Towing The Line
Unravelling & Reconstructing Identity along the Zambezi River

by
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FIGURE 01 RIVER THINKING VISUALIZATION
ABSTRACT

*Towing the Line* reflects on systems of connection and disconnection in postcolonial southern Africa along the Zambezi River. With Namwali Serpell’s novel, *The Old Drift*, as a catalyst, this project questions how we form and reform identities—individual, collective, shared, and national—and examines how they manifest spatially and shape our relationship with place and space through a world-building exercise.

African identities are in a constant tug of war, a struggle to reclaim narratives and the right to self-determination. Externally imposed identities have historically determined the position of Africans in the world and were formed by tearing and stitching together peoples, territories, and boundaries. These ruptures and sutures cannot be reversed but must always be reckoned with. My research interrogates colonial boundaries and edges to propose alternative ways of connecting and building relationships on the continent.
ACKNOWLEDGEMENTS

For the unwavering support I have received during this journey, I would like to extend my gratitude to my supervisor Professor Ozayr Saloojee. I am forever grateful for the enriching dialogue that fostered my interests, encouragement, and abundant knowledge you shared with me. Your reassuring guidance during this process was greatly appreciated. Thank you, it has been a wonderful trip on the Zambezi with you.

Thank you to those at home for your support: my parents for providing me with all the tools I have ever needed to achieve my goals, my support system for the reassuring calls and texts, and Obi for your support, hugs, and cups of tea.

Mazvita
I have lived life with the awareness that my position in society and the things outside of my control, the identities that I have inherited and claim—Woman, Black, African, Immigrant— are also barriers that have shaped my life and understanding of space and place. This thesis is two things. Most importantly, it is an act of self-appropriation and a lesson on taking possession of oneself. Through it, I seek to position myself as a designer who challenges dominant narratives of place-making by centring imaginings of African spatial possibilities.

Secondly, it is an attempt to reckon with the absurdity of our ways, an avenue to process the harmful ideas, systems, and practices we continue to uphold.

Produced during the COVID 19 Pandemic, a time characterised by a debilitating hyper-awareness of our skewed societal priorities, this thesis has been a moment for me to point out an example of an abnormal condition and say, “Okay. This is ridiculous. How do you begin to address this?”

Unfortunately, travelling to my site was not an option due to the pandemic, so I had to find other ways to teleport to it. Though I relied heavily on videos and photos sourced from the internet, I also curated a playlist during the summer of 2021. This compilation of songs and discussions was my starting point and helped shape my early thinking around the topic, grounding me in the work. Before proceeding further, I highly encourage you to listen to the playlist to help you do the same:

Towing the Line Playlist
TOWING THE LINE PLAYLIST

01. Title: Stimela
   Artist(s): Hugh Masekela
   Link: https://www.youtube.com/watch?v=n4Bb7p9gggc&ab_channel=barbichello

02. Title: Marcus Garvey
   Artist(s): Burning Spear
   Link: https://www.youtube.com/watch?v=oGN3R49CAE&ab_channel=ReggaeRootsChannel

03. Title: Bhiza Ra Mambo
   Artist(s): Oliver ‘Tuku’ Mtukudzi Feat. Hugh Masekela & Chinembiri Chidodo
   Link: https://www.youtube.com/watch?v=jr8I3ddECjA&ab_channel=OliverMtukudzi-Topic

04. Title: Kothbiro
   Artist(s): Ayub Ogada
   Link: https://www.youtube.com/watch?v=bOJwfy1uww&ab_channel=RealWorldRecords

05. Title: Welcome to Nigeria (Reunion of the black people)
   Artist(s): Sunny Adé
   Link: https://www.youtube.com/watch?v=PBkzE7y6oUl&ab_channel=Ballak%C3%A9Sissoko-Topic

06. Title: Nan Sira Madi (A Colors Show)
   Artist(s): Ballaké Sissoko
   Link: https://www.youtube.com/watch?v=PBkzE7y6oUl&ab_channel=Ballak%C3%A9Sissoko-Topic

07. Title: Conversations with Neighbours Ep 1: The Archive is a Portal for Reimagination
   Speaker(s): Huda Tayob, Jumoke Sanwo, Ali Al-Adawy
   Link: https://anchor.fm/archive-of-forgetfulness/episodes/Episode-1–The-Archive-is-a-Portal-for-Reimagination-em9cbc/a-a3q6fa6
08. Title: Conversations with Neighbours Ep 4: What remains of the political and cultural ideas that imagined Africa as the ‘utopia of a borderless world’?

Speaker(s): Bongani Kona, Kuukuwa Manful, Emmanuel Iduma


9. Title: Conversations with Neighbours Ep 6: What do lines of flight reveal of our shared planetary futures?

Speaker(s): Thandi Loewenson


10. Title: Afghanistan: The Center of the World

Speaker(s): Ramtin Arablouei and Rund Abdelfatah

Link: https://www.npr.org/2021/09/08/1035125396/afghanistan-the-center-of-the-world


Speaker: Achille Mbembe

Link: https://www.youtube.com/watch?v=NKm6HPCSXDY&ab_channel=YaleUniversity
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>III</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>IV</td>
</tr>
<tr>
<td>PREFACE</td>
<td>V</td>
</tr>
<tr>
<td>TOWING THE LINE PLAYLIST</td>
<td>VI</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>VIII</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>X</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>STRUCTURE</td>
<td>5</td>
</tr>
<tr>
<td>PART 1: CONTEXTUALIZING SPACE</td>
<td>7</td>
</tr>
<tr>
<td>THE ZAMBEZI RIVER</td>
<td>8</td>
</tr>
<tr>
<td>KARIBA &amp; CAHORA BASSA</td>
<td>12</td>
</tr>
<tr>
<td>KUOMBOKA</td>
<td>18</td>
</tr>
<tr>
<td>CHINYINGI &amp; MOKORO</td>
<td>22</td>
</tr>
<tr>
<td>KAZUNGULA PONTOON &amp; BRIDGE</td>
<td>24</td>
</tr>
<tr>
<td>PART 2: MICRO NARRATIVES PONDERING PLACE</td>
<td>27</td>
</tr>
<tr>
<td>CROSS-BORDER TRADE - PIETER</td>
<td>29</td>
</tr>
<tr>
<td>CROSS-BORDER TRADE - AGNES</td>
<td>32</td>
</tr>
<tr>
<td>TRANSPORT- CHANDA</td>
<td>36</td>
</tr>
<tr>
<td>TRANSPORT- PATRICK</td>
<td>39</td>
</tr>
<tr>
<td>FRICIONAL RELATIONSHIPS- DAVID</td>
<td>42</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>PART 3: (RE)CONSTRUCTION</td>
<td>47</td>
</tr>
<tr>
<td>SURVEY</td>
<td>49</td>
</tr>
<tr>
<td>REBUILDING</td>
<td>51</td>
</tr>
<tr>
<td>PROJECTION</td>
<td>54</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>58</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>59</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

| Figure.01 | River Thinking Visualization | ii |
| Figure.05 | Hugh Masekela | vi |
| Figure.06 | Burning Spear | vi |
| Figure.07 | Oliver Mtukudzi | vi |
| Figure.08 | Ayub-Ogada | vi |
| Figure.09 | King Sunny Ade | vi |
| Figure.10 | Ballaké Sissoko | vi |
| Figure.02 | Huda Tayob | vi |
| Figure.03 | Jumoke Sanwo | vi |
| Figure.04 | Ali Hussein Al-Adawy | vi |
| Figure.11 | Bongani Kona | vii |
| Figure.12 | Kuukuwa Manful | vii |
| Figure.13 | Emmanuel Iduma | vii |
| Figure.14 | Thandi Loewenson | vii |
| Figure.15 | Ramtin. A & Rund. A | vii |
| Figure.16 | Achille Mbembe | vii |
| Figure.17 | Africa Connectivity Map | 1 |
| Figure.18 | Namibian National Heroes Acre | 3 |
| Figure.19 | Zimbabwean Heroes Acre Stamp | 4 |
| Figure.20 | River Thinking Visualization | 7 |
INTRODUCTION

Borders on African maps were not organically formed. They were largely the outcomes of political decisions, made elsewhere, and aimed at securing European influence and power through land and the extractions that ensued—ivory, gold or enslaved people—for profit abroad. As foreign powers expanded their reach on the continent, they violently etched divisive lines and called them borders. Everywhere they went, the invisible barriers they erected were met with resistance. What once was open, unfettered, was now bound, constrained.

* A border said one, protects us from two

* A border said two, restricts me from what I used to do

* No. A border said one, is a kraal for two.

* No. A border said two, is really to kraal two.

Securing claims to territory and "ownership" over land was coupled with creating a large labour pool that could be exploited for resource extraction. The complicated mess of learning about these people was secondary (if that) and only meaningful if in service of more efficient (and profitable) business practices. As such, the corresponding borders of these territorial claims, gradually reoriented the fabric of life in each territory by separating tribes, displacing people from their ancestral lands and lumping groups with complex histories and socio-cultural fabrics together.

The continued struggle for freedom gradually overcame colonial rule. As new African states emerged, these political transitions coincided with the challenging process of reconstructing collective, shared and national identity. Although colonial interests had come to shape relationships and communities, the post-colonial era offered the opportunity to restructure ev-

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Profit Abroad: This 'looting machine' never ended. It simply morphed. Today Africa's relationship with the world is centered around extracting raw materials, metals and minerals. At the same time, the loss of autonomy and dispossession of Africans of their land is conducted through global networks of foreign oil and mineral companies aligned with elites and corrupt governments. The outcome of this extraction is evident in the disparities in the quality of life in the places where these resources are extracted and where they end up. For a more detailed understanding of the concept of the 'looting machine' and an in-depth overview of how this system continues today, refer to Tom Burgis, 'The Looting Machine: Warlords, Oligarchs, Corporations, Smugglers, and the Theft of Africa’s Wealth' (New York: Public Affairs, 2015).

A Kraal (n.) An Afrikaans word often used in to describe the traditional homesteads of Southern African people

To Kraal (v.) To drive livestock into a pen
Emancipation was the act of reconstructing. As new states emerged, nascent governing powers claimed national narratives, crafting unique identities in the modern world and framing the telling of these new stories.¹

In Southern Africa, the state-led reshaping of the cultural landscape sought to disentangle its people from colonial histories and reclaim self-ownership. Following their independence from white settler rule in 1980 (Zimbabwe) and 1990 (Namibia), both Zimbabwe and Namibia stripped their colonial names. Rhodesia became Zimbabwe and South West Africa became Namibia. As each state shifted toward its new “Zimbabwean” and “Namibian” identity, new city, street, and place names were established.² These nation-building projects also physically manifested as independence museums, national burial sites and statues of state-sanctioned leaders throughout the region. In both Zimbabwe and Namibia, the new governments commissioned **Mansudae Art Studio** to develop their national war memorials to commemorate their respective struggles for independence. Today, these National Heroes Acres sit atop hills adorned with statues and monuments.³

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¹ Luce Beeckmans, “The Architecture of Nation-Building in Africa as a Development Aid Project: Designing the Capital Cities of Kinshasa (Congo) and Dodoma (Tanzania) in the Post-Independence Years,” (Progress in Planning 122, 2018), 2.


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**Mansudae Art Studio:** Located in Pyongyang, North Korea, Mansudae Art Studio is estimated to be one of the world’s biggest art studios. Mansudae produces most of North Korea’s public artwork, such as statues, monuments, murals and paintings. ‘The Mansudae Overseas Project’ is the division that oversees international projects. They have completed many public monuments and government buildings throughout Africa, including Algeria, Botswana, Cambodia, Chad, the Democratic Republic of the Congo, Egypt, Ethiopia, Germany, Malaysia, Mozambique, Madagascar, Senegal, Syria, Togo, and Zimbabwe.

These fabricated landscapes foreground the state’s triumph over white settlers. However, they are not just places to honour the dead but narrative landscapes where ideas of patriotism and nationalism have become the primary drivers of a new national identity. These sites have come to represent government interests in maintaining state-sanctioned versions of the truth, effectively silencing histories that oppose their narratives. In doing so, they have politicised the question of who belongs and what it means to belong to a nation.

The challenge of how to cut ties with its colonial past is an ongoing struggle in Africa. In this epoch, the statues of Rhodes and Livingstone have been toppled and replaced with those of new heroes. Symbolically, white settler states have been replaced, but their effects continue to shape and dictate relationships in the region. Their legacies are reflected and present in less assuming “colonial monuments” and infrastructures such as borders, dams and railway lines that have remained in the backdrop in homage to the colonial project.


“On one hand, Zambia, to me, doesn’t exist. It’s a complete fabrication. On the other hand, we have appropriated that fabrication and turned it into something generative, something creative...What can be generative about error? What do the slips and skids of history and time create?” -Namwali Serpell, Fields Interview

*Towing the Line* begins by interrogating the place of these silent monuments in the context of post-colonial Africa. It questions how manufactured identities have come to shape space in Africa and what effect these manipulations have had on African relationships. *Towing the Line* is a project that continues to unravel the complicated legacies of colonisation. It does so by ‘miniaturising the gigantic’ and framing the Kazungula border—a unique node in the Southern African region where four nations, Zimbabwe, Zambia, Botswana and Namibia meet—as a microcosm of Africa to interrogate colonial borders, challenge currently accepted edges and reflect on alternative systems of connecting and building relationships on the continent.

It examines identity and place-making through the notions of place and space, where space speaks to an invisible realm dominated by hegemonic flows of capital and place refers to how these flows shape our spatial relations. In this thesis, “place thinking” is grounded by a site and concerned with representation and making. In contrast, “space thinking” centres on thought and reflection through reading and writing.

The visual work of the thesis and its texts lend themselves to a

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design proposal set in a speculative future along the river. This future picks up where Namwali Serpell’s novel, The Old Drift ends. Serpell’s multigenerational epic, occasionally narrated by a chorus of mosquitoes, braids fiction with history as it follows three families, bound by the actions of a European settler at the beginning of the book, through the century that marked the birth of Zambia as a nation-state.
PART 1: CONTEXTUALIZING SPACE
THE ZAMBEZI RIVER

Beginning as a small stream in the swampy wetlands of north-western Zambia, the Zambezi River flows 3,540 kilometres eastward, tumbling over waterfalls, inundating floodplains, and enriching wetlands. Along its journey, it meanders through Angola, Namibia, Botswana, Zambia and Zimbabwe before reaching the coast of Mozambique, where it empties into the Indian Ocean. The Zambezi basin supports an array of wetlands, woodlands, savannahs, and aquatic ecosystems, and as one of the world’s most pristine rivers, it is home to a wide range of animals and plants. Given its vast expanse and formidable force and flow, it is a natural border and has been central to the formation and destruction of relationships in the region. Often at the expense of those that dwell along the river, securing access to its waters and controlling traffic and commerce between its banks has been a political priority for precolonial and postcolonial states alike.

Human relationships with the river have come to be characterised by a desire to exploit it as a cheap energy source, a trade route and a tourist destination. As with many rivers worldwide, it was viewed as a conduit for trade by foreign merchants who encountered it. Arab and Portuguese traders, who later settled in the lower Zambezi delta, used the river to venture inland.
searching for ivory, gold, and people to enslave. David Livingstone later charted most of the river, searching for a trade route to the East African coast. Much to his disappointment, its many natural barriers, such as rapids, waterfalls, and sandbars, made it impossible to directly travel down to the Indian Ocean. As a result, despite connecting six countries, the Zambezi has had little historical significance as a trade route.\(^{10}\)

We see this in the story of the Caprivi Strip. After Germany settled in modern-day Namibia, it sought to establish an overland connection with its eastern territories (Tanzania, Rwanda and Burundi) and a direct route to the Indian Ocean.\(^{11}\) In 1890, when Leo von Caprivi succeeded Otto von Bismarck as German Chancellor, his administration signed an agreement with the British to trade the islands of Zanzibar in exchange for Heligoland, an archipelago northwest of Hamburg. This deal included a thin strip of Bechuanaland (Botswana) that would give the Germans direct access to the Zambezi River.\(^{12}\) Unaware of the rapids around the narrow strip and Victoria Falls sixty-four kilometres east of it, they foolishly acquired the isolated strip, adding an appendage to their territory that greedily juts out towards the Zambezi River.

The river resists navigation, and this has meant infrastructure – vehicle-controlled crossings, artificial lakes, dams – span across

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\(^{10}\) Ibid


specific points along its length. A total of fourteen bridges span the river to link people and territories. A selection of bridges and other modes of navigating along the river were researched to examine further the historical and current social, cultural, and economic factors that inform connectivity between nations along the Zambezi. The crossings examined in this thesis include Kariba Dam and Cahora Bassa Dam, The Kuomboka Ceremony, the Chinyingi Suspension Bridge, mokoro canoes and the Kazungula bridge and pontoon.
FIGURE 25 ZAMBEZI BRIDGES MAP
The name “Zambezi” originates from the Tonga phrase “Kasambabezi,” meaning “only those who know the river can bathe in it” and highlights Tonga knowledge of the river’s ways and their society’s intimate relationship with ‘their’ waters. Before white settlement, the Tonga lived in southern Zambia and north-western Zimbabwe and were one of several groups of people who inhabited the banks of the Zambezi. The river is of immense spiritual significance to the Tonga and was the foundation of their society. They relied on the rich soil it deposited for farming and the wildlife it supported for hunting.

In 1958, the Federation of Rhodesia and Nyasaland displaced the Tonga from their ancestral homeland. They resettled them in the Zambezi valley’s less fertile and productive areas and began work on the Kariba Dam project. With financing from the World Bank, the Federation sought to provide cheap hydroelectric power to support economic development in Zimbabwe and Zambia. However, the dam’s construction and the subsequent flooding of the Lower Zambezi Valley inversely affected the valley’s inhabitants flooding their homelands, destroying their ancestral burial grounds, cutting off communities living across the river in Zambia and violently disrupting their way of life.

Today, the dam stands nestled into a gorge forming a border between Zambia and Zimbabwe supplying both countries with hydroelectric power. Over 60 years old now, the dam is ageing...
and fast approaching its end of life. Recently, scientists have issued warnings regarding potential ecological disaster should it collapse. At the height of 128m and with a holding capacity of 181 billion cubic metres, the dam contains the largest manufactured water reservoir in the world. It is so immense that should the dam fail, a tsunami-like wall of water would rip through the Zambezi valley, reaching the Mozambique border within eight hours with the torrent overwhelming Mozambique’s Cahora Bassa Dam. These joint collapses would eliminate 40 percent of the hydroelectric capacity in all southern Africa and close to 3.5 million people could be flooded downstream, leading to catastrophic loss of life and livelihoods.

Galvanized by the powerful image of the Kariba Dam, the Portuguese constructed the Cahora Bassa Dam, located north of Kariba Dam, in Mozambique between 1969 and 1974. Under increasing threat from anticolonial agitation damming the Zambezi River became a symbol of Portugal’s commitment to maintain control of its African colonies. At the time of its completion, it was praised for its technical complexity and seen as confirmation that nature could be conquered, and geographical systems harnessed to serve the needs of humans. As a result, it has remained a symbol of economic advancement, and as the world’s largest dam created for exporting electricity, it has been central to Mozambique’s colonial and postcolonial development. However, the problem with framing the Cahora Bassa Dam as a modernist economic triumph is that it masks the damage that it and other projects like it have caused.


The colonization of the Zambezi River through hydroelectric projects has repeatedly been accompanied by violence. As with the Kariba Dam before it, displacement and coercion were central features of Cahora Bassa’s construction. Unlike the Kariba Dam, less attention was paid to the relocation of communities along the river or the potential ecological impact of the dam. As the site of the dam was in a remote part of the colony with no infrastructure linking it to the rest of the country, the first step was to build this infrastructure. Though forced labour had been abolished the Portuguese government conscripted Africans to perform the arduous labor needed to construct the necessary access roads. Additionally, a lack of skilled engineers, electricians and mechanics willing to relocate to this remote region meant that ZAMCO had to recruit foreign worker from Europe and South Africa. To accommodate these foreign workers, local Tonga and Tawara communities that relied on the rich dark soil deposited by seasonal floods (unfavorable to European sugar-cane plantations at the mouth of the river) were forced to leave their homes in the Songo highlands for the construction of new segregated towns for white workers.20

Ecological disaster has also long been a common by-product of damming along the Zambezi River. In an eyewitness account of the final stages of the Kariba dam’s construction, the President of the Game Preservation and Hunting Association of Northern Rhodesia recounted how

“On what is still dry land, some 100,000 acres of rough bushland are being cleared at the cost of more than £1 million to make fishing grounds and harbour sites for when the Lake is filled. Giant £18,000 bulldozers, pulling eight-foot steel balls by means of battleship anchor chains, are clearing bush at the rate of fifty acres an hour. The baobab is the only tree that offers any resistance to this equipment.”21

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20 Ibid, 615

After two failed attempts, the river was bounded in December 1958, and disaster struck immediately. In all their “planning”, the Rhodesian government failed to consider the broader implications of altering a force of such magnitude. The fracturing of the river at Kariba reduced the flow of water to its confluence with the Kafue River and the natural water barrier that once existed beneath the dam was eliminated. This drastic change in flow threatened to alter the migratory patterns of animals and posed a grave threat as it meant expanded movement of the disease carrying tsetse fly between the two banks. As such, guard camps were erected, and thunderflash grenades were used to prevent the movement of people and animals between the northern and southern banks.

Above the Kariba Dam, schools of dead tiger fish floated to the surface of the Lake, having overconsumed crickets driven from their holes by the rising water. Moreover, wild animals stranded on the rapidly disappearing islands gradually began to starve and drown. This colossal loss of wildlife was met with substantial public outcry and prompted an urgent response to rescue the wildlife before the Gwembe Valley flooded. (An outcry, I might add, far more significant than that received by the displacement of the Tonga). From 1958 to 1961, a rescue mission spearheaded by white conservationists, “Operation Noah,” succeeded in capturing and removing 6,000 animals, though thousands more died in the floods. Between 1963 and 1983, several earthquakes struck the valley—twenty of which exceeded a magnitude five on the Richter scale—with the highest concentration of these at the dam wall.

Cahora Bassa experienced similar devastation. The damming of the Zambezi trapped the sediment and nutrients that once flowed to the floodplains and the delta behind its wall, altered erosion patterns and the geomorphology of its lower basin and transformed the variable seasonal flows into constant flows.

These drastic alterations coupled with the loss of animal life destroyed the complex food production system that existed in the Lower Zambezi.²³

Despite our awareness that water is a dynamic force, society perceives rivers as fixed entities bound between the lines we see on maps. These lines attempt to separate land from water, and we have engineered intricate systems and interventions to maintain and prevent the line from encroaching. However, as Dillip Da Cuna argues, these lines mark only a brief moment in the hydrological cycle. At this moment, we have anchored our reality, and in it, we have oriented society, drawn maps, sectioned off the globe, and planned for the future. In contrast, other moments like rain, dew, mist, and vapour are reduced to fleeting moments of lesser significance. This reality is more frequently under threat today, challenged by rising sea levels and increased flooding due to climate change. By framing our understanding of rivers in this way, as bodies of water that exist only within the confines of our maps, we see phenomena outside of that moment—seasonal floods, monsoons—as an enemy or unwanted entity that needs to be tamed and controlled.

The Lozi (Barotse) people who live in western Zambia are among a global few who have anchored their reality and way of life around the movement of water, particularly the flood cycle of the Zambezi River. As a result, Lozi culture, productivity and mobility are directly tied to the seasonal flood, and the fluctuation of the river is central to their economic, religious and philosophical approach to life. Following the rainy season between March and April, the Lozi welcome the floods in a ceremony known as Kuomboka, meaning to “get out of the water.” A few weeks before the ceremony, based on the level of the floods, the availability of food, and the moon’s phase, their Litunga sets a date for the ceremony. Then, accompanied by dignitaries, his

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Nalikwanda begins the journey east to their winter village located on higher ground. His procession is followed by a vessel carrying the queen and the royal household and finally by the rest of the plain’s inhabitants in canoes. As they migrate to the highlands, this ceremonial procession of boats celebrates the return and benefits of the flood through song and flood poems.

It is flood time in Bulozi.

The floodplain is clothed in the water garment.

Everywhere there is water!

There is brightness!

There are sparkles!

Waves marry with the sun’s glory

Birds fly over the floods slowly,

They are drunken with cool air.

They watch a scene which comes but once a year

Floods are beautiful.

Bulozi is the flood’s dwelling place.

Every year floods pay us a visit.

A Lozi does not beg for floods.

We do not resort to herbs to bring floods.

We practice no witchcraft whatsoever.

These are floodwaters, indeed!

The floods are ours.

They know their own route.

They know their own home.

They know where they are needed.

They know where they are cared for.

And when we ourselves see them, we are filled with happiness,

Our hearts become lighter

We do not fear the floods.

Floods are a Lozi’s patelo

When the floods are in, we prepare the royal boat.

It is a happy occasion in Bulozi...  

A patelo in Lozi refers to the centrally located open public space of in a village.

FIGURE 29 CHINYINGI AND MOKORO COLLAGE
Located in a remote area of Zambia’s North-Western Province is Chinyingi, a mission established in the nineteen-thirties by Capuchin Friars. A key feature in this mission is the Chinyingi suspension footbridge, a two hundred-and eighty-meter-long bridge that spans across the Zambezi River and connects Chinyingi to the rest of Zambia. It was commissioned by Capuchin brother Crispin Valeri following the deaths of five people who drowned while ferrying an ill person to the hospital in a mokoro (a local type of wooden boat).\(^{28}\) Despite a lack of technical expertise, through donations from copper mines in the area, he and the community constructed a reliable bridge—one of four free-spanning bridges on the Zambezi—that still spans the river today. This impressive but simple bridge is reflective of the influence that Christianity has had in shaping rural African environments and infrastructure.

**Mokoro** are the oldest form of transportation that people use to move between the banks of the Zambezi. These dugout canoes are crafted over the course of months by carefully hollowing out the trunk of Jackalberry, Ebony, Mangosteen or Sausage trees.\(^{29}\) Before the influx of tourism along the Zambezi, these vessels were predominantly used throughout the region to access dense swamplands and navigate shallow water highways cleared by hippos and elephants. Today they also facilitate water safaris. These agile wooden structures are guided along by a poler who stands at the stern, quietly sending the nkashi deep into the water. Men historically poled mekoro (plural of makoro) for hunting and fishing, and when women did use them, it was to harvest reeds and water-lily bulbs.

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FIGURE 30  KAZUNGULA BRIDGE AND PONTOON COLLAGE
Borders exist in duality, acting simultaneously as conduits and obstacles. As protective devices that govern, regulate and control the movement of specific goods and people and conversely act as barriers that isolate and prohibit designated groups from accessing protected resources and opportunities. The movement of people, goods and animals was central to life on the continent, and the borders imposed to divide up land halted this by transforming the continent into a massive carceral space.\(^3\) Before colonisation however, where borders existed on the continent, they were not regarded as monolithic markers of territory but understood as porous nodes in a more extensive network of flows and exchange. As Achille Mbembe posits, “the primordial principle of spatial organisation was continuous movement. To stop is to run risks. You must be on the move constantly. More and more, especially in conditions of crisis, being on the move is the very condition of your survival.”\(^4\) He argues that mobility was the key driver of social, economic and political transformation, informing the demarcation and organisation of space and territories.

Trade was and has remained an integral part of life in Africa, and the Kazungula border is reflective of this. This unique node in the Southern African region is where four nations, Zimbabwe, Zambia, Botswana and Namibia, meet at what was previously a quadripoint but now two tripoint borders. The imaginary lines that demarcate where one nation ends, and another begins run through the middle of the Zambezi River. In essence, at specific points along these lines, one could be in multiple countries at once and nowhere at all. However, despite all four nations being independent of colonial rule, colonial logic still dictates movement between territories here. Before 2021, bridges between

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\(^4\) Ibid
Zimbabwe and Zambia and Namibia existed along the Zambezi, but none existed between Botswana and Zambia or Zimbabwe and Namibia. In 2021, The Kazungula bridge opened, replacing two pontoons that transported trucks between Zambia and Botswana. The construction of the bridge is a saga that began in 2001 when Nippon Koei and Oriental Consultant Global (Japanese engineering consultants) were hired to conduct an initial study. However, border disputes about the Zimbabwe-Botswana border followed shortly after and halted the development of the project for years. As a result, Botswana and Zambia proceeded without Zimbabwe’s participation and the initial bridge project was redesigned to curve away from Zimbabwe. This bridge is crucial for trade and despite it being well-received, the geopolitical dance that lay its foundation are profoundly counterintuitive to Pan African dreams of an interconnected continent.

The growing anxiety associated with immigration and mobility is a significant concern of the 21st century. The challenge facing many governments is finding more advanced ways to tighten controls and regulate who can and cannot move through their borders. Our current understandings of space and movement are grounded in European thought that generally understood identity as being about the relation between similar beings, rather than one centred around mutual belonging to a shared world. This tendency towards forming relationships by creating “the other” has created an increased divide between bodies with unrestricted access to the earth and bodies without that same right.

Border logic affords the freedom of movement and the “right to exclusion” to members of certain countries. The rest of the world becomes a restricted, potential illegal migrant that is unable to move except under increasingly punitive conditions. There is an urgent need to expand and reshape our understanding of community because the problem is that humanity is al-


Punitive conditions: Though certain passports may afford some unrestricted movement, race is an additional barrier that prohibits it. The deep racial biases that afford some the freedom of movement have recently resurfaced on the global at Ukrainian borders following the Russian invasion of Ukrainian in March 2022. The tiered response to the war, fueled by anti-black and brown racism, has given preferential treatment to white refugees and deliberately prevented black and brown people from fleeing Ukraine. This response has left people of colour (regardless of what passport they hold) trapped within a war zone. For further reading, refer to Nana Osei-Opare and Thom Loyd, “Anti-Black Racism Is Upending Easy Narratives about the Exodus from Ukraine,” The Washington Post (WP Company, March 3, 2022), https://www.washingtonpost.com/outlook/2022/03/03/anti-black-racism-is-up-ending-easy-narratives-about-historic-exodus-from-ukraine/.
ready in an era characterized by profound unpredictability and the need to adapt to change quickly. As parts of the earth become uninhabitable, one of the results will be a mass exodus of people and unprecedented waves of global migration, and the question is where will we go and how will we address this?33

PART 2: MICRO NARRATIVES
PONDERING PLACE

My first encounter with the Kazungula border conjured up whimsical notions of unrestricted movement that subverts border logic by unsettling colonial boundaries through a game of geographical hopscotch. It is these initial thoughts that inspired this thesis. To reflect on my findings of this border, I wrote a series of fictional micro narratives based on my research as a form of social site analysis. These interwoven narratives synthesize and present the macro and micro complexities that exist in this place and provided key information that informed my design thinking about the program of the final design proposal.
Pieter was overjoyed as he rang his partner Danie on the phone. He had just received a WhatsApp message from their client, Chambishi Copper Smelters, asking if their company could transport more minerals in a week. In just five years, Nyati Cross Border had grown their humble fleet of six trucks to a diverse fleet of eighty vehicles and in spite of the pandemic, they were set to continue growing.34

"Danie!" Pieter exclaimed. "Yoh! Business has been lekker these past couple of years bru! Thank God for this cobalt: everyone out there needs it- China, Japan, the Middle East, Canada- you name it. As long as this global demand for all these new energy sources and electric devices continues to increase, so will the need for copper and cobalt. Personally, I don't get it. You know me, I'm very happy with my brick and my Hilux, but that's the west for you."

Most of the cargo that NCB transported began in the Central African Copperbelt, the world’s largest and highest-grade copper province that extends northwest from the Zambian Copperbelt to the Congolese Copperbelt.35 Cobalt is a by-product of copper, and its production is highly concentrated. Despite Congo hosting close to half the world's cobalt reserves and industrial and artisanal mining accounting for 70% of global supply, the majority of that is exported and refined in China, who supplies 50%-60% of global cobalt output.36 NCB was one of many in this extraction pipeline, offering convenient cross border transportation services between SADC countries. Because none of

the mining equipment used on the mines is manufactured locally, they focused on transporting mining equipment and chemicals to Zambia and the DRC and returning to South Africa with loads of copper concentrate or cobalt. Their cargo typically made its way onto freight ships at Walvis Bay and Durban Harbor, the largest and busiest shipping terminal in sub-Saharan Africa.37 This increasing demand, coupled with the new bridge at the Kazungula border, meant their hauliers completed trips at unprecedented rates. “The guys are zipping like speed racers; this bridge has really helped move things along. I think Chanda recently got back from a haul; he should be able to do this one.”

FIGURE 3.3 CROSS-BORDER TRADE COLLAGE 2
When the Road Development Agency (RDA) first approached the Lumbo community to inform them about the new bridge and their relocation strategy for the community, Agnes was skeptical. Senior Chief Sekute, however, was thrilled by the list of promises that included forty electrified houses with running water, new classroom blocks, an access road in the new Lumbo village, compensation for fruit tree losses and an upset and settling allowance.38 The endless list felt too good to be true but in 2014 much to her surprise she, her husband David and their three children, moved into their new home as promised. Gone were the early morning treks to fetch water from the Zambezi River. Her old village located near the river’s edge, had been moved north to make way for the Kazungula bridge. The bridge had brought much needed jobs to the community. Many of the men and some women took up jobs as workers on the project, and the influx of people to the border meant that traders in the village felt the benefits too.

In addition to the new jobs and clients, the new bridge had alleviated some of Agnes’s daily commuting woes. Like many women in the region, she was a cross-border trader. As her mother had done before her passing, Agnes brought chitenge, second-hand clothes, shoes, and handbags to Zambia from Botswana through the Kazungula border.39 Her days began at 4:30 am sharp, she prepared food for her family and before customs opened at 6:00 am, she was on a mini-van or bus bound for the other side. The long lines that existed before the

38 AfDBGroup. “Kazungula Bridge project will benefit the population by providing a border crossing facility.” (YouTube, May 7 2020) 4:50. https://youtu.be/AgoeAOf3rGA?t=290
bridge were non-existent now and she was appreciative of the new facilities as it meant that her produce wouldn’t wilt in the sun during the blazing hot summers. She was delighted by the new and efficient one-stop system; it meant that she could use her expensive passport for longer as it filled up quickly from her frequent trips. These improvements didn’t address the cost and the confusion around taxes and duty on goods though. She had started hearing of more and more women in Botswana risking their lives by going through the bush where lions, elephants, buffalo, and hyenas roam, in order to avoid customs at the border.

Her schedule was flexible and changed seasonally to meet demand. During the summer she conducted short day trips three times a week and on the other days she operated a small stall in the Kazungula market—a makeshift structure, with a plastic roof—where she sold rape (a leafy green), cassava, groundnuts, mealies, fruit, sugarcane, and dried fish that her husband, David, caught. During the winter she travelled to Lusaka during the weekends to barter groceries for second-hand clothes. In a month she would earn upwards of $250 (US) and at 30 years old she was educating her three children and had supported her two siblings’ education and her cousin Patrick’s Transport & Driver program at the Industrial Training Centre with the Ministry of Technology and Science.

Agnes had been so busy with the increased workload that it had taken her longer than most to notice the cracks forming in the house. By Christmas 2021 twenty-five houses in her community had developed large cracks—running from wall to wall—and three families had vacated their houses due to the damage. They had unsuccessfully reached out to the government until surveyors with the RDA visited Lumbo to assess the houses. They hadn’t returned and rumors spreading through the community.

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40 Ibid, 28
41 Ibid, 38
42 AskMUVITV, “Relocated Lumbo Residents in Kazungula Cry Foul” (YouTube, August 2, 2021) https://youtu.be/X0mv4JM0E34
munity were that after the rainy season the RDA would perform further assessments to determine if they needed to reconstruct the houses.  

Chanda frustratingly read his WhatsApp messages as he rolled out of bed. He was still recovering from his most recent trip to South Africa and had been planning to visit his extended family in Kasama in a few days. The time between cross-border trips was typically two weeks but just five days into his return, Piet-er, his boss, sent a message telling him that he would be making another trip in three days. Work had been rapidly increasing at Nyati Cross Border, but things were also becoming more tense on the road, and he wasn’t looking forward to the drive. His last trip had been stressful, as the situation for Zambians and other foreign nationals working for South African companies was be-coming dangerous again. South African hauliers feeling aban-doned and frustrated with the ANC’s failure to provide social and economic development had started accusing foreigners of stealing jobs and they had begun blocking roads in protest.44

At the height of tension in 2018, 35 trucks had been set on fire at the Mooi River Plaza toll gate along South Africa’s N3 to Durban, and Chanda feared that it would happen again.45 He and other drivers had camped out at the Kazungula border and refused to complete deliveries until the South African government pledged to address the xenophobic attacks on the Lubumbashi-Durban route.

As he sat waiting for his wife Mary to bring his lunch, he weighed out his options. He could use the Chirundu-Beitbridge Trans-African Highway corridor linking Zimbabwe and South Africa but the three days it took just to pass through the heavily congested Beitbridge border would make the trip much longer than going through Kazungula. Despite the North-South Corridor


route being 200km longer he could be in Joburg in those three days.46 “How are you feeling about this trip?” asked Mary. “You know that I’m getting older. I’m getting tired of this job, and I don’t know that I can keep up with this increase in business. I am glad this new Kazungula One-stop Border Post is finally open, even if the bridge is further out and more expensive than it used to be. You know how these government people are, they need to recover their expenses and pay back their loans so we transporters must pick up the cost, but one hundred US Dollars each way is just ridiculous! The processing time is better, it still takes a little over a day but that’s much better than the 12 days I used to spend waiting and fighting people and vehicles for a chance to board the ferry.47 Things aren’t centralised like in the East Africa Community, but this new one-stop system means you only deal with customs where you’re entering instead of the old system where you had to do immigration twice. There’s less corruption and less prostitution as well. Most importantly I’m just grateful I never have to use that pontoon again. Every time I drove onto it, I remembered the Lord and started praying in tongues. I told myself I only have a few kilometers left before I’m home and with my family again.”


Patrick arrived at Kazungula early in the evening, shortly after the border post had closed. As he sat scrolling through his WhatsApp messages, he huffed as he read Chanda’s message about his shortened break. “Pieter and Danie are greedy, they need to hire more men or turn away some of these clients” he thought to himself. He was suddenly startled by a loud thud on his windscreen—a young baboon—he had to be vigilant or else the troop could give him trouble. The waiting process at the border could be very dangerous, especially at night, due to the lack of facilities available for truck drivers. It wasn’t surprising to hear of a truck driver being attacked or losing his life to a wild animal while going toilet in the bush. He composed himself and began reflecting on how much had changed at the border. A few months ago, he would have been settling in for the week, playing cards, listening to music, and resisting the urge to accept the advances of sex workers as they moved from truck to truck.

In the early days of his career, on average, Patrick spent ten days idly waiting to board the pontoon that would take him to the other side and another ten on his way back. Twenty days of waiting in a town with high levels of unemployment made it far too easy for him to find and entice women and vulnerable young girls into “entertaining” him.48 He, like many who frequently cross physical borders, were amongst the most at-risk demographic at the height of the HIV and AIDS epidemic in southern Africa. Migrant workers—traders, sex workers, and long-distance truck drivers—often couldn’t receive appropriate medical services at most health facilities along transport corridors, so it wasn’t until 2013, when Patrick fell ill on the road, that he went into the newly built wellness Centre at Kazungula that he was diagnosed with

The wellness centre had been constructed the year before as part of the SADC HIV and AIDS Cross-Border Initiative. The project addressed the epidemic by constructing clinics in border towns that offered free HIV counselling, testing, AR services, TB screening and malaria diagnosis and treatment to sex workers, long distance truck drivers and community members in these areas.

Though things had changed, many things hadn’t. He wouldn’t see trucks stretching for kilometres from the border. Truck queues were a thing of the past. But tomorrow morning he would still have to hustle for tap water, a toilet, and a place to wash up. And on his return trip he would still buy fruit to support his cousin Agnes or fresh bream and fried Kapenta from her husband David as he always did. He fell asleep that night content knowing that he wouldn’t have to spend as much money on this trip. Shorter wait times meant fewer days at the border and fewer days at Kazungula meant more money to take home to the family.

Faint chatter from a nearby lodge carried through the silence of early morning. Tourists vacationing on the river were gearing up to make their way onto boats for a relaxing day of fishing. Further down the river David was preparing to cast his net into the river for the first time that year. It was March 1st the day the Zambia fisheries annual fish ban that began on December 1st ended. His people, the Lozi, much like other groups along the river had always relied on fishing for their survival. Several generations before they fished along the Zambezi and its tributaries unrestrict ed by laws and regulations on fishing methods, fishing areas, or the quantity of fish one could catch. “It is not like we never knew how to conserve fish.” David murmured to himself “We knew. Of course, we knew. We are related to this water.”

David had worried that the arrival of the RDA and his community’s subsequent relocation would leave them in a precarious position, like the BaTonga further down the river. When the Tonga were relocated to make way for the Kariba Dam they were cut off from the river and the tough restrictions on fishing licences that followed left them feeling that their way of life had been criminalised. To this day they were still struggling to get licenses and return to the water and their way of life.51 Thinking about their story always left David anxious and coupled with the poor fishing season he had last year his return to the water wasn’t as joyful as it normally was.

The increase of people working on the border and eventually passing through the border had been great for David and his family. He caught and dried fish and Agnes sold them at the market. Over the last few years however, and with each passing year, David’s monthly yields were decreasing. Four years ago, he sold twenty thirty-kilogram bags of kapenta at the end of 51 Farai Matiashe, “Why Zimbabwe’s ‘Great River People’ Feel Cut off from Their Trade,” (Al Jazeera Media Network, Qatar, September 22, 2021), https://www.aljazeera.com/features/2021/9/21/why-zimbabwes-great-river-people-feel-cut-off-from-their-trade.
March but last year he only sold twelve bags at the end of the month. He and other fishermen in his village with the same concerns had come together and contacted the African Wildlife Foundation to discuss their Inyambo Fish Farming Project further north in the Barotse plains.

Like his community, groups further north also fished on the Zambezi daily and as demand rose people started using mosquito nets to fish, catching everything from the river and disrupting its ecology. Consequently, fish populations declined and left people with less food to eat and sell. They approached the African Wildlife Foundation, an African conservation group, to help them address their issues and together with AWF they established an integrated fish farm to limit overfishing, provide food security and create employment in the community.52

As David cast his net into the water, his nerves were calmed by thoughts of an integrated farm project strengthening his community. The farm would provide them with a sustainable food source throughout the year allowing the fish in the wild to repopulate the river. Any profits they made from the project would be fed back into the community, distributed by a Trust of elected community representatives who would decide what the community needed, and allocate funds towards implementing solutions.

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As the troop of 70 baboons made their way to their tree for the night, one of the younger males noticed a bright yellow can and an assortment of food on the dashboard of a "truck". In his troop he was regarded as the ultimate trickster, always open to a challenge, so without second thought he darted toward the truck. These animals - these "trucks," larger than any other animal in the wild, were extremely dangerous when awake. As an infant he had heard many tales about baboons that had fallen victim to them. They seemed to obey humans and only traveled on the black hard earth, so his troop did their best to avoid them outside of foraging time. This particular truck was asleep, so he leapt up the bumper onto the hood and landed heavily on the windscreen. He had assumed that there wouldn't be a human in it and was startled when he locked eyes with a man sitting there sipping from a second yellow can—humans were so greedy!

Long before he was born, his troop had fed on wild fruits in the forest that they found around the Cassandra Farms wetlands. Their way of life had gradually changed as the number of people and idle trucks waiting at the border increased. The troop ventured further inland each day and no longer spent their days in the forest searching for fruit, seeds and small helpings of meat. They quickly developed a penchant for human food— deep fried chicken, chips, soda, candy— adapted their foraging skills and began rummaging through the bins of restaurants in the area for leftovers. And their daily focus and ethos shifted as their troop found innovative ways to outmaneuver and outwit humans.

The Cassandra Farms, located a few meters from the Zambezi River, was home to a diverse population of birds and browsing grounds for impala, elephants, kudu, buffalo, and waterbuck. The troop returned to the wetland from the southern shore every

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evening around sunset as it was always a cool refuge, especially
during the dry season when it rained sparsely. However, things
had begun to change again with the construction of the new
border post located on the northern side of the wetland. It oc-
cupied 21.5 hectares, disrupting indigenous fauna, fragmenting
and reducing access to habitats and threatened to contaminate
the water in the area. Additionally, most of the planned railroad
would cut through the wetland creating a physical barrier that
would modify its drainage and obstruct the flow of water to it.

Normally the young baboon would have retreated and observed
the man from the safety of a tree, waiting for an opportune mo-
ment to snatch the food or tear into sacks of maize and sugar
but foraging was different now. In the past vehicles slept for
much longer than they did now, they would spend endless sun
cycles waiting on the black earth to cross the water. This gave
his troop ample time to assess and plan how to steal stealthi-
ly but now the vehicles slept less and foraging was quickly be-
coming a game of aggression. The decrease in idle trucks was
accompanied by a decrease in trash in the waste bins around
the border, leaving the troop with fewer leftovers each day. This
made the troop anxious, and their desperation triggered a new
approach to scavenging. This new approach was more aggres-
sive and involved ambushing, snatching, biting and clapping
humans. They challenged any resistance or attempts to defend
property by snatching handbags and destroying cars as they
searched for food. And lately they had started breaking win-
dows and entering houses and shops to steal food.

As he contemplated his mode of attack the man woke the truck
and the young baboon darted off to join the rest of his troop.

54 Gabe Cordry, "Assessing the Potential Ecological Impacts of the Proposed Kazungula
Border Development at Cassandra Farms" (Independent Study Project, University of Tulsa,
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55 Ibid, 14
babwe-zambia-border-post.
PART 3: (RE)CONSTRUCTION

To design is to problem solve by planning and arranging elements together to achieve a specific purpose. The challenge for many designers today (myself included) is that many of the pressing issues that we are facing—climate change, social inequality—are linked to complex systemic problems, and the “solutions” to these problems would require an overhaul of our values, attitudes, beliefs and practices.\(^57\) The growing realization that many of the issues that I so desperately want to address cannot be designed away or “fixed” through one design “solution” has meant that I’ve had to find other ways to use design thinking to talk about these problems. One way has been through design fiction, a methodology that steps away from using design to prescribe solutions and instead offers an avenue to use design to highlight and discuss complex ideas.

Through design fiction, one can temporarily suspend the viewer, allowing them to speculate not on predictions of the future but on possibilities of the future—what could be, what might be, what should be. Design fiction foregrounds ideas of possible futures and uses those ideas to expand our perspec-

tives, allowing us to reflect on the present and openly discuss the futures that we want and alternative ways of being.

*The Old Drift* by Namwali Serpell uses fiction to do just that. It is the departure point and the site of this thesis design proposal. The story ends with the main characters attempting to temporarily block the Kariba dam to shut off the country’s power supply. However, their plan fails, causing the dam wall to collapse and The Zambezi River to flood the valley leaving only the capital city, Lusaka. Serpell leaves the reader with a glimpse into a speculative future “Zambia.” An emancipated “Zambia” that resisted the historical cycles of extraction and disentangled itself from the influence of external forces and global capital flows.

This speculative design proposal begins after the Rupture.

“The bodies of water spilled their banks within days, and soon the whole country was drowned. The gorges and valleys were rivers and lakes, the escarpments were lost under waterfalls. Electric grids failed; people fled from their homes. The flood flowed broad and washed out the roads, making streams and canals of the tarmac. Traffic slowed down, then stopped altogether. Passengers waded, then swam. Lusaka survived, that dusty plateau, as its own city-state. Ka-lingalinga became its capital. A small community, egalitarian, humble. People grow all of the food that they eat. There are a few clinics and one of two schools....”

After the erasure of Zambia, those that remain are faced with the question of how to move forward on this new island. Do they redraw formal borders? How do they define themselves and their new islands? How do they restructure and rebuild in this terrain in flux?

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The first drawing, titled “Surveying”, is set in 2024, a year after The Rupture and follows three characters, Jacob, Joseph and Bupe, through the time immediately after the dam’s collapse as they attempt to understand this new landscape.
"The Rupture changed everything. Our home was reduced to nothing more than a small collection of islands isolated by water and disconnected from the world in a single moment. In the absence of the systems and structures that had once defined us, those of us that remained were faced with the question of how to restructure and rebuild within this terrain in flux.

Amid the chaos, we began surveying our new environment, rescuing and relocating stranded wildlife and collecting and creating repositories. We reconfigured old grain silos into monitoring stations placed along the shoreline. These silos anchored weather devices that monitored atmospheric conditions, and they helped us see far into the distance. They acted as markers that registered water level fluctuations and recorded surface-level changes due to erosion.

With much of the old country washed away, it left an array of materials submerged beneath the water. We slowly began to harvest these remnants, at first by hand and then with dredgers from old farms. Eventually, we expanded to include seasonal coffer dam harvesting to access old machinery in submerged warehouses and farms to meltdown and repurpose."
The following set of drawings focuses on the process of Rebuilding. Set in 2044, 20 years after Drawing 1, they examine how the next generation begins to structure their community.
“Despite knowing that water is a dynamic force, society had come to see the river as a tamed entity bound between the lines drawn on their maps. These lines attempted to cleanly separate land from water, and to prevent that line from encroaching, they engineered intricate systems and interventions to maintain the divide.

However, these lines marked only a moment in a cycle. In this moment, they “anchored their reality, oriented society, sectioned off the land and planned for the future.” But The Rupture shattered that reality, forcing them to see phenomena outside of that moment of stillness not as an enemy that needed to be tamed or controlled but as something to be embraced and welcomed in song and poem.

Today we live variably, having reverted to living in response to the ebbs and flows of the water. We live in Ngazi again—homes elevated from the ground—cooled during the hot months and times of drought, and protected from flash flooding during the rainy season. Our community values cycles and interconnection sustaining itself through integrated fish farms and moving back and forth between our seasonal gardens.”

Figure 4.1 Ngazi Level 1

Figure 4.2 Ngazi Water Level

FIGURE 4.1 NGAZI FLOOR PLANS

FIGURE 4.2 NGAZI SECTION

Towing the Line | 53
The third set of drawings, “Projection” are set in a distant future and follow a descendant of the earlier characters as she reflects on connections at a water market.
“Our views of space and movement were once rooted in Western thought that understood identity as the relation between similar beings rather than one centred around mutual belonging to a shared world. This tendency towards forming relationships by creating “the other” created a divide between the bodies we included and those we did not.

Borders existed in duality, acting simultaneously as conduits and obstacles. Existing as protective devices that governed, regulated, and controlled the movement of specific goods and people and as barriers that isolated and prohibited designated groups from accessing resources and opportunities. But the profound unpredictability, the mass waves of migration and the need to adapt to change quickly showed us that we urgently needed to return to and expand our understanding of community.

Today we are on the move again. “Where borders exist, they are not regarded as monolithic markers of territory but understood as porous nodes in an extensive network of flows and exchanges.” 60 Mobility drives our social, economic, and political well-being because we realise that more and more, especially in conditions of crisis, continuous movement, the freedom to react, adapt and change is paramount to our survival.”

FIGURE 43 WATER MARKET PLAN
During this thesis year, I was asked “How is this Architecture?” a few too many times. That burning question, coupled with the decision not to produce an Architecture—a polished design proposal of a bridge or a building etc—often left me doubtful about the work I was producing. At its core, this work examines our relationship with space—the things that inform and influence that relationship—and how those relationships manifest as place, architecture, infrastructure and landscape.

Today, the architectural profession is grappling with its position in the world. Many of us in the architectural profession are realizing that architecture is not simply a neutral practice but one that has upheld and perpetuated harmful systems and ideas. As a result, this is a time of introspection where we challenge the beliefs and teachings that we’ve inherited and question how we can be better and how our profession can do better.

To “toe the line” is to conform to rules or standards. In the context of post-colonial Africa, we are “towing the line”—dragging along systems and ideas that were imposed on us forcefully. Systems and ideas that weren’t designed for the well-being of people, animals or the environment but are the foundation on which our cities and infrastructure are built today. Failure to address these larger systems will result in the continued production of destructive built environments.

The work of addressing these legacies is ongoing and will never be complete. Still, through this thesis, I hope to contribute to ongoing discussions around mobility, integration and strengthening relationships on the continent. I also hope it encourages those who encounter it to remember that there are other ways of being and continue questioning and challenging what you inherit.
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Re(construction)


Images


