivation and primate conservation in Africa. *Proceedings of the National Academy of Sciences of the United States of America*, 115(35), 8811-8816.
- Strona, G., Szantoi, Z. & Vieilledent, G. (2018). Oil palms and primates can hardly co-exist in Africa. *The Science Breaker – Science Meets Society*, 167, 1-2.
- Takawira-Nyenyanya, R., Mucina, L., Cardinal-McTeague, W.M. & Thiele, K.R. (2018). *Sansevieria* (Asparagaceae, Nolinoideae) is a herbaceous clade within *Dracaena*: inference from non-coding plastid and nuclear DNA sequence data. *Phytotaxa*, 376(6), 254-276.
- Tsakalos, J.L., Renton, M., Dobrowolski, M.P., Feoli, E., Macintyre, P.D., Veneklaas, E.J. & Mucina, L. (2018). Community patterns and environmental drivers in hyper-diverse kwongan scrub vegetation of Western Australia. *Applied Vegetation Science*, 21(4), 694-722.

- Tsendbazar, N.E., Herold, M., De Bruin, S., Lesiv, M., Fritz, S., Van De Kerchove, R., Buchhorn, M., Duerauer, M., Szantoi, Z. & Pekel, J.F. (2018). Developing and applying a multi-purpose land cover validation dataset for Africa. *Remote Sensing of Environment*, 219, 298-309.
- Wich, S., Koh, L.P., Szantoi, Z. (2018). Classifying Land Cover on Very High Resolution Drone-Acquired Orthomosaics. In R.L. Anemone & G.C. Conroy (Eds.), *New geospatial approaches to the anthropological sciences* (pp. 121-136). University of New Mexico Press, Sante Fe, Mexico.
- Willemse, L. (2018). A class-differentiated analysis of park use in Cape Town, South Africa. *GeoJournal*, 83(5), 915-934.
- Adeniyi, S.A., De Clercq, W.P. & Van Niekerk, A. (2019). Assessing the relationship between soil quality parameters of Nigerian alfisols and cocoa yield. *Agroforestry Systems*, 93, 1235-1250.
- Bangira, T., Alfieri, S.M., Menenti, M. & Van Niekerk, A. (2019). Comparing thresholding with machine learning classifiers for mapping complex water. *Remote Sensing*, 11(11), 1-21.
- Bekker, G.F.H.V.G., Addison, M.F., Addison, P. & Van Niekerk, A. (2019). Using machine learning to identify the geographical drivers of *Ceratitis capitata* trap catch in an agricultural landscape. *Computers and Electronics in Agriculture*, 162, 582-592.
- Bekker, G.F.H.V.G., Baard, N., Addison, M.F., Van Niekerk, A. & Addison, P. (2019). The area-wide spatio-temporal distribution of *Ceratitis capitata* (Wiedemann) (Diptera: Tephritidae) in a heterogenous fruit production region of the Western Cape, South Africa. *African Entomology*, 27(1), 97-113.
- Bordelon, L.A. & Ferreira, S.L.A. (2019). Mountain biking is for (white, wealthy, middle-aged) men: the Cape Epic mountain bike race. *Journal of Sport & Tourism*, 23(1), 41-59.
- Breytenbach, A. & Van Niekerk, A. (2019). Analysing DEM errors over an urban region across various scales with different elevation sources. *South African Geographical Journal*, 102(2), 133-169.
- Descals, A., Szantoi, Z., Meijaard, E., Sutikno, H., Rindanata, G. & Wich, S. (2019). Oil palm (*Elaeis guineensis*) mapping with details: smallholder versus industrial plantations and their extent in Riau, Sumatra. *Remote Sensing*, 11(21), 1-16.
- Donaldson, R. & Duckitt, H. (2019). Geographies and branding impacts of non-metropolitan music festivals in the Western Cape province of South Africa. In W. Cudny (Ed.), *Urban events, place branding and promotion – place event marketing* (pp. 141-161). Routledge, London.
- Donaldson, R. & Horn, A. (2019). Drakenstein: the shining pearl in the shadow of the Cape Town Metro. In L. Marais & V. Nel (Eds.), *Space and planning in secondary cities: reflections from South Africa* (pp. 41-66). Sunmedia, Bloemfontein.
- Donaldson, R., Hyman, G., Duceman, K., Kashiwagi, U., Lutz, V., Stola, I. & Zapata, I. (2019). Factors affecting the functionality of ward committees in heterogeneous communities in Cape Town. *Journal of Public Administration*, 54(2), 307-324.
- Du Plessis, D. (2019). Stellenbosch: change comes to a historical university town. In L. Marais & V. Nel (Eds.), *Space and planning in secondary cities: reflections from South Africa* (pp. 239-263). Sunmedia, Bloemfontein.
- Ferreira, S. (2019). Management of a mature destination. In M. Mkono (Ed.), *Positive tourism in Africa* (pp. 230-245). Routledge, London.

- Ferreira, S. & Beuster, L. (2019). Stellenbosch coffee society: Societal and locational preferences. *Urbani Izziv*, 30, 64-81.
- Geyer, H.S. (2019). Gateway cities, under-connected cities and largely disconnected cities in global value chains in sub-Saharan Africa. In S. Scholvin, A. Black, J. Diez & I. Turok (Eds.), *Value chains in sub-Saharan Africa* (pp. 221-234). Springer, Switzerland.
- Geyer, H.S. (2019). Global value chain participation and trade barriers in sub-Saharan Africa. In S. Scholvin, A. Black, J. Diez & I. Turok (Eds.), *Value chains in sub-Saharan Africa* (pp. 13-26). Springer, Switzerland.
- Geyer, H.S. (Jnr) (2019). Evaluating ecological, subcultural and political approaches to neighbourhood change and neighbourhood poverty. *Housing, Theory and Society*, 36(2), 189-205.
- Geyer, H.S. & Mosidi, N. (2019). Differential demographic transitions for women of different ethnicities in Gauteng, South Africa, 1996-2011. *Regional Science Policy and Practice*, 11(1), 159-171.
- Geyer, H. & Quin, L. (2019). Social diversity and modal choice strategies in mixed land-use development in South Africa. *South African Geographical Journal*, 101(1), 1-21.
- Gibson, L., Engelbrecht, J. & Rush, D. (2019). Detecting historic informal settlement fires with sentinel 1 and 2 satellite data – two case studies in Cape Town. *Fire Safety Journal*, 108, 1-15.
- Gigante, D., Carni, A., Bultmann, H., Fernandez-Gonzalez, F., Mucina, L., Theurillat, J. P. & Willner, W. (2019). Decision on nomenclatural proposals (1), (16) and (18). *Phytocoenologia*, 49(3), 309-310.
- Gwate, O., Mantel, S.K., Finca, A., Münch, Z. & Palmer, A.R. (2019). Estimating evapotranspiration in semi-arid rangelands: connecting reference to actual evapotranspiration and the role of soil evaporation. *African Journal of Range and Forage Science*, 36(1), 17-25.
- Hacking, C., Poona, N., Manzan, N. & Poblete, C. (2019). Investigating 2-D and 3-D proximal remote sensing techniques for vineyard yield estimation. *Sensors*, 19(17), 3652.
- Harris, D. & Van Niekerk, A. (2019). Radiometric homogenisation of aerial images by calibrating with satellite data. *International Journal of Remote Sensing*, 40(7), 2623-2647.
- Harris, L.R., Bessinger, M., Dayaram, A., Holness, S., Kirkman, S., Livingstone, T., Lombard, A.T., Lück-Vogel, M., Pfaff, M., Sink, K.J., Skowno, A.L. & Van Niekerk, L. (2019). Advancing land-sea integration for ecologically meaningful coastal conservation and management. *Biological Conservation*, 237, 81-89.
- Höpke, J., Mucina, L. & Albach, D.C. (2019). Phylogenetic and morphometric analysis of *Plantago* section *Coronopus* (*Plantaginaceae*). *Taxon*, 68(2), 315-339.
- Horn, A. (2019). The history of urban growth management in South Africa: tracking the origin and current status of urban edge policies in three metropolitan municipalities. *Planning Perspectives*, 34(6), 959-977.
- Jacklin, D.M., Brink, I.C. & De Waal, J. (2019). Laboratory method design for investigating the phytoremediation of polluted water. *Water SA*, 45(4), 608-615.
- Jakoet, A., Mucina, L. & Magee, A.R. (2019). The pseudo-radiate buttons: a taxonomic revision of the *Cotula turbinata* group (*Asteraceae*; *Anthemideae*) and the description of two new species. *South African Journal of Botany*, 121, 282-293.

- Kontsiwe, N. & Visser, G. (2019). Tourism as a vehicle for local economic development in small towns? When things go wrong: the case of Aliwal North, South Africa. *Geojournal of Tourism and Geosites*, 27(4), 1334-1346.
- Louw, G. & Van Niekerk, A. (2019). Object-based land surface segmentation scale optimisation: an ill-structured problem. *Geomorphology*, 327, 377-384.
- Magadzire, N., De Klerk, H.M., Esler, K.J. & Slingsby, J.A. (2019). Fire and life history affect the distribution of plant species in a biodiversity hotspot. *Diversity and Distributions*, 25(7), 1012-1023.
- Marais, L., Du Plessis, D.J., Nel, V. & Cloete, J. (2019). Secondary cities and spatial transformation in South Africa. In L. Marais & V. Nel (Eds.), *Space and planning in secondary cities: reflections from South Africa* (pp. 1-24). Sunmedia, Bloemfontein.
- Marceno, C., Guarino, R., Mucina, L., Biurrun, I., Deil, U., Shaltout, K., Finckh, M., Font, X. & Loidi, J. (2019). A formal classification of the *Lygeum spartum* vegetation of the Mediterranean region. *Applied Vegetation Science*, 22(4), 593-608.
- Martinez-Azorin, M., Crespo, M.B., Alonso-Vargas, M., Dold, A.P., Crouch, N.R. & Mucina, L. (2019). New combinations in the tribe *Urgineeae* (*Asparagaceae* subfam. *Scilloideae*) with comments on contrasting taxonomic treatments. *Phytotaxa*, 397(4), 291-299.
- Marx, J.T. & Van der Merwe, J.H. (2019). Spatial decision support for military integrated environmental management in South Africa. In H. Smit & J. Bezuidenhout (Eds.), *Contemporary military geosciences in South Africa* (pp. 81-111). African Sun Media, Stellenbosch.
- Mashimbye, Z.E., De Clercq, W.P. & Van Niekerk, A. (2019). Assessing the influence of DEM source on derived streamline and catchment boundary accuracy. *Water SA*, 45(4), 672-684.
- Mucina, L. (2019). Biome: evolution of a crucial ecological and biogeographical concept. *New Phytologist*, 222(1), 97-114.
- Mucina, L. & Hammer, T.A. (2019). *Limonium dagmarae* (*Plumbaginaceae*), a new species from Namaqualand coast, South Africa. *Phytotaxa*, 403(2), 71-85.
- Muller, S.J. & Van Niekerk, A. (2019). Within-field monitoring of secondary salinity in irrigated areas of the South. In R. Lal & B.A. Stewart (Eds.), *Soil degradation and restoration in Africa* (pp. 89-110). Taylor & Francis Group, Boca Raton.
- Münch, Z., Gibson, L. & Palmer, A. (2019). Monitoring effects of land cover change on biophysical drivers in rangelands using albedo. *Land*, 8(33), 1-25.
- Ottaviani, G., Keppel, G., Marcantonio, M., Mucina, L. & Wardell-Johnson, G. (2019). Woody species in resource-rich microrefugia of granite outcrops display unique functional signatures. *Austral Ecology*, 44, 575-580.
- Perold, R., Donaldson, R. & Devisch, O. (2019). Architecture in Southern African informal settlements: a contextually appropriate intervention. *Urbani Izziv*, 30, 96-111.
- Poona, N.K. & Ismail, R. (2019). Developing optimized spectral indices using machine learning to model *Fusarium circinatum* stress in *Pinus radiata* seedlings. *Journal of Applied Remote Sensing*, 13(3), 34515.
- Szantoi, S. & Strobl, P. (2019). Copernicus Sentinel-2 calibration and validation. *European Journal of Remote Sensing*, 52(1), 253-255.

- Tsakalos, J.L., Renton, M., Dobrowolski, M.P., Veneklaas, E.J., Macintyre, P.D., Broomfield, S.J. & Mucina, L. (2019). Composition and ecological drivers of the kwongan scrub and woodlands in the northern Swan Coastal Plain, Western Australia. *Austral Ecology*, 44, 906-916.
- Tsakalos, J.L., Renton, M., Riviera, F., Veneklaas, E.J., Dobrowolski, M.P. & Mucina, L. (2019). Trait-based formal definition of plant functional types and functional communities in the multi-species and multi-traits context. *Ecological Complexity*, 40(Part A), 100787.
- Visser, G. (2019). Gentrification in South African cities. In J. Knight & C.M. Rogerson (Eds.), *The geography of South Africa: contemporary changes and new directions* (pp. 195-202). Springer, Cham.
- Visser, G. (2019). Leisure tourism space and urban change: lessons from Cape Town and Stellenbosch to contemplate in urban South Africa. In R. Massey & A. Gunter (Eds.), *Urban geography in South Africa – perspectives and theory* (pp. 173-188). Springer, Cham.
- Visser, G. (2019). The challenges of tourism and urban economic (re)development in Southern cities. In D.K. Müller (Ed.), *A research agenda for tourism geographies* (pp. 107-116). Edward Elgar, Cheltenham.
- Visser, G. & Kisting, D. (2019). Studentification in Stellenbosch, South Africa. *Urbani Izziv*, 30, 158-177.
- Watkins, B. & Van Niekerk, A. (2019). Automating field boundary delineation with multi-temporal Sentinel-2 imagery. *Computers and Electronics in Agriculture*, 167, 105078.
- Watkins, B. & Van Niekerk, A. (2019). A comparison of object-based image analysis approaches for field boundary delineation using multi-temporal Sentinel-2 imagery. *Computers and Electronics in Agriculture*, 158, 294-302.

LIST OF Stellenbosch GEOGRAPHY EDITED COLLECTIONS BY YEAR, 1954-2019

- Serton, P. (Ed.) (1954). *The narrative and journal of Gerald McKiernan in South West Africa, 1874-1879*. The Van Riebeeck Society, Cape Town.
- Nel, A. & Jansen, J.P. (Eds.) (1961). *Aspects of recent African development in maps*. Society for the Teaching of Geography, Stellenbosch.
- Swanevelder, C.J. (Ed.) (1966). *Viewpoints on Africa*. Society for the Teaching of Geography, Stellenbosch.
- Serton, P., Raven-Hart, R., De Kock, W.J. & Raidt, E.H. (Eds.) (1971). *Description of the Cape of Good Hope with the matters concerning it: Amsterdam 1726*. Van Riebeeck Society, Cape Town.
- Barnard, W.S. & Nel, A. (Eds.) (1976). *Ons nuwe wêreld 9*. Maskew Miller, Kaapstad.
- Barnard, W.S. & Nel, A. (Eds.) (1981). *Ons nuwe wêreld 10*. Maskew Miller, Kaapstad.
- Barnard, W.S. (Ed.) (1985). *Kompas op Suidwes-Afrika/Namibië. Spesiale Publikasie 5*. Vereniging vir Geografie, Stellenbosch.
- Geyer, H.S. (Ed.) (2009). *International handbook of urban policy, volume 2: issues in the developed world*. Edward Elgar, Aldershot, Hants, United Kingdom.
- Zietsman, H.L. (Ed.) (2011). *Observations on environmental change in South Africa*. African Sun Media, Stellenbosch.

- Donaldson, R. & Marais, L. (Eds.). (2012). *Small town geographies in Africa: experiences from South Africa and elsewhere*. Nova Science Publishers, New York.
- Mucina, L. & Daniel, G. (Eds.) (2013). *Vegetation mapping in the Northern Kimberley, Western Australia*. Curtin University, Perth, Australia
- Visser, G. & Ferreira, S.L.A. (Eds.). (2013). *Tourism and crisis*. Routledge, London.
- Mucina, L., Rutherford, M.C., Powrie, L.W., Van Niekerk, A. & Van der Merwe, J.H. (Eds.) (2014). *Vegetation Field Atlas of the Continental South Africa, Lesotho and Swaziland (Strelitzia 33)*. South African National Biodiversity Institute, Pretoria, South Africa.
- Marais, L., Nel, E. & Donaldson, R. (Eds.). (2016). *Secondary cities and development*. Routledge, London.
- Visser, G., Donaldson, R. & Seethal, C. (Eds.). (2016). *The origin and growth of geography as a discipline at South African universities*. African Sun Media, Stellenbosch.

LIST OF GEOGRAPHY HONOURS RESEARCH PROJECTS BY YEAR, 1972-2019

- Booyesen, J.J. (1972). Morfometriese vergelyking van alluwiale waaiers in die Kaapse Plooiberggebied met verwysing na die in die Hexriviervallei en Jan Dutoitsrivier.
- De Waal, A.E.J. (1972). Diffusie van handelsbanke binne Suidwes Kaapland met inagneming van ekonomiese- en bevolkings-verspreidingstendense tot 1970.
- Dippenaar, F.J. (1972). Lokaliseringpatroon van baksteenmakerye in Wes-Kaapland.
- Ellis, B.D. (1973). Some aspects of population as pertaining to landownership in the Gamka irrigation area.
- Van der Merwe, J.H. (1974). Onderzoek na bewyse van eustatiese veranderinge van die kuslyn langs 'n deel (Hermanus tot Muizenberg) van Suidwes-Kaapland.
- Van der Merwe, L. (1974). Woonbuurtontwikkeling in die Stellenbosch, Somerset-Wes en Strandomgewing.
- Clarke, D. (1975). Comparative study of the intra-urban travelling time of certain Western Cape towns.
- Kriegler, G. (1975). Vergelyking van die voorsiening van groente aan die varsmark en verwerkingsfabrieke in Suidwes-Kaapland.
- Schneider, W. (1975). Persepsie van droogte deur die boerderygemeenskap in Suid-Afrika.
- Odendaal, J.P.leG. (1976). Studie van die pluimveebedryf in Suidwes-Kaapland: ligging, uitbreiding en organisasie.
- Scheepers, A.C.T. (1976). Sandinsette in die sandsee van die suidelike Namib.
- Skinner, W.C. (1976). Potensieële evapotranspirasie in Suid-Afrika en Suidwes Afrika.
- Van der Hyde, J.M. (1976). Persepsie van die plaaslike stedelike omgewing deur die Stellenboschstudente.
- Haldenwang, B. (1977). Insette en uitsette by vervaardiging in Stellenbosch.
- Heyns, C. (1977). Geomorfologiese geskiedenis van die Swakopduine veld.
- Marais, G.F. (1977). Geomorfologiese geskiedenis van die Koeëlbaai-omgewing.
- Meissner, A. (1977). Dagryery deur Stellenbosch-studente: omvang en evaluering.
- Van Wyk, J.M. (1977). Tyd-ruimtelike patrone van misdaad in die Stellenbosch-omgewing.

- Bekker, L. (1978). Brackenfell Hipermark: die effek daarvan op die koop- en verkooppatrone in Groter Kaapstad.
- De Beer, A.S.A. (1978). Ontleding van die sosio-ekonomiese en behuisings-verskille tussen eienaars en huurders in die suidelike voorstede van Kaapstad.
- Du Toit, P.W. (1978). Ontleding van talusmantels in die Jonkershoek-Banhoek-bergkompleks.
- Esterhuysen, T.J. (1978). Somerset-Wes as aftreepark vir bejaardes.
- Harrison, T.E. (1978). Analysis of the wind regime at Rooibank South West Africa/Namibia.
- Krige, D.S. (1978). Ontwerp en toets van 'n gebiedsklassifikasiekaart vir Stellenbosch en onmiddellike omgewing.
- Lategan, S. (1978). Verandering in die beddingmateriaal en beddingmateriaal langs die loop van die Eersterivier.
- Montgomery, A.D. (1978). Application of physical criteria in site selection for domestic waste disposal by sanitary landfill: greater Cape Town.
- Neethling, L. (1978). Funksie en sosio-ekonomiese struktuur van enkele Kleurling-nedersettings in die Stellenbosch omgewing.
- Van der Merwe, J.H.S. (1978). Ruimtelike variasie in die voorkoms en persepsie van die Suidoostewind in Stellenbosch.
- Winckler, T. (1978). Beskikbaarheid van openbare diensfasiliteite binne die sosio-ekonomiese statussones van die Kaapstad se munisipale gebied.
- Brand, C.A.J. (1979). Ontleding van enkele resente grondverskuiwings in die Suidwes-Kaapse plooiberge.
- Kotze, W. (1979). Reëvaldoeltreffendheid en weidingsnoodlysting in Suid-Afrika.
- Malan, J.N. (1979). Ruimtelike variasies in sosiale welstand van Stellenbosch se permanente bevolking.
- Marais, H.C. (1979). Herkomspatrone van Stellenbosch se toprugbyspelers (1973-1979).
- Sicker, E. (1979). Mineralogiese studie van Namibduinsande in oos-wes verbreiding ten einde moontlik verskeie provenansgebiede te identifiseer.
- Van der Merwe, W.J. (1979). Herkomspatrone van besoekers na Stellenbosch en omgewing.
- Van Zyl, G.S. (1979). Vergelyking van die stedelike aktiwiteitspatrone en omgewingskennis van dowe, blindes en normale skoliere in Worcester.
- Vlok, A.C. (1979). Vergelykende studie van die faktoriale ekologieë van die totale-, blanke- en kleurling/asiaat-bevolking in Kaapstad, 1970.
- Biesenbach, G.D. (1980). Vrygrond: anatomie van Kaapse plakkerskamp.
- Coetzee, E.A. (1980). Ruimtelike patrone van stedelike geraas in Goodwood, Kaapstad.
- Frauenstein, G.G. (1980). Relationship between rainfall and drainage characteristics on a section of the Beaufort series.
- Johnston, P.A. (1980). Multivariate climate classification of Southern Africa.
- Jordaan, G. (1980). Sosio-ekonomiese klassifikasie van dorpe in 'n gedeelte van Suidwes-Kaapland.
- Lombaard, P. (1980). Benuttingspatrone van skole, poskantore en biblioteke in die Strand en Somerset-Wes.
- Loubser, M.H. (1980). Geomorfologiese geskiedenis van die Dieprivier.

- Louw, C.B. (1980). Geomorfologiese ondersoek van Simonsberg.
- Louw, J.P.S. (1980). Goue Akker: 'n nuwe tendens in die SSK van Kaapstad?
- Marais, C.P.F. (1980). Afstandsverwantskap tussen woon- en werkplek in Kaapstad.
- Neppen, H. (1980). Inkoopgedrag met betrekking tot verbruikers- en duursame goedere: 'n gevallestudie van die Strand.
- Viljoen, C.A. (1980). Comparison of atmospheric pollution potential (APP) and observed pollution in Cape Town.
- Vos, E. (1980). Akademiese personeel skakeling tussen universiteite in Suid-Afrika: 'n ruimtelike beskouing van kwalifikasies.
- Blount, B.W. (1981). Verandering in die tyd-ruimtelike struktuur van die Suid-Afrikaanse binnelandse lugdiensnetwerk.
- Calitz, M.C. (1981). Nuwe landboustreeksindeling van Suid Afrika.
- Hanekom, J.H. (1981). Moontlikehede vir kleinhandelsdesentralisasie in die blanke-woonbuurte van Stellenbosch.
- Herbert, W. (1981). Strandsedimentverplasing in die Strand tydens die somer en herfsseisoene.
- Joubert, D. (1981). Model van intra-stedelike residensiële verskuiwing in Kaapstad.
- Loftus, J.H. (1981). Openbare vervoer in Kaapstad: 'n vergelyking van bedienings-beskikbaarheid en woongebiedkenmerke.
- Lückhoff, A.H. (1981). Lugbesoedelingsiklusse in Kaapstad.
- Mostert, A.M. (1981). Morfologie en morfogenese van die Paarlbergkoepels.
- Nieuwoudt, D. (1981). Aspekte van stedelike klimaat in Stellenbosch.
- O'Callaghan, P. (1981). Periodieke markte in Stellenbosch.
- Smit, J.P. (1981). Wind en sagtevrugteboerdery in die Franschoek en Elgin-omgewings.
- Smit, T. (1981). Effek van stedelike uitbreiding op 'n landelike omgewing: die Constantiakom.
- Spies, M. (1981). Optimum toekomstige dorpsuitbreidingsareas van Stellenbosch.
- Van Rhyen, D. (1981). Veranderinge in die gebruik van grond in Stellenbosch distrik 1953-1977.
- Botha, J.P. (1982). Afdelingsraadsetel vir die Swartland.
- Harvey, K.R. (1982). Private university students in Stellenbosch: residential patterns, circumstances and impact.
- Kruger, A.J.L. (1982). Adolessenteseuns en persepsie van intrastedelike afstand.
- Kruger, J.H. (1982). Ruimtelike struktuur van groothandel in die Kaapse munisipale gebied.
- Terblanche, P. (1982). Invloed van die Groepsgebiedewet op die stedelike struktuur van Stellenbosch.
- Bekker, S.F. (1983). Universiteit van Stellenbosch as genereerder van kwaternêre ekonomiese aktiwiteite.
- Cilliers, N.A. (1983). Ruimtelike beklemtoning in enkele Suid-Afrikaanse koerante.
- Cloete, D.J. (1983). Ruimtelike aspekte van woonhuisverkope in Stellenbosch, 1979-1982.
- Hornickel, K. (1983). Oppervlaktemperatuurveld van die Paarlvallei.
- Köstens, H.G. (1983). Residensiële vestigingspatrone van Stellenbosch: universiteitspersoneel.
- Kotze, N.J. (1983). Leningpatrone van 'n bouvereniging in Stellenbosch.

- Kruger, G.K. (1983). Deeltydse boerdery in die Stellenbosch-omgewing.
- Lubbe, A. (1983). Kleinboothawe vir die Strand-Gordonsbaaigebied.
- Smit, H.A.P. (1983). Indringing van uitheemse plante teen die hange van Stellenboschberg.
- Smith, A.L. (1983). Woning-werkritpatrone van huishoudingshoofde in Macassar.
- Steenkamp, W.J. (1983). Langenhoven se Klein-Karoo.
- Trümer, I. (1983). Bioklimatologiese klassifikasie van Suid-Afrika.
- Barrie, E.L. (1984). Wind potential in Southern Africa: power and force.
- Brand, J. (1984). Die veranderende dorpsbeeld van Stellenbosch.
- De Wet, L. (1984). Origin and geochronology of sandsheets around Sandberg, district Robertson.
- Heyns, A. (1984). Stedelike aktiwiteitspatrone van blanke getroude vroue in Stellenbosch.
- Huysamer, P.A. (1984). Microclimate of a building in autumn.
- Pienaar, J.G. (1984). Omgewingsbeelde vir die bevordering van streeks-ontwikkeling in Wes-Kaapland.
- Snyman, G. (1984). Aspekte van besoedeling in die Eersteriviersisteem.
- Snyman, N.M. (1984). Die ruimtelike analise van padverkeersongelukke in die stedelike gebied van Stellenbosch.
- Van der Vyfer, M.J. (1984). Ruimtelike organisasie van blanke NG kerkgemeentes in Stellenbosch.
- Van Koenen, A. (1984). Landbougebied van Philippi as konfliktsone binne die landelik-stedelike oorgangsones van Kaapstad.
- Baxter, D. (1985). Newspaper perception of South Africa's regional political environment, July 1944-June 1985.
- Bestbier, H.J. (1985). Ruimtelike patrone van die Bestbier-familie.
- Du Toit, G. (1985). Dorpsplase: unieke bate of anachronistiese hindernis?
- Engels, W.H. (1985). Kusmorfologie: veranderinge in die gebied Danger Point tot Kaap Agulhas.
- Müller, H. (1985). Geografiese ontleding van fertiliteit en moraliteit in Suidwes-Kaapland.
- Nigrini, J.J. (1985). Ondersoek na die stroomsnelhede in die Eersterivier.
- Reyneke, H.J. (1985). Funksionele struktuur binne die sentrale sakekern van Stellenbosch.
- Smith, A.D. (1985). Gebruik van kaarte in advertensies.
- Snyman, N.M. (1985). Ruimtelike analise van motorongelukke in die stedelike gebied van Stellenbosch.
- Spamer, D.J. (1985). Drie letterkundige landskappe van die Karoo: CJ Langenhoven, Pauline Smith en Olive Schreiner.
- Van Schoor, N.C.E. (1985). Handleiding by die saamstel van werkstukke.
- Baxter, J. (1986). Negative externality fields of Stellenbosch University sport stadiums.
- Boshoff, L.J. (1986). Eustatiese veranderings langs die Kaapse Skiereiland.
- Lochner, F.C. (1986). LANDSAT-beeldprosessering met behulp van die PIPS-stelsel: 'n bodembedekkingskaart van die Stellenbosch omgewing.
- Louw, C. (1986). Tydruimtelike analise van bergwindtoestande op die kusgebiede vanaf Walvisbaai tot P.E. en die aangrensende binneland.
- Rautenbach, D.J.S. (1986). Boland as volkstreek.

- Smit, P. (1986). Stedelike houdings by geselekteerde bewoners van Kaapstad.
- Truter, D.J. (1986). Verbreding van sagtevrugte in die Grabouw-Elgin-omgewing: 'n hulpbronstudie.
- Van der Berg, D.J. (1986). Geskiedenis van grondgebruik in die Kleinriviersberge.
- Van Rooyen, E. (1986). Historiese verbreding en hervestiging van die Kaapse bergkwagga in die Kaapprovinsie.
- Van Wyk, H.L. (1986). Ondersoek na die geskiktheid en omvang van die Kuilsrivier-Penhill-afsetting vir glasproduksie.
- Dippenaar, S.C. (1987). Strookverbouing in die suidelike Sandveld.
- Du Plessis, D.C. (1987). Onderlinge vergelyking van die granietlandskappe in die Suidwes-Kaapse kusvoorland.
- Rootman, A. (1987). Haelrisiko vir landbougewasse in Transvaal.
- Swart, P. (1987). Gentrifikasie in Stellenbosch: 'n mite of 'n werklikheid?
- Basson, M.G. (1988). Tydruimtelike patrone van besoekers aan Stellenbosch.
- Bester, R. (1988). Ruimtelike verbreding en verbandhoudende kenmerke van heuweltjies in die Swartland.
- Brand, J. (1988). Veranderende dorpsbeeld van Stellenbosch.
- Burger, G.W. (1988). Gronde van die Eersterivieropvangsgebied en die potensiaal daarvan in die verbouing van meerjarige gewasse.
- Christians, D. (1988). Kleinhandel in die sentrale sakekern van Stellenbosch: liggingspatrone, vestigingsbesluite en kleinhandelskakels.
- De Clerq, W.P. (1988). Water- en soutbalans van 'n drupbesproeide landskap as 'n komponent van 'n groter besproeiingskema.
- Führmann, A. (1988). Relationship between climatological comfort zones and ischaemic heart disease.
- Grobler, P.P. (1988). Tydruimtelike studie van daaglikse studentevoetgangerbeweging op die sentrale Stellenbosch Universiteitskampus.
- Haasbroek, F. (1988). Ligging van restaurante in Stellenbosch en omgewing.
- Kritzinger, J. (1988). Metropolitaanse groei in die RSA: 1951-1980.
- Le Roux, P.J. (1988). Tydruimtelike waterkwaliteit in die Eersterivier.
- Le Roux, S.A. (1988). Toekomstige uitbreiding van Stellenbosch: moontlikhede en vooruitsigte.
- Lourens, E. (1988). Oseaanfronte en opstuwing in Valsbaai.
- Munro, J. (1988). Geomorfolgiese verandering van die Walkerbaaikuslyn.
- Niehaus, C.C. (1988). Tydruimtelike aktiwiteitspatrone van blankes in die Paarl.
- Olden, P. (1988). Filamentary warm water intrusions into the South East Atlantic Ocean.
- Olivier, A.P. (1988). Koste van stedelike ontwikkeling in verskillende grootte-orde kerne in Suidwes-Kaapland.
- Roos, G.J. (1988). Voorsiening van openbare oopruimtes vir buitelugontspanning in geselekteerde woonbuurte van Stellenbosch.
- Schutz, W. (1988). Tehuse vir bejaardes in die Strand: 'n geografiese perspektief.
- Swart, G.P. (1988). Geografiese Inligtingstelsel (GIS) vir die Stellenbosch Munisipaliteit.

- Van As, M. (1988). Ruimtelike verbreiding van longkanker onder die blanke en Kleurlingbevolking in die Kaapprovinsie: 1984.
- Bührmann, M. (1989). Geografie van stedelike kinders in Stellenbosch.
- Charlton, M.A. (1989). Influence of Indian Ocean temperature and pressure fields on Natal rainfall 1976-1985.
- Dreyer, E.J. (1989). Streekswoonvoorkeure van Suid-Afrikaanse studente.
- Du Rand, R. (1989). Meergesinbehuising in Stellenbosch.
- Geldenhuis, C.W. (1989). Berggrivierterrasse en hul benutting.
- Heunis, J.C. (1989). Verwantskappe tussen temperatuur en mortaliteit in die Kaapse metropolitaanse gebied.
- Latagan, S.C. (1989). Evolusie van grondgebruik in die Piketberggebied.
- Needham, L. (1989). Vlooi- en handwerkmarkte in groter Kaapstad.
- Ritter, A. (1989). Lugbesoedelingspotensiaal in die Strand en Somerset-Wes gebied.
- Scriba, H.M. (1989). Vleisinkoopedrag in Stellenbosch: 'n ruimtelike en sosio-ekonomiese analise.
- Van der Bank, J.J. (1989). Ligging en algemene funksionering van landelike padstalletjies in Suidwes-Kaapland.
- Van Rooyen, C.H. (1989). Ruimtelike patrone van boomsamestelling langs Stellenbosch strate.
- Williams, J.H. (1989). Woonbuurtkwaliteit en toewysing van owerheidsfondse in die Paarl.
- Bentley, K.M. (1990). Radiometric analysis of satellite images: Theewaterskloofdam area.
- Bucchianeri, J.S. (1990). Guidelines for the design and selection of South African school atlases.
- Davids, A.S. (1990). Evaluering van die hospitaaldiensnetwerk van Suider-Afrika.
- Donaldson, S.E. (1990). Kaya Mandi: eksterne skakeling van 'n swart stedelike gemeenskap.
- Grobler, E.J.M. (1990). Moontlike voorkomsgebiede van malaria teen die middel van die 21ste eeu in Suid-Afrika.
- Koch, J.M. (1990). Herstrukturering van die landbou in die Swartland: geografiese grondslae en implikasies.
- Kriel, G. (1990). Hoofpad 171: geskiedenis, beplanning en plaaslike politiek.
- Louw, D.J. (1990). Menslike wysiging van die Valsbaaikuslyn en die geomorfologiese gevolge daarvan.
- Müller, J.J. (1990). Potensiële waarde van 'n geografiese inligtingstelsel vir die Wes-Kaapse Streeksdiensteraad.
- Petterson, W.L. (1990). Olive industry in the South Western Cape.
- Strydom, W.W. (1990). Hoofroete van die Hottentots-Holland seksie van die Boland voetslaanpad: beskrywing, evaluering en omgewingsimpak.
- Thom, G.Q. (1990). Aankoop van wingerd- en vrugteplase deur buitelanders in 'n gedeelte van die Boland.
- VanderMerwe, C.P. (1990). Geskiedenis en grondgebruik van die Franschoekpasomgewing.
- Van der Walt, E. (1990). Eienskappe en verbreiding van kussande vanaf Melkbos tot Saldanha.
- Van Gend, S.A. (1990). Pulmonêre-siekte-mortaliteit in die Kaapse Metropolitaanse gebied.

- Van Vuuren, K. (1990). Warmwaterbronne van Suidwes-Kaapland: hulle verbreiding, eienskappe en benutting.
- Visser, D.deV.B. (1990). Formulering van 'n bewaringstrategie vir Robertson.
- Williams, A.H.M. (1990). Kompetisie tussen kettingwinkelgroepe in die Kaapse Metropolitaanse gebied: 'n tyd-ruimtelike perspektief.
- Anderson, M. (1991). Morphological and hydrological characteristics of the Berg River estuary: a geographical perspective.
- Bucchianeri, E.R. (1991). Evaluering van Geografie-handboeke vir matriekleerlinge.
- Carstens, J.E. (1991). Aard en omvang van geografiese aksieruimtes van jagters.
- Fourie, P. (1991). Openbare houding teenoor 'n bevolkingsensus: 'n gevallestudie in Stellenbosch en Kaya Mandi.
- Greef, R.S. (1991). Regional geomorphology of the Cedarberg.
- Horn, J.W. (1991). Geografie van enkelouergesinne in Kaapstad.
- Langenhoven, M. (1991). Nie in my omgewing: inwonerdeelname en houdings teenoor ontwikkelingsprojekte in Stellenbosch.
- Lerwick, L.C. (1991). Identifisering van terreine vir informele behuising in die Kaapse skiereiland.
- Loedolff, A. (1991). Oopstelling van skole in Stellenbosch: 'n ruimtelike ontleding.
- Louw, J.J. (1991). Verbreiding en landbourol van plaasdamme in geselekteerde opvanggebiede in die Boland.
- Lubbe, A.P. (1991). Ruimtelike kenmerke en funksionering van munisipale meentgronde in Suidwes-Kaapland.
- Meyer, K.C. (1991). Identifisering van besproeide oppervlaktes in 'n diverse landbou-omgewing m.b.v. satellietafstandswaarneming.
- Nortjé, G. (1991). Voorkeurliggings vir algemene praktisyns in die Kaapstad metropolitaanse gebied.
- Rossouw, J.P. (1991). Aantreklikheid van die Suidwes-Kaapse landelike kultuurlandskap.
- Schutte, W. (1991). Gedenkarterefakte in die Suidwes-Kaap: 'n multidimensionele evaluering.
- Van Sitters, J.D. (1991). Woonpatrone in die Paarl in die nagroepsgebiede era.
- Van Wyk, J. (1991). Misstuiwels as 'n addisionele waterbron: bepaling van optimale opvanggebiede in die heeljaar- en winterreënval-streke.
- Young, C.A. (1991). Violent crime in the Cape Peninsula: some geographical and meteorological aspects.
- Du Toit, S. (1992). Geomorfologiese eienskappe van puinmateriaal tussen Gordonsbaai en Rooiels.
- Geldenhuis, J.E. (1992). Bo-Kaap: die geografie van 'n etniese enklave in Kaapstad.
- Penderis, S.P. (1992). Geographical perspective of the migrant labour hostels in Kaya Mandi.
- Pienaar, M.E. (1992). Silkkreet geomorfologie en paleo-vlakke in geselekteerde gebiede van Suid-Kaapland.
- Rocher, M. (1992). Opdatering van die Suid-Afrikaanse 1:50 000 stedelike kaartvel met behulp van SPOT-multispektrale satellietdata.
- Scheidegger, R. (1992). Spatial management of local tourism – a GIS for the Stellenbosch district.

- Slabbert, M.C. (1992). Tulbagh-aardbewing, Laingsburgvloed en Domiona-oorstromings: 'n ruimtelike vergelyking in nuusbladberiggewing.
- Steyn, M. (1992). Sosio-ekonomiese verskille in residensiële waterverbruik op Stellenbosch.
- Van der Merwe, E. (1992). Interaksie tussen wind en hoë geboue in die strand: 'n impakstudie.
- Van der Merwe, R. (1992). Plekbeelde en bemarkingstrategieë vir residensiële eiendomsontwikkelings in die Kaapse metropool.
- Van der Merwe, W.J. (1992). Byeboerdery in Wes-Kaapland.
- Walters, M.M. (1992). Geografiese perspektief op die voorkoms en verbreiding van bronchitis in Suid-Afrika.
- Werge, J. (1992). Civic Associations in the Cape Metropolitan area: the geography of an urban social movement.
- Wessels, S. (1992). Tegnopark Stellenbosch: doodgeborene of streekseonomiese groeistimulus.
- Beukes, L.D. (1993). Spaza-winkels in Kaya Mandi: funksionering, ligging en vooruitsig.
- Ferreira, S. (1993). Kaapstad se bod om die Olimpiese Spele 2004: gereedheidsaspekte en betrokkenheidskomponente uit die wynlandstreek.
- Kloppers, M. (1993). Geografiese horison van laerskoolkinders.
- Rosenberg, S.A. (1993). Ontstaan van die Ysterfontein-duin korridor.
- Schmidt, K.S. (1993). Heatwaves in the South Western Cape.
- Stadler, W. (1993). Addisionele gebiede vir hopverbouing in Suid-Afrika: 'n verkennende studie.
- Van Niekerk, L.O. (1993). Sosiaal-demografiese woonbuurtverandering in Stellenbosch.
- Van Zyl, A.P. (1993). Plaaseienaarskap-verwisseling in die Franschoekvallei (1983-1992).
- Vermaak, R. (1993). Ruimtelike effektiwiteit van brandweerdienste op Stellenbosch.
- Cronjé, H. (1994). Straat- en woonbuurtname in Stellenbosch: implikasies vir 'n post-apartheid stedelike struktuur.
- Deal, D. (1994). Landbou-chemiese besoedeling in die Veldwachtersrivier-opvanggebied.
- Dorfling, J. (1994). Optimum spektrale bandkombinasies en multitemporele multispektrale SPOT satellietdata: 'n toepassing in landbougewas-identifikasie in die Bo-Breëriviergebied.
- King, G.R. (1994). Windy weather conditions and tourism along the South Western Cape coast.
- Moss, D. (1994). Impak van verstedeliking op landbou in die Stellenbosch-distrik.
- Neethling, J.P.N. (1994). Evolusie van Valsbaaikusoorde.
- Potgieter, J.-M. (1994). Alternatiewe ligging vir 'n skietbaan vir Stellenbosch en omgewing: studie in stedelike ontwikkeling en buiteligreksie.
- Smit, L. (1994). Ruimtelike effektiwiteit van trauma-diensgebiede in die Wes-Kaapse platteland.
- Steyl, I. (1994). Modelling van die tyd-ruimtelike veranderinge in die oppervlakhidrologie van die Veldwachtersrivier-opvanggebied.
- Tait, G. (1994). Meting, kwantifisering en kwalifisering van visuele landskappe: 'n toepassing van die Veldwachtersriviervallei.
- Uys, J. (1994). Informele stedelike landbou: owerheidspersepsies en gevallestudies in die groter Kaapstad-omgewing.

- Visser, G.E. (1994). Gastehuse: 'n nuwe element in die toeristemark van die Kaapse metropolitaanse soomgebied.
- Bosman, B. (1995). Interaksie tussen Stellenbosch en die Kaapstad-Metropool.
- Kempthorne, A.J. (1995). Bottled water in Stellenbosch: a geographical perspective.
- Kunneke, M.M. (1995). Afvalproduksie uit die wynmaakproses in Stellenbosch en omgewing.
- Oelofse, M.-L. (1995). Psigiatriese siektes in die Wes-Kaapse platteland: ruimtelike verbreiding en diensverskaffing.
- Rehder, A. (1995). Resente tyd-ruimtelike patrone van restaurante in Stellenbosch en omgewing.
- Rush, K.E. (1995). Spatial patterns of domestic water shortage on the South African West Coast.
- Steyn, E.C. (1995). Vestiging van kleinboere op staatsgronde in die Wes-Kaap: 'n geografiese perspektief.
- Van Niekerk, A. (1995). Uitgebreide toepassing van geografiese inligtingstelsels vir hidrologiese modellering: die Kuilsrivierbekken.
- De Villiers, W. (1996). Geografie van godsdiens: ruimtelike patrone van die NG-Kerk in 'n veranderende Stellenbosch.
- Driver, A.L. (1996). Potential contributions of the olive industry to regional development in the Western Cape Province.
- Du Preez, C. & Kriel, L. (1996). Stedelik-geografiese profiel van straatkinders in sentrale Stellenbosch.
- Engel, B.S.M. (1996). Vergelykende profiele en plekkarakter van die woonbuurte Welgemoed en Rustdal in Kaapstad.
- Haupt, M. (1996). Geographical perspective of selected home-based enterprises in parts of Mitchell's Plain.
- James, A.J. & Kotze, W.S. (1996). Ontwikkelingspotensiaal vir wildreservate in die Wes-Kaap.
- Jooste, K.M. (1996). Geohydrology and spatial extent of the Atlantis aquifer.
- Kiangi, A.N. (1996). Impact of the Tyger Valley Centre on surrounding residential areas.
- Ramakoae, M.E. (1996). Integrated solid waste management in Stellenbosch and the selection of a suitable landfill site.
- Saayman, E. (1996). Toeganklikheid: Universiteit van Stellenbosch kampus en rolstoelgebruikers.
- Sinclair, D.A. (1996). Extent and management of invasive alien vegetation in the Stellenbosch area.
- Swanepoel, P.A. (1996). Ruimtelik-vergelykende ontleding van eiendomswaardasie en verkoopswaardes in Stellenbosch.
- Van der Walt, H. (1996). Impak van afvalproduseerders op die waterkwaliteit van die Bergrivier.
- Venter, A. (1996). Voorsiening en benutting van sokker- en netbalfasiliteite in Stellenbosch.
- Von Holdt, D. (1996). Comparative study of the seasonality problem in Sedgfield and Knysna.

- Wentzel, J.C. (1996). Taxidienste in en tussen plattelandse dorpe: die Robertson-Montagukorridor.
- Boon, D.F. (1997). Jonkershoek as rekreasielhulpbron: benuttingspatrone en gebruikerspersepsies.
- Botha, A. (1997). Botmaskop bergfietsroete: fisiese impak op die omgewing.
- De Witt, E.A. & De Meyer, M. (1997). Die impak van Somerset Mall op die kleinhandelspatrone van Stellenbosch, Strand en Somerset-Wes.
- Heunis, S. (1997). Tyd-ruimtelike patrone van tuberkulose in Ravensmead en Uitsig, Kaapstad.
- Joubert, H. (1997). Die rol van geografie in die aanwending van GIS in Kaapstad.
- McKechnie, J.J. (1997). Diere in stede: Stellenbosch onder die vergrootglas.
- Mitchell, I. (1997). Vredenheim picnic site: a GIS-aided terrain analysis for optimal site selection.
- Morakeng, P. (1997). The geography of formal day-care centres for pre-school children in Stellenbosch.
- Ncholu, M. (1997). Traffic noise as an environmental nuisance in Stellenbosch.
- Ntene, M. (1997). The extension of the Devon Valley refuse site: an environmental impact assessment.
- Robertson, R. (1997). Fabriekswinkels in die Kaapse Binne Metropolitaanse Streek: 'n verkennende stedelik-geografiese studie.
- Smit, W.J. (1997). Die afbakening van staproetekorridors met behulp van GIS.
- Van der Merwe, N.G. (1997). Die geografie van gholffasiliteite in die soomgebied van die Kaapse metropool.
- Wildemans, W. (1997). Stellenbosch Gründig Bergfietskampioen-skappe: openbare steurnis of internasionale treffer?
- Akinnusi, O.A. (1998). Invasion of low-cost housing developments – problems on the Cape Flats.
- Crafford, J.M. (1998). Konferensievergaderplekke in die Kaapse Buite-Metropolitaanse Streek: 'n geografiese studie.
- Dekker, J. (1998). Stedelike uitbreidingspotensiaal in die Tygerberg-heuwels.
- Hahn, M. (1998). Natural and forestry areas around Stellenbosch: perceptions and proposals.
- Matthys, C.A. (1998). The management and supply of domestic water to the urban area of Kenhardt.
- Mocke, C.A. (1998). Die monitering van stedelike groei deur middel van afstandswaarneming: Kaapse Metropolitaanse Gebied.
- Mohamed, A. (1998). GIS-aided evaluation and management of invasive alien plants in the Jonkershoek Valley, Stellenbosch.
- Nel, L. (1998). Sensitiewe area-identifisering in biosfeerreservate: Kogelberg gevallestudie.
- Semoli, B.P. (1998). Participation in recycling of household waste in Stellenbosch.
- Temple, M. (1998). Environmental monitoring by remote sensing of agricultural expansion in the Bottelary Hills.
- Terrapon, H.M.E. (1998). Development and application of GIS for determining optimal routes for ambulances in Stellenbosch.

- Van Lill, S.W.P. (1998). Afvalraping in Stellenbosch as oorlewingstrategie.
- Wambugu, J. (1998). Population density change in the Cape Metropolitan Area: 1980-1991.
- Angula, M. (1999). Informal economic activities in Kayamandi: a post-apartheid analysis.
- Barry, M.W. (1999). A comparative environmental impact study: Koeberg and Thyspunt nuclear power plants.
- Behm, R.A. (1999). The perceived demographic, economic and environmental impacts of the N2 re-alignment through the Helderberg Basin.
- Chandler, N.A. (1999). Calculation of the ecological reserve for the Eerste River using the Planning Estimate method.
- Combrinck, A.P. (1999). The journey to death on the R44: a time-spatial analysis.
- Ford, F.Y. (1999). Bloubessieverbouingspotensiaal in die Wes-Kaap.
- Koegelenberg, A. (1999). Ecotourism resource base of the Western Cape mountain areas: the Montagu region.
- Matern, C. (1999). The Greater Hermanus Water Conservation Programme: an evaluation.
- Nel, A. (1999). Geographical perspectives on urban South Africa in cinema.
- Nel, G. (1999). Grondgebruikverandering van die Riviersonder-endvallei sedert voltooiing van die Theewaters-kloofdam.
- Richards, L.T. (1999). Wetland demarcation, classification and change along central highland watersheds in the Western Cape.
- Schonegevel, L. (1999). Using the Internet to communicate environmental issues: a case study of the Rietvlei Wetland Reserve.
- Sutton, T.P. (1999). An application of GARP modelling for predicting the distribution of three lower vertebrate species in Western Cape Province ...
- Van Wyk, F.C. (1999). Die Langebaanweg- en Elandsfontyn-akwifere as natuurlike hulpbronne: struktuurkenmerke en benuttingsimpakte.
- Van Zyl, N.M. (1999). Die ontwikkeling en beoordeling van 'n GIS multimedia-staproetegids: Jonkershoek gevallestudie.
- Wielenga, R. (1999). The bicycle as an urban transport mode in Stellenbosch: a contribution to sustainable transport?
- Davids, A.J. (2000). Housing the elderly: a comparison of rural and urban areas in the Western Cape, South Africa.
- Du Plessis, I. (2000). The influence of environmental characters on the quality of Rooibos Tea (*Aspalathus linearis*) in the Western Cape.
- Du Toit, T.F. (2000). Tracing the tracks. Animals and accidents: Spatio-temporal patterns in the Eastern Cape.
- Fourie, R. (2000). Agritourism – Potential and perceptions in the Clanwilliam District.
- Heyns, N.R. (2000). The agricultural and human impact on land use: the Central Koue Bokkeveld.
- Kliem, G. (2000). Employment and unemployment in South Africa: the Magisterial Districts in 1996.
- Maruping, K.J. (2000). Determining waste transfer station locations in rural Stellenbosch using multicriteria evaluation.
- Morojele, N.I. (2000). Intra-urban inequalities in levels of service provision in the Cape Metropolitan area.

- Morolong, L. (2000). Mass migration as an agent and response to change during the post-apartheid era.
- Mulaudzi, N.D. (2000). Waste management in rural Stellenbosch: disposal practices.
- Münch, Z. (2000). Tuberculosis transmission patterns in a high-incidence area.
- Nghulele, S.R. (2000). Out-migration patterns in the Republic of South Africa.
- Ntaote, M.J. (2000). Post-apartheid South Africa: a comparative analysis of demographic characteristics of urban formal and urban informal areas.
- Oberholzer, L. (2000). The natural integrity of Man-made Wetlands: a case study.
- Rossouw, C.L. (2000). Geografiese inkomste kenmerke van Suid-Afrika.
- Setzer, P. (2000). Occupational Structure of the South African Population, 1996.
- Speirs, L.J. (2000). The perceptions and potentials of agritourism in the Ceres farming area.
- Tesfamariam, Y.G. (2000). Assessing temporal change of Wetlands under land use pressure along a highland region of the Western Cape.
- Tichagwa, C.G. (2000). Waste management in rural Stellenbosch: generation and storage.
- Van den Heever, J.L. (2000). The application of satellite remote sensing to detect strip cultivation in the central Sandveld of South Africa.
- Van Niekerk, L. (2000). The hydrodynamics of the Bot River Estuary.
- Van Schalkwyk, F.W.P. (2000). A Regional analysis of educational levels in South Africa.
- Wade, W.T. (2000). A spatial analysis of religious affiliations in South Africa.
- Anagnostu, M.-A. (2001). The geography of children's play in Cloetesville, Stellenbosch.
- Basson, F.C. (2001). The future of livestock farming: the development of a spatial decision support system for livestock grazing management.
- Bester, F.J. (2001). Wildlife management in larger conservation areas: managing the Gaza-Kruger-Gonarezhou Transfrontier Park's elephants.
- Dawson, E.K. (2001). The influence of slope angle and soil type on the environmental impacts of mountain biking in Stellenbosch.
- De Kock, R. (2001). Volhoubare funksionering van die Hottentots Holland Natuureservaat as ekstoerisme-hulpbron.
- Koch, C. (2001). Biogas as alternatiewe energiebron: is dit haalbaar in Suid-Afrika?
- Majola, S.Z. (2001). Impact of cellphone mast distribution on communities in the Cape Metropolitan Area (CMA).
- Mans, G.G. (2001). Street children in Stellenbosch: their spatial location and effect on surrounding businesses.
- Mansfeld, C. (2001). The extent and impact of recreational activities in the Namib Desert between the mouth of the Ugab River and Sandwich Harbour.
- Mgulwa, Z. (2001). The retail potential of the proposed Philippi Development Node and Corridor in the Cape Metropolitan Area.
- Present, G.W.F. (2001). Nature and extent of cover change along the Bot/Kleinmond estuarine system.
- Rütschlin, E.K. (2001). Residential electricity consumption patterns in Stellenbosch.
- Scott, D.G. (2001). A new label for an old wine: the extent of commercialisation in the Stellenbosch Wine Route.
- Soutar, G. (2001). A visual impact assessment of a cellular transmission tower.

- Tom, L. (2001). An evaluation of Local Agenda 21 in Kayamandi.
- Van Zyl, L.-M. (2001). Informal street trading in Lady Grey Street, Paarl.
- Breytenbach, A. (2002). GIS-based land use evaluation and decision making in small-scale rural woodlot development.
- Durrheim, G.P. (2002). Monitoring for sustainable timber harvesting in the indigenous forests of the Southern Cape.
- Hurter, J.A. (2002). An ecological footprint analysis of Stellenbosch.
- Kidane, D. (2002). Semi-automated mapping of landform patterns and landform elements from elevation data in GIS.
- Letsie, M. (2002). Spatial analysis of parking situation in Stellenbosch.
- Majara, N. (2002). Water management at Simonsberg cheese factory.
- Mashimbye, Z.E. (2002). Identification and mapping of salinised irrigated areas between Kakamas and Brandboom.
- Mouton, M. (2002). Restaurante in en om Stellenbosch: 'n Ondersoek na liggingskenmerke.
- Smith, N. (2002). Pixel- versus segment-based classification techniques for land cover mapping.
- Steer, A. (2002). Location and suitability ratings of farm dams for the farming of *Cyprinus carpio* in Stellenbosch.
- Stipinovich, A.M. (2002). Spatial analysis of land cover in Bot River coastal catchment.
- Takalimane, S. (2002). Water consumption at Stellenbosch University: sources, temporal-spatial patterns and efficiency.
- Zweig, P. (2002). Feasibility of a public bath-house/laundry facility as an upliftment strategy in Masiphumelele, Fish Hoek.
- Aling, E. (2003). Spatial analysis of Oudtshoorn as a cultural tourism node.
- Donald, A. (2003). Assessing the environmental state of agricultural landscaping functioning.
- Fourie, C. (2003). Modelling soil moisture of the Helderberg basin using a digital elevation model.
- Hanana, A. (2003). Emotional responses of academic excursionists to Kayamandi township, Stellenbosch.
- Hector, W. (2003). Afval vermindering: inwoners gesindheid van Witzenburg munisipale area teenoor herbenutting, hergebruik en komposering.
- Kazapua, V. (2003). Time-series analysis of rural land use change in a highland watershed: Koue Bokkeveld.
- Kuffner, R. (2003). Morphological changes in the Berg River estuary.
- Kula, L. (2003). An evaluation of community-based tourism projects in the Western Cape.
- Makau, M. (2003). Spatial analysis of accessibility of public sidewalks for wheelchair users in Stellenbosch.
- Pretorius, J. (2003). Evaluating densification policy by focusing on the water distribution capacity of Stellenbosch.
- Shacks, V. (2003). *Chromolaena Odorata* invasion of disturbed sites in the Greater St. Lucia Wetland Park.
- Van der Walt, S. (2003). Fortress Boland: gated communities in Paarl.

- Bhengu, N.F. (2004). From informal to formal housing: the nature of social, economic, political, spatial and environmental impacts of resettlement on the people of Kayamandi township.
- Du Plessis, J.J. (2004). Eksklusiewe sosiale ruimtes in die jong naglewe van Stellenbosch: 'n tyd-ruimtelike analise.
- Groenewald, A.A. (2004). Sosio-ekonomiese verandering van die Sentrale Westelike Karoo: 1980-1996-2001.
- Januarie, D. (2004). Geographical analysis of the housing component for the poor in Stellenbosch.
- Joubert, S.J. (2004). Enhancement of climate data in the South-Western Cape using Digital Elevation Models.
- Lewarne, M. (2004). The effect of channelisation on river courses in an agricultural setting.
- Niemand, B.J.P. (2004). Environmental management in the Nuwejaars wetland ecosystem.
- Ricketts, A.M. (2004). Minibus taxis: routes, ranks and operations, a study of the Lwandle Taxi Association's taxi fleet.
- Stals, J.P. (2004). Identification of potentially salinised soils in the Lower Orange River using an object oriented classification method.
- Tengbeh, S. (2004). Object oriented road extraction from high-resolution digital colour aerial photography in urban Stellenbosch.
- Van der Merwe, J.M.P. (2004). Delimitation of neighbourhood areas as smaller bioregional planning units in the Cape L'Agulhas Municipality.
- Van der Merwe, S.W.J. (2004). Hoogekraal Sustainable Development Initiative: a strategy for eradication of poverty and inequality and rehabilitation of the environment.
- Viljoen, F. (2004). Rural tourism potential, practice and perceptions: a highland region revisited.
- Beytell, P.C. (2005). Black Rhino (*Diceros bicornis bicornis*): suitability of Namib Naukluft Park for relocation.
- Erasmus, A. (2005). Golflandgoed versus Wynlandgoed.
- Janse van Vuuren, V. (2005). Recreational public open spaces in Southern Helderberg.
- Lotz, T. (2005). Agricultural encroachment on the natural vegetation in the North West Sandveld.
- Nkwinika, J.W. (2005). Impacts of the RDP housing project on the social well-being of the community: A Delft-Leiden housing project study case.
- Pego, M. (2005). Tourist carrying capacity of Moremi Game Reserve, Botswana.
- Remas, H. (2005). Estimating temporal cloud cover for the Western Cape using satellite imagery.
- Van der Westhuizen, G. (2005). Die tyd-ruimtelike groei van Mosselbaai.
- Welgemoed, L. (2005). Climatic effects on the biomass of natural vegetation in the Western Cape.
- Blewett, R. (2006). Karoo Hoogland Municipal Region: socio-economic change and growth potential in small towns.
- De Kock, C. (2006). Die gebruik en volhoubaarheid van strande: Bikini Beach en Clifton 4de Strand.
- Dube, C. (2006). A solar powered Stellenbosch: residents' participation and attitudes.

- Ellis, A. (2006). Tydruimtelike liggingspatrone van restaurante in Stellenbosch omgewing: 1988-2006.
- Flint, J.C. (2006). The geography of building sand in the Western Cape.
- Haasbroek, F. (2006). Tourism resource inventory and GAP analysis of the Western Little Karoo.
- Meyer, I. (2006). Landbougeskiktheidsanalise van amanderverbouing in die Breëriviervallei: 'n GIS benadering.
- Prinsloo, C.D. (2006). Urban development outside of the delineated urban-edge in the Western Cape.
- Spies, P. (2006). Grondgebruik praktyke langs die Eersterivier in Stellenbosch: 'n vloedlyn analise met behulp van GIS.
- Stephenson, G. (2006). A stakeholder perception survey: the breaching of the Bot River estuary.
- Adendorff, A. (2007). The impact of knowledge-based service industries on the economic growth of Stellenbosch.
- Bird, R. (2007). Towards decriminalizing the sex tourism industry for the 2010 soccer world cup: case study of Cape Town.
- Fourie, C. (2007). Correlation between the global landscape emissivity database and South Africa's recent land cover product.
- Jerling, M. (2007). Spatial and economic changes in the property market of Somerset West 2000-2006.
- Le Roux, F. (2007). The impact of off-road vehicles on the environment when used for recreational activities.
- Newman, R. (2007). Identifisering van geskikte areas vir die verbouing van drie kommersiële heuningbostee spesies.
- Struwig, S. (2007). Land claims within the Kruger National Park: progress, role players and possible impacts.
- Torr, L. (2007). GIS and dairy wastewater management.
- Wöhl, K. (2007). Defining Sense of Place for Betty's Bay.
- Oosthuizen, M. (2008). The Victoria and Alfred Waterfront: evaluating the public space.
- Pauw, T. (2008). Examining the correlation between remotely sensed data and plant a-diversity measures in the Matroosberg area.
- Scott, G. (2008). The wine connoisseur: the experience of the Stellenbosch Wine Region.
- Smit, E. (2008). Planning for urban containment or planning for urban spatial sprawl? The case study of Paarl.
- Van Dorsen, M. (2008). Water resource use in an arid environment and its impacts on tourism development: the Naukluft case.
- Willemse, L. (2008). The extent and impacts of land cover change in the Franschhoek Valley.
- Bindemann-Nel, H. (2009). The environmental impact of cemeteries on groundwater: Stellenbosch area.
- Erasmus, A. (2009). Social footprint of international students on the grade seven students in the Kayamandi community.
- Ikokou, G.B. (2009). Urban change detection and analysis using SPOT 5 imagery: Case study of Stellenbosch area in South Africa between 2005 and 2008.

- Kritzinger, J. (2009). Housing the elderly: comparing the experiences from as isolated Karoo and metropolitan fringe town.
- Mambela, J.E. (2009). Urban land use mapping using SPOT 5 imagery.
- Matre, I. (2009). A spatial distribution model of tuna occurrences in South Africa's exclusive economic zone.
- Myburgh, G. (2009). Automated georeferencing and cloud cover monitoring of A VHRR images of Southern Africa.
- Van Heerden, S. (2009). Urban spatial growth in the City of Cape Town: 2000-2008.
- Vos, E. (2009). Land use change in the Koue Bokkeveld 1949-2009.
- Clarke, S. (2010). Time spatial patterns of geographical distribution and co-habitation in South Africa: implications for Nyala and Bushbuck trophy size.
- Etoughe Kongo, P. (2010). The utility of SPOT 5 images for extracting Built-up area.
- Joachim, D. (2010). Historical and contemporary distribution of Nyala [*Tragelaphus Angasi*], and time-spatial patterns of best trophy producing areas in South Africa.
- Kelly, M. (2010). Site and landscape conditions at kudu related motor accident sites in the Eastern Cape.
- Lombard, A. (2010). Feasibility of wind farms in the Western Cape.
- Matthee, E.J. (2010). Post-2010 Soccer World Cup urban impact assessment of Stellenbosch – economic aspects.
- Mawiyo, S. (2010). Exploring local relationships between vegetation cover and quality of life indicators from remotely sense data: Gauteng Province Study.
- Meyer, F. (2010). Post-2010 Soccer World Cup social impact Assessment of Stellenbosch.
- Michaels, T. (2010). The impact of the 2010 World Cup on street traders in the CBD of Cape Town.
- Olivier, G. (2010). Donga occurrences within the Sandspruit Catchment, Western Cape.
- Paviour, S.-J. (2010). Carbon sequestration and trading potential in semi-arid South Africa: A Karoo case study.
- Robb, B. (2010). Measles in South Africa: A spatial and temporal analysis.
- Sephton, S. (2010). A triple bottom line assessment of concessions in the Table Mountain National Park.
- Shifidi, V. (2010). Detection and mapping of *Acacia mearnsii*: An object-oriented approach.
- Slabbert, G. (2010). Global warming – is it already a reality in the Western Cape?
- Vermeulen, L. (2010). Book towns as tourism-led initiative to urban renewal: the case of Richmond, South Africa.
- Willems, K. (2010). Crimes against tourists in the Table Mountain National Park.
- Adeyemo, A. (2011). Exploring the benefits of hyperspectral versus multispectral data for geological classification – a case study in the Damara Belt, Namibia.
- Boshoff, A. (2011). The geography of luxury hotel rooms in Cape Town.
- Brand, E. (2011). Detection of Pitch Canker Fungus infection of *Pinus radiata* seedlings using hyperspectral remote sensing.
- Claque, C. (2011). Soil erosion modelling in the Berg River Catchment using RUSLE and GIS.
- Cloete, G. (2011). Diversification of wine farms in the Stellenbosch Municipal area.

- D'Elboux, Q. (2011). Poaching of rhino within conservation areas of South Africa.
- Doms, T. (2011). A social-spatial impact assessment of Jamestown – a gentrified Jamestown: curse or blessing.
- Edwardes, K. (2011). A spatial analysis of the 2010 matriculation results in the Western Cape.
- Geyser, M. (2011). Urban South Africa through the eyes of the international media: 2010 FIFA World Cup.
- Koch, R. (2011). Land use change in the Paarl and Wellington Municipal districts.
- Longbottom, R. (2011). The distribution and production techniques of organic food producers in the Western Cape.
- Muller, S.J. (2011). Developing an urban spectral library for potential urban land cover classification.
- Potgieter, R. (2011). Geographies of production and consumption: Lifestyle markets in the Western Cape.
- Scheuer, J. (2011). Can data on Cape *Proteaceae* tell us how old veld must be before it can recover from a fire?
- Van Breda, P. (2011). Valuing the relationship between public open space and informal settlement dwellers' daily lives.
- Van den Heever, D. (2011). The demographic profile and spatial activity patterns of Cape Hunt Hunters, 1992-2011.
- Verhoef, N. (2011). Communities and Trans-Frontier Conservation Areas : characterizing the Maramani community in the Greater Mapungubwe TFCA.
- Vermeulen, D. (2011). Evaluation of atmospheric correction methods for SPOT-5 imagery.
- Bessinger, M. (2012). Mapping pitch canker fungus in *Pinus radiata* forests using QuickBird imagery and Support Vector Machines.
- Chirowodza, P. (2012). An investigation of the perception of healthcare: a case study of Zimbabwean migrants in Kayamandi.
- Cloete, C. (2012). The use of remote sensing products for water use management in irrigated sugar cane crops in the Incomati river basin.
- De Kock, C. (2012). The effect of heat wave occurrences on Granny Smith apples in the Western Cape.
- Evans, R. (2012). The role of small grains in carbon sequestration in the agricultural sector of the Western Cape.
- Gardiner, A. (2012). Stellenbosch: towards a heritage town?
- Gouws, E. (2012). Urban forestry.
- Hamilton, J. (2012). The leisure and tourism patterns of international students at Stellenbosch University in 2012.
- Kok, C. (2012). Stellenbosch campus heading towards a green future: Recycling measures implemented in university residences.
- Ledeboer, S. (2012). Investigating flood risk in the Lower Sabie River.
- Lotter, P. (2012). Water restrictions in Stellenbosch – the rationale behind this measure.
- Mafame, T. (2012). The assessment of solid waste recycling as a green town objective: Stellenbosch households.
- Marembo, R. (2012). Object based classification of landform elements using a high resolution digital elevation model.

- Moche, T. (2012). Using geostatistics and interpolation techniques to determine viability of alluvial diamond mining.
- Moreland, M. (2012). Kayaloo's in Kayamandi: Informal settlement sanitation in Stellenbosch.
- Motswaledi, M. (2012). Testing object-based image classification for lithological discrimination of Karoo sediments: a case study in the Laingsburg region.
- Mugwena, T. (2012). Current environmental character of the Limpopo National Park.
- Müller, R. (2012). Innovation of the wine tourism product: Food and wine clustering on the Stellenbosch Wine Route.
- Page, R. (2012). Estimating population size using remote sensing: A case study using historical aerial photography of Cape Town.
- Peek, C. (2012). Using remote sensing to map quartz patches in the Knersvlakte.
- Schoeman, A.D. (2012). The Upper Letaba River: Investigating changing vulnerability to extreme flood.
- Smit, C. (2012). The effect of focal length and flying height on the accuracy of stereo DSMs extracted from UAV imagery.
- Smith, P. (2012). Can livelihoods be improved through land reform ?
- Van der Westhuizen, L. (2012). Die rol van die 'blomme-produk' in die toerisme attraksie aanbod, plekidentiteit en ekonomie van Clanwilliam.
- Viljoen, V. (2012). Art in Stellenbosch: increasing vitality of urban structures and developing a sense-of-place in small town settings.
- Visagie, H. (2012). From productivist to post-productivist: a case study of the Durbanville Wine Valley.
- White, K. (2012). Climate change risk assessments for coastal urban areas: False Bay case study.
- Adesuyi, S. (2013). Using time-series NDVI to model land cover change in the Berg River catchment.
- Ballim, K. (2013). Mapping informal dwellings from WorldView-2 data using an object-based image analysis approach.
- Basson, D. (2013). Towards the pedestrianisation of Stellenbosch historic core.
- Bhula, M. (2013). Factors influencing variations in sucrose yield.
- Botha, R. (2013). Investigating sources and social impact of pollution in the Eerste River, Stellenbosch.
- Bouwer, H. (2013). Time-spatial distribution of dairy farms and related opportunities in the Swartland, Western Cape.
- De Beyer, L. (2013). An evaluation of polarimetric decompositions of SAR data for land-cover classification.
- Emma, M. (2013). The potential of carbon sequestration trading as a farming strategy in a Western Cape mountain fynbos environment.
- Francioli, A. (2013). Investigating general emergency knowledge and preparedness of proximal residents to Koeberg Nuclear Power Station.
- Hanly, D. (2013). Riverine public open space usage in Kuils River.
- Hunneyball, L. (2013). The impact of household food gardens on food insecurity in two wineland communities: A tempero-spatial analysis.

- Kruger, R. (2013). The extent of urban densification in De Weides from 2000-2013.
- Mendelsohn, S. (2013). Foraging movements of a nomadic Palaearctic migrant in Southern Africa.
- Moolman, T. (2013). Career paths of honours geography graduates from Stellenbosch University.
- Pistorius, T. (2013). Accuracy assessment of game-based crowdsourced land-use/land cover image classification.
- Pretorius, J. (2013). Determining runoff in the Berg River Catchment area using GIS and a suitable runoff model.
- Van der Reis, B. (2013). Review of social conflict disasters in the Western Cape: 2008-2013.
- Wenger, S. (2013). Towards low-cost 3D mapping of an urban environment using structure from motion.
- Alman, E. (2014). Investigating desegregation in the Western Cape: a comparative case study of Paarl and Worcester.
- Arzul, M. (2014). An evaluation of pixel-based DSM to DTM conversion techniques.
- Bailey, C. (2014). Scaling patterns of landscape heterogeneity.
- Biffen, L. (2014). Food security in urban informal settlements: a case study of Fairyland.
- Camp, J. (2014). Using GIS in site selection to balance recreational needs and conservation.
- Cele, M. (2014). Exploring people's attitudes and behaviours regarding solid waste disposal in informal settlements: A case study of Khayamandi, Stellenbosch.
- Christ, S. (2014). Changing flood risk along the Hex River.
- Cronje, C. (2014). Home fortification in Kuils River.
- Dassonville, S. (2014). Investigating hazards and impacts in Zwelihle settlement, Hermanus.
- Gilbertson, J. (2014). Differentiating irrigated cultivated crops using multi-seasonal Landsat 8 data.
- Hunter, C. (2014). Exploring the livelihood strategies of waste-pickers: a comparative study.
- Leathem, C. (2014). Shark-cage diving tourism: a case study of Kleinbaai.
- Lockyer, B. (2014). Gated community identity: place naming and exclusivity in non-metropolitan Western Cape.
- Louw, G. (2014). Identification of principal covariates for the prediction of effective soil depth.
- Louw, J.D. (2014). An evaluation of automated topographic correction (pre-processing) methods for Landsat 8 data.
- Meyer, H. (2014). Identification of key features for surface water extraction using SPOT-5 imagery.
- Portnoi, M. (2014). Determining a model for sugarcane height prediction using polarimetric observables.
- Van Zyl, G. (2014). Exploring the McDonaldisation of casual dining in the Kruger National Park.
- Barratt, K. (2015). Characterizing polarimetric signatures of vineyards at varying phenological stages.
- Botha, N. (2015). The role and function of Cape Town Harbour: Local, national and international contexts.
- Burns, J. (2015). Assessing the effect of crop type on X-band SAR coherence.

- Combrinck, M. (2015). Geographic analysis and communication of matric results in the Western Cape.
- De Villiers, J. (2015). Waste management situation in the Stellenbosch municipal area.
- Gafieldien, H. (2015). Impact of electricity blackouts on household energy consumption behaviour.
- Halls, K. (2015). The changing socio-economic character of the urban periphery in metropolitan areas in South Africa.
- Haupt, S. (2015). Assessing the effect of vineyard row direction on X-band SAR observables.
- Johnson, M. (2015). Deriving bathymetry from multispectral Landsat 8 satellite imagery.
- Lombard, L. (2015). Mapping ecotones using satellite image signatures in fynbos.
- Makan, T. (2015). Backyard dwellers and dwellings in Cloeteville.
- Mostert, M. (2015). Spatial instruments applied by metropolitan municipalities in South Africa to contain/control urban expansion/sprawl.
- Mpe, H. (2015). Assessment of mining-related coastal degradation in the Western Cape using LiDAR data.
- Neethling, A. (2015). Mapping the positioning of bulk water and sewerage infrastructure in flood-prone areas and the frequency and consequences of damage.
- Payne, B. (2015). Change and contestation of policies governing river management and the implications for flood-risk reduction.
- Quin, L. (2015). A spatio-temporal analysis of food franchises in South Africa.
- Schoeman, N. (2015). Crop type separability from polarimetric X-band SAR.
- Scholtz, J. (2015). Residential movement patterns in informal communities: Mapping the lives of the elderly.
- Terblanche, M. (2015). The geography of SA rugby players in the French & British top rugby union leagues: Demand and supply side analysis.
- Van Dijk, E. (2015). Shifting agricultural landscapes in Mpumalanga.
- Viljoen, M. (2015). Investigating flood risk factors in the Kars River catchment, Overstrand.
- Wilson, M. (2015). The great trek into Africa: a spatio-temporal analysis of South African business expansion into Africa.
- Ackermann, C. (2016). Friend of foe? The perceptions of Stellenbosch residents towards bats.
- Dippenaar, N. (2016). Eventification of the Stellenbosch Winelands: the wedding region.
- Du Plessis, A. (2016). Understanding the actors and methods of alien clearing in the Breede River as well as potential flood risk.
- Duckitt, H.C. (2016). The geography of rural music festivals in the Western Cape province, South Africa.
- Engelbrecht, S.P. (2016). A spatio-temporal analysis of mall development in South Africa.
- Erasmus, I. (2016). Airbnb – the pioneer of the sharing economy: a study in Cape Town.
- Hacking, C. (2016). Extracting surface roughness from vineyard soils using Structure-from-Motion in Stellenbosch.
- Kellerman, C. (2016). Visualizing the locations of CO plumes not related to biomass burning across Southern Africa.
- Kenned, A. (2016). A spatial analysis of socio-economic drivers of HIV treatment compliance.
- Lawrence, R.G. (2016). Semi-automated extraction of roads within a plantation forest environment.

- Lendrum, D. (2016). Understanding lightning fires in fynbos: an analysis of weather conditions.
- Loggenberg, K. (2016). Establishing the relationship between point cloud measurements and biophysical parameters of vineyard in Stellenbosch using Structure from Motion.
- Luyt, H. (2016). Evaluating the benefit of assimilating satellite sea surface temperatures in forecasting Benguela upwelling events.
- McDonald, B. (2016). Perceptions of undergraduate Stellenbosch students on South African national parks.
- Miller, M. (2016). Airbnb: The emergence of a new virtual accommodation sector.
- Mistry, A. (2016). The impact of suburban gardening practices on natural sustainability.
- Mugamu, E. (2016). Personal safety and security: experiences of Zimbabwean migrants living in Strand, Cape Town.
- Nel, M.C. (2016). Transportation mobilities of low-income women in Stellenbosch.
- Prins, A.J. (2016). Individual tree counting and tree crown delineation using LiDAR.
- Rodrigues, A.M. (2016). The mapping and analysis of the commuting catchment area of permanent staff of Stellenbosch University.
- Steenkamp, A. (2016). An overview of craft beer production in the Cape Winelands.
- Straw, J. (2016). Motivations for participation in mountain biking in Stellenbosch.
- Twekye, N. (2016). Assessing coastal land cover dynamics in False Bay using Sentinel-2 time series.
- Vlok, H.H. (2016). Craft beer, place and identity in Stellenbosch.
- Watkins, B. (2016). The classification of crop types using X-band and C-band space borne radar data with optical data: A machine learning approach using feature selection.
- Baleta, G.F. (2017). The growth of the olive industry in the Western Cape: Producers and products.
- Beuster, L.R.N. (2017). The geography of coffee shops and the social and physical factors influencing the preference of certain coffee shops.
- Bolton, D.B. (2017). An assessment of the vegetation status in citrus orchards using Sentinel-2 derivatives.
- Brown, C.W. (2017). Park or parking? Contestation of urban public space.
- Buchanan, L.J. (2017). Urban heritage conservation in Stellenbosch – towards an expanded demarcated heritage area.
- De Wet, L. (2017). Studente se persepsies van erfenis en erfenis simbole: 'n Gevallestudie van die kasteel Die Goeie Hoop, Kaapstad.
- Eastes, N.D. (2017). A comparative analysis of the spatial-temporal development of guest houses in the Stellenbosch Municipality area 1996-2017.
- Gramberg-Danielsen, L.I.K. (2017). Africa's greenest hotel. Expectations and perceptions of tourists towards sustainable business strategies in the hospitality sector. A case study at the Hotel Verde in Cape Town, South Africa.
- Henn, H. (2017). Forest species delineation in a commercial plantation using LiDAR data.
- Huntley-Walker, N.R. (2017). Mapping scree slope extent and change in the Hottentots-Holland Mountain Range.

- Jankielsohn, P. (2017). Contributions of Renosterveld vegetation to sense of place in the Overberg.
- Jeffery, J. (2017). Analysis of fishing practices on the Agulhas coastline in relation to the development of the Agulhas National Park.
- Kisting, D. (2017). Studentification in Stellenbosch revisited.
- Lock, E.J. (2017). An investigation into the contribution of interferometric coherence for burnt area mapping.
- Middleton, D. (2017). A geography of restaurants in Stellenbosch.
- Naik, N.R. (2017). The geography of private hospitals in South Africa: A case study of MediClinic.
- Oppel, L. (2017). Gating the winelands.
- Peek, J.T. (2017). Examining the drivers of flood risk and how they have changed over time (1980-2017): A Langeberg case study.
- Prata, B. (2017). Understanding the nature and prevalence of abandoned building fires in Cape Town.
- Ransome, M.A. (2017). Environmental perceptions, attitudes and preferences of recreational boaters in marine protected areas: The West Coast National Park, South Africa.
- Robinson, K.-L. (2017). Understanding evaporation and seepage losses from agricultural canal stemming from the Clanwilliam Dam.
- Stephens, S.B. (2017). Exploring the local challenges of wildfire risk mitigation in the Table Mountain National Park and how these challenges can be overcome.
- Svensen, D. (2017). Exploring methods and the cost-benefit of reducing evaporation from farm dams.
- Thomas, A. (2017). A flood-risk analysis: Genadendal as a case study.
- Van der Merwe, C. (2017). Forest species delineation in a commercial plantation using high resolution aerial imagery.
- Van der Westhuizen, K. (2017). The geography of crime incidents in Stellenbosch Central (2010-2016).
- Vermeulen, L. (2017). A novel approach to deriving land use productivity using Google Earth Engine.
- Weir, L.S.C. (2017). Dissemination of flood early warnings in the Langeberg Municipality: Closing the gap between formal and informal systems.
- Wiese, Z. (2017). Monitoring the condition of perennial crops using Sentinel-2 derivatives.
- Wilkinson, M.N. (2017). A semi-automated object-based approach for estimating forest canopy heights using very high-resolution imagery.
- Willmott, P. (2017). Impact of orography on wind fields over the larger Cape Peninsula.
- Adams, C.F. (2018). The daily livelihoods of street buskers in Stellenbosch.
- Barnard, J.J. (2018). Identifying forest canopy anomalies using spatial modelling and multitemporal LiDAR data.
- Biaya, L. (2018). Urban hairscares in Bellville.
- Clothier, N. (2018). Assessing the relationship between river pollution and land cover change in the Diep, Salt and Sout River catchments in Cape Town.

- Douglas, M. (2018). Coping with drought in the Cape Winelands: Investigating adaptation strategies of Stellenbosch Wineries.
- Forssman, A.O. (2018). Tourism development and tourism area life cycle model: A look at St Helena Island.
- Fuller, J.E. (2018). Public participation in water resource management: A case study of water management devices in Tafelsig.
- Gillion, H.-A. (2018). An investigation of the March 2017 Pringle Bay/Rooi-Els wildfire.
- Glover, S. (2018). Modelling *Phytophthora* root rot in avocado trees using hyperspectral imaging and machine learning.
- Gouws, A.-P. (2018). Exposing the nature and extent of sport swallow tourists: Stellenbosch as a summer sport training town.
- Graves, R. (2018). Determining the effect of temperature and wind on streamflow in Jonkershoek, Stellenbosch.
- Jansen, H.C. (2018). Evaluating the effects of spatial and spectral resolution for land cover classification using spot imagery.
- Johnston, B. (2018). The end of the line: Abandoned railway stations in the Northern Cape.
- Jones, S.A. (2018). Investigating sedimentation and its effects on the capacity of large dams: Mgeni Catchment.
- Jordan, M. (2018). Investigation of sedimentation rates in selected Karoo dams and associated impacts on dam storage capacity.
- Kamati, K. (2018). The impact of resolution on land cover mapping at local scale based on supervised pixel-based classification using Landsat-8 imagery.
- Kotze, C. (2018). Impact of drought on olive and wine farmers in the Western Cape.
- Lirula, T. (2018). After the fire: Rebuilding lives in an informal settlement community: A case study of zone O, Kayamandi.
- Mabe, M.A. (2018). What's in a name? A toponymic investigation of gated communities in Durbanville, Cape Town.
- Moir, L. (2018). Flooding preparedness of hospitals in the City of Cape Town municipality.
- Monteverdi, R. (2018). Multi-temporal remote sensing of ecotones: The Agulhas Plain.
- Morrison, R.L. (2018). Understanding rates of deposition and sequestration of total suspended solids in the Eerste River-Kleinplaas Dam to Stellenbosch.
- Mouton, R. (2018). Investigating multitemporal filtering for small dam mapping using Sentinel-1 imagery.
- Mutizwa, T.J.P. (2018). Stellenbosch University students' perceptions and responses to the Western Cape water crisis.
- Nickerson, D. (2018). Investigating the potential of mapping fire damage extent in informal settlements using SAR polarimetry.
- Rasmussen, N. (2018). Tourism driven urban renewal: the case of Kalk Bay.
- Rossouw, J. (2018). An investigation into the relationship between backyard dwellings and residential fires in Wallacedene.
- Sullivan, L.J. (2018). Western Cape water crisis: a perspective study of the Philippi Horticultural Area.
- Theron, C.L. (2018). Covariate and parameter selection for high-resolution temperature surface interpolation.

- Thomas, L. (2018). Community perceptions of cultural ecosystem services: a case study of the Jonkershoek Nature Reserve, Stellenbosch.
- Turnbull, D. (2018). Potential contribution of synthetic aperture radar backscatter to fire extent mapping in informal settlements.
- Willemse, A.J. (2018). Quenching the thirst: adapting to the drought through the use of freshwater springs, Ceres.
- Wyngaard, Y.W. (2018). A spatio-temporal investigation into the evolution of residential property values in Stellenbosch.
- Andrews, W. (2019). South African rugby players migration (mobilities) to the developed north the what, where and the why.
- Cloete, T. (2019). Investigating attitudes towards solar water heaters in low-cost housing: a case study in Kuyasa, Khayelitsha.
- Cupido, C. (2019). Studentification in Wellington.
- De Wet, D. (2019). Urban regeneration debates in the popular press: reflections on Woodstock.
- Du Plessis, J. (2019). Soil depth modelling at sub-catchment scale using machine learning techniques based on landscape attributes.
- Dukes, M. (2019). Using time series hyperspectral imaging and machine learning to model leaf water stress in Shiraz vineyards.
- Flexney, J. (2019). Emergency preparedness among farmers and farm labourers in the vicinity of Koeberg Nuclear Power Station.
- Gordon, N. (2019). The evolution and life cycle phase of the Stellenbosch Wine and Food Festival (1995-2019).
- Hanekom, T. (2019). Building a fire wise community: a case study of Lanquedoc.
- Herman, C. (2019). Urban regeneration debates in Cape Town in the popular press: reflections on Bo-Kaap.
- Higgs, C. (2019). Identifying the main land cover types that contribute to depleting water levels in the Verlorenvlei.
- Jan, L. (2019). Mapping the loss of renosterveld using Sentinel-1 backscatter time series.
- Jeffhas, T. (2019). The contribution of small-scale fisheries to livelihood: A case study of Lambert's Bay.
- Kapp, J. (2019). Detecting settlement expansion using hyper-temporal Sentinel-1 data.
- Light, R. (2019). Love thy neighbour?: "Integrated" residential hamlets of Stellenbosch.
- Malan, O. (2019). Sentinel-3 for near surface air temperature estimation.
- Mayeki, S. (2019). Vertical conversion of Reconstruction and Development Programme houses in Delft South.
- McCarthy, L. (2019). Assessing the ability of the Prometheus Fire Simulation Model to predict fire spread based on the 2018 George fire.
- Mohlala, M. (2019). Assessing environmental factors influencing streamflow – Jonkershoek.
- Ndyafi, V. (2019). Automated object-based, boundary delineation approach of plantation stands using multi-temporal sentinel-2 imagery.
- Pepper, L. (2019). Public access to the coast: a case study of Maidens Cove.
- Petersen, J. (2019). A comparative analysis of household fire risk and preparedness in the area of Athlone, Western Cape.

- Potgieter, C. (2019). Parking in Stellenbosch.
- Pretorius, P. (2019). Quantifying packaging: rubbish attitudes or green campus?
- Shawe, R. (2019). Killing of a neighbourhood: What happened to De Waterkant?
- Van Zyl, J. (2019). Assessing the viability of local change detection techniques to map woody encroachment in grasslands.
- Von Fintel, M. (2019). Determining the minimum waterbody surface area that can be successfully classified using Sentinel-1.
- Williams, A. (2019). Value of feature selection for mapping land cover using the maximum likelihood classification algorithm.
- Young, E. (2019). Entrepreneurship during drought – a case study of the current Western Cape drought.

LIST OF GEOGRAPHY MASTER'S THESES BY YEAR OF SUBMISSION, 1927-2019

- Van der Merwe, E.G.J. (1927). Die moderne ontwikkeling van die distrik Ceres: die vooruitgang van die distrik na 1910 verklaar uit die algemene verbeterde verkeersweë en meewerkende faktore en nie alleen uit die Wolseley-Ceres taklyn nie.
- Pienaar, J.H. (1928). Geografiese gesigspunte in die segregasiepolitiek van Suid-Afrika.
- Fischer, P.U. (1931). Saldanhabaai.
- Potgieter, C. (1931). Die klimaat van die Oostelike Karoo, uit ou reisbeskrywinge.
- Schmidt, A.A. (1932). Die Brederiviervallei.
- Theron, H. (1932). Die geografiese invloed op die wynboubedryf in die Suid-Westelike Distrikte van die Kaapprovinsie.
- Beyers, M.S.M. (1933). Die verbreiding van die menslike woonplekke in die distrikte van die Paarl en Wellington.
- Moolman, J.H. (1933). Die bevolking van Kaapstad.
- Stander, E. (1936). Die George-Knysna Tszikammabosstreek.
- Louw, J.K. (1938). Graaff-Reinet of die Bo-vallei van die Sondagsrivier.
- Strydom, A.E. (1939). 'n Geografiese studie van Agter-Hexrivier.
- Van der Merwe, A.C. (1939). Die suikerindustrie van Natal en Zululand.
- Vermeulen, D.C. (1940). Die Klein Karoo.
- Beukes, C.A. (1941). Besproeiing langs die Vaalrivier.
- Potgieter, G. (1941). 'n Geografiese verhandeling van die gebied tussen die Vaal-, Vet- en Modderiviere met spesiale verwysings na die panne in die gebied.
- Conradie, R.P. (1942). Die ekonomiese ontwikkeling van die Koue Bokkeveld.
- Vermeulen, M.C. (1942). Die geografiese, ekonomiese en sosiale ontwikkeling van die Caledonse distrik as gevolg van motorvervoer.
- Brink, D. (1943). Kimberley: 'n ekonomies-geografiese studie.
- Coetzee, P.K. (1943). Die klimaat van die westelike sentrale Kaapprovinsie binne die afgelope twee eeue.
- Raubenheimer, H.P.M. (1943). Die distrik George en die dorpe George en Mosselbaai.
- Naude, L.P. (1944). Die dorpe en distrikte Worcester, Robertson, Swellendam, Riversdal en Ceres.

- Van Eeden, D.J. (1944). Die distrik Kuruman.
- Breytenbach, I.M.N. (1945). Die Benede-vallei van die Sondagsrivier onder Mentzmeer-besproeiingskema.
- Luckhoff, A.D. (1945). Die ontwikkeling van Bellville.
- Maree, S.D. (1945). 'n Geografiese studie van die dorpe en gebiede Caledon, Bredasdorp en Somerset-Wes.
- Nel, A. (1945). 'n Geografiese studie van die dorpe en distrikte Tulbagh, Piketberg en Moorreesburg.
- Retief, S.M. (1945). Damesfontein, Coloniesplaats, Eenzaamheid, Brooklyn: geografiese vergelyking van plase in die distrik Graaff-Reinet.
- Wahl, I.R. (1946). Distrik Clanwilliam.
- Nel, D.E. (1947). Die hawe en fabrieksnwywerhede van Mosselbaai.
- Venter, J.H. (1947). Die Boegoeberg-Karos besproeiingskema.
- Visagie, J.H.B. (1947). 'n Geografiese studie van Langkloof en die Kouga.
- Coetzee, P.P. (1949). Saldanhabaai: 'n geografiese studie.
- Cornelissen, P.J. (1950). 'n Geografiese studie van die besproeiingsnederstelling Kanoneiland.
- Coetzee, J.A. (1951). Die Bo-Bergriviervallei: 'n ekonomies-geografiese verhandeling.
- Hagen, P.D.K. (1951). St Helenabaai: 'n geografiese studie.
- De Wet, E.J. (1953). 'n Geografiese oorsig van die waterbronne van die distrik Swellendam.
- Gertenbach, L.G. (1953). Die Rietrivier-besproeiingskema.
- Swanevelder, C.J. (1953). Die Olifantsrivier-besproeiingskema.
- Möller, A.K. (1955). Die Robertsonkaroo: klimaat, plantegroei en ekonomiese aspekte.
- Swart, M.J. (1956). Klimaattipes van Suidwes-Kaapland volgens die Koppen-Indeling.
- Coetzer, H. (1957). Die bergplase van Piketberg.
- Linde, J.B. (1957). Katoenverbouing langs die Oranjerivier.
- Van Zyl, J.A. (1957). Die Kamiesberg en aansluitende Kliprand.
- Barnard, W.S. (1959). Politiese-geografiese aspekte van Suidwes-Afrika.
- Bührmann, J.M. (1959). Nywerheidsvestiging aan die Oos-Rand.
- Senekal, W.F.S. (1959). 'n Stedelik-geografiese studie van Vereeniging, met besonder verwysing na die grondgebruik, grond en residensiële waardasie, beroepe en denominasie.
- Roos, T.J. (1960). 'n Geografiese beskouing van die Kuruman-Postmasburg-mynbougebied.
- Visser, G.M.W. (1960). Die reliëfenergie van Wes-Kaapland.
- Jooste, P.G. (1961). Lugfotografie as basis vir aardrykskundige navorsing soos toegepas op die Stellenbosch-distrik.
- Kotze, J.C. (1961). Die Vaalhartsbesproeiingskema: 'n ekonomiese en sosiaal-geografiese studie.
- Smit, P. (1962). Die betekenis van Walvisbaai as hawe vir Suidwes-Afrika.
- Van Aarde, J.N.S. (1963). Olifantsrivier-staatswaterskema, 1945-1960: grondgebruikstudie.
- De Klerk, J.A. (1964). Die afbakening van stedelike invloedssfeer van die distrikte Caledon, Bredasdorp en Swellendam.
- Stemmet, H.T. (1965). Die geografiese grondslae van die droëvrugtebedryf in Suid-Afrika.

- Thirion, C.R.I. (1965). Klimaattipes van Suid-Kaapland volgens die Köppen-indeling.
- Coetzee, I.G. (1967). 'n Ekonomies-geografiese ondersoek na die kleinhandelspatroon in die suidelike voorstede van Kaapstad.
- Hanekom, F. (1967). 'n Geografiese opname van die gesoneerde nywerheidsareas binne die gebied van die Kaapse Stadsraad.
- Tait, N.C. (1967). 'n Geografiese studie van die noordelike hange van die Outenikwaberger in die Oudtshoorn-omgewing.
- Van der Merwe, I.J. (1967). 'n Kartografiese studie van die stedelike gebied van die Strand.
- Steyn, J.N. (1968). 'n Grondgebruikstudie van die Mtunzini-distrik.
- Hugo, M.L. (1969). Die Strydpoort-bergreeks en aangrensende gebiede: 'n studie in regionale geomorfologie.
- Nieuwoudt, A. (1970). 'n Stedelik-geografiese studie van Upington.
- Rootman, P.J. (1970). Die funksies en invloedseer van die stedelike gebied van Oudtshoorn.
- Tancred, P. (1972). Klimaattipes van Oos-Kaapland volgens die Köppen- en Thornthwaite-klassifikasies.
- De Kock, G.L. (1973). Die evolusiegang van padroetenetwerke in Suidwes-Afrika.
- Taylor, V. (1974). Spatial patterns of tourism in the East London area.
- Wolfaardt, P.J. (1975). Pad- en spoornetwerke in die oostelike Kaapse Middellande.
- Myburgh, D.W. (1976). Evolution of urban centres in the Eastern Cape Midlands.
- Eloff, P.J. (1978). Sentraleplekverval in die Sentraal-Westelike Karoo.
- Kriel, L.P. (1978). Ruimtelike patrone van landelike nedersettings in die Gordoniadistrik.
- Harmse, J.T. (1980). Die noordwaartse begrensing van die duinsee van die sentrale Namib langs die Benede-Kuiseb.
- Dippenaar, F.J. (1984). Stedelike groei en verval in die De Aar-streek, met spesiale verwysing na die effek daarvan op die interne struktuurkenmerke van die dorpe.
- Haldenwang, B.B. (1984). Die ruimtelike verbreiding van geestesiektes in Kaapstad.
- Scriba, J.H. (1984). The indigenous forests of the Southern Cape: a locational study.
- Stockton, P.L. (1988). Aspects of the filament activity within the Benguela upwelling system.
- Baxter, D. (1989). Micro-bus taxi activities in the peripheral towns of greater Cape Town.
- Reyneke, F.I.J. (1989). Die funksionele interaksie tussen die Kaapstad-metropool en sy soonegebied.
- Smit, H. (1989). Omgewingsanaloe vir die vestiging van guayule en jojoba in die ariede en semi-ariete streke van Suid-Afrika.
- Vlok, A.C. (1989). Die identifisering en kartering van wingerde in Suidwes-Kaapland met behulp van Landsatgegevens.
- Smit, P. (1991). Die Kavango-gebied: hulpbronne, bevolking en ontwikkeling.
- Baxter, J. (1992). Farm tourism in the South Western Cape.
- Bester, R. (1993). Noordwes-Kaapland: 'n geografiese studie met die klem op water in die ontwikkeling van die gebied.
- Boshoff, L.J. (1994). The new Helshoogte Pass: a case study in environmental impact analysis.
- Mackay, C. (1994). The application of integrated remotely sensed and geographic data to facilitate rangeland mapping and condition assessment in the Ceres Karoo region of southern Africa.

- Wolff-Piggott, B. (1994). Coupling geographical information systems and catchment hydrological models.
- Needham, L. (1995). Vlooi- en handwerkmarkte in die Kaapse metropool: 'n geografiese beskouing.
- Nel, I. (1995). Die identifisering van besproeide gebiede in 'n intensief-bewerkte landbougebied in die Suidwes-Kaap met behulp van satelliet-afstandswaarneming.
- Cedras, L.D. (1996). Die implikasies van landelik-stedelike interaksie vir plaaslike owerheidsbestuur in die Stellenbosch-distrik.
- Muller, J.J. (1996). Die herstrukturering van openbare gemeenskapsdienste in die Tygerberg stedelike omgewing, Kaapstad.
- Oelofse, M. (1996). Geïntegreerde bekkenbestuur en die Buffeljagsrivier as varswater-hulpbron.
- Penderis, S.P. (1996). Informal settlement in the Helderberg Basin: people, place and community participation.
- Rehder, A. (1996). Die impak van kusontwikkeling op die bestuur en bewaring van argeologiese vindplase langs die Weskus, Suid-Afrika.
- Steyl, I. (1996). Solid waste in rural Stellenbosch: nature, extent and handling strategies.
- Van Niekerk, A. (1996). Die ontwikkeling van geografiese inligtingstelsels vir omgewingsbestuur in Wes-Kaap.
- Visser, G.E. (1996). The geography of guest houses in the Western Cape province.
- Botha, A. (1997). Identifisering van mesotermiese streke in die Stellenbosch-omgewing: GIS-modellering van inkomende sonstrale.
- Bucchianeri, E.R. (1997). Walvistoerisme – gruwel of goudmyn? Die geval Groter Hermanus.
- Kriel, L.A.B. (1997). Die geografie van die formele nag- en 24-uur ekonomie in Stellenbosch.
- Nembudani, M.E. (1997). Geographical analysis of public open spaces for recreational use in Guguletu, Cape Town.
- Sinclair, D.A. (1997). Using GIS as an interactive marine mineral resources model for assessing economic viability – Algoa Bay as a case study.
- Smit, H.A.P. (1997). Die impak van verskillende tipes passe op 'n bergomgewing: die Attakwaskloof-, Cloetes- en Robinsonpasse.
- Swanepoel, P.A. (1997). The use of the internet for GIS applications: A virtual tourist site for Stellenbosch.
- Swanevelder, S.A. (1997). 'n Tyd-ruimtelike ontleding van verkeersongelukke op geselekteerde roetes in die Wes-Kaap.
- Tait, G. (1997). Die selektering van optimale terrein met 'n GIS vir die aanplant van wingerdkultivars.
- Van der Walt, H. (1997). Tydruimtelike korrelasie tussen waterkwaliteit en grondgebruik in die Bergrivierdreineringsgebied.
- Driver, A.I. (1998). The impact of the Fish River spatial development initiative on industrial development in Port Elizabeth and East London: an initial evaluation.
- Engelbrecht, J.C. (1998). Die implementering van omgewingsmissies, -beleide en -programme as omgewingsbestuurshulpmiddele.
- Kiangi, A.N. (1998). Habitat and health in Kayamandi.

- Le Roux, P.J. (1998). Modelling van die groeipotensiaal van natuurlike veld in die Wes-Kaap mbv GIS-tegnologie.
- Lohrentz, G. (1998). Die afbakening van 'n plantegroei-bufferstrook as element van omgewingsbewing: die Saldanha-Langebaan kussone.
- Neethling, J.P.N. (1998). Kusoordontwikkeling in die Valsbaai-periferie van die Kaapse Metropool: geografiese perspektiewe.
- Sinske, S.A. (1998). The analysis of the main sewer system of the Cape Metropolitan Region with the aid of a GIS.
- Van Deventer, H. (1998). The integration of commercial farmers' local knowledge in a GIS for land reform.
- Malherbe, R. (1999). Optimising refuse collection routes with a GIS: the Paarl Municipality as a case study.
- Ramakoae, M.E. (1999). Evaluation of groundwater as a domestic water resource for the rural valages in the Eastern Cape near Matatiele.
- Semoli, B.P. (1999). An assesment of the practice and potential of industrial solid waste minimisation in South Africa: A case study of Stellenbosch.
- Van de Walle, S. (1999). Toegankelikhed tot sport tydens en na apartheid: case study: City of Tygerberg, Cape Metropolitan Area, Zuid-Afrika.
- Van Wijk, C.M. (1999). Malaria risk mapping and prediction in Côte d'Ivoire.
- De Witt, E.A. (2000). Ruimtelike verwantskappe tussen kultuurtoerisme en kleinhandel in Leuven, België: 'n GIS toepassing.
- James, A. (2000). Die identifisering van ontwikkelings sensitiewe areas teen berghange: Stellenbosch- en Hottentotshollandberge.
- Luck, W. (2000). GIS based forest type classification and modelling of the indigenous forests of the Southern Cape.
- McKechnie, J.J. (2000). 'n GIS ondersoek na die kultuurtoerisme-potensiaal van Mechelen, België en die rol van kulturele toerisme in stedelike hernuwing?
- Mitchell, I. (2000). An assessment of cumulative effects in strategic environmental assessment: a critical review of South African practice.
- Modika, K.A. (2000). Human vulnerability to flooding in the greater Letaba catchment.
- Morakeng, P. (2000). Temporal and spatial patterns of vehicle-related crime in the central area of Stellenbosch.
- Nthengwe, N.S. (2000). The role of GIS in flood management: a case study of the greater Thoyhoyandou TLC, Northern Province, RSA.
- Rhode, H. (2000). Factory shops in greater Cape Town: an urban geographical approach.
- Schonegevel, L. (2000). Spatial modelling for decision making in alien invasive vegetation management.
- Steyn, B. (2000). Tydruimtelike analise van toerisme-aktiwiteite in die Kaapse Skiereiland Nasionale Park.
- Choma, M.L. (2001). Hazard-risk assessment and potential impact of total (industrial and municipal) cumulative waste and pollution generation on the South African Highveld.
- Crafford, J.M. (2001). 'n Navraagstelsel van tyddeoorde in Suid-Afrika vir RCI-lede en potensiële kopers van tyddeelbelang.

- Du Preez, C. (2001). Attacks on farms and smallholdings: GIS for crime prevention in the Stellenbosch District.
- Du Toit, T.F. (2001). Parke as ruimtelike, sosiaal-ekologiese bate in die Bellville munisipale gebied.
- Dzivhani, M.A. (2001). Land degradation in the Northern Province: physical manifestations and local perceptions.
- Linde, A. (2001). A spatially integrated approach for tourism planning and marketing in rural mountainous areas: the Montagu.
- Morakeng, P. (2001). Applying environmental management systems: the University of Stellenbosch case study.
- Morojele, N.I. (2001). Temporal and spatial patterns of vehicle-related crime in the central area of Stellenbosch.
- Morolong, L. (2001). Defensible space and closed circuit television (CCTV) as crime prevention strategies in Cape Town CBD.
- Nghulele, R.Z. (2001). Closed-circuit television: cause for crime displacement.
- Ntene, M.E. (2001). Assessment of ecotourism potential of the Katse Area, Lesotho.
- Opperman, D. (2001). Agriculture and the bio-physical environment: a GIS based inventory and analysis of the Western Cape.
- Pranger, I. (2001). Urban development and transformation in the new South Africa: the example of Stellenbosch, Western Cape province.
- Pretorius, C. (2001). Digital satellite remote sensing for terrestrial coastal zone management.
- Rainer, J. (2001). Die lebenswell der kinder von Kayamandi, SudAfrika.
- Smit, W.J. (2001). 'n Vergelyking van satelliet afstandwaarnemingstegnieke vir die kartering van vuurletsels in die Swellendam area.
- Steyn, E. (2001). Ontwikkelingspotensiaal van wateroppervlaktes vir buitelugontspanning en eko-toerisme in die sentrale Breëriviervallei.
- Van der Westhuizen, H.P.S. (2001). Die ontwikkeling van 'n GIS-tegniek om visuele landskap te kwantifiseer.
- Van Lill, S.W.P. (2001). Ontwikkeling van 'n driedimensionele netwerkmodule vir optimale roetebeplanning.
- Van Wyk, F.C. (2001). Die Saldanhabaai Watergehalte Forum Trust: 'n instrument vir beplande, geïntegreerde monitering en bestuur van watergehalte.
- Wambugu, J.N. (2001). Using GIS for optimal locations of automated teller machines (ATMs): The case of Stellenbosch.
- Hobson, A.G.C. (2002). Optimizing the renewal of natural gas reticulation pipes using GIS.
- Mohamed, A. (2002). Waste management practices at the University of Stellenbosch: An environmental management perspective.
- Oosthuizen, S.A. (2002). Establishing a greenbelt policy for the conservation and development of the Crocodile River in Nelspruit.
- Tichagwa, C.G. (2002). Land degradation in Mhondoro: an environmental evaluation of communal landuse systems and resource management practices.
- Van den Heever, J.L. (2002). The development of a visualization tool to assist topographic map users.

- Akinnusi, G. (2003). Probability mapping of veld fire occurrence in the mountain regions of the South Western Cape.
- Fernandez Ruiz, F. (2003). Alternative agricultural land uses to forestry in the Western Cape: a case study of La Motte plantation.
- Greenwood, K.C. (2003). Sea-surface temperatures around the Southern African coast: aspects and applications.
- Janse van Rensburg, H.S. (2003). Residential segregation in post-apartheid Vredenburg: the role of racial preference.
- Matoti, A. (2003). Using geo-technology for assessing the groundwater resources within the Table Mountain group.
- Meyer, K.C. (2003). Development of a GIS for sea rescue.
- Schreiber, W. (2003). GIS and EUREPGAP: Applying GIS to increase effective farm management in accordance with GAP requirements.
- Terrapon, H. (2003). Marketing of factory shop tourism in greater Cape Town using ArcIMS.
- Van Zyl, N.M. (2003). An infrastructure management support system for Western Cape Nature Conservation Board.
- Von Holdt (Sheila), D. (2003). GIS mapping and analysis of aircraft noise at Cape Town International Airport.
- Bester, F.J. (2004). The design and implementation of a first version MCDM for ArcView.
- Combrinck, A.P. (2004). Bepaling van weidingsdruk in 'n semi-ariëde gebied: Paulshoek gevallestudie.
- Kotoane, M. (2004). Modelling risk of Blue Crane (*Anthropoides paradiseus*) collision with power lines in the Overberg region.
- Kunneke, M.M. (2004). Vestiging van gemeenskapsgedrewe geïntegreerde rivierbekkenbestuur: die Veldwachtersrivier as gevallestudie.
- Letsie, M.A.M. (2004). The implementation of the planning indicators model as a tool for measuring the success of spatial planning policies in Stellenbosch.
- Mashimbye, Z.E. (2004). Remote sensing based identification and mapping of salinised irrigated land in a selected area between Upington and Keimoes.
- Münch, Z. (2004). The epidemiology of tuberculosis in the Western Cape: a geographical perspective.
- Puling, L. (2004). Solid waste management systems in developing urban areas: case study of Lwandle township.
- Scott, D.G. (2004). Developing the vine: commercialisation and commodification of the wine tourism product in the Stellenbosch.
- Smith, N. (2004). A dynamic landscape model for transfrontier conservation decision support.
- Sutton, T. (2004). The development of an integrated system for modelling species distribution within the Western Cape Province of South Africa.
- Basson, F.C. (2005). A spatial decision support system for the allocation and licensing of ground water usage.
- Donald, A.J. (2005). The application of bioregional planning and landscape function analysis in an agricultural landscape.

- Engelbrecht, J. (2005). Establishing and identifying remote sensing techniques for monitoring change detection of wetlands in the Kogelberg Nature Reserve and surrounding areas.
- Erasmus, L. (2005). Virtual reconstruction of stratigraphy and past landscapes in the West Coast Fossil Park region.
- Fourie, R. (2005). Evaluating landscape aesthetics.
- Hughes, S. (2005). Geohydrology data model design: case study South African boreholes.
- Kemp, J.N. (2005). Using ASTER multispectral reflection and emission data for the discrimination of Tonalite-Trondhjemite-Granodiorite suites in the Barberton Greenstone Belt, Mpumalanga, South Africa.
- Kidane, D.K. (2005). Rule-based land cover classification model: expert system integration of image and non-image spatial data.
- Majara, N.N. (2005). Land degradation in Lesotho – synoptic perspective using NOAA AVHRR data.
- Mhangara, P. (2005). Testing the ability of ASTER to map hydrothermal alteration zones: a case study of the Haib Copper Porphyry Deposit.
- Mocke, C. (2005). Location based services today and tomorrow: mobile phone GIS applications providing optimum traffic route directions.
- Morojele, N.I. (2005). Nodal intensification strategy: application of an analytical model to railway stations in the City of Cape Town.
- Semoli, B.P. (2005). Assessment of the practice and potential of industrial solid waste minimisation: case study of Stellenbosch.
- Stipinovich, A. (2005). Changing landcover and water abstraction: modelling runoff effects in the Bot River Catchment.
- Van der Merwe, J.P.A. (2005). Spatial monitoring of natural resource condition in southern Africa.
- Walters, C. (2005). Parke as ruimtelike, sosiaal-ekologiese bate in die Bellville munisipale gebied.
- Breytenbach, A. (2006). GIS-based natural resource allocation and decision making strategy in degraded rural landscapes – a forestry example.
- Ford, F.Y. (2006). Development of a GIS for fire management by the Western Cape Conservation Board.
- Fourie, J.C. (2006). Evaluating agricultural potential of a Cape Metropolitan catchment: a fuzzy logic approach.
- Gilberto, R. (2006). Integrating displaced local communities of the Limpopo Park in sustainable tourism development within the Great Limpopo Transfrontier Park in Gaza, Mozambique.
- Makau, M.E. (2006). Implementation of a household solid waste recycling scheme in Stellenbosch: householders' attitudes and willingness to participate.
- Mansfeld, C. (2006). Environmental impacts of prospecting and mining in Namibian national parks: implications for legislative compliance.
- Steer, L.A. (2006). Using GIS to find economically viable sites for trout farms in the Western Cape.
- Tengbeh, S. (2006). Crime analysis and police station location in Swaziland: a case study in Manzini.

- Van der Merwe, J.M.P. (2006). The impact of Stellenbosch Square on retail buying patterns in Paradyskloof.
- Van der Merwe, S.W.J. (2006). Local and sub-regional socio-economic and environmental impact of large scale resort development.
- Van Zyl, N.M. (2006). The Garden Route golfscape: a golfing destination in the rough.
- Fatoki, O.B. (2007). Monitoring the re-growth rate of alien plants after fire on Agulhas Plain, South Africa.
- Joubert, S.J. (2007). High resolution climatic variable generation for the Western Cape.
- Kula, L. (2007). Land-use change detection in Stellenbosch and its environs from 1994 to 2002.
- Lourens, J. (2007). Linking the cheese and tourism industries in South Africa.
- Marshall, L. (2007). The KwaZulu-Natal midlands meander as a tourism destination.
- Mlisa, A. (2007). Spatial decision support systems for hydrogeological studies in the Table Mountain Group aquifers, Western Cape, South Africa.
- Oosthuizen, M. (2007). Avalon Springs as toerismenodus: die rol in die streekseksonomie van Montagu.
- Stals, J.P. (2007). Mapping potential soil salinization using rule based object-oriented image analysis.
- Van Niekerk, L. (2007). A framework for regional estuarine management: a South African case study.
- Viljoen, F. (2007). Sustainability indicators for monitoring tourism route development in Africa.
- Bixa, B. (2008). Biodiversity and Wine tourism in South Africa.
- Dube, C. (2008). The impact of Zimbabwe's drought policy on Sontala rural community in Matabeleland South Province.
- Fourie, V. (2008). Architectural heritage of the Stellenbosch Wine route.
- Lemmer, A. (2008). Kayamandi tourism development corridor preverbal white elephant or success story?
- Watkiss, B.M. (2008). The Sleuth urban growth model as forecasting and decision making tool.
- Adendorff, M.A. (2009). The location dynamics of knowledge-based service establishments.
- Bridgman, C.P. (2009). Linking biodiversity and business in the Western Cape wine sector: a sustainability study of the Biodiversity and Wine Initiative.
- Nhantumbo, E.S.N. (2009). Tourism development in the Inhambane Coastal Zone, Mozambique.
- Torr, L.C. (2009). Applications of dairy wastewater as a fertilizer to agricultural land: an environmental management perspective.
- Welgemoed, L. (2009). The social and spatial manifestation of gated communities in the north-eastern municipalities of Cape Town.
- Benn, J.D. (2010). Studentifikasie in Stellenbosch.
- Smit, E. (2010). The spatial and structural relationship between the formal and informal economic sectors in South African city centres: the case of George.
- Stephenson, G.R. (2010). A comparison of supervised and rule-based object-orientated classification for forest mapping.

- Van der Walt, S. (2010). Determinants of Hout Bay residential property values.
- Willemse, L. (2010). Determining community park user's characteristics for effective park usage and delivery in Cape Town Metropole.
- Beytell, P.C. (2011). Reciprocal impact of black rhino and community-based ecotourism in northwest Namibia.
- Booyens, D. (2011). Deprivation amongst unemployed South African youth: Intergenerational or transitional?
- Chakupa, T. (2011). Environmental management and chrome mining along the Great Dyke of Zimbabwe, case study of Zimasco mining operations.
- Els, Z. (2011). Data availability and requirements for flood hazard mapping in South Africa.
- Gabriels, H. (2011). The relationship between information and communications technology penetration and poverty in South Africa.
- Khoza, C. (2011). Socio-economic performance of municipalities along the Maputo development corridor (MDC): implications for the national development plan (NDP) of 2011.
- Laldaparsad, S. (2011). The reshaping of urban structure in South Africa through municipal capital investment: evidence from three municipalities.
- Lottering, N. (2011). Investigating water sensitive urban design in a South African context – the case of Stellenbosch and George municipalities.
- Maluleka, R. (2011). To establish the relationship between geographic type and census undercount.
- Mohoto, T. (2011). Integrated development planning: relevance and availability of information in South Africa: the case of Gauteng province.
- Morudu, D. (2011). Economic and demographic performance of municipalities in South Africa: An application of Zipf's rule.
- Naidoo, A. (2011). Spatial variation in school performance, a local analysis of socio-economic factors.
- Naidoo, P. (2011). The potential application of supply-side statistics for analysing Municipal service delivery trends in South Africa.
- Niemand, B.J.P. (2011). A spatial analysis of agricultural land use change in the Cape Winelands District Municipality region.
- North, H. (2011). Citizens in space: a geo-information framework foundation.
- Schmidt, I. (2011). A critical evaluation of the analytical and operational application of various settlement typologies in South Africa.
- Taljaard, S. (2011). A model for integrated coastal zone management for South Africa – from legislation to practice.
- Thema, H. (2011). The importance of the crime administrative data in South Africa for achieving the NDP 2030 goals.
- Van Heerden, S. (2011). Spatial relationship between street trading and formal business in Cape Town's CBD.
- Brill, G. (2012). The tip of the iceberg: spatio-temporal patterns of marine resource confiscations in Table Mountain National Park.
- Chobokoane, N. (2012). An assessment of Bloemfontein's urban form in the context of the Mangaung Metropolitan Municipality's spatial plans for compaction.

- Cronje, M. (2012). Integrated development planning and sustainable development indicators: a case study of the Overberg District Municipalities and City of Cape Town.
- De Waal, J. (2012). Extreme rainfall distribution: analysing change in the Western Cape.
- Idima, V. (2012). The impact of urban form on public transportation accessibility: the case of Lebrerville.
- Kleinsmith, D. (2012). The new university of the Northern Cape: likely demographic and economic implications for Kimberley.
- Lotz, T. (2012). A fine-scale classification of land cover in the north-west Sandveld.
- Mnyaka, M. (2012). An analysis of the urban hierarchy of the SADC countries.
- Mohale, M. (2012). Measuring the size of dead capital in Johannesburg Metropolitan Municipality and determining its relationship to poverty levels.
- Myburgh, G. (2012). The impact of training set size and feature dimensionality on supervised object-based classification: A comparison of three classifiers.
- Pauw, T. (2012). Assessment of SPOT 5 and ERS-2 OBIA for mapping wetlands.
- Remas, H. (2012). The identification of natural terroir units in the Robertson Wine District using GIS and remote sensing.
- Stuckenberg, T.M. (2012). Land cover change in the Berg River catchment: implications for biodiversity conservation.
- Van der Mescht, D. (2012). Mountain wave turbulence over the Hex River Valley.
- Gama, N. (2013). The quality of life of domestic workers in post-apartheid South Africa.
- Hakizimana, J.-M. (2013). Comparative analysis of spatial disparities measures and their impacts on the socio-economic in South Africa.
- Harebatho, M. (2013). Address assignment in South Africa's traditional areas: assessment of 15 villages of Mahikeng, Ratlou and Tswaing local municipalities in North West province.
- Hattas, M. (2013). Determining the factors informing the future growth location of informal settlements in the City of Cape Town, Western Cape.
- Le Roux, R. (2013). Backyard dwellings in the City of Cape Town: implications for urban form, function and management.
- Lombard, A. (2013). Plantegroeibuffers as grondgebruikkontrolle in die Saldanha-Langebaan kussone: gemeenskapsdeelname in multi-kriteria afbakening.
- Magadzire, N. (2013). Reconstruction of a fire regime using MODIS burned area data: Charara Safari Area, Zimbabwe.
- Makhata, N. (2013). Factors influencing the evolvement of RDP Housing Settlements: Durban Metropolitan Area.
- Manamela, W. (2013). Performance of matriculants against the location of schools within different settlement typologies in the Eastern Cape province, South Africa.
- Mohammed, F. (2013). Analysis of neighbourhood change using harmonised census data in Cape Town municipality 2001-2011.
- Nhlapo, M. (2013). Migration pattern and age structure.
- Ntlebi, Z. (2013). Demographic and socio-economic characteristics of female migrants in the Western Cape.
- Slabbert, G. (2013). Assessment of the application of green building practices in Stellenbosch.

- Tyoda, Z. (2013). Landslide susceptibility mapping: remote sensing and geographic information system approach.
- White, K. (2013). A comparative study of coastal towns and central places elsewhere in South Africa based on socio-economic variables.
- Basson, C. (2014). The economic impact of a changing urban mining region: the case of the West Rand District Municipality in Gauteng Province.
- Brand, A. (2014). Corridor development in Gauteng.
- Brink, E. (2014). Geographical information systems for environmental impact assessment: a feasibility study.
- Callaghan, K.L. (2014). The use of remote sensing and GIS in the identification and vulnerability detection of coastal erosion as a hazard in False Bay, South Africa.
- Chatikobo, T.H. (2014). Evaluating holistic management in Hwange communal lands, Zimbabwe: an actor-oriented livelihood approach, incorporating everyday politics and resistance.
- Chikowore, T. (2014). Identifying the changes in the quality of life of Southern African Development Community (SADC) migrants in South Africa from 2001 to 2011.
- De Kock, C. (2014). Farming in the Langkloof: coping with and adaptive to environmental shock and social stress.
- Jacobs, W. (2014). Migration patterns and migrant characteristics in the Western Cape through a differential urbanisation lens.
- Kastern, M.L. (2014). Factors affecting lion (*Panthera leo*) spatial occurrence in the Zambezi Region, Namibia.
- Kruger, C. (2014). Applying the city development index (CDI) to measure the quality of life of the local municipalities in the Northern Cape between 2001 and 2011.
- Malepe, N. (2014). How's business? Manufacturing small, medium and micro enterprises (SMMEs) contributions to the formal sector employment in Gauteng and the Western Cape between 2007 and 2013.
- Marengo, R. (2014). Application of species distribution modelling to identify African Wild Dog (*lycaon pictus*) ecological corridors and re-location sites in South-Eastern Zimbabwe.
- Mashele, Y. (2014). An investigation of the demographic and socio-economic characteristics of youth in the labour market in the Limpopo province, South Africa.
- Matavire, M.M. (2014). Impacts of sugarcane farming on coastal wetlands of the North coast of Zululand, Kwadukuza, South Africa.
- Mathekga, J. (2014). Shattering the glass ceiling: determining the factors contributing to achieving grade 7 or grade 12 for citizens in Limpopo.
- Mogapi, T. (2014). Urbanisation pattern processes in the Bojanala Mining region.
- Moir, S. (2014). Drivers of wildfire behaviour, severity and magnitude in the Limietberg Conservation Area: Understanding the complexity of wildfire risk.
- Mokhuwa, E. (2014). Police area structure and crime dynamics: investigating the City of Tshwane Municipality.
- Motswaledi, M. (2014). Using remote sensing indices to evaluate habitat intactness in the Bushbuckridge area: A key to effective planning.
- Mugwena, T. (2014). Mapping spatial requirements of ecological processes to aid the implementation of corridors.

- Ngidi, M. (2014). Exploring the population and economic growth dynamics in former homeland settlements between 1996 and 2011.
- Ngobeni, J. (2014). Migrant characteristics and migration patterns to Gauteng (2001-2011).
- Ngwenya, L. (2014). A case study of international circular migrants shack-farming in the bon accord agricultural holdings, Tshwane, South Africa.
- Paviour, S. (2014). Carbon sequestration and trading potential in semi-arid South Africa: a Karoo case study.
- Pillay, X. (2014). Business clustering along the N1-M1-N3 corridor in northern Johannesburg, 2001-2012.
- Polumo, N. (2014). Investigating the level of alignment between the municipal capital budgets and the spatial development frameworks in the Ehlanzeni District Municipality.
- Potgieter, R. (2014). A review of land reform in the Matzikama Municipal area.
- Selemela, P. (2014). The impact of traditional authorities in the urban growth and development of intermediate cities: the case of the North West province in South Africa.
- Shifidi, V. (2014). Socio-economic assessment of the consequences of flooding in Northern Namibia.
- Smit, C. (2014). Geographical information system for integrated management of agriculture and the environment.
- Vos, E. (2014). Land cover change and its effects on landscape function in the Koue Bokkeveld.
- Xulu, S. (2014). Land degradation and settlement intensification in uMhlathuze Municipality.
- Buwembo, P. (2015). Impact of inter-provincial migration on individual labour market status: Limpopo-Gauteng migration flow.
- Coetzee, J. (2015). Factors influencing internal migration in the Free State.
- Creighton, A. (2015). Determining the transportation patterns and the socio-demographic, social and socio-economic factors influencing the transportation mode choice in the metropolitan areas of South Africa.
- Cronje, C. (2015). Farmworker housing in the Cape Winelands: Implications of regional migration and demographic dynamics.
- Dzumbira, W. (2015). An assessment of special economic zones' contribution to local economic development goals of municipalities.
- Geyer, P. (2015). Causes and consequences of counterurbanisation in the Developing World: Counterurbanisation in South Africa.
- Kelly, P. (2015). Who pushes the buttons? Regulatory governance of electricity tariff setting for businesses in South Africa.
- Makale, T. (2015). Service delivery in South African rural municipalities: an in-depth study of two local municipalities in South Africa.
- Masondo, N. (2015). Analysing the geographic structure and population composition of electoral wards in KwaZulu-Natal.
- Mdwara, V. (2015). Assessment of the quality of life in rural district municipalities of the Eastern Cape province.
- Moolman, T. (2015). Environmental reasoning of secondary-level schoolchildren: case study of Okahandja, Namibia.

- Mpanza, S. (2015). The influence of population change on plans developed in municipalities. a case study of ILembe District Municipality.
- Nell, G. (2015). Investing in infrastructure for backyard dwelling as a possible solution to the housing shortage of the urban poor: an in-depth study of backyard dwelling in a low cost housing community in South Africa.
- Ngema, S. (2015). Comparative spatial temporal analysis of urban mixed land use patterns in post-apartheid South African metropolitan cities.
- Nkwinika, M. (2015). Investigation of the changing relationship between transportation, land use, and population growth: the case of the northern part of City of Tshwane Metropolitan Municipality (CTMM).
- Ruch, W. (2015). Capital investment, economic growth and poverty reduction: a regression analysis for two metropolitan municipalities in South Africa between 2001 and 2011.
- Theron, F. (2015). Urban encroachment and growth management relaxation on urban agriculture: the case of the Philippi Horticulture Area.
- Tuoane-Nkhasi, M. (2015). Spatial analysis of deaths due to non-communicable diseases among adults in South Africa, 2009-2013.
- Adesuyi, A.S. (2016). Automating land cover modelling using time series NDVI: a case study in the Berg River catchment area.
- Ballim, K. (2016). Detecting informal settlements from high resolution imagery using an object-based image analysis approach.
- Brendie, F. (2016). Determining the spatial extent of golf residential lifestyle estates and its accessibility to facilities: managing this marketed lifestyle throughout the Western Cape.
- De Villiers, R.E.T. (2016). The Victoria and Alfred Waterfront (V&AW) work and playground for Capetonians.
- Jenneker, A. (2016). A typology for back yard housing focussing on policy implementation: the case of Diepsloot and Alexandra.
- Kgantsi, M. (2016). Measuring the expansion of economic activities in the city of Johannesburg using building statistics: the impact of development corridors.
- Lewis, N. (2016). Profiling doctoral graduates at Stellenbosch University, Stellenbosch between 2010 and 2015: understanding their role in knowledge creation and regional innovation.
- Mahlakanya, I. (2016). Comparing the changes in the quality of life of people residing in the rented main shacks, backyard rooms and backyard shacks in the metropolitan municipalities in Gauteng from 2001 to 2011.
- Maribe, H. (2016). Assessment of municipal property rates in South Africa.
- Mbolambi, C. (2016). Assessment of coastal vegetation degradation using remote sensing in False Bay, South Africa.
- Mokwena, E. (2016). Overview of self-employment and informal employment in the informal economy in Gauteng province between 2009 and 2013.
- Molayi, R. (2016). Factors influencing travel mode choice for work and educational trips in Gauteng.
- Mostert, M. (2016). The effects of water security on urban development, a case study of Windhoek, Namibia.

- Nzimakwe, V. (2016). Factors affecting and spatial trend of tuberculosis in RSA (2010-2014): Evidence from vital registration systems.
- Quin, L. (2016). Relationship between mixed land-use developments and property value trends in Woodstock, Cape Town.
- Roux, D. (2016). The dynamics of household formation and composition and its implications for housing.
- Sergio, F. (2016). A study based on the changed socio-economic profiles and population density of the areas surrounding stations on the Atlantis-Cape Town MyCity Bus Rapid Transport (BRT) route (Phase 1A) (2001-2011).
- Terblanche, M. (2016). Identifying the trends of property value within the Cape Town urban edge since 2001.
- Thoka, M. (2016). The effects of migration on fertility: an analysis of internal migrants from other provinces in South Africa to Gauteng.
- Thothela, M. (2016). Citizen participation in municipal planning and performance management processes in KwaZulu-Natal province: understanding citizen satisfaction with municipal performance.
- Venema, J. (2016). The social and economic impact of mall development in Paarl and Stellenbosch.
- Viljoen, E. (2016). Determining the applicability of the ISO 37120 standards as a potential tool for evaluating city planning processes: a case study of the City of Cape Town.
- Walters, C. (2016). Public art's right to the city: determining various role players' perceptions, experiences and preferences for public art in public spaces in the City of Cape Town.
- Wenger, S.M.B. (2016). Evaluation of SFM against traditional stereophotogrammetry and LIDAR techniques for DSM creation in various land cover areas.
- Wilson, M. (2016). Urban densities and transit: an analysis of Cape Town's integrated rapid transit system.
- Bailey, C.J. (2017). Scaling patterns and drivers of species richness and turnover across the afrotropics.
- Gardiner, A.E.M. (2017). The socio-economic wellbeing of small mining towns in the Northern Cape.
- Gilbertson, J.K. (2017). Machine learning for object-based crop classification using multi-temporal Landsat-8 imagery.
- Hunter, C.A. (2017). Wine tourism development in South Africa.
- Beuster, L. (2018). Urban greening in the global South – urban heat islands and the cooling capacity of green spaces, a South African case study.
- Botha, N. (2018). Case studies of private landowner conservation initiatives in the Western Cape, South Africa.
- Chuene, M. (2018). Derivation of quality of life (QoL) indicators from regular households surveys.
- De Wet, L. (2018). A mobility study to determine cycling routes, walking paths and parking nodes that students can use as part of the Future Urban Campus Plan.
- Duckitt, H. (2018). The Main Road corridor, Cape Town.
- Jacklin, D.M. (2018). Potential use of critically endangered renosterveld plant species for the phytoremediation of clopyralid and NPK Fertilizers, Western Cape.

- Kisting, D. (2018). From private to public urban management: a case study on Oranjemund, Namibia.
- Lepelle, M. (2018). Pattern of development of new property and the redevelopment of existing property, its uses and locations around Gautrain stations.
- Letlape, S. (2018). The impact of agricultural land on food security in rural areas in South Africa.
- Loggenberg, K. (2018). A machine learning-remote sensing framework for modelling water stress in Shiraz vineyard.
- Luck, W. (2018). Generating automated forestry geoinformation products from remotely sensed imagery.
- Makhubu, S. (2018). The effect of housing density parameters on the property prices and the supply of housing in Stellenbosch.
- Maringa, T. (2018). Analysing determinants of housing tenure: a cross sectional analysis in the City of Tshwane Metropolitan.
- Mbatha, L. (2018). Determining sustainable livelihoods of informal settlements in eThekweni and City of Cape Town.
- Rammuki, P. (2018). Change analysis of learner travelling time.
- Vermeulen, D. (2018). Efficacy of machine learning, earth observation and geomorphometry for mapping salt-affected soils in irrigated fields.
- Burns, J.J. (2019). Using lidar derivatives to estimate sediment grain size on beaches in False Bay.
- Chuene, M.A. (2019). Factors influencing the educational attainment for residents in Inxuba Yethemba, Mhlontlo, Buffalo City and Nelson Mandela Bay municipalities in Eastern Cape.
- Jacobs, N. (2019). Towards a framework for developing serious games for urban planning in South Africa.
- Jay, L. (2019). Regional lifetime fertility in the Eastern Cape province, South Africa.
- Lushozi, N.Q. (2019). Remote sensing approach for examining changes in water use in relation to climate variability and land cover change.
- Maponya, M.G. (2019). Machine learning and high spatial resolution multitemporal sentinel-2 imagery for crop type classification.
- Maringa, T.L. (2019). Analysing determinants of housing tenure: a life cycle case study in the City of Tshwane Metropolitan.
- Mistry, A. (2019). The 'eco-ness' of eco-estates in South Africa.
- Mulibana, P.L. (2019). Characteristics and patterns of in-migration and out-migration for Mpumalanga province (2011-2016).
- Prins, A.J. (2019). Efficacy of machine learning and lidar data for crop type mapping.
- Rammuki, P.M. (2019). The factors influencing the learner travelling time to school in the metropolitan municipalities of Gauteng.
- Tshililo, N.A. (2019). Youth participation in development planning and urban management in Gauteng province.
- Watkins, B. (2019). Agricultural field boundary delineation using earth observation methods and multi-temporal sentinel-2 imagery.

LIST OF GEOGRAPHY PHD DISSERTATIONS
BY YEAR OF SUBMISSION, 1937-2019

- Pienaar, J.H. (1937). Witwatersrand: ekonomies-geografiese ondersoek.
- Moolman, J.H. (1939). Die verspreiding van die bevolking in die Suid-Westelike Kaapprovinsie.
- Conradie, D.J. (1942). Port Elizabeth as industrie-sentrum.
- Hugo, C.F. (1944). Die geografiese verbreiding van bevolking in die Sentrale en Noordelike Transvaal.
- Brink, D. (1948). Noord Kaapland: die geografiese faktore wat sy ontwikkeling bepaal.
- Stander, E. (1950). Die geografiese grondslag van melk- en groentevoorsiening vir Kaapstad.
- Nel, A. (1951). 'n Kartografiese studie van die vernaamste dorpe in Suidwes-Kaapland.
- Vermeulen, D.C. (1952). Die bevolkingsverbreiding van die Kaapse Middellande.
- Joubert, H. (1956). Die verstedeliking van die Kaapse Vlakte.
- Coetzee, J.A. (1961). Die betekenis van Kaapstad as hawe: gesien in die lig van 'n breë Suid-Afrikaanse verkeersgeografie.
- Barnard, W.S. (1964). Die streekpatrone van Suidwes-Afrika.
- Swanevelder, C.J. (1965). 'n Geografiese opname van die Breërivieropvangsgebied met klem op die landelike grondgebruik.
- Roos, T.J. (1967). Geografiese invloede op die bosboubedryf in die Wes-Kaapstreek, die Kaap-Middellandstreek, die Oos-Kaapstreek en die Transkei.
- Jooste, P.G. (1968). 'n Kartografiese studie van die nie-blanke bevolkingsgroepe van Suidwes-Kaapland met die oog op die verwydering van die Bantoe uit die streek.
- Van Zyl, J.A. (1968). Stedelike ontwikkeling in die Noordoos Vrystaat: 'n sentrale plekstudie.
- Buys, M.E.L. (1971). Die gebruik van elektroniese hulpmiddels en statistiese tegnieke in die evaluering van die agro-klimaat van Suidwes-Kaapland.
- Steyn, J.N. (1972). Die Suid-Kaapse toeristebedryf: geografiese patrone en invloede op regionale ontwikkeling.
- Van der Merwe, I.J. (1972). Die differensiële evolusiegang van die interne stedelike ruimte van Kimberley.
- Tait, N.C. (1973). Die verbreiding en benutting van natuurlike hulpbronne in die Ciskei.
- Coetzee, I.G. (1974). The retail patterns of greater Johannesburg with particular reference to the incidence of large-scale retailing.
- Nieman, W.A. (1975). Die fisiese omgewingspotensiaal van die Bo-Visrivierbekken: gebiedsisteme, bodembenutting en bodembenuttingsprobleme.
- Senekal, W.F.S. (1977). Gedifferensieerde woonbuurtvorming binne die munisipaliteit van Bloemfontein: 'n faktorekologiese toepassingstudie.
- Zietsman, H.L. (1978). Residensiële mobiliteit van blankes in die Kaapstadse metropolitaanse gebied.
- De Kock, G.L. (1983). 'n Stedelik-morfologiese vergelyking tussen die twee oudste Sentraal-Weskusdorpe: Clanwilliam en Vanrhynsdorp.
- Taylor, V. (1984). Outdoor recreation of whites in the Cape Town metropolitan area: the resource base and utilization patterns.
- Kotze, W. (1986). Ruimtelike dimensies en impak van die 1982/84 droogte in Suid-Afrika.

- De Necker, P.H. (1987). Industrial linkages in greater Cape Town: spatial patterns of purchases and sales.
- Harmse, J.T. (1987). Die geomorfologiese geskiedenis en huidige vervorming van oppervlaksand langs die Suid-Afrikaanse weskus.
- Van Deventer, W. (1987). Die ruimtelike aktiwiteitspatrone van getroude vroue in Kaapstad.
- Van der Merwe, J.H. (1989). Die ruimtelike stuktuur van Kleurlingonderwys in die Kaapprovinsie: vraag, aanbod en benutting.
- Haldenwang, B.B. (1991). Die ruimtelike patrone en beïnvloedende omgewingsfaktore van kanker in Kaapstad.
- Kotze, N.J. (1997). Gentrifikasie as stedelik-geografiese verskynsel in Kaapstad.
- Moeti, D.M. (1997). An assessment of the Lesotho Highlands Water Project for irrigation: a geographical information system application.
- Badenhorst, N.C. (1998). The development of an operational decision support system for agricultural drought management in South Africa using satellite remote sensing.
- Reyneke, H.J. (1998). Die effek van die apartheidstelsel op die struktuur en funksionering van Mmabatho/Mafikeng stedelike kompleks en sy toekomstige rol as provinsiale hoofstad.
- Donaldson, S.E. (1999). Restructuring in a South African city during transformation: urban development and transformation in Pietersburg during the 1990's.
- Sinske, S.A. (2001). A spatial decision support system for pipe break susceptibility analysis and impact assessment of municipal water distribution systems.
- Froneman, C.A. (2004). Die rol van aftree-oorde in die behuisingvoorsiening vir bejaardes in Groter Kaapstad: 'n stedelik geografiese perspektief.
- Goldschagg, P. (2007). Airport noise in South Africa: prediction models and their effect on land-use planning.
- Van Niekerk, A. (2007). Clues: a web-based land use evaluation system for the Western Cape.
- Louw, E.J.M. (2008). Climate change in the Western Cape: a disaster risk assessment of the impact on human health.
- Rust, C. (2008). Meta-tourism, sense of place and the rock art of the Little Karoo.
- Van Pletzen-Vos, L. (2009). The impact of tourism on the archaeological resources of the western Little Karoo.
- Gumbo, T. (2013). On ideology change and spatial and structural linkages between formal and informal economic sectors in Zimbabwean cities.
- Massey, R.T. (2013). An investigation into the effect of state led informal settlement upgrading on governmentality: New Rest and Vrygrond, Cape Town.
- Musakwa, W. (2013). Evaluating earth observation for supporting sustainable urban land use planning in Africa.
- Onyebueke, V.U. (2013). Policy implications of the spatial and structural relationships of the informal and formal business sectors in urban Nigeria: the case of Enugu (1990-2010).
- Spocter, M.A. (2013). Non-metropolitan gated communities in the Western Cape: patterns, processes and purpose.
- Tilumanywa, V.T. (2013). Land use and livelihood change in the Mount Rungwe Ecosystem, Tanzania.

- Du Plessis, H. (2014). A methodology for assessing geographical information science professionals and programmes in South Africa.
- Mwathunga, E. (2014). Contesting space in Malawi: A Lefebvrian analysis.
- Marx, J.T. (2015). The military integrated environmental management (MIEM) of the Donkergat training area.
- Smit, H.A.P. (2017). Military environmental literacy in the South African army.
- Magadzire, N. (2018). Using remotely sensed measures of ecological regime as predictors of the distribution of vegetation types, communities and species across the Cape Floristic Region.
- Matthaei, E.A. (2018). A critical reflection on the formalisation of communal land rights in Namibia: why local contexts matter for bridging the dichotomies of tenure rights.
- Perold, P.R. (2018). Informal capacities: exploring grounded architectural practice in transitions to sustainable urbanism in Cape Town.
- Welman, L.P. (2018). Regional development of the greater Saldanha Bay region.
- Yakubu, I. (2018). Residential mobility practices in low-income communities of Tamale, Ghana.
- Bangira, T. (2019). Mapping surface water in complex and heterogeneous environments using remote sensing.
- Du Plessis, D.J. (2019). The impact of spatial planning on the structure of South African cities since 1994.
- Harris, D.J. (2019). Regional mapping of spekboom canopy cover using very high resolution aerial imagery.
- Horn, A.J. (2019). An analysis of an urban edge as urban growth management instrument: Cape Town, South Africa.
- Münch, Z. (2019). Towards land change management using ecosystem dynamics and land cover change in rural Eastern Cape.
- Yamungu, N. (2019). Piecemeal planning: An analysis of local realities and adoption of urban planning approaches in Tanzanian small towns of Mlandizi and Sirari.



INDEX

A

Adendorff A 74, 75

B

Barnard WS (Barnie) 2, 5, 14, 24, 27,
36-38, 41-44, 50, 53, 63, 82, 93, 95

Blommaert W 10, 12, 14

C

Cape Town 5, 6, 15, 27, 43, 44

CGA (Centre for Geographical
Analysis) 3, 64, 66, 69-73, 79

Cillié GG 6, 7

climatology 10, 40, 41, 43, 60, 84, 87

Conradie DJ 16, 17, 20, 28, 37, 50, 63

Cronje M 39, 40

CRUISE (Centre for Urban and
Regional Innovation and Statistical
Exploration) 3, 64, 67, 69, 71, 73, 74,
75, 76, 79, 89, 92

curriculum 6, 18, 35, 40, 41, 43, 46, 54,
59, 61, 82, 94

D

Davids D 39, 40

de Klerk H 51, 57, 67, 68

de Kock GL 36, 37, 51

de Necker PH 34, 36, 37, 38, 43, 44, 51,
52, 60-62, 88, 90

department 1-6, 9, 10, 13, 14, 16-18, 22,
24, 27-31, 33-36, 38-44, 46-50, 52-71,
73-97

de Waal JH 51, 64, 67, 76, 77

Die Suid-Afrikaanse Geograaf 44

doctoral degree 24, 30, 50, 90

Donaldson SE (Ronnie) 51, 57, 61,
63-66, 68, 72

du Plessis D 63, 72, 74-76

E

economic geography 15, 18, 24, 30, 44,
52, 87, 90

Eichhoff J 72

Eloff PJ (Piet) 36-38, 43, 51, 59, 62, 67

empirical 83, 94-97

*Encountering Adamastor: South Africa's
founding geographers in time and
place* 27

environmental studies 1, 4, 52, 53, 58,
59, 64, 69, 78, 84

epistemology 44

F

Ferreira SLA 1, 51, 61-64, 66, 68, 72,
88, 95

funding 36, 61, 71, 73, 78, 83, 86, 88,
91, 96

G

gentrification 67

geographical tradition 29, 42, 94

geomorphology 40, 41, 43, 54, 60, 83, 84,
87, 91

Geyer HS Jnr 74, 75

Geyer HS (Manie) Snr 68, 74-76

GISc (Geographical Information
Science) 56

GIS (Geographical Information
Systems) 34, 52, 54-57, 66, 67, 70, 73,
85, 90-92, 95

GIT (Geographic Information
Technology) 4, 54, 55, 57, 60, 64, 66,
67, 69-72, 85, 88, 90-92, 95

Goddard EJ 10, 11, 14

government 6, 10, 17, 27, 47, 55, 74, 79,
80, 86, 88, 89, 96

Grenfell S 51, 64, 67, 68

H

- Harmse JT 42, 43, 51
 Higgs C 72
 honours (honours degree) 3, 36, 37, 47,
 60, 61, 64, 67, 76, 78, 81-86
 Horn A 74, 75

I

- ICA (Institute for Cartographic
 Analysis) 3, 37, 69-71

J

- Jansen JP 34, 35, 37, 38, 42, 50
 Jooste PG 38, 51, 52
Journal for Geography 40, 44

K

- Kemp J 51, 57, 63, 67

L

- le Roux MM 16, 17, 36, 50, 95
 Liederman C 59
 Loggenberg K 51, 67

M

- Malan O 72
 Malherbe WE 8
 Marxist geography 46, 95
 Mashimbye ZE 51, 62, 67
 master's degree 3, 30, 36, 75, 78, 81,
 86-90
 McCarthy L 72
 Moolman JH 17, 18, 21, 28, 50
 Morrison JT 7, 8
 Mostert H 72
 Muller J 72
 Münch Z 51, 57, 67

N

- Namibia 42, 48
 Nel A 18, 20, 21, 29, 34-37, 40-42, 47,
 50, 52, 63
 Nieman WA 34, 36, 38, 42, 44, 51

O

- Olivier J 36, 38, 43, 51, 53
 Ortell S 39, 40

P

- Pauw T 72
 physical geography 2, 5, 10, 14, 15,
 40-43, 53, 54, 59-62, 64, 67, 84,
 90-92, 94
 Poona N 51, 57, 62, 67
 population dynamics 30, 41, 87, 90, 91
 positivism 44, 83
 positivist 31, 44-48, 90, 94-96
 postgraduate research 42, 80, 81
 postmodern geography 46
 Prins A 72

R

- RADAR (Research Alliance for Disaster
 and Risk Reduction) 3, 64, 69, 71, 73,
 76-79
 regional geography 16, 19, 24, 29, 40,
 42, 82
 Regue Y 74, 75
 remote sensing (RS) 55, 56, 66, 67,
 71-73, 91
 research centres 52, 54, 59, 67-69, 73,
 79, 96
 Rhodes University 5, 27

S

- Schloms BHA (Bennie) 36, 43, 51, 59,
 61, 67
 Serton P 5, 13, 15-20, 23-30, 34-36, 40,
 41, 50, 63, 82, 83, 86, 90, 95
 Shand SJ 8-10, 13, 14, 58, 82, 94
 small towns 61, 66, 87
 South Africa 1, 5, 6, 10-14, 16-18, 24-28,
 30, 31, 33, 35, 36, 40, 41, 44-50, 52,
 53, 56, 58, 60, 68, 70, 72-74, 78, 79,
 81-90, 93-97
South African Geographical Journal 1, 24, 44
 Southey T 72
 Spocter M 51, 62-64, 67, 68, 72
 Statistics South Africa (StatsSA) 74, 75
 Stellenbosch 1-6, 10, 12-16, 18, 22-24,
 27, 29-31, 33-36, 38, 40, 41, 43-46,
 48, 49, 52-58, 60, 61, 64, 69, 71, 73-76,
 78, 79, 81-83, 85-87, 90, 93-97
 Stephenson G 71, 72
 Steyn JT 38, 44, 45, 51, 52, 90
 structured master's 86-89
 Swanevelder CJ 34-38, 41-43, 51, 63, 90

T

- Theron C 72
The South African Geographer 44
Tijdschrift voor Economische en Sociale Geografie 24
Tijdschrift voor Economische Geografie 24
 tourism 4, 60, 61, 64, 66, 67, 85, 87, 88, 90, 91, 95
 traditional master's 86, 89
Tydskrif vir Aardrykskunde 44

U

- University of Cape Town (UCT) 43, 46, 52, 56, 64, 76, 78
 University of Natal (UN) 27, 43, 46, 50, 95
 University of the Cape of Good Hope 5, 6, 12
 University of the Western Cape (UWC) 27, 46, 64, 78
 University of the Witwatersrand (Wits) 27, 30, 36, 43, 46, 50, 56, 95
 urban geography 40, 43, 53, 61, 76, 83, 90, 91

V

- van der Merwe EGJ 30, 86
 van der Merwe IJ (Izak) 36-38, 43, 44, 47, 50-53, 63, 65, 66, 68, 70, 72, 88
 van der Merwe JH (Hannes) 51, 53, 56-58, 62, 63, 65-70
 van Eeden A 74, 75
 van Huyssteen MKR (Konrad) 36-38, 51, 53, 61
 van Niekerk A 51, 52, 55, 56, 63, 64, 66, 68, 70-72
 Vermeulen D 72
 Victoria College 2, 5-7, 9, 10, 12, 16, 18, 82
 Visser GE 51, 63, 64, 66, 68, 93

W

- water 42, 43, 60, 67, 72, 88
 Wesso H 6, 17-19, 35, 94
 West Coast 48
 Willemse L 74, 75
 Williams S 51, 62, 64, 67
 wine 73, 88

Z

- Zietsman HL (Larry) 37, 38, 51, 52, 55, 56, 63, 70, 72

A Century of Geography at Stellenbosch University 1920-2020 focuses on the establishment and development of geography as an academic discipline at Stellenbosch, South Africa's founding geography department. The ways in which the department currently operates are deemed fundamentally joined to its past and pave the way for the evolution of geography and its various subdisciplines going forward. The investigation seeks to highlight the development of the discipline and its institutionalisation as part of the academic offerings of the university, while providing details about the teaching and research conducted, as well as of the people who contributed to these endeavours. It also furnishes the academic geography community at Stellenbosch, and geography more broadly, with some insights into its past development and more recent changes, along with a complete bibliography of conducted research.

GUSTAV VISSER is a Professor in the Department of Geography and Environmental Studies, Stellenbosch University.

JAN DE WAAL is a Lecturer in the Department of Geography and Environmental Studies, Stellenbosch University.



SUN PRESS

ISBN 978-1-928480-74-7



9 781928 480747