

ubuntu

UBUNTU 2150

The Co-Creation of Preferable,
Inclusive South African Futures



SUBMITTED TO:

OCAD University in partial fulfillment of the requirements
for the Master of Design in Inclusive Design

SUBMITTED BY:

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ABSTRACT

This purpose of this research project is to help develop a visual panorama of what Cape Town, South Africa could hypothetically look like 150 years from now. This concept art would be used to employ the method of Chain Creation, where the created visual would be used as a platform with which to inspire other creative thinkers, leaders and citizens to imagine preferable future scenarios.

The concept art would help provide people a tangible way with which to imagine and think about preferable futures, and potentially have a role in shaping it.

Keywords

Future, co-creation, visioning, Apartheid, forecasting, STEEP, environment scanning, scenarios, world-building, *ubuntu*

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PREFACE

I'm a South African-born creative who has had the amazing privilege to work and live abroad for the last 8 years, as well as pursue a degree at the graduate level at OCAD University in Toronto.

The desire to actualize this project has been inspired by the many narrative worlds I have traveled to throughout my lifetime, from childhood fantasies to adolescent escapism and speculative adulthood. I have been a wizard roaming the halls of Hogwarts; I have traversed the Kanto region in pursuit to 'be the very best'; and I have wandered the streets and skies of San Fransokyo in search of Hiro and Baymax. I was only able to do so because these worlds that I entered were so rich with detail, designed by passionate creators who provided enough information to propel imagination, yet kept their narrative open enough to allow their audience to become possible characters within them.

Imagination, to me, has been a means to inspire actionable creativity, whereas to many South Africans who have experienced a history of exclusion, it has been a means to escape a harsh reality. Coupled with the desire to have a social impact in the world and the advantages of narrative world-building, I propose to provide the agency to empower other South Africans to document their contributions to the future of the country.



2 — FIGURE 1. AERIAL VIEW OF THE ECONOMIC DISPARITY IN SOUTH AFRICA.

INTRODUCTION

1. INTRODUCTION

[...]they are hardly aware of the potential value of harmonious surroundings, a world which they may have glimpsed only as tourists or as escaped vacationers. They can have little sense of what a setting can mean in terms of daily delight, as a continuous anchor for their lives, or as an extension of the meaningfulness and richness of the world. Kevin Lynch (1960, p. 2)

1.1. Reclaiming South African Identity Amidst the Legacy of Apartheid

The legacy of Apartheid continues to haunt every facet of South African society. Apartheid, an Afrikaans word meaning "apartness", was a series of legislations enforcing racial segregation. Despite the adoption of political democracy, the transition into a socially and culturally democratic society has been challenging. White supremacist ideology has functioned by producing conditions in South Africa that exclude Africans from civil society (Ginsburg, 2011). A half-century of brutally discriminatory Apartheid legislation nurtured pre-existing systemic racism, which has in turn constrained the political involvement of a large segment of the population under a new legal-political system (Buur, 2005).

1.2. An Inability to Visualize an Inclusive Future

As a result of the exclusive nature of Apartheid, the majority of the public have not yet developed a sense of how a truly democratic social structure might function, and more importantly how it could affect their everyday life. With close to 53 million people, South Africa is a multi-ethnic country that has since attempted to incorporate a variety of races, languages, cultures and

religions, but with divisive ramifications (seen in Figure 1). Persistent systemic issues have resulted in the hopelessness of an uncertain future, the incomprehension of preferable outcomes, and the lack of agency to make impactful structural changes today. South Africa's diversification in perspective requires participation from all stakeholders to assimilate possible futures and actionable steps to achieve this change.

The objective of this project is to explore how the practice of forecasting possible South African futures could inform public imagination and foster a more inclusive society. For example, fiction could be used to construct and present a scenario as a "prototype" which envisions South Africa as a healthy and developed society for the general public and policymakers alike. The hope is to collect and curate narrative pieces from a variety of individuals, both locally and internationally, to cultivate discussion and structural change. To date, there have been no formal studies on preferable South African futures.

Any attempt to confront harmful social structures should first develop methods with which to maximize and streamline public participation. In a situation as far-reaching and complex as post-Apartheid South Africa, the proliferation of a unified "goal" can both rationalize and encourage consistent participation in coordinated and targeted efforts. In response to the fallout from mid-century Apartheid legislations—evident in limited public involvement in South Africa's political and cultural development—I suggest the introduction of futures studies methodologies, to help South Africans document their contributions to foster a society that values inclusion. The initial prototype for this sort of engagement is intended to be a panoramic image, which would then encourage further creative pieces, which could take on many different narrative forms: from a short

story, to a graphic novel, a written song, or conceptual drawings. This progressive approach would be used to construct and present a scenario that envisions South Africa as a functioning and developed society for the general public and policymakers alike. The hope is that these would act as a catalyst to inspire conversation, and subsequently, impactful structural changes.

Within this paper, I will first detail an environment scan of available literature to help inform the situation in South Africa, the importance of futures studies and design, as well as a native South African approach to inclusive design. From there I will discuss a series of research methods that were implemented to help reach the completion of a forecasted timeline and brief, to help inform creative collaboration, resulting in a completed artifact to help further employ the method of Chain Creation.

LITERATURE REVIEW

2. LITERATURE REVIEW

The sooner we learn to use and democratise collective imagination to dramatise our alternatives, the more powerful will be our capacity to shape change towards just and worthwhile ends. Stuart Candy (2015, para. 9)

In order to assess the atmosphere of South Africa's current social discourse, it is important to collect sources that elucidate contemporary perspectives. This section achieves this first, by discussing published research that traces the history of exclusion in South Africa. Next, to gain a more contemporary perspective, this section reviews news media, through which I was able to build a more cohesive reflection of a contemporary public sentiment. Finally, it is equally important to address the historical development of racial prejudices, resultant social conflicts and controversial legislative institutions—ones that have indelibly affected public attitude.

To challenge this societal exclusion in South Africa, I have decided to explore potential solutions through the examination of literature which meditates on the design of alternative futures, and the incumbency of designers to help visualize and document these futures. Design is an imperative lens in the sense that it deals with formative solutions to existing problems. It also has the evolutionary capability, through the collaboration of multiple creative practitioners, to inform public insight and allow all stakeholders to rethink their current reality. A further selection of literature is explored to unpack the idea of transmedia storytelling and its role in believable world-building to stimulate imagination, inspire creativity and afford innovation.

Lastly, I was enlightened by the philosophy of *ubuntu* which looks at the collective views of diverse peoples to create a unified form of knowledge.

2.1. A History of Exclusion

In *Our Cultural Legacy—A Divided Society*, Stuart Pennington insists that South Africa’s cultural inheritance “can be summed up in one word—exclusion” (2011, para. 6). This cultural exclusion dates back 400 years to the Dutch and English colonization of South Africa. Historically, justifications for colonization have argued its potential to introduce productive infrastructures as well as “modernize” cultural and political institutions, and primitivize existing social structures and attitudes. Pennington claims that the process of colonization served a deliberate purpose to segregate and disenfranchise native peoples. Subsequently, in order for South Africa to retain its colonial class structures as it emerged into the post-colonial landscape, native peoples needed to be excluded from the process of designing new social structures. Apartheid was the result of an attempt to transition into a modern, socially and economically competitive political system while maintaining existing structures of power. Pennington further elaborates that “when we try to understand the violent nature of our society, the poor state of our education, our work ethic, our strike ethic, our driving ethic, our litter ethic, our racial ethic, our corruption ethic... so many of them can be explained by examining the roots of this legacy of exclusion and what has emerged over the past three hundred years”.

Makhanya of the *Sunday Times* advocates for creating an inclusive society, with an “inclusive economy”, “inclusive healthcare system” and “inclusive education system” (as cited in Pennington, 2011, para. 9). This “inclusive” mantra needs to be adopted if the transformation of South African society is to succeed.

2.2. Imagining the Future Through Design

Stuart Candy (2015), a design futurist in Toronto and a professor of Strategic Foresight and Innovation at OCAD University, firmly believes that the only way to design for the future is to visit the future yourself. Candy argues that these visits are documented and orchestrated by designers who use a variety of media to help imagine possible futures. He proclaims that it is his job "[...] to create, and to help others create, transmedia situations where such possibilities can be thought, felt and used to make better decisions" (Candy, 2015, para. 6). In his practice, all media types can and should be used in bringing possible futures to life, from interactive performances and physical artifacts, to video and food—anything that can establish a future scenario as a potential reality-in-waiting. The design of possible futures intends to showcase an alternative to the current status quo, thereby providing possible outcomes to inform public imagination of possible choices for the future. Future studies hopes to overturn the given situation as it is, attempting to “widen human choices, by reconceptualising political, social and cultural ends[...]" (Nandy, 1996, p. 637).

2.3. Community Problem Solving Through Design

Public imagination, as discussed in *Speculative Everything*, wherein authors Dunne and Raby claim that the power of dreams, whether individual or collective, act as repositories of our innermost desires (Dunne & Raby, 2013). They argue that dreams today have been reduced to hopes. People are unable to envision solutions, and do not know how to fix the planet or how to ensure their survival, but they remain hopeful. Design, however, is generally believed to be about problem solving and finding possible solutions. In a world that is faced with enormous challenges such as overpopulation, water shortage, and

climate change, designers feel an overpowering urge to work together to fix them. Dunne and Raby speak of speculative design and how it can act as a catalyst for people to collectively rethink their relationship to reality. Speculative design, which looks at "how things could be", is not about predicting or forecasting exactly what the future holds but is instead focused on the idea of possible futures and using them as a way to better understand the present situation, igniting discussion on the type of future its people desire. Speculative design is intended for debate and is provocative, intentionally simplified, and fictional. The fictional quality requires the suspension of belief and to allow the imagination to wander by momentarily forgetting how things are now, and instead consider how things could be. To find inspiration for speculative design, one needs to "look beyond design to the methodological playgrounds of cinema, literature, science, ethics, politics, and art to explore, hybridize, borrow, and embrace the many tools available for crafting not only things but also ideas of fictional worlds, cautionary tales, what-if scenarios, thought experiments, counterfactuals, reductio ad absurdum experiments, prefigurative futures, and so on" (Dunne & Raby, 2013, p. 3).

2.4. The Conceptual Potential of Transmedia Storytelling

The goal of foresight professionals and the futures field as a whole is not to predict the future, but to idealize and imagine possible future scenarios. To simply present and discuss data is not nearly enough to help transform perceptions about the future and move a community to action. There is an emergence of transmedia storytelling thanks to the rapid evolution of digital media technology, presenting foresight professionals with a powerful approach for communicating possible futures. Von Stackelberg and Jones describe transmedia storytelling as "the use of multiple media—graphic novels, video clips

on YouTube, blogs, Twitter, and enhanced e-books, for example—to tell one or more related stories set within a common storyworld” (Von Stackelberg & Jones, 2014, p. 1).

Foresight professionals need to adopt various forms of storytelling if they hope to prompt conversation and encourage further exploration of issues facing society. Constructing these "stories" is essential for community discussion, engagement, and imagination, as “the only way to truly comprehend the human costs of policy and cultural constructs is to listen to and exchange stories” (Stories, 2012, para. 6). “To build a culture of possibility, we have to build both a movement and an ethical framework grounded in multiple narratives from multiple voices, and fostered by co-creation networks that act for the good of the collective and the protection of the individual” (para. 6). The creation of transmedia stories by way of low-cost tools, consumer level cameras, and Adobe Creative Suite helps the public to articulate what usually exists only in their imagination. Such tools can aid foresight professionals to engage individuals, organizations, and popular culture in ways that were not previously possible.

2.5. The Ability for Imagination to Inform Creativity and Power Innovation

Tanner Christensen differentiates imagination, creativity and innovation, their unique cognitive roles and their relation to one another. Imagination is a process that deals with the intangible, that which is either impossible or unreal. Creativity on the other hand, uses the imagination to reorganize existing ideas and unlock their potential in order to create new ideas of value. Lastly, innovation is what happens when we find ways to improve upon an existing system, using both imagination and creativity (Christensen, 2015).

Where imagination simply requires that we have some context from which to envision an idea, creativity requires that we have knowledge of the idea, motivation and freedom to explore and tinker, intelligence to see what makes the convergence of any set of ideas possible, and then the energy to see the process through. Innovation takes both creativity and imagination further, focusing on existing systems or ideas that can be evolved naturally. Tanner Christensen (2015, para. 12)

Christensen further elaborates that imagination provides the agency to convey extraordinary narratives, and then creativity to physically document what the process of imagination dreams up. Innovation utilizes both imagination and the efficacy of creativity to make measurable improvements on what exists today. Each of these cognitive processes requires varying degrees of context. Memory is often a tool that informs creativity. In the context of South Africa, it is the memory of a harsh past that has influenced current structures and is constraining ideas about the future. For this project to intervene, I need to help introduce other tools to inform new areas of imaginative thought—ones that were previously incomprehensible.

2.6. Reinforcing an Ubuntu Approach to Design

Given that colonial infrastructures nurtured the exclusion of native cultures, and resulted in the eventual segregation of races, it might be helpful to look at local practices of inclusion, specifically the philosophy of ubuntu, and the possible effect it could have on modern South African society.

Fainos Mangena documents that the term *ubuntu*, philosophically, highlights its foundation in the idea of group and community. The term itself finds its ori-

gin in the Nguni/Ndebele phrase “*umuntu ngumuntu ngabantu*,” which means that one person finds purpose through other persons—I am because we are (Mangena, 2017, para. 1). The actual word itself specifies the moral obligations of an individual within a community. Following the harsh political system of Apartheid, South Africa needs to reconsider this homegrown philosophy to allow all citizens, singularly and as a group, to find value and purpose, to reignite their hope in a better future, and to move forward, together.

We can look to *ubuntu* as a local form of inclusivity, where the benefits and burdens of a community are shared, and where everything that is done places the concerns of the community above the interests of the individual. Imagination, creativity and innovation then, are not the responsibility of an individual, but the collective obligation of the community to create systems that everyone would find preferable.

Martin H. Prozesky lists 10 descriptive qualities of *ubuntu* that do not quite encapsulate the word as a whole, but help capture the philosophy’s core essence (as cited in Mangena, 2017):

- Humaneness
- Gentleness
- Hospitality
- Empathy
- Deep Kindness
- Friendliness
- Generosity
- Vulnerability
- Toughness
- Compassion

The review of literature in this chapter has concentrated largely on a brief history of the country and why the public’s general attitude and outlook has

been affected the way that it has. Possible solutions exist within the realm of future studies methodologies: design to visualize these futures; then imagination to kick-start community engagement in creative solutions to systemic problems; and the philosophical concept of *ubuntu* to encourage community involvement.

As a result, this chapter provides the framework for Chapter 3, in which the insights gained through the various literary work inform the research methods employed.

RESEARCH METHODS

3. RESEARCH METHODS

Any adequate theory of modern society must include people as active, purposeful, and innovative beings whose future-oriented behavior helps create not only their own future but also the social order itself. Wendell Bell (1998, para. 1)

There are many possibilities for what the future may hold. The challenge for this specific project, especially in light of the hopelessness of what a racial-, socially and economically inclusive South Africa would look like, is to construct a future that is both believable and preferable. The methods delineated in this chapter propose to forecast a preferable future through a series of situational methodologies by assessing the country's current status as affected by its external environment. The methods provide an overview of the history and current situation within South Africa, to look at patterns and provide context for the kind of future that is desired. These rough overviews of the country's status quo throughout its various stages of existence would provide enough information to employ various visioning techniques and scenario-building, which will then be documented through a forecasted timeline and written synopsis of the projected future. As this forecasted future would be the result of the imaginative processes of one person, it would not necessarily be an accurate depiction of what the future would look like, or even the future that others would imagine themselves.

This chapter will focus on the methods employed to outline past, current and preferable environments, and the proposed timeline that was forecasted to reach a written synopsis for this possible future.

3.1. Forecasting by Looking at the Past and Present

When anticipating or ideating possible and preferable futures, rationality is an “awareness that the future cannot be known with absolute certainty” (“Methods for Studying the Future”, n.d., para. 1), and recognition that a spectrum of alternate futures is possible. Methods for anticipating futures are not able to necessarily predict the future but are instead used to assess probabilities to help an audience comprehend future possibilities and inform better decision making. By elucidating what is known, what can be known, scoping out possibilities, and the likely effect of today’s decisions, forecasting methods have the ability to help people approach the future with less apprehension and uncertainty. Forecasted futures are highly subjective and have endless possible outcomes depending on the individual imagining them. For this reason futures research should be participatory, involving stakeholders and designers, collectively forecasting and creating possible future scenarios.

3.2. Situational Methodologies

To assess past and present South African scenarios, a rough environmental scan by means of a STEEP analysis of available media has helped to identify the visions and outlooks of the general South African public, current trends, emerging issues and potential developments (PESTLE Analysis, 2017). These environmental scans were recorded by creating three STEEP overviews that look at the *social, technological, economic, environmental* and *political* factors affecting South Africa during Apartheid, in today’s post-Apartheid era, and in a preferable future:

- **Literature STEEP Analysis:** the situation during Apartheid South Africa (pre-1994) as it was through the lens of literature.

- **Media STEEP Analysis:** the current situation in Post-Apartheid South Africa (1994-2017) through the lens of media.
- **Future STEEP Analysis:** a preferable South African future (2017-2150) built using forecasting techniques.

3.2.1. Literature STEEP Analysis (Apartheid South Africa, pre-1994)

It is important to gather an understanding of South Africa's current situation in order to help frame possible, probable and preferable futures. This understanding will be framed through the *Literature STEEP Analysis*, displayed in Figure 2, informed by current literary works. These specific pieces were selected because the authors have articulated crucial problems that exist within South Africa today, and help to provide an ecumenical overview of the environments that might have contributed to these issues.

- **Social:** White domination maintained enforced while enforcing racial separation ("The History of Apartheid in South Africa", n.d.).
- **Technological:** Technology used as tools to enforce repression ("The History of Apartheid in South Africa", n.d.).
- **Economic:** A free-market capitalist economy (Harry Valentine, April 27, 2004).
- **Environmental:** Environmental degradation: eroded land; overgrazed pastures (Sattaur, 1990).
- **Political:** Natives treated as foreigners with no political representation (Lavery, 2007).

Apartheid South Africa Pre-1994

S White domination maintained while enforcing racial separation

T Technology used as tools to enforce repression

E A free-market capitalist economy

E Environmental degradation: eroded land; overgrazed pastures

P Natives treated as foreigners with no political representation

3.2.2. Media STEEP Analysis (Post-Apartheid South Africa, 1994-2017)

The second situational analysis, the *Media STEEP Analysis*, displayed in Figure 3, introduces a more representative and inclusive method of data collection that the first model was unable to provide. This model relies on a broad scan of current media, from web-based articles to journals and blog posts. The media were carefully selected to represent the social, cultural and economic diversity that exists within South Africa, and have helped generate personable, meaningful results to inform preferable outlooks that citizens have.

- **Social:** Increased unemployment rate—26.7% (Holodny, 2016).
- **Technological:** Technological acceleration but still financially unavailable to many (Chetty, 2012).
- **Economic:** South Africa’s credit rating cut to junk status by S&P Global (BBC News, 2017).
- **Environmental:** Below average in terms of clean technology innovation (Smith, 2015).
- **Political:** President Jacob Zuma’s time in office led with corruption and misrule (IOL, 2017).

3.2.3. Future STEEP Analysis (Preferable South Africa, 2017-2150)

The review of existing literature and media in the previous two analyses helped in the formation of the *Future STEEP Analysis*, in Figure 4, which acted as a rough creative springboard for the next step within this methods section.

**Post-Apartheid
South Africa
1994-2017**

S

Increased unemployment rate—26.7%

T

Technological acceleration but still financially unavailable to many

E

Credit rating cut to junk status by S&P Global

E

Below average in terms of clean technology innovation

P

President's time in office led with corruption and misrule

Preferable South African Future 2017-2150

S Unity through collective responsibility and love for the land

T Growth in sustainable energy in its bid to be a greener country

E Wealth in agriculture, industrial revolution and natural resources

E Ecosystems protected by law

P Distributed governance, valuing different approaches and diversity

- **Social:** Unity through collective responsibility and love for the land
- **Technological:** Growth in sustainable energy in its bid to be a greener country.
- **Economic:** Wealth in agriculture, industrial revolution and natural resources.
- **Environmental:** Ecosystems protected by law.
- **Political:** Distributed governance, valuing different approaches and diversity.

This rough overview of a preferable South African future was then used to inform the process of scenario-building intended to help create a believable environment, rich in detail yet open for further interpretation.

3.3. Blueprinting a Preferable South African Future

3.3.1. Creating Scenarios

The three STEEP models were then leveraged as a framework in which to develop a projected forecast of South Africa's future through the creation of a future timeline. The STEEP models helped inform the process of scenario planning through the application of internally consistent narratives and their correlations to possible states of affairs or developments for the future.

Alternative scenarios are often developed to inspire individuals to conceptualize alternative futures. Doing so also inspires considerations into the possible consequences of current developments and influential decisions made to get there. A scenario, distilled to its simplest of forms, is a series of events that we foresee occurring in the future. Our daily psyche, however, is often filled with

little departures into the mysterious and unbound worlds of tomorrow, next week or next year; playing out possible scenarios as means to prepare for what is to come. Scenarios are sparked when we wonder “What if...?” When we pose these open-ended questions we kick-start the imaginative process of exploring various possible consequences. Methodically, when we ideate various outcomes to scenarios, they help us come to a conclusion, action or decision, and become outlets for exercising our perceptions of alternative futures or outcomes in which our decisions have an impact. Scenarios serve to make us aware of potential conflicts relating to our final decisions. This then equips us with the ability to either 1) abandon a proposed action or 2) further plan to mitigate problems/conflicts that may arise as a result of us taking said action.

3.3.2. Visioning

Visioning is the process of forming visualizations of the future that are sufficiently real and compelling enough to act as ideals to encourage present change. Amongst futurists, the practice of visioning has become one of the most popular and important methods to develop desirable futures for individuals, organizations and communities. The visioning process typically attempts to identify both sources of pleasure and displeasure in past and current environments. The process also challenges current assumptions and helps individuals identify existing drivers of change to facilitate a process leading to their preferred future.

What responsible futurists do is not try to “predict” “the future” but to “forecast” “alternative futures” for study and evaluation, and then to help individuals, corporations, governments, and other groups to envision and to move towards their preferred futures--the best, possible, “real” world they can imagine[...]. Jim Dator (2011, para. 3)

2017-2019

Nothing is experienced by itself, but always in relation to its surroundings, the sequences of events leading up to it, the memory of past experiences.

Kevin Lynch (1960, p. 1)

3.3.3. Forecasted Timeline

2017

The asking price for a rhinoceros horn fetches \$300,000/kg in the East Asian black market.

South Africa's political crisis has intensified as tens of thousands of people join demonstrations across the country calling for president Jacob Zuma to step down.

South African actress, Charlize Theron, shares her concern with the rapid decline of the rhino population and is nominated as the spokesperson for the Save The Rhino foundation (savetherhino.org).

2018

Students take to the streets on Youth Day in protest against ever rising university fees. They cry out in the streets: "Next year we'll vote!

2019

Ngulia Rhino Sanctuary terminates operation, rendering South African wildlife reserves responsible for the remaining rhino population.

2020-2026

Mmusi Maimane wins the elections. Voter turnout at an all time high.

2020

The rhino is officially declared extinct.

2021

Commemorative rhino pins made as a symbol of solidarity for the nation to make an active effort to care for the surrounding wildlife (Figure 5).

2023

Mmusi Maimane is re-elected by a slim margin. Nonkuleleko Nyembezi Heita got 46% of votes, in her concession speech she comments that the South African people are strong, and will make sure the elected government hold up to their election promises.

2025

Wine producers have a disappointing harvest. The rise in temperatures takes its toll on agricultural growth. The need for non-traditional wine harvesting becomes evident.

2026

Recent protests have been organized using the hashtag #RhinoRise, a nod to the extinct animal. They call for a better quality of life for people and the planet.



2027-2031

2027

Nonkuleleko Nyembezi Heita wins the election for the SA presidency.

2028

Montagu sculptor, Willie Bester, best known for his installations made of found objects, is commissioned to build a piece in remembrance of the rhino to act as a call to all South Africans to rally together to protect the natural flora and fauna around them. He titles the piece "*Khumbula*".

2029

After recent turmoil in Myanmar, FIFA is scrambling to find a new host for the 2030 World Cup. The organization approaches South Africa for a second turn at hosting duties. Nonkuleleko Nyembezi Heita politely declines stating: "Now is the time to invest in our education system and housing crisis, not to play ball".

2030

South African designer Thula Sindi substitutes Maria Grazia Chiuri as creative director of Dior. Thula promises to bring his sense of timelessness and sophistication to the Maison.

2031

Cape Town is the first city in the African continent to allow self-driving cars.

2033-2042

2033

In a combined effort to become more eco-friendly, cut the cost of having a physical work location, and accommodate citizens desiring a work-life balance, many companies adopt a policy allowing employees to work wherever they want.

2035

Cardinal Thabo Cecil Makgoba is rumored as the most likely substitute for Pope Francis II. The South African clergyman is known for his liberal positions.

2037

Cape Town's Integrated Rapid Transit (IRT) system, MyCiTi, reveals ZAR130 billion plan to work on the city's transit infrastructure over the next 30 years.

2039

Hanerie Bosman, the first SA child born after the rhino were officially declared extinct, votes in her first election. Local newspaper, *Die Burger*, interviews her.

2041

Coca-Cola launches a special edition of the popular Iron Brew soda. The can displays the outline of a rhino head and the words: Rhino Brew.

2042

Global population reaches nine billion, and the average global temperature has risen by three degrees.

2044 - 2059

2044

In its bid to become a greener city of the future, the development board of Cape Town calls for all future developments to have solar panel and wind turbine technology.

2046

DHL, the global market leader in the logistics industry, commits its expertise in international parcel, express, air and ocean freight, road and rail deliveries. The company rebrands itself for the local market to "AirFrika", using air drone technology to make local deliveries.

2049

With the global rise in water level and change in wind speeds, the city announces developments to reformat the coastal line, along with breakwater systems to protect city structures from volatile weather conditions.

2055

Dr. Boitumelo Kubheka is named the head of the African Union (AU). She is the first openly gay woman to lead the AU.

2059

Introduction of aquaculture systems off the coastline helps to increase both sustainability and yield. Growth in popularity and success of aquaculture results in further employment opportunities.

2060-2073

2060

South African unemployment rate drops to a single digit for the first time.

2061

Cape Town government announces it will be using the taxes obtained from recreational drug sales to fund housing for those impacted by the rise in sea levels.

2063

As part of a continued effort to promote inclusion and pride, the city of Cape Town, also previously referred to the Cape of Good Hope, is renamed. "*Themba*", a regional word meaning hope.

2065

McDonald's strikes a deal with South African Apple Farmers: All McDonald's apple pies, globally, will be made entirely of South African apples.

2070

Netflix purchase the South African media company DSTV.

2073

The Shangri-La wins the right to build their resort in one of *Themba's* man-made islands.

2079 - 2101

2079

Stellenbosch University's MBA is ranked Top 10 in the World.

2083

Walt Disney launches its new animated feature film, "*Nomvula* . It tells the tale of a young zulu girl who magically appears in a village after a rainstorm.

2091

Themba is the second city in the world to have zero carbon emission generated by transportation.

2094

The South African passport is ranked in 12th in the world, between South Korea and Belgium. This represents a leap in 70 positions since the ranking first began.

2097

Lonely Planet lists *Themba* the travel destination of the year.

2101

South African-born architect, Xander Phiri, with an accumulated education in the Netherlands, is inspired by the Cape Protea for his latest architectural renderings of solar-powered flora structures that contract and close as a protective measure in turbulent weather conditions.

2110 - 2150

2110

Two solar-powered spires, "The "Protea Sisters", erected as part of a strategy by the South African government to continuously transform Cape Town into a garden city, raise the awareness for the importance of indigenous flora, as well as provide an architectural identity to the city.

2127

Local fabrications centers begin construction on the coastlines of popular ports throughout South Africa. Within these fabrication centers, raw materials are brought in via sea barges and drone technology.

2134

Environmental Defense has become the highest-earning field in the country.

2140

Tourism throughout the country is at an all time high. Visitors need to go through a strict visa application process.

2150

TBD.

3.3.4. Brief for Creative Practitioners

The forecasted timeline provided enough groundwork to formulate a creative brief in the form of a narrative summary to be passed onto a creative practitioner in the hopes to help guide their visualization of this preferable South African future, yet still remain ambiguous enough to grant them creative exploration. In terms of execution, the amount of detail held within the creative brief helps the creative practitioner deliver on the desired overall vision.

NARRATIVE SUMMARY

"Themba" in South Africa has become a large, inclusive, environmentally conscious metropolis. Investment over the last 100-150 years has yielded a technologically advanced and economically vibrant city on the Southern tip of Africa once known as Cape Town.

Redevelopment of the coastal line has accommodated the burgeoning need for an international urban centre dealing with environmental changes. Sustainable floating island colonies have flourished off the coast to both house and offer employment opportunities for agricultural workers, and massive transportation terminals grant entry to both passengers and cargo.

Architecture has borrowed design influences from the natural habitat as a reflection of the shared love of the land. Public squares and sculptures around the port city afford togetherness and community, affirming the indigenous philosophy of *ubuntu*, the belief that *"I am because we are"*.

CO-CREATION

4. CO-CREATION

Co-creation works best when you build a strong community. People share ideas, build on each other's work, critique, praise, and compete. It takes more than financial rewards to keep smart, creative people engaged. They need praise, credit for ideas, and to see the difference that they're making. Stefan Stern (2011, para. 7)

With a newfound understanding of the preferable South African future through examination of the STEEP model; paving the way for a forecasted timeline and subsequent creative brief, we turn now to Chain Creation: A method of design that emerged during the lifespan of this project as a means to support co-creation between artists from diverse geographic locations and cultural backgrounds.

The challenge redressed through Chain Creation was that the project needed a way to incorporate diverse perspectives that represented the heterogeneity of South Africa and beyond, yet still within the structure that emerged from the steps described in the previous chapter. Chain Creation served this purpose by enabling me to use personal thumbnail sketches and the construction of a brief to set parameters within which another artist could express their own perspective and creativity. Specifically, Chain Creation is intended to provide agency for one practitioner's creative interpretation of a brief to act as a platform with which to inspire another practitioner's imaginative interpretation, and so forth. What Chain Creation affords is a tangible modus operandi to use another individual's creative output as creative ignition to envision further.

It aims to provide a domino effect in terms of imagining preferable South African futures but is not intended to perform the work that a survey might provide, or any other form of qualitative or quantitative technique.

4.1. Determining Optimal Collaborators

After the completion of the timeline and brief, it was time to start working with a conceptual artist to bring the vision of this future South Africa to life. I conducted extensive online research in my search for potential collaborators with experience in actualizing imagined worlds. My communications with artists across the globe from a diverse range of backgrounds such as gaming, film and even tertiary education programs, introduced me to Kirsten Zirngibl of San Diego, California.

Kirsten is a concept artist and illustrator residing in the United States. Her professional focus lies in augmented reality, programmable matter, sustainable architecture, microbiology, and swarm robotics and her artistic interests include cityscapes, surrealism, mathematical strangeness, and abstraction. She has engaged in designing video games, augmented/virtual reality projects, and theme parks as well as advertising for tabletop gaming and advertising. Her personal and professional experience led to an avid interest in world-building—imagining future scenarios (both real and fantastic), building architecture with story and purpose, and extrapolating from these abstract scenarios to better understand the present while laying the groundwork for potential changes ahead. Her enthusiasm for the project was immediately apparent. Well before completing the negotiations of her agreement, she proceeded to research the city, its history, and current design in order to create with context and avoid appropriating from an outsider’s perspective, giving me confidence

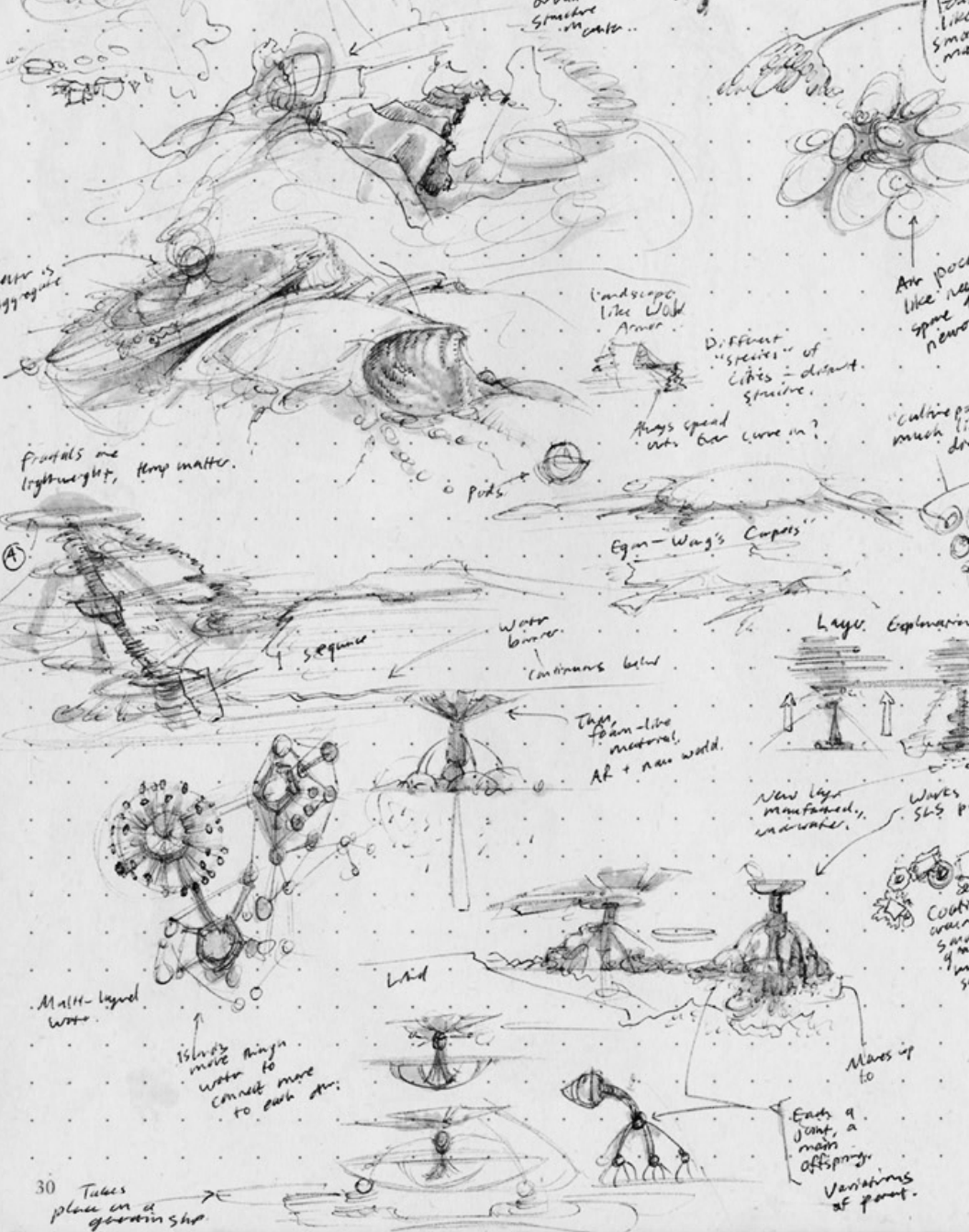
that she was the perfect candidate to assist bringing this vision to life. With this confidence, I proceeded to outline the preferred vision of the future by providing her with both the brief and forecasted timeline.

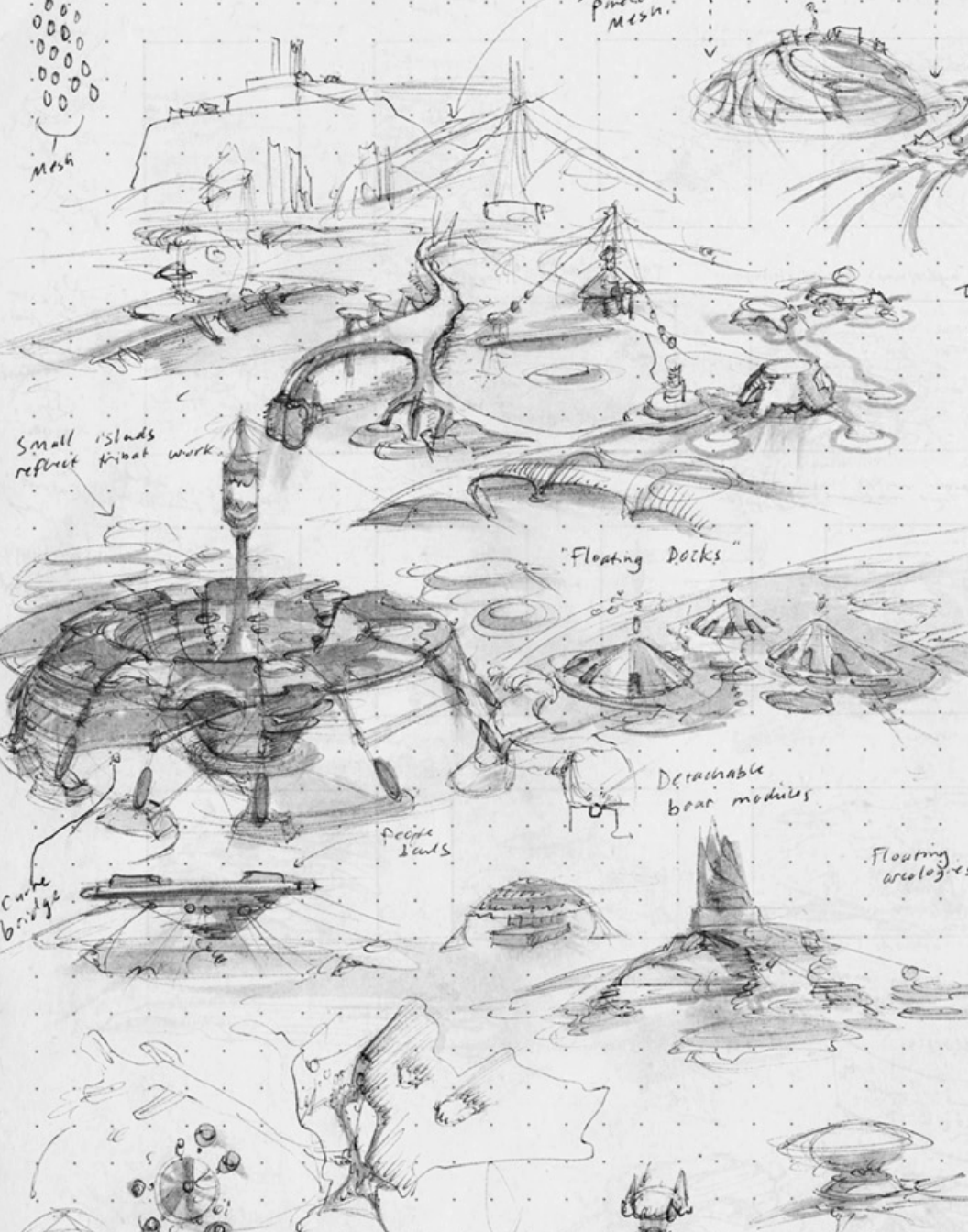
4.2. The Affordance of Email to Build Ideas

It was the asynchronous and text-based nature of email interaction between two individuals separated geographically, but most importantly by time zones that; enabled the exchange of information in a written format, facilitated the ability to ask questions, and allowed each of us to begin working while waiting for an email response from the other. What emerged from this was more than just hiring a freelancer to do work, because the interaction quickly revealed that the collaboration became a new type of data gathering where "the freelancer" actually had a wealth of knowledge and a personal vested interest in the issues being addressed and the world-building at hand.

The email interactions perfectly capture how the asynchronous exchange with forced delay due to work schedules and time zones, engendered a thoughtful development of questions that afforded new creative insights. Upon provision of the brief, timeline and photographs of crude sketches from a notebook (seen in Figures 6 and 7), the freelancer in response asked further critical questions about the state of technology in this hypothetical future, forms of possible government and any considerations made for changing climate conditions and its subsequent effect on city development.

The freelancer's inquiries encouraged further research and the re-examination of the proposed STEEP model, timeline and brief, challenging the perception of what this future should look like and how it could possibly function.





The act of world-building became a collaborative visioning process. Both creative stakeholders challenged one another at various stages within the conception process, resulting in a method of creation that was not anticipated but willingly welcomed—Chain Creation. The freelancer’s thoughtful questions afforded the opportunity to contribute insights that were initially not considered, and as a result, an ecosystem where the freelancer became a participant and collaborator, granting passage to an ideation process far better than what could have been imagined alone.

4.3. Creative Alignment

In order to ensure that we were aligned with the visual direction of the creative piece being produced, the freelancer and I continued open dialogue through a series of emails and video conference calls. Initial investigative research fuelled a kickoff-brainstorming meeting to discuss the potential of directions in which the visual could go. Alignment on the visual was needed to establish clear objectives, the parameters of size and scale, as well as expectations of the final deliverable. By the end of the brainstorm session, we had condensed the ideas into a concise inventory that highlighted the key aspects that needed to be communicated.

A. Overall Visual

The comprehensibility of the imagined future was crucial in terms of believability. The collective goal was to progress a little beyond the comprehensible to create a cityscape that was not completely recognizable, yet still distinguishable as Cape Town. We agreed that the city itself should be flanked by Table Mountain in the background, an instantly familiar landmark. The general busyness of the landscape would not be high energy per se, but more of a

serene culture, one that visually establishes that the city has integrated well into its natural surroundings.

B. Architectural Style

Radial symmetry, branching connections inspired by surrounding natural habitat (Key references to the national flower, the King Protea, and indigenous flora, *fynbos*). Solar paneled structures, rooftop greenhouses, and sustainable housing.

C. Housing

Circular fish farms/housing to provide both employment and homes. South Africa's natural resources are a great source of income for the country. As the need for produce and agriculture continues to grow, farming and cultivation will become much more important in this future. It would provide work and housing for the currently unemployed.

D. Monuments/Public Spaces

Public spaces reflecting the notion of *ubuntu*, with large public squares/parks, both open and covered to suggest the mingling of people.

E. Transport

Elevated train systems, many boats in the water and a sky full of autonomous delivery vehicles.

F. Climate

Floating islands off the coastline with an elevated sea level to reflect global warming. Deck patterns jutting off as an extension of the coastline.

Reaching creative alignment paved the way to begin the physical execution of world-building. Thereafter I provided some initial sketches of my own as a means to share my creative vision for possible buildings, transportation devices, and coastal structures for the purpose of allowing the freelancer to use these sketches as a platform to initiate her own thinking and translate them into her own artistic style.

4.4. Collaborative Process

4.4.1. Cross-discipline Tennis

The collaborative nature of world-building involving two co-creators from separate disciplines afforded the sharing of resources and insight that might previously have been unavailable to each party. The constant reciprocation of knowledge encouraged each collaborator to engage in a personal investigation into the other's field of expertise, thereby providing insight that allowed participants to evolve their personal contributions to the project.

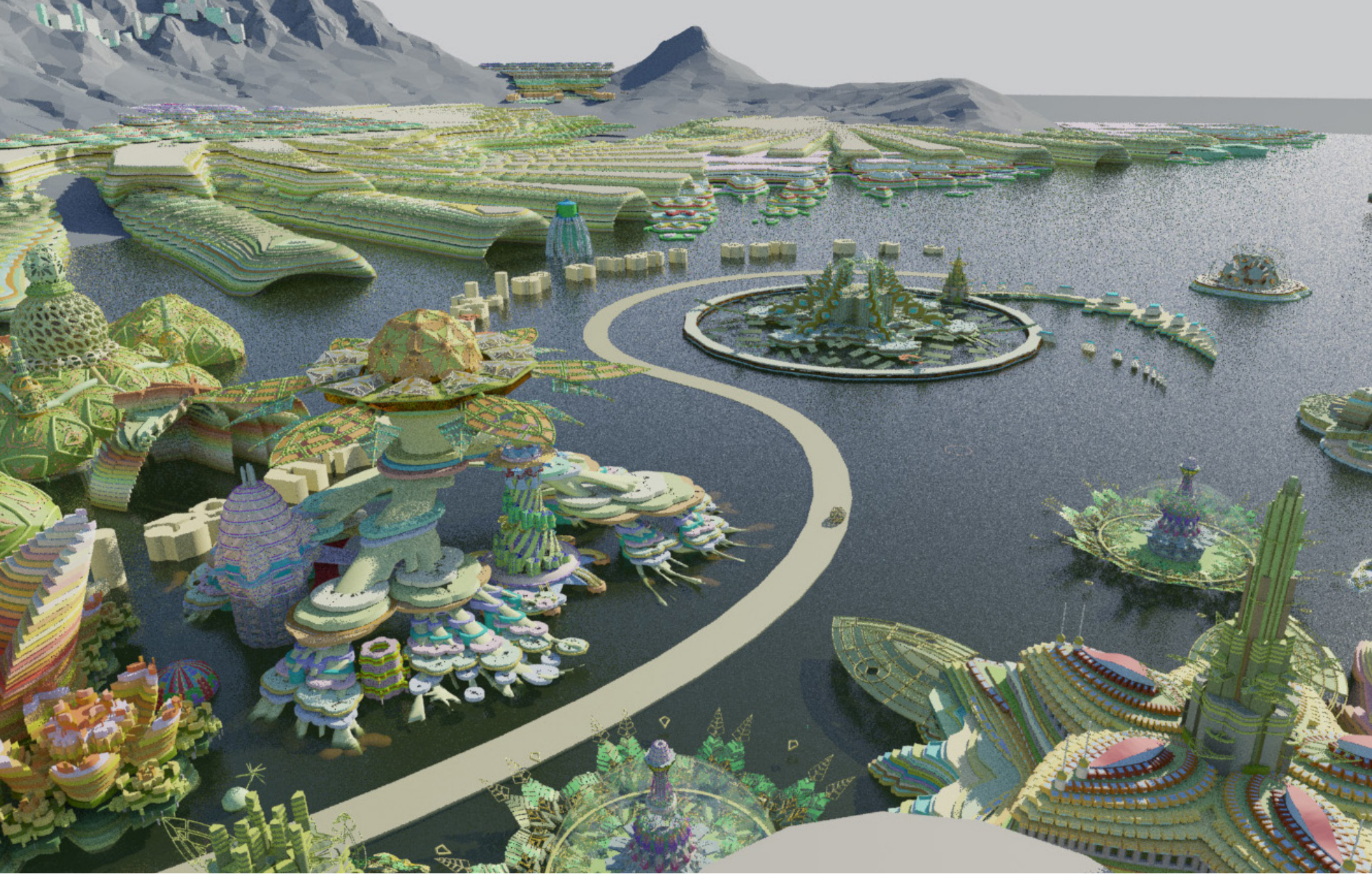
For example, the freelancer was particularly inspired by floating architecture technology that had been recently unveiled in the Netherlands and suggested that it would make sense, considering South Africa's ties to the Dutch, that this could influence possible structures off of the coastline. In return, the suggestion was made that these floating structures could act as a form of housing and possible agricultural employment, and take visual inspiration from an aquatic plant indigenous to South Africa's Western Cape province, the *Waterblommetjie*.

The synergistic and proficient combination of disciplines informed insights beyond individual parameters, helping to generate novel solutions within this creative exercise.

4.4.2. Feedback and Negotiation

With the provision of sketches and background narrative for the desired architecture, the freelancer translated the provided sketches into three-dimensional models and began the process of building the city. The low fidelity drawings alone did not contain enough visual information to communicate the complexity of what was being imagined, but together with the brief and the shared alignment of the vision moving forward, they provided enough detail to allow us to begin the creative development. Step by step, the freelancer shared her progress and requested feedback to ensure constant alignment.

The sharing of the first preview image (seen in Figure 8) set the precedent for the creative environment moving forward. The execution of creative work is often determined by the individual and how they choose to translate the brief, as well as the creative decisions or liberties made during the process. Inquisition during this phase of feedback and negotiation was essential in terms of understanding the freelancer's approach to certain elements and structures. Keeping an open mind during the creative process led to realizations regarding approaches that did not initially resonate with me, but in the end had benefits that I alone had not considered. As a result, the freelancer's visual interpretation and physical manifestation of the brief inspired a creative response, which I documented by revisiting sketches and later circulated back as a form of feedback and co-creative development. What was borne was a creative boomerang effect, where the act of world-building came to fruition by two individuals creatively sparring with one another. Throughout this process of feedback and negotiation, we learned to collaborate better, challenged our preconceptions, and ultimately gained greater perspective into what was being achieved.



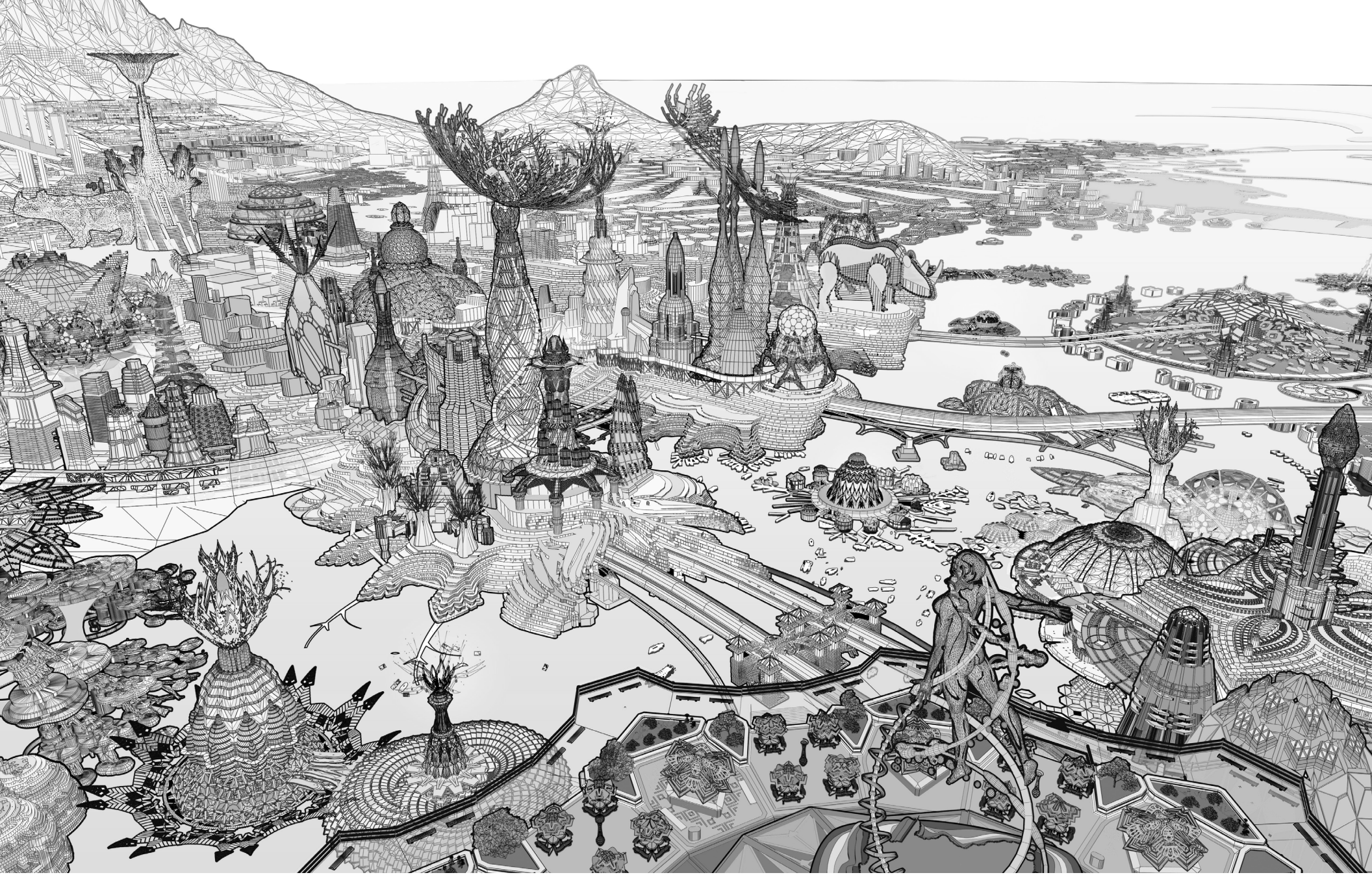
47 — **FIGURE 8.** THE FIRST LOW-RESOLUTION PREVIEW OF THE CITY OVERVIEW.

The act of world-building was an experimental process, requiring both creative stakeholders to integrate imagination and the use of technology to transform the narrative brief step-by-step into an actualized visual through various iterations and prototypes. It also afforded visual participation from both myself and the freelancer to see what worked, what didn't, and what could be improved upon.

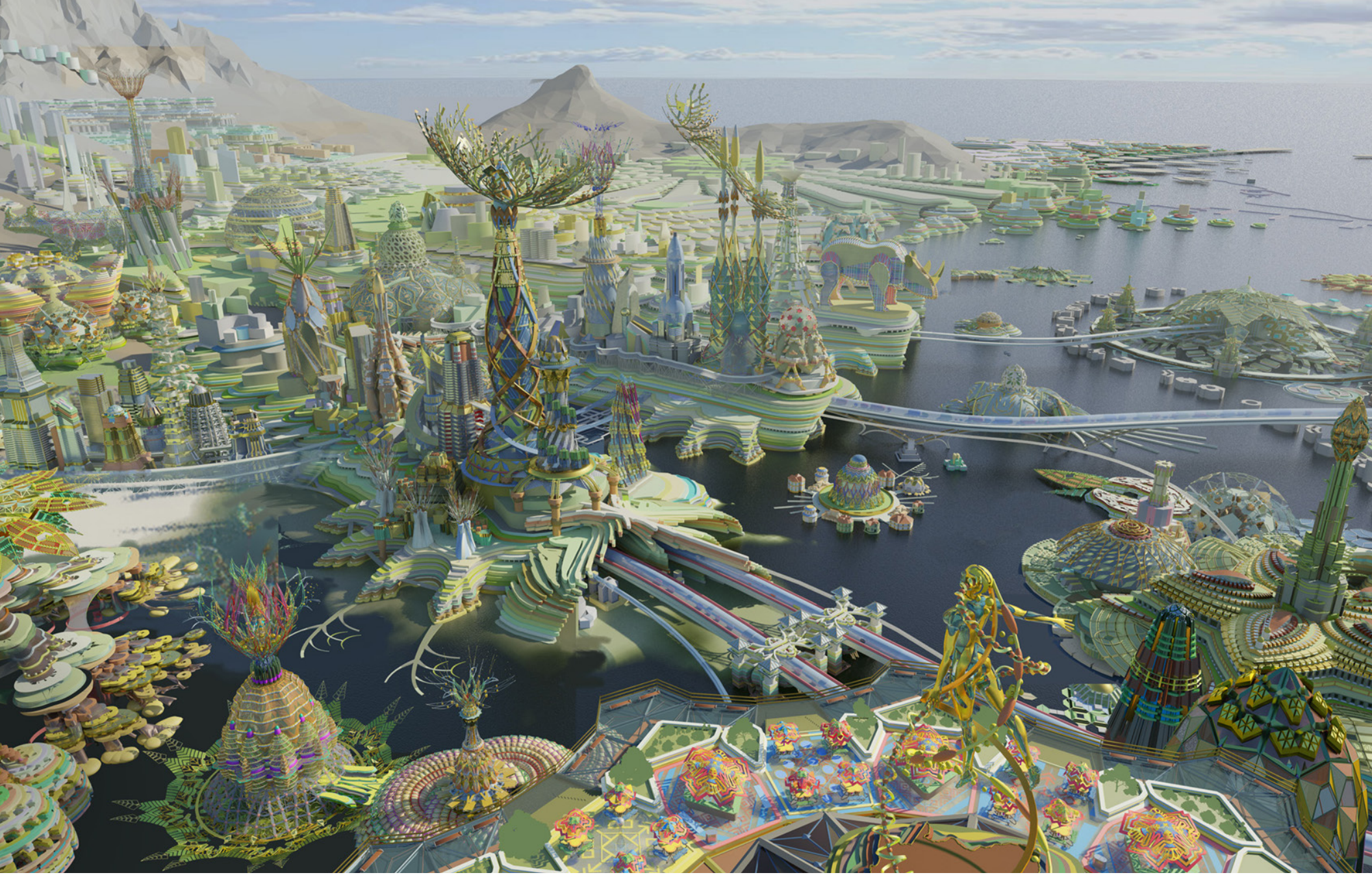
Something else that the gradual progression of world-building afforded was new possibilities of immersive storytelling. As the visual evolved (seen in progression from Figures 9 to 11), so did the attached narrative. With every new structure introduced into the three-dimensional rendering, it stimulated further ideation into how this world came to be. The progressive realization of the narrative became like a puzzle, where both the freelancer and I had built the framework but had the ability to fill in the remaining pieces and choose how they fit together. This collaborative interaction was exemplified when ideating a possible structure to incorporate into the empty foreground of the second iteration. Ideas were bounced back and forth until we both agreed that a public sculpture would be most appropriate within the centre of the community square, which led to another series of sketches being produced to illustrate possible narratives as to how this sculpture came about.

The further we delved into the visualization, the more detailed the feedback became. The majority of the creative exchange took place over email from this point onwards, where the visual was numbered to bring attention to specific structures and the suggested edits to be made to them. Edit suggestions included the changing of colours, the translucency of a material or the positioning of structures in relation to one another.





50 — FIGURE 10. A WIREFRAME PREVIEW OF THE CITY OVERVIEW.



51 — FIGURE 11. A COLOUR PREVIEW OF THE CITY OVERVIEW.

Once all of the feedback was provided, and the requested changes addressed, it became a game of patience in the sense that we both needed to rely on the processing time that the technology required to render the detailed image. From a creative point of view, it was essential to ensure that both myself and the freelancer were wholly satisfied with the final output, and for it to be a piece that we were confident would help accomplish the goal that this project had set out to achieve.

Having reached a finalized panoramic overview of a preferable South African Future (confined to a representation of a future Cape Town seen in Figure 12) through collaboration, electronic communication and a continuous cycle of feedback and negotiation, the method of Chain Creation that materialized from this process inspired further development into how it could be put into practice.



53 — FIGURE 12. A COMPLETED PANORAMA OF THE CITY OVERVIEW.

CHAIN CREATION

5. CHAIN CREATION

Let us now discuss the results and implications of the investigation thus far, starting by recalling the purpose of the investigation, which is that the legacy of Apartheid [and the associated deep-rooted cultural memories that persist as a result] constrain the cognitive construction of more inclusive futures. The purpose of this project is to explore how the practice of forecasting possible South African futures could inform public imagination and foster a more inclusive society. This purpose entails three objectives that have produced three results:

5.1. Review

5.1.1. Objective 1: Perform an Environmental Scan

The first objective was to assess the atmosphere of South Africa's current social discourse, as shaped by the history that led to its current situation, so that the end result of the entire exercise imagined a scenario that was plausible.

Result 1: Review of the Current Situation in South Africa

The result of the first objective produced a literature review that described the current situation in South Africa, informed by a historical context. In short, the situation in South Africa is still affected by Apartheid's legacy of exclusion, one in which one race has continued to prosper while another has suffered social and economic ramifications.

South Africa's National Development plan currently acknowledges this problem and has sought to "eliminate poverty and reduce inequality by 2030 by

drawing on the energies of the country's people, growing an inclusive economy, enhancing the capacity of the state, and promoting leadership and partnerships throughout society" (Brand South Africa, 2012).

5.1.2. Objective 2: Forecast a Preferable South African Future

Building on the first objective, the second objective was to forecast a preferable future, but developed within a believable context by examining key trends across social, technological, environmental, economic, and political dimensions.

Result 2a: Future STEEP Model

Objective 2 resulted in a timeline that describes a possible future where South Africa has properly embraced the philosophy of *ubuntu*, become an international hub, and collectively created a visual identity in terms of architecture that is a natural outgrowth of its diverse, multicultural population. More specifically, Objective 2 resulted in the following forecast:

- **Social:** Unity through collective responsibility and love for the land.
- **Technological:** Growth and sustainable energy in its bid to be a greener.
- **Economic:** Wealth in agriculture, industrial revolution & natural resources.
- **Environmental:** Ecosystems protected by law.
- **Political:** Distributed governance valuing diversity in approaches.

This specific method consisted of organizing the information into a preferable vision of the future through a forecasted timeline, by first determining the overall future goals and objectives, then working backwards to extrapolate exactly how they could be achieved.

Result 2b: Visual Panorama

In addition to the timeline, Objective 2 resulted in a visual panorama that depicted this preferable future with a specific focus on the region of Cape Town. The panorama acts as a brief visual summary of the timeline, but also affords a personal interpretation. By creating a pictorial representation that manifested the forecasted timeline as a visually perceivable, concrete structure of a future scenario (mapped onto the physical location of Cape Town), audiences have the ability to interpret the depicted situation through their own personal imaginative extrapolations, thus using the depicted scene as a prompt or scaffold with which to spur their own creative insights. The provision of the image, in a way, is also the provision of a new memory, in that it helps audiences visualize a future that was previously incomprehensible.

Designing the visual artifact of the future was a form of design fiction, created as if visiting the future. Visions like this prompt us to think about the future and desire to know more about it. "Imagine, for example, we had dumped an iPad in your lap twenty years ago. You'd want one, and be hungry to know more about the future from whence this came. They can make us wonder whether we want a world where panda jerky is commonplace, or where only vestiges of our civilization remain" (Selin, 2017, p. 28).

The artifact was a successful merging of foresight and art in the sense that it became believable content for comprehension, to create new 'memories' and to help identify possible future opportunities and risks, as well enable "what if...?" scenarios.

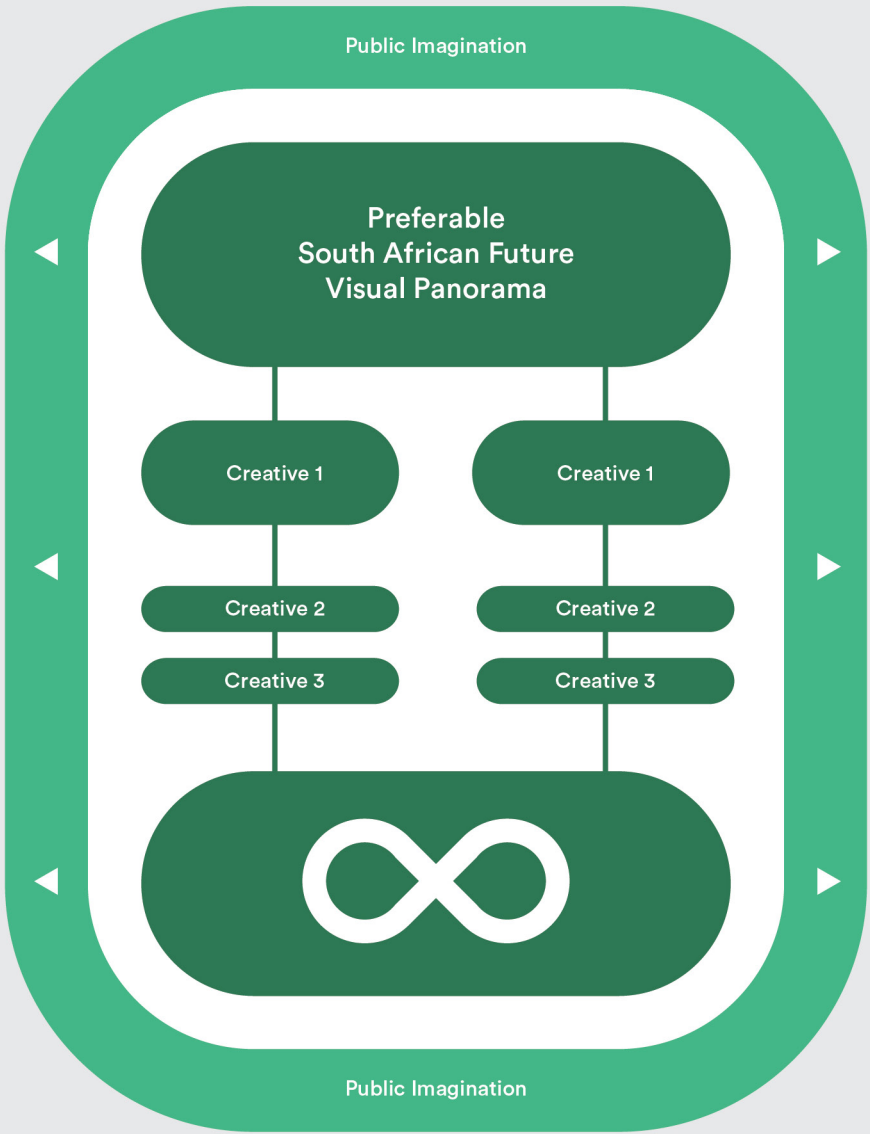
5.1.3. Objective 3: Visual Springboard for World-Building

The third objective was to develop a means to build upon the foundation established by Objectives 1-2, by incorporating diverse perspectives that represent the heterogeneousness of South Africa.

Result 3: Method of Chain Creation

The result of Objective 3 is a direct outgrowth of Result 2b: A method, referred to here as chain creation, that allows for further imaginative thought using the visual panorama as a springboard. It provides a tangible way through which to think about the future; and by “think” I mean to assign a personal interpretation in reaction to what is perceived from the panorama.

This approach is unique in the structured way creative individuals are involved. Their interpretations are in reaction to the research based forecast, manifested in pictorial form. The way in which chain creation is intended to work is perfectly illustrated within Figure 13. The creative process starts with the provision of the visual panorama. If you were to hypothetically brief two further creative practitioners—say a musician and fashion designer—with the panorama and a concise brief within their field of expertise. You request the musician to use the panorama as a form of visual inspiration to stimulate what they think street music would sound like in this future, and the fashion designer to ideate possible clothing and fashionable accessories. The panorama would not necessarily restrict their creativity, but would help provide a directive frame within which to think. By allowing the artists to exercise creative freedom, their output would exist as a unique contribution as an extension of this proposed preferable future. Their creative output, along with the initial panorama, would then be passed to four further creative practitioners—let’s say an architect, graphic designer, potter and



character artist—to inspire their own creative responses. This process of chain creation would continue resulting in an inclusive act of world-building where artists and designers get to "visit" the future and work individually or collectively to create transmedia solutions. The possibility of this future can be experienced, thought of, felt and used to help others believe in a hopeful tomorrow and make better decisions today.

5.2. Discussion

Result 2b, the visual panorama, is intended for those with lived experience within South Africa. It acts as an artifact from the future (like a postcard of the city brought from the future to present day), providing a tangible experience of the proposed future. What the visual does is that it explicitly details the forecasted scenario, aiding the viewer's comprehension on a personal level, using their imagination to contemplate what it would be like to live in this particular future. The Institute for the Future advocates for the importance of future in that they provide a rich point of entry for strategic discussions amongst organizations and communities looking to engage their members in collaboratively ideate how to improve their surroundings. Creating artifacts from the future "is also a great way to get people thinking about the future—their assumptions, their goal, and the path from here to there" (Ness, 2014, para. 3).

The region of Cape Town as a focus within the visual panorama was selected for multiple reasons: it is where I grew up (personal); it is an easily recognizable location within South Africa (to help aid viewer comprehension of locality); and it is a region in which there is much disparity in terms of social and economic status of peoples.

The visual panorama as an artifact from the future is satisfactory in addressing the concerns that this project set out to achieve in that it acts as a visual summary. To understand the image is not confined by the limitations of language or having a specific educational background, but is instead accessible to a larger audience in that it requires a visual understanding; an understanding and extrapolation that is personally defined by each viewer. The value and meaning that the viewer assigns to the image is theirs to own, using their personal experiences to imagine further. The artifact houses so many visual details, from architecture to public parks, sculptures and the structurally vague, providing the visualization of an abstract yet still recognizable city. The abstraction of the image is also what affords multiple viewer interpretations—they are given agency to ascribe their own meaning—transforming them from traditional passive observers to active participants and drawing their own conclusions into the specific details that were not provided.

CONCLUSION

6. CONCLUSION

What has been contributed by this project? Apartheid was officially eliminated in 1991, yet the everyday lives of many South Africans remain unchanged. Within the context of this project, we view an imagined future as constructed from the traces we have of our past, built from memory and that which we know. And if our past is composed of memories of discrimination and exclusion, those traces will become the resources from which a discriminatory future of exclusion might be constructed. To break this vicious cycle, this project aims to intervene by introducing practices that enable the construction of new memories, with the aim of engendering more inclusive futures.

6.1. The Construction of New Memory

This project makes a novel contribution by introducing a visual representation of the future, one that is designed to engender the construction of new ideas about the future by members of the South African public. What is unique about this contribution is how it portrays a specific concrete future that is rendered with precisely enough detail for participants of the chain creation process to be able to imagine themselves within this imagined future.

This project introduces a resource that people can draw upon to help break the vicious cycle of exclusion with the formation of new memories. The resources consisted of the panorama and the proposed method of chain creation. Both are unique in how they introduce a way to gather feedback from people who have and are experiencing the effects of Apartheid. However, the framework for gathering that feedback aims to induce a different outcome

because the framework is a vision for the future—manifested through the panorama—a tangible and non-abstract representation that is realistic enough for someone to imagine themselves within it, moving around and living a life in a very concrete way. It is detailed enough to suspend understanding of life as it is and transport viewers to a believable, preferable future, walking the streets, going to work, engaging in leisure and so on. It is the concreteness that is afforded by the picture that induces possibilities that pertain to everyday life that would not be induced through a more abstract representation. The transportational quality of the visual acts as a design intervention to help South Africans imagine themselves within it to comprehend a preferable future, and as a further result to ideate their own possible ways to ensure a positive manifestation of a better future.

However, for the panorama to be useful it needed to inform a future that could realistically happen. For this reason, the panorama was informed by a timeline that described a specific future, and the timeline was built with plausible scenarios informed by the visions and outlooks of the general South African public, current trends, emerging issues and potential developments—as discussed in Chapter 3.

Overall, what was made possible through the visual panorama and the method of Chain Creation, was the formation of a framework for eliciting feedback from individuals who could creatively contribute details based on their lived experiences, which would further help the public imagine different, preferable future outcomes. The process introduced via this investigation translates a highly abstract but informed understanding based on situational analysis, into a concrete representation that is specific enough to elicit details about every-

day life that would not be captured through a more abstract and analytical representation.

6.2. Limitations of the Project

What is not afforded by this image is any information about the principles, policies, practices or customs that guided the decisions to produce the specifics within the visual: street corners, workspaces, technologies, trees or monuments. However, with the foundation of these imagined concrete details of what an everyday life could be like in a less-discriminatory, inclusive South Africa, they serve as the foundations for discussions, revelations and commentary.

Other limitations of the produced image are in its dependency on visual understanding, thereby making it inaccessible to any person with a visual impairment. As a precautionary measure, the narrative summary of the proposed future could be used as an accessible text explanation, which in itself provides enough detail to kick-start imaginative processes, yet is also abstract enough in detail to allow for further extrapolation.

The artifact might not be satisfactory in that it is one interpretation of many. While the future that I have proposed as a preferable future might be my personal interpretation in collaboration with the freelancer, it might not encapsulate the kind of future that others might imagine, thereby running the risk of the image not having its intended effect on the viewer—simultaneously a visual prompt and restraint. However, because of the abstract nature of the artifact, it still allows viewers to imagine alternatives of their own. Lastly, the artifact does not propose to actively change the current situation

in South Africa, but it would definitely help inspire hope for change and the contemplation of steps required to be able to ensure such change.

6.3. Testing the Project

For us to imagine future work that builds upon what has been presented in this project, we can first consider how art performs a role in society by sparking discussions among critics and commentators which then filter throughout society into the minds of engineers, designers, policy makers, politicians and everyday people to inform decisions and ideals to shape reality as it unfolds. The next step in this work will be to strategically accelerate that life cycle for specific aims. In particular, I propose to develop techniques for capturing commentary and discussions in reaction to the represented details about lived experiences so that they can be synthesized into principles, practices, habits, customs and conventions to fill the gulf that stands between the lofty claim that Apartheid has already been abolished and the lived experience of everyday South Africans.

It is important to consider how it could be tested with its intended audience. In order for it to have its desired effect it has to be adequate in combining the abstract future with life as it is comprehended in the present.

6.3.1. Instigative Thought Starters

One way to do this is to combine the image with directive frames of thought by steering the audience's thinking into a specific direction. An idea would be to present them with both the image and a topic of discussion as a means to dig deeper into a specific area. By doing this, you allow the viewer to contemplate the abstract future by providing an area of topic that they are

familiar with now, allowing them to bridge the gap between the preferable future and the present scenario. Possible thought starter topics could include:

- Employment
- Entertainment
- Agriculture
- Music
- Education
- Climate
- Transport
- Tourism
- Communications
- Community
- Shopping
- Health Care
- Housing
- Economy
- Fashion
- Cuisine
- Inclusivity
- Hobbies
- Conservation
- Race
- Passports
- Monuments
- New Industries
- Wildlife
- Arts
- Public Squares
- Hairstyles
- Recreation
- Advertising
- Architecture

By allowing the audience to bridge the gap themselves, you provide them with the ability to think of specific preferable future scenarios and contemplate actionable steps that could be taken to actualize them. What these instigative thought starter topics are designed to do is to help South Africans understand the possible future within a structured train of thought, and inform better decision making today. To make any sort of decision is challenging, especially in light of an uncertain future. These thought starters, in tandem with the visual panorama, intend to help South Africans handle this uncertainty by providing a vision of the desirable—what could be possible.

Possible ways in which these thought starter topics could live:

- Prompt Cards for Individuals
- Group Workshops
- Online Discussion Threads
- Debates

6.3.2. Curating a Preferable South African Future

Another way to test this project is to let the visual panorama live online on its own dedicated webpage and allow other creatives or citizens to use the image to help template their own contributions to this proposed future. Their contributions would live online in a curated gallery as a form of community world-building to allow other online visitors to view their contributions and extrapolate them further. By having an online platform in which people would be able to freely view, contribute, post comments, provide feedback and be inspired, it would be like providing a form of open-source futurism where visitors get to have an integrated experience of this proposed future from multiple viewpoints. Each contribution would make the experience of this future that much more tangible, immersive and believable. The purpose of the curated online gallery would be to allow the collective intelligence and imagination of the South African community to come forth.

6.3.3. Open-Source Futurism for Other Contexts

The process of creating a tangible visualisation and the method of Chain Creation for this specific project could be modified and applied to other contexts all over the world. Whether on a national scale or as small as a community, both the visualisation and method would benefit further creative exploration.

tion into preferable and desired outcomes, accelerating an ecosystem where commentators respond to the arts, creating discussion that filters into the lives and minds of decision makers and the general public.

6.4. Final Word

In response to a vicious cycle of exclusion engendered by an exclusionary past serving as a resource for constructing exclusionary futures, I have introduced an artifact and process that is based on real data so as to interact with South Africans to imagine concrete details about a future that is more inclusive. In contrast to the more widely used practices that present more abstract representations of the future, this technique targets futures work at a highly concrete level—at the granular level of everyday life, which is where the experience of exclusion happens. It is upon this foundation of concrete specifics that discussions will unfold that we and the rest of culture can synthesise to bridge the gap between the very reality of discrimination and the lofty ideals of a post-Apartheid South Africa.

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6. REFERENCES

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(2) *All website links are current at 21 April 2017.*

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APPENDIX A: TERMINOLOGY

TERMINOLOGY

Apartheid

A system of institutionalized racial segregation and discrimination throughout South Africa between 1948 and 1991.

World-building

The process of constructing an imaginary world, sometimes associated with a whole fictional universe.

Forecasting

A series of methods used to assess probabilities to help an audience comprehend future possibilities to inform better decision making today.

Visioning

A process of forming visualizations of the future that are sufficiently real and compelling enough to act as ideals to action present change.

STEEP

A method of analysis used to evaluate the external factors (Social, Technological, Environmental, Economic and Political) that impact an environment.

Ubuntu

An ethic or humanist philosophy focusing on people's allegiances and relations with each other. The word has its origin in the Bantu languages of southern Africa.