

***“Collecting spring water
reminds us how to be human”:***

**In search of an ethic of care
for the springs
of southern Cape Town**

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A minor dissertation submitted in partial fulfilment of the requirements for the
award of the degree of **Master of Philosophy: Environmental Humanities**

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DEDICATION

To ||*Hu-!Gaeb* and // *ammi i ssa*'s sweet Spring water

and the endangered and vanishing ways that you enable life and inspire connection.

You who still flow freely
and where we have the privilege to drink straight from this Earth,
thank you for the ways that your waters remind us how to be human
members of this breathing world.

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Melissa, Shaun, Faith thank you for your support, thinking environments created and shared, laughter, encouragement and thank you most of all for your friendship. I'm so happy we met through this degree.

To my Parents – thank you both for all your support, encouragement and most of all for teaching me an ethic of care for the living world.

Thank you to my friends who have tolerated my endlessly enthusiastic water conversations, allowing me to share both insights or moments of despair.

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Thank you to all the Springs in Cape Town. Thank you for all that you continue to give us, humans and other-than-humans. Thank you for the people that I met around your waters.

Thank you to the spring running on the land on which I live. I have the great privilege to drink from the earth and collect the water I need by hand as I do not have a tap in my home. This practice has shown me how water collection creates community, how it slows moments down and calls attentiveness and appreciation to the life around the water. Thank you for your delicious sweet waters, for the hours sat next to you listening with another ear. Thank you for all that you shared.

ABSTRACT

Between 2015 and 2018 Cape Town was affected by a drought more severe than any on record. When it became clear that Cape Town might actually run out of water, thousands of its citizens flocked to the historical springs that flow from Table Mountain's groundwater, which for many of whom it was their first time collecting spring water. However, at the height of the water crisis, the municipality cemented over one of these vital springs after numerous complaints of disturbance by residents. Piped to a newly constructed water collection site enclosed by fences a kilometer away, the water was made accessible to the public through 16 industrial taps. While this action from the municipality may have been the only viable solution, it was experienced as a huge loss to the people of Cape Town. This study investigates why the design of the current spring water collection point became the source of such criticism. It compares the re-designed site with two of Cape Town's southern springs that still flow freely, investigating the meaning and influence of unrestricted flowing spring water through public engagement on site, asking what draws people to collect spring water. Key themes that emerged include health and well-being; and connection with other humans, with history, with nature and with a greater spirit. Springs are powerful agents for an ethic of care, the study finds, and water a powerful medium of connection. Yet, the city's water policies are shaped by the kind of thinking that sees water only as a commodity, reflected in an urban design that further alienates people from water and nature. In this era of the Anthropocene, itself a condition of this alienation of people from the earth, the paper concludes and proposes biophilic design principles that foster the sensibilities of connection and interdependence as a vital part of urban design for a shared future where people come to know what it means to be human as participants within a living world.

Table of contents

ACKNOWLEDGEMENTS	v
ABSTRACT	vi
LIST OF FIGURES	ix
INTRODUCTION	1
Rain no longer comes because “the land is not right”	2
Versions of nature	11
Marx’s theory of metabolic rift.....	14
Unsilencing the storied springs	15
An Ethic and Politics of Care.....	17
Decolonizing thought.....	20
Ecological identity	22
Research design	23
Interpretation of data.....	25
Chapter 1	31
From Wellspring to Water ATM	31
<i>//ammi I ssa</i> : Place of Sweet Waters.....	31
“Waters’ things”.....	33
From rain’s things to people’s things.....	34
From Spirits to spirits	37
The water commons.....	39
Nature as property – water as commodity	46
Good or Gift?	51
Chapter 2:	56
“The springs remind us how to be human”	56
Storied springs	60
Other ways of knowing.....	63
Health as the matrix of relationship	67
Attentive interactions in the Sentient World.....	69

A case for undomesticated water	70
The springs reminds us how to be human.....	72
Controls and Corrals	77
Chapter 3	79
A Case for the Living Image:.....	79
Designing for ecological identity.....	79
Bridging troubled waters.....	79
How do we design for liveliness?	81
Flowforms	83
FLOW – For Love Of Water	86
Designing for ecological identity.....	92
Conclusion	96
BIBLIOGRAPHY	101
APPENDIX 1	117

LIST OF FIGURES

pg.

Fig 1. Queues of people line up to collect water from Cape Town’s springs. _____	4
Fig 2. The free-flowing waters of Springs Way Spring, Newlands, before it was closed. _____	5
Fig 3. Citizen Initiative: Riyaz Rawoot’s invention to allow more people access to the water at the same time. _____	6
Fig 4. People fill bottles from Springs Way Spring using Rawoot’s invention. _____	7
Fig 5. The water queue at Springs Way Spring before it was closed. _____	9
Fig 6. St James Spring. _____	24
Fig 7. Boyes Drive Spring. _____	24
Fig 8. ‘Spring water tea party’ - author with other water researchers at Newlands Pool collection site 18 May 2019. _____	25
Fig 9. The queue here moved too fast because of the guards hurrying people along to allow in-depth interviews to take place _____	25
Fig 10. Needing to create a more relaxed atmosphere for longer interviews, a group of us water researchers decided to set up a tea station, with water from the spring and to offer tea and biscuits to encourage people to stay on after they had collected water _____	25
Fig 11. Appreciate everything. _____	30
Fig 12. Newlands Pool water collection site separation gate, padlocked closed to split the waiting queue from the group at the actual water points. _____	31
Fig 13. people in the “inside” group about to collection water. _____	31
Fig 14. Ohlsson’s Brewery employees. _____	39
Fig 15. Cape Town’s prominent springs. _____	40
Fig 16. Riyaz Rawoot’s improvised pipe structure helping more people access the water commons at Springs Way Spring. _____	42
Fig 17. The water queue at Springs Way Spring. _____	44
Fig 18. Springs Way Spring today: a once-vibrant Spring buried under concrete. _____	46
Fig 19. The water ATM: the taps at the Newlands Pool site disconnect water collectors from “source” and present the spring water simply as a consumable resource. _____	48

Fig 20. The new collection point’s signage is in stark contrast to those of the Springs Way Spring’s hand-made notes encouraging community-mindedness. _____	49
Fig 21. The real source of water. _____	55
Fig 22. Springs Way Spring streaming out of its pipe going on to flow into Newlands Stream. _____	58
Fig 23. Springs Way Spring during the 2015-2018 drought. _____	59
Fig 24. Boyes Drive and St James Spring. _____	64
Fig 25. Khanyile “Emmanuel” Siziba helps people carry their water from the Springs Way Spring to their vehicles. _____	66
Fig 26. Springs Way Spring water – living water, whose patters of flow shape thinking and life. _____	72
Fig 27. A woman bows to the water at St James Spring. _____	73
Fig 28. Springs Way Spring before the drought. _____	75
Fig 29. Newlands Pool Collection site today. _____	75
Fig 30. Boyes Drive free-flowing mountainside Spring. _____	76
Fig 31. Mohammed’s tubing inserted into the flow-carved rockpool. _____	76
Fig 32. Droplets as spheres. _____	82
Fig 33. Archetypal Movement of Water. _____	82
Fig 34. Constructed Flowform showing how, like a river, it lets water flow naturally. _____	83
Fig 35. The Living Water Garden, Chengdu Sichuan Province, China. _____	84
Fig 36. Informatic of benefits from Flowform water. _____	84
Fig 37 Informatic of the first seven Biophilic Principles. _____	87
Fig 38. Newlands Pool spring water collection site showing its potential to catalyse connection and well-being because of the natural elements already existing at this location – the Liesbeek River trail and many large trees. Each number represents an element of the first seven Biophilic Design Principles in existence here. Google Maps. _____	88
Fig 39. Colonel Bird’s Bath, Kirstenbosch Botanical Gardens. _____	89

Fig 40. Newlands Pool site. The check-out counter for spring water. _____ 90

Fig 41. Isolated trees in a desert of brick. _____ 90

Fig 42. The Spring flows alongside the hewn-mountain-stone pathway. _____ 91

Fig 43. The spring’s pooling ‘bath’. _____ 91

Fig 44. Designs that connect with mountain, stone and water. _____ 94

Fig 45. Allowing people to see running water and hear its sounds. _____ 94

Fig 46. Opportunities to more fully engage the senses. _____ 94



"...that one day, the people of Cape Town will gather around our common heritage of CAMISSA - the very waters that defined the location of the city, reflecting the public past and embracing a new civic infrastructure, inspired by a deliberate recognition and respect for the social, cultural and ecological significance of this Water. Linking the past with the present, to develop a different model for our future, by connecting people to this vital resource, we celebrate the Water that links mountain to sea, past to future, and people to the environment.."

- Reclaim Camissa Trust, 2010



INTRODUCTION

“Why do you not go to the Newlands Spring anymore?”

“The security! The attitude! The water is in jail!”

- St James Spring interviewee¹

I used to gather water at Springs Way Spring, in Cape Town, South Africa, the city² where I live. I no longer collect water in the area at all now. The “*Newlands Spring*” sign hung on the surrounding fence only serves to note the history of what once was, but is no more - a spring turned into pipes and taps with guards and fences by the City who commissioned the construction of this space and those who designed it.

This study explores why it matters that the spring at Springs Way was closed, why it was a huge loss to the people of Cape Town and why the design of the new spring water collection point next to the Newlands Pool is out of kilter with the global necessity to address the kind of thinking causing the climate breakdown that we are facing, which Amitav Ghosh calls “the great derangement”.³ The Springs Way spring, I will argue, was never reducible to a water supply for the people who collected water there, in much the same way that a home is not reducible to a house.

I trained as a psychologist in the early 2000’s because I am fascinated by what shapes human thinking and behaviour, how meaning-making happens and what it is that makes people and ecosystems thrive. During my training however, I began to see that contemporary psychology is the attempt to repair the nature-estranged human; it attempts to resolve the traumas, destructive behaviours and dysfunction caused by the belief that humans are separate, individual selves,

¹ Interviewee 6, see Appendix 1

² I use the word ‘city’ in two ways in this study: where it is capitalized, it refers to the City as local government municipality, where it is in lowercase it refers to the broader geographical location and the residents of Cape Town

³ Amitav Ghosh, *The Great Derangement. Climate Change and the Unthinkable* (Chicago: University of Chicago Press, 2017).

unconnected to the Earth - and therefore adrift in an indifferent universe. I realized I would be unlikely to find what I was looking for within a paradigm that believes the inner world is separate from the outer world, and where a person's need for myriad relationships with the more-than-human world is not recognized as an integral part of well-being.

My growing disenchantment with conventional psychology during my undergraduate degree was additionally augmented by my parallel work at that time, which involved guiding groups of people through outdoor experiences. 'Think Outside' became my mantra and response to the conventional adage 'think outside the box'. I observed that when people spent a period of time in contact with water, or mountain, plants or any elements of the natural world, they were typically able to think more clearly and developed greater insight into their life and choices. People's sense of well-being increased dramatically, as did their sense of connectedness to the more-than-human world. Significantly this combination of experiences often resulted in an adjustment of their behaviour. When people felt more a part of their natural world, their senses of meaning increased and their actions changed to become more affectively tuned to their environments. I started to deeply question a psychology that did not value the potent impact of 'nature contact' and 'connectedness to nature'. This kind of well-being I would describe as ecological well-being – and over time, I began to understand that this was inseparable from planetary health.⁴ These observations were in keeping with a wider emerging literature in eco-psychology and depth psychology from voices such as Bill Plotkin, Theodore Roszak, David Abram and James Hillman.⁵

Rain no longer comes because “the land is not right”

Cape Town has experienced first-hand the dramatic consequences of a societal disconnect from the living world. From 2015 until the winter of 2018 the city was affected by a drought that broke all records going back a century, to an extent that not even leading climatologists predicted.⁶

⁴ George Monbiot, *Feral. Rewilding the land, sea and human life* (London: Penguin Books, 2013).

⁵ See Bill Plotkin, *Nature and the Human Soul* (California: New World Library, 2008); Bill Plotkin, *Soulcraft. Crossing into the Mysteries of Nature and Psyche* (California: New World Library, 2003); Theodore Roszak, *The Voice of the Earth. An Exploration of Ecopsychology* (Michigan: Phanes Press, 1992); James Hillman, *The Thought of the Heart and the Soul of the World* (Ascona: Eranos Foundation, 1981); David Abram *The Spell of the Sensuous* (Vintage Books: United States of America, 1996)

⁶ Leonie Joubert & Gina Ziervogel, *Day Zero. One City's Response to a Record-breaking Drought* (Cape Town: Idea in a Forest, 2019): 5-6.

Associate Professor Gina Ziervogel who was on the Water Resilience Advisory Committee (WRAC) during the drought, and Cape-Town based science writer Leonie Joubert describe the drought as “the local expression of the unfolding global climate change emergency.”⁷ In their book, *Day Zero*, they explain that “environmental shocks like this drought are expected to become more common. Cape Town’s water planning is based on historic rainfall and water use records, and projections of the likely water use increase as the population and economy swell.”⁸ It was the plentiful springs which has made human life around Table Mountain’s slopes possible all year-round, yet the city once known for its four rivers and more than thirty six springs⁹ that supplied global seafarers with fresh water,¹⁰ some of which derived from aquifers where the water is estimated to be 450 million years old,¹¹ almost ran out of water in 2018.

Today many of the city’s rivers have been canalized and are highly polluted.¹² The city’s water managers - whose role it is to care for the city’s water bodies - have been served with notices from the Western Cape Directorate of Environmental Affairs and Law Enforcement due to some of these sources being fouled to the point of toxicity.¹³ A lack of municipal services to informal settlements is one of the leading causes of contamination. The springs themselves are buried out

Joubert and Ziervogel go on to explain how between June 2015 and June 2018 “the rainfall varied between 50 and 70 percent of the long-term average... with many rainfall figures dropping to the lowest since written records began in the 1880s. Cape Town draws its waters from the Western Cape Water Supply System (WCWSS), almost all of which is stored in a few main reservoirs... Together, they hold about 18 months’ supply of water for farming and urban needs – 900 million m³ of water. In 2014, the city’s dams were full. By early summer, in November 2015, water levels were down to 71 percent... By the start of the summer of 2017, they were down to just 38 percent. By January 2018, it looked as though there was only three months’ supply of water left.”

⁷ *ibid.*, 2.

⁸ *ibid.*, 8.

⁹ Melanie Gosling, “Cape’s spring water wasted”, *IOL*, June 14, 2013, accessed March 13, 2019, <https://www.iol.co.za/capetimes/capes-spring-water-wasted-1532571>.

¹⁰ Lesley Green, *Rock Water Life: ecology and humanities for a decolonial South Africa* (Durham: Duke University Press, 2020).

¹¹ Petri Juuti, et al., *Resilient Water Services and Systems: The Foundation of Well-being*, 2019 accessed June 29, 2020, <https://www.iwapublishing.com/books/9781780409764/resilient-water-services-and-systems-foundation-well-being>, 123.

¹² Dr Kevin Winter, “Peninsula Paddle: 10 years on”, *University of Cape Town News*, 12 August, 2019, accessed June 10, 2020, <https://www.news.uct.ac.za/article/-2019-08-12-peninsula-paddle-10-years-on>; and Steve Kretzmann, “Cape Town’s rivers are open streams of sewage, yet the City is not spending its budget”, *GroundUp*, 26 September 2019, accessed February 2, 2020, <https://www.dailymaverick.co.za/article/2019-09-26-cape-towns-rivers-are-open-streams-of-sewage-yet-the-city-is-not-spending-its-budget/#gsc.tab=0>

¹³ Lesley Green et al., “Sewage Flowing into Kuilsrivier creates a health hazard for all of Cape Town”, *Daily Maverick*, December 5, 2018, accessed February 21, 2021, <https://www.dailymaverick.co.za/article/2018-12-05-sewage-flowing-into-kuils-river-creates-a-health-hazard-for-all-of-cape-town/>

of sight, existing almost entirely as piped underground systems that send the waters out to sea¹⁴ - thus managed and controlled via an approach to engineering that has continued a colonial regard of these water bodies as ‘problems’, whose design priority was putting them out of daily contact with the city.¹⁵ The springs and streams no longer even had ‘official’ existence since they were struck off the City’s asset register in 1994.¹⁶ Their presence, however, was catapulted back into public imagination as the city reeled from the shock of the drought. For a while it looked like Cape Town might be the first major city in the world to run out of water. With a dramatic increase in water price and a decrease in allowable litreage from the city's reticulation system, thousands of people began to flock daily to the city’s natural springs. For many Capetonians this was a first experience of collecting spring water.



Fig. 1. Queues of people line up to collect water from Cape Town’s springs. Image: Mark Hutchings, 2018.¹⁷

¹⁴ Anna James, “Making (Non)Sense of Urban Water Flows: Qualities and Processes for Transformative and Transgressive Learning Moments”, *Sustainability* 11 no. 23 (2019): 1-21.

¹⁵ Green, *Rock Water Life: ecology and humanities for a decolonial South Africa*, 45.

¹⁶ *ibid.*

¹⁷ Mark Hutchings, *People queue to collect water from a spring in the Newlands suburb as fears over the city's water crisis grow in Cape Town, South Africa, Jan. 25, 2018*, Cape Town, in *Reuters*, 25 January, 2018, accessed

Springs Way was a small cul-de-sac named after the spring whose water emerged from the ground, via a plastic pipe that had been inserted to allow the main flow to remain free of sand and clay. This spring had been long-known and water collected from here for as long as anyone can remember.¹⁸ Springs Way Spring during the height of the drought became a bustling, vibrant meeting place. Before the drought over the course of a month perhaps 100 people collected water at this location, but by April 2018, at the height of the water crisis, statistics from traffic officials show that the numbers rose to around 7000 people per day.¹⁹



Fig. 2. The free-flowing waters of Springs Way Spring, Newlands, before it was closed. Image: Norman Rasmussen, 2009.²⁰

February 1, 2020, <https://www.icetruck.tv/2018/02/21/reporters-notebook-cape-town-residents-struggle-to-survive-water-crisis/>. Queues of people line up to collect water from Cape Town's springs.

¹⁸ See Beatrice Law, *Papenboom in Newlands. Cradle of the brewing industry* (South Africa: Formxpress, 2007); M. Attwell, *Notes on the historical significance of the Newlands spring*, 1994, accessed October 5, 2018, <http://norman.rasmussen.co.za/dl/notes-on-the-historical-significance-of-the-newlands-spring.pdf>; and Helen Robinson, *The villages of the Liesbeeck: from the sea to the source* (Wynberg: Houghton House, 2011).

¹⁹ Raeesa Pather, "Residents rally as City of Cape Town plans to close water collection point", *Mail & Guardian*, 22 May 2018, accessed October 1, 2019, <https://mg.co.za/article/2018-05-22-residents-rally-as-city-of-cape-town-plans-to-close-water-collection-point/>.

²⁰ Norman Rasmussen, *Stone drain with PVC pipe ~15cm diameter to help fill your bottles. Water normally runs directly into the local river*, Cape Town, in *Facebook. Friends of Newlands Spring*, 2009, accessed February 25, 2020, <https://findaspring.com/locations/africa/newlands-spring-cape-town-south-africa/>. The free-flowing waters of Springs Way Spring, Newlands, before it was closed.

The image above (fig. 2) depicts the simple layout of the Spring Way Spring water outlet before the drought. With the enormous increase of people collecting water during height the drought, this single water point created queues that stretched to the end of the small cul-de-sac and onto the main road 150m away. Riyaz Rawoot, a Cape Town resident was first drawn to the spring by his family who had a bond of eighty years with its waters. As a Sufi, he “was also attracted to its pure water and the serenity of the space ... ‘the setting was wonderful, with the green trees and the river flowing, and the sound of the water, the sky, butterflies, dragonflies, birds all in this little cul-de-sac, and I loved it.’”²¹ Seeing this situation, he came up with an innovative idea to avert potential chaos. Rawoot explained, “*It crystallised over time when I was coming and listening and seeing how awkward it was to get to the water. Eventually I said, ‘OK, if I can just get in two pipes for myself, then it will go a bit quicker’. It was quite selfish,*” he laughs, watching as people collect water from the spring on a sunny afternoon. After that, I thought I may as well leave it for everyone to have benefit from it.”²² Rawoot’s idea grew and he added more pipes, creating a structure with bricks to lift it off the ground and drilled 26 holes into the pipes so that the water flowed from multiple locations and more people could collect water at the same time.



Fig. 3. Citizen Initiative: Riyaz Rawoot’s invention to allow more people access to the water at the same time. Image: Courtney Africa. 2018.²³

²¹ Steven Robins, “The Kildare Road Spring: A Place buried under concrete”, *Daily Maverick*, 4 June 2018, accessed May 9, 2020, <https://www.dailymaverick.co.za/article/2018-06-04-the-kildare-road-spring-a-place-buried-under-concrete/#gsc.tab=0>.

²² Pather, “Residents rally as City of Cape Town plans to close water collection point”

²³ Courtney Africa, *CITIZEN INITIATIVE: The spring in Newlands boasts many outlets for water collection by this handmade structure created by Riyaz Rawoot*, Cape Town, in *African News Agency*, 16 May, 2018, accessed

Not long after this construction was erected however, the City of Cape Town issued an official notice that the Springs Way Spring would be closed and an alternative site created at a different location.²⁴ The City also issued a letter to Riyaz Rawoot demanding that he remove his structure immediately or “costs incurred for this removal”²⁵ would be imposed on him. These two notices were met with public outrage: residents rallied around Rawoot in support, incensed that the City were not recognising his civic contribution; some wrote letters to newspapers to express their discontent with the lack of public participation process;²⁶ many people continued to collect water at the Springs Way Spring in an act of defiance, claiming that the waters belonged to the people and not to the government; and a petition gathered hundreds of signatures within days to try and stop the spring being closed.²⁷



Fig. 4. People fill bottles from Springs Way Spring using Rawoot’s invention. Image: Morgana Wingard. 2018.²⁸

March 17, 2020, <https://www.iol.co.za/capeargus/news/resident-warned-to-turn-off-spring-or-else-15006788>. Citizen Initiative: Riyaz Rawoot’s invention to allow more people access to the water at the same time.

²⁴ *ibid.*

²⁵ *ibid.*

²⁶ Athina May, “Resident warned to turn off spring or else”, *IOL*, 16 May 2018, accessed July 10, 2020, <https://www.iol.co.za/capeargus/news/resident-warned-to-turn-off-spring-or-else-15006788>.

²⁷ Pather, “Residents rally as City of Cape Town plans to close water collection point”; and Nicole Daniels, “Petition to prevent ‘free water’ closure in Newlands”, *IOL*, 13 September 2017, accessed January 5, 2020, <https://www.iol.co.za/capetimes/news/petition-to-prevent-free-water-closure-in-newlands-11190344>.

²⁸ Morgana Wingard, *Residents queue to refill water bottles at Newlands Spring on January 31, 2018*, Cape Town, in *Huffingtonpost*, 31 January 2018, accessed March 10, 2020, https://guce.huffingtonpost.co.uk/copyConsent?sessionId=4_cc-session_297c1fb2-8087-4e3d-b579-8ed333e3411d&inline=false&lang=en-gb

Rather than this array of civic action being met with encouragement or conversation by the City of Cape Town however, Springs Way Spring was permanently closed on the 20th May, 2018.

It is clear that for the residents of Springs Way road, in particular those living in the old age home that was situated right next to the spring itself, the continuous traffic and noise coming from people collecting water at all hours became an untenable situation. While the resulting action from the municipality may have been the only viable solution – to reroute the spring water to a ‘more convenient area with parking’ - it failed in its principle duty as managers of a common pool resource. While expanding briefly on how the historic Springs Way Spring was closed off unceremoniously by the City – simply covered with cement – and that this was done with negligible public participation, a requisite when dealing with a commons,²⁹ the underlying concern throughout this study has to do with the lack of engagement by the City with what the spring is - a point of connection to the earth and its water flows. It is less to do with the waters being re-directed to an alternative water collection point, and rather with the design of this alternative.

Where common pool resources are concerned all members using them have rights, as well as obligations and duties. Amitav Ghosh highlights that a shift in power relations is a vital need in the face of great climate change and crisis: “If whole societies and polities are to adapt then the necessary decisions will need to be made collectively, within political institutions, as happens in wartime or national emergencies. After all, isn’t that what politics, in its most fundamental form, is about? Collective survival and the preservation of the body politic?”³⁰ In addition to this forced closure, the design of the alternative site at the Newlands Pool failed to grasp the value of the still-enduring historical practice of spring water collection and instead imposed the division of nature and people. This design turns its back almost entirely on the importance of ‘place’, on the essence of the spring itself, on the cultural heritage of these historic waters of the Cape and on the values of connection that springs evoke.

²⁹ Pather, “Residents rally as City of Cape Town plans to close water collection point”

³⁰ Ghosh, *The Great Derangement. Climate Change and the Unthinkable*, 753.



Fig. 5. The water queue at Springs Way Spring before it was closed. Image: Caron von Zeil. 2018.³¹

The alternative spring water collection site was opened on the 9th May 2018 in an area at the back of Newlands Swimming Pool, about a kilometre away from the Springs Way Spring. It consists of a face-brick wall with sixteen industrial taps, eight on each side of the wall with steel fences surrounding the water point. There are permanent guards who speed the queue along. The gate leading to the taps, because it is surrounded by a fence, can be closed and therefore there are times when this water point is accessible to the public, and other times when it is closed and water cannot be collected. The City of Cape Town municipality who commissioned the design and construction of the new spring water outlet looked at the construction, and indeed the act of water collection itself, as a logistical exercise in technical efficiency to supply a commodity, rather than as the arena of deeply meaningful collective practices across the cultural spectrum of Cape Town's diverse population. As a result of the guiding values of the municipality what has been created at the current water collection point is a structure that reflects the conceptual divisions that created the Anthropocene, and therefore the drought. The design failed to grasp an opportunity to reconnect people with water as a product of earth systems.

³¹ Caron von Zeil, *The water queue at Springs Way Spring before it was closed*, Cape Town, in *Green Times*, 11 February 2018, accessed January 20, 2020, <http://thegreentimes.co.za/calling-government-serve-groundwater-springs/>.

Physicist, ecologist and ecofeminist Vandana Shiva cautions that the capitalist narrative of modern civilization has become a whitewash where the entire paradigm that holds itself up as self-evident is in need of question. When value is reduced to economic terms alone it becomes the primary filter for knowledge and information and thus only certain viewpoints are deemed relevant and others not.³² This is how spring water collection was essentially seen by the City municipality – a way for citizens to save money. The limited filter of behavioural economics is used as the most important yardstick as to whether a society is “moving in the right direction” or not.³³ What attracted me to the Environmental Humanities was that I saw a discipline that seeks ways to bridge the divide between personal and planetary and it felt like an antidote for the kind of thinking that invalidates most values other than those enshrined in financial capital. As Shiva reflects, “[w]hen it comes to real solutions to real problems faced by the planet and people, it is subjugated knowledges and invisible non-violent co-production with nature that shows the way to human survival, peace and well-being in the future”.³⁴ The springs hold subjugated knowledges, as do many people who collect water here.

Climate scientists at the Climate System Analysis Group from the University of Cape Town and the Environmental Change Institute at Oxford University calculated that “human-caused climate change tripled the likelihood” of the Cape Town drought.³⁵ A clear message comes from their analysis: “this kind of climate change risk is real and all future city planning needs to be done with this kind of heightened uncertainty in mind.”³⁶ In the wider context of Cape Town’s waterways being toxic from pollution, to be able to still drink from the earth is a kind of magic. Given that the Anthropocene is a product of people who have lost their connection with the earth, the alternative spring water point that has been constructed does the opposite of what is needed in these critical times – it continues to perpetuate the disconnect between people and nature. This observation of disconnected and disconnecting design is what began this inquiry and study, because of the awareness that the degree to which people feel and experience themselves as connected with all life is *directly* linked to attitudes and actions of care and life-enhancing

³² Vandana Shiva, *Earth Democracy: Justice, Sustainability and Peace* (Cambridge MA: South End Press, 2005).

³³ Shiva, *Earth Democracy: Justice, Sustainability and Peace*, 9-47.

³⁴ Vandana Shiva, “Foreword,” in Ariel Salleh, *Ecofeminism as Politics. Nature, Marx and the Postmodern* (London: Zed Books, 2017): xviii.

³⁵ Joubert and Gina Ziervogel, *Day Zero. One City’s Response to a Record-breaking Drought*, 8.

³⁶ *ibid.*

behaviour.³⁷ In the collective context of the Anthropocene, expanding the contexts where people remember their connection to the earth and connect to a sense of care for water, for others and for life seems not just prudent, but essential.

Versions of nature

The Newlands Pool water collection point and the now-closed Springs Way Spring is an example that illustrates very different versions of nature. Eduardo Vivieros de Castro, Bruno Latour and Veronica Strang all observe that both ‘natural’ and ‘social’ science assume an overarching concept of nature, whereas there are alternative views that envisage multiple natures.³⁸ Lesley Green, also writing on this topic as editor of *Contested Ecologies. Dialogues in the South on Nature and Knowledge*,³⁹ explains how in fora such as conventional ecological management settings, the possibility of exploring unorthodox environmentalities, which have seldom found a listening ear in this setting, is very difficult when this single version of nature is held as the only one. In a chapter of this same book, Green examines how “alternative environmentalities find themselves explained away as culture or belief. The option there is to ask to be tolerated – while scientific understandings of nature inform governance and policy. But as philosopher of science Isabelle Stengers asks, who, as a knowledge authority, will accept being tolerated?”⁴⁰

Metaphors explain the world around us very differently, and where they are enacted, they bring into the world those meanings via infrastructure, design, concepts, roles and actions. Root metaphors essentially construct understandings of the world and the nature of ‘truth’⁴¹ and form a blueprint for meaning-making. They form our human templates of reality. If my root metaphor is that world is like a machine, made up of separate, distinct parts (‘just things’) and that I, too,

³⁷ Matthew J. Zylstra, *Exploring meaningful nature experience connectedness with nature and the revitalization of transformative education for sustainability* (University of Stellenbosch: Doctoral dissertation, 2014).

³⁸ Eduardo Vivieros de Castro, “Exchanging Perspectives: The transformation of objects into subjects in Amerindian ontologies”, in *Common Knowledge* 10 no. 3 (2004): 463-84.; Bruno Latour, ‘Perspectivism: “Type’ or ‘bomb’?”, in *Anthropology Today* 25 no. 2 (2009): 1-2.; see also Veronica Strang, “Reflecting nature: water beings in history and imagination” in *Waterworlds: anthropology in fluid environments*, (New York: Berghahn Books, 2015): 1-31.

³⁹ Lesley Green (Ed.), *Contested Ecologies. Dialogues in the South on Nature and Knowledge* (Cape Town: HSRC Press, 2013).

⁴⁰ Green, “Contested ecologies: Nature and knowledge,” 1.

⁴¹ George Lakoff & Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 2008).

with my thinking mind am a separate entity, I would likely see the world outside myself as being at my disposal. What is in essence a Newtonian⁴² root metaphor holds as true the independent existence of the individual and society⁴³ - a universal nature - forms the basis of contemporary scientific understanding and goes on to inform governance and policy. Even if another's experience of the world is not of it an inert or mechanical object but rather a living field, an open dynamic landscape subject to its own metamorphoses and moods, and who knows themselves as an intimate and known part of this aliveness, in the face of this single version of 'nature' in governance and policy, as says Green, this other way of knowing the world is simply explained away as belief or culture.⁴⁴

Since Europe's 'Age of Reason', the capacity to master and control has been celebrated as the reason for generating scientific knowledge. "Through reflection, observation and experience, man finally dominates the facts that bewilder him. Henceforth he knows how to find his way through the forest of phenomena. He knows how to use the world",⁴⁵ said the poet Aimé Césaire. Human rationality has been valorised and provided the foundation for the binary framing logics of us-and-the-rest.⁴⁶ My appreciation of the Environmental Humanities as a discipline and body of work is that it refuses this divide between the 'natural' and 'social' worlds. Affrica Taylor, a cultural geographer in this field, expounds on this, saying that the divide "has provided the epistemological basis for separating our species off from the rest of the natural world and has affirmed the need for us to exercise our exceptional intelligence and agency (through scientific study and technological interventions) in order to 'improve' on nature, or more recently, to 'fix' it. It is this instrumentalist version of the nature/culture divide that valorises the exceptionalism of human intelligence and agency and renders nature passive and inert, which still predominates in western thinking and which underpins mainstream scientific research practice and educational theories."⁴⁷

⁴² Karen Barad, *Meeting the Universe Halfway* (Durham: Duke University Press, 2007).

⁴³ Marilyn Strathern, *The Gender of the Gift. Problems with Women and Problems with Society in Melanesia*, (California: University of California Press, 1990).

⁴⁴ Green, "Contested ecologies: Nature and knowledge", 1.

⁴⁵ Aimé Césaire, *Lyric and Dramatic Poetry: 1946-82*, translated by Eshleman and Smith (Charlottesville: University Press of Virginia, 1990): 134.

⁴⁶ Scott Hess, "Imagining an Everyday Nature", *Interdisciplinary Studies in Literature and Environment* 17, no.1 (2010): 85–112.

⁴⁷ Affrica Taylor, "Romancing or Re-configuring Nature in the Anthropocene? Towards Common Worlding Pedagogies", in Karen Malone, Son Truong & Tonia Gray (Eds.) *Reimagining Sustainability in Precarious Times* (Singapore: Springer Science + Media, 2017): 62.

Val Plumwood, one of the pioneering voices of the Environmental Humanities movement, in her book *Feminism and the Mastery of Nature*, eloquently demonstrates that in this worldview of ‘mastery’, the natural world – which includes women, indigenous people and nonhuman – is subordinated to anything associated with reason. These many pairs – human/animal, society/nature, reason/emotion – are mutually reinforcing and arise from an interlocking structure of concepts. Anything on the “subject” side of the binary is “good”; anything on the “object” side is lesser. These are the foundations of modernist thought and have created a cultural system that continues to deny our total human dependence on nature.⁴⁸ Its version of nature locates “nature” apart from humans, something that Plumwood refers to as ‘*hyperseparation*’. While hyperseparation exists only in the human head, the consequences of this paradigm seep into almost every part of modern life causing great damage to well-being. This separation skews priorities and does so in a way that blinds many people to the enactment (the production and performance) of nature and society of these terms in daily living, and incapacitates people from seeking alternatives that would enable living with the earth in an interrelated, interdependent way.⁴⁹ Plumwood makes it clear that “[i]f our species does not survive the ecological crisis, it will probably be due to our failure to imagine and work out new ways to live with the earth, to rework ourselves and our high energy, high-consumption, and hyper-instrumental societies adaptively.... The time of *Homo reflectus*, the self-critical and self-revising one, has surely come. *Homo faber*, the thoughtless tinkerer, is clearly not going to make it. We will go onwards in a different mode of humanity, or not at all.”⁵⁰ How the City’s installation of a wall fitted with industrial silver taps as the water outlet point of a spring perpetuates this split is the focus of this investigation, which contends that it changes people’s relationship with the water they are collecting and enacts the very separateness of humans from nature that is psychologically traumatic, perpetuating the divisions that have created the Anthropocene - the era of human-induced climate change. A critique of the alternative spring water collection site is therefore not merely a matter of aesthetics, but an inquiry into why it matters that a new infrastructure enacts the division of society from nature.

⁴⁸ Val Plumwood, *Feminism and the Mastery of Nature* (London: Routledge, 1993).

⁴⁹ Hess, "Imagining an Everyday Nature", *Interdisciplinary Studies in Literature and Environment*, 85–112.

⁵⁰ Val Plumwood, "Review of Deborah Bird Rose’s Reports from a Wild Country: Ethics for Decolonisation", *Australian Humanities Review*, 42, August (2007), accessed April 15, 2020, <http://australianhumanitiesreview.org/2007/08/01/a-review-of-deborah-bird-roses-reports-from-a-wild-country-ethics-for-decolonisation/>.

Marx's theory of metabolic rift

Marx's theory of alienation was his attempt to understand the separation of humans from nature, increasing under capitalism. Believing in unity where humans were a part of nature, Marx observed that through production of goods for capital people became separated from their activity to produce the product, from themselves and from one another, therefore leading to an estrangement from their humanness and nature. He noticed that this led to a condition of competition, prejudice, loss of control over production and environmental destruction.⁵¹

Marx used the concept of a rift to describe this estrangement of human beings from the metabolic relations between themselves and the 'natural laws' of life.⁵² I have come to see it more as a metabolic 'drift', like that of a continent, the slow violence⁵³ of a now almost undetected belief system drifting in a direction alluded to only by the progressively severe consequences of the distance already covered. Rob Nixon in his book *Slow Violence* highlights exactly this, that the lack of attention paid to lethal attrition of many environmental crises, as opposed to the sensational disasters that tend to evoke public activism, is where the greatest danger to the earth and to a shared future actually lies. It is the proverbial death by a thousand cuts. This study is therefore a deliberate paying of attention to one of these small, local crises.

The act of drinking water illustrates this concept of metabolic (d)rift well: it highlights both direct and inseparable human relationship to nature as well as an ignorance of it - as seldom do urban people know the source of the water.⁵⁴ When I am thirsty, I go to the nearest tap to get something to drink. It is a convergent social and ecological crisis, this growing rift between humans and water, and as explains Matthew Zylstra in the study, 'Exploring meaningful nature experience connectedness with nature and the revitalization of transformative education for sustainability', is both a psychological (perceptual and emotional) and physical (experiential) disconnect⁵⁵ –

⁵¹ Bertell Ollman, *Alienation: Marx's conception of man in capitalist society*, London: Cambridge University Press, 1971): 133-135.

⁵² John Foster, "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology", *American Journal of Sociology* 105, no.2 (1999): 366-405.

⁵³ Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge & London: Harvard University Press, 2011).

⁵⁴ Jacklyn Cock, *The war against ourselves: Nature, power and justice* (Johannesburg: Wits University Press, 2007).

⁵⁵ Zylstra, *Exploring meaningful nature experience connectedness with nature and the revitalization of transformative education for sustainability*, 4.

which is further maintained by the belief in bulk infrastructure as the only ideal way to have access to water. It is a crisis of consciousness. Urban people are separated from the origin of water itself through this system - my relationship is thus to a tap that exists solely to provide for my human needs, where the consequences of my water use and what might happen beyond the tap remain invisible and largely unimaginable.

There are growing numbers of studies that highlight how the general lack of response to the problem of climate change, and in this specific context of Cape Town's water issues explored by Anna James, "can be found in the make-up of urban space, materiality, and ecologies. In some ways, our built environments obscure or abstract our relationship with water and our relationships through it to other people and living systems. This abstraction is linked to the systematic way in which the water infrastructure system obscures inequality, hides links to other ecological systems, and our connections with other countries as water flows cross state boundaries. This occurs quite literally through historical systems of pipes underground, and more complexly through the multi-scaled nature of urban systems."⁵⁶ The new water collection site at Newlands with its taps fortify the association of water to a tap and render invisible our wider relationships with water's earthly sources. This is made undeniably clear through a Google search done for 'Day Zero' - the name given to Cape Town's 'imminent doomsday' during the 2015-2018 drought. The tag line across multiple news sources and sites of the worst case scenario is: 'when the *taps* run dry'.

Unsilencing the storied springs

That 'taps run dry' rather than streams or springs is a revealing metaphor concerning urban relations to water sources. Researchers in the Environmental Humanities such as Thom van Dooren, Deborah Bird Rose and Monika Bakke show the value of 'lively ethnographies': a mode of knowing, engaging, and storytelling that recognizes the meaningful lives of others and that, in so doing, enlivens our capacity to respond to them by singing up their character or ethos."⁵⁷ 'Ethnographies' are founded on the confidence in that if one exposes people to the lives and deaths of other species - not limited by given notions of taxonomy thus including stones, rain and springs

⁵⁶ James, "Making (Non)Sense of Urban Water Flows: Qualities and Processes for Transformative and Transgressive Learning Moments", 1-2.

⁵⁷ Thom van Dooren and Deborah Bird Rose, "Lively Ethnographies. Storying Animist Worlds", *Environmental Humanities* 8, no.1 (2016): 77.

- that this facilitates an inevitable coming-closer, allowing people to be drawn into new connections and thus the natural concern that arises out of connection.⁵⁸ When this connection is felt strongly humans call it care or love. This approach appreciates storytelling as a deeply ethical practice in that through the act of ‘storying’ one comes to see that the stories we choose to tell act as powerful contributors to the shaping of the world. Choosing stories that cultivate the capacity for engaged response offers an opportunity to contribute towards a more care-full way of living and the possibility of changing our own story of the world thanks to a new experience of other realities. This study follows this example and looks both at how the southern free-flowing springs themselves offer the kinds of encounters that allow Cape Town’s citizens to be drawn into new connection with water sources and reconnect with the earth, both as an individual act towards mitigating further climate change; as well as to share parts of these encounter stories so that this writing itself may be a lively ethnography.

The focus on *response* in ethnographies allows the opportunity move beyond the rudimentary framing of environment and its implied reality as a passive background or context, and instead to begin a conversation about ethics in a landscape and ecosystem that is entirely relational and interdependent. Anna Tsing uses the term ‘passionate immersion’⁵⁹ to describe becoming curious and therefore entangled with whomever it is that one may be engaging. While much research in the humanist world promotes neutral observation and keeping an impartial distance from ones ‘subject’, viewing other beings as resources or background for the lives of human beings, what is most exciting about this multispecies approach is its promotion of care - “learning to be affected” as Vinciane Despret⁶⁰ describes it, “and so perhaps to understand and care a little differently”.⁶¹

Multispecies ethnography is a more-than-human approach to ethnography and offers a practice of attunement to the power of subjects that are non-human to shape the world. It explores the myriad of ways in which the human ‘becomes’ through relations with other beings and,

⁵⁸ Van Dooren and Rose, “Lively Ethnographies. Storying Animist Worlds”, 77 and Monika Bakke, “Geologizing the Present. Making Kin with Mineral Species and Inhuman Forces” in *The Forces Behind the Forms* (Köln: SnoeckVerlagsgesellschaft, 2016): 58-65.

⁵⁹ Anna Tsing, ‘Arts of Inclusion, or, How to Love a Mushroom’, *Australian Humanities Review*, (2011) 50, in Thom van Dooren, Eben Kirksey and Ursula Münster Multispecies Studies: Cultivating the arts of attentiveness. *Environmental Humanities* 8, no.1 (2016): 1-23.

⁶⁰ Vinciane Despret, “The Body We Care For: Figures of Anthro-zoo-genesis”, *Body & Society* 10, no. 2-3 (2004): 131 in van Dooren, Kirksey and Münster, “Multispecies Studies: Cultivating the arts of attentiveness”, 6.

⁶¹ Van Dooren, Kirksey and Münster, “Multispecies Studies: Cultivating the arts of attentiveness, 6.

understanding the liveliness of an entity such as a spring for example, brings attention to the animacy of nonhuman and human life. This new cosmology requires paying attention to the intricate, complicated and political ways in which our lives are already entangled with other species and to take notice of how these common worlds are made through everyday interspecies encounters. It requires a noticing of what Isabelle Stengers refers to as the ‘Cosmopolitics’ of our common worlds.⁶² Cape Town’s springs offer such places to practice these arts of noticing.⁶³

Astrida Neimanis brings to light how, ‘bodies of water’ present a challenge to anthropocentrism and the favouring of humans as being the sole or primary site of embodiment, and indeed that they “undo the idea that bodies are necessarily or only human.”⁶⁴ The life of water in a river or spring shares many basic affinities and constraints with other specied beings: it interacts with the environment, it can grow and starve, thrive and be harmed and ultimately die. If a spring can be harmed, has already been harmed through the placement of concrete over its mouth, then could it not be seen as a vulnerable subject?⁶⁵ This study holds as an underpinning the Earth-centered approach and work of Cormac Cullinan, advocate and author of *Wild Law: A Manifesto for Earth Justice*.⁶⁶ Cullinan asks what societies would look like if the Earth, other animals and all natural elements were taken seriously by their political and legal structures. Far from being passive, these cosmopolitical common worlds are potent and damaged and so bring our multispecies relations within them into the realm of ethics.⁶⁷

An Ethic and Politics of Care

It is not an easy ask – fostering new ways of paying attention and thinking. It requires a practice of collective thinking in the presence of others, and in this way producing a common account of a shared world. As says Affrica Taylor, “Collective thinking require[s] slowing down, being

⁶² See Taylor, ‘Romancing or Re-configuring Nature in the Anthropocene? Towards Common Worlding Pedagogies,’ in Malone, Truong and Gray (Eds.) *Reimagining Sustainability in Precarious Times*, 61-75, and Isabelle Stengers, ‘The cosmopolitical proposal’, in Bruno Latour, & Peter Weibel, *Making Things Public* (Cambridge, Mass, Karlsruhe, London: MIT Press, 2005).

⁶³ Anna Tsing, Heather Swanson and Elaine Gan, *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* (Minneapolis, London: University of Minnesota Press, 2017).

⁶⁴ Astrida Neimanis, *Bodies of Water. Posthumanist Feminist Phenomenology* (London, New York: Bloomsbury, 2017): 2.

⁶⁵ *ibid.*

⁶⁶ Cormac Cullinan, *Wild Law: A Manifesto for Earth Justice* (Vermont: Chelsea Green Publishing, 2011).

⁶⁷ Taylor, “Romancing or Re-configuring Nature in the Anthropocene? Towards Common Worlding Pedagogies”, in Malone, Truong and Gray (Eds.) *Reimagining Sustainability in Precarious Times*, 61-75.

present, and risking attachment with others in our common worlds”.⁶⁸ This act is the first in cultivating an ethic of care.

While ‘ethics’ is most often equated with a set of rules for right conduct, I’m talking about an ethics that has more to do with an attentive openness.⁶⁹ Not just towards other persons, but towards the myriad of other beings of this world; a simple humility towards them. To look upon any entity only as an object severs the possibility of relationship with that being and forestalls the need for ethical reflection.⁷⁰ When the nature is considered merely a set of mechanical processes, real only if they can be measured, then the inhabited world is seen as a collection of objects and relationships are removed.⁷¹ It is through this process that a human can free themselves from accountability to the rest of nature, how nature is relegated to a role that allows usefulness without requiring consideration.

Karen Barad calls for a *situated* knowledge, a knowing that comes from relationship precisely because the human is an intimate part of this world. “Practices of knowing and being are not isolable; they are mutually implicated. We don’t obtain knowledge because we are standing outside the world; we know because we are of the world. We are part of the world in its differential becoming. The separation of epistemology from ontology is a reverberation of a metaphysics that assumes an inherent difference between human and nonhuman, subject and object, mind and body, matter and discourse.”⁷²

Thomas Berry, known for his articulation of the principles and philosophy of Earth Jurisprudence⁷³ described how, “[t]he universe is composed of subjects to be communed with,

⁶⁸ Taylor , “Romancing or Re-configuring Nature in the Anthropocene? Towards Common Worlding Pedagogies”, 68.

⁶⁹ Deborah Bird Rose, “Connectivity thinking, Animism and the Pursuit of Liveliness.” *Educational Theory* 67, no. 4 (2017): 491-508.

⁷⁰ David Abram, *Alliance for wild ethics*, 2020, accessed January 18, 2020, <https://wildethics.org/why-ethics/>.

⁷¹ Abram, *Alliance for wild ethics*, <https://wildethics.org/why-ethics/>.

⁷² Barad, *Meeting the Universe Halfway*, 185.

⁷³ Earth Jurisprudence is the term used first by Thomas Berry, cultural historian, for the philosophy of governance and law, in which the Earth, not human interests, is primary. It accepts that humans are born into an ordered and lawful Universe, to whose laws we need to comply if we are to be a benign presence on Earth.” Berry developed these ideas over decades in conversation with many others. For more see: Mary Evelyn Tucker and John Grim, “Thomas Berry and the Rights of Nature”, *Kosmos*, 2019, Accessed June 14, 2020, https://www.kosmosjournal.org/kj_article/thomas-berry-and-the-rights-of-nature/.

not objects to be exploited. Everything has its own voice. Thunder and lightning and stars and planets, flowers, birds, animals, trees - all these have voices, and they constitute a community of existence that is profoundly related.⁷⁴

Following the reflections of Berry and Cullinan I reflect on what a form of governance and society could look like if all the many presences involved in an urban setting with whom a common world is shared were acknowledged, not as objects, but as subjects in their own right and the multitude of relationships held with them. Not just with other animals and plants, but with mountains and storm clouds and springs. What might change if they were seen to have their own active agency, influencing life around them, as humans influence that which around them? Might speaking of the world in this way, as a community of living subjects, facilitate a new sense where each person comes to know themselves as active members of this larger community.⁷⁵

Ecofeminism is not just a green extension of feminism but is instead referred to as four-revolutions in one, linking green, socialist, feminist and postcolonial theory. The basic premise of ecofeminism, according to Ariel Salleh, author of the classic *Ecofeminism as Politics: Nature, Marx and the Postmodern*, is that the ecological crises are a result of a “eurocentric capitalist patriarchal culture built on the domination of Nature, and domination of Woman ‘as nature.’ Or, to turn the subliminal Man/Woman=Nature equation around the other way, it is the inevitable effect of a culture constructed on the domination of women, and the domination of Nature ‘as feminine.’”⁷⁶ This viewpoint is consistent with other leading ecofeminist theorists and has had not only a resurgence, but an addition of a new generation of both activists and scholars where ecofeminism is seen as a way of expanding and deepening the analysis of gender that has been largely absent from the environmental justice field.⁷⁷

The word ‘care’ means many different things to many different people but a description by feminist philosophers Joan Tronto and Bernice Fischer is one I find most insightful: care is “everything that we do to maintain, continue and repair “our world” so that we can live in it as

⁷⁴ Derrick Jensen, *A Language Older than Words* (Vermont: Chelsea Green Publishing, 2004): 361.

⁷⁵ See Barad, *Meeting the Universe Halfway* and Abram, *Alliance for wild ethics*.

⁷⁶ Ariel Salleh, *Ecofeminism as Politics. Nature, Marx and the Postmodern* (London: Zed Books, 2017): 35.

⁷⁷ See also Irene Diamond and Gloria Orenstein, ed., *Reweaving the World: The Emergence of Ecofeminism* (United States :Sierra Club Books, 1990).

well as possible. That world includes our selves, our bodies and our environment, all of which we seek to interweave in a complex, life-sustaining web.”⁷⁸ At this point in time it is no longer disputable that even urban human lives are entirely entangled with the myriad of other lives and livelihoods, and that our fates are wholly linked with these other lifeforms in ways seen, unseen and yet-to-be-seen. Care is a human trouble, but this does not make care a human-only matter. Looking at the current state of degradation of natural systems world over, an ethical reorganization of the relationship between human and nonhuman is evidently required, and its ensuing search for our obligations of care and a non-exploitative form of togetherness.

Decolonizing thought

This study engages with decoloniality and the colonial power dynamics behind city planning through the lens of psychology – and more specifically it examines and analyzes the human thought processes that have created the scaffolding underpinning the logic of colonization: that of the Eurocentric, white, male as being the singular, valid point of reference. By its very nature the call for decoloniality, unlike the exclusive singular narrative of this colonial positionality, allows for multiple ways of knowing and for multiple concerns to be addressed through verifiable knowledge drawn from different perspectives.⁷⁹

While including key works, historical references and excerpts from interviews that confront the many violent histories and race dynamics, and recognizing the enormous task of analysing race and class in the ambition of a decolonial scholarship, this work deliberately discusses a less familiar aspect of decolonization. The wider call within decoloniality itself for “collective thinking” throughout this study seeks a more diverse perspective on what decoloniality *can* also mean: less of the constant foregrounding of the human, and a more inclusive relationship with all of life. Given the global necessity to address the kind of thinking causing the climate breakdown that all beings are facing, all races self-evidently included in this, I believe this to be of vital importance. I am aware of my own positionality as a white female in South Africa, acutely so that it is from this place of privilege that I am able to focus on such a topic of the other-than-human.

⁷⁸ Joan Tronto, *Moral Boundaries: A Political Argument for an Ethic of Care* (New York: Routledge, 1993) in Maria Puig de la Bellacasa, *Matters of Care. Speculative Ethics in More Than Human World* (Minneapolis, London: University of Minnesota Press, 2017): 3.

⁷⁹ See Marisol de la Cadenas, *A World of many Worlds* (USA: Duke University Press, 2018).

Many ideas of nature are themselves alienating. Environmental historian William Cronon asked in an essay titled, *The Trouble with Wilderness*, if ‘nature’ is only in those places that are without humans.⁸⁰ If so, then how do natural springs and streams within a city find a place in people’s lives? A new and growing literature, such as the work of Affrica Taylor, Thom van Dooren and Deborah Bird Rose, First name Bakke, Maria Puig de la Bellacasa, Isabelle Stengers and Jamie Lorimer⁸¹ about re-configuring these divisive notions of ‘nature’ supports the accounts in this study of the importance in keeping the free-flowing springs in Cape Town accessible to society - to disarm the divisive narrative that has become in-built in language use, urban design, politics and policy.

The project of decolonization begins with the awareness of a shared, very long and entangled history with many other forms of living entities and that the dualistic beliefs that partition meaning, matter and nature from culture, and minds from bodies, can no longer hold.⁸² As Ariel Salleh explains “[o]ne reason why the capitalist patriarchal mode of production is so destructive to life is that its underlying ontology divides History from Nature.”⁸³ The focus of this thesis is the undertaking of decolonization that focuses on opening up the imagination to a new cosmology; seeing those who have been ‘othered’ as kin. Eduardo Kohn speaks of an ‘alter-politics’⁸⁴ that grows not from our critique or opposition to the current systems but rather from an attention to other ways of being. Now, when natural history and social history are no longer separable, it is clear that life needs to be considered beyond the human, beyond species and even beyond organic.⁸⁵ As Anna Tsing, researcher into the Anthropocene affirms, human species are

⁸⁰ William Cronon, “The Trouble with Wilderness; or, Getting Back to the Wrong Nature” in *Uncommon Ground: Rethinking the Human Place in Nature* (New York: W. W. Norton & Co., 1995): 69-90.

⁸¹ See Taylor, ‘Romancing or Re-configuring Nature in the Anthropocene? Towards Common Worlding Pedagogies’, 61-75; van Dooren and Rose, ‘Lively Ethographies. Storying Animist Worlds’; Monika Bakke, “Geologizing the Present. Making Kin with Mineral Species and Inhuman Forces” in *The Forces Behind The Forms* (Köln: SnoeckVerlagsgesellschaft, 2016): 58-65, and de la Bellacasa, *Matters of Care. Speculative Ethics in More Than Human World*, 2017; Isabelle Stengers, *Cosmopolitics 1* (Minneapolis: University of Minnesota Press, 2010) and Jamie Lorimer, *Wildlife in the Anthropocene: Conservation after Nature* (Minneapolis: University of Minnesota Press, 2015).

⁸² Achille Mbembe, *Decolonizing Knowledge and the Question of the Archive*, 2018, accessed on October 24, 2018, <https://worldpece.org/content/mbembe-achille-2015-“decolonizing-knowledge-and-question-archive”-africa-country>

⁸³ Salleh, *Ecofeminism as Politics. Nature, Marx and the Postmodern*, 196.

⁸⁴ Eduardo Kohn, *How Forests Think: Toward An Anthropology Beyond the Human* (London: University of California Press Ltd, 2013)

⁸⁵ Bakke, “Geologizing the Present. Making Kin with Mineral Species and Inhuman Forces”, 58-65.

a multispecies relationship,⁸⁶ no more evident than with water that makes up so much of our species' body.

Ecological identity

There is a large part of the picture missing in the current form of governance in Cape Town. It is no longer 'affordable' to bank on the model of behavioural economics and prioritizing capital. The 'wise water use' called for by the City of Cape Town will not last – is not sustainable - if it is reduced to scare-tactics and financial threats that goad action. Efforts at fostering environmentally responsible behaviour regarding water have largely focussed on “information-rich campaigns which are often poorly conceived and targeted, especially given that knowledge about a problem alone is unlikely to change behaviour”.⁸⁷ Cape Town finds itself today in a very new 'normal' when it comes to rainfall and water availability and it is not enough to engage only people's heads - hearts need to be engaged as well. It is the heart that informs peoples values, their actions and their care; it is the heart that engages when relationships are formed. Collecting water from the earth forms relationships with water and earth. With connective practices largely eradicated in modern societies, the term 'philosophical animism' offers a helpful footing for identity for modernized minds to foster these sensibilities of connection and interdependence; the responses that develop and nourish an ecological identity.

'Environmentally-friendly behaviour' is an inevitable side-effect of a person who identifies themselves an extension of life, inseparable from the whole. The design paradigm of modern cities by and large further estrange its citizens from this ecological identity, yet this is not an inevitable by-product but rather a basic design flaw. By engaging decolonial approaches to urban infrastructure, adopting a different story, and thus a different design to reflect that story, urban policy and design can begin to change the trajectory of the modern human suicide mission, towards a direction of connection, care and regeneration.

⁸⁶ Tsing, Swanson and Gan, *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene*, 2017.

⁸⁷ Matthew J. Zylstra, Andrew T. Knight, Karen J. Esler. *et al.* Connectedness as a Core Conservation Concern: An Interdisciplinary Review of Theory and a Call for Practice. *Springer Science Reviews* 2 (2014): 134. accessed May 24, 2020, <https://doi.org/10.1007/s40362-014-0021-3>.

Research design

This study “Collecting spring water reminds us how to be human”: In search of an ethic of care for the springs of southern Cape Town’, investigates the significance of care for living in a world that is more-than-human. It asks why it mattered that the Springs Ways Spring was closed, why its closure was a huge loss to Cape Town’s citizens and whether the new design at the Newlands Pool site addresses the needs of the people, the needs of water and the needs of Cape Town’s ‘new normal’. The following questions were asked in order to understand this primary enquiry, as well as to become aware of ways in which values that may counter water saving end up being designed into municipal structures:

- what draws people to the springs to collect water, even if they have the option to simply get it from a tap?
- is their motivation to save money and reduce their water bill?
- people can spend over an hour standing in a queue, in the hot sun, waiting their turn to fill their plastic bottles with water. This effort seems to outweigh the financial costs saved. If, contrary to what the municipality seem to believe, economics is not the only motivation, why then do people come to the springs and what do they get from their visits apart from water?
- how has the City’s installation of a wall fitted with taps as the water outlet point, and a new venue changed people’s relationship with the water they are collecting?
- has their experience of water collection as a whole changed, if people were to compare this new site to their experience at the Springs Way Spring, or the other autonomous springs where they would bend down to collect water from the earth?
- what do we want from a future where there is the option of water collection from a spring to look like in the City of Cape Town?

With the Springs Way Spring closed interviews and conversations could no longer happen there. With ethics clearance given, the interviews that I conducted were done at the new Newlands Pool collection site with the awareness that I would likely find people who used to gather water at the Springs Way Spring there, to have a point of comparison regarding these two locations. Additionally, the stark contrast in atmosphere between the Springs Way Spring and the Newlands Pool site offered a valuable opportunity to investigate how the settings of the various water points

themselves might influence experiences and attitudes about water. I added into the interview site list the springs at both St. James (fig. 6) and Boyes Drive (fig. 7).



Fig. 6. St James Spring. Image: Jess Tyrrell.

St James Spring.

Along Main road in the sea-side suburb of St James, about fourteen kilometres as the crow flies from Newlands is a stone wall made with rock, hewn from the mountain behind it. The water that comes from a protruding PVC pipe is a mixture of stream water and storm water.

People queue along the pavement and have the option of dropping off water containers with a ‘water helper’ at this spring site, who will have them ready and waiting at the requested hour for a small fee.



Fig. 7. Boyes Drive Spring. Image: Jess Tyrrell. 2019.⁸⁹

Boyes Drive Spring.

Alongside the road named Boyes Drive on the lower slopes of Muizenberg mountains is Boyes Drive Spring. It is close to the St James Spring, about three hundred meters higher up in elevation, and about fifteen kilometres as the crow flies from Newlands.

It consists of a tiny hole in the ground through which the underground water seeps to the surface world.

I included St James and Boyes Drive Springs because they both have a spirit of freedom and autonomy. These two southern springs would offer the opportunity to ask why people chose to go to certain springs, as well as inquire into what people got from these water visits.

At both St James and Boyes Drive Spring one can clearly see the movement and hear the sounds of flowing water. There are no imposed restrictions, whether by guards or opening hours. The Newlands Pool site in contrast has been turned into a place where the central value seems to be

⁸⁸ Jess Tyrrell, *St James Spring*, Cape Town, Personal photograph by author, 2019.

⁸⁹ Jess Tyrrell, *Boyes Drive Spring*, Cape Town, Personal photograph by author, 2019.

control – fences, guards, and specifically taps. Being someone who values sovereignty and takes exception to disproportionate control, it was therefore worth assuming that there were other people who, feeling similarly to me, would no longer visit the new Newlands water site and might go instead to other springs that still maintain their freedom. This offered an interesting point of comparison.

The interviews took place between February and late May 2019 and in terms of specific context this was the end of Cape Town’s summer period following the most significant drought in living memory. I used a combination of 15 short (less than 10 minutes) interviews, as well as 6 in-depth interviews (between 30 minutes to an hour and 30 minutes). These interviews were semi-structured with a combination of closed as well as open-ended questions, while placing the main emphasis on allowing the conversations to flow freely.



Fig 8. ‘Spring water tea party’ - author with other water researchers at Newlands Pool collection site 18 May 2019 (left); Fig 9. The queue here moved too fast because of the guards hurrying people along to allow in-depth interviews to take place (middle). Fig 10 Needing to create a more relaxed atmosphere for longer interviews, a group of us water researchers decided to set up a tea station, with water from the spring and to offer tea and biscuits to encourage people to stay on after they had collected water (right). Images: Jess Tyrrell. 2019.⁹⁰

Interpretation of data

At the centre of this study I have used a methodology based on that of “Indigenous storywork” - comprised of seven principles: respect, responsibility, reverence, reciprocity, holism, interrelatedness, and synergy.⁹¹ As a context for methodology the first four principles “act as an ethical guide for the researcher” to work with people, their knowledge and their stories.⁹² “In this story research process the researcher must listen to ... [p]eoples’ stories with respect, develop story relationships in a responsible manner, treat story knowledge with reverence, and strengthen

⁹⁰ Jess Tyrrell, ‘Spring water tea party’; Cape Town, Personal photographs by author, 2019.

⁹¹ Jo-ann Archibald et al., *Decolonizing Research. Indigenous Storywork as Methodology* (London: Zed Books, 2019): 1-13.

⁹² *ibid.* 1.

storied impact through reciprocity. The remaining three principles of holism, interrelatedness, and synergy enhance the meaning-making process⁹³ of lived-experience stories.

Foundational to this research was a search for new ways of thinking *collectively* about our common worlds. Philosopher of science, Isabelle Stengers proposes practicing collective thinking in the presence of others as a way of producing a ‘common account’ of our common worlds.⁹⁴ The word ‘others’ here included thinking in the presence of and *with* bodies of water, namely the springs themselves - rather than only thinking *about* them. A deep practice of attention and attending is a means to stir political and ethical imagination, such as is needed to respond to the disturbed earth system called the Anthropocene.

Edmund Husserl who is thought of by many as one of the founders of phenomenology presented this methodology as a way of turning *towards* the world as it is experienced in its felt immediacy: to “not seek to explain the world but rather to describe it as close as possible to how it makes itself spontaneously evident to awareness in direct sensorial experience.”⁹⁵ During the course of the research I followed many different tributaries, each one which required an attention to the thread of connection that linked them all, yet, later I found that these side streams themselves circled around the theme of connection itself. “This circular practice of going deeper resembles the practice of hermeneutical phenomenology,” notes Matthew Zylstra, “but also represents an approach which is increasingly lost in an age where the compulsion to constantly produce “new” information and knowledge dilutes and supplants depth of meaning”.⁹⁶ It is this depth of meaning into the practices of spring water collection that this study is interested in as a way of storying the springs and shine a light on their value.

⁹³ *ibid.* 2.

⁹⁴ Stengers, “The cosmopolitical proposal” in Latour, and Weibel, *Making Things Public. Atmospheres of Democracy*, 2005.

⁹⁵ Zylstra, *Exploring meaningful nature experience connectedness with nature and the revitalization of transformative education for sustainability*, 164. Husserl’s work was not a rejection of science but instead offered “...a plea that science, for its own integrity and meaningfulness, must acknowledge that it is rooted in the same world that we all engage in our everyday lives and with our unaided senses – that, for all its technological refinements, quantitative science remains an expression of, and hence must be guided by, the qualitative world of our common experience. For more see David Abram *The Spell of the Sensuous* (Vintage Books: United States of America, 1996): 43.

⁹⁶ *ibid.*, 414.

Each time that I come back to the word ‘connectedness’, what emerges is a deeper meaning: that of *belonging*; belonging to the more-than-human world, and the impossibility of *not* being connected. Following Zylstra, Stengers, Tsing, Van Dooren, Bird-Rose and the many others who encourage the arts of noticing, this study uses a phenomenological approach specifically to understand the experience of connectedness in order to analyse the data gathered during the interviews, observations made, in reviewing texts, as well as all the ‘unrelated’ events linked to the writing of this dissertation.

As such this dissertation attends to the values that informed the actions of Capetonians collecting spring water, so that in future this ritual may not be reduced, as it has in the past, to the shallow notion of it being a merely ‘economic’ act. On the contrary, the findings affirm three central insights into the experience of people collecting water from the autonomous springs, compared to the water-ATM – the constructed spring water point in Newlands. First, collecting spring water from autonomous springs, without taps, is an experience that serves to connect people to the Earth and the relationships between water, rock, and climate. Second, the importance of the experience of connectedness is as a cornerstone for health, for sustainability and an ethic of care. Third, the experience of connectedness both integrates and transcends the paradigm of ‘sustainability’.⁹⁷ By ‘transcending sustainability’ I mean simply that the word ‘sustain’ risks a search for ways to continue with “business as usual”, rather than to ask deeper questions of the kinds of thriving future that might be desired. Among other aspects, connectedness opens a pathway to conscious architecture and design: in other words deliberately creating spaces that are connective, restorative and that nurture personal, place-specific and planetary care.

In sum: this study establishes that in allowing people to collect water from the earth and to deliberately design for connection there are profound implications for future spring water policies, for water governance and for human and earth health. In order to make this argument, the research findings are presented in three chapters.

Chapter 1 explores Cape Town’s water socio-historically – both as an element and humans’ historical relation to it. It highlights how the narrowing down of governance to a single-story – and its fixation on economics - risks for society, as the novelist Chimamanda Adichie warns, a

⁹⁷ *ibid.*, 415.

critical misunderstanding.⁹⁸ The narrowing down to a single story is a form of power and control through its re-shaping of thought. The City of Cape Town's municipal policies are increasingly fashioned on private sector principles where corporatization has become the service delivery model and water reduced to nothing but a commodity. As a result the Springs Way Spring was corralled and turned into checkout counter rather than promoted as a place that naturally supports diverse experiences of connection. The consequences of a single story of commodification is the extinction of experience and disappearance of diversity: diversity in ways of thinking, modes of existence and different ways of being with and relating to the world.

Chapter 2 examines the reasons that people gave for gathering water at Cape Town's southern springs.⁹⁹ It examines the many ways in which water both connects and cultivates the capacity for connection, how it forms relationships and provides the opportunity to come to know oneself in the world as a participant of a living world. Those who collect spring water reported enhanced health on multiple levels. These health insights are important, and in these Anthropocene times it is vital to draw attention to the fact that the place-based learning at autonomous springs evokes an ethic of care that benefits the well-being not only people but of the *waters* themselves, the lives connected to these waters and beyond in widening circles. This has profound sustainability implications in that collecting spring water can evoke feelings of gratitude to and for the water ,and gratitude engenders a feeling of 'enoughness' and the desire to reciprocate with care.

Chapter 3 looks at the value of connectedness and its potential to go beyond the paradigm of 'sustainability'. I note evidence that suggests that the degradation of natural systems is not an inevitable by-product of modern life, but rather a design flaw. This serves to highlight the necessity to design in ways that represent interdependence and interconnection with the living natural world.

⁹⁸ Chimamanda Adichie, "The Danger of a Single Story", Filmed October 2009 at TED Global, video 19:16, accessed May 13, 2020, https://www.ted.com/talks/chimamanda_ngozi_adichie_the_danger_of_a_single_story#t-561825.

⁹⁹ There are many more springs that emerge from the Newlands aquifer specifically. Some of the more well know ones are Kildare Spring, Newlands Spring, Palmboom Spring, Kommetjie Spring and Albion Spring. There are at least fifteen springs that have been documented in the Newlands area, of which only four are easily accessible to the public, and only two of those four are known about widely and visited daily. Of the others, Albion Spring is pumped into the City's water mains; another is used by a school (SACS); and other springs are used respectively: to irrigate the Bishop's garden in Bishops court; to irrigate Kirstenbosch Gardens; by the local forestry office as drinking water; and two springs are used by SAB Miller for beer brewing according to Geohydrological and Geospatial Solutions International (Pty) Ltd., *Hydrogeological Investigation of Existing Water Springs in the City of Cape Town and Environs. Spring Use Strategy*, GEOSS Report no. 2014/10-08 for City of Cape Town. See also Changhong Wu, *Groundwater occurrence in the Table Mountain Area of Cape Town, South Africa* (University of the Western Cape: Unpublished Master's thesis, 2008): 40.

I ask how we might design for liveliness and connectivity, delight and love. As eco-philosopher and activist Val Plumwood wrote, “love can develop capacities for perception and sensitivity that might otherwise be stunted, and can provide a basis to spread its virtues of attention, compassion and care to a wider field”.¹⁰⁰

What emerges from this study that weaves together ecopsychology, sustainability education, phenomenology and design theories is discussed in the conclusion: a deeper awareness of values other than capital, the inter-dependant ecosystem of health, an exploration into how water might find representation that goes beyond the narrative of resource and how this all might relate to a future that involves a politics and ethic of care.

Inspired by the possibility of how water collection from the free-flowing springs around Cape Town might itself impart a water ethic, this study develops the notion of relationship as a dimension central to the challenges we are facing in the Anthropocene. In Cape Town, looking to the future of more severe droughts, it acknowledges that an encounter with a natural spring can in itself be educational for the water collector and evoke a new appreciation for water. The study goes on to explore alternative design processes that *include* connection, specifically in the context of the Anthropocene and in modern urban landscapes, in order to highlight design approaches that may be used to reinvest Cape Town’s “jailed” water at the Newlands Pool site with meaning. It highlights the necessity of a paradigm change in urban relations to water and the urgent need for design that restores relations with the earth that have been disrupted by centuries of commodification.

The language used to speak about water, as well as to publicise information about water is itself frequently detached and impersonal and only perpetuates the identification of it as a lifeless resource, little more than a substance for human well-being. I have therefore woven in where possible a more poetic language form. I find poetry to be intimately connected to good thinking and a way to look more deeply into the phenomenology of life. This is “a sensuous ecopoetics, prioritising emotional and imaginative faculties that the epistemology and procedures of modern science typically dismiss.”¹⁰¹ I begin with the living image of a wellspring.

¹⁰⁰ Val Plumwood, “Shadow Places and the Politics of Dwelling”, *Australian Humanities Review* 44 (2008), accessed 20 June 2020, <http://australianhumanitiesreview.org/2008/03/01/shadow-places-and-the-politics-of-dwelling/>.

¹⁰¹ Jennifer A. Wagner-Lawlor, ‘Regarding intimacy, regard, and transformative feminist practice in the art of Pamela Longobardi.’, *Feminist Studies* 42, no.3 (2016): 652.

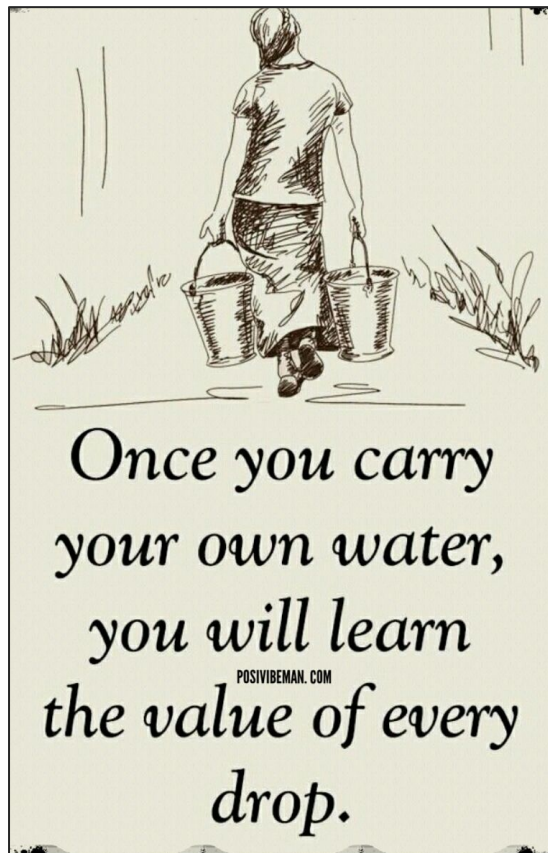


Fig. 11. Appreciate everything. Image: anonymous. 2019.¹⁰²

¹⁰² *Appreciate everything*. In Pinterest. Accessed March 30, 2020.
<https://za.pinterest.com/pin/674625219165155009/>.



Chapter 1

From Wellspring to Water ATM



Fig. 12. Newlands Pool water collection site separation gate, padlocked closed to split the waiting queue from the group at the actual water points.¹⁰³ (left) Fig. 13. people in the “inside” group about to collection water.¹⁰⁴ (right) Images: Jess Tyrrell. 2019.

//ammi I ssa: Place of Sweet Waters

Mythologies in all parts of the earth overflow with images and stories of wellsprings – dependable dwelling places of liveliness, generativity, nourishment, and the numinous.¹⁰⁵ From

¹⁰³ Jess Tyrrell, *Newlands Pool water collection site separation gate, padlocked closed to split the waiting queue from the group at the actual water points*, Cape Town, Personal photograph by author, 2019.

¹⁰⁴ Jess Tyrrell, *People in the “inside” group about to collection water*, Cape Town, Personal photograph by author, 2019.

¹⁰⁵ Plotkin, *Nature and the Human Soul*, 303.

invisible geological depths, a clear, cool life tonic surfaces, offering wonder as it flows into the visible world.

Cape Town has its own story of springs. Here, a meeting of elements – water and land, latitude and weather – allowed a unique diversity of life to evolve over the last 450-million years,¹⁰⁶ shaping the rocks, waters and later all who came to the slopes of Table Mountain. The mountain rises out of the ocean to a point of just over one thousand meters above sea level, where the sea winds, laden with moisture, hit this iconic shaped body of rock causing the air to rise, clouds to form and rain to fall. A certain area at the foot of the mountain now known as Newlands receives the highest rainfall in South Africa per year.¹⁰⁷ This sky-water seeps into the mountain’s predominantly porous sandstone and slowly down through the layers of rock. Springs occur when permeable rock meets impermeable rock.¹⁰⁸ The water pools along the line of this hard rock, pulled by gravity, until it finds a way out to the surface world.

Table Mountain’s Springs have sustained people, plants, animals and ecosystems for uncounted centuries. Evidence like that of carbon-dated charcoal uncovered in Peers Cave - a site on the southern peninsula above the suburb of Fish Hoek - shows that people lived on the Cape peninsula around 35 000 – 36 000 years ago.¹⁰⁹ This reality is likely to have only been possible because of the Cape’s fresh water. Before Cape Town was settled by Europeans, the indigenous Khoekhoe, comprising several bands of pastoralists knew this area as *//ammi I ssa*, now Anglicised into “*Camissa*”, meaning ‘*place of sweet waters*’,¹¹⁰ because of the clear spring water available in abundance. The broader peninsula of the Cape was known as *||Hu-!Gaeb*, the place

¹⁰⁶ Terence McCarthy and Bruce Rubidge (Eds.), *The Story of Earth & Life. A southern African perspective on a 4.6-billion-year journey* (Cape Town: Struik, 2005): 191.

¹⁰⁷ South Africa Weather Service, *South Africa*, 8 September, 2010, accessed July 23, 2020, https://web.archive.org/web/20100909000929/http://www.1stweather.com/regional/climate/index_climate.shtml.

¹⁰⁸ Changhong Wu, “Groundwater occurrence in the Table Mountain Area of Cape Town, South Africa”, (University of the Western Cape: Unpublished Master’s thesis, 2008).

¹⁰⁹ Deano Snyder et al., “A mid-Holocene AMS 14 C date for the presumed upper Pleistocene human skeleton from Peers Cave, South Africa”, *Journal of Human Evolution* 56, no. 4 (2009): 431-434.

¹¹⁰ Patric Tariq Mellet, *Camissa People*, n.d., accessed September 7, 2018, <https://camissapeople.wordpress.com/camissa/> and Caron von Zeil, *Reclaim CAMISSA*, 2018, accessed 14 March 2019, <http://www.reclaimcamissa.org/about.html>. Reclaim Camissa is a movement created by Cape Town citizen, activist and landscape architect Caron Von Zeil to secure the natural water sources of 5 artisanal Springs in the City Bowl and create a profoundly interactive outdoor public environmental center for the benefit of all. von Zeil has also created an extensive water commons archive online.

where the clouds gather.¹¹¹ These names give a momentary glimpse into a knowledge and a world that was intimately known.

“Waters’ things”

J. David Lewis-Williams, professor emeritus of cognitive archaeology at the University of the Witwatersrand explains that when analysing narrated accounts given by the indigenous |Xam,¹¹² and later the pastoralist Khoekhoe to try and understand their views on the world, the significance is hard to gauge from narrative structure on its own. However, he goes on to suggest, if one were to probe beneath the narrative and not ‘universalise’ the myths and stories, then meaning and appreciation may be cumulatively revealed.¹¹³

Sustainable resource use by the |Xam and Khoekhoe is evidenced in Jan van Riebeeck’s diary and a visiting surgeon in 1658, where both described the abundant, thriving ecosystem of the Cape with wood, plentiful clean water, a prolific shoreline of seafood and a bountiful ocean and terrestrial life, including megafauna.¹¹⁴ The |Xam had been living in, or at least visiting this area for thousands of years and it was their ‘management practices’ that allowed a very healthy landscape to continue. Although their specific practices, philosophies of sustainability, or concepts of nature particularly cannot be known now, what is clear is that whatever they were doing resulted in an abundant ecosystem and their ‘use’ of ‘resources’ was evidently sustainable. First-hand knowledge of water sources and water cycles as relationships, where the requirement of reciprocity through taking care seems to have been well understood. After all, if worlds are made of relationships, taking care of those relations is taking care of the world.¹¹⁵

¹¹¹ Mellet, *Camissa People*.

¹¹² The |Xam is the name most people are familiar with then referring to a group of San who lived in the south and western Cape region of South Africa. |Xam is in fact the name of the dialect spoken and the speakers themselves were the |Xam-ka !'ē.

¹¹³ J David Lewis-Williams, “Three nineteenth-century Southern African San myths: a study in meaning”, *Africa* 88, no. 1 (2018): 154.

¹¹⁴ H. C. V. Leibbrand, *Precis of the Archives of the Cape of Good Hope. January, 1656 – December, 1658. Riebeeck’s Journal &c.* (Cape Town: W. A Richards & sons. Government Printers, 1897): 46. accessed 10 July, 2020 https://www.sahistory.org.za/sites/default/files/jan_van_riebeeck_diary.pdf. The prolific ecosystem is recorded again by John Nieuhof, surgeon in the Cape in February 1654, who wrote, “We again went fishing, and in one draught caught as much as the shallop could hold: of them Heer Rietbeek [Van Riebeeck] took as much for himself as could be carried in fourteen wheelbarrows.” Raven-Hart, R. *Cape of Good Hope 1652-1702: The First Fifty Years of Dutch Colonialization as Seen by Callers*. Vol 1 (Cape Town: A.A Balkema, 1971): 11.

¹¹⁵ Lesley Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, (Durham: Duke University Press, 2020): 42

The !Xam, and to an extent the Khoekhoe, were a society that was based on tracking, where the knowledge of movement was the important thread of connection.¹¹⁶ The ‘water animals’ – rain snakes and water spirits – are hard to identify with for a linear modern mind, but can be more easily appreciated as manifestations of relational thinking, where emphasis is placed on relations and relatedness – “the Snake and the water are but one”.¹¹⁷ What links snake and water is movement and sound, flow, hiss, wetness, rain, clouds. They are ‘water’s things’.¹¹⁸ This is an inclusive way of being in relation *to*, of thinking *with* – and not as a separate being thinking *about* – the world.¹¹⁹ As Veronica Strang, an environmental anthropologist who has written extensively on water and human-environment relations explains, “water imagery is used cross-culturally to articulate ideas about movement, flow and transformation over time”.¹²⁰ She understands the hydrological cycle as frequently providing “a model for cosmological constructs about ephemeral cycles of existence”.¹²¹

From rain’s things to people’s things

Strang and others consider the change in beliefs in many cultures worldwide from collaborative relationships to that of human dominion over and distinction apart from nature to be linked to the

¹¹⁶ Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, 41.; Neil Rusch, “Sounds and sound thinking in !Xam-ka !au: “These are those to which I am listening with all my ears””, *Cogent Arts and Humanities* 3, no.1 (2016): 1-16; and Veronica Strang, “Reflecting nature: water beings in history and imagination”, 251.

¹¹⁷ Rusch, “Sounds and sound thinking in !Xam-ka !au: “These are those to which I am listening with all my ears””, 1-16.

¹¹⁸ Hoff, ‘The water snake of the Khoekhoen and /Xam’, 21–37.

¹¹⁹ Lewis-Williams, “Three nineteenth-century Southern African San myths: a study in meaning”, 154. Through the narratives recorded in the Bleek/Lloyd archive about the land, the rain, the history of the people narrating, and origins of the stars and the moon, there is the impression, certainly to scholars such as Ansie Hoff and Neil Rusch, of a partnership and equality with the material world, the recognition of the agency of non-humans, and a low-key and sustainable resource use. See W. H. I. Bleek and L. C. Lloyd, “Notebooks. Stories”, *The Digital Bleek and Lloyd*, accessed May 9, 2020, <http://lloydbleekcollection.cs.uct.ac.za/stories.html>. See W. H. I. Bleek and L. C. Lloyd, *Specimens of Bushman Folklore* (London: George Allen, 1911); Ansie Hof, “Guardians of Nature Among the /Xam San: An Exploratory Study”, *The South African Archaeological Bulletin* 66, no.193 (2011) 41-50; Ansie Hoff, ‘The water snake of the Khoekhoen and /Xam’, *The South African Archaeological Bulletin* 52 (1997): 21–37; Neil Rusch, “Sounds and sound thinking in !Xam-ka !au: “These are those to which I am listening with all my ears””, *Cogent Arts and Humanities* 3, no.1 (2016): 1-16 and Veronica Strang, ‘Reflecting nature: water beings in history and imagination’ in *Waterworlds: anthropology in fluid environments* (New York: Berghahn Books, 2015): 251.

¹²⁰ Veronica Strang, *The Meaning of Water* (Oxford: Berg, 2004): 251.

¹²¹ *ibid.*, 62.

rise in agriculture in human societies.¹²² In a chapter of Strang’s book titled, ‘*Reflecting nature: water beings in history and imagination*’, she explains how, rather than working with seasonal movements and the natural rise and fall of springs and rivers, societies developed technologies that could accumulate and direct water, controlling the material environment to meet human needs.¹²³ As a result the representations of water-beings and peoples’ relationships to flow were altered to fit the new power dynamic.¹²⁴

When the Dutch landed on the shores of the Cape in the mid 17th Century, they brought with them their own version of societal changes in the human-nature power dynamic – described by Ariel Salleh as “a eurocentric capitalist patriarchal culture built on the domination of Nature.”¹²⁵ For the Dutch both water and the land were seen as objects and thus extractable for profit. This version of nature did not seem to recognize the low-impact and sustainable practices nor the versions of nature of the Khoekhoe and the |Xam.

“Van Riebeeck and his successors brought to the Cape the techniques of cartography that were new in Europe at the time, together with ordinances (the “placcaat”) and the capacity to compel compliance in dungeons and a torture chamber ... [T]he beginnings of science in South Africa generated the extension of new knowledge ... imposed by the threat of “legitimate” violence”, writes Lesley Green in her book *Rock | Water | Life*, that examines colonialization, racism and environmental destruction in South Africa.¹²⁶ Using the new ideas of the mathematics of space (cartography), van Riebeeck manufactured invisible borders – essentially racial exclusion zones – a move that marked the imposition of a new cosmology.¹²⁷ According to Jan van Riebeeck himself in his personal journal¹²⁸ on the 21st February in 1657 he granted nine “*free burghers*”¹²⁹ land

¹²² Strang, ‘Reflecting nature: water beings in history and imagination’ in *Waterworlds: anthropology in fluid environments*, 1-31. See, among others, Donald Worster, *Rivers of Empires: Water Aridity, and the Growth of the American West* (New York: Pantheon, 1985) and Max Haiven, “The Dammed of the Earth: Reading the Mega-Dam for the Political Unconscious of Globalization”, in Cecilia Chen, Janine MacLeod, and Astrida Neimanis (Eds.) *Thinking with Water* (Canada: McGill-Queen’s University Press: 2003): 213-231.

¹²³ *ibid.*, 8.

¹²⁴ *ibid.* 10.

¹²⁵ Salleh, *Ecofeminism as Politics: Nature, Marx and the Postmodern*, 35.

¹²⁶ Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, 34.

¹²⁷ *ibid.*, 35.

¹²⁸ H. C. V. Leibbrand, *Precis of the Archives of the Cape of Good Hope. January, 1656 – December, 1658. Riebeeck’s Journal &c.*, 46.

¹²⁹ ‘Burgher’ is the Dutch word for citizen.

rights along the Dutch (re)named Liesbeek River.¹³⁰ An insight by Green into the renaming of the land around ||*Hui !Gaeb* by the Dutch is how this can be seen as an expression of another way of being human in the world – a “new political and cultural and economic mastery”.¹³¹ Names such as ‘New-lands’ and ‘Wood-stock’ speak to what the place could provide for the human. It appeared as if consideration was not required as the Dutch began to extract the Cape’s resources.¹³² What had been a shared space, essentially a commons, for thousands of years became the claim of private property and was closed off. And so a moment in the history of South Africa was marked where the mathematization of space, presented as neutral and independent fact,¹³³ imposed itself not only on the land, but in the psyche of the future people who would come to call the Cape home.

It is useful here to distinguish between science and scientism. Green describes science as “a reliable way of producing knowledge through experimental processes”¹³⁴, as opposed to scientism which holds that scientists produce “neutral, transcendent, natural science that is permanently and totally separate from political power, regardless of context”.¹³⁵ Similarly, Verschuuren et al. see scientism as the belief that “science has authority over all other interpretation of reality and life, such as religious, spiritual, philosophical, mythical or humanistic explanations”.¹³⁶ According to Green, discerning between the two is important because this “opens the way to recognising and celebrating scientific achievements in producing knowledge of the world, while simultaneously opening up space for thinking critically about the irrational, transcendent political power that science accrues when it denies its locatedness in society”.¹³⁷

Though science was still being developed at this time in history, what amounts to scientism of the time imposed by the Dutch through force, mapped onto the slopes of ||*Hu-!Gaeb* allowed a regime

¹³⁰ M. Attwell, *Notes on the historical significance of the Newlands spring*, 1994, accessed October 5, 2018, <http://norman.rasmussen.co.za/dl/notes-on-the-historical-significance-of-the-newlands-spring.pdf> and Caron von Zeil, *Calling On Government to conserve groundwater springs* 2018, accessed October 27, 2018, <http://thegreentimes.co.za/calling-government-conserve-groundwater-springs/>.

¹³¹ Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, 39.

¹³² Victor Corral-Verdugo; Robert B. Bechtelb; Blanca Fraijo-Singc, ‘Environmental beliefs and water conservation: An empirical study’, *Journal of Environmental Psychology* 23 (2003): 247–257.

¹³³ Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, 34.

¹³⁴ *ibid.*, 38.

¹³⁵ *ibid.*

¹³⁶ Bas Verschuuren, Robert Wild, Jeffrey McNeely and Gonzalo Oviedo (Eds.), *Sacred Natural Sites: Conserving Nature and Culture* (London, Washington DC: Earthscan, 2010): xxv.

¹³⁷ Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, 38.

of private property and water ownership to erase the Khoekhoe and |Xam presences.¹³⁸ In a description of the Newlands area by both M. Attwell, in a paper titled ‘Notes on the historical significance of the Newlands spring’, and Kevin Wall in his research into the Cape’s municipal restructure due to water demands, the new land owners were assigned to produce food for a growing Cape settlement and passing ships, all of which were entirely dependent on streams and spring water.¹³⁹ These new farmers barred the Khoekhoe from bringing their cattle to the springs, seeming not to notice the importance of care for these waters, nor in acknowledging the water-beings that protected them, and thus both the Khoekhoe and the |Xam’s access to water became increasingly difficult.¹⁴⁰ What was clearly a very different way of living with the natural world known by these original inhabitants was subdued, forcefully overridden as the lands were turned into private farmsteads under this imposed ‘cosmopolitics’.¹⁴¹

From Spirits to spirits

Attwell’s account of the historical background of Newlands describes one of the properties assigned to the *free burgher* farmers was adjacent to what is today known as Springs Way Spring, known then as Papenboom.¹⁴² The spring itself was renamed from Papenboom to Newlands Spring when De Nieuwe Land (Newlands) Estate was established in 1700.¹⁴³ The first beer brewing licence was granted in 1694 to Rutger Mensing, who used the water from the Papenboom Spring to brew his beer.¹⁴⁴

¹³⁸ *ibid.*

¹³⁹ Kevin Wall, *Water Supply : Reshaper of Cape Town's Local Government a Century Ago*, accessed May 31, 2018, https://researchspace.csir.co.za/dspace/bitstream/handle/10204/3062/Wall_2008_d1.pdf;sequence=1 and Attwell, *Notes on the historical significance of the Newlands spring*.

¹⁴⁰ Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, 31.

¹⁴¹ *Cosmopolitics* is a term created by Isabelle Stengers. Through this term Stengers has been able to show how a politics that will not be attached to a cosmology is moot and that a cosmos detached from politics is irrelevant. Where science may see a spring or a mountain as simply “a thing”, a resource to be used, an ecosystem service to be exploited, it is in effect claiming that there is a single, transcendent truth, and asserting its cosmos as the only one. This is cosmopolitics at work.

¹⁴² Attwell, *Notes on the historical significance of the Newlands spring*, 1.

¹⁴³ Caron von Zeil, “History of Newlands Spring”, Reclaim Camissa, 2013, accessed May 8, 2018. This page is no longer available after the website went under construction. Some of the same information is still available in an article written by von Zeil: “Calling On Government to conserve groundwater springs”, *The Green Times*, 2018, accessed October 27, 2018 <http://thegreentimes.co.za/calling-government-conserve-groundwater-springs/>.

¹⁴⁴ Attwell, *Notes on the historical significance of the Newlands spring*; and von Zeil, *Calling On Government to conserve groundwater springs*.

By the late 19th century there were several breweries in the Newlands area using the local springs as their water supply. These waters, previously dwelling places for Spirits were turned into spirits to be sold in what amounted to a “looting of the commons.”¹⁴⁵ The various breweries were bought up one-by-one by a man called Anders Ohlsson between 1888 and 1889 who eventually went on to consolidate his property into Ohlsson’s Cape Breweries.¹⁴⁶

In 1888 Ohlsson established the Cape Town and District Waterworks company to supply the small municipalities (Rondebosch, Mowbray, Claremont, Wynberg, Newlands and Woodstock) with fresh water. These areas had previously been receiving most of their water from the Liesbeek River but, by this stage, the river had become so severely polluted by the breweries and other industries that those municipalities depending on its water were suffering from water shortages.¹⁴⁷

Marx used the concept of a ‘rift’ to describe the estrangement of human beings from the metabolic relations between themselves and the ‘natural laws’ of life.¹⁴⁸ In a paper by Kevin Wall that investigates the need for adequate waters as the most compelling reason for Cape Town’s local government being reshaped over a century ago, he points out that for the first 250 years of its colonized existence Cape Town was *entirely* dependent on water sources that came from Table Mountain.¹⁴⁹ As the town grew so did the metabolic rift, a drifting of many people from a direct relationship with the streams and springs of the Cape. Accordingly, the structure of the city’s government changed in order to be able to accommodate not only more people, but the ever increasing demand on water supply.

¹⁴⁵ Patrick Bond, “Water Commodification and Decommodification Narratives: Pricing and Policy Debates from Johannesburg to Kyoto to Cancun and Back”, *Capitalism Nature Socialism* 15, no.1 (March 2004): 8.

¹⁴⁶ Attwell, *Notes on the historical significance of the Newlands spring*; Ohlsson Cape Breweries later came to be called SA Breweries, then SAB-Miller and bought in 2016 by AB InBev. This huge multinational merged SAB-Miller with Coca-Cola Beverages Africa (notably this was the company which created a huge amount of the wealth for the current President of South Africa, Cyril Ramaphosa. For more see Green, *Rock, Water Life: ecology and humanities for a decolonial South Africa*, 58. Significantly, with these many properties he purchased, Ohlsson also acquired all water rights associated with them which, in the present day translates as public water commons being closed off by private property lines, the brewery drawing millions of litres of spring water from this commons daily, free of charge, while using the water to make beer that they sell for profit.

¹⁴⁷ Attwell, *Notes on the historical significance of the Newlands spring*.

¹⁴⁸ Foster, “Marx’s Theory of Metabolic Rift: Classical Foundations for Environmental Sociology”, 366-405.

¹⁴⁹ Wall, *Water Supply: Reshaper of Cape Town’s Local Government a Century Ago*, 1.



Fig. 14. Ohlsson's Brewery employees. Newlands 1880. Image: Historic Archives of Foresters Arms. 1880.¹⁵⁰

The water commons

As mentioned, the water commons in the form of the springs were struck from the City of Cape Town's Register of Assets in 1994, but their importance returned rapidly to the city's larger consciousness through their provision of thousands of Capetonians with clean, drinkable water during one of the most dramatic and controversial droughts in the city's recorded history. The threat of 'Day Zero' – the name given to Cape Town's 'imminent doomsday', when "the taps may run dry and residents begin queuing for water"¹⁵¹ – and the increasingly persistent demand by local government for citizens to reduce their water usage led to an enormous increase in the number of people collecting water from the natural springs all over the city. A substantial volume

¹⁵⁰ *Ohlsson's Brewery Employees. Newlands 1880*, Cape Town, in *The History of Foresters Arms*, 2013, accessed May 4, 2020, <https://forries.co.za/our-history/>.

¹⁵¹ Carla Bernardo, "Day Zero: Scare tactics, science and solutions", *Mail & Guardian*, 6 March 2018, accessed October 1, 2018, <https://mg.co.za/article/2018-03-06-day-zero-scare-tactics-science-and-solutions>.

of stored municipal water was saved, in part thanks to the springs supplementing peoples water needs.



Fig. 15. Cape Town's prominent springs. Image: John McCann. 2018.¹⁵²

While the houses and homes along Springs Way that lead to Springs Way spring's access point are private property, the water itself is a common pool resource. Cape Town, with its common pools of water resources, is a city whose waterways highlight its racialised geography: areas that were demarcated for black and coloured people by the apartheid-era Group Areas Act, now contain streams or springs rendered undrinkable from pollution. Affluent, still predominantly white areas like that of the Newlands spring, have access to land and ecologies with clean, drinkable water. According to Johannes Euler and Leslie Gauditz, commons are resources and products that “are created, cared for and used in a shared way in a great variety of forms. The term has increasingly come into use again over the past decades – “again” because commons as concepts and praxis are ancient and exist worldwide.”¹⁵³ Today, research on the commons is

¹⁵² John McCann, *Cape Town's prominent springs*, Cape Town, in *Mail & Guardian*, 2018, accessed November 8, 2019, <https://mg.co.za/article/2018-02-01-run-on-spring-hints-at-cape-s-future/>.

¹⁵³ Johannes Euler and Leslie Gauditz, “Commoning: a different way of living and acting together”, *Degrowth*, 23 February 2017, accessed July 15, 2020, <https://www.degrowth.info/en/2017/02/commoning-a-different-way-of-living-and-acting-together/>.

often associated with Elinor Ostrom, who received the Nobel Prize for Economic Sciences in 2009. Ostrom distilled her far-reaching research into best practice principles – suggestions on how commons can be self-governed sustainably and equitably. Some of these include locally adapted conflict resolution strategies and self-chosen regulations, ensuring that those affected by the rules can participate in modifying the rules.¹⁵⁴ Differing from Ostrom, “other authors assume that the main shared features should be looked for in the actual social arrangement, the *commoning*, rather than in the institutions and regulations.”¹⁵⁵

Commons, unlike the exchange of goods of capitalism, rely on voluntary contributions.¹⁵⁶ During the Cape Town drought the innovative pipe structure created by one man, Riyaz Rawoot, to help more citizens have easier access to the Springs Way water commons is an example of a voluntary contribution. Rawoot also volunteered his time, designating himself peace-keeper, to help manage inevitable tensions. Commended by Steven Robins in an article about the loss of the spring at Springs way, Robins describes how Rawoot, “[i]nstead of verbally instructing people to behave with consideration towards each other, he used ropes to channel movement along the lines to the water points, and made posters with didactic messages to encourage users to treat each other with courtesy and respect: “Help each other. 25 liters for you, 25 liters for me”.¹⁵⁷ As Rawoot himself explained, “Rather than trying to tell people to behave properly, I let the ropes and posters do the talking.”¹⁵⁸ Through this voluntary, citizen-driven creativity he cultivated and nurtured “a communal culture of co-operation that allowed both social relations and the water to flow smoothly.”¹⁵⁹ He was given the honorary title of “water keeper” by fellow water collectors – a mark of respect and acknowledgment of his public service and personal contribution towards this shared resource. Rawoot bore this title with pride.

¹⁵⁴ Jay Walljasper, “Elinor Ostrom's 8 Principles for Managing A Commons”

¹⁵⁵ Euler and Gauditz, “Commoning: a different way of living and acting together”; and Walljasper, Elinor Ostrom's 8 Principles for Managing A Commons.

¹⁵⁶ *ibid.*

¹⁵⁷ Robins, “The Kildare Road Spring: A Place buried under concrete”.

¹⁵⁸ *ibid.*

¹⁵⁹ *ibid.*



Fig. 16. Riyaz Rawoot's improvised pipe structure helping more people access the water commons at Springs Way Spring. Image: Sid Lockett. 2018.¹⁶⁰

Cape Town was, and still is in crisis because the water commons are not being given attention and care. The very definition of a commons is something that affects everyone, not just private property owners, and the closure of Springs Way Spring indicates that property ownership directly informs decision-making about space and the commons.¹⁶¹ For months the local ward councillor and the residents of this small area in Newlands put intensive pressure on the City of Cape Town, calling for them to block access to the spring on the grounds of permanent traffic, noise and the influx of 'outsiders' - primarily from the poor and working class areas of the Cape Flats¹⁶² - coming to collect water. Word started to spread that the Springs Way spring would be permanently closed.

¹⁶⁰ Sid Lockett, *Riyaz Rawoot's improvised pipe structure helping more people access the water commons at Springs Way Spring*, in *Daily Maverick*, 4 June, 2018, accessed March 2, 2020, <https://www.dailymaverick.co.za/article/2018-06-04-the-kildare-road-spring-a-place-buried-under-concrete/#gsc.tab=0>.

¹⁶¹ Lesley Green, *Professor Lesley Green statement made on 2 Aug 17 to the Standing Committee on Agri, Tourism and Economic Development*, accessed March 25, 2018, available publicly via: <https://www.facebook.com/notes/pha-food-farming-campaign/professor-lesley-green-statement-made-on-2aug17-to-the-standing-committee-on-agr/835768196598610/>.

¹⁶² Robins, "The Kildare Road Spring: A Place buried under concrete"

In early September 2017, hearing this, Rawoot started a petition to stop the closure from going ahead. Within a matter of days he had received hundreds of signatures in support of keeping the spring accessible to the public. Approached for comment by Independent Online,¹⁶³ the City would not confirm nor deny the plans to close the spring, despite multiple attempts from the Cape Times¹⁶⁴ to also get clarity from them. Eventually, after a flood on social media Mayoral committee member Xanthea Limberg responded, saying that there was “no intention on the part of the City to close the collection point.”¹⁶⁵

One of the founding values of South Africa as a constitutional democracy is a system of democratic governance to ensure accountability, responsiveness and openness.¹⁶⁶ There are clear principles of public involvement in decision making that are requisite, such as:

- Promotes active and representative participation towards enabling all community members to meaningfully influence the decisions that affect their lives;
- Engages community members in learning and understanding community issues, and the economic, social, environmental, political, psychological, and other associated courses of action.¹⁶⁷

¹⁶³ IOL is a news and information website in South Africa.

¹⁶⁴ The Cape Times is an English-language morning newspaper owned by Independent News & Media SA and published in Cape Town, South Africa.

¹⁶⁵ Daniels, “Petition to prevent ‘free water’ closure in Newlands”

¹⁶⁶ “Public Participation Framework for the South African Legislative Sector”, *SA Legislative Sector*, June 2013, accessed July 16, 2020, <http://sals.gov.za/docs/pubs/ppf.pdf>: 16.

¹⁶⁷ Parliament of the Republic of South Africa, “Chapter Five: Public Participation Model”, *Parliament of the Republic of South Africa*, n.d., accessed July 16, 2020, https://www.parliament.gov.za/storage/app/media/Pages/2019/august/19082019_ncop_planning_session/docs/Parliament_Public_Participation_Model.pdf: 2.



Fig. 17. The water queue at Springs Way Spring. Image: David Harrison. 2018.¹⁶⁸

Despite public outcry, a petition with hundreds of signatures and the statement by municipal official Limberg that the spring would not be blocked, the final decision to bar access to Springs Way with concrete was made only days after Limberg's statement. Yet the information produced in support of this decision was based on questions to a select few, revealed in ward councillor Ian Iversen's statement to Independent Online newspaper: "[a] meeting will be held ... with SA Breweries¹⁶⁹ and the Water Department to discuss the spring in Springs Way off Kildare Road, Newlands, and how to address the current situation."¹⁷⁰ Public engagement that consists of consultation with a multi-million Rand private company and local government only is not acceptable, particularly when engaging with a commons. The municipality got data, but it was

¹⁶⁸ David Harrison, *The water queue at Springs Way Spring*, Cape Town, in *Mail & Guardian*, 2018, accessed March 25, 2020, <https://mg.co.za/article/2018-02-01-run-on-spring-hints-at-capes-future/>.

¹⁶⁹ SA Breweries used to have a spring water access point that helped relieve the pressure on Springs Way spring during the drought, however this was eventually closed due to overcrowding sometime during the drought.

¹⁷⁰ Nicola Daniels, 'City seals fate of Springs Way water collection point', *IOL*, 15 September 2017, accessed May 1, 2019, <https://www.iol.co.za/capetimes/news/watch-city-seals-fate-of-springs-way-water-collection-point-11218860>.

not useful data¹⁷¹ - and certainly not useful to the water collecting citizens of Springs Way. So while the resulting action from the municipality may have been the only viable solution – to reroute the spring water to a ‘more convenient area with parking’ – it failed in its principle duty as managers of this common pool resource. Where commons are concerned all members using them have rights as well as obligations and duties, yet the municipality failed to follow any meaningful public participation processes.¹⁷² The municipality’s failure was to ask the kinds of questions that would have revealed really useful evidence. What might have happened if they had conducted a good study that had come to understand the beauty of a spring water commons? This is one of the core concerns of this study – the lack of engagement by the City with what the spring *is*, and *does*: for a spring is a point of connection to the earth and its water flows, and to the source of life.

What remains of the spring today, in place of the hundreds of colourful pairs of feet standing patiently in line, chatting to the pairs of feet behind and in front, where conversations flowed like the water, are silent concrete slabs. Steven Robins, Professor in the Department of Sociology and Social Anthropology at Stellenbosch University identified what gets demolished when decision-making is based on a version of nature as a commodity: “By covering the spring with concrete, the City destroyed a creative social experiment born in a time of crisis and public panic. By criminalising Rawoot’s improvised pipe structure, and threatening him with having to pay the costs for dismantling it, the City failed to acknowledge and celebrate an innovative act of socially responsible citizenship. It also failed to anticipate how closing a historically and culturally significant site could trigger anger and resentment, reminding many Capetonians of their historical experiences of forced removals of the 1960s.”¹⁷³

¹⁷¹ Green, *Professor Lesley Green statement made on 2 Aug 17 to the Standing Committee on Agri, Tourism and Economic Development*, <https://www.facebook.com/notes/pha-food-farming-campaign/professor-lesley-green-statement-made-on-2aug17-to-the-standing-committee-on-agr/835768196598610/>.

¹⁷² Jay Walljasper “Elinor Ostrom’s 8 Principles for Managing A Commons”, 2011, *On the Commons*, accessed September 8, 2018 <http://www.onthecommons.org/magazine/elinor-ostroms-8-principles-managing-commons#sthash.jwdC1K5c.dpbs>.

¹⁷³ Robins, “The Kildare Road Spring: A Place buried under concrete”, <https://www.dailymaverick.co.za/article/2018-06-04-the-kildare-road-spring-a-place-buried-under-concrete/#gsc.tab=0>. Steven Robins has published on a wide range of topics including citizenship and governance.



Fig. 18. Springs Way Spring today: a once-vibrant Spring buried under concrete. Image: Jess Tyrrell. 2018.

Nature as property – water as commodity

“Watery language naturalizes the movements of capital” – Janine MacLeod¹⁷⁴

David Harvey defines a commodity as, “something that meets a human want, need or desire. It is something external to us that we take possession of and make ours.”¹⁷⁵ The problem with the commodification of water, a commons, becomes clearer through Euler and Gauditz, who point out that, “[c]urrently, commons can be understood as a concept based on equality and self-governance that is in conflict with the capitalist logic of commodities.”¹⁷⁶

For most citizens of contemporary Cape Town a relationship to water is not face-to-face with *||Hu-!Gaeb*’s springs and towering rock face, but with a tap protruding from a wall. Moreover,

¹⁷⁴ Janine MacLeod, “Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital”, in Chen, MacLeod, and Neimanis (Eds.) *Thinking with Water*, 42. MacLeod goes on to say: “To the degree that it is carried by aqueous metaphor, capital is figured as a necessity, no less a biospheric feature than an ocean or a raincloud.”

¹⁷⁵ David Harvey, *A Companion to Marx's 'Capital'* (London, New York: Verso, 2010): 16, in Matthew Grant, *Marx's Theory of Alienation* (University of Cape Town: Unpublished Masters thesis, 2011): 63.

¹⁷⁶ Euler and Gauditz, “Commoning: a different way of living and acting together”

prepaid water meters mediate the relationship many people have with water – where one needs to “feed the meter” to keep the taps running.¹⁷⁷ Water’s commodification also comes in the form of municipal tariffs and bottled water.¹⁷⁸ The City of Cape Town’s ‘Water and Sanitation Consumer Charter’ pledges many things to its ‘consumers’, among them “consumer satisfaction” by ensuring “the availability and reliability of water resources”.¹⁷⁹ The title of this charter alone highlights this reductionist framework used by the municipality, where people are regarded as buyers who respond only to economic motivation, and as George Monbiot points out, where buying and selling are “the best democratic choices.”¹⁸⁰ The consequence of this is a politics under which all relationships, except that of a consumer to the commodity, are eradicated.

Though the Cape Town water crisis was averted, at least temporarily, climate models predict that less rain and higher temperatures will be experienced in the future, which will further limit water supply in addition to the structural failure of the current water system in South Africa.¹⁸¹ There have been calls for a combination of “investment in a more water-wise infrastructure and behavioural change to reduce increasing demands on dwindling supply”,¹⁸² as reported by the Environmental Monitoring Group (EMG). However, “[i]nvestment in such infrastructure is a challenge because South Africa faces the problem of a financing system for municipal water that is unsustainable.”¹⁸³

Water collection in Newlands for Cape Town’s citizens today is an area allocated by the municipality at the back of the Newlands Swimming Pool, alongside the busy main road. There

¹⁷⁷ Coalition Against Water Privatisation, Anti-Privatisation Forum and Public Citizen, ““Nothing For Mahala”: The forced installation of prepaid water meters in Stretford, Extension 4, Orange Farm, Johannesburg, South Africa”, Centre for Civil Society Research Report No. 16, Durban April 2004, accessed July 16, 2020, <http://ccs.ukzn.ac.za/files/report%2016.pdf>, in Matthew Grant, *Marx’s Theory of Alienation* (University of Cape Town: Unpublished Masters thesis, 2011): 63.

¹⁷⁸ Matthew Grant, *Marx’s Theory of Alienation* (unpublished Masters thesis: University of Cape Town, 2011): 63.

¹⁷⁹ City of Cape Town, *Water Charter Poster*, n.d. accessed October 30, 2018 https://resource.capetown.gov.za/documentcentre/Documents/Graphics%20and%20educational%20material/Water_Charter_Poster_Eng.pdf.

¹⁸⁰ George Monbiot, *Neoliberalism – the ideology that is at the root of all our problems*, 15 April 2016, accessed December 23, 2019, <https://www.theguardian.com/books/2016/apr/15/neoliberalism-ideology-problem-george-monbiot>.

¹⁸¹ Environmental Monitoring Group, “A perfect storm is gathering: South Africa’s perpetual water crisis”, Daily Maverick, 12 September 2019, accessed July 13, 2020, <https://www.dailymaverick.co.za/article/2019-09-12-a-perfect-storm-is-gathering-south-africas-perpetual-water-crisis/#gsc.tab=0>.

¹⁸² *ibid.*

¹⁸³ *ibid.*

are steel fences all around this collection point, with side fences that herd people into a narrow holding area. As shown in fig. 19 below, the water point itself is made up of a face brick wall with sixteen industrial taps (eight on each side) and a low brick wall below the taps where one can place a water container.



Fig. 19. The water ATM: the taps at the Newlands Pool site disconnect water collectors from “source” and present the spring water simply as a consumable resource. Image: Jess Tyrrell. 2019.¹⁸⁴

Queues are controlled by guards at a gate. Only small groups of people are allowed into the water collection area at a time. The spiked gate that separates those at the taps from the main queue is bolted closed and padlocked, opened by a guard only when a number of people at the inside queue have finished filling their bottles. Signs attached to the steel spikes tell people that no weapons are allowed and how much water one is permitted. People do not talk much, in stark contrast to the experience of Springs Way Spring. At the Pool collection site no longer can one

¹⁸⁴ Jess Tyrrell, *The water ATM: the taps at the Newlands Pool site disconnect water collectors from “source” and present the spring water simply as a consumable resource*, Cape Town, Personal photograph by author, 2019.

bend down, kneel on the ground and collect water from the earth. What has been designed is a water ATM.



Fig. 20. The new collection point's signage is in stark contrast to those of the Springs Way Spring's hand-made notes encouraging community-mindedness. Image: Jess Tyrrell. 2019.¹⁸⁵

According to the EMG, satisfying all three objectives held by municipalities regarding water: first, provision of access to water, including free basic water; second, generating enough revenue to cover costs of providing this water, and third, discouraging wasteful use – simultaneously is practically impossible in a country as unequal as South Africa. The interplay between these three objectives leads to a downward spiral of system failure.¹⁸⁶ This dynamic was a contributing factor to the Cape Town drought. In a revealing article titled 'A perfect storm is gathering: South Africa's perpetual water crisis', the EMG emphasise that "[t]he current pricing model needs to generate sufficient revenue from water to cover the costs of maintaining the necessary water-supply infrastructure. This has and will always lead to perverse incentives being offered by the municipality in order to generate revenue."¹⁸⁷

¹⁸⁵ Jess Tyrrell, *The new collection point's signage is in stark contrast to those of the Springs Way Spring's hand-made notes encouraging community-mindedness*, Cape Town, Personal photograph by author, 2019.

¹⁸⁶ Environmental Monitoring Group, "A perfect storm is gathering: South Africa's perpetual water crisis", <https://www.dailymaverick.co.za/article/2019-09-12-a-perfect-storm-is-gathering-south-africas-perpetual-water-crisis/#gsc.tab=0>.

¹⁸⁷ *ibid.*

Laila Smith highlights precisely this – the forces bent on further commodification of water - in her paper, ‘The murky waters of the second wave of neoliberalism: corporatization as a service delivery model in Cape Town’. Smith explains how “[t]he incursion of private sector principles into a traditional public sector ethos has been a central element of neoliberal policies at the local government level over the 1990s”¹⁸⁸ and that, “Cape Town ha[s] adopted corporatization as a service delivery alternative to deal with the problems of a historically mismanaged water sector. These problems are, however, politically based rather than technically oriented and cannot be resolved by engineers without the assistance of politicians...and is being undermined by the corporatization process and its cost-recovery imperatives.”¹⁸⁹

In the City of Cape Town’s Spring Use Strategy report their explicit objective of this spring exploration was “to find all springs, with the aim of using excess water in the City water supply system”.¹⁹⁰ The Newlands Spring water diversion from Springs Way to the Pool collection site illustrates this point further - the new water site, while not under the control of a private company, is gated, guarded and padlocked closed and thus carries all the trademarks of private property.¹⁹¹ South African Breweries Miller, one of the world’s wealthiest beverage companies, draws millions of litres of spring water from these commons daily, with no charge, using the water to make beer that they sell for profit.¹⁹²

Smith goes on to argue that “corporatization, a service delivery alternative that is illustrative of a second wave of neoliberalism, threatens to undermine democratic accountability by restructuring the state in ways that are invisible to the public yet with visibly negative outcomes”.¹⁹³ The insights of her study point to how not only municipal policy, but language and

¹⁸⁸ Laila Smith, “The murky waters of the second wave of neoliberalism: corporatization as a service delivery model in Cape Town”, *Geoforum* 35 (2004): 375.

¹⁸⁹ *ibid.*

¹⁹⁰ Geohydrological and Geospatial Solutions International (Pty) Ltd., *Hydrogeological Investigation of Existing Water Springs in the City of Cape Town and Environs. Spring Use Strategy*, GEOSS Report no. 2014/10-08 for City of Cape Town, 24 June 2015.

¹⁹¹ Aside from this only part of this spring’s water gets piped to the new collection site. The vast majority is used by SAB for their beer making. Concerningly, the City of Cape Town’s Spring Use Strategy report, dated 24 June 2015, excludes the main Newlands Spring used by SAB Miller, on the grounds that “the Newlands Spring has no existing infrastructure that can be utilised. All infrastructure is property of SAB Miller. As Lesley Green expresses with concern, this raises serious questions around science-for-hire. See more in Lesley Green, *Rock Water Life: ecology and humanities for a decolonial South Africa* (Durham: Duke University Press, 2020): 58.

¹⁹² Throughout Cape Town’s record breaking drought SAB Miller continued with business as usual using millions of water per day.

¹⁹³ Smith, “The murky waters of the second wave of neoliberalism: corporatization as a service delivery model in Cape Town”, 375.

the design of physical structures themselves are guided by a political philosophy based on the model of private capital. ‘Flow of capital’, ‘currency’, ‘pools of resources’, ‘frozen assets’, ‘liquidity’ ‘trickle down affect’ - it is evident that neoliberalism has also not just borrowed water’s meanings, but appropriated them directly.¹⁹⁴ As a result, because of the unconscious knowing that our human bodies are made predominantly of water, when combined with an assimilated daily language of ‘capital as water’, by extension this transmutes into human essence *is* capital, and a self-identification with this takes place.¹⁹⁵

This version of nature holds a notion of springs as places for *consumers* to attain a resource for consumption. Following this logic a check-out-counter-construction was the inevitable design choice. It did not matter where the water outlet was located so long as it was efficient, convenient and controllable. Thus the construction of a new water collection site that has nothing to do with spring water and is rather a particular socio-technical apparatus.

Good or Gift?

Capitalism at its most basic means finding something that was once nature and making it into a good, something that was once a gift relationship, a community service, something that people once got without money, take it away and sell it back to them. Around the world, capitalism is transforming and reshaping three key ecologies: the environment, human subjectivity and social relations.¹⁹⁶ Bruno Latour, Isabelle Stengers, Anna Tsing and Nils Bubandt describe how “the ecologies of both humans and nonhumans are being radically made and unmade according to the logics of capitalism.”¹⁹⁷

The nature of an object is much changed depending on the way that it comes into ones hands; as a gift or as a commodity. The water that comes out of a tap is convenient, and while I might feel grateful to the person who installed the taps, or to the city for the infrastructure that delivers the water, I have no inherent obligation to that water as a commodity, as private property, let alone

¹⁹⁴ Janine MacLeod, “Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital”, in Chen, MacLeod, and Neimanis (Eds.) *Thinking with Water*, 42.

¹⁹⁵ *ibid.*

¹⁹⁶ Bruno Latour, Isabelle Stengers, Anna Tsing and Nils Bubandt, “Anthropologists are Talking - about Capitalism, Ecology and Apocalypse”, *Ethnos* 83, no. 3 (2018): 587-606

¹⁹⁷ *ibid.*, 5.

the river or spring or rain that it came from. There is no bond beyond my contractual exchange of a monthly amount debited from my account for this provision of goods. I've paid for it and our reciprocity ends the minute that I hand over the money.¹⁹⁸ But what if I collected water from a mountain spring? This changes everything.

Mbali is a traditional healer, a term used in Southern Africa to identify people who have been initiated into systems of knowledge that see the world, seen and unseen, as a living whole and 'right relationship' as the key to health. She expressed the following during our in-depth interview: "Water from the earth, to us, it's completely untainted, and yes you need to bow to it. *Bow to it*. And that creates some kind of emotion. We've forgotten how to bow, surrender, get on our knees, because it's become a commodity. When we forget how to bow, we've forgotten how to surrender... and we forget how to be grateful. When we're not grateful then the heart closes".¹⁹⁹

The act of bowing that Mbali is speaking of is an expression of humility and thanks. When I receive a gift I naturally feel grateful. I feel gratitude in the knowledge that I have received and the desire to give in turn. Giving thanks implies that there is a recognition not only of the gift, but of the giver. Dr Robin Wall Kimmerer, professor of Environmental and Forest Biology and Founding Director for the Centre for Native Peoples and the Environment in her book, *Returning the Gift*, reiterates that many cultures are full of cautionary tales about the failure of gratitude. They recall times when people forgot to recognise and honour that which was given and that the consequences are always material, as well as spiritual. The spring dries up, a drought befalls the community, life in all its forms rises up against the ones who neglected gratitude. "Gratitude propels the recognition of the personhood of all beings and challenges the fallacy of human exceptionalism—the idea that we are somehow better, more deserving of the wealth and services of the Earth than other species"²⁰⁰ says Kimmerer. Stories in contemporary societies are strangely silent on this matter, and thus Cape Town found itself in an era of drought.²⁰¹

¹⁹⁸ Robin Wall Kimmerer, *Returning the Gift*, 1 October 2013, accessed May 5, 2020, <https://www.humansandnature.org/earth-ethic-robin-kimmerer>.

¹⁹⁹ Interviewee 14, see Appendix 1

²⁰⁰ Robin Wall Kimmerer, *Returning the Gift*.

²⁰¹ *ibid*.

The evolutionary advantage for gratitude is compelling.²⁰² It has an adaptive value precisely because it brings about practical sustainability outcomes.²⁰³ In gratitude I acknowledge the gift and in the sense of satisfaction and enough-ness engendered can lead to the practice of self-restraint, taking only what I need: an antidote to the societal messages that inform people that they need more.²⁰⁴ As expressed by a previous water collector of Springs Way, “It’s only when we see now...it’s only now this has happened [the drought]...that this whole story, this controversy about the water... now we’ve had to come out, leave our homes, now you really can appreciate the water and you’re thinking that water is such a valuable thing...we just use it, you know, without thinking. We flush the toilets, all of this stuff that we don’t really consider”.²⁰⁵

The ethic learned at the Spring Way Spring and still being learned at the free-flowing springs researched in this study – St James and Boyes Drive Spring – is this ‘enoughness’. An interviewee at Newlands water collection site shared that, “[w]hen the City of Cape Town said we were going to run out of water that’s why I did [started collecting spring water]. It’s part of my group effort.”²⁰⁶ Springs have always been operating within a different system from monetary economics – the gift economy. The modern economic system has simply eclipsed what continues to live as a gift relationship. Another water collector from Springs Ways spring elaborated on this further, saying, “ It comes out from the earth...there’s something about it that’s so precious... I think that there is a correlation between us bending down to get the water... it makes a person, a human being, appreciate the water more. In this day and age, we are so spoilt in the way we get things... just like in our homes we open the tap and water comes out. Now we are doing something like, a little bit like what you would do in the rural areas, where you’d have to go collect water and yes, then it really does make you appreciate this water. So now we’re bending, we’re getting into an awkward position to get the water...definitely you respect the earth more, you respect the water more”.²⁰⁷

²⁰² Martin A. Nowak and Sébastien Roch, ‘Upstream Reciprocity and the Evolution of Gratitude’, *Proceedings: Biological Sciences*, Vol. 274, no. 1610 (2007): 605-609; and Michael E. McCullough, Marcia B. Kimeldorf and Adam D. Cohen, ‘An Adaptation for Altruism? The Social Causes, Social Effects, and Social Evolution of Gratitude’, *Current Directions in Psychological Science* 17, no. 4 (2008): 281-285.

²⁰³ Kimmerer, *Returning the Gift*

²⁰⁴ *ibid.*

²⁰⁵ Interviewee 2, see Appendix 1

²⁰⁶ Interviewee 16, see Appendix 1

²⁰⁷ Interviewee 2, see Appendix 1

The key difference between a gift and commodity exchange is that a gift establishes a feeling bond: gratitude for having received and the desire to give in turn. Eric, to whom I spoke at Boyes Drive spring, and his son expressed this by saying: “This [collecting spring water] is our contribution towards saving water.”²⁰⁸ The feeling bond evokes reciprocity where the human desires to give in turn in the form of care. Reciprocity – returning the gift – “is not just good manners; it is how the biophysical world works. Balance in ecological systems arises from negative feedback loops, from cycles of giving and taking. Reciprocity among parts of the living Earth produces equilibrium, in which life as we know it can flourish.”²⁰⁹ This learning was articulated by an interviewee at Boyes Drive Spring who said, “[water collection teaches] respect....and conservation of water.”

During my interviews, as their first reason for visiting the springs almost no one informed me that they collect water to save money. While some people did mention “free water”, I believe that this happened for three reasons: firstly, the interviews took place just after a record-breaking drought where the municipality had introduced radical water restrictions and tariffs prices, from a belief in behavioural economics which presumes that an increased price serves as a disincentive for misuse. Thus the collective narrative was dominated by this financial language that eclipsed the intangible motivations for water collection from the springs. The dominance of the narrative of capital and its language use alters experiences of reality and extends much deeper. It amounts to neoliberalism’s theft of water’s meanings and the resulting self-identification with capital.²¹⁰ It reveals the power of descriptions in making or breaking relations.²¹¹ Secondly, the distinction between gift and commodities is inadequate to accurately give language to ‘gifts’ from the natural world. A commodity logic “grasps the form of things through imagining that things exist in themselves: the use to which they are put must always entail some kind of relation with their...nature”²¹². In other words, water comes into existence to the commodities-socialised mind within the framework of its use. Thirdly, when “free water” was mentioned, this happened predominantly at the Newlands Pool site, which I believe is a direct result of its design and taps.

²⁰⁸ Interviewee 6, see Appendix 1

²⁰⁹ *ibid.*

²¹⁰ *ibid.*

²¹¹ Soumhya Venkatesan, ‘The social life of a “free” gift’, *American Ethnologist* 38, no. 1 (2011): 47-57.

²¹² Strathern, *The Gender of the Gift. Problems with Women and Problems with Society in Melanesia*, 134.

In contrast to the extractive and dry politics of commodity and capital, the next chapter is a purposeful challenge to the single-story version of nature as distinct from humans and water as commodity. There are many people for whom this division of nature and people make no or little sense and where the clear-cut bifurcation is not inevitable. Paying attention to these other modes of naturing through peoples' stories of water collection emphasises ways in which divisions might be reconciled through down-to-earth practices.²¹³ The seemingly simple down-to-earth practice of collecting spring water has implications for a different relationship to the world, where the constructs that hold nature and culture as separate no longer hold. This is the focus of the following chapter where the 'domains of entanglement'²¹⁴ of the southern springs of Cape Town are given attention and recognized as sites of an alter-politic.

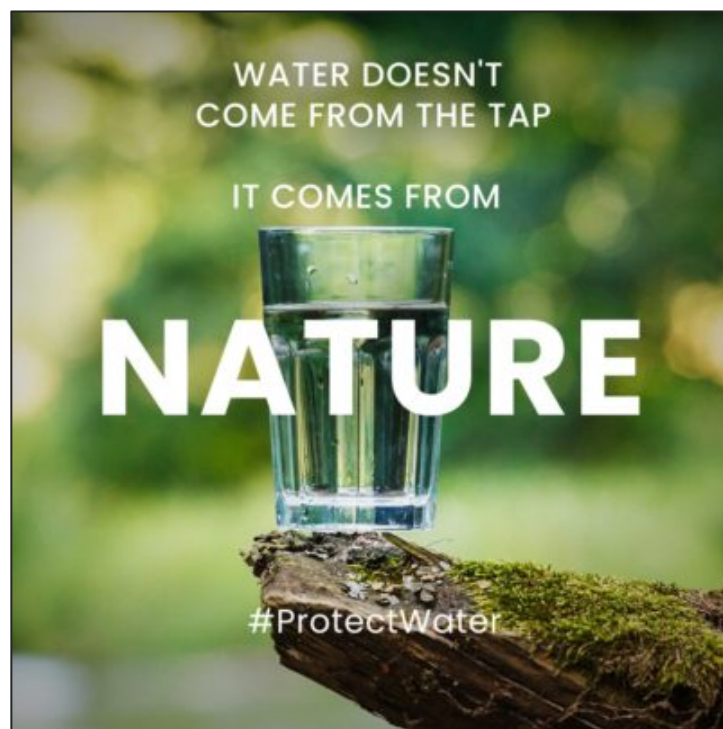


Fig. 21. The real source of water. Image: Euronatur.²¹⁵

²¹³ Heather Swanson, John Law and Marianne Lien, "Modes of Naturing: or stories of salmon", *Heterogeneities.net*, 10 March 2016, accessed July 15, 2020, <http://heterogeneities.net/publications/SwansonLawLien2016ModesOfNaturing.pdf>.

²¹⁴ Tim Ingold, 'Rethinking the animate, reanimating thought' in *Being Alive: essays on movement, knowledge and description*, (Abingdon: Routledge, 2011): 67-75.

²¹⁵ Euronatur, #Protectwater. n.d., in Euronatur, accessed May 19, 2020. <https://www.euronatur.org/en/what-we-do/campaigns-and-initiatives/protectwater/>. The real source of water.



Chapter 2:

“The springs remind us how to be human”

Eve Fairbanks, a journalist being taken around Cape Town by a local guide described her experience of the scene at Springs Way Spring during the drought:

In a formerly “white” neighbourhood called Newlands, thousands of Capetonians line up each day to gather water from a natural spring that, save for a police booth to oversee parking, is completely unmanaged by any authority... The interesting thing is that the spring sits in a neighbourhood that, before it was white, was mixed-race—the kind of neighbourhood that, in South Africa, tends to be a source of special tension, because even relatively long-time homeowners worry that the descendants of residents evicted decades ago could lay a legal claim to the land. In fact, Rawoot’s ancestors had lived two blocks away from the spring. “*People from everywhere in the Cape Flats are going there,*” Omar [the guide] whispered to me. The legal process for land claims is very complicated; he presented the influx of people to the spring as a sort of quiet, extra-legal reclamation. Some come from as far as Mitchell’s Plain, a township more than 10 miles away. “*They want to go back to their waters.*”

The even more interesting thing is that, despite this, many white residents seemed to enjoy the mood of the spring, too. It was, indeed, incredible. It was a mob scene—60 people in flip-flops, bathrobes, headscarves, shalwar kameez, tony private school uniforms, surf shirts and the form-fitting clothes popular in the black townships swirled around Harleys and busted-up old bicycles, pushing jugs of water back and forth in strollers, in shopping carts, on homemade trolleys and on skateboards. Backpacks and empty water bottles were strewn everywhere, like in a high school hallway at lunchtime...a group which more closely resembled South Africa’s on-paper demographics than anything I had ever previously seen... Rawoot was handing out grape popsicles.

But there was also something reverential about the mood: People slid gracefully around each other, softly pointing one another toward the best-flowing outlet, guiding other people's trolleys, handing back filled jugs in organically assembled lines. These days, utopian dreams that people could manage themselves in a completely non-hierarchical situation have mostly died; anarchism is a sound for high school thrash bands. But at the spring it felt as if the dream had arisen again. The situation just *worked*, naturally. On the left side of the spring, one hose was problematic; its stream was too fierce. Through unspoken lines of communication, people realized that somebody needed to hold it still, and seamlessly, a guy vaping in a Ducati T-shirt gave way to a young black woman, who, after 10 minutes on hose duty, gave way to Abdulrahman.

Abdulrahman, an elderly Muslim man, told me he had toiled for 48 years in the townships as a soda hawker. He sold refreshment. He was tired of selling it. He wanted to give. A few weeks earlier, he had come to the spring to fill up some jugs and found himself holding the hose for an hour. Two days later he made the 10-mile trek back—just to hold the hose. He intentionally wore shoes “with holes in them so the water runs out,” he told me, howling with laughter.

He was soaked from head to toe. When I asked him why he did this unpaid work, he looked at me and laughed again, as if it should be obvious. “Everybody's stressed,” he said. “Everybody's rushing.” Thanks to him being at the hose, “people can relax!”

He also seemed to take pleasure from the feeling he had managed to figure out a special hose angle that made the stream especially efficient. “Does it go quickly?” he asked a blond stranger, hopefully. From her neck hung a cross.

“It is amazing,” she said.

He beamed with pride.²¹⁶

²¹⁶ Eve Fairbanks, ‘Dry, the beloved country’, *Huffpost*, 19 April 2018, accessed January 3, 2020, <https://highline.huffingtonpost.com/articles/en/cape-town-drought/>



Fig. 22. Springs Way Spring streaming out of its pipe going on to flow into Newlands Stream. Image: Noel Marten. 2011.²¹⁷

It was this atmosphere, described so richly by Fairbanks, that existed at Springs Way and kept so many people coming back to experience it again and again. However, many years before the drought people had been going to various springs around Cape Town and filling their bottles with water to take home. Indeed, “[u]ntil July 2017, every household in Cape Town received six kilolitres of water every month free”²¹⁸ and therefore the municipal understanding of spring water collection simply being about ‘free-water’ seems even less likely. So why then did people go to fetch water from these natural water points?

Riyaz Rawoot, water keeper of Springs Way spring recalls his reason: “Springs Way was a wonderful place and that’s why I used to attend twice daily, sometimes three times a day and just spend a couple of minutes at the water and then go home... People were compassionate, caring,

²¹⁷ Noel Marten, *Overview of the Newlands spring collection point*. Cape Town, in Facebook, *Friends of Newlands Spring*, 11 July 2011, accessed April 10, 2020, https://www.facebook.com/pg/newlandsspring/photos/?tab=album&album_id=237650412925379. Springs Way Spring streaming out of its pipe going on to flow into Newlands Stream.

²¹⁸ Environmental Monitoring Group, “A perfect storm is gathering: South Africa’s perpetual water crisis”, <https://www.dailymaverick.co.za/article/2019-09-12-a-perfect-storm-is-gathering-south-africas-perpetual-water-crisis/#gsc.tab=0>.

they were seeing to their fellow people. They would help carry [water], they would enquire about each other, and I've never seen anything like that in Cape Town. I'd hear about the stories of my family back in the 60's and earlier, that that was the culture of the area. Where it was a mixed area, mixed finances, mixed colours, religions...and the sense of reminiscing when they'd come to the water ...and...tell someone younger or someone that's similar in age *'we used to do this. And 'that house you see from here, that second one there, that's where I was born, and two doors down was this granny, and behind us was that family ...'* That was insightful, and part of the reason I'd keep going back."²¹⁹



Fig. 23. Springs Way Spring during the 2015-2018 drought. Image: Nic Bothma. 2018.²²⁰

²¹⁹ Riyaz Rawoot had the title “water master” conferred on him by those who frequented Springs Way to collect water at its spring and were part of the water culture that emerged there. He was interviewed as a role player in the Cape Town drought by the Drought Response Learning Initiative. The DRLI is an online database of interviews - an open access archive of replicable lessons learned about the Cape Town water crisis by various people across a broad spectrum of Cape Town’s civic landscape. accessed January 12, 2020, <https://www.drought-response-learning-initiative.org>

²²⁰ Nic Bothma, *Residents collect drinking water from a mountain spring collection point in Cape Town, South Africa, Jan. 31, 2018*, Cape Town, in ABCNews, 31 January 2018, accessed March 7, 2020, <https://abcnews.go.com/International/cape-town-tightens-water-restrictions-day-looms/story?id=52767410>. *Springs Way Spring during the 2015-2018 drought.*

Storied springs

St James Spring is about fifteen kilometres south ‘as the crow flies’ from Newlands. Mbali, the traditional healer and water diviner, collects water from here. Traditional healing can be understood as a systems understanding of life and involves sophisticated psychospiritual technologies for maintaining or restoring balance to any parts of a system which may be out of its ‘right relationship’ with the whole. Mbali explained that water is alive and that it has a spirit. She has a relationship with water spirits. I asked her thoughts on the new Newlands Pool water collection site, specifically about the installation of taps. Her response was that, ‘to remove that ritual [of bending down to collect water], unconsciously has a direct impact on our immediate relationship to nature’.²²¹

The Springs Way spring offered itself as a public space to bump heads, literally, and laugh with others from completely different background as one bent to fill one’s bottle with water. Laughter is critical for social cohesion. The design of the Newlands Pool water collection site however, does not facilitate the kinds of interactions that the free-flowing springs still offer. The current architecture and urban layout has largely turned its back to the vital importance of springs as cultural and social catalysts, despite the persistent ritual of water collection of citizens that conveys how many people still hold as precious the springs as a part of their personal story of the city. Not only have relationships been designed out of the Newlands Pool site, but very few of the spring-qualities are allowed through its taps, as further expressed by Mbali, who said, “to put a tap in is to remove the conduit spirit of water”.

Water is both an agent of diffusion (a conduit) and the greatest medium of interconnection, connecting all life forms together. Capital, in contrast, is antagonistic to this logic of water’s movement because capital logic is about accumulation – the systematic concentration of wealth and thus, forms of power.²²² Canadian First Nations academic Leanne Simpson explains capitalism as:

Colonialism and capitalism are based on extracting and assimilating. My land is seen as a resource. My relatives in the plant and animal worlds are seen as a

²²¹ Interviewee 14, see Appendix 1

²²² Janine MacLeod “Hydrologies of Transformation: Capitalism, Hegemony, and the Meanings of Water.”, *YouTube video*, 15:12 - 30:41. Filmed May 31, 2018, accessed July 17, 2020, <https://www.youtube.com/watch?v=GiYxqjgWeYE>.

resource. My culture and knowledge is a resource... The act of extraction removes all of the relationships that give whatever is being extracted meaning... The alternative is deep reciprocity.²²³

The relations of extraction are non-reciprocal. They fracture and fragment social relationships.²²⁴ The spring water now tapped is transmuted from gift and conduit of relations and connection to that of commodity where relationships and history are erased.

The queues at the Newlands Pool collection site are mostly quiet. Those who do speak tend to do so in hushed tones, and when listening to the interviews recorded from within the queue what is noticeable in the soundscape are the voices of the guards in the background that constantly interject into the quiet queue with cries of “neeext”, “*neeeext*”, in increasingly insistent tones, depending on the length of time the person being instructed to move to the next tap available took to respond. Listening back on recordings of interviews my questions sound hurried, conversation could not flow in a relaxed manner because whomever I was talking to was being ‘managed’. How much potential for relationship and relating is erased when an external voice beholden to hurried notions of productivity and dissociated power relations dictates not only time itself, but permitted time *with* the ‘other’, human or other-than-human? What part does the loss of this opportunity to laugh, the loss of head-bumps play in the continuation of cultural divide in Cape Town?

In a paper titled, ‘Conviviality by design: the socio-spatial qualities of spaces of intercultural urban encounters’, researchers Farnaz Ganji and Clare Rishbeth offer some insights to these questions regarding the value of meaningful encounters in urban public spaces. Those with water particularly they found, naturally evoke playfulness and have provide “intergenerational opportunities for conviviality, a ‘license to speak’.”²²⁵ Taps do not facilitate conviviality. Voices have been silenced.

²²³ Leanne Simpson in MacLeod presentation, “Hydrologies of Transformation: Capitalism, Hegemony, and the Meanings of Water.”, 25:02.

²²⁴ Janine MacLeod “Hydrologies of Transformation: Capitalism, Hegemony, and the Meanings of Water.”, *YouTube video*, 15:12-30:41, <https://www.youtube.com/watch?v=GiYxqjgWeYE>.

²²⁵ Farnaz Ganji and Clare Rishbeth, “Conviviality by design: the socio-spatial qualities of spaces of intercultural urban encounters”, *URBAN DESIGN International* (May 2020), accessed July 17, 2020, DOI: [10.1057/s41289-020-00128-4](https://doi.org/10.1057/s41289-020-00128-4).

Southern waters

Eric collects water at Boyes Drive Spring. While conducting my interviews here, we had a visitor:

Eric: “Look, look! Look at this mouse here, this is his friend!”²²⁶

Mohammed: “Ja, this is my friend”.²²⁷

Mohammed is the water guardian of this small spring on the scenic road of Boyes Drive as it climbs the lower slopes of Muizenberg and the east facing range of Table Mountain. It is located about fifteen kilometres from the Newlands Spring water site. The spring is deep in the ground and only a tiny hole in the rock allows some water to the surface world. Mohammed sees himself as the water keeper and comes here to this spring every morning after prayers, inserts a thin length of transparent tubing into the rock that otherwise trickles to the surface as a seep, sets up a vacuum in the pipe by sucking on one end, and encourages the water from underground to flow steadily and slowly to the people waiting five meters below. Mohammed stays way beyond dark on many occasions in this facilitatory role because, he explains, “*people need water*”.

Mohammed spends almost every day at the spring and as a result has made friends with a Striped Field Mouse and a Bloukop Koggelmander.²²⁸ Both Mouse and Lizard came to visit while I sat and talked to Mohammed, an elderly gentleman Eric, and Eric’s son. This father and son pair come weekly to collect water where they sit watch the world go by, enjoying the time outdoors alongside the mountain. “Here, the water is much slower. You need to bring patience with you ... so we come here, we sit, we have a conversation. One of these drums takes about 15 minutes to fill up, a 25 litre. A 5 litre about 3 minutes. So, during that time you know, you get a lot of people here and it ends up being a big conversation. ... and we’ve also seen a lot of things here. Oh, the stories you hear here...the people you meet...”²²⁹

The more-than-human relationships that Mohammed has formed illustrates how a spring creates connectivity effortlessly and facilitates a process of re-membering – the re-establishment of our

²²⁶ Interviewee 6, see Appendix 1

²²⁷ Interviewee 7, see Appendix 1

²²⁸ Bloukop Koggelmander directly translates into Blue Head Lizard and is the Afrikaans name for the Southern Rock Agama.

²²⁹ Interviewee 6, see Appendix 1

human membership within the larger living systems of which each being is a part. It is as if, at this spring, on the slopes of the southern band of Table Mountain's chain, the perceived boundary between the human world and the more-than-human community dissolves; the traumatising psychic split of modernist thinking is repaired and the hall of mirrors from where, looking out, one usually sees reflections only of oneself, falls away and in its place is a two-way flow of communing between mice and men, water and rock, gravity and patience.

When asked what he thought the free-flowing springs and water collection from them teaches people, a man collecting water at the St James Spring paused. He considered this question carefully. Then he replied, with only a single line response, but containing profound depth: "The springs remind us how to be human".²³⁰



Fig. 24. Boyes Drive and St James Spring. Image: Google Earth. 2020.²³¹

²³⁰ Interviewee 11, see Appendix 1

²³¹ Google Earth. *Boyes Drive and St James Spring*. Cape Town, in *Google Earth*, June 11, 2020, accessed June 11, 2020.

Other ways of knowing

Roger loves the Newlands Spring water. He says he likes the taste much more than tap water. The spring water makes him “feel good” and he and his family can “feel that it is natural”.²³² Rogers’ account of the water that he now collects from the Newlands Pool site speaks to the role of bodily responses to water. If taste is at its most superficial an evolutionary sense informing us of nutrients needed for physical health, providing information about what is dangerous and thus to be avoided,²³³ then the repeated reference by Roger and almost every person to whom I spoke, to the *good taste* of spring water is clearly an indicator that our sensing bodies know something important. Their comments speak to the ways that humans pay attention to our world through our senses and how the senses continuously give us feedback about that world: by paying attention to the smells, colour, taste and felt experience, people assess the quality of water. This impression of *quality* speaks not only to an inherent understanding of water as “an enabler of life, human and non-human”,²³⁴ but that within these stories of ‘*good water*’, there is a level of discernment happening that demands further consideration.

While those with whom I spoke at each spring – Newlands Pool collection site, St James and Boyes Drive – used the word “taste” in their description of the spring waters, it is clear that they were also distinguishing between *kinds* of water. There is a problem in only defining water as pure, physical matter. It is part of the modern reductionist style of thinking that there is such a thing as universal nature, and thus universal water. As Jamie Linton notes in his book “*What is Water?*”, in reality water in peoples lived, daily encounters with it is always produced by particular ways of knowing it.²³⁵ The idea that water could even be considered apart from its social and ecological relations is a relatively new concept.²³⁶ Astrida Neimanis calls the modernist idea of universal water, ‘Anthropocene water’.²³⁷ Like no two people are the same, no two sources of water are the same and nor are its social and cultural contexts. People know this from their own experiences, and some expressed it in various ways: still water is different from

²³² Interviewee 5, see Appendix 1

²³³ Paul Breslin, ‘An Evolutionary Perspective on Food and Human Taste’, *Current Biology*, 23, no. 9 (2013): 409-418.

²³⁴ Caterina Sacramelii, ‘Making Sense of Water Quality: Multispecies Encounters on the Mystic River’, *Worldviews*, 17 (2013): 151.

²³⁵ Jamie Linton, *What is Water? The History of a Modern Abstraction* (Vancouver: UBC Press, 2010).

²³⁶ *ibid.*

²³⁷ Neimanis, *Bodies of Water. Posthumanist Feminist Phenomenology*, 4.

stream water; sky water is different from mountain water is different from tap water. Despite accessible water from a tap in or near their homes, it is *specifically* for this *good water* that people travel for sometimes more than 30 minutes by car, and queue for what could, during the drought, take up to two hours to get to the kind of water that flows from these springs.

At the Newlands Pool site, due to the speed at which the queue moves, hurried along by the guards, it was hard to conduct a proper interview. To solve this, myself and two other water researchers created a ‘spring water tea party’. We set up a gas burner, chairs, a table with a selection of biscuits and invited people to sit down and talk about their water collection practices over a cup of tea brewed on site. The responses to questions posed around why people come to collect spring water, and whether there was a difference between tap water and spring water held commons threads:

Anisa: “We carry water for my nephew ...who had a stroke, we don’t really want him to drink the tap water.”²³⁸

Liz: “my sister takes it [spring water] to the one lady who had breast cancer and it’s because you don’t want to give them [sick people] tap water.”²³⁹

Ziad: “I’m a cancer warrior. I use only spring water, for my health. The spring water is natural”²⁴⁰

Water is clearly not just water and people are able to tell the difference.²⁴¹ What is being alluded to by almost every person interviewed is a *quality* of water instinctively felt to be good for health. One interviewee gives his two small children only spring water to drink, not tap water, sharing that it had simply been intuitive to do this; a woman explained that she came to collect water for cancer patients and made sure her ill sister only drank spring water; another reported that she felt happy and good when she drank this water. These are the common stories of almost every person spoken to at the springs. Health. None of them had, nor wanted to, read any technical reports about the chemistry of the water to inspire or inform their actions. It came from their lived

²³⁸ Interviewee 2, see Appendix 1

²³⁹ Interviewee 15, see Appendix 1

²⁴⁰ Interviewee 17, see Appendix 1

²⁴¹ Larissa Buchholz, “Bringing the body back into theory and methodology”, *Theory and Society* 35 (2006): 481.

experience. They knew it was good for their health because the body, an animate part of the living, communicating world, has the capacity to sense such things.



Fig. 25. Khanyile “Emmanuel” Siziba helps people carry their water from the Springs Way Spring to their vehicles. Image: David Ritchie. 2018.²⁴²

Part of the vast sensing mechanisms of the human body is linked to a little understood and vastly complex ecological community of microbes – bacteria, fungi and viruses – that play a primary role in our health. According to Ron Sender, Shai Fuchs and Ron Milo, the human body is comprised of more bacterial cells than human cells.²⁴³ There are microbes everywhere, in the soil, in the air, in water, in rocks, they live in every single part of the planet. Spending more time outdoors where there is a naturally higher diversity allows one to populate one’s own microbial community – the microbiome – with new strains. Generally microbes are protective: the greater the number of different species you have inside you, the more chemicals they produce, and the more defences you have against pathogens. In countries where there is routine use of antibiotics,

²⁴² David Ritchie, *Khanyile “Emmanuel” Siziba assists Parklands resident Ayanda Bingo, 30, from Delft, helps people carry their water from the Springs Way spring in Newlands to their vehicles*, Cape Town, in *IOL*, 23 January 2018, accessed February 22, 2020. <https://www.iol.co.za/capetimes/news/watercrisis-duo-make-most-of-reality-of-collecting-heavy-bottles-12866990>.

²⁴³ Ron Sender, Shai Fuchs and Ron Milo, “Revised Estimates for the Number of Human and Bacteria Cells in the Body”, *PLoS Biology* 14, no. 8 (2016): accessed April 17, 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4991899/>.

the population number, as well as the diversity of microbes is enormously reduced – a literal biodiversity loss in the internal ecosystem. A study titled, “Microbiome and mental health in the modern environment” by Emily Deans, shows that these good microbes keep the immune system functioning, they regulate digestion and nutrient uptake, as well as play a primary role in mental health.²⁴⁴ However, increasingly sterile modern environments, poor diets and antibiotics in food means that societies, particularly urban ones, have been losing the natural diversity and variation needed for optimal health.

Health as the matrix of relationship

Water that goes through the formal water provision systems in Cape Town goes through a treatment process. A standard additive to tap water is chlorine, among other chemical additives, that kills the possibility of pathogenic bacteria. Research shows however, that chlorine not only kills pathogenic bacteria but it also kills many helpful microbes and kills beneficial gut bacteria. A study by David Martino titled, “The Effects of Chlorinated Drinking Water on the Assembly of the Intestinal Microbiome” highlights that “[g]iven the importance of the microbiome in health, persistent exposure to low levels of chlorine may be a hitherto unrecognized risk factor for gut dysbiosis, which has now been linked to virtually every chronic non-communicable disease of the modern era.”²⁴⁵ Chlorine in the tap water was one of the common concerns mentioned by those interviewed about why they collect spring water. They testified that:

Tap water has too much chemicals. All our drinking water, too much chemicals. You can smell it; you can taste it. Pour a glass of water and put it on your bedside and wake up the next morning and taste it...pure chlorine. – Boyes Drive Spring interviewee ²⁴⁶

The tap water I know deep down got chlorine in... chlorine! Now he's²⁴⁷ already not immune to any little germs... – Newlands Pool collection site interviewee ²⁴⁸

²⁴⁴ Emily Deans, “Microbiome and mental health in the modern environment”, *Journal of Physiological Anthropology* 36, no.1 (2016): accessed April 24, 2020, <https://doi.org/10.1186/s40101-016-0101-y>.

²⁴⁵ David Martino, “The Effects of Chlorinated Drinking Water on the Assembly of the Intestinal Microbiome”, *Challenges* 10, no. 1 (2019): accessed July 15, 2020, <https://doi.org/10.3390/challe10010010>.

²⁴⁶ Interviewee 8, see Appendix 1

²⁴⁷ The person speaking here is referring to her husband who was with her at the time, he was frail and appeared to be in his late 80's or 90's.

²⁴⁸ Interviewee 15, see Appendix 1

When people collecting spring water say it is *good* water, that is because it *is* good water. The spring water is liquid health for gut microbes. Healthy water is water that promotes healthy bodies. Like a healthy ecosystem needs diversity, so too the gut microbiome needs diversity. When this language of ‘natural’, ‘good water’ and ‘health’ used by those interviewed is appreciated in relation to the *source* of these waters, then the perception of quality is not only accurate, but it is actually a recognition of one living body - the water collector – of another living body: *living water*. Good, living water is entangled water. It is 450-million-year-old-rock-with-billions-of-microbes-infused water, fynbos-streaked-tannin water, flowed-down-through-ancient-Afromontane-forest-under-bright-sunshine-and-the-sound-of-birdsong-water. These sensorial modes of attention and bodily responses to good water speak of the importance of *relationship*; relationship to the senses, to internal ecosystems communicating with other ecosystems, and to the fact that health is a product of these many intimately entangled relationships with the more-than-human world. This is evidenced in what these interviewees had to say about collecting spring water:

This is good water – Boyes Drive interviewee ²⁴⁹

I don’t like the quality of tap water; I don’t want water with chemicals. I feel different [drinking spring water] – Newlands Pool collection site interviewee ²⁵⁰

You feel like you’re doing something for your health, something positive.
- Newlands Pool collection site interviewee ²⁵¹

In Japan, a standard preventative medicine is that of Forest Bathing. This practice is decades old and known as *shinrin-yoku*, which means “taking in the forest”. Multiple studies have documented the benefits to health from Forest Bathing that include lowered blood pressure, lower blood glucose levels, lowered stress hormones, better moods and a reduction in anxiety.²⁵² Forest bathing leaves people feeling more connected to the natural world around them. Like Forest Bathing, water

²⁴⁹ Interviewee 6, see Appendix 1

²⁵⁰ Interviewee 2, see Appendix 1

²⁵¹ Interviewee 1, see Appendix 1

²⁵² Marc R. Farrow & Kyle Washburn, “A Review of Field Experiments on the Effect of Forest Bathing on Anxiety and Heart Rate Variability”, *Global Advances in Health and Medicine* 8 (2019): 1-7. See also Katherine Ka-Yin Yau and Alice Yuen Loke, “Effects of forest bathing on pre-hypertensive and hypertensive adults: a review of the literature”, *Environmental Health and Preventive Medicine* 25, no. 23 (2020): accessed July 15, 2020, DOI: [10.1186/s12199-020-00856-7](https://doi.org/10.1186/s12199-020-00856-7).

collection at the springs, even to a certain extent at the Newlands Pool collection site by virtue of its position next to the Liesbeek River and the tall, old trees around the site, engages the activity of one's senses and allows us to "take in the forest". Eyes, ears, skin, nostrils all function like a glue, binding seemingly separate nervous systems into the all-encompassing ecosystem. Edward O. Wilson wrote that the human species has a natural affinity for all other life forms.²⁵³ This impulse he termed *biophilia* – love of life. In Wilson's book with this title he describes the connections that humans instinctively seek with the rest of life as an innate love or affection – be that with other humans, trees, rivers or animals. *Hydrophilia* is the human condition of a love for water.

When the model of world-as-machine is no longer projected onto the world and instead of looking for separate parts I rather look for wholes, processes instead of substances, I come to see that these wholes – whether they are cells, bodies, ecosystems or even the earth itself – are not just an assemblage of parts but, are a dynamically organised and intricately balanced system in constant interaction.²⁵⁴ This view of nested systems itself offers an antidote to the dis-ease of the lonely modern spirit. No organism is an isolated, separate entity and like a tree is to air, so good water is to wellness – always in a fluid, reciprocal relationship. Individual, community, societal and ecosystem health are emergent properties of all the parts of a whole. Health is a *result* of co-evolving socio-ecological relationships.²⁵⁵ Health *is* relationship.

Attentive interactions in the Sentient World

The whole world is a contact zone.²⁵⁶ Emily Deans in her study of the microbiome indicates that mental health problems such as anxiety, affective disorders and psychotic disorders are not simply glitches of genetic vulnerability triggered by adding psychological stressors. They are rather "full-body, inflammatory conditions related to the immune state. In this light, the microbiome, 100 trillion or so organism that provide a barrier and a profound effect on our immune regulatory function becomes immensely important."²⁵⁷ Studies show that anxiety is

²⁵³ Edward O. Wilson, *Biophilia* (Harvard University Press: Massachusetts, 1984).

²⁵⁴ Joanna Macy and Molly Brown, *Coming Back to Life* (New Society Publishers: Canada, 2014): 39.

²⁵⁵ *ibid.*

²⁵⁶ Donna Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008).

²⁵⁷ Emily Deans, "Microbiome and mental health in the modern environment"

reduced when microbial species not living permanently in the gut but, because of their presence in soil and water, have continuously passed through the human gut throughout evolutionary history, are given as a supplements.²⁵⁸ Mounting evidence shows that a healthy microbiome is *essential* for a healthy brain, in which case healthy water is essential for a healthy brain. The microbiome affects genetics and epigenetics, and this affects future generations. Disrupting of the flows of ecology by bleaching the health from water disrupts health on all levels of life.

Public health practitioners, environmental managers, researchers and many others are beginning to understand that ecosystems play a critical role not only in disease prevention, but in health *promotion* and recognized the value of an ecosystems approach to health (ecohealth).²⁵⁹ The intimate relationship between human and other forms of life are possible through an ancient, shared heritage, an entanglement that Isabelle Stengers describes as “reciprocal capture.”²⁶⁰ It is a rich process of co-becoming²⁶¹ or as Astrida Neimanis explains it in her book, *Bodies of Water*, “[w]ater in this sense is facilitative and directed toward the becoming of other bodies. Our own embodiment is never really autonomous...we require other bodies of other waters (that in turn require other bodies and other water) to bathe us into being.”²⁶²

A case for undomesticated water

Humans “use the world to think”.²⁶³ By this is meant that the brain makes imaginative use of the material world to compose concepts and metaphors, and the human capacity to do this highlights a fundamental principle of cognitive development.²⁶⁴ It is not simply that physical reality helps people to think but rather that mental development and later functioning *depends*

²⁵⁸ *ibid.*

²⁵⁹ Martin Bunch, ‘Ecosystem Approaches to Health and Well-Being: Navigating Complexity, Promoting Health in Social–Ecological Systems’ *Systems Research and Behavioural Science* 33 (2016): 614-632.

²⁶⁰ Isabelle Stengers, *Cosmopolitics I* (Minneapolis: University of Minnesota Press, 2010), in Van Dooren, Kirksey, and Münster, “Multispecies Studies: Cultivating the arts of attentiveness”, *Environmental Humanities* 8, no. 1 (2016): 1-23.

²⁶¹ Van Dooren, Kirksey, and Münster, “Multispecies Studies: Cultivating the arts of attentiveness”, 1-23.

²⁶² Neimanis, *Bodies of Water. Posthumanist Feminist Phenomenology*, 2017.

²⁶³ Strang, “Reflecting nature: water beings in history and imagination” in *Waterworlds: anthropology in fluid environments*, 4; Lakoff and Johnson, *Metaphors We Live By*, 273; and MacLeod, “Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital”, in Chen, MacLeod, and Neimanis, *Thinking with Water*, 2003.

²⁶⁴ *ibid.*

literally on the *direct* interaction with the world. Metaphors are far more than simple linguistic tools. Strang emphasises that they play a pivotal role in the ability to understand and reason and are literally (and figuratively) the primary means of cognition.²⁶⁵ The central thesis of George Lakoff and Mark Johnson is that lives are lived on the basis of interpretations derived via metaphor.²⁶⁶ “[I]n every language, water provides an endless well of metaphorical imagery that people use to describe process and change in every aspect of their lives... water is the ultimate metaphor of fluidity... Thus, they use themselves to describe the world, and the world to describe themselves. The result is flowing patterns of linguistic and visual association, meaning and value... Sensory interaction with water is a recursive relationship in which nature and culture literally interpenetrate each other”.²⁶⁷ Janine MacLeod brings attention to the association with water even in “the invisible current we refer to when we say the word ‘currency’ – literally, “the condition of flowing.”²⁶⁸ Veronica Strang further explains in her book *Reflecting nature*, that “engagement with the environment is ‘dialectical’ – people draw on that which they observe and experience to describe themselves and their own emotional, mental and physical processes. In this dialectic people project themselves psychologically onto the world, objectify that projection and ‘reel it in’ to be reintegrated into their own knowledge and experience.”²⁶⁹

A corollary to this is without direct, bodily experience of water that flows untethered – not domesticated water controlled through a tap – but from a stream, a spring or a river the human brain does not develop the capacity to think in flows, and the potential for real-world, informed and fluid cognition either doesn’t get a chance to develop, or it atrophies. This highlights a critical need for people in all stages of life to have access to natural water bodies in a state of natural flow for healthy cognitive development and functioning. Not having access to free-flowing water can be likened to a mineral deficiency for the mind. While the causative flow is easily recognized from environment to cognition, the reciprocal causative flow in the other direction is more easily overlooked.²⁷⁰ If action has *already* been taken to cement over a spring when there is still flowing

²⁶⁵ Lakoff and Johnson, *Metaphors We Live By*, 273.

²⁶⁶ *ibid.*, 274.

²⁶⁷ Veronica Strang, ‘Common Senses - water, sensory experience and the generation of meaning’, *Journal of Material Culture* 10, no. 1 (2005): 97.

²⁶⁸ MacLeod, “Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital”, in Chen, MacLeod, and Neimanis, *Thinking with Water*, 40.

²⁶⁹ Strang, *The Meaning of Water*, 61.

²⁷⁰ Jeremy Lent, *The Patterning Instinct*, (Prometheus Books: United States, 2017). The relationships between cognition and history, and cognition and reality are not one-way, but reciprocal. What goes on around someone is

water to affect and develop a full complement of human thinking faculties, what world might we end up living in further down the line when flowing water has been stopped throughout Cape Town and the only feedback loop we are in relationship to is a tap?

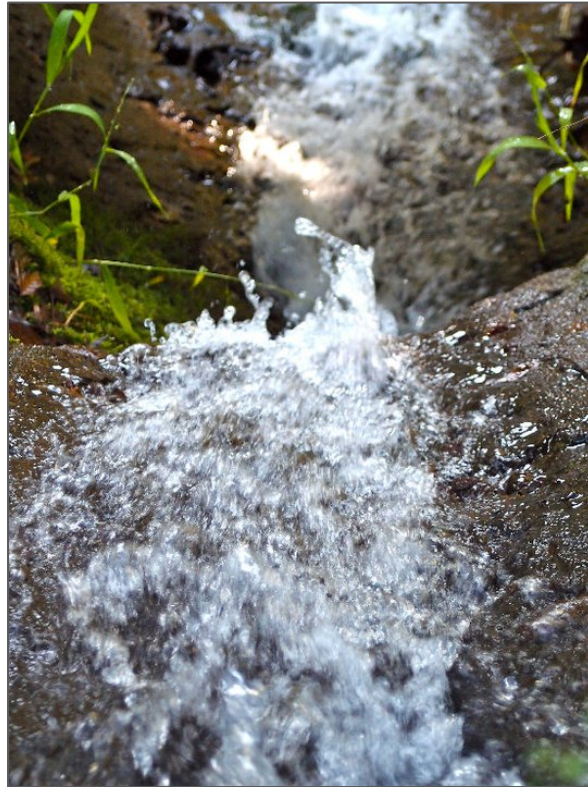


Fig. 26. Springs Way Spring water – living water, whose patters of flow shape thinking and life. Image: Noel Marten. 2011.²⁷¹

The springs reminds us how to be human

The drought in Cape Town, I connect it directly to the disconnect with the relationship to water. That is actually what the drought is.

- Mbali, water diviner, St James Spring water interviewee ²⁷²

continually affecting cognitive patterns and the consequent action someone takes continually affects what is around them. It is a perpetual, bi-directional feedback loop.

²⁷¹ Noel Marten, *Profile photo*, Cape Town, in *Facebook, Friends of Newlands Spring*, 11 July 2011, accessed December 11, 2019.

https://www.facebook.com/pg/newlandsspring/photos/?tab=album&album_id=237650412925379. Springs Way Spring water – living water, whose patters of flow shape thinking and life.

²⁷² Interviewee 14, see Appendix 1

If the much-quoted saying of Einstein’s is correct – that a problem cannot be solved by using the same mindset that created it – then discussing the troubles of drought and climate change with those who do not hold the same version of the world as separate seemed necessary. I spoke at length to the traditional healer Mbali, about this, someone who has trained and been initiated into two different systems of wellbeing, who explained the drought to me: “[T]he crisis is a spiritual crisis. It’s always a spiritual crisis. It’s never anything else..... And so here in Cape Town what’s been happening is that the water has spoken. It’s actually the water that’s spoken ... to get people back to the water...”



Fig. 27. A woman bows to the water at St James Spring. Image: Rodger Bosch. 2018.²⁷³

Niall Campbell and Nicola Robins, also two traditional healers, reveal in an essay titled “Rainmakers, Initiation and Climate Change” how, across cultures, initiation ceremonies in the past involved the learning of natural law. Through a transformative experience initiates developed a sense of personal responsibility to their community and to the larger web of life upon

²⁷³ Rodger Bosch, *People collect drinking water from pipes fed by an underground spring, in St. James, about 25km from the city centre, on January 19, 2018, in Cape Town, Cape Town, in Getty Images, 19 January 2018, accessed April 4, 2020. <https://www.wired.co.uk/article/cape-town-water-crisis-day-zero-climate-change>. A woman bows to the water at St James Spring.*

which they and the community depended. Today these types of initiations are largely finished and those who knew of their necessity see this as the greatest reason that there is drought and vast changes in the climate. Rain no longer comes because “the land is not right” and “no one is being taught to keep things right”.²⁷⁴ If one looks at this in systems terms, rain is simply an emergent property of a community living in balance with a larger whole.²⁷⁵ Droughts are a symptom; they are like a fever. They are a symptom of an underlying condition. That of ignoring of the precious, the beautiful and the unmeasurable.

Being in ‘right relationship’ is a term used by many different societies to describe a way of living in the world with the awareness of being part of a greater whole, where reciprocity is a basic part of being alive. This speaks to a more relational definition of health. A way to ‘right’ a relationship out of balance is achieved commonly through ritual. Ritual, simply put, is a technique of health, health being the interplay of dynamic, living relationships. The act of water collection at the springs is a ritual. Mbali emphasized this by explaining how, “[w]ater has been used for centuries ...always in healing, always in cleansing, always in anointing, always in blessing.... It’s connected to this ancient way of being, water and ritual.” She went on to explain: “When people go to water, they’re having a direct relationship with to the water spirit”. “That’s what people going to the water don’t get when they have a tap. It’s about having a relationship with that water, in a very different way. And it’s almost as if you are creating a sacred thread. That’s the thread to all beings. That’s the thread to nature. That thread has in some ways been broken through the western mind.”²⁷⁶ Through collecting water at a spring one knowingly or unknowingly involves oneself in a technique of health.²⁷⁷ It is in the encounter with the source of the precious waters of life that people’s deeper motives and aspirations are expressed through encounters with ‘the sacred’ – special places where it is clear how nature and humanity meet.

²⁷⁴ Niall Campbell and Nicola Robins, *Rainmakers, Initiation and Climate Change*, 2009, accessed October 10, 2018 http://www.raindance.co.za/resources/docs/Raindance_Rainmakers_100214.pdf, 1.

²⁷⁵ *ibid.*

²⁷⁶ Interviewee 14, see Appendix 1

²⁷⁷ Gathering Spring water is a ritual directly related to physical health yet, also, looking at it in a wider context one can see the act of water collection also facilitates social health through bringing a diversity of people from all over Cape Town together in a common purpose, enabling the cross-pollination of conversations, shared kindnesses, encounters with the more-than-human world and new experiences that shift perceptions.



Fig. 28. Springs Way spring before the drought. Image: Orbit Gypsy. 2015.²⁷⁸ (left); Fig. 29. Newlands Pool Collection site today. Image: Jess Tyrrell. 2019.²⁷⁹ (right)

Springs Way Spring was in its own way a sacred site, defined as “areas of land or water having special spiritual significance to peoples and communities”.²⁸⁰ Many families and individuals collected spring water from Springs Way for spiritual reasons – people of faith or religion, or of no specific faith but a more personally defined relationship with this particular place on the Earth. People continue to collect water at the other free-flowing springs, finding inspiration in these places, and in doing do attend to the more numinous aspect of health. This is evidenced through an interview that happened at the Newlands Pool collection site with a woman who used to collect water at Springs Way Spring. She spoke about what collecting water there before it was closed off taught her: “In this day and age we are so...spoilt...in the way we get things... just like in our homes we open the tap and water comes out, that now we are doing something like... like what you would do in the rural areas, where you’d have to go collect water and yes, then it really does make you appreciate this water...you know? So now we’re bending, we’re getting into an awkward position to get the water...and we had more appreciation, and it was coming out of the

²⁷⁸ Orbit Gypsy. *Springs Way spring*. 2015. Cape Town. In *Orbit Gypsy*. Accessed October 18, 2018. <https://orbitgypsy.wordpress.com/2015/09/15/challenge-16-collect-mountain-water-from-newlands-spring-and-share-it/>. Springs Way spring before the drought.

²⁷⁹ Jess Tyrrell. *Newlands Pool Collection site today*. Cape Town. Personal photograph by author. 2019.

²⁸⁰ Gonzalo Oviedo and Sally Jeanrenaud, “Protecting sacred natural sites of indigenous and traditional peoples”, in Josep-Maria Mallarach, and Thymio Papayannis (Eds), *Protected Areas and Spirituality* (IUCN and Publicacions de l’Abadia de Montserrat: Switzerland 2007): 3.

earth and that ja, wow, Allah is providing...you respect the earth more, you respect the water more.”²⁸¹

While people are no longer being taught to keep things in right relationship through ‘official’ initiation ceremonies as before, what is substantiated through interview responses is that spring visitors are nevertheless being taught this through a smaller, intimate and more personalised ceremony – the ritual of collecting water from its Source. One could say that even though many people have forgotten the important knowledge of connection, the water has not. It is as if there is a greater intelligence at work at the springs. Here, a sensitive process of acculturation begins to happen, through which those coming to the water sources slowly acquire the knowledge, attitudes, values, skills and behaviours that enable them to become functioning participants of a new sub-culture.²⁸² There is learning that happens at the water’s edge, such as this lesson expressed by a water collector at Boyes Drive Spring: “Here, the water is much slower. You need to bring patience with you.”²⁸³

This is place-based learning – a process of adaptation. I believe it is here that the seed of a vital water ethic is planted and that this sub-culture might come to be known in our shared future in Cape Town as a culture of care. This ethic is a wonderful expression of nature self-organizing, evoking feedback loops of self-regulation that is adaptive. It is almost as if a water ethos is inherent in the water and that by drinking from its source one is enculturated by the Spirits of the springs themselves; perhaps those same guardians long ago spoken of by the /Xam and the Khoekhoe are still doing their work, watching over resources that can be easily destroyed,²⁸⁴ teaching those who visit the places over which they are custodians how to be in right relationship once again.

²⁸¹ Interviewee 2, see Appendix 1

²⁸² Verschuuren, Wild, McNeely, and Oviedo (Eds.), *Sacred Natural Sites: Conserving Nature and Culture*, xxv.

²⁸³ Interviewee 6, see Appendix 1

²⁸⁴ Hof, ‘Guardians of Nature Among the /Xam San: An Exploratory Study’, 47.



Fig. 30. Boyes Drive free-flowing mountainside Spring²⁸⁵ (left). Fig 31. Mohammed’s tubing inserted into the flow-carved rockpool²⁸⁶ (right). Images: Jess Tyrrell. 2019.

Controls and Corrals

I asked people who had previously collected water from Springs Way Spring but do not go to the Newlands Pool site as to what had changed for them. One response by a St James Interviewee was: “The security! The attitude! The water is in jail!”²⁸⁷

Water as a captured being is a powerful image. Something that is not captured is free, wild. The root of the word *wild* seems to be ‘will’, with a descriptive meaning of *self-willed*.²⁸⁸ This speaks to a quality of flowing water, and a quality missing when water is captured by a tap. It highlights the point that even when water is moving through a large open pipe, such as at the Springs Way Spring, it retains an element of self-willedness through the natural pulse that is an inherent

²⁸⁵ Jess Tyrrell, *Boyes Drive free-flowing mountainside spring*. Cape Town. Personal photograph by author. 2019.

²⁸⁶ Jess Tyrrell, *Mohammed’s tubing inserted into the flow-carved rockpool*. Cape Town. Personal photograph by author. 2019.

²⁸⁷ Interviewee 11, see Appendix 1

²⁸⁸ Frazier Roderick Nash, *Wilderness and the American Mind* (Yale University Press: London, 1967) quoted in Jay Griffiths book *Wild* (Penguin Books: USA, 2006): 49.

character of flowing water. This self-willedness is one of the animating characteristics that make up a spring.

A response from a conversation held at the Boyes Drive Spring revealed another person's aversion to the Newlands Pool collection site: "At Newlands there's a control thing...whereas here... there's nothing".²⁸⁹

"Here, there's nothing" is a telling testimony. Rather than simply the absence of essential qualities or values that this man experiences at the Newlands Pool water collection point, it is rather what he *finds* at the Boyes Drive Spring that is far more valuable. And what he finds he was less able to express in words. It is indeed hard to articulate an encounter with Mountain, with timelessness, or with free-flowing-water that appears in our surface world from the unseen parts of Earth. Given another day, another societal paradigm to influence our speaking and help give he and I language for such encounters perhaps he would have said to me, "here, there is everything", as we, two strangers, sat sipping sweet cool water in the warm sunshine, in reflective quiet, appreciating the adventure of the natural flows of wild water, of conversation and the freedoms afforded us by this truly-still-free-flowing mountainside spring.

²⁸⁹ This interview was done at Boyes Drive, where the water comes from a seep on the face of the mountain. Interviewee 6, see Appendix 1.



Chapter 3

A Case for the Living Image:

Designing for ecological identity

“Getting water to flow through pipes often involves much more than hydrological pressure – it also may require taking cognisance of the political, moral, social and cultural dimensions of everyday life.”

- Steven Robins²⁹⁰

Bridging troubled waters

In Cape Town, with its long history of oppression, forced removals and present day glaring spatial divides of humans from each other, and humans from anything other-than-human, there is a genuine need for attentiveness to the numerous subtle ways that social structures and styles of thinking continue to perpetuate dominance and separation on many overt and hidden levels. Michael Parker Pearson and Colin Richards in *Architecture and Order: Approaches to Social Space*, write that “most constructions exert power in ways that are not so obviously coercive. Space commands bodies, prescribing or proscribing gestures, routes and distances to be covered.”²⁹¹ It was a necessity for the City to thus speak to spring water collectors directly, do publicly engaged research, to seek to understand what it was about the Springs Way Spring that made it so meaningful to so many and for this to be carried forward into the creation of the new site. That it was precious was evident in numerous ways, not least through the large petition sent

²⁹⁰ Robins, “The Kildare Road Spring: A Place buried under concrete”, <https://www.dailymaverick.co.za/article/2018-06-04-the-kildare-road-spring-a-place-buried-under-concrete/#gsc.tab=0>.

²⁹¹ Michael Pearson and Colin Richards (ed.), *Architecture and Order: Approaches to Social Space* (Routledge: London & New York): 3.

to the City by citizens imploring that this spring be kept open.²⁹² Yet the disconnect with the meaningful reality behind these waters was never bridged, and the design of the alternative water collection site at the Newlands Pool was seen simply as a logistical engineering exercise by the City of Cape Town, its point of reference was not about designing for aliveness in a severed city, but rather technical efficiency and economic productivity.²⁹³ This approach divided up sections of a spring and piped it to a location deemed “convenient”, completely ignoring it as a living whole, ignoring the critical flows of ecology. What has been created as a water collection point is not representative of a spring, but rather of an ATM or a check-out counter where the values emphasized are the same as those that led to human-nature estrangement, the consequences of which are climate breakdown and drought. As Mbali, the traditional healer described previously: “To remove that ritual [of bending down to collect water] unconsciously has a direct impact on our immediate relationship to nature”.²⁹⁴

As explains Enric Pol in his paper investigating the processes that shape social and environmental identity in relation to sustainability, “[t]he city as a physical structure serves to condition social interactions by either facilitating or impeding them. The physical shape of the city also moulds attitudes toward the environment.”²⁹⁵ The fences and guards at the Newlands Pool water ATM bear striking resemblance to draconian forms of containment used in the USA’s militarized crowd control tactics. Controls, corrals, guards, fencing – these are all devices in the colonization toolkit. Given that architecture has been used historically as a colonial weapon of disconnection and control and that a country like South Africa has a long traumatic history of militarized force on its civilians, it should by now be obvious that such realities *must* be taken into consideration in public space design. Achille Mbembe, mentioning Frantz Fanon in his public lecture series titled, *Decolonizing Knowledge and the Question of the Archive*,²⁹⁶ outlines how “decolonization starts with the de-privatization and rehabilitation of public spaces” – of rearranging spatial relations. He continues by saying that the decolonization of public spaces and building is inseparable from the democratization of access. In the context of the Newlands Pool water

²⁹² See Daniels, ‘Petition to prevent ‘free water’ closure in Newlands’

²⁹³ Bruno Latour, The Recall of Modernity: Anthropological Approaches, *Cultural Studies Review* 13, no.1 (2007) accessed June 7, 2019, <https://doi.org/10.5130/csr.v13i1.2151>.

²⁹⁴ Interviewee 14, see Appendix 1

²⁹⁵ Enric Pol, ‘The Theoretical Background of the City-Identity-Sustainability Network’ *Environment and Behavior* 34, no.1 (2002): 14.

²⁹⁶ Achille Mbembe, *Decolonizing Knowledge and the Question of the Archive*. np.

collection site how might it be designed in a way that creates the conditions for every citizen of Cape Town to feel that “[t]his is my home. I am not an outsider here. I do not have to beg or to apologize to be here. I belong here”.²⁹⁷ As the site currently exists control has been designed *in* and nature (the human included) has been designed *out*.

If water is only known or experienced as a captured being through a tap, what does that say about the capture of the human mind, when neither water nor human are allowed *self-willedness*? The characteristic of built-in obsolescence in consumable goods risks being carried over to water when it comes out of a tap, where its history is effaced and its origins are rendered unreadable. If humans learn to think, are taught to think by exposure to metaphor, what happens to the human being if nature is designed out of daily experience? When water is not allowed to flow the opportunity to witness its movement is taken away, as is the corresponding cognitive function and the metaphor of water’s free movement only expressed in “flows of capital” and currency?²⁹⁸ The commons – the gift economy – are being closed off. First Springs Way Spring and now at the Newlands Pool site in the form of a tap. If, as a water gatherer at St James Spring said so beautifully, “collecting spring water reminds us how to be human”, then the closing off of the water commons is akin to closing off the human.

How do we design for liveliness?

It is clear from the conversations held at the free-flowing springs around southern Cape Town that they teach connectivity thinking and reciprocity. Rather than estrange people from life these springs promote life and promote connection *to* life. They support an experience which encourages organic learning, a water ethic of care-full-ness, where in gratitude for the water received, the gift of water is acknowledged and in the sense of satisfaction and enough-ness engendered the practice of self-restraint occurs. I take only what I need. This is the very water ethic that the City tried to create through its top-down messaging and price hikes during the drought yet was being organically learned, from the ground up, through collecting water at flowing springs. So what are the common threads that exist at these springs whose moving waters evoke the imagination, inform of an ethic of care and support diversity?²⁹⁹

²⁹⁷ *ibid.*

²⁹⁸ MacLeod, “Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital”, in Chen, MacLeod, and Neimanis, *Thinking with Water*, 41.

²⁹⁹ Diversity of humans, experiences, cognition and more-than-human beings.

In the modern urban setting the primary design paradigm has transformed and massively degraded natural systems and it continues to estrange humans from the rest of the world. These consequences however are not an inevitable by-product of modern urban life – rather they are a result of a fundamental design flaw.³⁰⁰ By adopting a different paradigm a different direction can be chosen through conscious design. What could happen if design ensures that nature in the city is more than simply about infrastructure? ‘Restorative environmental design’ is an approach that not only aims at having a low-environmental impact but, more importantly, aims to have a positive impact that fosters contact and connection between people and landscapes.³⁰¹

I want to introduce the terms ‘inspirational learning’³⁰² and biophilic design as a response to the urgent question of our times and this final chapter: *how do we design for liveliness and connection?* It is now clear that not only do modern civilization’s economic structures and technologies need to adapt to meet today’s climate crises, but important too are the ways in which urban people think about, and as a consequence design, urban spaces and the structures within them to be regenerative. How do we design for the Anthropocene, given that the Anthropocene is a product of people who are estranged from their connection to the earth? The degree to which individuals feel and perceive themselves as being connected with all life – ecological identity – is directly linked to attitudes and actions of care and life-enhancing behaviour.

³⁰⁰ Stephen R. Kellert, Judith H. Heerwagen & Martin L. Mador, *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life* (Wiley: USA, 2013): 5.

³⁰¹ Kellert, Heerwagen and Mador, *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life*, 5.

³⁰² A. Telier et al., “Qualities of an Inspirational Design Environment.” *Design Things* (The MIT Press, Cambridge, Massachusetts; London, England, 2011): 27–50. accessed June 8, 2020, www.jstor.org/stable/j.ctt5hhmhc.8.

Falling water separates off into drops



Fig. 32. Droplets as spheres.



Naturally flowing water always endeavours to follow a meandering course

Fig. 33. Archetypal Movement of Water

Images: Theodore Swenk: 1971.³⁰³

“Wherever water occurs it tends to take on a spherical form...Falling as a drop water oscillates about the form of a sphere”³⁰⁴

Flowforms

While he was the director of the Institute for Flow Sciences in Germany, Theodore Schwenk assembled his research on water’s natural movement into his seminal book, *Sensitive Chaos*. The book reveals how water’s various forms, shapes, flows and patterns give rise to other forms and shapes that we can see all around us in nature – everything from ripples in the sand, animal

³⁰³ *Archetypal Movement of Water.*, in *Sensitive Chaos: The Creation of Flowing Forms in Water and Air.*, by Theodore Schwenk. London: Rudolph Steiner Press, 1971. 13-14.

³⁰⁴ Theodore Schwenk, *Sensitive Chaos: The Creation of Flowing Forms in Water and Air* (Rudolph Steiner Press: London, 1971): 13.

shapes, the pulse of a river, wood grain, crystalline structures, the physiology of jellyfish as well as human bone formations, all of these resemble responses to the forming ability of water.³⁰⁵ John Wilkes, a sculptor and research assistant at the Institute of Flow Sciences with Theodore Schwenk believed that, “hidden in [its] rhythmical movement, is the secret to water’s way of being”.³⁰⁶ After carefully absorbing the principles being researched at the Institute, Wilkes went on to create sculptures that use water’s natural spiralling tendency as a means not only to create art, but also of increasing water’s ability to support life and people to reconnect with the rhythms of life. Calling them ‘Flowforms’, the design incorporates a series of bowls and utilizes mathematical precision to allow water to move as if in a mountain stream with its naturally occurring rhythmic pulse. The bowls are often symmetrical mirror images so that the water within them flows in repeated figure of eight patterns, designed specifically with the desired drop in elevation to maximize the spiralling motion.

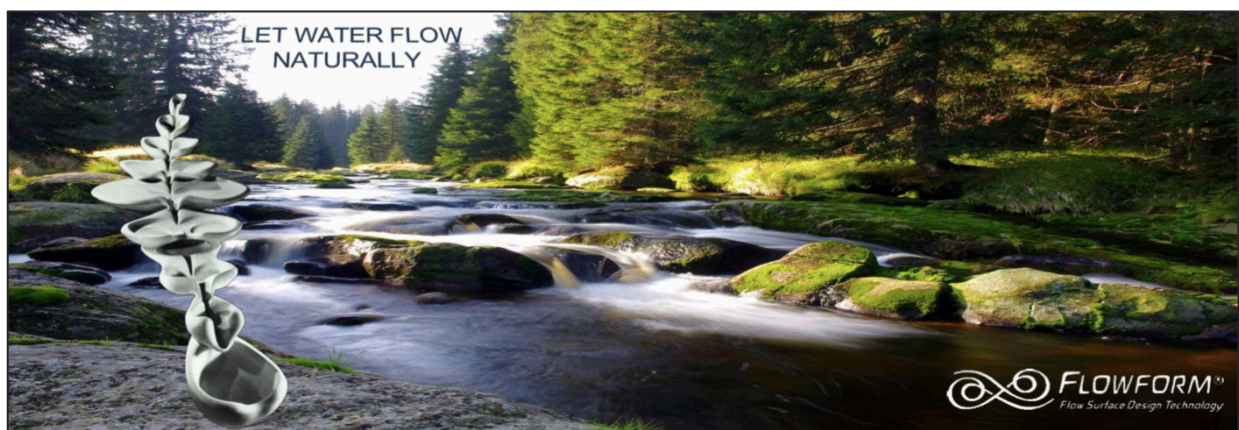


Fig. 34. Constructed Flowform showing how, like a river, it lets water flow naturally. Image Flowform Product catalogue.³⁰⁷

The Chengdu river water garden in the image below (fig. 35) incorporates Flowform sculptural eco-technology to enliven constructed wetland areas that purify town water run off before it goes into the river, refreshed and clean. This landscape of stone and plants creates a natural design space for families to socialise, learn about and play with water.³⁰⁸ The swirling action of water

³⁰⁵ Sven Schunemann, “Forming Flows”, Watershapes, accessed June 13, 2020, <https://watershapes.com/other-waterfeatures-from-birdbaths-to-lakes/flowing-forms.html>.

³⁰⁶ Mark Riegner & John Wilkes in Flowforms and the language of water, in David Seamon & Arthur Zajonc (Eds.), *Goethe's Way of Science: A Phenomenology of Nature* (State University of New York Press, New York, 1998): 238.

³⁰⁷ Flowform Product Catalogue, n.d, accessed June 13, 2020, <http://178.62.247.112/wp-content/uploads/2020/01/Product-catalogue-20180805-1.pdf>. Constructed Flowform showing how, like a river, it lets water flow naturally.

³⁰⁸ Image of “Flowform Projects Worldwide”, Flowform, accessed June 13, 2020, <http://flowform.info/projects/>.

effects a type of water treatment that has enabled large scale projects around the world to treat city runoff water before it flows into rivers.



Fig. 35. The Living Water Garden, Chengdu Sichuan Province, China. Image: Flowform.

- The gentle, rhythmical sound has a **calming effect** on people
- Flowform revitalized water has **elevated pH levels**, positively contributes to health improving biochemical processes at cell level
- **Stimulates plant growth**
- Negative ions produced by the force of moving water, stimulate the brain to produce more serotonin, resulting in **lower stress levels**
- It turns anaerobic **effluent into** usable sweet smelling **fertilizer**

Fig 36. Benefits from Flowform water. Informatic: Flowform Product Catalogue.³⁰⁹

Flowforms are becoming increasingly popular in agriculture where effluent and waste water is treated for fertilizer teas, composting, pond health and biodynamic crop treatment.³¹⁰ Extensive

³⁰⁹ Flowform Product Catalogue, accessed June 13, 2020, <http://178.62.247.112/wp-content/uploads/2020/01/Product-catalogue-20180805-1.pdf>. Benefits from Flowform water.

³¹⁰ Flowform, n.d, Agriculture, accessed June 25, 2020, <http://flowform.net/#agriculture>.

research has been done that verifies that the water passing through Flowform systems makes nutrients more readily available to plants and stimulates growth, and that the movement of the water generates negative ions which have positive effects on energy and mood in people, lowering stress levels and increase mental energy. Flowforms are just one of many possibilities for supporting liveliness in water, as well as liveliness in those who may drink it.

FLOW – For Love Of Water

If I were to imagine the kinds of designs that allow people, in our daily lives around Cape Town, to have meaningful daily contact with diverse others and with nature it would be those that represent and express the beauty and reality of our interdependence and interconnection with all parts of the living world. They would reflect no separation between humans and nature. The natural ‘design’ of the free-flowing springs around southern Cape Town clearly allow these kinds of encounters, that teach an appreciation of water and reciprocity in the form of care. Are there common design principles that exist at these springs that we might look to as inspiration? Anna Tsing uses the term ‘passionate immersion’³¹¹ to describe becoming curious and therefore entangled with whomever it is that one may be engaging. This approach is vital if the human estrangement the rest of the world is to be restored. With restoration of connections comes a “*learning to be affected*’ and so perhaps to understand and care a little differently”.³¹²

In his book *Building for Life*, Stephen Kellert, who co-edited *The Biophilia Hypothesis* with E.O Wilson, illustrates how designers and architects can address the innate human need for contact with nature as well as offers many practical and creative solutions for cultivating a meaningful experience of nature within the built environment.³¹³ “Biophilic design” as it is known has an increasingly large body of evidence to support its successes - evidence that shows not only acceleration of healing in those who are ill, in stress reduction, enhancement of clarity of thought and creativity, but also the improvement of people’s sense of well-being. This list is strikingly similar to the very benefits that I observed happen when taking people out into nature for periods of time.

³¹¹ Tsing, ‘Arts of Inclusion, or, How to Love a Mushroom’, in van Dooren, Kirksey, and Münster, “Multispecies Studies: Cultivating the arts of attentiveness”, 1-23.

³¹² *ibid.*

³¹³ Kellert, Heerwagen, and Mador, *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life*, 2013.

Biophilic design is the designing for people as a biological organism, respecting the mind-body systems as indicators of health and well-being in the context of what is locally appropriate and responsive. Good biophilic design draws from influential perspectives – health conditions, socio-cultural norms and expectations, past experiences, frequency and duration of the user experience, the many speeds at which it may be encountered, and user perception and processing of the experience – to create spaces that are inspirational, restorative, and healthy, as well as integrative with the functionality of the place and the (urban) ecosystem to which it is applied. Above all, **biophilic design must nurture a love of place.**³¹⁴

An extensive report compiled by Bright Green Terrapin highlights fourteen principles of biophilic design in the context of health, architectural histories and key considerations for implementation. These principles form a framework for understanding and supporting thoughtful inclusion of a rich diversity of design strategies and they have been identified through extensive interdisciplinary research, with over 500 publications on biophilic responses mined in order to uncover useful patterns that designers can use.³¹⁵ In the case of the environment around the Newlands Pool spring water collection point biophilic design has the potential to catalyse landscape architecture to play a central role in not only public, but ecosystem health - which includes the human – in urban environments.

³¹⁴ William Browning, Catherine Ryan & Joseph Clancy, *14 Patterns of Biophilic Design: Improving Health and Well-being in the Built Environment*, Terrapin Bright Green, accessed June 10, 2020, <https://www.terrapinbrightgreen.com/reports/14-patterns/#front-matter>.

³¹⁵ *ibid.*

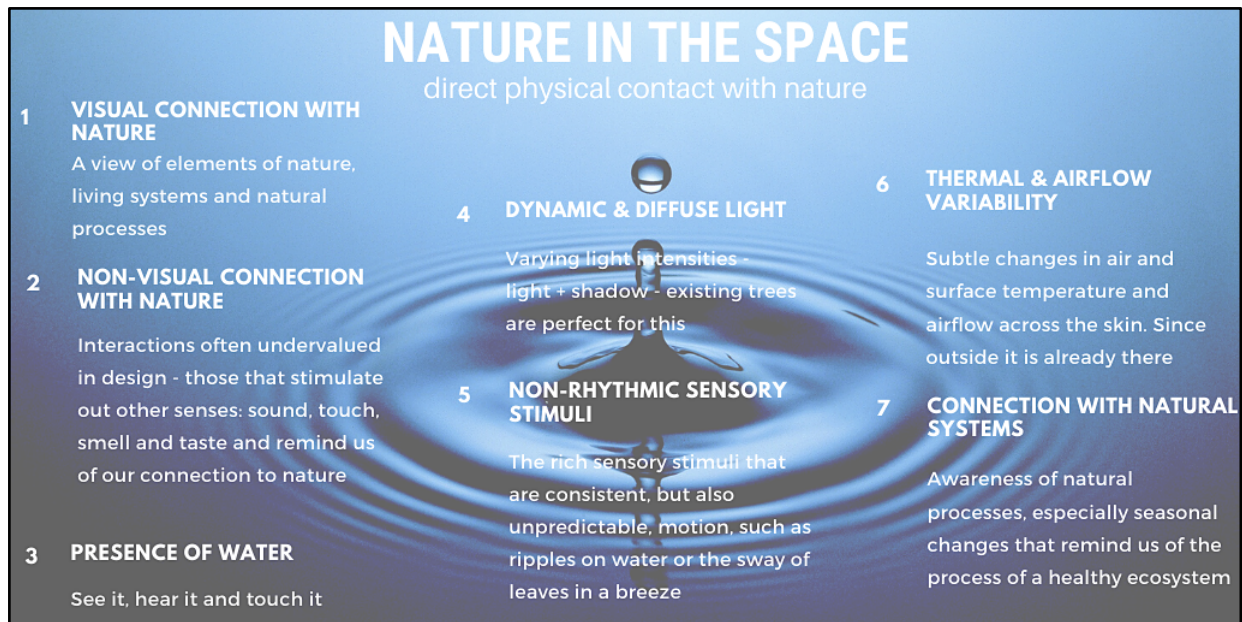


Fig 37. Informatic of the first seven Biophilic Principles. Informatic: From Browning, Ryan and Clancy. 2020.³¹⁶

Biophilic design is about connecting people to nature and also connecting nature to other parts of nature within urban settings, where they tend to exist as isolated ‘nature pockets’. The Newlands Pool spring water collection site is located right next to the Liesbeek River. If looking at the seven principles of Biophilic Design (illustrated in fig. 37 above) all of them are present in some form at the site: *visual connection* with beautiful large trees and with water, *non-visual connection* with the sound of the river, *presence of water*, *dynamic and diffuse light* thanks to the existing trees, *non-rhythmic sensory stimuli* through wind in the leaves or the sound of flowing water, *thermal and airflow variability* simply through being outside and *connections with natural systems*, such as the trees losing their leaves in winter that remind us of the seasons.

³¹⁶ *Biophilic Design Principles*. In *Terrapin Bright Green*. By William Browning, Catherine Ryan, and Joseph Clancy. 2014. Accessed June 19, 2020. <https://www.terrabinbrightgreen.com/reports/14-patterns/#front-matter>. Informatic of the first seven Biophilic Principles.



Fig 38. Newlands Pool spring water collection site showing its potential to catalyse connection and well-being because of the natural elements already existing at this location – the Liesbeek River trail and many large trees. Each number represents an element of the first seven Biophilic Design Principles in existence here. Image: Google Maps.
317

In Cape Town the racialized geography inherited from apartheid has not been addressed, and land and healthy ecology continue to be starkly divided according to race. This makes the springs sites of double importance in that they are accessible to all people. There are fifteen springs in the Newlands area.³¹⁸ The image below (fig. 39) is one of these springs that illustrates beautiful, living design already existing for a Cape Town spring. The aesthetic and sense of magic woven into this space produces an affect that is meaningful to visitors: it is easy to imagine this kind of place inspiring a water-gathering practice as a pilgrimage. This particular spring is part of Kirstenbosch Botanical Gardens, a protected area for which one has to pay to access. To quote Achille Mbembe again – the decolonization of public spaces is inseparable from the democratization of access.³¹⁹ Public health, social justice, design, environmental health and

³¹⁷ Google Earth Liesbeek River Trail, June 11, 2020, Cape Town, in Google Earth, accessed June 11, 2020.

³¹⁸ Geohydrological and Geospatial Solutions International (Pty) Ltd., *Hydrogeological Investigation of Existing Water Springs in the City of Cape Town and Environs. Spring Use Strategy*, GEOSS Report no. 2014/10-08 for City of Cape Town, 24 June 2015.

³¹⁹ Mbembe, *Decolonizing Knowledge and the Question of the Archive*, <https://wiser.wits.ac.za/system/files/Achille%20Mbembe%20-%20Decolonizing%20Knowledge%20and%20the%20Question%20of%20the%20Archive.pdf>.

sustainability are all part the same problematic belief: separation / exclusion. When these issues are recognized as connected and systems are designed on such a foundation of understanding, they become mutually supporting of a future vibrant, living ecosystem of well-being. Access to beauty cannot only exist if you are able to pay for it. I imagine how the Newlands Pool water site, without its access blocked by exclusive entrance fees, available to all citizens of Cape Town might also be given the same quality of attention to beauty as the Colonel Bird's Bath.



Fig 39. Colonel Bird's Bath, Kirstenbosch Botanical Gardens. Image: liozima. 2005.³²⁰

Val Plumwood spoke about how “[m]uch contemporary environmental theory, especially in the eco-humanities, focuses on place as a locus of continuity, identity, and ecological consciousness and on ‘place education’”.³²¹ She goes on to emphasise how “[r]ecovering a storied sense of land and place is a crucial part of the restoration of meaning. But if commodity culture engenders a false consciousness of place, this meaning can be fake.”³²² The Newlands Pool site as it currently

³²⁰ Liozima, *Colonel Birds Bath*, Cape Town, in *Flicker*, 2005, accessed July 12, 2020, <https://www.flickr.com/photos/liozima/851535339>. Colonel Bird's Bath, Kirstenbosch Botanical Gardens.

³²¹ Plumwood, ‘Shadow Places and the Politics of Dwelling’, *Australian Humanities Review*, <http://australianhumanitiesreview.org/2008/03/01/shadow-places-and-the-politics-of-dwelling/>.

³²² *ibid.*

exists illustrates an example of what Plumwood is referring to – a construction based on the privatization of water infrastructure that offers nothing towards the storied sense of land. The stories collected in my interviews, rather highlight how its taps have invoked fewer pilgrimages to the spring water by Cape Town citizens. This miserly design arouses no inspiration and engenders a false consciousness.

Using the stories gathered in my interviews, as well as in research done by others is one way of beginning to know what it is that makes these springs at Newlands, as well as other springs around southern Cape Town so meaningful to the people of Cape Town. That these storied wellsprings offer a blend of present day rain water with ancient, fossil water stored for over 450 million years old³²³ holds a numinous magnetism. The springs are literally foundations of wellbeing. Where this Newlands water can no longer emerge from its chosen outlet at Springs Way then at least at its new site this primordial and essential water is deserving of a design that truly represents and honours its waters as a foundation of life, where one may have a direct experience of one's being as made *from* and belonging *to* the living Earth.

From this:



Fig. 40. Newlands Pool site. The check-out counter for spring water.³²⁴ (left); Fig. 41. Isolated trees in a desert of brick (right) Images: Our Lawyer. 2018.³²⁵

³²³ Juuti, et al., *Resilient Water Services and Systems: The Foundation of Well-being*, 123.

³²⁴ *The New Water Collection Taps at Newlands Cape Town*, May 12, 2018, Cape Town, in *Our Lawyer*, May 12, 2018, accessed June 8, 2020. <https://www.ourlawyer.co.za/water-collection-point-newlands/>. Isolated trees in a desert of brick.

³²⁵ *Parking Lot at the new New Spring Water Collection Point, Newlands, Cape Town*, May 12, 2018, Cape Town, in *Our Lawyer*, May 12, 2018, accessed June 8, 2020. <https://www.ourlawyer.co.za/water-collection-point-newlands/>. Isolated trees in a desert of brick.

To this:



Fig. 42. The Spring flows alongside the hewn-mountain-stone pathway. Image: M. van Hartmut. 2018.³²⁶ (left); winding up towards Fig. 43. The spring's pooling 'bath'. Image: Martin Harvey.³²⁷ (right)

Designing for ecological identity

As the crickets' soft autumn hum
is to us
so are we to the trees

as are they
to the rocks and the hills.³²⁸

Environmental self-identity is frequently thought of as the degree to which I consider myself to be the kind of person whose behaviour is “environmentally-friendly”,³²⁹ but this limited

³²⁶ M. Van Hartmut. *Kirstenbosch Botanischer Garten*. November 14, 2018, Cape Town, in *Garden-route Wanderlustlust*, November 14, 2018, accessed July 2, 2020. <http://garden-route.wanderlustlust.de/kirstenbosch-botanischer-garten>. The Spring flows alongside the hewn-mountain-stone pathway.

³²⁷ Martin Harvey, *Colonel Bird's Bath, Kirstenbosch Botanical Gardens, Cape Town*, Cape Town, in *Getty Images*, February 1, 2020, accessed July 15, 2020. <https://www.gettyimages.com/photos/kirstenbosch-botanic-gardens?mediatype=photography&phrase=kirstenbosch%20botanic%20gardens&sort=mostpopular>. The spring's pooling 'bath'.

³²⁸ Gary Snyder, 'Front lines / as the crickets' soft autumn hum', *Thriving on the Threshold*, accessed 1 December 2019, <https://juliegabrielli.com/lifesaving/poetry/front-lines-as-the-cricket-soft-autumn-hum/>.

³²⁹ Susan D. Clayton, "Environment and Identity", *The Oxford Handbook of Environmental and Conservation* (Online Publication, Nov. 2012), accessed January 29, 2020,

modernist interpretation misses the most important inclusive point. Environmentally-friendly *behaviour* is not the destination, yet tends to be where the vast majority of conservation psychology research is focussed. Environmentally friendly behaviour is simply a by-product, a reverberation, an inevitable side-effect of the real ‘destination’ – a person who experiences and identifies themselves an extension of life, inseparable from the whole. In psychology one could say that identity is essentially a way of defining, describing and ultimately locating oneself,³³⁰ and within the modernist framework this is usually as an isolated island of humanness. With a preference for animate language that evokes affect and response I would rather describe environmental self-identity as a direct experience of ones being as made *from* and belonging to the living earth, and as an extension of this whole. Rather than breathing, I am breathed by a much larger body. This is an ecological identity.

“The term animism has its origins in 19th century anthropological work that sought to demonstrate an evolutionary hierarchy within the human family such that primitives could be defined in ways that radically distinguished them from civilised folk. It was, in short, another structure marked by hyperseparated dualism, and one of the distinguishing criteria for making the cut between ‘us’ and ‘them’ was animism.”³³¹ Communities of practice that are still in contact with their belonging to the Earth have many rituals that affirm the interconnectedness between people and nature. Examples of these rituals were mentioned in Chapter 2 – ceremonies that involved the learning of natural law to develop a sense of personal responsibility to community and to the larger web of life upon which the individual and the community depend. I identified that spring water collection can be seen as a ritual of this kind. With these connective practices largely eradicated in many modern societies, a term from the great ecofeminist Val Plumwood, ‘philosophical animism’ may offer a helpful foundation of identity for modernized minds to work within going forward. This inclusive perspective makes the connections with animism as a worldview, yet without cultural appropriation or mimicking indigenous animisms.³³² As explains Deborah Bird Rose, who wrote about this philosophical animism of Plumwood, “her beautiful definition of philosophical animism is that it “opens the door to a world in which we can begin

<https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199733026.001.0001/oxfordhb-9780199733026-e-10>, 1-31.

³³⁰ *ibid.*, 2.

³³¹ Deborah Bird Rose, ‘Val Plumwood’s Philosophical Animism: attentive interactions in the sentient world’, *Environmental Humanities* 3, no.1 (2013): 93-109, <https://read.dukeupress.edu/environmental-humanities/article/3/1/93/8116/Val-Plumwood-s-Philosophical-Animism-Attentive?searchresult=1>.

³³² *ibid.*

to negotiate life membership of an ecological community of kindred beings.”³³³ Rose goes on to say, “[t]hus, her animism, like indigenous animisms, was not a doctrine or orthodoxy, but rather a path, a way of life, a mode of encounter.”³³⁴

By design, regenerative approaches aim for an integrated system where human systems can co-evolve with natural systems and create cycles of co-benefits.³³⁵ People’s actions are naturally caring when their “heart is in it”³³⁶ – “and the heart usually engages through direct experience that is sensory and emotive.”³³⁷ A wellspring, a natural water point in the middle of a city, where we are still privileged enough to be able to drink straight from the earth is the perfect opportunity with which to practice a more generous kind of thinking.

Using the patterns and principles of nature as fundamental in any design for Cape Town’s future holds the potential to create a flourishing society, a resilient economy and a thriving ecology.³³⁸ This kind of design supports the emotive experiences of delight, appreciation and wonder that foster the sensibilities of connection and interdependence; these responses develop and nourish an ecological identity, which in turn supports a love of life, and actions *for* life which leads to thriving: human thriving as well as the greater ecosystem thriving. This is the design of *Regenerosity*.³³⁹

³³³ *ibid.*, 96.

³³⁴ *ibid.*

³³⁵ Regenerosity, “What is Regeneration”, 2020, accessed June 25, 2020, <https://www.regenerosity.world/what-is-regeneration>.

³³⁶ P. Wesley Schultz, Conservation Means Behaviour, *Society for Conservation Biology* 25, no. 6 (2011): 1080-1083 in Matthew J. Zylstra, Andrew T. Knight, Karen J. Esler. *et al.* Connectedness as a Core Conservation Concern: An Interdisciplinary Review of Theory and a Call for Practice, *Springer Science Reviews* 2 (2014): 119–143. <https://doi.org/10.1007/s40362-014-0021-3>.

³³⁷ Zylstra, Knight, Esler. *et al.* Connectedness as a Core Conservation Concern: An Interdisciplinary Review of Theory and a Call for Practice, 119–143.

³³⁸ Regenerosity, “What is Regeneration”

³³⁹ *ibid.*



Fig. 44. Designs that connect with mountain and water. Image: Matt Corrión. 2009³⁴⁰ (left) Fig. 45. Allowing people to see running water and hear its sounds. Image: Woodsmoke-and-coffee.³⁴¹ (right)



Fig. 46. Opportunities to more fully engage the senses. Image: Muneeza. 2019.³⁴²

³⁴⁰ Matt Corrión, [*Designs that connect with mountain stone and water*], Devon, in *Outdoor Design Group*. 2009, accessed July 1, 2020. www.odgdesign.com.

³⁴¹ Woodsmoke-and-coffee. [*Allowing people to see running water and hear its sounds*], in Woodsmoke-and-coffee, n.d., accessed June 29, 2020. <https://woodsmoke-and-coffee.tumblr.com/post/76491669854>.

³⁴² Muneeza. [*Opportunities to more fully engage the senses*]. November 23, 2019., in Muneeza Intuitive Medicine Woman, accessed May 11, 2020. <https://muneezaahmed.com/water-water-everywhere-yet-what-to-drink/>.



Conclusion

Finding Common Ground

In a city as divided as Cape Town, not only geographically but racially and by socio-economics, the Cape Town springs during the peak of the water crisis became rare public spaces where many different people from many different backgrounds came together. What the municipality did not see when it decided to block access to the historic Springs Way Spring was that it was not just a pipe with water coming out of it where people went to save a little money. It was so much more than that. The City did not see that the spring was a place of autonomy, where people who had become conscious of bulk water treatment, aware that the addition of chemicals destroys the microbiome and causes physical and mental health issues, came to make another choice for their health; they did not see that it was a place where people came to connect to the source of their water, a source of life, to connect to place, to the other natural elements that created an atmosphere that many people reminisce about to this day - the *love* of the setting; they did not see that the spring was a place of history, where people told stories of water collection rituals, during and since their families were moved by South Africa's Group Areas Act in the 1960's; they did not see that this spring was a melting pot of civic action and initiative that encouraged resilience, community-minded consideration; they did not see that it was a source of entrepreneurship where many without work stationed themselves from early in the morning until late at night, their makeshift trolleys helping to ferry heavy water containers to vehicles parked elsewhere and who came to love dearly the sense of service to community and belonging that they experienced here; they did not see that the spring was a place of dialogue and storytelling where people from different backgrounds could learn about one another's lives in a way that the societal and city structure does not normally allow; they did not see that it was an area of unparalleled character and spirit of place, like that of a temple - all different religions could stand side by side; it was a place where a relationship with water and its earthly source could be formed.

The incursion of private sector principles into Cape Town's water commons and its public sector ethos is the most significant component in what has shaped local government policy since the 1990's. The consequences of this municipal service delivery approach is that all relationships except those of the consumer to the 'good' are erased and a severe fragmentation of life occurs.

Extraction of resources and commodification takes place even in language through the direct appropriation of water's metaphoric meanings. The nature-culture distinction and its resulting alienation of people from life is not inevitable, but is rather in-built into this economic system of commodification. The case of the Springs Way Spring helps to illustrate the ways in which the model of privatization and commodification is not as straightforward as, say, the bottling of spring water for profit, but rather it is in the more subtle influences that the danger lies - the undermining of democratic spaces through the restructuring of policy and public spaces. Urban design and its constructions exert power in ways that are not often visibly coercive but nonetheless command bodies, time, proscribe or prescribe movement and flows of life and mould attitudes towards other humans and nature. The displacement of actual waters "by the 'waters of capital' in dominant cultural imaginaries can be understood as one manifestation of contemporary processes of reification."³⁴³ Springs Way water, now re-directed to a site a kilometer away, is channelled into taps and is thus extracted from its larger context, its ecosystem and habitat where multi-generational memories thrive.³⁴⁴ Water's past and future is erased and so the fabric of time is damaged, by erasing human cognition of the relationship of earth and water through encountering water flowing from a rock.³⁴⁵ Due to the water's past being erased and it arriving as if by spontaneous genesis from within the tap this commodification process causes what is essentially a memory disturbance. The physical design of space around this singular apparatus produces "the delusion of independence from ecologies, from the broader social context."³⁴⁶ There is a loss in alternative modes of experience that come from moments of encountering mountain water. Opportunities for commoning and grounding in the Earth are denied.

Silke Helfrich, cofounder of the Commons Strategy Group, expresses that, "[i]n a way we need to stop looking for definitions of the commons as a notion, as a concept. Because in fact it's not about a thing. It's not about a concept. It's not about something separated from us. It's another way of being in the world. It's another way of thinking about the world, and thus another way of

³⁴³ MacLeod, "Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital", in Chen, MacLeod, and Neimanis, *Thinking with Water*, 43.

³⁴⁴ *ibid.*, 41.

³⁴⁵ MacLeod "Hydrologies of Transformation: Capitalism, Hegemony, and the Meanings of Water.", 32:40 - 32:29.

³⁴⁶ *ibid.* 33:37 – 33:46.

constantly reshaping and reconstructing the world.”³⁴⁷ In one small local space that exemplified Cape Town’s severe water crisis, this study offers an alternate narrative to the flows of capital and explores other modes of ‘naturing’ the relationships that the city’s citizens have with springs and other ways of thinking about and being of the Earth.

It mattered that the water commons of Springs Ways Spring was closed precisely because people were passionately immersed in its web of life. This research recognizes that *being affected* is exactly the kind of response needed in order to navigate the unknown of the climate future being faced by society. When one focuses merely on the numbers, seeks to maximise only the numbers, everything that is not measured, that one *cannot* measure and is fundamentally *unmeasurable*, gets ignored. When the precious, the beautiful, the unmeasurable is ignored the consequences are cement over a spring, where the storying of shared worlds become critically impoverished by the subsequent insertion of an a-historical tap. The current condition of the world is asking value to be afforded to “the vast amount of information that the imagination, emotion, affect, and relationality offers to so-called objective information of calculation and measurement”.³⁴⁸

The primary design paradigm of modern urban cities has transformed and massively degraded natural systems and continues to estrange humans from the rest of the living ecosystem. However, urban design practices are not an inevitable but rather are the consequences of an essential design flaw. ‘Restorative environmental design’ using biophilic principles not only has a low-environmental impact but more importantly has a positive impact that fosters the sensibilities of connection and interdependence between people and living landscapes. There is an increasing body of evidence to support its numerous successes - evidence that shows not only acceleration of healing in those who are ill, in stress reduction, enhancement of clarity of thought and creativity, but also the improvement of people’s well-being and the vast improvement in the health of living ecosystems.

Knowing that water is arguably “as essential to our self-understanding as it is to the vitality of ecosystems”,³⁴⁹ how does Cape Town design for the Anthropocene, given that the Anthropocene

³⁴⁷ The Commons Strategies Group, “Silke Helfrich on the Commons as a way of working and living together”, YouTube video, 0:37 – 01:09, posted March 21, 2017, accessed July 14, 2020, <http://commonsstrategies.org/silke-helfrich-commons-way-working-living-together/>.

³⁴⁸ Wagner-Lawlor, ‘Regarding intimacy, regard, and transformative feminist practice in the art of Pamela Longobardi.’, 652.

³⁴⁹ MacLeod, “Water and the Material Imagination: Reading the Sea of Memory against the Flows of Capital”, in Chen, MacLeod, and Neimanis, *Thinking with Water*, 56.

is a product of people who are estranged from their connection to the Earth? As says Donna Haraway, indeed “it *matters* what stories we tell to tell other stories with...what thoughts think thoughts, what descriptions describe descriptions”.³⁵⁰ Collecting spring water from the earth, is a “sensuous ecopoetics, prioritising emotional and imaginative faculties that the epistemology and procedures of modern science typically dismiss”.³⁵¹ The attention given to these fluid ethnographies, these storied springs, is done with the confidence that in exposing people to the lives and deaths of other aspects of the more-than-human world, there is an inevitable coming-closer that is facilitated, allowing people to be drawn into new connections and thus an ethic of care arises. Hearing waters’ movement, feeling it make contact with one’s skin, bodily experiences evoke affect and feeling and experience renews an almost pre-verbal understanding of connection to the Earth – becoming in the process, an instrument of change. This act places me, the participant, *within* the web of life and thus contributes towards more than just understanding, but to an intimate, personal experience and knowing of the inseverable entanglement of myself as an extension of life. Spring water collection from the Earth holds all the vital threads required to weave the ecological identity that the symptoms of disconnect are asking to be remembered.

What might the kind of governance look like where the ethical entanglement with water was acknowledged? A politics that included reason *and* affect; where decision making held at its centre an ethic of care; where the awareness that springs and streams being kept healthy and remaining accessible for gathering water was a critical component of cultivating a future water ethic? Where the health of Cape Town’s waterways was recognized as inseparable from the health of its citizens? Where the metaphoric language of flows and current were divested from economic associations? What kind of designs might be created, how might public urban spaces for common ground be shaped when they are guided by a responsiveness and sensitivity to preserving connections and relationships both between the human and the more-than-human? A new ‘environmental ethic’ towards which so many environmentalists aspire will come into existence not as much through logical information, new restrictions, legislature or philosophical appeals to morals, but through a renewed attentiveness to this dimension of perception and Earthly engagement through the simple act of bending down to the ground to gather water that

³⁵⁰ Donna Haraway, *Staying with the Trouble. Making Kin in the Chthulucene* (Durham NC: Duke University Press, 2016). Emphasis my own.

³⁵¹ Wagner-Lawlor, ‘Regarding intimacy, regard, and transformative feminist practice in the art of Pamela Longobardi.’, 652.

comes through the geological formations of a mountain and from a rejuvenated sensory grasp of the Earthly source of the living waters that sustain us.

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—. *Needing to create a more relaxed atmosphere for longer interviews, a group of us water researchers decided to set up a tea station, with water from the spring and to offer tea and biscuits to encourage people to stay on after they had collected water*. Cape Town. Personal photograph by author. 2019.

—. *Newlands Pool Collection site today*. Cape Town. Personal photograph by author. 2019.

—. *Newlands Pool water collection site separation gate, padlocked closed to split the waiting queue from the group at the actual water points*. Cape Town. Personal photograph by author. 2019.

—. *People in the "inside" group about to collection water*. Cape Town. Personal photograph by author. 2019.

—. *'Spring water tea party' - author with other water researchers at Newlands Pool collection site 18 May 2019*. Cape Town. Personal photograph by author. 2019.

—. *Springs Way Spring today: a once-vibrant Spring buried under concrete*. Cape Town. Personal photograph by author. 2019.

—. *St James Spring*. Cape Town. Personal photograph by author. 2019.

—. *The new collection point's signage is in stark contrast to those of the Springs Way Spring's hand-made notes encouraging community-mindedness*. Cape Town. Personal photograph by author. 2019.

—. *The queue here moved too fast because of the guards hurrying people along to allow in-depth interviews to take place*. Cape Town. Personal photograph by author. 2019.

—. *The water ATM: the taps at the Newlands Pool site disconnect water collectors from "source" and present the spring water simply as a consumable resource*. Cape Town. Personal photograph by author. 2019.

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APPENDIX 1

List of interviews conducted and participant demographics

Interviewee number	Gender	Race	Location	Date of interview
1	F	Coloured	Newlands	11 Feb. 2019
2	F	Coloured	Newlands	11 Feb. 2019
3	M	Coloured	Newlands	11 Feb. 2019
4	M	White	Newlands	11 Feb. 2019
5	M	Black	Newlands	11 Feb. 2019
6	M	Coloured	Boyes Drive	24 Feb. 2019
7	M	Coloured	Boyes Drive	24 Feb. 2019
8	M	Coloured	Boyes Drive	24 Feb. 2019
9	M	Coloured	Boyes Drive	24 Feb. 2019
10	F	White	St James	07 Apr. 2019
11	M	Coloured	St James	07 Apr. 2019
12	M	White	Newlands	16 Apr. 2019
13	M	Black	Newlands	16 Apr. 2019
14	F	Black	St James	18 Apr. 2019
15	F	Coloured	Newlands	18 May 2019
16	M	Coloured	Newlands	18 May 2019
17	M	Coloured	Newlands	18 May 2019
18	F	White	Newlands	18 May 2019
19	F	White	Newlands	19 May 2019
20	F	White	Newlands	19 May 2019
21	F	Coloured	Newlands	19 May 2019