

The local, the global, and the self:  
An ethnographic account of a community Computer Centre in Carnarvon,  
Northern Cape, and its significance for its users' sense of self and  
their place in the world

by  
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*Thesis presented in fulfilment of the requirements for the degree of Master of Arts in  
the Faculty of Arts and Social Sciences at Stellenbosch University*



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March 2017

## **Declaration**

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## Abstract

The focus of this thesis has been on the local participants in computer education courses that are provided by the Siyafunda Computer and Technology Centre at Kareeberg library in Carnarvon in the Northern Cape. The aim of the Computer Centre is to introduce the rural community to basic computer technology and to promote computer literacy and thereby improve their job opportunities and better their livelihoods. The Centre was launched on 19 November 2013 with the slogan '*leer, motiveer & inspireer*' [learn, motivate and inspire], and is a partnership between inter alia the Department of Science and Technology (DST), the Square Kilometre Array South Africa (SKA-SA) and SiyafundaCTC. The SKA is an internationally driven project located on a cluster of farms between the towns of Brandvlei, Vanwyksvlei, Carnarvon and Williston, and when completed it will be the biggest and most advanced radio telescope in the world. The presence of the SKA in this area of the Karoo has brought changes to the surrounding communities, and in particular Carnarvon, which have proven to be a significant part of the context for this research project.

The main research site for this project has been the Computer Centre, and within this setting I have explored what impact the promise of being able to use computers and have access to the internet has had on the lives of the people who have made use of these facilities. Additionally, I looked at whether and how basic education in computer technology may shift the way participants look at themselves, their local environment, and the wider world 'out there'. This has been done through the conceptual lens of 'critical cosmopolitanism', to provide an understanding how computer technology can open up local views to global perspectives and unpack the tensions that may arise between local, national and global spheres.

In conducting this study an ethnographic research methodology has been adopted in which participant observation and 'hanging' out in the Centre as well as in the town of Carnarvon have been central research methods. By engaging with students, staff, recreational users, and casual visitors of the Centre I developed insights into how the use of computers and internet may affects their everyday lives, how they think about their local community and what it means to open up their ideas of the world 'out there' to a more open and global worldview.

## Opsomming

Hierdie studie fokus op plaaslike inwoners van Carnarvon in die Noord-Kaap wat ingeskryf is vir rekenaaronderwys kursusse aangebied deur die Siyafunda Rekenaar en Tegnologie Sentrum by die Kareeberg biblioteek. Die doel van hierdie rekenaarsentrum is om die landelike gemeenskap bekend te stel aan basiese rekenaartegnologie en rekenaargeletterdheid te bevorder. Sodoende word daar gepoog om hierdie gemeenskap bloot te stel aan beter werkseleenthede en terselfde tyd moontlik hul lewensbestaan te verbeter. Met die vorming van 'n vennootskap tussen onder andere die Departement van Wetenskap en Tegnologie (DWT), die Square Kilometre Array South Africa (SKA) en SiyafundaCTC was dit moontlik om die sentrum se deure oop te maak in November 2013 met die slagsprek 'leer, motiveer & inspireer'. Die SKA is 'n internasionaal-gedrewe projek wat geleë is op 'n groep plase tussen Brandvlei, Vanwyksvlei, Carnarvon en Williston. Wanneer die SKA voltooi is sal dit die grootste en mees gevorderde radioteleskoop in die wêreld wees. Die teenwoordigheid van die SKA in hierdie gebied van die Karoo het vele verandering aan die omliggende gemeenskappe teweeg gebring. Dit is veral die geval in Carnarvon, die dorp wat 'n beduidende deel van die konteks vir hierdie navorsingsprojek gevorm het.

Die rekenaarsentrum was die belangrikste plek van navorsing vir hierdie projek. Binne hierdie instelling is ondersoek ingestel na die impak wat toegang tot die gebruik van rekenaars en die internet gehad het op die lewens van die mense wat gebruik gemaak het van hierdie fasiliteite. Verder is gekyk na of, en hoe, basiese opleiding in rekenaartegnologie deelnemers se persepsie van hulself, hul plaaslike omgewing, en die res van die wêreld "daar buite" verander het. Deur gebruik te maak van 'kritiese kosmopolitisme' as 'n konseptuele lens, word 'n begrip gevorm vir die manier waarop rekenaartegnologie plaaslike menings vatbaar maak vir globale perspektiewe. Verder word daar gekyk na die spanning wat kan ontstaan tussen plaaslike, nasionale en globale vlakke as gevolg hiervan.

'n Etnografiese navorsingsmetode is gebruik tydens veldwerk. Dit het deelnemende waarneming asook 'n informele daaglikse aanwesigheid in die sentrum, sowel as Carnarvon, wat sentraal in die uitvoering van hierdie studie was, behels. Deur interaksie met studente, personeel, informele besoekers, en diegene wat die sentrum gebruik vir ontspanningsdoeleindes, is daar gepoog om verdere insigte te verkry oor die gebruik van rekenaars en die internet en hoe dit deelnemers se alledaagse lewens affekteer. Dit het verdere insigte gebied oor hierdie individue se persepsie van hul plaaslike gemeenskap en hoe hul idees rakende die wêreld "daar buite" lei tot 'n meer globale wêreldbeskouing.

## **Acknowledgements**

I would like to express my gratitude to my supervisor, Professor Cherryl Walker, for giving me the opportunity to explore, learn, struggle and grow as an academic and as a person. Without her guidance, patience and sometimes very needed stern words of encouragement this thesis would not have been the same, and I am grateful for the valuable lessons learned throughout this journey.

A special thank you to the staff, students and visitors of the Computer Centre in Carnarvon, who were kind enough to allow me into their lives and always made me feel welcome in their midst.

This MA project has also benefitted by being associated with Prof. Walker's DST/NRF SARChI Research Chair in 'The Sociology of Land, Environment and by Sustainable Development. The financial assistance of the National Research Foundation (NRF) is hereby acknowledged. Opinions expressed and conclusions arrived at are those of the author and are not necessarily to be attributed to the NRF.

Lastly, I would like to acknowledge Marike for chatting and singing through all the countless hours of driving on the endless Karoo roads, and to the other 'Karoosters' for sharing their knowledge and experiences with me.

## **Dedications**

I would like to dedicate this thesis to a few of the most important people in my life, as without them I would not be where I currently am today. Therefore, I would like to express a special thank you:

to Matt, for being my rock. For letting me ramble endlessly in order to streamline my thought, for never letting me give up when I thought I could not do it, and most importantly for calling me on my sh\*t when I needed it most. Thank you for always being there and I whaley love you.

to my parents and brother, for accepting my passions even when that meant having a daughter and sister living on the other side of the Globe. You have given me the foundation I needed to grow and I will be forever grateful for your love and support.

to Wessel, for telling me to keep believing in myself and to chase after my dreams. Without your support and words of wisdom I would have never made it this far in life.

to my best friends, Annelijne, Marlies en Lisa, who I miss every day. Without the countless whatsapp messages, hours on skype and short rendezvous at home, I would not have stayed completely sane. I cannot be happier to have you as my friends, and to never let the distance come between us.

I could not have done this without your support, in one way or the other, and it means the world to me that you were willing to stick by my side and guide me whenever necessary.

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## List of Abbreviations

ABET	Adult Basic Education and Training
AoIR	Association of Internet Researchers
ANC	African National Congress
CACE	Centre for Adult and Continuing Education
CSIR	Council for Scientific and Industrial Research
CTC	Computer and Technology Centre
DST	Department of Science and Technology
IT	Information Technology
IDP	Integrated Development Plan
LAP	Land Acquisition Programme
NGO	Non-Governmental Organisation
NRF	National Research Foundation
NSC	National Senior Certificate
SEA	Strategic Environmental Assessment
SKA	Square Kilometre Array
SKA SA	Square Kilometre Array South Africa
TRC	Truth and Reconciliation Commission
UWC	University of the Western Cape
VG Church	<i>Verenigde Gereformeerde</i> [United Reformed] Church

# CHAPTER 1:

## INTRODUCTION

*It is almost 10 a.m. but so far only two young people in their early 20s have entered the already warm and sticky room in the Computer and Technology Centre attached to the Kareeberg Library in Carnarvon. The two young women have taken a seat in the one corner of the U-shaped room and, except for sometimes stealing a look at each other, they stare blankly at the computer screen in front of them. Charlie, the teacher is printing administration forms and course materials for the first class. Based on the pile of papers coming out of the printer, one can definitely expect about 10 more people. It is five past ten and two more girls take a quick peek from outside into the computer room, but are not quite sure of what to do next. Charlie catches them peeking inside and invites them in to the room, saying: 'Kom binne! Soek 'n plekkie waar jy wil sit' [Come on in. Take a seat wherever you like]. Over the next ten minutes more shy and unsure looks come from beyond the open door and eventually fourteen of the total of 36 computers have potential users sitting in front of them. The class consists of nine female and five male participants ranging in age from 18 to 26 years. The group is completely quiet and the only sounds to be heard are the suddenly working air conditioner, the buzzing of the computers and the laughter of the librarians chatting next door in the library. Charlie breaks the silence by announcing that 'this is a safe space. There is no making fun of each other or laughing at questions. We are all here to learn and the one will learn a little faster than the other. This does not matter, because you are all here to learn. Is that clear?' This does not seem to ease the tension in the room and most of the students continue to stare passively at the blue log-in screen with the angry flashing cursor asking them to type in a password. It is only at the actual start of this first computer class that I realise why most of them have such a nervous and almost fearful look in their eyes; these young adults have never used a computer in their lives before! During the next half an hour the computers stay untouched while Charlie explains the position and function of the screen, keyboard, and the mouse with everyone eagerly taking notes. When the moment finally arrives, everyone is allowed to type in the login password "students" and fourteen pointing fingers go over the keyboards searching for the right letters, I am certain that the coming months will be an interesting learning experience for all of us!*

### **1.1 Introduction**

The above is a description of a group of young adults whom I observed taking part in their first computer class in April 2016. This computer course for beginners, along with a more advanced e-learning course, was being provided by the Siyafunda Computer and Technology Centre at the Kareeberg library in Carnarvon in the Northern Cape. This secluded rural town, barely known to most people in the country, has been in the limelight for the last couple of years, especially within the scientific community. The reason for this is the establishment of the Square Kilometre Array (SKA) radio telescope project in its vicinity; when completed, this internationally driven project will be the biggest and most advanced radio telescope in the world. The location of the SKA project, on a cluster of farms between the towns of Brandvlei, Vanwyksvlei, Carnarvon

and Williston (see Figure 1 below), is remarkable to say the least. The people living in these small Karoo towns have to deal with a harsh living environment and poor socio-economic conditions on a daily basis but are now being exposed to the establishment of a multi-billion Rand, cutting-edge science project on their doorstep. As a social scientist it is difficult to overlook the paradox in this situation or to ignore the tensions this juxtaposition has created within local communities. For these reasons the SKA management has also acknowledged their social responsibilities toward the communities surrounding the project. One of the initiatives of their local development outreach programmes has been the establishment of the Siyafunda Computer and Technology Centre at Kareeberg library. The aim of this Centre is to introduce the rural community to basic computer technology and promote computer literacy.

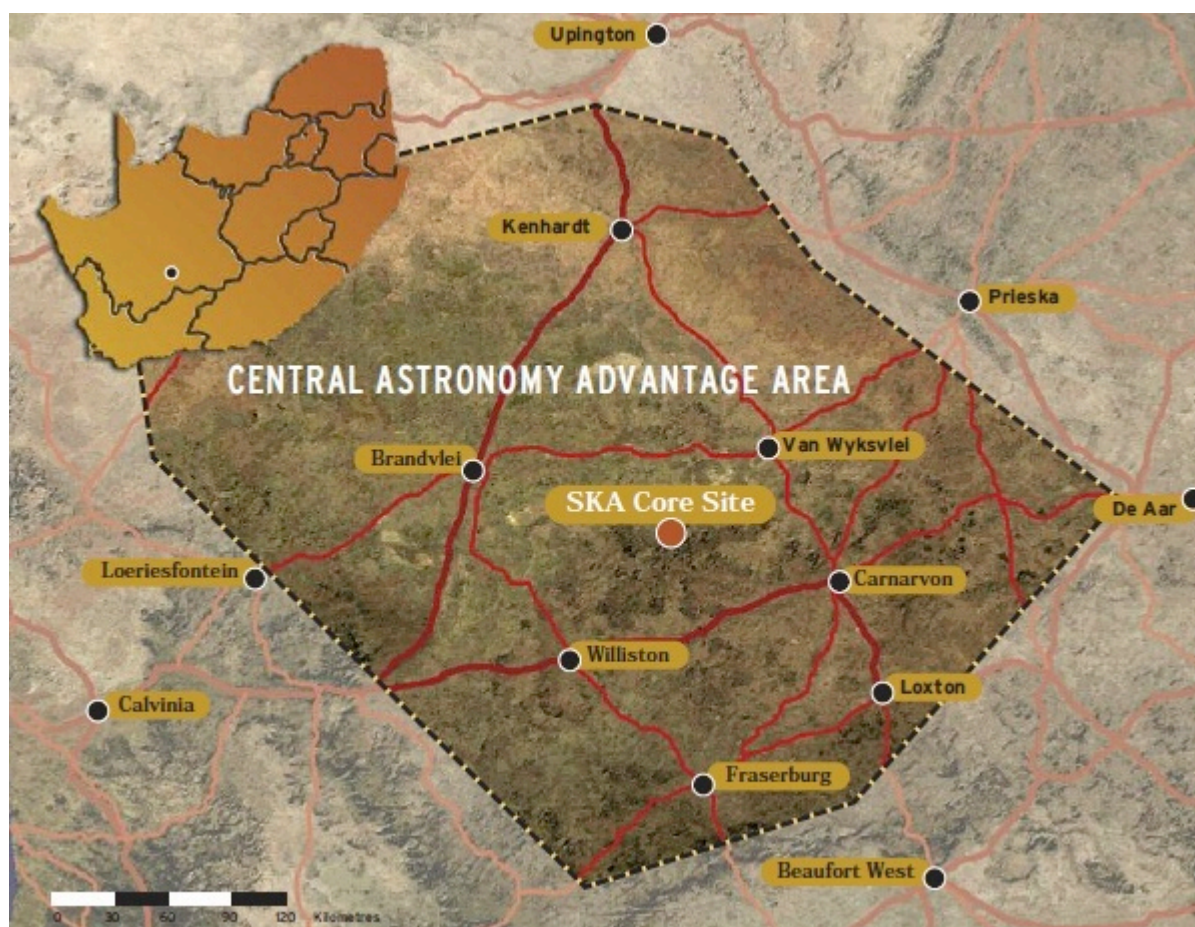


Figure 1: The area where the SKA is based within the Karoo region (Source: SKA South Africa)

This Centre has been my main research site for this thesis. Within this setting I have wanted to explore what impact the promise of being able to use these computers and have internet access has had on the lives of the people who made use of these facilities, for most their first opportunity to work with computers. Additionally, I wanted to look at whether and how basic education in computer technology may shift the way participants look at themselves, their local environment, and the wider world ‘out there’. This has been done through the lens of ‘critical cosmopolitanism’ (Delanty 2006, 2009), to look at how computer technology can open up local views to global perspectives and unpack the tensions that may arise between the local, the national and the global spheres. Critical cosmopolitanism, which I discuss in more detail in Chapter Two, challenges the conventional connections between the global and the local and looks at the social world as

akin to a glass world where boundaries are no longer blocked or hidden by differences, but are fluid and transparent (Beck, 2006).

Although these have remained central concerns within this research project, my fieldwork has also shown that what happens and is being discussed within the Centre is strongly affected by what happens outside the Centre. In the course of my fieldwork the Centre encountered serious logistical problems which affected its ability to provide the services it had initially promised. The wider context in which the Computer Centre and its users are located has therefore become an important part of this project, as will be discussed in greater length in the following chapters.

This introductory chapter starts off by presenting the general background for this research project in section two. Here I provide a broad overview of the socio-economic situation of the Northern Cape as well as the Kareeberg Municipality (developed further in Chapter Three), followed by an introductory account of the SKA and thereafter an overview of local development projects that have been established by the SKA and the establishment of the Computer and Technology Centre in Carnarvon, in association with SiyafundaCTC (Computer and Technology Centres), a nation-wide organisation based in Gauteng. After this description of the wider context in which the Computer Centre is situated, I present my main research questions in section three, followed by a discussion of the research methodology that I have used to answer these questions in section four. I conclude this introductory chapter with my chapter outline in section five.

## **1.2 Background**

### **1.2.1 The Northern Cape Province and Kareeberg Local Municipality**

Carnarvon, together with the small towns of Vanwyksvlei and Vosberg, forms part of the Kareeberg Local Municipality within the Pixley ka Seme District Municipality of Northern Cape Province. The Northern Cape is one of South Africa's poorest provinces. The name Kareeberg derives from the nearby mountain range in the area, especially iconic for the landscape around the town of Carnarvon. According to the 2011 Census (Statistics South Africa, 2011), the total population of the local municipality was 11,673 people, which amounts to less than one person per every square kilometre. In terms of racial dynamics, the majority of the people living in this area can be classified as 'coloured'<sup>1</sup> (85,1%), with 9,1% of the population classified as 'white', 4,8% as 'black African' and 1% as 'other'. The great majority of the people - 93,7% of them - speak Afrikaans as their home language. Overall, the biggest population group (62,5%) consists of working-age people between 15 and 64 years of age, with almost one-third children under the age of 14 and about 8% elderly people 65 and older. The 2011 Census also reported a total of 3,222 mostly 'urban' households, with an average size of 3,4 people, about a third of them the female headed (Statistics South Africa, 2011).

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<sup>1</sup> The term 'coloured' draws on apartheid-era terminology where it was used to label people considered to be from mixed ethnic origin. I use this term here as the Carnarvon residents I spoke to classified themselves as being 'coloured'.

Looking more closely at the statistics one can see that the Northern Cape Province in general suffers from low levels of education, which stands in marked contrast to the world-class scientific knowledge that the SKA represents. Educational statistics for the province show that in 2015 25,5% of the population had no formal education (Department of Basic Education, 2015:20). According to South Africa's Millennium Development Goals Report of 2013 the proportion of children finishing secondary school in the Northern Cape is 33,1% (Statistics South Africa, 2013:36), which is 10% below the national average completion rate. Statistics for the Kareeberg Local Municipality indicate that 18% of the people above 20 years of age have no education at all and only 17,5% have graduated for their National Senior Certificate (matric diploma) (Statistics South Africa, 2011). In comparison to the other municipalities, figures for the highest level of education attained are lower in the Kareeberg than in most other districts within the Northern Cape (Statistics South Africa, 2012:14).

The statistics for employment do not sketch a more positive picture either. Of the 11,673 people living in this municipality, 2,940 were unemployed, of whom almost a thousand were young adults between the ages of 18 and 25 years. This places the youth unemployment rate in the Kareeberg at 32,1%, which is one of the highest rates in the province (Statistics South Africa, 2012:16). Looking at the distribution of household goods within Carnarvon, only 14,5% of the households had a computer, compared to 68,6% with a cell phone and 64,3% owning televisions. These numbers are all lower than what the averages for the Northern Cape Province as a whole (showing, respectively, 16,5%; 81,1% and 72%). With regards to access to the internet – in any form possible – the Kareeberg notes 22,3% of the population having access, compared to 25,9% for the Northern Cape overall (Statistics South Africa, 2012:20, taken in mind larger towns as Kimberly and Upington pushing up these statistics).

Taking these statistics into account, it is evident that a Computer and Technology Centre within the Kareeberg municipality has the potential to be of great relevance for the community. They demonstrate the need for a Centre to boost access to computer, computer literacy and the internet. These factors make it even more interesting to have a closer look at how the Centre has unfolded over the three years and how it is currently being run.

### **1.2.2 The Square Kilometre Array**

As mentioned above, the Siyafunda Computer and Technology Centre in Carnarvon has been partly established through the sponsorship of the Square Kilometre Array South Africa (SKA-SA) project. Unlike what many people assume, the SKA is not one big radio telescope but, once completed, will consist of thousands of smaller radio telescopes spread across a collecting area of one square kilometre (one million square meters). The main structures of the SKA telescope are co-hosted by both South Africa and Australia, with additional dishes reaching into seven other African countries (Namibia, Botswana, Ghana, Zambia, Mauritius, Madagascar, and Mozambique) (see Figure 2 below). Compared to what is currently one of the most powerful radio telescopes in the world, the Hubble Space Telescope, the images coming from the SKA will exceed the resolution quality of the Hubble telescope by a factor of 50 times and will be 10,000 times

faster (SKA SA, 2016a). As mentioned on the SKA SA website and in public information booklets, there are 11 member-countries taking part in the international SKA project, namely Australia, Canada, China, Germany, India, Italy, New Zealand, South Africa, Sweden, The Netherlands and the United Kingdom, with the international headquarters based near Manchester (UK).

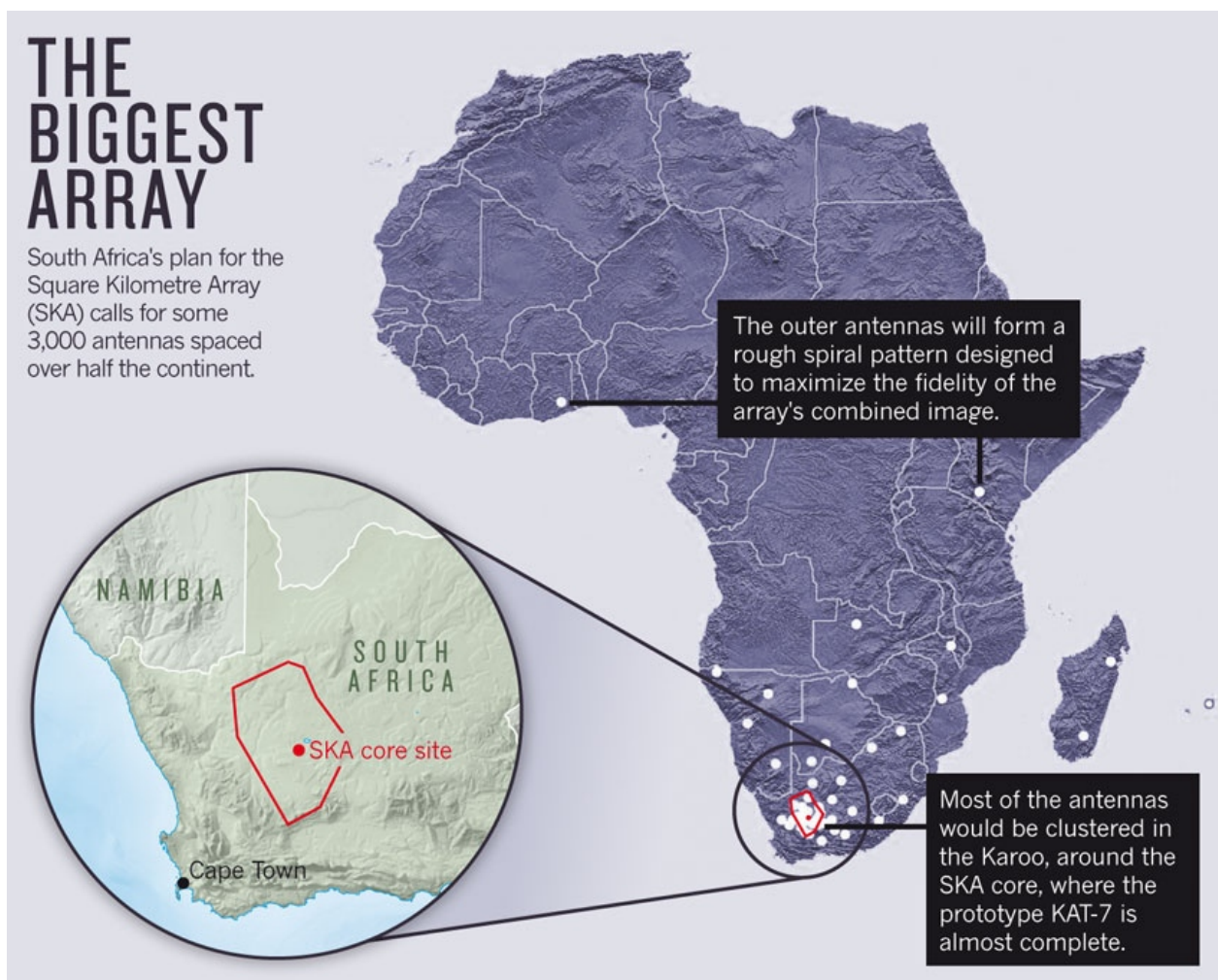


Figure 2: The projected positioning of the SKA's dishes spread over the African continent (Source: Cherry, 2011)

The purpose of building the entire SKA is to start understanding how the universe evolved, how stars and galaxies form and change, and what 'dark matter' really is. According to scientists involved in the project, the SKA will be able to make new discoveries that go beyond what we can imagine now and it may even find life elsewhere in the universe (SKA-SA, 2016a). This mega-science project requires the development of the finest technology, including designing the world's fastest supercomputers and fibre optic lines in order to process the immense amounts of data that will be produced by the telescope. The SKA will consist of thousands of radio antennas that can detect the weakest radio signals from outer space, which will enable astronomers to analyse the universe in exceptional detail (SKA-SA, 2016a).

Because of the high sensitivity of the antennas the developers of the project have stressed the importance of the telescopes being located in a thinly populated area, as far away as possible from any man-made electronics and machines that can interfere with the radio waves coming from the universe. Other important

considerations were that the core sites should be built in a dry and elevated area, to prevent waves being absorbed by moisture in the atmosphere. For these reasons, the area of the Great Karoo between the towns of Brandvlei, Vanwyksvlei, Carnarvon, and Williston (Figure 1) was identified by experts as being the perfect building site for the SKA. In 2014 the South African state declared a ‘Central Astronomy Advantage Area’ around the SKA core site, in terms of the 2007 Astronomy Geographic Advantage Act (Act No. 21 of 2007) (Department of Science and Technology, 2014).

After a long bidding process of several years between South Africa and Australia, on 25 May 2012 it was decided that both countries would share the project but South Africa would host the larger share of the SKA. In preparation for the bid, South Africa had already completed a prototype of seven dishes named the KAT-7 in December 2010 in the identified SKA site (which have already delivered impressive images of the Centaurus A, a galaxy about 14-million light years away) (SKA SA, 2016a; Isaacs, 2016). The next step in this huge project is currently being developed next to the KAT-7 installation. This 64-dish telescope, called the MeerKAT (see Figure 3 below), is scheduled to be finished at the end of 2017 (Wild, 2016a). Hereafter, the construction of SKA Phase 1 will take place between 2018-2023 building an additional 133 dishes in the Great Karoo. With the completion of SKA Phase 1, the project will consist of 197 dishes in an array spread over a baseline up to 150 kilometres. The next development phase is planned to take place between 2023-2030, and this SKA Phase 2 will include extending the baseline up to 3,000 km, with the building of the outstations in the other African partner countries (SKA SA, 2016a).



Figure 3: The first dishes of the MeerKAT array on SKA’s core site in the Karoo (Source: SKA South Africa)

To be able to build such an extensive project the National Research Foundation (NRF) and SKA-SA have needed to acquire land in the designated area between the towns of Brandvlei, Van Wyksvlei, Carnarvon, and Williston. Initially two farms were bought, Losberg and Meyersdam, with a total surface area of 13,406 hectares. This land has been used to develop the KAT-7 and currently the 64 dishes of the MeerKAT are



being constructed in this area. While the SKA initially indicated that this was all the land they were going to obtain, beginning in 2016 they made public that the plan was to buy up another 36 farms in the core area, extending the land dedicated to develop SKA Phase 1 to 118,000 hectares (Wild, 2016a). Along with this process the Council for Scientific and Industrial Research (CSIR) was appointed to undertake a Strategic Environmental Assessment (SEA) to evaluate the environmental consequences of the SKA Phase 1, as well as assess biophysical, economic and social risks and opportunities (SKA-SA, 2016b). Some of the affected farmers in this area have taken action against this process by uniting in the *Karee Boere Forum* and are represented by a lawyer from Kimberly. Although the farmers are challenging the process of the SKA buying them out, as of late 2016 their chances of success are slim. As stated in the SKA's Land Acquisition Programme (LAP) information brochure, the SKA Organisation first plans to negotiate with the farmers and offer them a fair price for their land within the core area, but if this fails the government eventually has the right to acquire their land (SKA-SA, 2015a). An official who is working on the land acquisition process mentioned in a public meeting in Carnarvon that expropriation would be the SKA-SA's last resort, as they recognised that this would not be good for their standing within the local community, taking into account that the SKA will have a presence in the area for at least the next 50 years. Although the opposition of the farmers as well as the negativity of the local community around this issue is not resolved at the time this thesis was completed, the SKA is confident it will have acquired all necessary farms in time for the construction of the SKA Phase 1 to start in 2018 (Wild, 2016b).

While the history of the SKA's land acquisition programme does not have a direct bearing on my project, it is part of the wider context of this project and will therefore be discussed more extensively in Chapter Three. It is also indicative of the very different sets of interest of the various actors involved, which as being stated has been the cause of many tensions between the SKA and the local communities. In an attempt to include the local communities of Williston, Brandvlei, Vanwyksvlei and Carnarvon and ease some of the tensions, the SKA, in line with the broader development goals of State, has committed to setting up local community development projects in the area.

### **1.2.3 The SKA and local community development**

Since the completion of the KAT-7 in December 2010, SKA-SA has initiated several local development projects in the Kareeberg area. Although the main goal of the SKA organisation is to establish the most advanced radio telescope in the world, its senior managers have also identified local community development as an important objective, for example by improving communication, education and driving local businesses (SKA-SA, 2015b). The socio-economic conditions of the Northern Cape already highlighted in section 1.2.1 above have made it evident how urgently needed local community development projects are in this area.

The statistics on education levels cited above underline the urgent need for development initiatives concentrated on education and access to technology. When the idea of the SKA project was first introduced to the communities in the Northern Cape in 2008, SKA officials claimed that the project would lead to local

economic development, job creation and improved opportunities for youngsters through the promotion of science and education (Wild, 2016b). Similar statements have been made over time since then. For instance, in a March 2014 newsletter spokesperson Tracy Cheetham stated that the organisation aims to develop a '[...] sustainable educational ecosystem around the SKA project' that will not only benefit the local community, teachers, learners, and schools, but also the SKA as a workspace and South Africa as a nation' (SKA-SA, 2014). Dr. Rob Adam, the current Director of the SKA-SA, emphasised on the social development goals again in the first SKA edited *Noord Kaap NUUS* issue of 2016, writing: 'SKA-SA is committed to five focus areas in the Northern Cape: the support and development of small and medium scale enterprises; investment in youth; the identifying and nurturing of learners' talent; support of community upliftment programmes; and ensuring connectivity' (Adam, 2016:2).

In this same newsletter the SKA-SA Director writes that besides the fact they are building the biggest scientific instrument in the history of the Northern Cape, it is also a fact that since the construction of the first satellites, the SKA has made a noticeable difference in the lives of the people in Carnarvon, Brandvlei, Williston, Van Wyksvlei and Calvinia. The newsletter gives an update on several community projects that are supported by the SKA-SA over the last few years, most of which were still running. One of the main development projects they initiated revolves around Carnarvon High School, where together with the NGO Teach SA, the SKA helped to recruit a qualified science and maths teacher, and construct a 'Cyberlab' and science laboratories (SKA-SA, nd). On top of this, in 2015 five Matric students from this high school were awarded full bursaries through the SKA's Human Capital Development Programme and all of them had started a science or engineering degree at different universities in 2016. It was the first time that students from Carnarvon High School were able to achieve this, with support of the SKA-SA. According to Dr. Adam this was a contribution towards their goal of having talented youngsters from the area become engineers and eventually work on the SKA project (SKA-SA, 2016c:4). The SKA-SA's promotion of education is shown again in a booklet that was distributed during community meetings in local towns in May 2016, which noted that 'SKA-SA has awarded more than 40 student bursaries since 2011; has supported more than 116 Master students and 52 PhD students as well as funded six research chairs at South African universities' (SKA-SA, nd:3).

Besides the school programmes, there are several other local community projects running with support from SKA South Africa, most of them concentrated on Carnarvon. One of those projects involves the Siyafunda Computer Technology Centre at the Kareeberg library, aiming at providing the local community with access to computers and technology. There is also an emphasis on developing local businesses and on creating jobs for the people in the area. In their public information booklet (SKA-SA, 2016c:3) the SKA South Africa claims that they have created over a 1,000 jobs already through construction work and the upgrading of infrastructure between the town of Carnarvon and the Losberg site where the satellites dishes are being built. In this process local contractors and business owners have reportedly been funded and trained to submit tenders and hired as subcontractors for road construction. The SKA has also assisted in establishing the Kareeberg and Karoo Hoogland Contractors' Forum (SKA-SA, 2016c:5).

At the same time, there is also criticism of the community upliftment initiatives implemented by the SKA-SA and its partners on the ground. During my interactions with people in the community during my fieldwork, I became aware that one of the main complaints locally was that the projects concentrate on the wrong local issues. For example; people would ask why they build a technology centre when local children struggle to get to school because there is no school bus, or why they invest in putting up 20 ‘SKA-themed’ decorated rubbish disposal bins within Carnarvon when there is no paper at the high school for writing exams. Considering that this part of the Northern Cape is one of the poorest and most desperate areas in the country, and with a multi-billion Rand project on their doorstep, these seem fair concerns. For its part, the SKA-SA management team recognises that the communities of the towns of Brandvlei, Vanwyksvlei, Carnarvon, and Williston had high expectations with the arrival of the SKA in their area and they are now struggling to manage these expectations, as they never quantified their social objectives at the start (Wild, 2016b). These concerns and expectation from the local community, which emerged during my fieldwork as an important part of the context in which the Computer Centre was operating, will be discussed more extensively in Chapter Three.

#### **1.2.4 SiyafundaCTC and the local Carnarvon Computer Centre**

SiyafundaCTC (Computer and Technology Centre) is a nation-wide initiative that aims to introduce rural communities to computer technology and make them computer literate. The development NGO is located in Palmridge just outside Johannesburg. According to its promotional material, the main objective of SiyafundaCTC is to create

[a] public place where people can access computers, the internet, and other digital technologies that enable them to gather information, create, learn, and communicate with others while they develop essential digital skills. The focus is on the use of digital technologies to support community, economic, educational, and social development—reducing isolation, bridging the digital divide, promoting health issues, creating economic opportunities, and reaching out to youth. (SiyafundaCTC, 2015:3)

In order to reach this objective SiyafundaCTC has established partnerships with stakeholders such as private businesses, (local) government, schools and universities, and community-based non-governmental organisations in order to develop Computer and Technology Centres (CTC’s) in previously disadvantaged areas. In a presentation given in December 2015, the NGO’s Director stated that each time a new Centre is being established they come closer to making their vision a reality by ‘ensuring that all citizens are computer competent and have access to information and communicating technology’ (SiyafundaCTC, 2015:7).

This initiative started off small with the opening of one Centre in Palmridge in Gauteng in November 2006. In the seven years that followed 2,450 people completed their basic computer course in the Palmridge Centre, over 2,500 email addresses were activated, and they had an average of about 65 internet users per day (SiyafundaCTC, 2015:16). In the ten years since then, many more Siyafunda Computer and Technology Centres have been established or entered into partnerships with similar initiatives. At the beginning of 2016

most centres were located in Gauteng, with an impressive total of 80 centres. Other provinces with Siyafunda-affiliated centres are KwaZulu-Natal (15), Mpumalanga (7), Limpopo (6), Free State (6), North West (1), Northern Cape (1), and the Western Cape (1). Concerning the Northern Cape in particular, two more facilities are reportedly to be initiated within the province (SiyafundaCTC, 2015:14). It has not officially been confirmed where they will be established, but a source close to the Centre has implied that they will be built in Vanwyksvlei and Williston.

At the time I conducted my research however, the Carnarvon Centre was the only one in the Northern Cape. It was launched on 19 November 2013 with the slogan '*leer, motiveer & inspireer*' [learn, motivate and inspire] (Siyafunda, 2013). This Centre became reality because of a partnership between the Department of Science and Technology (DST), SKA South Africa, Cisco, German software corporation SAP, Intel Software and SiyafundaCTC. A total of 366 laptops were provided to the local schools, the library and the Computer Centre, including free software, internet access and training for teachers from schools in Carnarvon, Williston, Vanwyksvlei and Brandvlei (SKA-SA, nd:3). The aim of this particular Computer Centre in Carnarvon is to develop basic technology and computer skills for beginners and more advanced learners and thereby improve job opportunities and better their livelihoods. At the opening more than three years ago, the Centre had three full-time computer teachers employed. The teachers (two woman and one man) all lived in Carnarvon and received training from SiyafundaCTC in Johannesburg. After a year one of the women left, but the other two teacher remained working at the Centre, teaching courses, helping people using the facilities and keeping the Centre running on a daily basis.

One of their main activities has been to teach entry-level computer courses that are part of the non-profit Adult Based Education and Training (ABET) programme. ABET aimed at participants who at some point in their lives have dropped out of high school, but have recently decided to continue their education and are now studying for their Grade 9 Certificate. Besides offering classes in Afrikaans, English, Mathematics and Life Orientation (Kerfoot, 2001), the ABET programme taught at Carnarvon Primary School has added an extra – but compulsory – course in basic computer skills and internet use. This is the course that was being taught to the students who I observed between April and August 2016. The students taking part in this course are all part of the local coloured community based in the adjoining area of Bonteheuwel and their ages ranged from 18 to 26 years. Besides these students, the Centre was mainly visited by recreational users who can be divided in two groups. The first group consists of teenagers, both boys and girls, who come to the Centre mainly to watch YouTube videos. The second group are men and women between 40 and 50 years of age who use the facilities for business purposes or socially to keep in touch with family elsewhere in the country.

### **1.3 Research Questions**

This research project has explored how the use of computers and access to the internet may have affected the awareness and everyday lives of the participants making use of the facilities at the Computer and Technology Centre in Carnarvon. More specifically, I have explored whether and how access to basic

education in computer technology may shift the way people look at themselves, their local environment, and the wider world ‘out there’.

The following overarching questions have underpinned this research:

1. In what way or ways does access to basic computer education provided by the Siyafunda Computer and Technology Centre at Kareeberg library in Carnarvon influence the everyday lives of local community members taking part in the computer courses and using the facilities?
2. How is access to computers and, through that, to the internet shaping the participants’ sense of themselves and their place in the world ‘out there’?

My starting assumption for this study was that access to computer technology and the internet was likely to have a significant impact on the everyday lives of local residents in Carnarvon and affect their awareness of their place in the world through being confronted with the virtual world ‘out there’. I was particularly interested in exploring how this might unfold in an isolated and marginalised country town such as Carnarvon. However, over the course of my research I was obliged to revisit my main assumption relating to access. Over the fourteen months I was going in and out of Carnarvon, the situation within the Centre changed drastically, to the point where the Centre appeared to be on the edge of closing down. These developments forced me to reconsider my initial assumption, that access to computer technology and internet was already a given and I could thus focus on students’ responses to this new opportunity. Instead I found myself reflecting on how other factors related to space and place, and the real and the virtual, were playing a significant role in inhabiting students’ access to computers and the internet, and to consider what this experience meant for these students’ understandings of their place in the world.

Although the circumstances within the Computer Centre altered over the time I was conducting my fieldwork there, did not mean I had to abandon my main question. What did require more attention in this project was understanding the wider context in which the Centre was located, including the presence of the SKA as a catalyst for other sorts of development or changes in the town. In this process I was obliged to take note of the constraints of the actual world that the young people hoping to use the Computer Centre had to confront, and not only the possibilities offered by the virtual world. This led me to formulate a third research question, namely:

3. How are local conditions impacting the effectiveness of the Computer Centre in providing computer education and internet access?

Additionally, the sub questions flowing from the above have included the following:

- What does the Siyafunda Computer and Technology Centre provide for the local community of Carnarvon and how are the facilities used on a daily basis?

- Who are the participants in the computer classes provided by the Siyafunda Computer Technology Centre, and what are their reasons for participating? Do they use the Centre for recreational as well as educational purposes?
- What difference (if any) do participants think access to the Centre and to computer education is making to their lives and to life in Carnarvon more generally? How do they think the training they receive may affect their futures?
- Who are the trainers and how do they understand the significance of their work and what do they think or expect of the SKA in this regard?
- What do the participants know about the SKA and (if applicable) what are their expectations of the SKA around the computer Centre and/or of the development of the area more generally?

## 1.4 Methodology

In this section I review my research methodology (sections 1.4.1 to 1.4.4) and address the ethical issues I encountered (section 1.4.5) in conducting this research project. In conducting this study I have adopted an ethnographic research methodology in which participant observation and ‘hanging’ out in the Centre as well as the town of Carnarvon have been central research methods. I have supplemented this with more structured conversations with selected informants as well as documentary analysis related to the history and socio-economic conditions of the town as well as the SKA and its local community development projects. I also attempted to use the internet itself as a research method, although I encountered problems in operationalizing this as discussed further below.

### 1.4.1 Ethnographic methods

In exploring how marginalised young people living in an isolated small town such as Carnarvon are affected by the opening up of their local understandings of the world to national and global forces, I decided to make ethnographic research methods central to my study. This is because ethnography is a qualitative research methodology that allows one to gain understanding of the social world by being involved in the daily activities of one’s participants, building trust and emerging oneself in their contexts, and consequently being able to recognise the complexity of their social world (O’Reilly, 2012:11).

Although it can be stated that there is no standard definition of ethnography, ethnographer on health issues Jan Savage (2000:1400) has noted that ‘[m]ost ethnographers today would agree that the term ethnography can be applied to any small scale research that is carried out in everyday settings; uses several methods; and evolves in design through the study’. According to O’Reilly, in her book *Ethnographic Methods* (2012). Based on her discussion, ethnography should be informed by a theory of practice that:

understands social life as the outcome of the interaction of structure and agency through the practice of everyday life; examines social life as it unfolds, including looking at how people feel, in the context of their communities, and with some analyses of wider structures, over time; also examines, reflexively, one’s own role in the construction of social life as ethnography unfolds; and determines

the methods on which to draw and how to apply them as part of the ongoing, reflexive practice of ethnography. (O'Reilly, 2012:3)

This description of ethnography is closest to how my research has developed, especially considering the wider context in which the Computer Centre had to be placed, as well as the need for me to be very reflexive about my own role within this project, something that will be addressed more in later chapters.

What is important to keep in mind is that ethnography is based on an iterative-inductive approach. This phrase captures the experience ethnographic research as a process of moving steadily forward, yet going back and forth at the same time, of it being 'both a spiral as a straight line, a loop and a tail', where the inductive implies having an as open mind as possible and letting the data speak for itself (O'Reilly, 2012:30). This aptly describes the journey my research has taken me on, as the changing circumstances in the Computer and Technology Centre forced me to broaden my perspective and be very flexible in responding to unfolding developments there. As indicated in my primary research questions, the main focus of my research was on what happened within the Centre in relation to students' shifting understandings of themselves in relation to the world 'out there'. However, I was also required to focus more on the everyday lives of the people visiting the Centre, and by engaging with their stories, to reflect more deeply on daily life in Carnarvon.

O'Reilly has explained elegantly how these ethnographic methods play a crucial role in understanding these experiences stating that:

Ethnographic research is a special methodology that suggests we learn about people's lives (or aspects of their lives) from their own perspective and from within the context of their own lived experience. This involves not only talking to them and asking questions but also learning from them by observing them, participating in their lives, and asking questions that relate to their daily life experience as we have seen and experiences it. (O'Reilly, 2012:86)

#### **1.4.2 Participant observation**

##### *The Computer Centre*

Given the limited time I had for this study, the Computer Centre was my main research site and participant observation, supplemented by numerous informal conversations and interactions with the people coming in and out of the Centre, my main method. The focus of this project has revolved around the participants in the ABET course and a more advanced e-learning course, both provided by the Siyafunda Computer and Technology Centre in the Kareeberg library. By observing the classes and engaging with the people who took part in the computer courses I was able to get a sense of how they think about themselves, their local community and what it means to open up their ideas of the world to a more open and global world view. I have not limited my inquiries in terms of age or other social categories. Although my initial focus was on the ABET class, over the period of my fieldwork I also engaged closely with a other users of the Centre, who

were all coloured Afrikaans residents from Bonteheuwel between 16 and 50 years of age. These visitors also contributed to the understanding of who the general users are, and their expectations and motivations for making use of the Centre's facilities.

Over the duration of fourteen months between June 2015 and August 2016, I travelled to Carnarvon four times, spending a total of five weeks based in the town. While in the Centre I was present during ABET classes, the more advanced e-learning classes, individual computer classes as well as during the time the facility was being used for 'free time'. The Centre is usually open every working day between 9 a.m. until 5 p.m., in which time classes and recreational use of the computers are alternated. Friday is the only day when there are no classes given, but course participants are free to catch up or practice their computer skills learned that week, and everyone else is welcome to use the facilities during the entire day.

Participant observation and 'being there' (Geerts, 1988) gave me access to a group of 25 students and regular visitors of the Centre, 14 students who started their ABET course in April and 11 regular visitors. I got to interact with them on different levels of intensity, but they all of them made it possible for me to observe their interactions with the resources on more than one occasion. Participant observation also provided me with the opportunity to talk to the teachers and other participants, and learn about their expectations of the Computer Centre, the education they were receiving in respect of their future, job possibilities, how they spend their free time, and their (changing) social relationships within Carnarvon and beyond. I made use of casual chat and informal conversations, but also participated in some class activities.

#### *Follow-up conversations with selected participants*

Based on the above-mentioned interactions as well as by consulting with the teachers who played a significant role in this project, I approached eleven regular users and students in total for follow-up and more in-depth interviews in order to gain more insight in their everyday lives in Carnarvon and in what way their computer training has had an effect on their sense of self as well as their understanding of the world 'out there'. Eventually three learners of the ABET course and five regular users agreed to speak to me in a more structured, although still very informal, conversation.

#### *Participant observation and 'hanging out' in Carnarvon*

Besides participant observation in the Centre, I also spent time 'hanging out' in the town of Carnarvon. I have taken into account other experiences that involved not only the users of the Centre, but also the broader community in order to understand the important wider socio-economic context of Carnarvon. These experiences were often based on everyday life events in the town, for example doing groceries at the local Spar, going to church, having a braai or walking home from the Centre. As a result, methods as (participant) observation and casual talk have provided me with a greater sense of meaning about the local place of Carnarvon, the Computer Centre, as well as how people's connection to the world 'out there' is being shaped by this context and their sense of self.



### 1.4.3 Using computers as a research method

Cook (2004:104) has argued that anthropology can bring particular strengths by exploring the social through new technology, stating that:

By insisting that any examination of new technologies be situated within economic, social, and political context where the information and images conveyed are consumed, circulated, and signified, these studies demonstrate that anthropology is particularly well suited to investigate the social (and symbolic) dimensions of new technology.

With this in mind, in addition to using more conventional ethnographic research methods, I was very interested at the start of my research project in using the internet itself as a methodological tool. As local community members are going to the Centre to learn how to use computers and the internet, I wanted to use this medium to explore the ways in which it opens up participant's local world to global spaces. Initially I intended to set up a chat room, so that instead of using a focus group discussion, I could use the chat room as a space in which participants would talk about their thoughts about the global space of the internet in relation to the local place in which they live. Besides using chat rooms, I also intended to explore the possibility of setting up a Facebook page among the participants of the computer course about their local community. The idea was that this would enable them to project their ideas of the local, and present this to the world 'out there'. Consequently, this could create a space for local participants to communicate with each other as well as with other people in other communities in the region or further afield.

However, after the first two weeks of fieldwork these plans had to be revised as two problems came to light. Firstly, most course students were complete novices in the use of computers and exercises such as typing on a keyboard were experienced as extremely challenging. The ABET course students' starting level was lower than I expected and I therefore needed to change my approach. So instead of using a chat room, which would have required a more rapid typing pace, I received access to some of their written assignments during the course to gain understanding about their ideas and skill development. This offered me some insights on their lives and motivations for using computers and the internet as well as their future goals, issues I was to explore in more depth in my follow-up conversations with some of the participants. Subsequently, in communication with the teachers, I designed a short written questionnaire in Afrikaans, which could be implemented as a (voluntary) Word exercise during one of their classes. This would have given the students the opportunity to take their time typing up a response and answer freely in their home language.

The questionnaire was based on the experiences I had after my fieldwork trips in June 2015 and April 2016, and was designed to gather information about the progress the students made in the course as well as how this possibly influenced some aspects of their life. Again, this ended up being less successful as a data collection method than I had hoped. As mentioned before, the circumstances within the Centre changed drastically between April and August 2016. After setting up this short questionnaire and returning for fieldwork in June 2016 it turned out that the computers at the Centre were not in operation due to a virus. As a result, the course students had not had class for many weeks. The only thing that was still possible to use,

however slow, was the internet. As a result, the Centre was extremely quiet and only a hand full of visitors came by to use the internet for research purposes or privately, but it was not possible for the staff to give any courses. At my return in August, the problem with the virus was sort of fixed, but the Microsoft programmes were still extremely slow and could also not be used in bigger groups. By this time most course students had dropped out and only three were still taking (individual) computer skill classes. As a result this short questionnaire never got filled in, however I did use the questions as a guideline for the more in-depth interviews I had with three of the students, which will be discussed in more detail in Chapter Four. These practical challenges itself were illuminating in regards to this research, as it gave me an indication first-hand of the many issues the Centre, and in particular the staff, had to deal with on a daily basis. It also taught me to be flexible in my approach as well as very reflexive on the developments of the Computer Centre.

The second problem related to my intention to use Facebook. Although many of the beginner and more advanced learners in the Centre were using Facebook, this was mostly done on their phones instead of using the computers in the Centre. The teachers informed me this was because using the *Facebook app* on a smart phone was a lot easier than opening an account on a computer screen where the number of options they were confronted with often confused the users. For this reason and the fact that access to the internet was itself proving to be a challenge at the Centre, I abandoned my plans for setting up a communal Facebook page. Instead I had to rely more on gathering information through ethnographic methods.

#### **1.4.4 Other key informants and documentary analysis**

The difficulties I experienced in regards to the Computer Centre over the duration of my research were unexpected, as during my scooping trip in June 2015 the Centre showed no signs of having any problems. I therefore worked on the assumption that the Centre would provide access to both computer education as well as the internet. However, as my fieldwork unfolded I had to change these assumptions and ask myself additional questions regarding the actual functioning of the Centre too. Although I gathered considerable information around the functioning of the Centre from the staff and through me being there over an extended period, the actors responsible for keeping the Centre operational on a more technical level – the SKA support staff and the SiyafundaCTC in Johannesburg – proved to be harder for me to access, especially given the limited time frame of a MA research project. I intended to travel to Johannesburg end July 2016 to interview key informants in the SKA and the NGO about the Computer Centre, but in the end it was not possible to organise this. In both cases I have therefore relied mainly on publicly available information from the two organisations, such as information booklets, newsletters, presentations and their websites. I recognise this as a limitation in that I have not been able to draw on these stakeholders' perspectives on some of the challenges facing the Computer Centre. Although I have attempted to represent these organisations' information and reactions as accurately and objectively as possible, it has to be noted that most of the material gathered on the topic of the functioning of the Computer Centre has come from my own ethnographic research on site.

Documentary analysis has also been an important tool for understanding state regulations in relation to the SKA, for example in regards to the Land Acquisition Programme and the Astronomy Geographic Advantage Act, and for exploring the history of the Kareeberg area and contemporary socio-economic conditions in Carnarvon.

#### **1.4.5 Research ethics**

This project has raised a number of ethical considerations that needed to be taken into account, particularly relating to protecting the identity of participants and more importantly that of the teachers in the Centre. In the case of the students and general users of the Centre this can be achieved relatively easily through the use of pseudonyms. However, considering the fact that Carnarvon is a small country town with a tight community and only has one SKA-supported Computer Centre, it is extremely difficult to protect the teachers' privacy. Furthermore, many of the issues that I address are in the public domain to a greater or lesser extent. Here I was guided by the 'Policy for the assurance and the promotion of ethical accountable research at Stellenbosch University' (Stellenbosch University, 2009), the general professional guidelines as the 'Ethical guidelines for good research practice' (ASA, 1999), and discussion with my supervisor. My resolution of these challenges has been to use pseudonyms for the teachers and to strive to ensure fairness and respect for their privacy in the way that I have discussed developments at the Centre. It needs to be noted that this has been done in discussion with the teachers themselves, who have indicated to me their understanding of the ethical dilemmas at hand and the approach I have adopted. Besides considering the individual participants in this research, it was necessary to receive the permission of SiyafundaCTC to undertake my research in their Centre and to use the name of the project. I therefore approached the organisations for institutional permission at the start of my project, which permission was granted (Appendix A).

With regards to my use of the computer technology and internet as a research tool, I have also familiarised myself with the ethical principles concerning e-research as discussed in the guidelines written by the Association of Internet Researchers (AoIR) (2009). As Bryman (2012:679) has noted, using the internet as a research method raises specific ethical questions which need to be addressed. Fundamental principles to take into consideration with regards to internet research identified by the AoIR (2009:4) concern the greater vulnerability of a participant or the community and the realisation that all digital information at some point involves individual persons. Especially this latter point has been taken into consideration, whereby the digital information I have gathered in the form of personal course assignments has been password protected and all names have been changed to pseudonyms. In addition to this, all the personal data of informants and participants at the Computer Centre have been kept confidential, and protected from improper access.

## 1.5 Chapter Outline

This thesis unfolds over four more chapters. In the next chapter I present my conceptual framework and literature review for my study. In exploring the transforming relationships and tensions between the self, the local, and the global I have been guided in the first instance by the theoretical framework of critical cosmopolitanism as developed by influential scholars such as Gerald Delanty and Ulrich Beck. Chapter Three focuses on the context in which the Centre operates and shows the importance of context for understanding the functioning of the Computer Centre. The chapter starts with a short overview of the history of Carnarvon, followed by a more in depth analysis of the socio-economic situation of the small town as well as stories of local community members I have spoken with in the Centre or during other occasions.

Chapter Four concentrates on the Computer and Technology Centre in Carnarvon. The focus is on the participants of the various computer courses and to a lesser extent, the more casual users. It looks at what happened with the ABET course as well as the day-to-day happenings in the Centre and also includes the perspective of the staff and the challenges they are facing. In Chapter Five I conclude this thesis with a short summary and concluding remarks on how this project has developed and how my broad research questions have been answered. Here I also reflect on how these findings can contribute to a deeper understanding of social conditions in the Northern Cape and flag the possibility for follow-up research.

## CHAPTER 2:

# CONCEPTUAL FRAMEWORK

### 2.1 Introduction

The conceptual framework for my study can be discussed across two levels. The first, more abstract level is where I lay out my understanding of critical cosmopolitanism as a way of conceptualising the relationship between the local (in my case, Carnarvon and the Computer Centre), the national (most directly SKA-South Africa and the national bodies promoting and regulating it) and the global (the international SKA organisation but also the internet as a virtual space). Here I have drawn on the work of influential scholars working with critical cosmopolitanism, such as Ulrich Beck, Gerard Delanty and Kwame Appiah. They argue that global forces in a variety of economic, political, technological and cultural forms have significantly transformed social relations around the globe and impacted on how the individual self relates to his or her local context and the wider world. In a transforming communicative environment such as Carnarvon, in the context of the SKA project, the theoretical framework of critical cosmopolitanism has proved helpful for thinking about how the local has been opened up to the global in some respects. In section two below, I first review core debates on critical cosmopolitanism and then address the related concept of cosmopolitan learning. Cosmopolitan learning engages with the idea that even in isolated spaces such as Carnarvon there are opportunities for people to rethink their perceptions of themselves and the world ‘out there’ by being exposed to global connectivity, most obviously via the internet but also by being exposed to national and international actors like the SKA. This is an important idea to explore, given my interest in the possible role of the Computer and Technology Centre in transforming social relations by educating the local community in the use computers and, potentially, access to the internet.

The second, more applied level of my conceptual framework, which I address in this chapter, involves additional concepts that have informed my thinking through this research project. In section three below I explore the concepts of space, place, virtuality, cyberspace, identity and new technologies as useful for thinking about the communicative transformations in the Siyafunda Computer and Technology Centre within the context of Carnarvon. Here the focus is on more applied bodies of literatures, predominantly concentrating on ideas around ‘the digital’ and, in the case of South Africa, ‘the digital divide’. Two particularly interesting studies that resonate with my own research in Carnarvon are by Miller and Slater (2000) and Hull and colleagues (2010; 2014). Miller is professor of Material Culture at the Department of Anthropology at University College London, and one of the key thinkers on what is called ‘digital anthropology’, in which he established a graduate programme in 2011. This experienced ethnographer has written extensively on how new technology and the internet have an influence on rapid social change. I have found his earlier ethnographic research on access to computers and the internet in the small Caribbean country of Trinidad particularly relevant for thinking through the issues that have surfaced during my research in Carnarvon. The research project by anthropologists Hull and Stornaiuolo, involving youngsters

from all over the world (including South Africa), has also been found to be very relevant, as it focuses on teenagers from small country towns who have recently been introduced to basic computer education, and how that has changed their ways of thinking about themselves in relation to others and the world.

Although these studies are considered extremely relevant for my project, neither of them concentrates on South Africa<sup>2</sup>. Unfortunately, as discussed further in section 2.3 below, the literature on access to computer technology in rural situations in South Africa is limited. Literature relating to computer education in South Africa mostly speaks to issues around changing curricula to include computer technology for urban schools or in higher education, but rarely address the issues raised through my research. The most useful South African studies concern the issue of the ‘digital divide’. This term is often used to describe the technological inequalities between western and developing countries, but it is also a useful term for describing the less commonly discussed divide between urban and rural situations in South Africa, as mentioned in the study of Conradie, Morris and Jacobs (2003).

## 2.2 Critical Cosmopolitanism

### 2.2.1 The idea of cosmopolitanism

Cosmopolitanism today cannot be understood without reference to social, cultural, political and economic features of the modern globalised era, an era defined by an unprecedented interconnectedness in which identities, ideas, cultures and politics are embedded in the global and the transnational. The boundaries between home and away, local and global, traditional and de-traditionalised, and here and there, have become increasingly blurred. (Skrbis, Kendall & Woodward, 2004:116)

The idea of cosmopolitanism is currently experiencing a critical revival in the social sciences. The concept has a very long genealogy, being of Greek origin and derived from the idea of a *kosmopolites* or a ‘citizen of the world; (Hansen 2014:3). As far as scholars have been able to determine, this notion finds its foundation in the voice of Diogenes (c. 390-323 BCE), a so-called Cynic philosopher who announced that he came ‘from the world’ rather than from a particular polity or culture (Hansen 2014:3). Over the centuries many writers have taken up the idea of what Diogenes believed characterised a cosmopolitan; ‘a willingness to think for oneself, to question extant custom, and to see oneself as a participant in a larger moral world than that which one inherits from local culture’ (Hansen 2014:3-4). In this sense, cosmopolitan thought could be seen as embracing the capacity of people to live in a global world, and to try to understand and communicate across cultural and political differences. As flagged by Roth and Burbulas (2010:206), the condition of cosmopolitanism challenges people particularly in the way they construct their identities and sense of

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<sup>2</sup> Although Hull and colleagues (2010, 2014) mention that their research is also located in South Africa, in their literature there is little information that proves to be relevant to my project. Instead, I will discuss their more related research that took place in a country town in India.

agency, in seeing themselves as being both part of a local community and part of the community of human beings.

For many centuries the idea of cosmopolitanism has been used by Western philosophers to engage with the consequences of a changing global world, for instance in Immanuel Kant's moral philosophy which inspired Enlightenment thinkers in Europe to condemn slavery, war, and imperialism (Hansen, 2014:4). However, in the twentieth century the concept became less prominent in the social sciences and humanities after the Second World War, when the focus shifted to the constructing of the welfare state and/or decolonisation instead (Weber, 2002 in Beck & Sznaider, 2010:382). In order for social scientists to take cosmopolitanism seriously again, in 2000 the prominent German sociologist Ulrich Beck made an urgent call for them to study cosmopolitanism as an empirical phenomenon. According to Saito (2011:124), Beck argued that 'cosmopolitanism was not simply a normative ideal entertained by philosophers but had actually come to exist in practices of everyday life in an increasingly global world'. Beck developed this school of thought in his influential book, *The Cosmopolitan Vision* (2006), in which he stated that 'the human condition has itself become cosmopolitan' (Beck, 2006:2) - throughout the world there is recognition of increased cultural differences combined with an awareness of interdependence among people around the globe. He proceeded to argue that it is therefore necessary to break free from the 'iron conceptual cage' of what he regarded as 'methodological nationalism' and to create a new cosmopolitan outlook that 'can grasp the social and political realities in which we live and act' (Beck, 2006:2-3). Beck creates this 'cosmopolitan outlook' by looking at the social world as akin to a glass world where boundaries are no longer blocked or hidden by differences, but are transparent and fluid.

This explanation also points to the difference between the idea of cosmopolitanism that was dominant in the time of Kant and the notion of *critical* cosmopolitanism that Beck and others key thinkers such as Delanty and Appiah represent. A key difference lies in these contemporary thinkers' rejection of earlier, universalising forms of cosmopolitanism that were used to over-generalise about human society, to abstract 'truths' and to ignore significant differences among people and the salience of local identities. Critical cosmopolitanism challenges the conventional relationships between the local and the global and creates a space for smaller-scale solidarities (Birk, 2014). This is why critical cosmopolitanism is an important concept to engage with in this research project as it requires one to think about the Computer and Technology Centre in Carnarvon in relation to the local, national and global spheres from a more complex and transformative perspective.

In the following sections, the differences between critical cosmopolitanism and that of globalisation will be discussed in more detail, as well as how this relates to a globally connected project such as the Square Kilometre Array.

### 2.2.2 The difference between globalisation and critical cosmopolitanism

In response to Beck's earlier plea to study (critical) cosmopolitanism, social scientists have initiated a theoretical discussion by asking critical questions such as how structural inequalities might restrict access to cosmopolitanism and how to distinguish between globalisation and cosmopolitanisation. Despite an extensive debate and the fast-growing literature on cosmopolitanism, the concept continues to be a contested term without a uniform interpretation. In part this is because of its post-modernist character, or as Skrbis *et al* describe it as being 'in danger of becoming all things to all people' (2004:132). Another concern is the blurred distinction between Beck's concept of 'cosmopolitanisation' and that of 'globalisation', with critics arguing that cosmopolitanisation and globalisation actually refer to the same sort of change: 'growing flows of economic, political, social, and cultural activities across national borders and corresponding transformations of institutions and practices inside national-states' (Saito, 2011:126). The general public often thinks of globalisation as being about the expansion of the global market, the defence of neoliberal economic growth, almost unlimited communication and the free movement of commodities and labour across all borders.

However, sociologist Hero Saito supports Beck, arguing that his idea of cosmopolitanisation proposes a relationship between the environmental change - which covers globalisation - and the subjective orientation among human subjects of openness to others. In his 2011 article, 'Actor Network Theory of Cosmopolitanism', he states:

Although the sociology of globalisation has analysed various institutional and organisational changes, it has not systematically examined their psychological effects. In the sociology of globalisation, subjective orientations make only a brief and occasional appearance as "consciousness of the world as a whole" [...]. This is why recent empirical studies of cosmopolitanism have built on Beck's thesis to examine people's attitudes toward foreign others and cultures. (Saito, 2011:127)

It can thus be concluded that the concepts of cosmopolitanism and globalisation are deeply connected but should not be considered the same. Sociologist Gerard Delanty, author of the influential 2009 book *The Cosmopolitan Imagination: The renewal of critical social theory*, agrees that globalisation has made it impossible 'to think of nation-states, capitalism, the environment, citizenship, borders, consumption and communication in the same way' (2009:1). He argues that the complete human experience is in one way or the other influenced by globalisation, by which he means 'the overwhelming interconnectivity of the world' (2009:1). This has brought about a renewed interest in cosmopolitanism in relation to questions around justice, identity and technology. Delanty distinguishes between the two concepts by stating that where globalisation speaks more to the idea of a single, Western notion of (political) modernity, cosmopolitanism refers to the multiple ways in which the social world is constructed in different modernities. According to Delanty, cosmopolitanism should not be seen in a singular condition that either exists or does not, nor as a goal to be realised; rather, it should be understood as 'a cultural medium of social transformation that is based on the principle of world openness' (2006:26). In other words, to be a cosmopolitan according to this



explanation, is to be a ‘citizen of the world’ and to reject the given and closed world of particularistic connections.

However, a few years later Delanty revisited this position, by acknowledging that it was still too focussed on the universalistic orientation of cosmopolitanism and was not sufficiently aligned with the openness at the heart of the idea of critical cosmopolitanism. In a 2011 article Delanty spells out the differences between globalisation and critical cosmopolitanism more clearly by stating that:

The key underlying characteristic of cosmopolitanism is a reflexive condition in which the perspective of others is incorporated into one’s own identity, interests or orientation in the world. This is what it distinguishes it from global culture, internationalism, transnationalism, which may be preconditions of cosmopolitanism: it is less a condition expressed in mobility, diversity, globalizing forces than in the logic of exchange, dialogue, encounters. (Delanty, 2011:634)

Cultural theorist and philosopher Kwame Appiah has also emphasised the importance of dialogue with ‘the other’ as a precondition for cosmopolitanism. In his 2006 book, *Cosmopolitanism: Ethics in a world of Strangers*, he states that cosmopolitanism should be considered a challenge, a strategy, and a means for balancing differences and universalities. He emphasises our ‘obligations to others, obligations that stretch beyond those to whom we are related by the ties of kith and kin, or even the more formal ties of a shared citizenship’ (2006:xv). He believes that cosmopolitanism entails respect for differences, especially if those differences result in practices driven by opposing values. In that case people’s most important tool is dialogue in order to attempt to construct a global ethic that considers what we owe others as members of the human community (Appiah, 2006:xv). In a 2009 interview, Appiah once again emphasised the importance of dialogue in a cosmopolitan world:

Cosmopolitanism commits you to a global conversation, or a set of global conversations, about the things that matter. I count someone a cosmopolitan if they are willing to engage in that conversation without the hope of making everybody like them. [...] A conversation is something human beings do with one another because it’s enjoyable in itself, because we learn about and from one another, because we get used to each other’s ways of being in the world, of thinking and talking. (Appiah, in Yates, 2009:42-3)

The conversation or dialogue Appiah is referring to extends further than just interpersonal interaction; it is also applicable at societal level, for example between religions. Appiah links cosmopolitanism to a ‘moral modernity’ where cosmopolitans should make good things available for everybody and keep the bad things away from everybody. However, this should not be conceived of in terms of a classically universalist approach, but as a combination of identifying on an abstract level with humanity as well as being in conversation and making connections with the fellow ‘other’ (Appiah in, Yates 2009:50). These ideas are not new to the work of Appiah, as he is well known for the development of the idea of ‘rooted cosmopolitanism’ (Appiah, 2005). In his 2005 book *The Ethics of Identity*, Appiah expressed the need to reconcile

cosmopolitanism as an important aspect of society with an appreciation of people's connections to local communities and places:

A tenable cosmopolitanism ... must take seriously the value of human life, and the value of particular human lives, the lives people have made for themselves, within the communities that help lend significance to those lives. The prescription captures the challenge. A cosmopolitanism with prospects must reconcile a kind of universalism with the legitimacy of at least some forms of partiality. (Appiah, 2005:222-3)

Although the term 'rooted cosmopolitanism' seems to be an oxymoron - to be a 'citizen of the world' and have roots embedded in a particular history - the philosopher considers these two as inseparable by emphasising how local histories themselves have been shaped by local places and communities.

### 2.2.3 Countering the methodological impasse

The concept of cosmopolitanism has not always been perceived positively by scholars (Roth and Burbulas, 2010:206). It has been labelled vague, abstract, diffusing, and useless as an analytical tool (Skrbis, Kendall and Woodward, 2004:115-118;). Skrbis and colleagues (2004) have identified four main problems with the concept: indeterminacy, identification, attribution and the issue of governance (Skrbis *et al*, 2004: 117-121). They argue that cosmopolitanism has been utilised as 'an empty signifier that can stand for almost any given reality and aspiration' (Skrbis *et al*, 2004:117), which illustrates the 'ultimate collapse of meaning' (Skrbis *et al*, 2004:118), making the attitudes practice of the cosmopolitan hard to know, if not unknowable. For these authors (2009:28) cosmopolitanism seems to be something of a fantasy - an appealing comforting illusion - and not a useful analytical tool. They identify three kinds of populations as cosmopolitan, namely global business elites, refugees and expatriates (Skrbis *et al*, 2004:119). At the one end of the spectrum is what Kanter (in Skrbis *et al*, 2004:119) characterises as some kind of 'über-cosmopolitan class', having a unique mind-set highly valued in global economics. On the other end we find the victims of modernity, those who are bereft of a national belonging: refugees, exiles, and migrants (Pollock *et al* in: Skrbis *et al*, 2009:29). However different these approaches might seem, all these cosmopolitans have human movement as a key determinant, whether through free will or not. Skrbis *et al* argue that characterising cosmopolitanism according to some winner-loser binary or by Western ideals is not the right way forward.

Michael Murphy (from the University of London) shares these concerns, but has developed a different approach to critical cosmopolitan social theory, one that cannot be reduced to the optic of Eurocentrism. He argues that while Beck and especially Delanty 'have made significant and important contributions to the development of critical approaches to cosmopolitanism social theory, of providing tools to re-imagine the world, they have done so through maintaining old ways of seeing the world' (Murphy, 2015: 507). Building on the argument that to date cosmopolitanism has been primarily a Western concept to conceptualise transformative dynamics in the world, Murphy finds it understandable that social theorists from developing countries are articulating the need to establish indigenous social sciences based on local research, which can then be applied universally as well. This view promotes the importance of what is spoken of as 'theory of the

South' and the need to engage with this perspective in exploring shifting relationships among the local, the national and the global in Carnarvon, with the SKA as a catalyst, through a critical cosmopolitanism lens.

Here it is important to propose a possible way beyond what Skrbis *et al* (2004:132) have labelled as an impasse. What is worth noting is that Delanty and Beck have taken note of the above-mentioned critiques. Both sociologists agree that the concept can be seen as empirically weak and have developed their own theories of how to solve this methodological problem. Thus Beck and Sznaider (2010) have concentrated on the need for a new form of analysis:

The main point for us lies in the fact that the dualities of the global and the local, the national and the international, us and them, have dissolved and merged together in new forms that require conceptual and empirical analysis. The outcome of this is that the concept and phenomena of cosmopolitanism are not spatially fixed; the term itself is not tied to the 'cosmos' or the 'globe', and it certainly does not encompass 'everything'. The principle of cosmopolitanism can be found in specific forms at every level and can be practiced in every field of social and political action: in international organizations, in bi-national families, in neighbourhoods, in global cities, in transnationalized military organizations, in the management of multi-national co-operations, in production networks, human rights organizations, among ecology activists and the paradoxical global opposition to globalization. (Beck & Sznaider, 2010: 383)

In contrast to his earlier account of cosmopolitanism, here Beck takes a step back from an all-encompassing idea of the cosmos. He now speaks of more specific forms of cosmopolitanism that can take place at different levels, rather than being bound to a global space.

Beck and Sznaider's description is still somewhat vague to be able to use as an actual analytical tool. Delanty, however, provides us with a more solid empirical take on the methodological problem at hand. In a more recent article (Delanty, 2012), he has also acknowledged that earlier accounts of cosmopolitanism have lacked the capacity for explanation. He attributes this to its normative orientations, a problem many 'big questions' have in the social sciences. However, he emphasises that the concept of cosmopolitanism can be a useful analytical tool, by arguing that there are 'four main kinds of cosmopolitan relationships, which together constitute the social ontology of cosmopolitanism' (Delanty, 2012:333). These are the relativisation of identity, the positive recognition of 'the other', the mutual evaluation of cultures, and the creation of a normative culture. The primary ontological focus of cosmopolitanism is thus relational (Delanty, 2012:340). Delanty elaborates on this by saying that the relationships at issue are those between the self, the other and world, where 'Self and Other relationships are worked out in the context of engagements with the wider context of World' (2012:340). This is an insight that I draw on in my exploration of unfolding dynamics at the Carnarvon Computer Centre over the course of my fieldwork.

The first relationship is the relativisation of one's own identity. This type of relationship can be characterised by a general disposition of openness to others and a tolerance of diversity, which is also used to reinterpret one's own culture. This feature is often part of what can be called 'everyday cosmopolitanism' (Delanty,

2012:340). The second relationship that is highlighted is that of the positive recognition of the other. Delanty explains this as ‘a stronger reflexive relationship entailing the inclusion of the other’ (2012:340), and not just an awareness of others as depicted in the relativisation of one’s identity. This type often entails a political and ethical form of commitment, with one of the best examples of cosmopolitanism at this level being the internationalisation of law. The third kind of relationship involves the mutual evaluation of identities or cultures, both one’s own culture or identity as well as that of the other (Delanty, 2012:340). This type of relationship is often referred to as an ‘embedded’ or, following Appiah, a ‘rooted’ form of cosmopolitanism. It is a self-reflexive stance that is based on cultural distance, critique and scepticism that makes it possible to have the sort of dialogic encounters between cultures as already described by Appiah (2009) above. The fourth type of cosmopolitan relationship that Delanty describes is a ‘shared normative culture in which self and other relationships are mediated through an orientation toward world consciousness’ (2012:341). This is the strongest expression of cosmopolitan relationships where global issues are predominant. It relates mostly to major societal transformations, in which new forms of civil society and new politics may develop. Delanty (2012:341) claims that ‘[t]his kind of cosmopolitanism entails the formation of a moral consciousness rooted in emotional responses to global issues, concern with global ethics, putting the non-national interest before the national interest’. In agreement with both Beck and Appiah, Delanty argues that this does not mean rejecting the nation-state all together, but rather, broadening the vision to more global concerns and not just the national. A good example of this is the development of a European identity, a form of cosmopolitanism that Delanty has written many articles and books about over the last two decades.

According to Delanty the four kinds of relationships described above are not automatically preconditions of each other. One level of relationship does not have to presuppose the other and they can be combined in different ways, which means that people are not equally cosmopolitan in all levels and within each level contradictions will occur (Delanty, 2012:341). Drawing on Max Weber’s idea of the ideal type, Delanty describes the four kinds as ‘ideal typifications’ of cosmopolitanism (Delanty, 2012:341). In this regard, Delanty wants to stress that the cosmopolitan approach addresses the question of social change that distinguishes between social mechanisms, processes and trajectories of historical change. According to Delanty (2012:352): ‘[T]his way cosmopolitanism can be seen as a particular kind of learning process that makes social change possible and which needs to be temporally situated to show how long-run variables become transformed in certain situations’.

Beck, Appiah, and Delanty have each elaborated on how critical cosmopolitanism offers us a way of understanding rapidly transforming social relations in a world where the boundaries between people and places have become more and more blurred. The four levels of cosmopolitan relationships put forward by Delanty (2012) offer a useful tool for reflecting on how significant the establishment of the SKA has been for the people of Carnarvon and its possible consequences for social change. With the development of the Computer and Technology Centre the potential has been signalled for this poor, isolated community in the middle of the arid Karoo to no longer be defined by physical boundaries, but enabled to start engaging with ‘the other’ and with the wider world.

In thinking about moments of openness to the world ‘out there’ and the possibility of transforming social relations through access to computer education in Carnarvon, it is relevant to explore the literature on the effects that access to education in computer technology and the internet can have on the awareness and everyday lives of people living in rural areas. This leads to the issue of what has been termed ‘cosmopolitan learning’, which is addressed in the next section.

#### **2.2.4 Cosmopolitan learning**

The focus in this section is not on ideas around a universal curriculum or educational standards, which is the focus of most of the literature on computer education, as this is not relevant for the Carnarvon case. What does require more thought is to what extent the type of learning provided by the Computer Centre is compatible with a cosmopolitan approach and whether and how it opens up participants’ minds to be able to reflect on themselves and think about the other, along the lines of Delanty’s four types of cosmopolitan relationships discussed above.

Here the literature on cosmopolitan learning is useful. According to Sobe (2012), in the contemporary social world it is almost impossible not to consider education within a cosmopolitan framework. Sobe, whose research specialises in the combination of education and citizenship, argues that schools can be seen as sites where individuals can experience moments of openness that can lead to profound cosmopolitan transformations. He emphasises that ‘[t]o understand the cosmopolitan intentions and outcomes of modern schooling it is necessary to understand the school as a site of cultural production as well as social reproduction’ (Sobe, 2012:267). Although schools are not the only sites of learning, they make a major contribution to the way in which young people learn to be at home in, and to make their homes in, the world. Sobe thus considers critical cosmopolitanism as a way of being in the world that can be seen as a ‘strategy for locating self and community betwixt and between local and global formations’ (2012:269). In reference to education, cosmopolitanism goes further than simply an attachment to things that are non-local. According to Sobe (2012:270) it points to the norms and values that are produced in the way that young individuals are taught to think about their humanness in both local and global dimensions. The body of literature around the concept of cosmopolitan education is therefore not only applicable to urban spaces, as is often assumed, but also provides an opportunity to rethink understandings of rural identities as changing and globally connected. Reid agrees with this and notes that ‘as a theory of education, cosmopolitanism provides a way out of the long-standing problematic of static constructions of difference to a concern for transformation, mutual exchange, and dialogue’ (2015:730).

Writing from a philosophical viewpoint, Hansen (2010) mentions two elements of what cosmopolitan education should include, namely ‘recognition of the importance of local socialization as making possible education itself’ and ‘recognition that a cosmopolitan outlook triggers a critical rather than idolatrous or negligent attitude toward tradition and custom’ (2010:1). In order for people to exercise an attitude like that, Hansen explains that people will have to transform the self or ‘cultivate as richly as possible their intellectual, moral, political, and aesthetic being’ (2010:8). Hansen emphasises that people can produce not

just ways to tolerate the differences between them ‘but also ways to learn from one another, however modest the resulting changes in their outlooks may be’ (2010: 4).

Murphy has also highlighted the importance of global learning as a critical citizen project especially across various scales and contexts. In her 2015 online article, ‘Critical cosmopolitan teaching and learning: a new answer to the global imperative’, she differs with those who see the local and the global as opposing terms, saying that:

Critical cosmopolitan teaching and learning works to complicate – and, ideally, unseat – this binary logic. It does so by investing in *thinking relationally about the local and the global*. As a framework for global learning, critical cosmopolitan education is committed to unsettling the traditional and highly reified opposition of local and global, to imagining a more dialogic and dynamic relationship between these terms. (Murphy, 2015)

These social scientists emphasises the relevance of having a critical cosmopolitan approach towards learning, as this positions the local and the global as relational and denies the assumption that the global is a category that transcends others. In other words, critical cosmopolitanism demands that ‘the local’ and ‘the global’ are seen as mutually constitutive and interdependent terms. Having access to the internet does not necessarily mean that global attachments will become more important than local ones, but, rather, that they influence each other. As Murphy (2015) elaborates, ‘[even] though they appear to occupy very different scales, the global and the local are not exclusively opposed but instead are co-constitutive, inform, and shape one another’. This idea that the local and the global are shaping each other is an important one when exploring the apparent tensions between them with regards to the Computer Centre and the location of Carnarvon in relation to the SKA.

### *The Kidnet Programme*

Given the considerable interest in global learning, there are many studies that compare how young people deal with their local and global responsibilities. However, Glynda Hull and Amy Stornaiuolo (2014) argue that less effort has been made into looking empirically at how artefacts, images, texts and cultural flows of ideas have become resources for meaning-making and self-imagining across cultural, national, textual and linguistic borders. To address this they started a long-term study in 2006 called ‘Kidnet’ focussing on how in our digital age adolescents are positioned to develop effective responses to local and global concerns. The youngsters in their study, who were located in different places around the world and all faced serious challenges in their daily lives, attended after-school classes where teachers attempted to foster cosmopolitan orientations toward others via a private social network called ‘Space2Cre8’ (Hull *et al*, 2010:332). Their main focus was to ‘study cosmopolitanism on the ground’ (Hull & Stornaiuolo, 2014:37), by asking how a dialogue could be stimulated across differences in language, ideology, culture and geography, and how identities as cosmopolitan citizens could be realised in practice. More concretely, they were looking into the way ‘youth in the cusp of adulthood took up opportunities to think and act reflexively about the

opportunities, responsibilities, and challenges of intercultural, cross-geographic communication in a global, digital world' (Hull & Stornaiuolo 2014:37).

One of the research sites selected by the researchers was located in Northern India; the study involved following a group of 15 teenage girls and tracing their participation online and offline and their 'cosmopolitan' imaginings of self and other. As is regularly the case in developing countries, education in this area is a long-standing problem and youngsters from lower social classes are often excluded from educational opportunities (Sahni in, Hull *et al*, 2010). Just as in the Northern Cape, most government schools in India suffer from low enrolment, teacher shortages, high dropout rates and poor infrastructure, with the result that children are often without classrooms, and access to computers and the internet is close to unthinkable. It takes projects like Kidnet and Space2Cre8 to provide access to certain digital tools and semiotic resources (Hull *et al*, 2010). By interacting with the Kidnet programme and by using various modes of communications and representation - chat, wall posts, audio recordings, blogs - the Indian girls were encouraged to reimagine themselves in relation to their local communities and to the world beyond them. By doing this, the girls were able to develop an awareness of their personal identities in relation to others. To study these redefinitions of self the researchers drew on ethnographic observations, interviews and analyses of creative products:

This agentic redefining of themselves [the girls ed.], or the creation of "new narratives of the self" through creative practices, involved the girls' examination of their place in their home society and their relationship to a global community. Through critical dialogues, creative digital arts production, and networked communication, the Indian youth came to exhibit the beginnings of what might be called cosmopolitan dispositions: hospitable and critical imaginings of self and other. (Hull *et al*, 2010:332)

Hull *et al* (2010:335) consider these different ways of communication to be 'cosmopolitan gestures' - ones that begin with local and personal issues which participants eventually are able to compare and contrast against wider contexts. This is a process that they label as 'ideological becoming' (2010:336). They note that by learning through dialogue with self and others, it becomes possible for young people to engage with and think critically about differences. Ultimately 'ideological learning' is a process of learning that, according to Hull *et al* (2010:336), can be usually understood in relation to cosmopolitanism as educative practice. I return to this study in section 2.3.3 below.

## **2.3 Transforming places**

### **2.3.1 Space and place**

Skrbis, Kendall and Woodward (2004:117) have argued that the idea of being 'a citizen of the cosmos' has never been so tangible and real for so many people as it is today. As Beck (2002:24) vividly describes it, the new cosmopolitan suffers from 'place polygamy'. The transformation in people's awareness of themselves from primarily local experiences to new global raises many questions around space and place. There is a

very large body of literature on these concepts by influential scholars of human geography such as Tuan (1977), Harvey (1996; 1995), Massey (1996) and Cresswell (2004). The concepts of space and place have been widely debated in the social sciences and humanities, and the discussion has taken on new dimensions in the age of the computer when we are being forced to think more extensively about new virtual spaces like cyber space. In Carnarvon residents are also being asked to engage with a dramatically expanded physical space in the form of the space of the universe that the SKA plans to explore.

Relating the concepts of space and place to my research means exploring how access to the facilities of the Computer Centre affects local people's sense of themselves and the relationship(s) between the local and the world, where meaning-making regarding place and space are likely to be important considerations. What makes getting a better understanding about the way we understand space and place particularly challenging is that in everyday speech these concepts are often used interchangeably and can be used in a variety of ways. David Harvey, who is an eminent human geographer, has indicated how difficult this actually is by noting with regards to the idea of 'place' that 'place alone can be related to territory, locality, a city, a state, but also to a home or the place of women in society, or 'our place'. It is therefore one of the most multi-purpose and multi-layered words in the English language' (Harvey, 1995:4).

In an effort to gain a firmer grasp of these concepts, Tim Cresswell (2004:11) has formulated a relatively simple distinction between space and place. According to him, 'space' is a more abstract concept than 'place', noting that when people speak about space, they tend to think of outer space, cyber space or the spaces of geometry. He goes on to argue that spaces have areas and volumes (for example, describing the Karoo as a large geographical space), whereas places have space between them and, crucially, reflect a way of understanding the world - a way of seeing, understanding, and knowing the world, and with that of creating connections between the place and people and a sense of belonging (Cresswell, 2004:11), (for example, the attachments residents have expressed for Carnarvon being their 'home town'). Cresswell goes on to argue that 'place is not so much a quality of things in the world, but an aspect of the way we choose to think about it - what we decide to emphasise and what we decide to designate as unimportant' (Cresswell, 2004:11).

Cresswell has built on earlier work by Yi-Fu Tuan who connects space to movement and place to pauses, like stops along the way. Tuan (1977) has had a major influence in the field of human geography, especially in the development of the concept of space and how we come to know the world through places, by drawing on experience and human perception. He has explained this connection as follows:

What begins as undifferentiated space becomes place as we get to know it better and endow it with value... The ideas 'space' and 'place' require each other for definition. From the security and stability of place, and visa versa. Furthermore, if we think of space as that what allows movement, then place is pause; each pause in movement makes it possible for location to be transformed into place. (Tuan 1977:6)



The term that Tuan (1977:9) has derived from this is ‘topophilia’, referring to the ‘affective bond’ between people and place. This bond, or sense of attachment, is essential to the idea of place. As mentioned above, Tuan defined place by relating it to space. He thinks of space as invoking an open arena of movement and action, in contrast with the idea of place that relates to resting, stopping and becoming involved. Building on this idea from Tuan, Creswell concludes that ‘the continuum that has place at one end and space at the other is simultaneously a continuum linking experience to abstraction. Places are experienced’ (Creswell 2004:21).

Tuan and Creswell explanations of space and place can be related to thoughts around the Karoo as well as Carnarvon. The Karoo is often perceived as a dry, arid and empty space, a large open area to travel through, but without a sense of belonging. In comparison, Carnarvon can be seen as presenting that moment of pausing that Tuan describes; a space that has been transformed into place by people connecting meaning to it in order to better understand the world around them. Or, as philosopher of space Edward Casey (1996:18) has put it (in a manner that invokes Appiah’s ideas on rooted cosmopolitanism described earlier): ‘[t]o live is to live locally, and to know is first of all to know the place one is in’. In regards to this research project it turned out to be critical for me to experience and learn about Carnarvon by spending time there in order to create a better understanding of what it means to live in this isolated place and view the world from there.

### **2.3.2 ‘Virtual’ versus ‘actual’ place**

The above discussion introduces a tension between the local and the global in relation to the growing influences of globalisation and information technology. According to Creswell (2004:22-3), place can be related to a conscious construction of the relationship between the self, others and the world. This raises an interesting issue involving the possible loss of a sense of place due to the forces of globalisation as well as the growing impact of technological developments which, as described by Creswell (2004:8), have diminished the power of local places and cultures and produced more homogenised global spaces. He continues by noting how what he terms hypermodernity is characterised by a form of globalism that makes each local action potentially global in its consequences (Creswell, 2004:17).

One of these global forces Creswell is referring to is the internet. Much has been written on the internet and how new technology has become a symbol of modernity, but less work has been done on what using the internet on a regular, everyday basis means for being human. Daniel Miller and Don Slater have done extensive ethnographic research on how people can find themselves in this transforming communicative environment. In their book, *The Internet: An Ethnographic Approach* (2000), they focus on what people from Trinidad find in the internet, what Trinidadians make of the internet, and how they relate these possibilities to themselves and their futures. In their ethnography they claim that ‘the internet is not a monolithic or spaceless ‘cyberspace’ - contrary to the first generation of internet literature - rather it is numerous new technologies, used by diverse people, in diverse real-world locations’ (Miller & Slater, 2000:1). They agree that social theory has gained very little by the generalisation of concepts such as the internet, cyberspace or virtuality and what is needed is research that allows us to understand the different

universes of technical and social opportunity that have developed around the internet in countries as different as, for example, Brazil, Sweden or South Africa. ‘We escape the straight jacket of relativism by recognising that each of these places is constantly being redefined through engagement with forces such as the internet’ (Miller & Slater, 2000:1-2). This last point is an important insight to my study.

Miller and Slater are critical of the idea that using the internet means ‘disembedding’ oneself from an off-line reality and do not take as their point of departure that the internet is some kind of ‘spaceless space’, a cyberspace that disconnects us from particular places. In this regard, they state clearly that:

[W]e find ourselves quite alienated from that earlier generation of internet writing that was concerned with the internet primarily through such notions of ‘cyberspace’ or ‘virtuality’. These terms focussed on the way in which the new media seemed able to constitute spaces or places *apart from* the rest of social life (‘real life’ or offline life), spaces in which new forms of sociality were emerging, as well as bases for new identities, such as new relations to gender, ‘race’, or ontology. (Miller & Slater, 2000:4)

It is clear that Miller and Slater resist the idea that the internet is different from the ‘real world’ and here the concept of ‘virtuality’ becomes important. For them the term ‘virtuality’ indicates that new forms of media can provide both ‘modes of representation’ as well as a ‘means of interaction’ that together create places that participants can engage with *as if* they are real (2000:4). The ethnographers give an example of online gamers communicating in an online chat room, which can create relationships that can be treated as if they were real, and at the same time can be seen to be about online gaming. In both instances the ‘virtual’ space represents a situation of ‘*as if*’, something that is separate from, but can also be substituted for the ‘*really is*’ (Miller & Slater, 2000:4). But, so state Miller and Slater (2000:4), ‘by focussing on virtuality as the defining feature of the many internet media and the moving on to notions as cyberspace, we start from an assumption that it is opposed to and disembedded from the real’. The bottom line for Miller and Slater is that the internet and other forms of new technology are new ways of mediation, but are not a new reality. They form new spaces that form an important *part of* everyday life, but are not *apart* from everyday life.

That being said, Miller and Slater did not wish to diminish the importance of the internet. Rather, they wanted to underline the fruitlessness of defining the internet as being separate from off-line life. Their early insights have been taken up by other anthropologists over the years and are discussed extensively in the 2012 book *Digital Anthropology*, which Miller edited with the co-director of the Digital Ethnography Research Centre, Heather Horst. In their introductory chapter Horst and Miller insist that ‘people are not one iota more mediated by the rise of digital technology. We are not more mediated simply because we are not more cultural than we were before’ (2012:11-13). What they mean by this is that digital anthropology will help us understand the framed and mediated nature of the non-digital world only when we do not suppose a contrast between the ‘virtual’ and the ‘real’. In a contribution to the same book, anthropologist Tom Boellstorff identifies the treatment of the virtual and the physical as separate and distinct domains as a core problem in digital anthropology (Boellstorff, 2012:40). He refers to the work of Gabriella Coleman (2010), who has

noted that most research on virtual worlds continues to [mis]perceive sharp boundaries between the online and offline contexts, which needs to be avoided. Boellstorff claims that these sharp boundaries are reflections of scholarly arrogance that incorrectly separates online and offline contexts rather than exploring what he terms the ‘ontologically consequential gaps that constitute the online and the offline’ (2012:41). According to Boellstorff (in Horst & Miller, 2012:12) ‘online words are simply another arena, alongside offline worlds, for expressive practice, and there is no reason to privilege one over the other’.

I have found the views of the anthropologists referred to above as particularly interesting for thinking about the situation in the Computer and Technology Centre in Carnarvon, where I have tried to explore how access to computers and the internet hold the potential to blur the boundaries between ‘the self’ and ‘the other’ and, consequently, to demystify the apparently sharp boundaries between the Computer Centre users’ everyday lives in ‘the real world’ and the ‘virtual’ world opened up by their learning to use computers. This links to what Geertz (in Boellstorff, 2012:39) describes as classical practice, which involves ‘tack[ing] between the most local of local detail and the most global of global structures in such a way as to bring them into simultaneous view’.

### **2.3.3 Identity and computer technology**

There is considerable scholarly literature around the way people, and especially the youth, construct their identities through the use of media technology such as Facebook, Instagram or YouTube. However, in this project I have been interested in looking at identity construction through a cosmopolitan lens, in terms of the impact of access to computer technology on the construction of the self, the other and world. In this subsection I therefore build further on the work of Miller and Slater (2000), Hull, Stornaiuolo and Sahni (2010) and Hull and Stornaiuolo (2014) discussed earlier, and Jackson (2014) on ‘broken world thinking’. In the next section I engage with the very limited literature on South Africa that I have found relevant for thinking about the impact of technology in a country town such as Carnarvon. The concept that I have found useful here is that of the ‘digital divide’, whereby a gap is suggested in access to technology in South Africa in terms of not only race, class, age and gender, but also locality (i.e. urban or rural).

#### *Dynamics of objectification*

It appears that people seem to recognise themselves in the internet in many different ways and it provides the space for endorsing practices, core values and identity. In order for Miller and Slater to investigate the embedding of the internet in Trinidad, they worked with different ‘dynamics’ to look for the driving forces and emerging patterns of change. The most relevant dynamic for my research is what they termed the ‘dynamic of objectification’ (Miller & Slater, 2000:10), which refers to how people engage with the internet as an instance of material culture through which they are involved in processes of identity formation. This dynamic of objectification around identity and the internet can be understood in two interrelated ways: the first involving what they term ‘expansive realisation’ and the second, ‘expansive potential’. The first mechanism, that of expansive realisation, refers fairly literally to a person’s ability, in everyday life, to be

who he or she thinks he or she is or is capable of being, through the global interconnectedness offered by the internet. For example, through the internet a Trinidadian might feel free to act as and hence to be a Hindu, by being part of worldwide networks of Hindus, an identification that can then be incorporated in a number of ways within their daily local lives in Trinidad (Miller & Slater, 2000:10-11). The second mechanism, that of expansive potential, refers to the possibilities and connections of the internet that allow a person to picture what he or she could become and to use the internet as a method of imagining this potential future.

Miller and Slater (2000:10) also reflect on how initially they expected to observe a process whereby the participants in their study were being distanced and abstracted from local, embodied social relations, or as they describe it, would be becoming less plainly Trinidadian. However, they found the opposite: Trinidadians actually put in a lot of energy to try to make their online-life as Trinidadian as they could, and to use the internet as a place to perform their 'Trinidadiness'. What Miller and Slater found remarkable was how Trinidadians were inserting themselves into the global arena and becoming part of the force that constitutes it, but were doing so as Trinidadians specifically. So on the one hand aspects of the new media were allowing people to 'objectify' themselves strongly as Trinidadian (among other identities such as youth, computer nerd, female, accountant, etc.), while on the other hand these same people were able to shape the spaces of the internet to culturally specific forms and purposes (Miller & Slater, 2000:10-12).

Here, Miller and Slater make an interesting observation about the mostly positive representation of Trinidadian identity by means of the internet, and into global spaces, when they note that:

[w]e do this partly, and paradoxically, in response to Trinidadians' own often very negative sense of themselves, their capacities and their global position. This negativity is often projected onto and through the internet itself. (Miller & Slater, 2000:13)

This presents an interesting paradox around their sense of themselves as cosmopolitans. According to Miller and Slater (2000:19) an important aspect of Trinidadian identity is having the knowledge and capability to act in global contexts, but this cosmopolitanism runs head-on into the realisation that Trinidadians are marginal and even unknown to others online. When using online chat rooms, for example, Trinidadians demonstrate a great deal of knowledge about the world 'out there' and consider themselves to be capable participants in this world. However, when they chat to people from the supposedly metropolitan centres Trinidadians realise that these 'others' have never heard of them and are actually more parochial than they are. Yet this same medium that makes Trinidadians seem marginalised creates possibilities for them to participate in creating a global cultural space which they thought already existed (Miller & Slater, 2000:20). Thus Trinidadians are able to engage in global youth culture, world music, or religious communities as *cosmopolitan* citizens, rather than as marginalised bystanders. In this way, argue Miller and Slater (2000:20), they are able to 'repair' a central part of their self-understanding and come to consider that the 'natural' stage for a Trinidadian is a global one. With this in mind, Miller and Slater conclude that 'identities have to be positioned in relation to a far wider context and dynamic than before' (2000:20) and that this positioning involves strategies for success or, sometimes, survival in these new spaces.

*Innovation and Repair*

An interesting approach to look at how technological changes affect our natural and social worlds comes from Steven J. Jackson. In ‘Rethinking Repair’ (2014), Jackson introduces the idea of ‘broken world thinking’. With broken world thinking he claims that not innovation, design and development, but rather breakdown, disillusion and change are the key problems that should be discussed in relation to the use of new technology (2014:222). Instead of a constant emphasis on invention and developments, we should ask questions such as ‘Who fixes the devices and systems we use?’ and ‘Who fixes the infrastructures around which our lives unfold?’. The common factor in these is ‘repair’, which Jackson describes as: ‘the subtle acts of care by which order and meaning in complex sociotechnical systems are maintained and transformed, human value is preserved and extended, and the complicated work of fitting to the varied circumstances of organizations, systems and lives is accomplished’ (Jackson, 2014:222).

Jackson explain this process by noticing that innovation always comes first, at the beginning of the technological chain, where repair always comes later, when firm-well is corrupted, when screens and buttons fail, and the iPhone gets shipped back to wherever it came from (2014:226). The importance of themes as breakdown, maintenance and repair is that these acts are often invisible and the idea of technologies breaking down rather forgotten. It is stated that the language of innovation is mostly used for new and ‘bright and shiny’ tools, while ‘repair tends to disappear altogether, or at best is relegated to the mostly neglected story of people (researchers, information managers, field technicians)’ (Jackson, 2014:227).

Looking at innovation and repair the way Jackson does is very relevant in relation to the developments in the Computer Centre in Carnarvon. When the Centre was established in 2013 the emphases was on innovation, namely providing the community with access to computers and the establishment of an internet connection in a previous almost ‘disconnected’ town. The Computer Centre has been highlighted as one of the success stories for local community development, as shown in the various SKA newsletters and promotional material. (SKA-SA, 2016c; SKA-SA, nd:3). However, this research has show that what comes afterwards, namely maintenance and repair, seems to be ‘forgotten’. Jackson explains this process by stating that:

[B]roken world thinking draws our attention around the sociality of objects forward, into the on-going forms of labour, power, and interest—neither dead nor congealed—that underpin the on-going survival of things as objects in the world. In doing so, it may hold up a clear and revealing light to relations of value and order that are sometimes made invisible under the smooth functioning of complex sociotechnical systems. (Jackson, 2014:230-231)

With this Jackson wants to draw attention to how maintenance and repair can help redirect our view from ‘moments of production’ to ‘moments of sustainability’ (2014:234). By doing so, it might become possible to bypass what Jackson labels ‘productivist bias’ (2014:234) and put more emphasis on thinking about what comes next; the break down and repair of technological development, and how this impacts our social worlds.

### *Crossing differences*

The ethnographic research already described by Hull and Stornaiuolo (2014) and Hull, Stornaiuolo and Sahni (2010) concentrates on the questions of how the identities of cosmopolitan citizens can be realised in practice, dialogue be encouraged across differences, and young people in the digital age positioned to develop effective responses to both local and global concerns. They start off with the notion that social networking sites are key locations for youngsters to construct and share images of 'self'. Similar to my study, in their research in India and other places in the world they were interested in how identity formation would take place among youth for whom access to computers and internet was relatively new, as well as what opportunities for expression and reflection would be possible in this process. Given their commitment to cosmopolitan learning, they consider 'self-conscious self-representation a pivotal part of the project of cosmopolitanism, for this 'practice of the self' can promote the consideration of self in relation to others' (Hull *et al*, 2010:344).

In the online project (Space2Cre8) that these researchers created this self-representation was strongly encouraged by teachers in the context of communicating with a global group of unknown, yet potential friends. Students were asked to share their everyday realities with these others through practices such as discussions, poems, journals, blogs or private messages (Hull & Stornaiuolo, 2014:24). These efforts to communicate, which can be regarded as cosmopolitan in nature, reflected a desire to listen to the other, to care for the other and to engage in dialogue. They were modes for communicating about the everyday and the local, while also connecting these local realities to and consequently situating them in the world more broadly. They were efforts 'to understand one another *in relation to* each other – to locate, reflect, represent, and engage self/world/other' (Hull & Stornaiuolo 2014:24).

In looking at what cosmopolitan orientations adolescents could possibly develop while exploring intercultural understandings, Hull and Stornaiuolo (2014:29-37) identified three stances, which they labelled as 'proximal', 'reflexive' and 'reciprocal'. A proximal stance reflected the need of the youngsters in the study to locate themselves in time and space to others, using 'mediated technologies to negotiate both physical and psychological connections' (2014:29). Whereas in the proximal stance it is important to locate oneself in relation to others, a reflexive stance permits participants to theorise their practices, while taking their own and others' shifting positionalities into account (Hull and Stornaiuolo, 2014:33). In practice this often means that participants like to assume that the other has the best of motives and to give them the benefit of the doubt and remain open to further dialogue. In the third stance, the reciprocal one, students were observed positioning themselves as open and welcoming partners in conversation. These different stances have similarities with the four types of cosmopolitan relations Delanty described in his work mentioned above. In both cases different levels of understanding and identifying in relation to the other take place in a (digitally) mediated space. However, where Delanty created a method to analyse different levels of cosmopolitan relations, Hull and Stornaiuolo have developed their stances based on cosmopolitanism 'from the ground'. Proceeding from the more philosophical theory and methods, they studied how 'youth as the

culp of adulthood took up opportunities to think and act reflexively about the opportunities, responsibilities, and challenges of intercultural, cross-geographic communication in a global, digital world' (Hull and Stornaiuolo, 2014:37). Guided by their qualitative data they analysed how young people who are relatively new to computer technology have learned how to locate and consider the self in relation to others, and engage in an open dialogue with the other.

### 2.3.4 The digital divide in South Africa

Where the previous two examples reflect on situations outside of South Africa, I have also tried to engage with the literature around (access to) computer education in rural South Africa. Regrettably, the available literature on this topic appears to be rather scarce, as most of the scholarship leans towards urban situations, higher educational institutions and curriculum development.

The concept most closely related to the issues covered in my study is that of the 'digital divide'. As Conradie, Morris and Jacobs (2003:199) have noted, much has been written about the digital divide between South Africa and the rest of the world, but little about the divide between rural and urban contexts within South Africa. However, these authors show that there is a very distinct gap between rural and urban areas, with access to computer technology and internet in South Africa strongly biased geographically towards urban areas:

[R]ural areas in the country are unfortunately not only lagging behind with regard to internet access, but also with regard to those factors (such as literacy, computer skills, and high income rates) that could possibly contribute to the bridging of the urban-rural divide. (Conradie *et al*, 2003:199)

That said, there are examples of initiatives that have attempted to introduce information technologies (IT) infrastructures to rural areas, and, to a lesser extent, to promote computer education (Conradie *et al*, 2003:200). A 2000 study by Stavrou and Benjamin showed that most telecentre initiatives in South Africa were struggling, and not only in rural areas. They concluded that the major stumbling block was the long-term economic sustainability of these centres and also noted that they did not reach many deep rural communities. These findings are interesting in relation to the Computer Centre in Carnarvon, given the threats to its viability that emerged during the course of my fieldwork. In listing the reasons for failure of IT projects, Conradie *et al* (2003:200-1) identified six serious challenges. The three most applicable to the Carnarvon context are: 'reconciling the tension between technology push and local development needs', the 'lack of PC-related applications and sustainable career path opportunities in rural areas', and 'other social challenges specific to the rural area involved' (eg. domestic violence, political divisions, power relations) (Conradie *et al*, 2003:200). The other three challenges involved the lack of electric power, the lack of a communication infrastructure, and lack of PC-related skills in the local community (teachers).

In order to address the challenges of rolling out access to computer technology in developing countries, in the late 1990s academics such as Van Audenhove (1999) and Mansell & When (1998) suggested three actions to be taken: one, the establishment of an IT infrastructure, two, the development of IT that is

applicable to local needs, and three, the introduction of supporting regulations for IT-related issues. In the case of the Carnarvon Computer Centre, external donors in the form of the SKA have provided the infrastructure. However, over the course of my research it has become clear to me that the issues of responding to local needs and providing appropriate support are very significant for the effective day-to-day functioning of the Centre.

## 2.4 Conclusion

This chapter has discussed first the concept of critical cosmopolitanism as central to the overarching conceptual framework for my study and then the more focused literature on space and place, the real and the virtual, as well as access to information technologies. As with most broad theories in the social sciences and humanities, critical cosmopolitanism has been the subject of much debate and has been criticised for both its empirical and its analytical value. In order to apply critical cosmopolitanism to my own research, it was necessary to engage with this debate and the more contemporary work of three influential thinkers on critical cosmopolitanism, namely Ulrich Beck, Gerard Delanty and Kwame Appiah. The four relationships between self and other put forward by Delanty (2012) – namely, the relativisation of identity, the positive recognition of the other, the mutual evaluation of cultures, and the creation of a normative culture – together define the scope of cosmopolitanism as a way of being in the contemporary world. However, Delanty stresses that these relationships should not be seen as preconditions for each other and argues that people are not equally cosmopolitan on all levels. Here Appiah's idea of 'rooted cosmopolitanism' is considered particularly useful for positioning local attachments as important for, rather than in opposition to, engagement with the other.

Delanty has also stressed that cosmopolitanism should be understood as a particular kind of learning process that makes social change possible. This important point was developed in the discussion on cosmopolitan learning as well as several studies on the impact of access to computers on identity and perceptions of 'the other' reviewed above. While cosmopolitan learning is often assumed to apply only to urban spaces, it most definitely creates an opportunity to rethink understandings of rural identity as changing and globally connected. Of particular interest here is the work by Hull and colleagues on how, through stimulating dialogue across differences in ideology, language and culture, it becomes possible for adolescents in different parts of the world to reflect on challenges, responsibilities, and opportunities in a globalised, digital world. The ideas around a 'virtual world' as opposed to a 'real world' were also central to the discussion in this chapter. The ethnographic work in Trinidad of Miller and Slater (2000) has made the important point that virtuality and cyberspace should not be seen as separate from the 'real' world, as these spaces are not apart from the rest of social life. The internet and other forms of technology are new ways of mediation, claim Miller and Slater, but are not a new reality. Particularly striking from their ethnography was their discussion of the apparent paradox in Trinidadian identification with self and other through the use of the internet. While on the one hand they regarded themselves as capable cosmopolitan citizens, with a good understanding of the world 'out there', on the other hand they observed how they were unknown to those whom they had considered to reside in the metropolitan centres of that world. Also important for my



research project is the insight that computer technology creates new spaces that form an increasing *part of* everyday life and are most certainly not *apart* from everyday life. This accords with the literature on critical cosmopolitan learning, where Murphy (2015) emphasises that the local and the global should not be seen as opposed to each other but, rather, as influencing and shaping one another. At the same time, in the context of South Africa (discussed in my final section above) the gap between urban and rural areas in regards to IT infrastructure and support needs to be factored into the analysis. Here Jackson's ideas on 'broken world thinking' are instructive.

The concepts discussed in this chapter will be drawn on in my exploration in the chapters that follow of how people in Carnarvon are using the Computer Centre and experiencing their exposure to new technologies. The next chapter presents a reflexive description of the history of Carnarvon and the many socio-economical problems residents of this town are currently facing, as part of the wider context within which the Computer Centre is operating.

## CHAPTER 3:

### THE COMPUTER CENTRE IN CONTEXT: CARNARVON

#### 3.1 Introduction

As already mentioned in my introductory chapter, when my research project started in early 2015 I was focused on the Computer Centre and what it promised its users: who were the student and teachers, what were the students learning, how were they using the computers in the Centre, and how was this affecting them in their daily lives and their thinking about themselves and their futures? However, over the course of my fieldwork between June 2015 and August 2016, it became more and more evident that the Centre could not be looked at simply as an IT educational institution. This did not mean that the Centre became a less meaningful place for my project, but that I needed to reconceptualise its significance. Over the 14 months that I was going in and out of the Computer Centre it changed from an apparently well-performing institution for basic computer education to one that seemed close to collapse. In this time staff as well as students were confronted with major problems such as computer viruses, a broken printer, and eventually being disconnected from the internet altogether. As a result not just the functioning but also the meaning of the Centre shifted for both its users and its staff, from a place of opportunity and the promise of a better future to a place that embodied the loss of hope, as well as neglect and indifference. This change in both functionality and feelings toward the Centre and the SKA as an actor have had a significant impact on this project, as it affected not only the methods applied (as indicated in Chapter 1), but also the framing of this project, something I will get back to in this chapter and the next one.

For myself the Centre took on a new significance as a place where I could observe and hear about the many social interactions of a small Karoo town. It also came to represent the challenges of marginalisation and isolation that many residents of Carnarvon have to deal with on a daily basis. Where the expectation had existed that I would be looking at the Computer Centre as a place used primarily for the purpose of computer training and the use of the internet, I was compelled to change this view after many hours of hanging around and talking to community members in the Centre without any of them ever touching a computer in this time. The people dropping into the Centre in this time were, furthermore, not primarily young people watching YouTube videos, but more often middle-aged coloured women whose main purpose was to spend some social time with some of the staff. During what I came to call ‘gossip time’ many things were discussed, ranging from day-to-day happenings such as being irritated about being sold a pregnant goat, to shocking events such as a fellow community member murdering her husband. The Computer Centre thus at times took on more of the function of a community centre than an institution for computer education, especially during the months when the computers were barely functioning. This also contributed to a shift in my understanding of the Centre as a space for and of ‘cosmopolitan learning’.

Over the duration of my fieldwork it became clear to me that the gossip sessions in which I participated were an important part of my fieldwork, as what was discussed provided me with an understanding of how the other participants thought about relevant issues such as local politics, the SKA, job opportunities and the future of Carnarvon in general. The concerns that surfaced in these conversations reflected people's sense of 'self' and 'other', and also gave me insight on how they perceived the world 'out there'. Although my initial focus was on how computer education and how the use of internet was shaping people's understandings of themselves, others and the world around them (which I return to in Chapter Four), I realised that this required a deeper understanding of the social dynamics in the town of Carnarvon. What I learned from staying in the town and taking part in daily activities, from buying cookies at the *tuisnywerheid* [home industry] to going to church on Sunday, was that the tensions in this town cannot be understood simply by reference to personal or local factors, but are linked to national and even global developments. A major factor has definitely been the arrival of the SKA project and the changes and promises that have come with that. But the effects this has had on the community of Carnarvon and how local residents have responded to this externally driven intervention have also to be understood within the context of Carnarvon's past as well as its current situation. A key insight that emerged during my reflections on this context was how the promise of the virtual space described in Chapter Two seemed to be overwhelmed by the problems of the actual space within which Carnarvon is located, and how this in turn affects local community members' sense of self and their place in the world 'out there'.

This chapter therefore concentrates on the local context and its relationship to the wider world beyond Carnarvon, nationally and, most visibly through the SKA, globally. It discusses first the history of Carnarvon, (section 3.2), then current socio-economic conditions in the town (section 3.3), here expanding on the brief overview given in Chapter One. The final section (3.4) addresses the SKA project and its promise of local development for Carnarvon and the other neighbouring small towns. In keeping with my ethnographic methodology, in what follows I rely heavily on my own observations, interviews and informal interactions with local informants and visitors to the Centre, as well as my participation in the 'gossip time' at the Centre. While reflections on these experiences have been central in the development of my understanding of local dynamics, I have supplemented my ethnographic material with information drawn from various documentary sources where appropriate.

## 3.2 The History of Carnarvon

*Carnarvon se geskiedenis vertel 'n verhaal wat daarop dui dat die hierdie gebied 'n kosmopolitaanse brandpunt soos min geword het. Die verskeidenheid van kulture wat hier saamgevloei het, laat Phil du Plessis opmerk: "Carnarvon se geskiedenis bestaan uit een van die interessantste interaksies tussen migrerende bevolkingsgroepe en die Britse koloniale owerhede in die land".* [The history of Carnarvon tells a story that suggests that this area has had a cosmopolitan focus rarely seen before. The variety of cultures that flowed together here led Phil du Plessies to remark: "Carnarvon's history consists of one of the most interesting interactions between migrant populations and the British colonial authorities in the country".] (Potgieter 1997: 9)

The above quotation comes from a publication, the *VG Kerk Carnarvon Gedenkblad 1847 – 1997* [United Reformed Church Memorial Book Carnarvon 1847-1997], which gives an overview of how the town of Carnarvon had developed over the preceding two centuries from the perspective of this church. In compiling these annals, Dr. Sakkie Potgieter, who was the pastor for this church in the late 1990s, collected stories from residents and undertook archival work in order to develop as accurate timeline as possible of the history of Carnarvon. It has turned out to be a major source of information on this history.

It may seem remarkable that the most detailed written account of the history of Carnarvon comes from the church. However, the church was a major driving force behind the development of towns in the Northern Cape in the nineteenth century (Penn, 2005:21) and the Christian religion still plays a very important social role in Carnarvon today. What is also striking about the quotation above in relation to my project is the author's description of Carnarvon as having an unusual history because of its cosmopolitan focus [*kosmopolitaanes brandpunt*], and his drawing attention to the movement, interaction and cultural mixing of different groups of people in the establishment of the town. In his introduction to his book Potgieter (1997:5) also declares that the 150-year history of the town deviates '*ietwat af van die 'normale'*' [somewhat away from the 'normal']. This is suggestive of how, at the time of the transition to democracy in South Africa (1994), from the perspective of a white church minister at least, the history of mixing among the different groups in Carnarvon should be seen as somewhat abnormal. These remarks from Potgieter show the importance of taking Carnarvon's history into account, and the extent to which over time social dynamics have changed which has, in turn, influenced current residents' sense of self and their place in the world. This history requires a much larger research project than I have been able to undertake within the scope of this thesis, but in the sub-sections below I pull out some pointers in this regard.

### **3.2.1 The origins of the town before 1850**

The story of how the town of Carnarvon was established is mainly documented in church records. The reason for this is that the Rhenish Missionary Society<sup>3</sup> founded a mission station in 1840 near a water point that was given the name Schietfontein, which formed the nucleus around which the town now known as Carnarvon developed. There are various explanations for how the name Schietfontein arose, but the description of the 'fountain' (or spring) as 'Schiet' comes most likely refers to a *skietgeveg* [shooting battle] between farmers and the /Xam Bushmen in the 18<sup>th</sup> century.

The original inhabitants of the land around the Kareeberg were Khoi pastoralists, who mostly lived in the *veld* [field] and the /Xam people, who were hunters-gatherers and generally inhabited the more mountainous

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<sup>3</sup> The Rhenish Missionary Society (*Rhenish* derives from the name of the river Rhine) was one of the largest missionary societies in Germany, which was formed from the merger of a number of smaller missions in 1828. By the end of that year the first missionaries were ordained and sent off to South Africa.

parts<sup>4</sup> (Penn, 2005:18). Although there was some perception of territory among pre-colonial societies, there was no sense of exclusive ownership of land and its resources by any one specific group, nor a concern that other groups should be prevented from entering the area as such outings were usually temporary. However, while early hunter-gatherers and pastoralists co-existed relatively peacefully, this way of living began to change from the late 18<sup>th</sup> century when the first ‘intruders’ began to enter the area, in the form of first the *trekboers* (white settlers from the Dutch settlement spreading into the interior from Cape Town), followed in the course of the 19<sup>th</sup> century by a Xhosa-speaking group from the east and a group of *Basters* (mixed-race people) from the west. This resulted in growing conflict over land. According to historian Nigel Penn, in the 19<sup>th</sup> century ‘records indicate that boundary disruptions and litigation over land increased dramatically as the century progressed’ (2005:18). The *trekboers* disrupted the co-existence between the hunter-gatherers and pastoralists and, because of their superior military strength, had the power to damage the very structure of existence of the original inhabitants (Penn, 2005:18). As a result, the /Xam withdrew into the Karee Mountains and were left with no choice but to regularly attack the livestock of the *trekboers*. The new arrivals also fought among themselves in order to gain as much grazing grounds for their livestock as possible. The struggle for resources was shaped by the extreme scarcity of water, which is why early 19<sup>th</sup> century travellers described the water point near the place that became Schietfontein as being a ‘*welkome lafenis in die barre Karoo*’ [a welcoming refreshment in the harsh Karoo] (Potgieter, 1997:9).

Changes in local dynamics in this part of the northern frontier of the Cape Colony from the early 1800s can be attributed to three things that went hand-in-hand. Firstly and most importantly, as Penn has explained (2005:23), the endorsement of the ‘Hottentot Proclamation’ by the newly established British government at the Cape in 1809 sealed the fate of the original inhabitants as well as that of other non-colonial groups, by introducing regulations that over time pushed them into servitude. The arrival of the British colonial power in southern Africa also meant that for the first time the Cape government was powerful enough to enforce its regulations in the frontier regions. According to Penn (2005:23) ‘this government ensured the outcome of the long struggle in the northern frontier zone for the land, labour and livestock’. Secondly, the British administration encouraged missionaries to come to the colony in order to ‘civilise’ the frontier zone. The arrival of Christian missionaries in the northern Cape ‘heralded the arrival of a new era in frontier history’ (Penn, 2005:22), and instigated a major process of social transformation in the area around present-day Carnarvon.

The third event had a more immediate effect in this area and that was the arrival of a Xhosa-speaking group from the southeast, who settled in the area in the early 19<sup>th</sup> century. Although Potgieter (1997:10) acknowledges small inconsistencies in the timeline, missionary records seem to suggest that in the 1820s a

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<sup>4</sup> The now disappeared language and culture of the /Xam people has been recorded in the latter of the 19<sup>th</sup> century by the German linguist Bleek and his sister-in-law Lloyd. All transcripts and recordings are available at the University of Cape Town Bleek and Lloyd Archive and online at: <http://lloydbleekcollection.cs.uct.ac.za/>.

group of Xhosa-speaking people from the Fish River area in present-day Eastern Cape were requested by the colonial powers to move to Schietfontein, to serve as a buffer between colonists and the /Xam. The leader of this Xhosa group was Umkwaai (also known as Jan Kaffer, as his direct descendants still refer to him), who was the son of the prominent Xhosa chief, Ngqika. Umkwaai, together with some 120 families, settled in the Schietfontein area and ended up being so successful in the fight against the /Xam that in 1839 the Cape Governor, George Napier, decided to reward him and his people with approximately 28,600 morgen (24,500 hectares) of land south of the Kareeberg (Potgieter, 1997:10). Some time later, about 700 *Basters* came from the Amandelboom mission station at present-day Williston<sup>5</sup>. Although initially the Xhosa were not very welcoming of the *Basters* as they had to compete for grazing land, Umkwaai eventually tolerated them ‘*net ter wille van God se Woord*’ [‘because God’s word told us to’]. This suggests that the Xhosa group were confronted with Christian religion even before the first Venerable from the Rhenish Mission, until then stationed in Amandelboom, arrived to set up the Rhenish mission at Schietfontein in 1847 (Potgieter, 1997:10). The arrival of the Rhenish mission at Schietfontein can be considered the beginning of the town that later became known as Carnarvon. On 18 November 1847 Venerable Christoph Alheit made Schietfontein his home and set up his tent on the site where the rectory and vicarage garden are still located in Carnarvon today. Soon after Alheit’s arrival the first simple church was built in the part of Carnarvon now known as De Bult.



Figure 4: View of Carnarvon showing places of interest (Source: Google Maps)

<sup>5</sup> On the history of Williston see Robins, S. 2016. *Letters of Stone: From Nazi Germany to South Africa*. Cape Town: Penguin.

### 3.2.2 White settlers and the colonial influence after 1850

The Rhenish community grew rapidly and in 1859 two new churches were constructed both of which are still being used today. Thereafter the original church building was used for educational purposes, with a permanent teacher appointed in 1859 to teach the local children High Dutch, English, Religion and even some Latin ([www.carnarvon.co.za](http://www.carnarvon.co.za)).

The growth and development of the town was remarkable considering the extreme drought that afflicted the area during the 1850s, which saw the community lose close to all their livestock. Another problem occurred when the community, comprising mainly of the people of Umkwaai and the newly arrived *Basters*, had a severe encounter with new white settlers in 1851 (Potgieter, 1997:11). These newcomers, former *trekboers* looking for places to settle permanently, wanted to take over the land allocated to Umkwaai and his people which they intended to transform into 80 units of farmland for themselves. If successful, this would have left only a fraction of the original allocated land (some 2,900 morgen) for the town and its 'non-white' residents (Potgieter, 1997:12). In 1857 Alheit and five delegates travelled to Cape Town in an effort to ensure that their land and belongings were secure, but the colonial government made no commitments and the group returned empty handed. Despite this set back, it appears that everyday relations between the local black and white residents were relatively peaceful, with Venerable Alheit dedicating a wing of the church to the white settlers. As a result, during church services the three groups consisting of Xhosa speakers (the majority), *Basters* and white settlers were all accommodated in the church, but seated separately, while the sermon was conducted in Kaaps Hollands as well as in Xhosa.

At the beginning of 1860 the group of white settlers tried to take over the land around Schietfontein again. This time they offered 17,000 pounds for the land, on condition that the black community would move further north toward the Orange River after the transaction was finalised. A delegation was sent from the Cape to examine the viability of this plan. However, states Potgieter (1997:13), the delegates reported back that the area to the north was too arid, as a result of which the deal never took place. On 16 November 1860 it was the colonial authority, this time in the person of Governor Sir George Grey, who settled the land discussion. As reported in the *Gedenkblad* (1997), 3,500 South African morgen was set aside for the establishment of the town, in which 200 plots had to be assigned to black community members. However, they could only keep their plots if they could meet set requirements, which included that they had to build a house on their plot within three years and invested at least 25 pounds in their house and garden. If they were unable to meet these requirements their ownership would automatically lapse. With the exception of 32 plots that were allocated to the Rhenish Missionary, the remaining 24,800 morgen around Schietfontein was declared community land for grazing purposes (Potgieter, 1997:13) - the origins of the municipal commonage that is still in operation today. This was followed by the establishment of a formal town council, which initially consisted off five coloured people, two Xhosa speaking people and a government representative (Potgieter, 1997:13). One of the Xhosa speakers was Daniel Kaffer, son of Umkwaai (Jan Kaffer), whose relatives are still living in the black settlement on the outskirts of Carnarvon that still carries

the name 'Skietfontein' today. Then, at the end of the 1870s, the name of the original Schietfontein settlement was officially changed to Carnarvon, in honour of the British colonial secretary (the fourth Earl of Carnarvon). This is the name the town still holds today ([www.carnarvon.co.za/index](http://www.carnarvon.co.za/index)). The name signals the triumph of British colonial authority over the area, and the erasure of not only the /Xam, but also the Xhosa and Baster history from the map.

Although giving the black members of Schietfontein ownership of some of their historic land may have seemed a reasonable solution to the colonial authorities at the time, it soon became evident that most of them were too poor to meet the requirements of building 'proper' houses on their land. This opened the door for wealthier white farmers to buy them out legally and for the laying down of the foundations of the racial hierarchy of 20<sup>th</sup> century Carnarvon, in which whites were the dominant group.

### 3.2.3 Carnarvon in the 20<sup>th</sup> century

The history of Carnarvon over the past century is one marked by both prosperity and oppression. Although information on developments in the town during the years of segregation after Union (1910- 1948) and then apartheid (1948 – 1991) is limited, comparing contemporary conditions with those that prevailed in the mid 19<sup>th</sup> century makes it is apparent that the town has been deeply influenced by the political climate of the time.

My most detailed information on the progress of the town comes from the 1997 Church *Gedenkblad* and a 1977 article by Marais in the *Tydskrif vir die Suid-Afrikaanse Stedelijke en Streeksgeeskiedenis* [Magazine of South African Urban and Regional History]. According to the VG church records, at the beginning of the 20<sup>th</sup> century, Carnarvon was going through a very difficult time, as residents battled drought, famine, multiple insect plagues, and a chicken pox epidemic. The decline in population illustrates how challenging this period must have been - in 1891 the census showed a total of 9,132 residents but 13 years later, in 1904, there were only 5,792 people still living in the town (South African History Online, 2012). General environmental challenges were compounded by the impact of the South African War (1899-1902), during which time British soldiers were stationed in the town (although actual fighting took place closer to Kimberly) (South African History Online, 2014). The War in combination with the already challenging situation in Carnarvon had devastating effects on the community. One of these effects was the rising tension between those identified as Xhosa people and those as coloured, which, according to Potgieter (1997:16), saw the coloured community threaten to show their support for the British by relocating to their church.

After the establishment of the Union of South Africa in 1910 legislation was introduced to regulate access to the commonage by means of the Carnarvon Outer Commonage Settlement Act, which came into place in 1913 (Union Gazette Extraordinary, 1913). It was part of a wider set of discriminatory land regulations that were put in place over the duration of the 20<sup>th</sup> century. The Native Lands Act of 1913 saw the establishment of 'native reserves' for Black African communities in the Transvaal and Natal but because of the earlier history of dispossession and subjection experienced by the Khoi pastoralists and San hunter-gatherers in the



Northern Cape, this legislation did not apply in this part of the country. Rather, a separate process had seen the establishment of a number of ‘coloured’ reserves based on former missions stations in the early twentieth century, which were treated separately from the African ‘homelands’ under the Apartheid regime (Bradstock, 2005); no such reserves were created in the Kareeberg around Carnarvon, where most former black land passed under the authority of the Carnarvon municipality as part of the municipal commonage.<sup>6</sup>

In the years that followed the tensions between the different communities intensified as racial identities differentiating between white and black people were hardened by law and social practice under apartheid. In this time it appears that many of the descendants of Umkwaai adopted Afrikaans as their home language and merged into the coloured community. The division of communities (to the extent that they were relatively united before) deepened after the adoption of the Group Areas Act in 1950, which in short provided for the displacement of black people from their homes in more developed ‘white’ areas and their relocation to segregated townships on the outskirts of town. Of note here, however, is that there was strong resistance to the imposition of the Group Areas Act in Carnarvon, which was successful in preventing the removal of all coloured people from the centre of town. Especially in the area of De Bult, where the old mission church and school were built in the mid 1800s, its residents fought for their history and fearlessly campaigned against the threat of forced removals (*Mail & Guardian*, 1998, November 13). This resistance was successful for a few years until the municipality attempted to remove its residents from De Bult and relocate them to the already designated and planned suburb of Bonteheuwel, a few kilometres from De Bult. Although a few people indicated that they ‘could not fight the whites’ (*Mail & Guardian*, 1998, November 13) and moved to Bonteheuwel, most people kept up their resistance and eventually, in 1992, the people of De Bult received individual title deeds.

Apartheid legislation was responsible for the growing segregation between the different groups, which can also be noticed in the growing inequality between the white community (in town and on surrounding farms) and black people. Marais provides an example of what was considered ‘standard’ development of towns within the Karoo, in his description of economic activity in the town in the 1970s:

Just as in other parts of the Karoo, Carnarvon followed the same pattern in business development. The town had its honest, and hard-working artisans, like shoemakers and mechanics, plumbers and construction workers. Where the trade was mostly in Jewish hands, the counters used to be staffed by sons of farmers. Eventually the latter developed the trading skills themselves and undertook a partnership with Jewish people or would start a business of their own. [Translated from Afrikaans] (Marais, 1977:20)

In his article, which refers to the growth and prosperity of Carnarvon, Marais highlights the development of an airfield in the 1950s with three runways, which were suitable for landing the biggest planes of that time.

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<sup>6</sup> The history of this process is not something that I have been able to research within the constraints of this thesis, but definitely ought to be researched further.

As stated by Marais (1977:17), the Department of Civil Aviation declared this to be one of the safest, most efficient, and well positioned airports of South Africa. This could be considered an early example of new communication technology that transcended the physical distance and linked Carnarvon to metropolitan centres within and across the South African boarder.

More comprehensive research on the development of Carnarvon in the context of how small Karoo towns more generally developed between 1911 and 2004 is provided by Nel, Taylor, Hill and Atkinson (2011). They also acknowledge the challenges they faced in finding data, but give a useful general overview of demographic and other changes in Karoo towns in this time. A trend their work reveals is that of a declining white population along with a rapidly increasing coloured and black population between 1911 and 2004 (Nel *et al*, 2011:401). Breaking this down between rural and urban populations shows a significant shift within the Northern Cape from a predominantly rural population (black and white) in 1911 to a predominantly urban population by 2004. This is indicative of major changes in the agricultural economy as farms became more consolidated in the latter half of the twentieth century, with a correspondingly sharp decline in the number of (white) landowning households from the 1950s and (coloured and black) farmworker households on farms from the 1970s (Nel *et al*, 2011:401).

Nel *et al* (2011) also provide information on demographic changes in Carnarvon, which is consistent with the developments in Karoo towns overall. According to their data, the total population of Carnarvon shows a 25% increase over the course of the 20<sup>th</sup> century, with a total population of 8,116 in 1911 rising to a total of 10,170 in 2004. In relation to its neighbouring towns, Carnarvon is the only town to show an increase between 1911 and 2004, with Williston facing a decline in its population of 27% and Fraserburg an even greater decline of 44% (Nel *et al*, 2011:402).

Overall then, the racial demographics of the Karoo reflect a growing coloured and black urban population, and an absolute decline in the rural population amongst all races. While the coloured and black urban populations have surged since the 1960s, the urban white population has remained relatively constant over the entire time period. (Nel *et al*, 2011:404-5)

While some towns within the Northern Cape Karoo – notably Calvinia, Prieska and De Aar – benefited from the changing nature of small town economies in the course of the 20<sup>th</sup> century, for example, in the transport and service delivery sectors, many have struggled with economic decline. The significant distances between them and metropolitan centres such as Cape Town have also made it more difficult for them to benefit from the development of tourism opportunities. Nel *et al* conclude:

Downscaling of farming, moving in of the retired and dependents from cities and the lack of employment opportunities have made many small towns the locus of a significant concentration of unemployment, poverty, welfare dependence and destitution. (Nel *et al*, 2011:407-8).

Along with the population growth of Carnarvon over the past century, numerous socio-economic problems have also increased and become part of everyday life. In the following section, I discuss contemporary Carnarvon and its current socio-economic situation, building on the discussion in Chapter One.

### **3.3 Contemporary Carnarvon**

#### **3.3.1 Economic decline in the Kareeberg Local Municipality**

The Northern Cape Province in which Carnarvon is located was only established as a separate province in 1993, by means of the Interim Constitution under which South Africa's first democratic elections were held in 1994. Previously it was administered as part of a single Cape Province. While the Northern Cape comprises over one-third of the country's total landmass, because of its arid environment it only accounts for 2,2% of the nation's population (Statistics South Africa, 2011). As such, the Northern Cape provincial administration began with certain problems. In 2000 Doreen Atkinson listed the major problems hindering the development of the province since it was established in 1993 as 'the lack of an established provincial administration, the need to consolidate provincial governance in a newly defined era, and an untested revenue base' (Atkinson, 2000:120). Sixteen years later, she highlighted the severe challenges regarding provincial and local governance in the Northern Cape as a result of party-political power struggles and the inability of politicians and government officials to work together (Atkinson, 2016). Another problem she has identified is the administrative division of the single ecological zone of the Karoo among four provinces (with sections falling under the Western Cape, Eastern Cape and Free State, in addition to the bulk of the Karoo within the Northern Cape). These issues are holding back development prospects. At the same time, proposals for uranium mining and possible shale-gas mining ('fracking') pose major threats to the area's biodiversity, although they also hold out the promise of boosting the development of local businesses and related infrastructure (Atkinson, 2016:135-6).

The challenges around socio-economic development in Carnarvon become very evident when one looks at the municipal data. The 2015-2016 'Review of the Integrated Development Plan' (IDP) of the Kareeberg Municipality sketches a rather depressing picture. In the Review it is stated that large numbers are leaving the area in order to seek work opportunities in other towns and cities. This is due to the lack of local economic opportunities and, according to the Review (2015:3), this declining economy can largely be blamed on the decline of the sheep farming industry within the district, a trend which Nel *et al* (2011) have noted has been on-going for at least three decades. This is an interesting point, considering that in 2016 the SKA-SA launched a process of buying out 22 farmers who together own 36 farms around the core site on which the radio telescope dishes are being built (Kahn, 2016). Once bought these farms will no longer be used for sheep farming, but will become part of the projected Astronomy Zone instead. Considering that 2015-2016 IDP Review was written in May 2015 when the land acquisition plans of the SKA were not yet public, the economic opportunities in the Kareeberg related to the local agricultural economy can only be assumed to have deteriorated further since then. This underscores why there is so much local concern about

the promise of the SKA for job creation in relation to the establishment of the site, an issue which is discussed further in section 3.4 below.

### 3.3.2 Poverty and violence

*Ondanks die sosio-ekonomiese voorspoed wat die gebied tans beleef, is dit haas ondenkbaar dat die huidige geslag toegelaat sal word om te vergeet met hoeveel moeite en ontbering die eerste intrekkers vir hulle 'n bestaan ontworstel het aan 'n streek wat hoë eise aan sy bewoners stel.*  
 [Despite the socio-economic prosperity that this area has experienced, it is almost unimaginable that the current generation will be allowed to forget how much effort and hardship it took for the first settlers to build a livelihood in an area that demands so much from its people.] (Marais, 1977:20)

This is a notable quote from Marais' 1977 article in the *Tydskrif vir die Suid-Afrikaanse Stedelijke en Streeksgeeskiedenis*, in which he indicated how well Carnarvon was doing at that time and also reminded his readers how hard the road to this success had been. As indicated in the previous section, this progress predominately benefitted the white community and not the growing coloured and black population (Nel *et al*, 2011). The picture sketched by Marais is in contrast with the socio-economical conditions currently prevailing in the Kareeberg, a problematic situation that seems to have accelerated after the Northern Cape became a separate province in 1993, as indicated by Atkinson (2000). Unfortunately deep poverty has become part of everyday life, which is strikingly evident while walking the streets of this town. In the course of a conversation with an elderly coloured woman who has lived in Carnarvon for over 80 years, she told me that the situation in town has degraded drastically 1994:

I am ashamed of how Carnarvon looks today. If I go to Spar now there are children begging and adults lying drunk on the sidewalk. This is not the Carnarvon I grew up in. It used to be better for everyone, black, white or coloured. [Translated from Afrikaans] (Personal conversation, April 2016)

The poor living circumstances for youngsters in Carnarvon have not gone unnoticed by the media either. A regular visitor at the Computer Centre made me aware of a short news item that portrays the harsh situation that people in this town are facing on a daily basis. In May 2016 Eyewitness News posted a YouTube video titled *Children in SA's hungriest province survive on one meal a day*. This short news item shows how the children in Carnarvon Primary School receive a meal at school and reports that due to the high levels of poverty in their families this was often their only meal in the day (Eyewitness News, 2016). Although questions can be raised around the accuracy of this information, it is clear that for a significant group of children this is a reality. This is supported by the IDP Review (Kareeberg Municipality, 2015:3), which takes note of the high levels of poverty, stating that '[t]he Kareeberg local municipality faces the problem of poor and indigent people, or those earning the maximum of R1880 or less per month'. In the news clip the acting principal of the Primary School noted that most families had to survive on social grants which were not enough for a family to survive on for the month. As a result, as learners get older their futures became increasingly uncertain and school dropout rates became exceptionally high once they get to high school. Related problems were high levels of alcoholism, drug abuse and teenage pregnancies (Eyewitness News,

2016). These problems are also recognised in the IDP Review, which identifies HIV/AIDS, high alcohol abuse, high rate of smoking, teenage pregnancies, and domestic violence as serious challenges (Kareeberg Municipality, 2015).

*'The Devil is in town'*

These challenges are woven through many residents' everyday lives. They are not limited to the poorest area of town (named Bonteheuwel), but also occur in the centre of town. During my fieldwork I witnessed several acts of domestic violence. The most personally unsettling experience took place in April 2016 when I was awakened one night around midnight by sounds of a woman screaming and glass shattering right outside my bedroom window. It took me a few moments to take in what was actually happening. When the woman screamed again, I could hear the fear in her voice as she yelled at the top of her lungs. The screams of what I can only describe as pure horror were alternated with loud bangs and the yelling of a man, more shattering of glass and outcries of pain. I lay paralysed in bed, as I had no idea what to do or what exactly was happening. Another student who also doing fieldwork in Carnarvon at the time was next door and was also woken up by the fight outside. She texted me and expressed similar feelings of shock and helplessness as I was feeling at that moment. The screams of the woman started to become less terrified after a few minutes and I heard a car pull up. Only then did I have the courage to get out of bed and try to peek through the shutters, which obstructed most of my view of the street outside. I could see the lights of a police car and just make out some officers escorting the still highly distressed woman into the police van. After some words were exchanged between the officers and another man, the police car took off with the woman inside. Some peace returned outside but my fellow student and I were unable to sleep after this encounter, and went into the living room to make a cup of tea while and try to come to terms with what had just happened.

In subsequent nights during this field trip the normally quiet Karoo evenings seemed not so peaceful anymore, with dogs barking throughout the night and loud people even in the smallest hours of the night. The sense of anxiety felt particularly intense at night, but not exclusively so. This was different from my previous experience and needed some reflection. In my research diary I noted that it felt to me as if 'the devil was in town'. According to our landlord, who stayed a few blocks away, there was a definite restlessness in the town, the cause of which was hard to detect. One of the drivers, however, was certainly high alcohol consumption. During the weekend the yelling started in the early morning and we could hear much swearing in the houses next door to our guesthouse. At the end of that afternoon we were startled by a noise at the back gate and when we went to look at what was happening, we saw a woman - perhaps the person we had heard screaming a few days before - walking past our gate holding a big knife and ranting about something to no one in particular. Although it was an unpleasant experience, we were less shocked than before as her aggression did not seem directed at us and no-one else in the street seemed surprised by the incident either.

This and a few other experiences made me think more deeply about how frequently people in Carnarvon must encounter such acts of violence, what the effects of this must be, particularly on children, and whether violence should be considered part of everyday life.

### 3.3.3 Youth unemployment and reasons for staying in Carnarvon

Almost 30% of Carnarvon's population are under the age of 15. At the same time, the official youth unemployment rate (for those in the 15-34 age range not in an education institution and actively seeking work) is high, at 32,1% (The Local Government Handbook, 2016). These are alarming numbers, indicative of the very uncertain livelihood opportunities and futures for young people living in this town. In the run-up to the municipal elections of August 2016, the youth of Carnarvon had an opportunity to voice their discontent about their living situation and to express their anxiety regarding their futures. In a news clip titled *Young voters refuse to vote in the Northern Cape* (Eyewitness News, July 2016), youngsters elaborated on how they feel about their lives in relation to the upcoming elections. One young woman (who was also a regular user of the Computer Centre's facilities) voiced strong views on people's futures in Carnarvon:

*Ons moet uit Carnarvon uitgaan om werk te gaan soek, verstaan jy dat hierso. Hulle het veel beloftes gemaak by die feit dat daar gaan huise wees, hulle sal kyk naar onse mense, maar hulle doen dit net nie. Vir 25 jaar! Ons kan nie altyd vir die selfde mense stem nie. En dan kyk na jou huisie, jou omstandighede, ons moet uitreik na die gemeenskap toe, hul opinie hoor. Maar dat is nie wat hier in Carnarvon gebeur nie, Carnarvon is klein. [You have to understand that we have to move out of Carnarvon in order to find work. They have made many promises saying that they would provide houses, they would look after our people, but they are not doing this. For 25 years! We cannot always vote for the same people. And then look at your little house, look at your circumstances, we have to reach out to the community and hear their opinion. But this is not what happens here in Carnarvon. Carnarvon is small ...] (Eyewitness News, 2016).*

The above quotation gives a good indication of how some of the youth feel about the lack of development in their town and also how they perceive their chances of a better future in Carnarvon. In the same news item another woman who grew up in Carnarvon explained that if she had not left Carnarvon to receive education elsewhere, she would not have gotten the opportunities she now has, living and working in Pretoria. Her advice to those young people who do not see a chance to develop themselves in Carnarvon is quite simply to leave.

Interestingly, however, leaving town is often not a possibility, nor even a desired solution. When I spoke to various members of the community, several examples come to light of the latter position when I asked about reasons for staying in or returning to their hometown. The most frequently offered reason for staying related to the social aspects of living in a small-town community. During a conversation with Miriam, a successful local businesswoman and mother of three, she expressed beautifully why it was so appealing to her to live in Carnarvon:

It is called the *meerkat* approach, as in the animal. One *meerkat* will stand guard to watch out for danger while all the others *meerkats* are out looking for food. This idea of always being there to help or feed others is why I stay in Carnarvon. *Want jou kind is my kind* [Because your child, is my child]. (Interview Miriam, June 2016)

Miriam has lived in other parts of the country for periods of time, but says that she would never again exchange Carnarvon to live somewhere else. Despite the difficult living circumstances, this is a widely shared opinion, which needs to be factored into the understanding of social conditions in the town, alongside the many social challenges already described. Strong social networks seem to be an important part of everyday life, something that has been a feature of community life going for more than 150 years. Having strong social networks is vital when living in a remote area like this, where the nearest town (the even smaller town of Loxton) is some 80 kilometres away.

Distance from other centres plays a crucial role in daily life, as relatively simple pursuits such as grocery shopping or going to school can become a significant challenge, especially if one does not have private transport. The lack of public transport is one of the main complaints in Carnarvon, directed both at the absence of transport for children from outlying areas to get to school in the town as well as to travel to ‘nearby’ towns or to bigger urban centres for access to a wider variety of shops and services than found in Carnarvon. Currently children from Bonteheuwel or Skietfontein have to walk for over half an hour to get to school in the bitter winter cold and the blistering summer heat. In order to travel to a regional administrative centre such as De Aar or to the Northern Cape’s capital city of Kimberly, most residents have to rely on finding a lift, which can be very costly as car ownership in Carnarvon is very limited among poorer residents and those who have cars can therefore set high fares. A local taxi service is therefore high on people’s wish list, something that has been identified by the local municipality as an issue (Kareeberg Municipality, 2015) but has not yet been established.

The significance of Carnarvon’s relative isolation was brought home to me when the printer in the Computer Centre went out of order just before my arrival in June 2016. This is one of the few public printers in town, used by school children to print school assignments or by local business owners to print documents. The printer was simply out of ink, but new cartridges have to be ordered at the local hardware store and need to come by road from Cape Town nearly 600 kilometres away. When I returned again to Carnarvon in August, there was still no working printer at the Centre. This is a good illustration of how ‘real’ distance plays a role in everyday life in Carnarvon, but also highlights the contrast between this and the computer technology in the Computer Centre as an instrument to eliminate physical distance. This particular situation also highlights the contrast between local struggles with poor communication services and the globally connected, cutting-edge technology that characterises the SKA development in the area.

### **3.4 The SKA South Africa and local development**

In this section I review the role of the SKA in relation to local development, looking first at the complex issues surrounding its promise of local economic and community development and then briefly at the controversies surrounding its land acquisition programme in 2016.



Figure 5: At the entrance to Carnarvon a billboard presents Carnarvon as 'home of the SKA' (Source: the author)

### 3.4.1 Promises and expectations

Given the many problems around poor education, high unemployment, alcoholism and domestic violence described above, it is not surprising that the establishment of the SKA project initially led to hope among a wide cross-section of Carnarvon residents that this would bring about the economic relief that this area so desperately needs. At the launch of the SKA project, SKA-SA made a commitment to the communities of its neighbouring towns that various development projects would be initiated that would result in improved infrastructure, opportunities for local businesses, job creation and educational support, particularly in the area of maths and science (Wilde, 2016b). However, although many such projects have indeed taken off, community members have not always perceived the results positively. Regardless of whether the generally negative opinions of the people that I encountered in my fieldwork were based on actual facts or not, what was important for this project was the influence on the overall mood in town; significantly, disillusionment around the SKA ended up being one of the major topics of conversation in the 'gossip talk' that took place at the Computer Centre while it was barely operational. Here I encountered local residents speaking about their concerns around job opportunities and worries about where the town is heading.

Over the course of my fieldwork I also detected changes in the general mood. During my first visit to Carnarvon, in June 2015, I experienced most people as broadly positive and, more importantly, hopeful about the SKA. For instance, the white woman who runs a homely little coffee shop in the centre of town expressed the hope that the arrival of the SKA might still save this town.



It can go both ways; it will either make the whole town disappear because we get cut off even further from the outside world, or this is the big boom this town has been waiting for. But I think the SKA will put us on the map and make us grow (Personal conversation, June 2015).

Similar comments were made to me by people I talked to at the church I attended as well as at a local bar and in the Computer Centre. Although some question marks were raised, no one was blatantly negative about the SKA and everyone hoped this project would provide Carnarvon with the support it so desperately needed. However, over time I came across more people complaining about the consequences of the presence of the SKA, with major frustrations expressed toward poor modes of communication and the perceptions that SKA staff was not willing to listen to the wishes and needs of the local community.

During my first field trip to the area in June 2015, I spoke to a local representative of the SKA-SA who was concerned back then that unrealistic goals had indeed been set by the organisation regarding their community involvement and that this needed to be revised. This informant also drew attention to the gap between the primary purpose of the SKA and local concerns: 'The SKA's goal is building the largest and most powerful radio telescope in the world. We realise that we have a social responsibility to the people in the surrounding area too, but this is not SKA's primary objective' (Personal communication, June 2015). My informant was also very aware that the residents of Carnarvon, Brandvlei, Vanwyksvlei and Williston had been told that the SKA was going to bring economic prosperity to their area, and that he had been left with the difficult task of tempering these misplaced expectations. 'The communities will have to understand that the SKA is here to practice big science,' he told me sternly. 'I realise this is not what people want to hear, but that is what the reality is going to be' (Personal communication, June 2015).

This does not take away from the fact that the SKA-SA as well as the Department of Science and Technology (DST) have recognised that they have a social responsibility towards the people most directly affected by the development of the radio telescope (Adams, 2016). In following through on this they have tried to link the aim of improving local youth's prospects for a better future to their primary concern with basic science. Apart from the Computer Centre itself, they have also introduced several projects intended to improve children's knowledge of maths and science at the local schools. Through the Schools Programme SKA-SA has helped recruit maths and science teachers and, in partnership with Teach SA, appointed them to teach at Carnarvon High School (SKA-SA, nd:5). In 2016 the SKA-SA also sponsored five learners who achieved university-admission passes in their matric maths and science examinations with bursaries to study science or engineering-related degrees at universities (SKA-SA, nd:3). The bursary programme is a widely known initiative in Carnarvon, but not everyone is excited about it. 'Right now the SKA is here, but they are selective in developing kids. So if you are not good in maths then it means you are going to fall out,' stated the woman interviewed on Eyewitness News in July 2016. This is a commonly expressed opinion within the community.

The maths and science projects as well as other human capital development programmes initiated over the last few years are promoted in glossy booklets and pamphlets that have been distributed locally during

various public information meetings in the middle of the year as part of the Strategic Environmental Assessment (SEA) held in all SKA's neighbouring towns. While these well-designed booklets are likely to impress SKA-SA's national and international stakeholders, the same cannot be said for people in their target communities. They blame the organisation for only communicating on their own terms and not listening to the actual needs of the community. This became very evident to me during my trip to Carnarvon in August 2016, when the Computer Centre had become a central place for mostly women to discuss on-going issues in the town. By this time the SKA had become a dominant topic of conversation, more often than not in a negative rather than a positive manner. One issue that was extensively discussed was that of job opportunities.

On one occasion, a rather warm winter morning, I arrived at the Centre to find that the only activity came from five women who were in lively conversation with each other. Clearly the women were not there to use the computers, as there had been no internet connection for the previous two weeks and the computers were still not running properly. Three of the women who were there had recently finished their basic computer training and had indicated the desire to continue with the more advanced e-learning course online, but were unable to do so. They recognised and greeted me as I walked inside and then, without any hesitation, continued with their conversation. After a few minutes the conversation shifted from a story involving a pregnant goat to an accusation of *voortrekkery* [favouritism] against the SKA-SA. One of the women, who had participated in the basic computer course, explained that she had recently applied for a job with the SKA but had been rejected 'because she was too old'. She elaborated on the selection process by saying:

I did as asked and sent them my resume and I got invited for an interview. So one morning I have to go all the way to their office at the SKA site, only to be told that I was too old for the job. [*Raising her voice:*] They could have gotten that from my letter and CV! Now I had to travel all that way to their office and make expenses just so they can say they gave people from Carnarvon a chance, but eventually they already know they will give it to some employee's family member anyways." (Group conversation, August 2016).

As the discussion rolled on the women expressed their frustration with what they perceived to be happening with the educational bursaries for talented students as well: 'These bursaries only go to children of teachers or the principals. Most kids are not even willing to try it any more, because they feel like they don't have a chance of getting a bursary anyways' (Group conversation, August 2016). Again, the issue here is not whether these perceptions are true or not, but what they say about the widespread mistrust that has developed on the part of local people towards the SKA and its local development projects.

However, some people do see the positive contributions that the SKA has made to the town. A local business owner whom I spoke to is one of them: 'The SKA brought technology to Carnarvon, like a 'cyberlab' to the high school, and we also have this [Computer] Centre. People need to change their attitudes because this is a positive contribution' (Interview, June 2016). In her case she owns a construction company that had been contracted by the SKA and when I last spoke to her she indicated that she might be employed

in a liaison capacity within the local office of the SKA. She is a busy women who does not believe in complaining about everything that is wrong either:

I believe the SKA will make Carnarvon a better place. This fashion of self-pity needs to stop and people need to get some self-respect. Get up, start with sweeping your own front yard. It is about creating a basket of opportunities, not hanging around and complaining about everything. (Interview, June 2016)

Her positive attitude was clearly not shared by the women whom I encountered in the Computer Centre in August 2016. Although I had spoken to them before during previous visits, this was the first time they were so outspokenly negative about everything connected to the SKA. When I asked them why they felt the need to express their frustration then, rather than in previous encounters, their answer was clear:

We have been quiet long enough. We have heard the many promises, but have seen no results. Things actually seem to be worse than they were before the SKA, because even the hope for a better future has been taken away from us now (Group conversation, August 2016).

### 3.4.2 Land and the SKA

The SKA's land acquisition programme has resulted in widespread feelings of worry and discontent, not only among affected farmers but also among townspeople in Carnarvon. While most media attention has been focused on its efforts to buy out 36 farms around its core site, the establishment of the Astronomy Reserve has also impacted on black land rights.

As my brief overview of Carnarvon's history made clear, struggles over land lie at the heart of the town's establishment and subsequent development. This started when the /Xam were dispossessed of their hunting grounds, not simply by white settlers from the south but also by Umkwaai's Xhosa-speaking group from the east and Basters from the west. These struggles continued during the period of colonial expansion and were taken further during the 20<sup>th</sup> century and under apartheid. As a result, white farmers now possess the bulk of the farmland within the Kareeberg district that stretches over an area of 17,702 square kilometres (Local Government Handbook, 2016). However, the descendants of Umkwaai's people have not forgotten their history and the way they eventually lost their land. In Potgieter's *VG Gedenkblad* (1997) there is a passage that clearly indicates their feelings about this lost land: *'Vandag se lidmate onthou net vaagweg uit hulle kinderdag iets van hierdie reserwegronde wat aan hulle voorouers behoort het. Die wyse waarop hulle dit verloor het, laat vandag nog 'n groot stuk hartseer.* [Current community members still vaguely remember from their childhood something about these grazing grounds that used to belong to their ancestors. The way in which they lost this land still leaves a great sadness today] (Potgieter, 1997:14).

Some descendants of Umkwaai have managed to hold on to some small plots of land at the small settlement that goes by the name of Skietfontein today, on the outskirts of Carnarvon. Tucked away on a smallholding

among eucalyptus trees, roses and a vegetable garden close to the river that only flows after the winter rains, lives a great-granddaughter of Umkwaai. Tannie<sup>7</sup> is in her early eighties and has seen Carnarvon and surroundings change over the years, unfortunately (in her eyes) not for the better. She grew up in Carnarvon but lived in the Western Cape for many years before returning to live permanently at Skietfontein in the late 1990s to get involved in development work in her community. Today she feels saddened and frustrated seeing the place she has always considered home slowly slipping away due to increasing social and economical problems.

*‘Jy moet weet, ek is baie moeg’* [You have to know that I am very tired], is one of the first things she says to me when I first meet her, as she took her place in the comfortable armchair in her living room. Next to her on the wall hung a framed poster from the early 2000s, commemorating an award she received from the Department of Water and Sanitation for her significant efforts to bring piped water to Skietfontein. At the time she was also the driving force behind efforts to develop basic facilities in Skietfontein and benefit from the possibilities of land reform. Judging from what I could see of the settlement on the drive to Tannie’s house it was clear that her efforts to secure services had failed. ‘For a long time I fought to get a post office here and also a little shop. You know, just the basics. But some people in Skietfontein didn’t want it, and they have kept it from happening’ [translated from Afrikaans] (Interview, April 2016).

Her efforts to engage the land reform programme have produced more ambiguous results. While she was not successful in securing adjacent land for the Skietfontein community, she did lodge a land claim on behalf of all the descendants of Umkwaai, for the land that had once belonged to her great grandfather. Her hopes that something might come from the land restitution process have, however, been challenged by a letter she received from the SKA in early 2016, stating that her family needs to sell their house and land (together valued at R1,000) because of a road that is planned to go straight through Skietfontein. According to Tannie this will not only mean the end of living in her parental home and on her ancestors’ land, but this will also mean the end of Skietfontein. *‘Ek is moeg vir baklei. Al hierdie jaar het ek probeer om Skietfontein ‘n beter plek te maak, maar nie die energie gehad nie. En nou hierdie situasie met die SKA... Ek is net moeg van dit alles’*. [‘I am tired of fighting. All these years I have tried to make Skietfontein a better place, but I don’t have the energy anymore. And now this situation with the SKA... I am just tired of it all’] (Interview, April 2016).

The communication between the Skietfontein residents and the SKA has been poor as it appears that only in August 2016 did a meeting take place between the organisation and some of the residents to discuss these proposals, but at the time of writing this thesis the situation for the Skietfontein residents remained uncertain. The owners of the farms located in the core zone of SKA-Phase 1 also voiced problems around communication, and 22 of those farmers are currently in the process of being bought out by SKA-SA. While

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<sup>7</sup> This is not the elderly woman’s real name, but the pseudonym I have given her, which is based on the polite way of addressing an older woman in Afrikaans.

conducting my fieldwork, the ‘land question’ was a frequent topic of conversation, regardless of the social background of the people I spoke to, because of concerns about the knock-on effects on the local economy of taking these farms out of production. In the course of my fieldwork I was also able to accompany a fellow student whose research is focused on the farm acquisition project on long dusty drives to remote farms to interview the owners about their views on the process and its effects on them and their farmworkers.

Although my research is not concerned with land issues directly, it has been shown to be an important part of the context, especially taking into account the complex history of land occupation and dispossession that led to the development of Carnarvon as a ‘cosmopolitan’ place in the 19<sup>th</sup> century. The history briefly recounted here also gives an indication of how local people think about the land and express strong feelings of belonging towards Carnarvon as a place as well as to the Karoo more generally, as a place that provides ‘clean air, a sense of freedom, and a rural lifestyle you cannot find anywhere else’ (Interview, June 2016).

The next chapter concentrates on the Computer and Technology Centre, where the focus is on the participants of the various courses, the staff working at the Centre and, in lesser extent, the more casual users of the facilities. Overall it looks into the day-to-day happening in the Computer Centre and will also address the challenges that were faced over the duration of this research.

## CHAPTER 4: (DIS)CONNECTING THE CENTRE

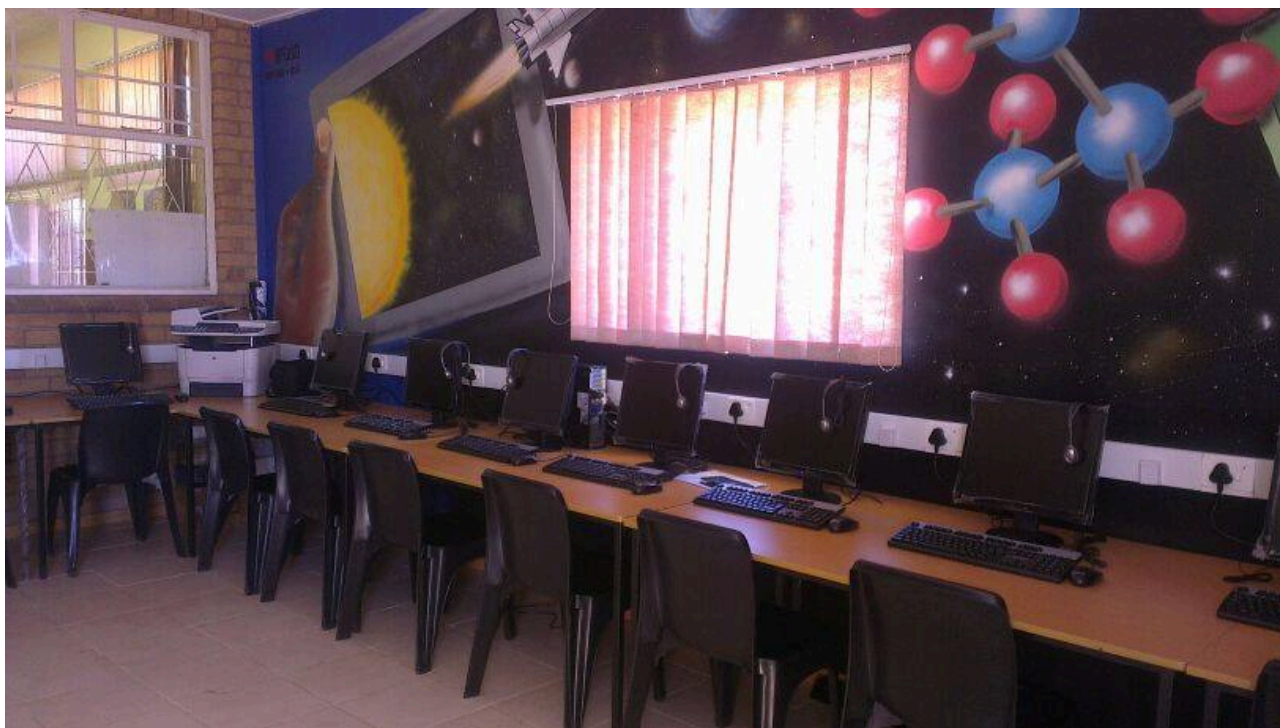


Figure 6: The Computer and Technology Centre in the Kareeberg library (Source: the author)

### 4.1 Introduction

The previous chapter concentrated on the history of Carnarvon and everyday life in it, to sketch the local context in which the Computer Centre is operating. This chapter focuses on the Computer Centre itself. The initial aim of this research project was to explore the Computer Centre, the computer education it provides and the possible effects of this new ‘digital world’ opening up to its users. In the previous chapter it became clear that the Centre functions within a context that - over time - became more and more important to this research. The Computer Centre had become a place where people come together to talk about the issues in their lives, that of their families and more generally that of the situation in town itself. Instead of it being primarily a place for computer education, the Centre had developed into a place for a certain group of people to meet and discuss everyday life. The people that came to visit the Centre for social purposes were mostly middle-aged, coloured, Afrikaans-speaking women who already had some kind of connection to the Centre, either through their computer course or because they know a staff member on a personal basis. The latter is very common considering the compact size of the town and its tight social network, which is especially the case in Bonteheuwel, where the Centre is located. Most coloured and black people live in Bonteheuwel, which is just outside the centre of town on the road toward Vanwyksvlei. At the entrance of this suburb you find several facilities as the local clinic, the Primary School, and the library with attached the Computer Centre. The main entrance leads into the library, where children from the Primary School next door often

come to read and watch educational videos. Although there is a door inside the library that leads to the computer facilities of the Centre, the preferred way to enter it is around the outside of the building where a side door will give one access to the Computer Centre.

In this chapter, my focus is on the Centre and the events within. This does not mean it will not speak or relate to other issues as being discussed in Chapter Three, however the emphasis will be on questions as how the facilities are used, why participants partake in the computer courses, how they expect being able to use a computer and internet will affect their futures, and how they see the involvement of the SKA in this all. Information on these and other questions were mostly obtained from 10 so-called 'ABET class' participants, as mentioned in the introductory chapter, and they were joined by four young community members, who already had their National Senior Certificate (NSC) but no computer experience. Following this group of students between the age of 18 and 26, who were learning how to use a computer from scratch and thereby slowly finding their way through the World Wide Web, was an extremely informative, frustrating, as well as humbling experience for me. Besides these 14 students taking part of the ABET class, there were five middle-aged coloured woman who finished their course in June. They were still regularly visiting the Centre and I spoke to four of the woman in more structured interviews as well as informal interactions, and engaged with them all during 'gossip time'. Based on these interactions I slowly started to develop an understanding in what the Carnarvon Computer Centre means to the students, to the staff as well as to the community in a more general sense.

In the following three sections, I present an account of this journey. The focus is on events within the Computer Centre, and draws on stories and reflections of users as well as my own observations during this process. I will present the results of my fieldwork, in three sections, organised chronologically around my field trips. In section 4.2 I reflect on my visit in April 2016 when the ABET class was just being launched. This was at the start of the course, and I was able to engage with students and was also provided access to a selection of their first assignments. The information given in the assignments provided me with a general idea of who the ABET students were, what their background was and not unimportantly, why they wanted to do the computer course. Section 4.3 covers my time in the Centre in June 2016, the period when I became aware of some of the changes and the problems that seemed to be gathering on the horizon. The first technological challenges emerged in relation to a computer virus and a broken printer, which went hand-in-hand with my experience of greater negativity within Carnarvon in general. Section 4.4 deals with my last visit in August 2016 when the general mood seemed to be at its lowest point in relation to the Centre. When I arrived in August there had not been any internet connection in the Centre for three weeks, which had had very negative consequences for the continuation of courses as well on users coming to the Centre for business or private reasons.

## 4.2 April 2016: The first digital encounter

### 4.2.1 Introducing the ABET course

IN April 2016 a group of ten young adults, all between 18 and 26 years of age and living in Bonteheuwel with Afrikaans as their home language, started on the road to what they hoped might be a better future by enrolling for the Adult Basic Education Training (ABET), partly given at the Computer Centre. As mentioned before, the ABET course is part of a national initiative of the Department of Education in order for adults who, for whatever reason, had dropped out of high school, to have another chance of earning a National Senior Certificate qualification. In practice this often means that adolescents who have been sitting at home for a certain amount of time recently decided to return to school in order to obtain their ABET level 4 Certificate. In the context of Carnarvon, where socio-economic conditions are poor and unemployment high school dropout rates are extremely high, returning to school in order to try better one's livelihood opportunities and perhaps that of one's family, is an impressive commitment to make. Here it is worth noting that the ABET programme in Carnarvon has had a problematic history. In 1997 the first attempts were made to establish the current course by two students from the Centre for Adult and Continuing Education (CACE), a former department for adult learning established at the University of the Western Cape (UWC) in 1985 (Kerfoot, 2001:191). Their attempt failed for multiple reasons and so did repeated efforts over the three years that followed (Kerfoot, 2001:188).

A 2001 report produced by the government on the outputs of the ABET programme revealed that countrywide the course was doing relatively well. However, according to Kerfoot's case study of Carnarvon, less positive conclusions could be drawn there. An ex-principal of the Primarily School in town was cited in the report as saying that it was the greatest tragedy that it looked like that the Department [of Education, ed.] had reached a point of classifying Carnarvon as a 'tricky problem' where the less they had to be involved with the town, the better (Kerfoot, 2001:188). Several reasons were given for this 'tragedy', the most significant ones being miscommunication and poor coordination between the local and provincial management because of the distance between the town of Carnarvon and the regional office located in De Aar. In summary, the report stated that '[t]here is yet no consultative process with people at grassroots level, involving needs analyses, proposals, negotiation, assessment, planning and coordination' (Kerfoot, 2001:190). On top of this, interviews with locals involved in the initiative had suggested that it made a significant difference to which 'network of friends' you belonged, or which 'personal connection' you had, in order for the main office to respond to someone's request or not. The conclusion was reached that there was an absence of 'mechanisms to facilitate the processes of communication and consulting between the grassroots and provincial levels of ABET', which led to the overall failure of the course in Carnarvon in the early 2000s (Kerfoot, 2001:191).

The reason for mentioning the attempted establishment of the ABET programme almost twenty years ago, is because some of the problems identified then seem to still be pertinent in analysing the situation in the



Computer Centre in 2016. Just as in Kerfoot's 2001 report - which was largely based on interactions with former staff members - the progress of the 2016 course turned out to be less positive than initially hoped for. In both cases problems relating to the isolation of Carnarvon and the distance to centres where the backup support was based seem to have been a key factor, leading to miscommunication and organisational problems between local staff running the projects and the regional and national actors coordinating it.

The first time I went to the Computer Centre was during my scoping trip in June 2015. Despite the extremely cold and rainy winter weather the Centre was constantly busy with classes or local community members coming in to use the facilities for both personal business and pleasure. The computers and internet worked well at that stage, the staff seemed happy and motivated, the printer was in good working condition, and everything else looked well organised with neat schedules in place. When I came back ten months later, in April 2016, at first sight there was little change to be detected. It was only when the ABET class began that I noticed more of the challenges the Centre and the teachers were facing on a regular basis. This was mostly related to issues with irregular attendance of students in class and outstanding payments of participants for the computer course<sup>8</sup>. But it didn't stop with these more course related challenges, and during my following two visits respectively in June and August, practical problems within the Computer Centre started to appear. In a rapid pace things changed within the facility and for its staff. It started off with the computers being affected by a virus at the end of May, to not having an internet connection at all during the last time I was there in August 2016. These issues will be returned to in the sections 4.3 and 4.4.

#### **4.2.2 The first steps**

As for many things in life, the first steps always seem the hardest. This was most definitely the case for the group of students taking part in the ABET programme, who had their first computer class in the Computer and Technology Centre on that warm sunny morning in April. As firmly stated by their teacher before starting, there was to be no room for making fun of others or for laughing about anyone's mistakes. Everyone answered in true classroom style with '*Ja mevrou*' [Yes, miss], after which the teacher could start the course. As described in my introductory chapter, it was an extremely informative, frustrating as well as humbling experience for me to follow this group of students, who were learning how to use a computer from scratch and thereby slowly finding their way through the World Wide Web.

On the second morning of the course all 14 students of the ABET group were present at the Centre at 10 a.m. sharp. Most of the participants had had their first theoretical introduction to a computer the day before, the task for them this morning was to make themselves familiar with the letters and symbols on the keyboard. After the teacher opened Notepad for them on their computer screens, the 14 young adults were left with the challenge of typing their answers to the questions 'Who are you?' and 'Why do you want to do this

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<sup>8</sup> The basic computer course at the Centre costs R250 and can be paid in three terms over three months. The normal price at most other SiyafundaCTC's in South Africa is R1250, but third parties of which SKA-SA sponsor the entry level courses in Carnarvon.

course?’ After a moment of insecurity and looking around to check if they really were allowed to use the computer this time, their fingers slowly started to wander over the keyboards, pausing on every line to search for the right letters. After a while lines gradually started to appear on the screen. Twenty minutes later every student had the results of his or her first interactive encounter with a computer, varying between a single sentence and up to a full paragraph of text.

This opening exercise began to open up the worlds these users lived in to me:

*Ek is 25 jaar. Ek woon in Bonteheuwel. Ek het 1 kind en ek is ongetrouwd. Ek is werkeloos en soek werk. Ek doen die ABET kursus om skills te develop omdat dit belangrik is om vandag die dag rekenvaardig te wees. [I am 25 years. I live in Bonteheuwel. I have one child and I am single. I am unemployed and I am looking for work. I take the ABET course to develop skills because it is important to be able to use a computer nowadays.] (Charmel, Fieldwork notes, April 2016)*

*Ek heb Matric gedoen last year at Carnarvon High. Ek hou baie van werk en wil baie graag ervaring opbou. Ek hou nie van baie praat. Ek is een persoon wie baie vining leer en swaar vergeet. Ek wil rekenaar ervaring opdoen omdat ek dit nie op skool gekry het nie. [I finished Matric last year at Carnarvon High. I really enjoy working and would love to build up experience. I do not like talking much. I am a person who learns very quickly and don't forget easily. I want to get computer experience because I did not get this in school.] (Eloy, Fieldwork notes, April 2016)<sup>9</sup>*

The above quotations were part of the first typing exercise where the students tried to say something about themselves and the reason why they were taking part in the course. In their responses, all fourteen participants mentioned that they thought that being able to use a computer would help them in the future. Most of them revealed that they were unemployed too, and expressed the hope that by obtaining computer skills it would help them find a job later on. Donovan expressed this hope as follows:

*“Ek is 19 en bly in Bonteheuwel. Ek doen ABET course by laerskool om Matric te ontvang. Ek doen kursus om verder in die toekoms te kom by werkseleenhede en kanse verbeter. Om werk te kry. [I am 19 and I live in Bonteheuwel. I do the ABET course at the primary school to get my Matric. I do this course to get a better future and work opportunities and better chances. To get work.”] (Fieldwork notes, April 2016)*

These written assignments gave me an indication of how the participants in the course were making a connection between obtaining computer skills and improving their life chances. All expressed hope for a better future; all were hoping to escape from a future of unemployment. However, the way forward seemed to be more challenging for some than for others, as was illustrated for me by the story of Nagia.

This young woman caught my attention immediately on the first day of class. She was a little older than most of the people present and looked even more shy and nervous and, somehow more out of place than the other

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<sup>9</sup> These are direct quotations from the written assignments of the participants; language mistakes or typos have not been edited.

students. However, she came to class prepared with some blank papers and a pen and was there before everyone else arrived, patiently waiting in front of the computer, but not touching it until told to do so. During the class I could pick up that Nagia struggled with the physical act of writing and it also took her longer than the others to find the right tools and keys on the computers keyboard. However, it was only when the class was over and people started to leave, that other features became evident. The young woman had serious trouble walking and had a hard time getting down the few little steps outside the Centre. The moment she passed me, I noticed the scars on her ankle, on her right arm and in her neck.

Slightly taken aback by my encounter with her, I was very interested to see what she had written down during her first typing assignment. The words she had typed struck me even more forcefully than seeing her scars:

*Ek doen kursus om beter mens te maak. En eintlik mense moet sien Nagia het die kursus gedoen om eendag te kan werk vir wat sy eendags kan doen in die lewe. [I am doing this course to become a better person. So people can actually see Nagia has done the course to be able to work one day so she can do this in her life.] (Fieldwork notes, April 2016)*

It is hard not to be affected by these words, rendered especially poignant because of the way she wrote about herself in the third person. It seemed to me to be a way for her to try to convince herself as well as others that she was really a worthy person, which she wanted to prove by showing that she was capable of managing the course.

A few days later I discovered the story behind Nagia's words. The 26-year-old had been in an abusive relationship since her late teens. About two years before I first met her boyfriend (now her ex-boyfriend) had attacked her while he was severely under the influence of alcohol. She almost did not survive after being stabbed in the arm, neck, and legs, but by 2016, after months of recovery, she was able to use most of her body again. However, she still had trouble walking and had very limited functionality in her right arm - conditions from which she will most likely never fully recover. But she was determined not to give up on life and that was why Nagia had decided to enrol for the ABET computer course. Before the first class she told her teacher that she did not want to be treated differently than anyone else, and also promised to ask for help when she needed it. Otherwise she just wanted to be left by herself to deal with the challenges herself. But sadly on my return to the Centre in June I found out that this brave young woman had put the computer course on hold, as she had decided it was too much for her to manage at the time. Although she insisted that she would come back for individual classes later in the year, by August that had not happened. By then of course the Centre was also not functioning properly.

Nagia's story encapsulates many of the challenges that the majority of people in Carnarvon face on a daily basis. As mentioned in the previous chapter, there is no public transport and most people have to get around by foot, covering large distances every day to get to shops or school or other amenities. The lack of public transport is even more onerous for someone like Nagia, who cannot walk properly and does not have the right shoes to support her disability. Besides the distances, the weather is also a major factor impacting on

one's daily life activities. Having to walk for several kilometres in the blistering heat, pouring rain or biting cold wind in order to get to class or to a job, is a challenging task on its own, compounded if one is disabled. Nagia's story also drove home the human cost of the regular occurrence of acts of domestic violence and of the high levels of alcohol abuse in the town.

#### 4.2.3 Working toward a better future

This story of Nagia brought home to me how the Computer Centre carries a much bigger responsibility than simply providing training in using computers. Despite the many challenges the community of Carnarvon is facing on a daily basis, there are participants in the computer course who cherish feelings of hope and strong perseverance to make a better life for themselves and their families.

In their introductory exercises Jurriaan and Eloy, two 19-year-old matriculants from Bonteheuwel, both showed that they had not given up on their dreams for a better future. According to Jurriaan, being able to learn about computers and use the internet is a key to achieving his goals:

I am unemployed and finished Matric in 2015. This course will help me with computer skills that I don't have. I am a fast learner. I like to learn new stuff every day to build up knowledge for the outside world. I am also into sports. This way I keep fit and healthy which helps my brain to function. I would like to study law, because that is the career I have chosen for myself, and love to do one day. Now I spend most of my time at home in front of the TV or I hang out with friends. (Jurriaan, Fieldwork notes. April 2016)

Jurriaan's account reflects the reality of the stifling circle of unemployment and poverty facing young people in Carnarvon. This bright bilingual young man has a dream of becoming a lawyer, but no resources to study further to achieve that goal. Both he and his friend Eloy had joined the ABET class late, on the third day, but picked up the theory very quickly and were soon ready to type their story about themselves and why they wanted to learn to use a computer and the internet.

In his first assignment, Eloy also revealed something about himself. What is interesting is that he adopted an essay-style layout, with paragraphs, and wrote more expansively than most:

*Ek hou van baie gesel en stories vertel. Ek hou van groep gesel en same werke. Ek is behulpsaam en hou van ander te help. Ek haat mense wat denk hulle is beter dan ander.* [I like to hang out and tell stories. I love being in a group and like to work together. I am helpful and like to help others. I hate people who think they are better than others.]

*Ek is een van die grootste hiphop aanhangers. Rap is my gunsteling omdat ek in een huis groot geword het waar my ouboetie het rap luister. Meeste van die vriende luister ook rap. My gunsteling kunstenaar is AKA. Hy is een van Suid-Afrika se mees populere kunstenaars. Dan is daar ook Young Thug hy is een Amerikaanse rap musikant. Hy is een van die wereld se top musikante.* [I'm one of the biggest hip-hop fans. Rap is my favourite because I grew up in a house where my older brother listened to rap. Most of my friends listen to rap. My favourite artist is AKA. He is one of South

Africa's most popular artists. Then there is Young Thug, he is an American rap musician. He is one of the world's top musicians.]

*Wat in vrye tyd? Ek is ook 'n sport aktief persoon ek speel graag sport soos sokker en krieket. Meeste van my tyd speel in krieket. Dit is my gusteling sport en ek geniet dit te speel. Ek is 'n spin bowler en hou daarvan om die eerste twee rondes te vir my te neem. Dit is die persoon wie ek is. [What I do in my spare time? I'm also an active sports person and I like to play sports such as soccer and cricket. Most of the time I play cricket. This is my favourite sport and I enjoy playing it. I'm a spin bowler and love to take the first two rounds for myself. This is the person I am.] (Fieldwork notes, April 2016)*

This short essay offers a window on some of the recreational activities that are popular among the youth in Carnarvon. What is interesting is Elroy's knowledge about global popular music – the American rapper he mentions is not one of the bigger names in the world of rap music. This shows in-depth knowledge on his part of the international rap scene.

This awareness of major forms of popular culture was also evident in the recreational use of the is in accordance with additional observations I made while casually hanging around in the Centre that I observed in April, in particular when the facilities were still fully functional. In the afternoons and on Fridays, young boys (from Carnarvon High School and all coloured) would come past the Computer Centre in order to surf the internet. The recreational use of the Computer Centre (which was allowed once the classes were over) was highly gendered, in that girls did not take part in it. These boys in their mid teens would come in groups of three or four and politely wait for the staff to assign them a seat, after which one of the main websites to be opened would be YouTube. The boys tended to watch two very distinct things: firstly they watched music videos from national and international rap artists; secondly they watched European soccer matches mostly involving British clubs. On average they spent between one and two hours surfing the internet for recreational purposes, something for which they would have to pay R2, if actually charged. Although these boys like to watch these popular and 'worldly' events on the computer and admitted to fantasising sometimes about becoming a famous soccer player or rapper, that was not how they saw what they called their '*werklike toekoms*' ['real' future]. The four youngsters who came most regularly all indicated that 'just getting a job' after school is what they really wanted. Revealingly, all four of them wanted that to be in Carnarvon, if possible – for them a job was not seen as a way of escaping from Carnarvon but, rather, living a better quality of life in Carnarvon.

These youngsters who were regularly using the Centre's facilities on a recreational basis as well as the participants in the computer course, enabled me to develop a better understanding of the importance being attached to the Computer Centre as a resource that could, possibly, contribute positively to improving their futures. Jurriaan and Eloy in particular reflected that the establishment of the Computer Centre had given them a little more hope of maybe achieving their goals one day, although they both realised this it was not going to be an easy road.

### 4.3 June 2016: The first cracks appear

After my first encounter with the ABET class and other users of the facility in April, I returned in June 2016 expecting my next visit to the Centre to be a productive one. However I found I was in for a little twist. The computers were only partly functional, and had been completely out of action for three weeks prior to my arrival due to a computer virus. These problems directly influenced the daily activities in the Centre as well as the working environment of the staff. This was particularly frustrating to one of the teachers, whom I had gotten to know as an extremely driven person and dedicated teacher during my earlier visits. She was at the Centre every working day from between 8.30 and 9 a.m. and waited for her colleague to take over from her at around 2 p.m. for the afternoon session. Despite the technology partly failing her, she also made sure that the door of the Centre remained open:

Regardless of the weather or other personal circumstances, some people walk all the way from the other side of Bonteheuwel or Skietfontein to here, so they can use a computer. I cannot find it in my heart for them to find this door closed. I cannot let them down like that, because next time they will not come back again and everything we worked so hard for would be for nothing. (Personal conversation teacher, June 2016)

The problems the Centre faced in mid 2016 reflected the lack of on-site technical support as well as ambiguity around who was responsible for fixing the problems. These problems, in turn, reflected the isolation of the town, with the main offices of the two sponsoring organisations both located in Johannesburg, over 800 kilometres away. Requests for assistance to solve the problem to these organisations did not produce quick solutions and the SKA-SA technicians who are permanently on site at the radio telescope operations were also unable to service the Centre's requests for support promptly.

Although it is not completely clear which of the computer NGO or the SKA is actually responsible for which aspects of the Centre's operations, what was clear to those on the ground was that since the computer virus was detected and reported halfway through May 2016, it had not been possible to use the facilities to its full potential ever since. After a few weeks the problem with the virus was dealt with by Siyafunda in Johannesburg but the functionality of some vital programmes such as Microsoft Office ended up being poor. Both teachers at the Centre were highly frustrated about this as their main computer classes involve the extensive use of the Word and Excel programmes. After the virus had struck, these programmes were very slow to start up and regularly froze while being used. Eventually this meant that the classes for the ABET group had to be put on hold as it was not possible to work with such a big group on the computers any more. The consequences of this for the students and the Centre were disastrous, as I learned on my return in August that most of the students who were part of this ABET class never returned to continue their computer education.

Although there was little going on within the Centre itself during my June visit, this did not make my time spent 'hanging out' in the Centre less informative about the town and the views of its residents on their place in the world. It had already become clear to me that the challenging social and economic circumstances of

the Carnarvon resident was important for understanding what happens in and around the Centre. This was brought home to me very strongly through a conversation that I was privy to involving some of the women working at the library next-door to the Computer Centre. These women were always ready for a chat, so when I found them outside on a particularly pleasant June afternoon we casually chat about nothing in particular before I moved on to the Centre. When I entered the Centre I overheard a conversation between one of the teachers and a local woman in her late thirties who just arrived for her private class. The two were animatedly discussing the events of the previous day, which turned out to revolve round the (postponed) court appearance of one of the women from the library group that I had just spoken to. When I asked what the reason was for her having to appear in court, I was astonished to be informed that she had stabbed and eventually killed her husband at the beginning of the year.

While they spoke about it as it was an everyday occurrence, I was astonished to find out that the cheerful woman with whom I had just spoken was accused of murdering her husband. According to my informants, she had been the victim of prolonged periods of domestic violence, and one night in January had decided that enough was enough for her. As the story goes, both she and her husband were under the influence of alcohol when he attacked her. She in response pulled a knife and stabbed him close to the heart. Although this might be interpreted as self-defence on the part of the court when it rules on the matter, the woman's actions had still resulted in the death of not only her husband but also the father of their two young children who might, as a consequence grow up without both parents. Furthermore, as my informants reflected, 'regardless of the legal consequences, Carnarvon is so small that everyone knows everything about each other. This means for example that at school my children know that these kid's, their mother has murdered their father. How do you move on from that? [...] Especially when you are still a young kid [translated from Afrikaans] (Fieldwork notes, June 2016).

Despite the problems with the computer virus and the fact that the ABET students were writing exams for other courses, the two young men from the ABET class who had already finished high school, Eloy and Jurriaan, would still come to the Centre to do their course and they were determined to finish it too. I had the opportunity to talk to these young men more extensively together to find out more about what they thought about the Centre, what they had learned and how this could possibly influence their futures. As indicated in their first assignments, they both had big dreams of change, but both of them also realised that growing up in Carnarvon makes things more difficult. Jurriaan explains this as followed:

I love going to school and learning new things, and my marks were good. I can also speak and write English OK. I really want to become a lawyer, but my family has no money for that and I also do not know how to get a bursary if I would to go to university. At high school we did not learn anything with computer so I could not search for universities or these things. But after this course I can, I already did some searching. But I know little about universities so I also do not really know where to look for. (Interview, June 2016)

Even with computers and internet at their disposal, these youngsters still struggle to find and work with the right resources of information – the IT resources on their own are not enough to assist them interpret and act on what they find. They never received much information on universities at school or spoke about it at home, and they never really asked about it either as they thought it would not be a serious option for them.

Besides the lack of awareness of and support for finding out what might be possible regarding an academic future, the obstacle of distance seems to be a severe one too. Firstly, the significance of the actual distance between Carnarvon and urban centres where opportunities for higher education are located should be flagged here. Neither of these two youngsters had ever left the Northern Cape, and both indicated that the idea of having to leave Carnarvon, and their family and friends, scared them, as they did not really know what is ‘out there’ or what to expect from it. Secondly, the digital divide discussed in Chapter Two imposes of sort of distance as well, one that seems even more difficult to navigate than the actual distance, given that today most interaction with universities and the formal application process are dealt with digitally, online. This requires being able to access and use the internet well enough, being able to send and receive emails, and being able to scan and/or upload documents. This turns out to be a challenging process. Although the Centre has made this more of a possibility than before it was established, and the possibility of applying to study elsewhere has become more tangible for young people in Carnarvon who make it through matric, there are still many obstacles in the way. The lack of fully functioning facilities at the Centre undermines its promise, making it more likely that these young talented children become disillusioned and demotivated and abandon their goals for a better future in Carnarvon or beyond. It reinforces their experience of marginalisation in relation to the world ‘out there’.

#### **4.4 August 2016: Lost connectivity**

By the time I returned to Carnarvon in August, the Computer Centre had been without internet connection for more than two weeks, the software programmes Word and Excel were hardly functioning, and the printer had been out of ink for more than two months. As a result, the local residents were not using the facility any more and the only people walking through the door of the Centre regularly were the women coming for ‘gossip time’ and to have a social chat with the staff who were still there to keep the doors open. I also did not see either Elroy or Jurriaan in my last visit.

During this visit I observed the negative impact of the ongoing problems around the lack of technical support on the staff who no longer had functioning classes to run. By now, the staff seemed to have lost all faith that the Centre’s problems were going to be solved any time soon and were extremely demoralised. For months they had been struggling with the technology at hand, but their calls for help did not seem to be heard. The communication problems with national offices in Johannesburg that were evident in June had not been resolved. From where I sat, it appeared that the problems within the facility were not related to either the computer or organisational skills or the commitment of the staff toward the Computer Centre. As already noted, in the time available to me I was unfortunately unable to set up interviews with individuals in the SKA or Siyafunda NGO who could have given me more insight into the challenges they faced with regard to



keeping the Computer Centre fully operational, so there may have been constraints on their side of which I was unaware. Nevertheless, it was apparent to me that the teachers took their role seriously and were trying to do the best they could, under difficult circumstances, to provide the people of Carnarvon with the opportunity to learn and use computers and the internet. However, by August 2016 a turning point seemed to have been reached for the teachers, where feelings of isolation and being undervalued were starting to gain the upper hand in their approach to their work.

One staff member could no longer see what the purpose of going to the Centre every day was, given that it was not operating as intended:

No one can use the internet and the printer still doesn't work either. You can't even do school work anymore, because you can't print or email it. I am walking against walls and I feel like no one is taking me seriously. There is just no support. (Personal conversation, August 2016)

The other staff member felt the same way, pointing to the challenges of working with persistent problems without support: 'It has been problem after problem for a while now. But we get no support from anywhere. What are we suppose to do now?' (Personal conversation, August 2016). Clearly feelings of insecurity and frustration were setting in and ideas of possibly leaving the Centre were beginning to cross their minds. At the same time, my informants were aware that to give up would most likely mean the closing of the Computer Centre altogether, which would be a serious blow for the Carnarvon community. The prospect of this made them both sad, but they were also beginning to reflect that they needed to be realistic and to look at their own situation, for the sake of their families and own wellbeing: 'But what do you do? If I wait until the Centre gets closed I am left with nothing, but I still have a family at home I need to feed' (Personal conversation, August 2016). The contrast between when they started at the Centre and conditions in mid 2016 was painful:

We had a 2-day training session in Johannesburg and we even did house visits here for three weeks in a row to make the people aware of the Centre and the courses we were going to do. We worked so hard to gain the trust from the community, but now it feels like it was all for nothing (Personal conversation, August 2016).

She has attended a university in the Western Cape, studying Psychology for a year, but had to quit due to the birth of her oldest child and then moved back home to Carnarvon with her husband. Charlie has been employed with the Centre since it opened its doors in November 2013, and was extremely motivated to make a success out of it.

When I asked each trainer separately whether they saw other opportunities for jobs for themselves, including within the wider SKA project, both reacted very sceptically. One simply stated that there was not really a future for them in Carnarvon anymore while the other felt that finding another job related to the SKA would not be an option any more:

I have applied so many times already, but I am not going to do it anymore. I was qualified for all the jobs and sent off all my letters and résumés on time... most of the time I didn't even get a reply. If

you don't have friend or family there, you do not stand a chance to get a job there. You can just follow the lines [of employees, ed.] and you will see they are all connected. It's all friend politics. (Personal conversation, August 2016).

Perceptions of local patronage networks determining who benefits from the local development opportunities offered by the SKA were not confined to the demotivated teachers at the Computer Centre. A 41-year old Coloured woman who was doing an individual computer course with one of the teachers during her lunch break, informed me that according to her, the scepticism towards the SKA's job and bursary opportunities had even trickled down to the school children. Her son and his friends were attending Carnarvon High School and they would potentially be eligible for a bursary from the SKA-SA if their marks were good enough. According to her, however, many children had given up on this opportunity because they saw that were only going to the children of well-connected teachers or local politicians: 'It is all a *mooi story* [nice story], but simply not true. Both for the jobs and the school bursaries' (personal conversation, June 2016). When she said that to me in June 2016, a high school learner who was one of a small group watching an English soccer game on YouTube at the time surprisingly joined in on the conversation. '*Tannie is reg mevrou*' ['Tannie' is right, miss], the teenager told me. 'Why would we even try, we will not get it anyways. I am also better in arts and not maths, so that doesn't count' (translated from Afrikaans; personal conversation, June 2016).

How correct these perceptions are was not something I could readily establish in the course of my fieldwork. In terms of the focus of my study, however, what was relevant was less whether they could be found to be objectively true or not than what they said about the levels of mistrust, jealousy and scepticism in which SKA-related community development projects were operating. Such negative sentiments were the opposite of what was supposed to be created with the various programmes initiated to support the local community, which were intended to uplift the community and meet the social responsibilities of the national SKA to the communities neighbouring its core site, not to create hostility towards the SKA project.

Over the time it took me to complete my study, I heard more and more sounds of discontent similar to what this young high school student expressed. This is in stark contrast to the very high hopes that local residents expressed at the start of the SKA project in their district. As of late 2016, the high expectations that a local SKA official had warned me in June 2015 were misplaced (mentioned in Chapter Three) have been replaced with feelings of frustration and disappointment. At the same time, what is also of interest is that these feelings were not directed toward the Computer Centre itself, but, rather, towards the overall SKA project as an abstract force within the community. The value of having access to a computer and the internet continued to be clearly acknowledged by the local community. However, the little cracks that had started to appear in May when the computer virus first struck, had widened and were threatening to undermine the viability of the Centre as an ongoing concern.

## CHAPTER 5: CONCLUSION

### 5.1 Introduction

This thesis has focused on the Computer Centre in Carnarvon, and tracked developments within it over a period of a little over a year (June 2015 - August 2016), using an ethnographic research methodology in which participant observation and ‘hanging’ out in both the Centre and the town were my primary research methods. Initially I intended to explore how the use of computers and access to the internet might be affecting the awareness and everyday lives of the people who make use of the facilities of the Centre. In addition to this, I was interested in how having access to basic computer technology might shape people’s sense of self as well as their sense of their place in the world. My starting assumption was that having access to computer technology and, through that, the internet would have a significant impact on the everyday lives of Carnarvon residents and that this encounter with the virtual world ‘out there’ would affect their awareness of their place in the world. This assumption was borne out by my preliminary literature review in which I encountered research by Miller and Slater (2000) on Trinidad, which suggested that, although Trinidad could be seen as a marginalised country, access to the internet created the opportunity for Trinidadians to participate in and engage with a global space. Given Carnarvon’s physical isolation from the main urban centres of the Northern Cape and South Africa more generally, as well as the marginalised status of many of its residents, seeing how this process was unfolding in this Karoo town was of particular interest to me.

However, as indicated in the introductory chapter and documented in Chapters Three and Four, the functioning of the Computer Centre deteriorated significantly over the duration of my fieldwork, to a point where, by the time that I was finalising my thesis in October 2016, the Centre seemed to have reached a very low point of being barely operational, without a clearly visible path back up for its staff, despite their commitment to it. In response to these unfolding developments, during my fieldwork I was obliged to reconsider my initial assumptions; understanding this downward spiral and what it meant for my informants’ sense of self and for the promise of ‘cosmopolitan learning’ with which I had framed my initial enquiry became an important part of my research project. I therefore added a third research question to the two with which I started, so that the three overarching questions that I finally set out to answer through my research project were as follows:

1. In what way or ways does access to basic computer education provided by the Siyafunda Computer and Technology Centre at the Kareeberg library in Carnarvon influence the everyday lives of local community members taking part in the computer courses and using the Centre’s facilities?
2. How is access to computers and through that to the internet shaping the participants’ sense of themselves and their place in the world ‘out there’?

3. How are local conditions impacting the effectiveness of the Computer Centre in providing computer education and internet access?

In this concluding chapter I summarise the main outcomes that have emerged from my fieldwork (discussed in Chapter Three and Four) in relation to these questions in section 5.2. Thereafter, in section 5.3, I reflect on the key themes that emerged from my findings in relation to the conceptual framework that I developed in Chapter Two, including the usefulness of critical cosmopolitanism and cosmopolitan learning, and ideas on space and place. In section 5.4 I make several suggestions for further research as well as some recommendations that could help to address the problems facing the Centre and, hopefully, return it to greater functionality. Lastly, in section 5.5, I reflect briefly on my personal journey and how being part of a larger research team has deepened my understanding of the contemporary challenges facing the physically isolated Karoo region in a time of increasing technologically driven connectivity for some.

## **5.2 Answering my research questions**

### **5.2.1 The significance of access to computer education**

As indicated in the introductory chapter as well as above, the assumed access to the internet ended up being more problematic than expected. Nevertheless, for most part of this research the Centre was more or less functioning and courses were given. It was particularly the students who were part in the ABET class who gave me a good understanding of what access to computer education means for them and how they think this could influence their lives. It needs to be noted that the emphasis of this course lay on learning how to acquire computer skills and to become capable of working with programmes such as Word and Excel, rather than on exploring access to the internet, at least not in this phase of the training. However, although these students were still very new to using this technology, they did express clear motivations of why they wanted to learn to work with computers and how this could possibly help them in their future. The most commonly mentioned reason for participating in the basis computer-training course was the hope that this would allow them to find a job and through that improve their livelihoods. People's aspirations in relation to the computer were largely pragmatic and practical.

What was interesting was that none of the students taking part in the ABET class expressed the hope that by acquiring these skills this would consequently create the opportunity for them to 'escape' Carnarvon. The opposite seemed to be the case, where most of the students (as well as other users for that matter) did not have the desire to leave Carnarvon at all. One of the students even mentioned that if he were to get the opportunity to go to university, how difficult it would be to leave Carnarvon. This being said, my informants are very aware of the problems their community is facing in relation to poverty and lack of job opportunities, so recognised that staying in Carnarvon and actually being able to improve their quality of life there would be a challenging task.

### 5.2.2 Participants' sense of their place in the world

As mentioned above, the students who took part in the ABET class and even the participants in the more advanced computer courses (e-learning) did not have accessing the internet as their main objective. This could most certainly be because they have not been exposed enough to this medium to understand how they could incorporate it in their daily lives and possibly use it in their desire to advance the future.

Those visitors who did come to the Centre specifically to use the internet can be divided into two groups. The first group consisted of local business owners or employers who use the internet to deal with online documentation and email from clients. The second group we can distinguish mainly comprises local township youngsters who come to the Centre to use the internet for entertainment. Their use is largely limited to some engagement with Facebook, but by far the most visited website is YouTube. These teenagers, mainly boys in this case, watched music videos of rap artist and soccer games. From this it can be concluded that the people who come to use the internet do engage with the world 'out there' but still on a very limited level and they stay close to what they already know.

Going beyond this, it is necessary to look at the downwards spiral the Centre was caught in over the time of my fieldwork and what this has meant for course participants and visitors. The almost complete standstill in the offer of computer courses, followed by the Centre being disconnected from the internet, has had a marked influence on the sense of their place in the world of both the Centre's staff and its visitors. As shown, Carnarvon's socio-economic situation is not promising and the town has been struggling with serious challenges such as HIV/AIDS, high alcohol abuse, and high rates of smoking, teenage pregnancy, and domestic violence. These factors have contributed to feelings of isolation and marginalisation: of being a 'forgotten town' in the middle of the arid Karoo. However, with the arrival of the SKA in the area and its representation of Carnarvon as the main 'hub' for its activities, feelings of hope and promise flourished. The SKA was putting Carnarvon on the so-called map and this created expectations within the community of a better future, through, for example, an increase in job opportunities.

Over the last few years there have been several initiatives that have been established to help develop the town and its community, with the Computer Centre one of the more widely heralded projects. At the end of 2013 this was presented as a major step forward in the road to improved internet connectivity, with access to computers and the internet being seen to hold great promise for local residents. However, with the serious problems the Centre has faced over the period in which my research took place, the initial feelings of hope and promise have shifted and feelings of abandonment and marginalisation have been reinforced. As the promising initiative of the Computer Centre has slowly entered a downward spiral, due to lack of support and commitment from the third parties involved, this has endorsed people's sense of themselves as being a constantly forgotten and marginalised community in the world. Arguably the failure of the project has made people's sense of isolation and marginalisation feel worse than if it had never been promised to them.

### 5.2.3 The impact of local conditions

Over the course of this research project the impact of the local conditions on the effectiveness of the Computer Centre became more and more visible. As a result (and acknowledging that more work is needed in this area), I directed more attention at the socio-economic conditions in Carnarvon, in order to develop a better understanding of the issues this isolated town is currently facing. In relation to the Centre one of the main issues that emerged as very significant is that of the actual physical distance between the town and external resources, an actual distance which trumped the promise of virtual connectivity. For local users of the Centre a paradox emerged between, on the one hand, the technologically extremely advanced infrastructure for high speed internet connectivity that linked the SKA site near Carnarvon to the outside world virtually instantly, and on the other hand the very mundane problems affecting their own connectivity, all of which reinforced their isolation and emphasised the problems they face as a result of ‘actual’ distance. These problems confirmed the vulnerability of the Centre’s users to the adverse socio-economic conditions in which they were trying to improve their lives.

A good example of the issues related to ‘real’ distance and how this trumped the potential of virtual connectivity was the problem with the printer in the Centre. Here the cartridges needed to be ordered and then had to come by road from a distant urban centre and, for whatever reason, it took weeks for the parts to arrive back in Carnarvon. The same disjuncture applied to the problems with the computer virus, where the lack of local technical support meant that the Centre’s computers were down for several weeks before a temporary solution could be implemented. So where it was assumed that access to the virtual would decrease distance and create more awareness of the world ‘out there’, the actual distance between Carnarvon and the main cities rendered this opportunity meaningless and emphasised the town’s isolation. In this context the lack of resources available in the town and the lack of on-hand technical support for the staff meant that it was not possible to keep the Centre going as a functioning facility.

## 5.3 Key themes

The main clusters of concepts that guided my conceptual framing were, on the one hand, ideas around cosmopolitanism and cosmopolitan learning, and, on the other hand, more applied ideas relating to space and place, as well as to identity and technology. In the following sections I will highlight some of the key themes that have emerged from my research and connect them with the main points presented in Chapter Two.

In engaging with the ideas of critical cosmopolitanism, it is interesting to consider the history of Carnarvon briefly described in Chapter Three, which one narrator described strikingly, in the context of my conceptual framework, as not only unusual but also cosmopolitan, stating that ‘[t]he history of Carnarvon tells a story that suggests that this area has had a cosmopolitan focus rarely seen before’ (Potgieter, 1997:9). What is being referred to here are the roots of the town in the mixing of different groups of people from different places and with different cultural backgrounds. While this history should not be romanticised, this interaction with ‘the other’ involved an encounter among different cultures, languages, and religions, which, albeit very

conflictual at times, nevertheless produced a new type of society in nineteenth-century Carnarvon. This ‘cosmopolitan’ town appears, however, to have been deeply affected by the enforced segregation of people based on their assumed race under the apartheid government. This shaped Carnarvon to become the town it currently is, with a large, impoverished coloured community, mainly living in Bonteheuwel, and a separate white community living in the town and on the surrounding farms. Although these communities live in close proximity with each other, there is very little social mixing, with most churches and hospitality establishments still being largely segregated, although no longer by law. Nevertheless, both groups do share a common language, namely Afrikaans, and overall share the same religion, although generally not practiced within the same churches.

However, the coming of the SKA to the neighbourhood has opened up new possibilities for thinking about Carnarvon as a cosmopolitan town again. It has done so through the increased interaction of townspeople with scientists, high-profile dignitaries, journalists, researchers and tourists from all over the world, as well as through the introduction of new ways of communication such as high-speed internet connectivity and the implementation of digital radio and television. The literature on critical cosmopolitanism has been helpful for thinking about these changing social dynamics in Carnarvon in relation to the SKA and the impact of this international astronomy project on the town. Gerard Delanty was quoted earlier in Chapter Two as noting that relationships between ‘Self and Other’ are being ‘worked out in the context of engagements with the wider context of World’ (2012:340), and it is possible to see this in operation in the Computer Centre. However, what also emerges is that this encounter is not necessarily experienced as a positive one, in the sense of promoting a sense of belonging to that wider world.

The importance of context is also strongly recognised in relation to cosmopolitan learning: as Hanson has shown, people can not only produce ways of tolerating the ‘other’ but cosmopolitan learning may also make it possible to ‘learn from one another, however modest the resulting changes in their outlooks may be’ (2010:4). It was concluded that having a critical cosmopolitan approach to learning (in every way possible) is relevant to the understanding of the interdependency of the local and the global and, furthermore, that having access to the internet does not necessarily mean that global attachments will become more important than local ones, but, rather, that they influence each other. This idea that the local and the global are shaping each other was important in exploring the tensions between the Computer Centre and the position of Carnarvon in relation to the SKA. At the same time, the particular context prevailing in the Carnarvon Computer Centre also meant that I was unable to explore the opportunities associated with ‘cosmopolitan learning’ fully during the time of my fieldwork.

It can be said that the establishment of the SKA has linked the Karoo and more specifically Carnarvon to the wider world in a number of ways, and also placed it at the centre of national attention from time to time. Examples of how the SKA has linked this isolated area to the rest of the world are plentiful; one has only to think about the construction of the high-speed fibre-optic cable between the SKA and its Cape Town offices and consequently to the rest of the world, or the many national and international scientists that visit the SKA

and stay in local guesthouses in Carnarvon. Another example is the instalment of forms of digital communication through the whole of Carnarvon that were put into operation on 28 October 2016. By switching to 'digital', this marginalised town, initially far removed from most urban innovation, has become the leader in the country in terms of access to digital communication. This so-called 'digital revolution' in Carnarvon could be considered a sign of great progress as it puts the town on the map and potentially increases local people's access to a wider range of media.

However, what my discussion on the Computer Centre in Chapter Four makes evident is that facilitating technological resources to a marginalised community without the necessary technical and logistical support to keep it functioning means that ongoing access to these facilities cannot be assumed as a given. Although the absence of infrastructure that enables access to computers is often listed as the main source of the 'digital divide' between urban and rural South Africa (Conradie, Morris and Jacobs, 2003), this research project has shown that this is not the only determinant for creating and sustaining connections with the wider world, both virtual and actual. This can also be related to the discussion about space and place, where accessing the virtual world is being constrained by the actual world, for example the physical distance which exacerbates the problems around the lack of resources and support for the Computer Centre and its staff. This is in line with the points made by Jackson (2014) around 'rethinking repair', where he notes how the emphasis is often put on innovation in 'development' but not on what comes afterwards, namely the maintenance and repair of the infrastructure. The tendency to 'forget' about repair and almost make this aspect invisible became very clear to me when the technology at the Computer Centre failed and no reliable systems were in place to repair the computers and restore the internet connection.

The above is in accordance with the findings presented by Conradie *et al* (2003:199-201), who concluded that the 'digital divide' in South Africa is not only shaped by the lack of access, but also by other factors such as illiteracy, poverty and lack of skills which contribute to the gap between urban and rural settings. Similar kinds of challenges could be detected when looking at the effectiveness of the Computer Centre in Carnarvon. What became apparent through my engagement with participants at the Centre was that their capacity to benefit from its resources (when these were functioning) was strongly mediated by their social circumstances locally, which pointed to other urgent development needs for Carnarvon, beyond access to technology. Major social challenges that surfaced throughout this research project, which impacted on students' ability to attend classes regularly and to benefit from the ABET course, included domestic violence and chronic poverty; this was demonstrated in the stories of Nagia and Jurriaan, who were struggling with socio-economic problems that were typical for Carnarvon more generally.

Local power relations and the lack of job opportunities were also frequently mentioned concerns in my conversations with community members, and were considered by many to lie at the root of most of their problems. This also fed into the unhappiness of many of Carnarvon's residents towards the SKA project more generally. Initially the announcement of the arrival of the SKA in this part of the Karoo was greeted with optimism and high hopes for change and prosperity. Initially this hope was encouraged by promises that



the SKA-SA made around five focus areas, namely: ‘the support and development of small and medium scale enterprises; investment in youth; the identifying and nurturing of learners’ talent; support of community upliftment programmes; and ensuring connectivity’ (Adam, 2016:2). Although these focus points have not changed for the SKA-SA over time, and various projects, including the Computer and Technology Centre, have indeed been established, at the time of writing this thesis the perceived benefits were seen by local residents to be more reduced than originally expected and to benefit only a few. The general attitude in town toward the SKA was considerably less positive at the end of my fieldwork than at the start, driven by the lack of visible change in the socio-economic position of most people in Carnarvon as a result of the presence of the SKA in the district. This seems to have encouraged rather than diminished feelings of abandonment and marginalisation, and has taken away some peoples’ hopes and dreams of a better future.

However, it is also important to acknowledge that this research has only covered a short period of time and that the SKA is in its early stages of development. Therefore, I cannot and are not making any definitive statements around the impact of this major project and people’s attitudes toward it. What is clear is that Carnarvon as a geographic space is now being linked to the wider world in innovative ways through technology and interaction because of the development of the SKA in the district. At the same time, what also needs to be recognised is that the local community who inhabit Carnarvon as a place is being affected by these new connections in what may be considered contradictory ways, considering that at this stage this development is reinforcing experiences of marginalisation and entrenched inequalities.

#### **5.4 Recommendations for further research**

This research project has noted major social challenges in the town of Carnarvon that are important to document and understand more deeply, including domestic violence, alcohol abuse, and youth development. It has also given a glimpse into Carnarvon’s rich history which needs much more archival work and oral history than I was able to do within the scope of this thesis. In regards to follow-up studies, I would also suggest that tracking further developments at the Computer Centre is important, as well as undertaking comparative studies if/when other Computer and Technology Centres are established in the neighbouring towns, as is being suggested by SKA insiders.

My main findings show that the Computer Centre in Carnarvon is in urgent need of hands-on support. The staff requires both technical as well as logistical support, and this needs to be both accessible and responsive. The SKA has most certainly placed Carnarvon on the map and stimulated multiple local developments, of which the infrastructure that stimulates communication with the ‘outside world’ is the most striking. While these developments may have succeeded in bringing the ‘virtual’ world ‘out there’ a lot closer, they have not bridged the ‘actual’ distance between Carnarvon and metropolitan centres such as Cape Town (which is one of the main struggles the Centre was facing), nor have they bridged the many social divisions within the town. To get (and keep) the Computer Centre completely functional again, more accessible technical and logistic support is strongly recommended.

## 5.5 ‘Cosmopolitan Karoo’

This research project is part of Professor Walker’s larger research programme,<sup>10</sup> popularly known as the ‘Cosmopolitan Karoo’ research programme. Under the auspices of her Research Chair a multidisciplinary research team – including postgraduate students at various levels and a Post-doctoral Fellow – has been conducting social research within the broad area of the Karoo. Our weekly ‘Cosmopolitan Karoo Research Forum’ has given me the opportunity to develop a broader knowledge base of the Karoo region, notably through the interaction at seminars with major scholars working on the Karoo such as Nigel Penn, Doreen Atkinson and David Fig, who all are experts in their own fields. In addition to my being able to learn from these and other inspiring guests, it has been a privilege for me to be part of a larger research team with similar kinds of research interests. This has provided the opportunity for team members to exchange thoughts and reflect on field experiences on a regular basis.

On a more personal level, this research project has been a challenging journey. I started this project slightly naïve, not really understanding the implications of the distance as well as the harsh circumstances of my field site. But after my first scoping trip in June 2015, with temperatures barely making it above zero during the day and heavy rainfall that flooded the surrounding dirt roads, I was quick to realise how challenging the circumstances actually are for people living in these isolated towns of the Karoo. But Carnarvon, and in particular the Computer Centre and its staff and visitors, managed to grow on me as the story unfolded. I realise this thesis might represent the end of my story about the Centre, but I sincerely hope that the story of the Centre and its students will continue to unfold, and with proper support, that the Centre will recover and realise its full potential.

Being at the end of this particular journey, I cannot adequately express how much I have come to appreciate this often ‘forgotten’ part of South Africa, with its long empty roads, beautiful sunsets, and in particular its friendly and welcoming people.

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<sup>10</sup> As noted this MA project is located within Prof. Cheryl Walker’s (Stellenbosch University) DST/NRF SARChI Chair in ‘The Sociology of Land, Environment and Sustainable Development’ ([www.cosmopolitankaroo.co.za](http://www.cosmopolitankaroo.co.za)).

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## APPENDICES

### Appendix A: Institutional Permission

Greetings Ms Monique

We trust you well. Best for 2016.

We quite excited about your intended proposal on the research project at the Carnarvon Centre. We welcome the opportunity and are very happy to use the centre for your research. Please feel free to liaise with the Centre Staff [REDACTED] and [REDACTED] (copied on the email)

This email serves as permission for your access to the Centre and its programmes and services. Please keep us informed and if any further assistance needed, please feel free to email me. Will email the Siyafundactc Profile to give insight about what we all about.

All the Best.

We, Thank You , Warmest Regards,  
Stay Blessed, Motivated & Inspired

[REDACTED]



SIYAFUNDA CTC - COMMUNITY TECHNOLOGY CENTRE

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## **Appendix B: Informed Consent**



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jou kennisvenoot • your knowledge partner

### **STELLENBOSCH UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH AROUND THE E-LEARNING PROJECT AT THE SIYAFUNDA COMMUNITY CENTRE IN CARNARVON**

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I am Monique van der Hoef, a Masters student from the Department of Sociology and Social Anthropology, Stellenbosch University. I am conducting research for study purposes for my MA degree and would like to invite you to participate in my study.

#### **PURPOSE OF THE STUDY**

The purpose of this study is to explore the e-learning project at the community centre in Carnarvon and what participants think about the opportunities it may be offering.

#### **RESEARCH PROCESS**

As a participant of the e-learning project in the Siyafunda Community centre you are invited to participate in an interview that will take about 1 hour. Participation in this study is completely voluntary.

If you agree to participate in this study, you are free to stop at any time, and choose not to answer certain questions. Your personal information will also be kept confidential and your identity protected through the use of a fictional name. To make it easier to conduct the interview I would like to use a voice recorder, if you agree. These recordings will be kept secure and will not be made available to anyone other than myself. Kindly note that there is no correct or incorrect answer and you have the freedom to answer how you seem fit.

There are also no direct benefits to you as a person from your participation in this study. Your participation may, however, assist in getting a better understanding of the experiences of participants using the facilities of the Siyafunda Technology Community Centre.

A copy of this study will be made publicly available in the form of a Masters Thesis and possibly to a wider audience in the form of research publications. You are welcome to request a copy of the study from the researcher (details provided below).

If you have any questions or concerns about the research, or would like to get a copy of the research findings, please feel free to contact me, my supervisor or my institution:

- Personal details: Monique van der Hoef [17592763@sun.ac.za; 072-970 5720]
- Supervisor: Prof. Cheryl Walker [cjwalker@sun.ac.za; 021-808 2420]
- Division for Research Development of Stellenbosch University: Ms Malene Fouche [mfouche@sun.ac.za; 021-808 4622]

### **CONSENT TO PARTICIPATE IN THIS STUDY**

The information above was given to me by Monique van der Hoef. I understand the purpose of this study and my rights regarding the research process, my participation and the confidentiality of my personal information.

I, \_\_\_\_\_ hereby consent voluntarily to participate in this study.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**OR**

### **Verbal Consent:**

The information above was given to the participant by Monique van der Hoef. The participant confirmed that he/she understood the purpose of this study and his/her rights regarding the research process, participation and confidentiality of his/her personal information.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_