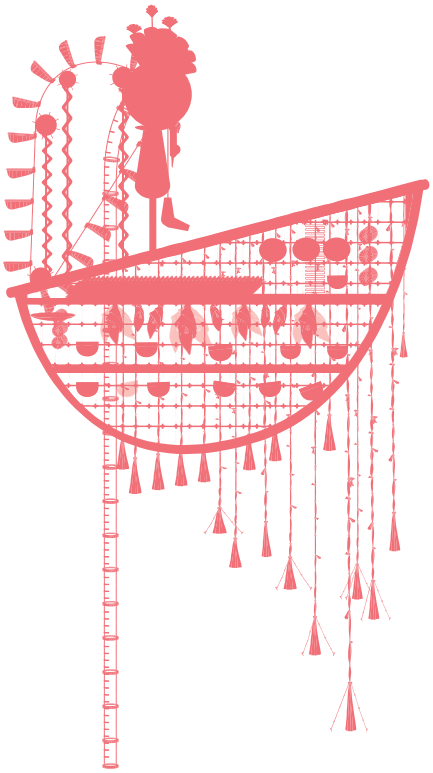

THE ETHEREAL CITY OF PINK

NATIONAL UNIVERSITY OF SINGAPORE
MASTERS OF ARCHITECTURE

Design Thesis Preperatory Report

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ABSTRACT

In 1993, the American Natural Soda Ash Corporation fabricated the claim that soda ash produced by Botswana Ash (Botash) in the Sowa mining district of Botswana was impure due to the presence of pink colouration in the salt brines. Subsequent predatory pricing tactics and soda ash dumping in the Republic of South Africa have threatened the soda ash market and economy of Botswana.

This thesis employs the premise of myth-making to rebrand Botash's image. Like the wizard in the Emerald City of Oz, Botash weaves an alternate myth of coloured purity. It rallies the citizens of Sowa in the production and manufacturing of 'pink' in a bid to liberate the nation from American capitalist threats. The Ethereal City of Pink protects Botswana's economy and ecology through preserving the limited soda ash resource. It projects an alternate myth of purity by embracing the colour pink.

The thesis stands as a speculative proposal of a mining city that cares for its land, resources, wildlife and its people. The proposed infrastructure suggests the slow mining of limited soda ash through rain water harvesting, glass recycling and exploiting the pink landscape in the creation of a resilient and sustainable city. Utilising the spatial mechanics of myth-making – mixing (half-truths), distancing, and edifying, the design creates an alternative myth of the Sowa mining city, one in which the pink of salt pans, flamingoes and the sky, reconfigure the binary of truth and lies; nature and culture; coloured and white.

Myths, Colour, Salt, Capitalism, Race, Ecology

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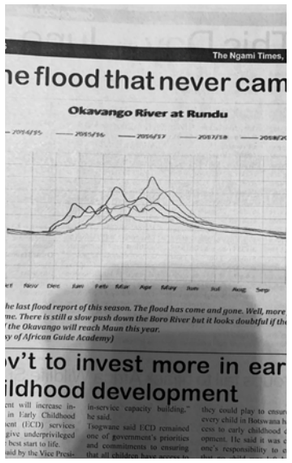
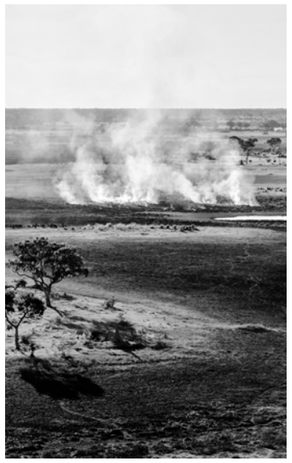




PRELUDE

Scarcity precipitates desire. In environments of scarcity, these desires often find themselves woven into folklore and myth, the making of which itself becomes an embodiment of such desires. Water-scarce Botswana, where four-fifths of which lay couched in the Kalahari Desert, finds itself intertwined in myths of rainfall and water. Peering into these myths offers a lens to understand the Tswanas' desire for and perception of rain.

The ability to control and manipulate rain in ancient Tswana traditions, for example, was perceived as a symbol of power and status, where the rainmaker is deemed worthy of directing the progression of society.[1] In modern day Botswana, the exiguity of this ecological resource - rain - found itself as the new currency of Botswana, where the word for rain - Pula - is elevated to a symbol of Botswana's national currency. Both cases, rain as power and rain as currency, demonstrates the intricate relationship between ecological resources and the Botswana economy.

1. Gewald, Jan-Bart. "El Negro, El Niño, Witchcraft and the Absence of Rain in Botswana." African Affairs 100, no. 401 (2001): 555-580.

The key to elucidating this relationship is - salt (or soda ash). While the economical value of salt is dependent on global markets demands, the extraction of salt and hence its supply is highly dependent on rain, seasons and the availability of water. As a seasonal resource, it has come to be embedded in many myth-making rituals [2], shaped local traditions and is exploited as a means of trade.In Botswana today, salt is exported primarily in the form of soda ash as a source of income for the Botswana economy and the livelihood of the mining residents in the town of Sowa.

2. Yurco, Kayla, Brian King, Kenneth R. Young, and Kelley A. Crews. "Human-Wildlife Interactions and Environmental Dynamics in the Okavango Delta, Botswana." Society & Natural Resources 30, no. 9 (2017): 1112-1126.

In 1993, the American Natural Soda Ash Corporation fabricated the claim that soda ash produced by Botswana Ash (Botash) in the Sowa mining district of Botswana was impure due to the presence of pink coloration in the salt brines.[2] Subsequent predatory pricing tac-tics and soda ash dumping in the Republic of South Africa have threatened the soda ash market and economy of Botswana. In an effort to cope with international competition, the current chief of Botash, Phatshwane, championed for diversification of the resource, a further expansion of the mine to sustain the soda ash economy in Botswana.[3]

2. Wareus, Jan. 2019. "History And Planning Of Sowa Town". Janwareussowatown.Blogspot.Com. http://janwareussowatown.blogspot.com/2009/09/normal-0-21-false-false-false-sv-x-none.html.

3. "BOTASH Advances Towards Diversification Of Products To Stay Afloat | Sunday Standard". 2019. Sundaystandard.Info. http://www.sundaystandard.info/botash-advances-towards-diversification-products-stay-afloat.

The principal thesis of this book hinges on the imaginative qualities of the material - salt - as a generator to explore the notion of architecture as a tool for myth-making. It is where architecture is seen as an imaginary construct where stories and myths are juxtaposed against the realities of the land. The thesis speculates a scenario of "what if" Botash employs architecture in the creation of an alternate myth of colored purity in a bid to reclaim their economy, their identity and their ecology.

The following chapters will illustrate the stories of the agencies involved in, and set the premise for, the myth making process; from the salt of Botswana, historical racial politics to the seasonal climate, and the myths of pink.

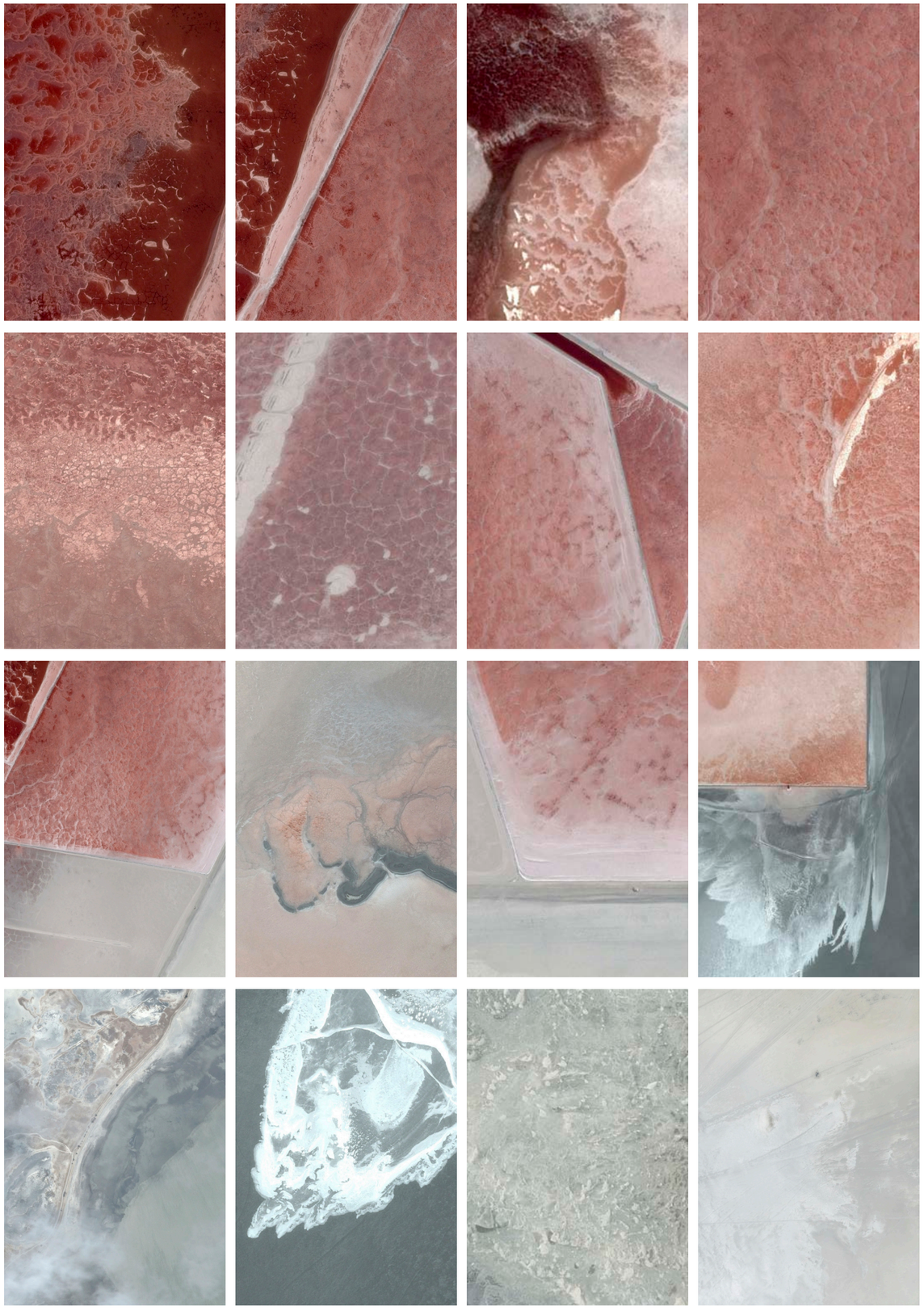
A Study in Pink - Myths of the Seasonal Resource

The tale of salt in Botswana dates back 200 000 years ago, when the grand lake situated in the Makgadikgadi pans became extinct.[4] The lake however, did not leave without a trace but left behind a trove of salt deposits fossilized deep beneath the earth. To reach for this treasure, one must await the great flood carried down by the rains from the far north of Angola. Once the flooded pans dries in the deep of arid winter, a thin layer of white crust will lie on the surface of the pans - salt.

4. Matatshetshe, K. "Salt Production and Salt Trade in the Makakgadikgadi Pans." Pula, Botswana Journal of African Studies, 2001: 75-90.

Then came the early settlers who have journeyed far and wide to collect this ancient heirloom. In groups of not more than ten people, the Barsawa bushmen would strut through the Sowa pan armed with woven baskets and bags sewn from impala skins. Others who live further from the pans would be accompanied by donkeys in hope to return with a greater harvest. Only the bushmen could tell if the salt was fresh and dry. For he was told that the salt which stayed long in water turns pinkish while those fresh from the ground laid crystal white.[5]

5. ibid.



The dawn of the coming rains would mark the twilight of the harvest season. The salt on the earth would again disappear back into the pans. The bushmen would then retreat to await the next harvest season. Along the way home, they would set up camps to trade the precious resource for grain and sorghum with the Bantu people from the Nata region.[6]

6. ibid.

Salt, as a natural resource has played an integral role in the lives of mankind. Its uses goes beyond the ubiquitous culinary exploits to political, social and mythical uses.[7] Within African cultures, salt is employed as a traditional medicine, used in the preservation of animal skins and as a tribute bequeathed to village chiefs. In ancient Tswana cultures, salt is believed to be associated with the rain gods and is used in rituals of rainmaking.[8] The resource's close kinship with the weather illustrates its intricate dependency of the seasonal conditions of the site. As a material that is highly deliquescent, water serves as a key regulating factor in the production of salt. Cool and dry winds with adequate sunshine provide optimal conditions for salt to crystallize. As a commodity to be traded between Basarwa and the Bantu people, salt has been a diplomatic tool, forging and strengthening friendship ties between these communities.[9]

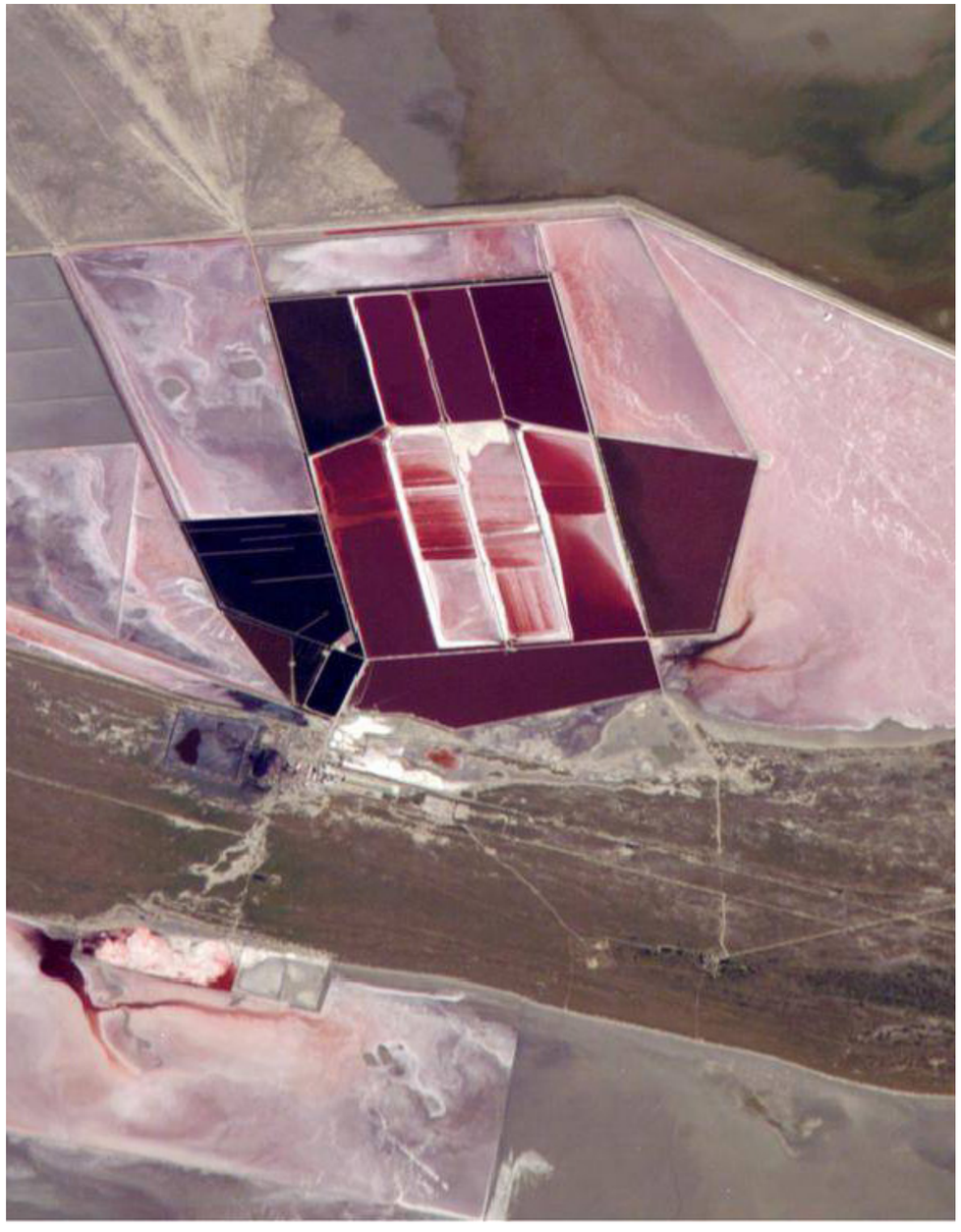
7. ibid.

8. Gewald, Jan-Bart. "El Negro, El Niño, Witchcraft and the Absence of Rain in Botswana." African Affairs 100, no. 401 (2001): 555-580.

9. Matatshetshe, K. "Salt Production and Salt Trade in the Makakgadikgadi Pans." Pula, Botswana Journal of African Studies, 2001: 75-90.

Sadly, the expiration of salt trade dawned upon Botswana since the inception of cheap and easily accessible European white salt. Coupled with governmental food aid during a drought around the Boteti area in the 1960's, the Bararwa saw no further need for the salt trade now that food is provided for. The preference for traditional salt to prepare a local dish, delele, has however kept the salt trade alive, but at minimum.[10]

10. ibid.



In Botswana today, salt is still being mined but exported mainly in the form of Soda Ash (Sodium Carbonate) where it is used mainly in the production of container and flat glass. Its other uses include the production of dyes and detergent.[11]

Fascinating as it seems, the process of salt crystallization is accompanied by a colored spectacle. As water content leave the vast evaporation pans, one can be treated to a visual feast as brine pools shift between hues of pink. The saline brine pools plays host to an algae - d' salina which contains pink colored carotenoids[12], transforming the salt pan into a deep pink.

This fascination around the coloration of salt has allowed it to be exploited and be vulnera-ble to stories, fabrications and claims. The Himalayan salt, for example, is widely exported and produced is a popular product believed to have added effects as compared to the common table salt. The pink coloration here, apart from its attractiveness, is believed to have unique healing powers.[13] The fascination of the colour pervades the imaginary realm, causing consumers and dealers to exploit its quality into creating different beliefs.

11. Advertising, In-Detail. 2019. "Home - Botash South Africa". Botash South Africa. http://www.botash.co.za.

12. Manjusha, Joseph. "A Study of Carbonate-Rich Brines from Sua Pan to Characterise Organic Contaminants in the Soda Ash Process." Rhodes University, 2001.

13. "Pink Himalayan Salt: Does It Have Any Health Benefits?". 2019. Medical News Today. https://www.medicalnewstoday.com/articles/315081.php.

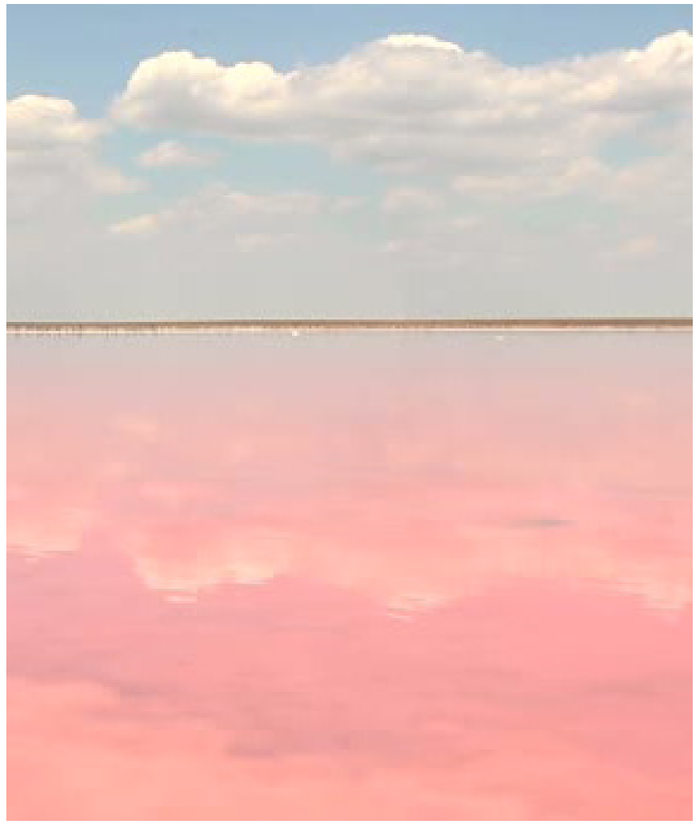


Image. Pink Brines of a Salt Pan

The case of the colored resource was unfortunately unfavorable for Botswana, where the colour pink was exploited by the America Natural Soda Ash Corporation (ANSAC) in fab-ricating the claim of impurity. The establishment of Soda Ash Botswana in 1991 provided a regional source of soda ash to the Republic of South Africa, and was seen as competition to to the America Natural Soda Ash Corporation (ANSAC) who once held a monopoly over salt exports in South Africa. The claim caused Soda Ash Botswana to face liquida-tion. It closed down in 1994 and reestablish themselves as Botswana ash (Botash).[14]

14. Wareus, Jan. 2019. "History And Planning Of Sowa Town". Janwareussowatown.Blogspot.Com. http://janwareussowatown.blogspot.com/2009/09/normal-0-21-false-false-false-sv-x-none.html.

Pink Politics: Myths of Colour, Race and the Apartheid

Not too long ago, within the region of Southern Africa, spoke the tale of the colored myth. It was said and known that White and Colour did not want to meet. White believed that Colour would stain and compromise its purity and wanted to remain superior above Col-our. White saw that Colour was dirty, wild and unkempt, and believed that Colour should begin to obey the things it said. To do so, White began to label the Color siblings, giving them names of Black (Africans), Brown (Indian and Pakistani) and Grey (mixed).[15]

15. Lokko, Lesley Naa Norle. White Papers, Black Marks: Architecture, Race, Culture. Minneapolis: University of Minnesota Press, 2000.

In 1948, White then began building houses and townships for itself and gave orders not to allow the Color siblings to stay. Then White gave the Color siblings document tags as should they wish to enter their townships, White could recognize and not make any contact with them. Casted out, the Color siblings grew unhappy and started fighting against the orders White gave. Unrelenting, White fought back resulting in both parties wounded.[16]

16. "Apartheid | Definition, Facts, Beginning, & End". 2019. Encyclopedia Britannica. https://www.britannica.com/topic/apartheid.

Internationally, many other countries did not agree with what White was doing and stopped wanting to be friends with White. Only then did White relented. In 1993 and 1994, White removed the orders that kept it and Colour apart.[17] Though the orders were not present today, but the beliefs about Color still lingers.

17. ibid.

Image. Signs depicting aparthied segregation

Myths and stories woven about colour could well be argued to have hinged on South Africa's history of Apartheid politics. Decades of racial separation between the white minority and the non-white majority, consisting of blacks, colored Asians and mixed race, have scared the perception of colour within the region. The policies have essentially laid the foundations to which non-whites are seen as a primitive entity, one that is less developed than the supreme whites.

18. Roland Barthes; François-Denève, Corinne (trans.). Mythologies,. Rosny-sous-Bois (Seine-Saint-Denis): Bréal, 2002.

Image. Values inscribed on the pillars outside the aparthied musuem, Johoannesberg

Similarly just like how spatial development took shape during the apartheid era in shaping the myths of separation, the myths too permeate into the very urban spaces of society. Architecture and visuality is intricately linked and it is the medium to which these myths can take shape. Architecture here does not simply refer to buildings, but as bill boards, colour, signs, and barriers. All of which provide the public with visual cues which reinforces these myths thereby shaping the way people live, experience and put to action certain beliefs. These visual cues are where architecture, in the words of Lokko, are imagined and experienced.[19]

19. Lokko, Lesley Naa Norle. White Papers, Black Marks: Architecture, Race, Culture. Minneapolis: University of Minnesota Press, 2000.

Image. Entrance to the aparthied musuem mirroring the events of seperation during the aparthied era.

Race, as I would like to argue, is a myth. Lesley Lokko puts forth that race is essentially a trope of difference constructed to segment the human population.[20] Hierarchy and classes are given to instate a desired order in society, for in the case of the apartheid - the notion of white supremacy.

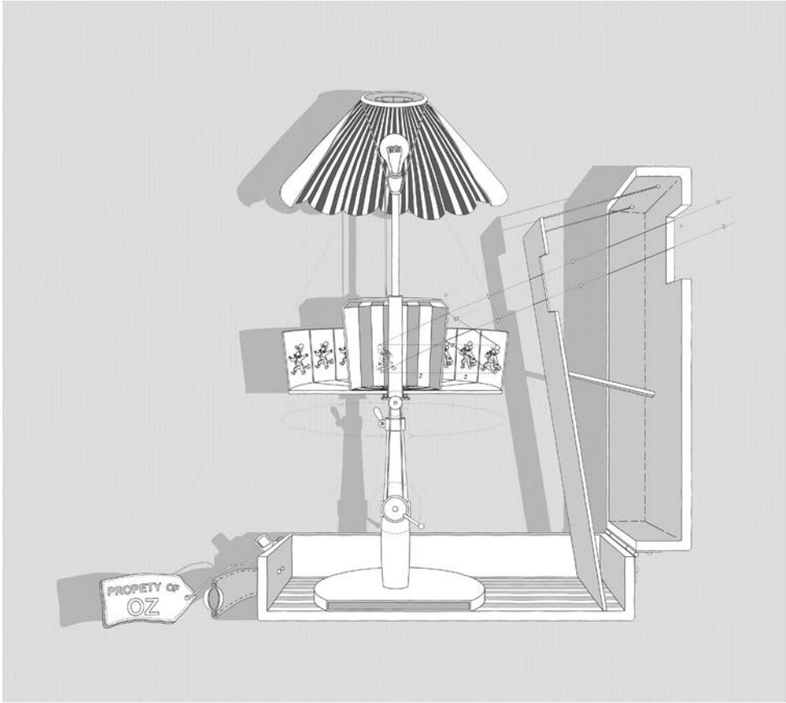
20. ibid.

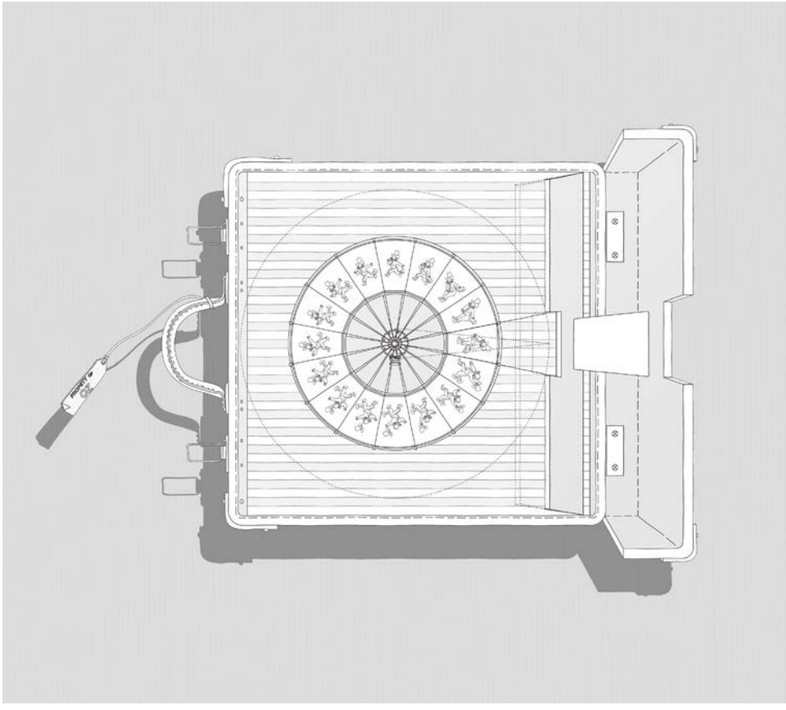
In his book, Barthes posited the subversion of a myth through the production of an alternate myth.[21] Through the premise of myth as a stolen language, where the constructed mean-ings of the given form is stolen from the original meaning of the word. Pink, for instance, is no longer seen as just a colour, but its meaning has been overwritten as a signified sub-stance of impurity. Barthes, however, posits the possibility that the signified object can be in turn be re-signified[22], whereby pink as a signified substance of impurity can be re-signified as a substance of purity.

21. Roland Barthes; François-Denève, Corinne (trans.). Mythologies,. Rosny-sous-Bois (Seine-Saint-Denis): Bréal, 2002.

22. ibid.

Capitalizing on this theory, the thesis project aims to change the signification of colour and the colour pink through the embracing not only its form but also in the concept. Pink, in its entirety, is not just reimagined as a colour of purity but of resilience, strength, love and abundance. Its architecture is imagined and experienced as a city of ambition and yearn-ing, a city of wealth and health all done though the love and acceptance of color - pink.





Dawn of a New Wizard: The Creator of Myths

LET DOROTHY GO TO THE CITY OF EMERALDS!

"Where is this city?" asked Dorothy.

"It is exactly in the center of the country, and it is ruled by Oz, the great wizard I told you of."

"How can I get there?" asked Dorothy.

"You must walk. It is a long journey, through a country that is some-times pleasant and sometimes dark and terrible."

The notion of imaginary and mythical cities are not all that foreign. The Emerald City, constructed in Frank L. Baum's classic fairytale The Wonderful Wizard of Oz (1995)[23], is an exemplar of architecture of the imagination. The city, at the start of Dorothy's journey served as a utopic vision for her and her friends. The rumors of the mythical city, one that houses a powerful wizard, remained as an imaginary construct, for neither she nor her friends, Scarecrow, Tin Woodman and the Cowardly Lion have been to or seen the Emerald City. Yet shaped by the strong belief that the wizard had the ability to grant her wish to re-turn back home, the Scarecrow brains, the Tin Woodman a heart and the Cowardly Lion courage, their faith spurred them on their journey, surmounting the numerous obstacles which came along her way.

23. Baum, Lyman Frank. The Wonderful Wizard of Oz. Penguin Popular Classics. London New York: Penguin, 1995.

Similarly, in Italo Calvino's Invisible Cities (1974)[24], Marco Polo's vivid descriptions to the Great Khan, aimed to project numerous visions of cities into the imagination of the Great Kahn. Without being able to physically reach these cities, the Great Khan could only draw upon imageries from his imagination to string these visuals together. The resultant architecture, charged with hope, magic and happiness, remains intangible to the Great Kahn but only made tangible through the very objects and acts which Marco Polo harvest from his illustrious expeditions.

> "Your cities do not exist. Perhaps they have never existed...Why do you amuse yourself with consolatory fables? I know well that my empire is rotting like a corpse in a swamp, whose contagion infects the crows that peck it as well as the bamboo that grows...why do you not speak to me of this? Why do you lie to the emperor, foreigner?"

"Yes the empire is sick, and what is worse, it is trying to become ac-customed to the sores. This is the aim of my explorations: examining the traces of happiness still to be glimpsed, I gauge its short supply. If you want to know how much darkness there is around you, you must sharpen your eyes, peering at the faint lights in the distance." [25]

24. Calvino, Italo. Invisible Cities. 1st ed. New York: Harcourt Brace Jovanovich, 1974.

25. ibid.

Only when heard, read but not seen, the existence of such cities can be easily doubted. Yet the creation and projection of these cities continue to serve as a genesis of hope. Fictional cities, as CJ Lim puts it, "holds a mirror to the present"[26], serving as a means to project possible realities of the future. These albeit fictional environments are yet grounded in the very realities of the world. Environments like these embody and engender a set of beliefs, ambitions and visions to which people belief in, subscribe to, change, and shape the way they act.

The land of witches and wizards in the Baum's fictional tale, for instance, was made believable through the bridge between the real and imagined realms. The bridge constructed through objects or phenomena familiar to readers, brings the imagined world closer than a mere fictional city. Be it a typhoon which brought Dorothy from the non fictitious prairies of Kansas to the magical land of Oz, or a hot air balloon which took the ordinary wizard from the Emerald City of Oz back to Kansas again; both of which the typhoon and hot air balloon have can be relatable by readers in many ways.

26. Lim, C. J. Inhabitable Infrastructures: Science Fiction Or Urban Future?. New York, NY: Routledge, 2017.

The transition between the real and imagined, the shift between the tangible and the intangible hint at the palpable reach of utopic spaces. These give rise to the notion of utopic visions and imaginary architectures. Borrowing Foucault's theories, the spectacle of Black spaces constructed through the lens of western civilizations, as Lokko terms it, is a form of heterotopic space.[27] Yet due to the sheer distance held between the spectator (western citizens) and the spectated (inhabitants of black spaces), these seemingly tangible environments becomes intangible utopic visions to the spectator.

27. Lokko, Lesley Naa Norle. White Papers, Black Marks: Architecture, Race, Culture. Minneapolis: University of Minnesota Press, 2000.

The new wizard of Sowa knew about the treats heralding from the west. the encroachment from the western empire is going to put a strain on his land, resources and livelihoods of his people. Reclining on his throne he imagined a plan...

The Flower in the Desert: A Tale of a Resilient Township

Wizard, what will be of my town, Sowa?

The tale will begin 10 miles east from where we are. There lies the flower in the desert. This flower is unlike any flower, but its petals has the abil-ity to embrace the light of the sun god. Its leaves adapted with the ability to store the gifts from the rain god and its roots to receive the treasures bestowed by the river gods. As day dawns upon the flower, its inhabit-ants toil to create the resources they need. Each year the flower grows stronger. In the deep of summer, the united efforts of the township allows the flower to bloom in bright pink. Through its sweet aromas it sends love for other flowers in the area. The compassionate flower draws no wa-ter from other well-fields but only take from where it stands on. Within the flower, there is only pink. There're is no stigma present.

But Wizard where, may I ask, do I seek for this flower?

You need not look far. Because you are already a part of it.

The myth of pink as a resilience serves as an avenue for the residents of Sowa town to par-ticipate to reclaim the myth of colored purity in a bid to protect their economy. In 1993, the myth of colored impurity and the further decline of Soda Ash Botswana led to the decreasing faith of the township.[28] The identity of the place was compromised as people were afraid to move into the town afraid that the township will collapse due to the weak economic standing of Soda ash in the global industry. The resultant undeveloped spaces and population left the township as a workers camp rather than functional township.[29]

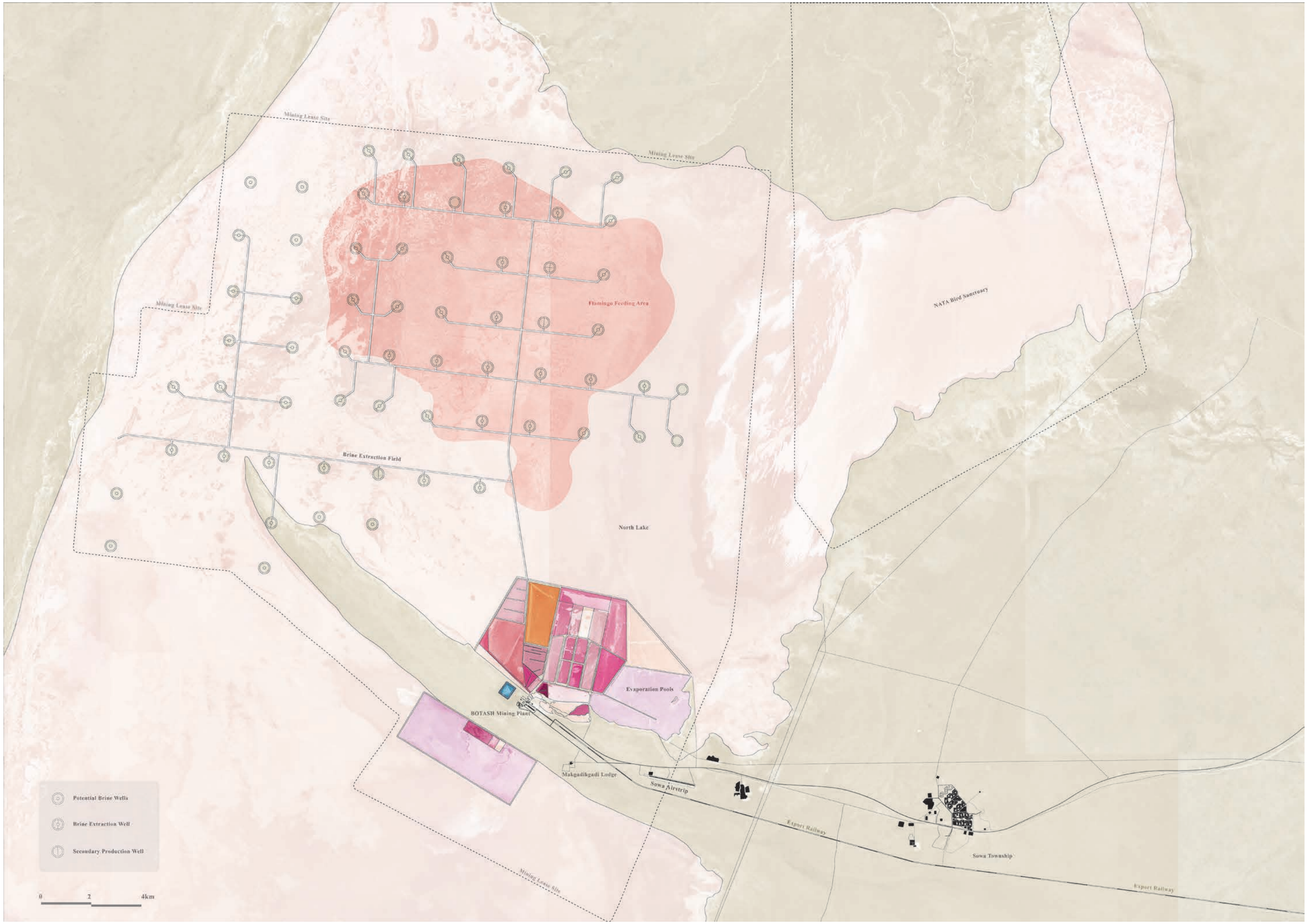
28. Wareus, Jan. 2019. "History And Planning Of Sowa Town". Janwareussowatown.Blogspot.Com. http://janwareussowatown.blogspot.com/2009/09/normal-0-21-false-false-false-sv-x-none.html.

29. Ibid.

The renaissance of the new township is henceforth key to the alternate myth of purity. The notion of resilience is built upon the townspeople's desire to remain and invest in the activities which the land provides. The blooming township will essentially project a renewal of faith in the soda ash industry.

In a desert that is scarce, the notion of harnessing nature in the accumulation of natural resources becomes an imperative move towards sustainability, resilience, and strength. Resilient landscapes, in CJ Lim's smart city manifesto, invites for the participation of everyone in the practice of resilient actions. Thorough participation in restoring nature, it engenders economic, environmental and social capital.[30]

30. Lim, C. J. Smartcities Resilient Landscapes + Eco-warriors. 2nd ed. New York, NY: Routledge, 2019.


Mining Lease Site
Mining Lease Site
Mining Lease Site
Mining Lease Site
Flamingo Feeding Area
NATA Bird Sanctuary
Brine Extraction Field
North Lake
Evaporation Pools
BOTASH Mining Plant
Makgadikgadi Lodge
Sowa Airstrip
Export Railway
Sowa Township
Export Railway
Potential Brine Wells
Brine Extraction Well
Secondary Production Well
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The colour pink now emits an air of patriotism as its colours are donned proudly by the citizens. The colour pink now becomes a construct of a new identity, wherein it acts as a new national colour of purity. As Lokko puts it, identities are constituted from within communities, it stems from a unified decision to how they would like to be represented. A unified colour instates equality. Similar to Baum's Emerald City, where the wizard unified the citizens within with the colour green in a bid to unite the various misfits of Oz.

The resilient township constructs and don the colour pink a new symbol of resilience and love. Though the participatory practices of a resilient city, the Sowa township weaves colour into a symbol of resilience and love. It displays and cares for its environment and economy through a unified identity.

The Gift of Colour: A New Ecology of Care

"Please come in"

The pink doors opened into a room of pink. Surrounding the room were towering pink walls what allowed the visitor to look into the landscape. Afar, looms the great pink mountains. The skies suddenly turned pink as pink clouds shifts to revealing the pink rays that shot through it.

"My fellow visitor. What do you desire?"

"Wealth! No one wants to buy my salt."

"Show it to me"

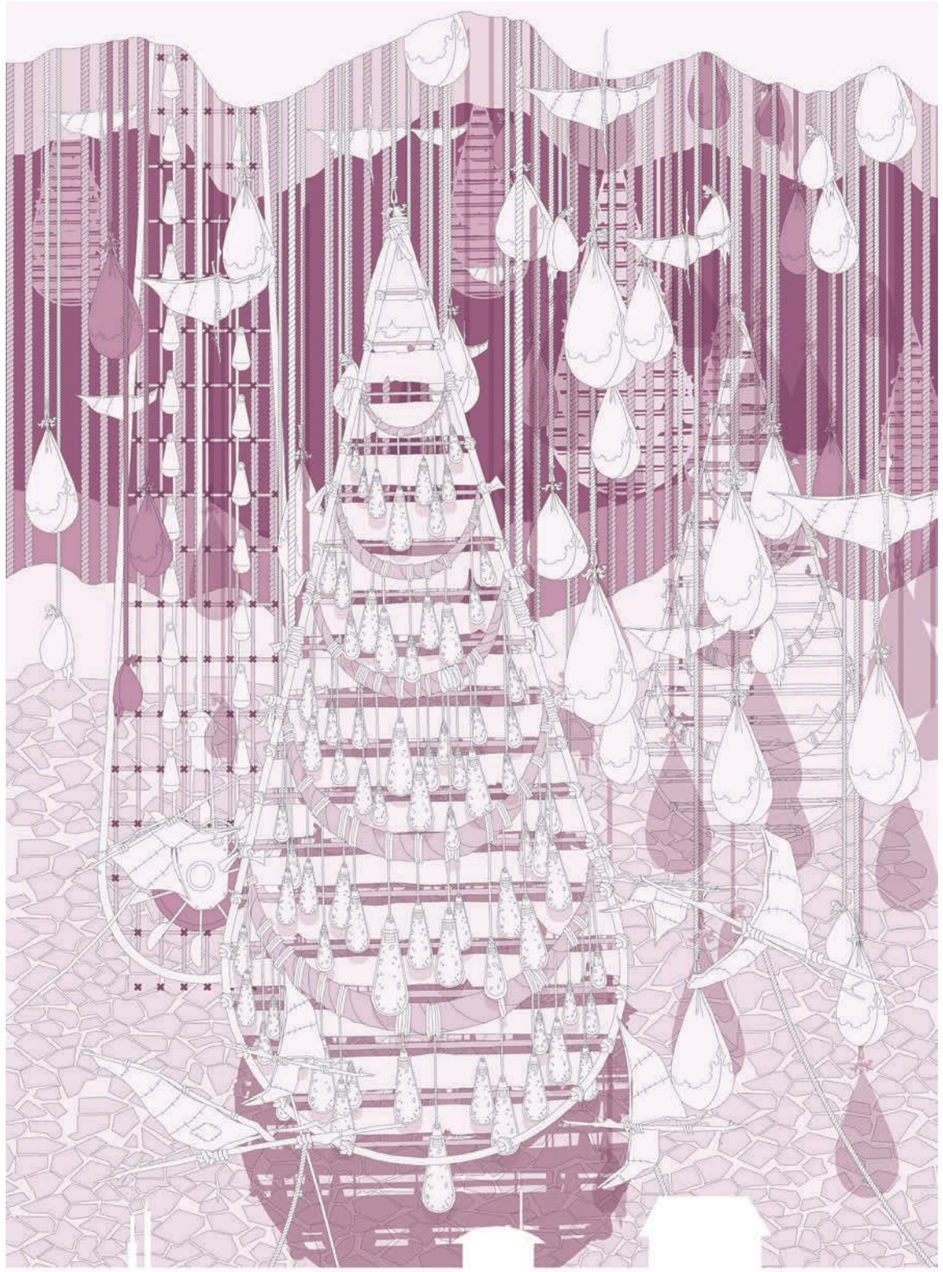
The visitor reached into his pockets and handed over a handful to the Wizard. From the back of his throne, the Wizard retrieved a pink vial shaped like pink tear drop. With his hand held high, the crystals shimmered pink as it passed through shafts of light, every bit falling into the mouth of the vail. In awe, the visitor starred as his salt begin to glow pink as it entered the vial.

"Treasure it"

Still struck with awe, the visitor received the vial with palms cusped together.

"Thank you! I will"

Facing page. Image. The Phoenix's Roost



The gift of pink stands to provide a new economy and instate a new ecology of care for the mines. Adopting the stance to diversify the economy, the thesis proposes the alternate ex-ploitation of the spectacle. Guy Debord in The Society of the Spectacle (1983), posits the spectacle as a form of commodity.[31] This deviates from the capitalist economy, allowing for the exchange value to be independent from the use value.[32] While the western capitalist threats continues to threat the soda ash economy and therefore declining market values, the exploitation of the spectacle serves to provide an alternative economy, one that leverages on the existing spectacle of the land as well as the spectacle produced from the production of the resource, to raise the exchange value of the resource.

31. Debord, Guy. Society of the Spectacle. Rev. ed. Detroit: Black & Red, 1983.

32. Ibid.

As a new economy, the spectacle of the color pink is capitalised as a new commodity to bring about an alternative income for the city. This is done in an effort to slow the rate of natural salt exploitation from the salt pans as well as the rate of groundwater extraction from the neighboring Dukuwi well field.[33] The notion of slow mining aims to protect and preserve existing resources. It protects existing ecological resources such as water for the neighboring villages and the saline breeding grounds for the migratory flamingos.

33. Oteng. D. Legadiko. "Characterisation and Grouroundwater Flow Remodeling, Dukuwi Wellfield Phase II North-Eastern Sub-District Botswana." University of Botswana, 2015.

Facing page. Image. Phoenix Tears Repository

The notion of instating ecologies of care through the celebration and commodification of the pink splendor aims to preserve and prolong the heath of the salt mine and the salt pans. This necessitates the construction of the pink landscape.

Seasons of Pink: The Ephemeral Landscape

The tale of a pink landscape begins with a traveler setting foot in the pink city. Having heard stories, he knew this place is different. He wanders around aimlessly on the mirrored sky in search for the city which was nowhere to be found. Draped in hues of pink, the city flirts with the traveler's eye concealing itself, only giving hints to its location through its ephemeral reflection. Its cloak throws the limelight to the pink landscape its nests on, peppered with crystals that glimmer at the slightest touch of light. He continues wandering amongst the pink-scape, constantly wondering if he was arrived, taking in all that he could, knowing that once the pink reach its deepest it will be gone.

As the sun continues to bake the land, the reflective pools gradually disappear, leaving be-hind faint pink jewels. It is here where the city springs to life, by rallying its people to harvest the treasures back to cure. This time, the city stands tall and proud, flaunting its harvest amidst the grand white hills that momentarily interrupts the horizon. Once ma-tured, these treasures leave the city to distant lands. On the day of the pink skies, the har-vest ends. The land is depleted of its treasures; but not all as the city-folks did not forget to leave some behind. To mark the occasion, the city chorused in pink, proudly parading through the streets synchronously with the thunderous claps of the skies. The time has come.

Left. Render of the Pink Landscape in Winter

Following Page. Render of the Pink Landscape in Summer

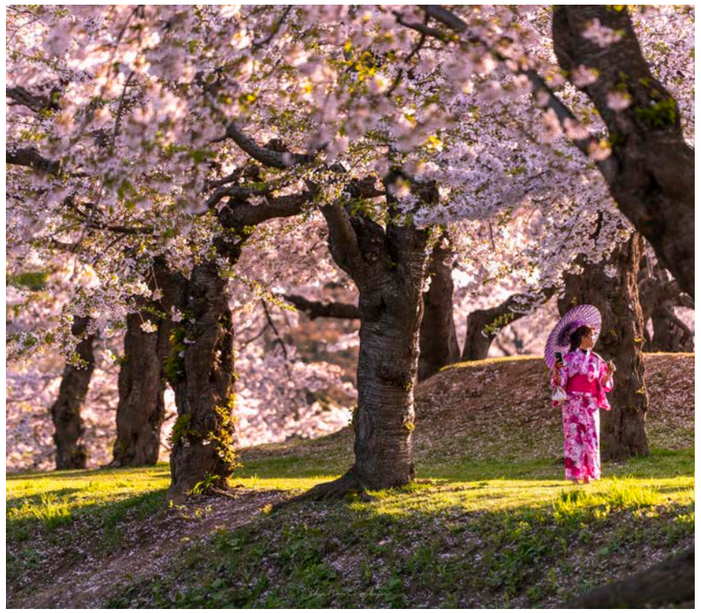


Image. Pink Splendor of the Hanami Season

The resounding fanfare queues for the arrival of the phoenix's descendants. In flocks they arrive from distant lands, bringing along with them the annual downpour. The city retreats, admiring the spectacle from afar, fearing to disturb the majestic flocks sent to nurse the land back into a pink of health. From the ashes, the flock recharges. Once ready and ever more pink than before, it takes to the skies, leaving the land back in the hands of the city to prepare for the next season of pink.

Having seen it all, the traveler now leaves to retell the tale of 3 cities, all within the ephemeral landscape of pink.

Previous Page. Render of the Pink Landscape in the raining season

The seasonal pink perpetuates the myth of an infinite resource. The myth serves as an impetus for the citizens of pink to protect the resources they have. The colour pink in transition is not only seen as a new symbol of wealth of the land, but also as a litmus test for the health of the mine. The seasons of pink appears in the form of the colour of the sky during the summer season, foregrounding the coming of the rains; the colour of the flamingos during their roosting season during the rainy season; and the colour of the salt brines during the dry winter season. These cycles of pink could only be made possible through the regulation of water and protection of ecological biomes on the site.

Seasonal spectacles have also brought about new means for festivities and gathering. The grand pink landscape of Japanese Sakura flowering seasons have brought 60% of the population from all walks of life to celebrate the dawn of spring.[34] The annual flowering season brings people closer to nature to feast on the seasonal spectacle as the flowers bud, bloom and wither in shades of pink. The ephemerality of this coloured spectacle has led to the bustling festive event, enabling the common practice of the flower viewing ritual – Hanami .

34. ""Hanami" (Flower Viewing)". 2019. Nippon.Com. https://www.nippon.com/en/features/jg00010/hanami-flower-viewing.html.

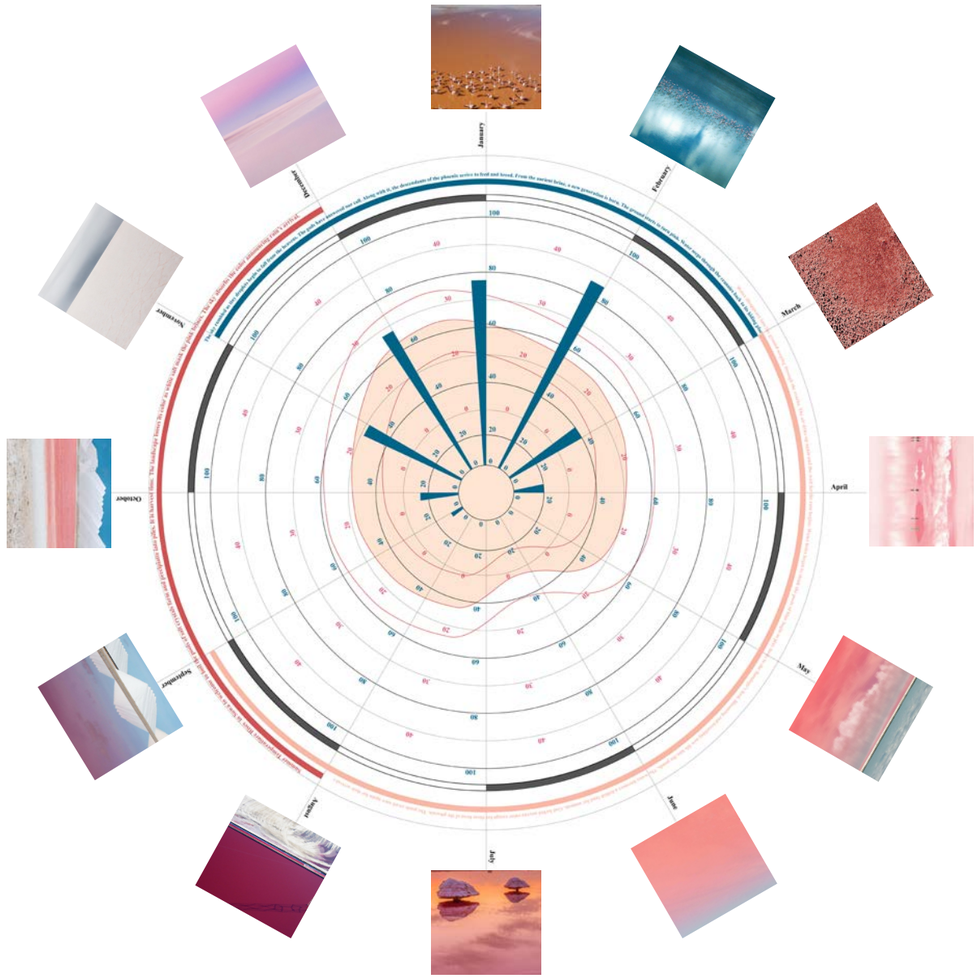
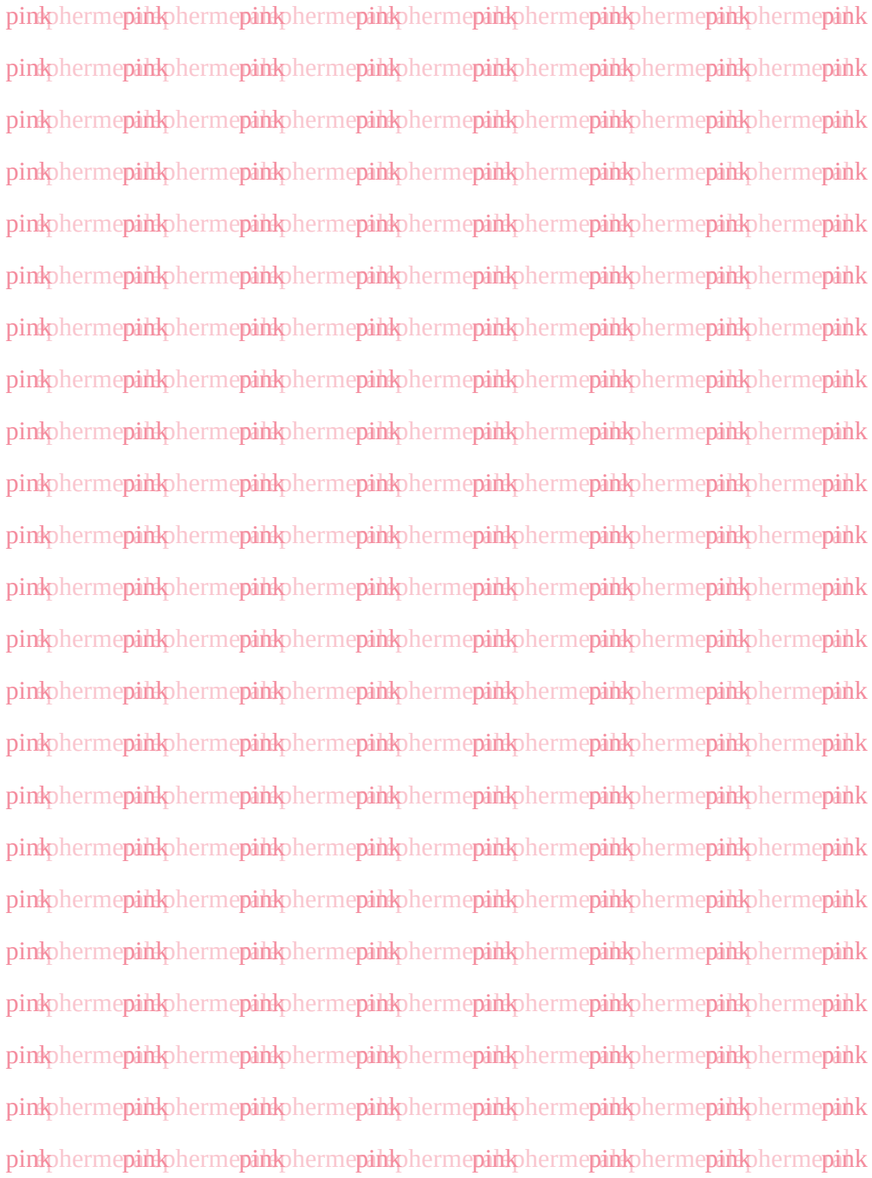


Image. Brine Pool Colour Transitions

Image Facing Page. Temperature Precipitation and salt brine color

The protection of such ecological biomes within the salt pans first begin by the protection of groundwater aquifers. Healthy aquifers that are constantly charged are what allow for life to blossom in the desert. This ranges from the crystallisation of salt on the crust of the pan as well as flooding of the pans for the growth of micro-crustaceans such as shrimp and algae. This in turn provide desired nesting grounds for the lesser and greater flamingos.[35]

35. Manjusha, Joseph. "A Study of Carbonate-Rich Brines from Sua Pan to Characterise Organic Contaminants in the Soda Ash Process." Rhodes University, 2001.



The Ethereal City of Pink

The wizard grinned from his thoughts. As he walked towards the door, resounding fanfares, muffled by the very glass doors that stood between him and his subjects. "Pula, Pula, Pula!" The cheers get louder with each step he takes. Soon the doors burst open and he is greeted by a sea of pink. There within the crowd were the subjects he knew, from the weary traveler who is now back with new guests, the townsman with his family and friends from neighboring villages, and the workers who have remained to serve in the city for years. There were thousands dressed in pink, waving the new pink flags of the city. Carts, big and small, draped in embroidered pink fabric. A new wave of hope surged through his heart as he steps forward reaching out for the speaker.

"To my citizens of pink, like the phoenix, each year we rise again from the depth of the ashes. Just like before, we celebrate renaissance of our purity in this festival of the Phoe-nix's tears!" The pastel pink skies rumbled as he raised a tear vail above his head. "Pula, Pula, Pula!" The cheers roused louder than usual. From afar distant flamingos are seen to flutter their feathers taking flight in a grand spectacle. Clouds gathered as the evening sun dipped below the horizon.

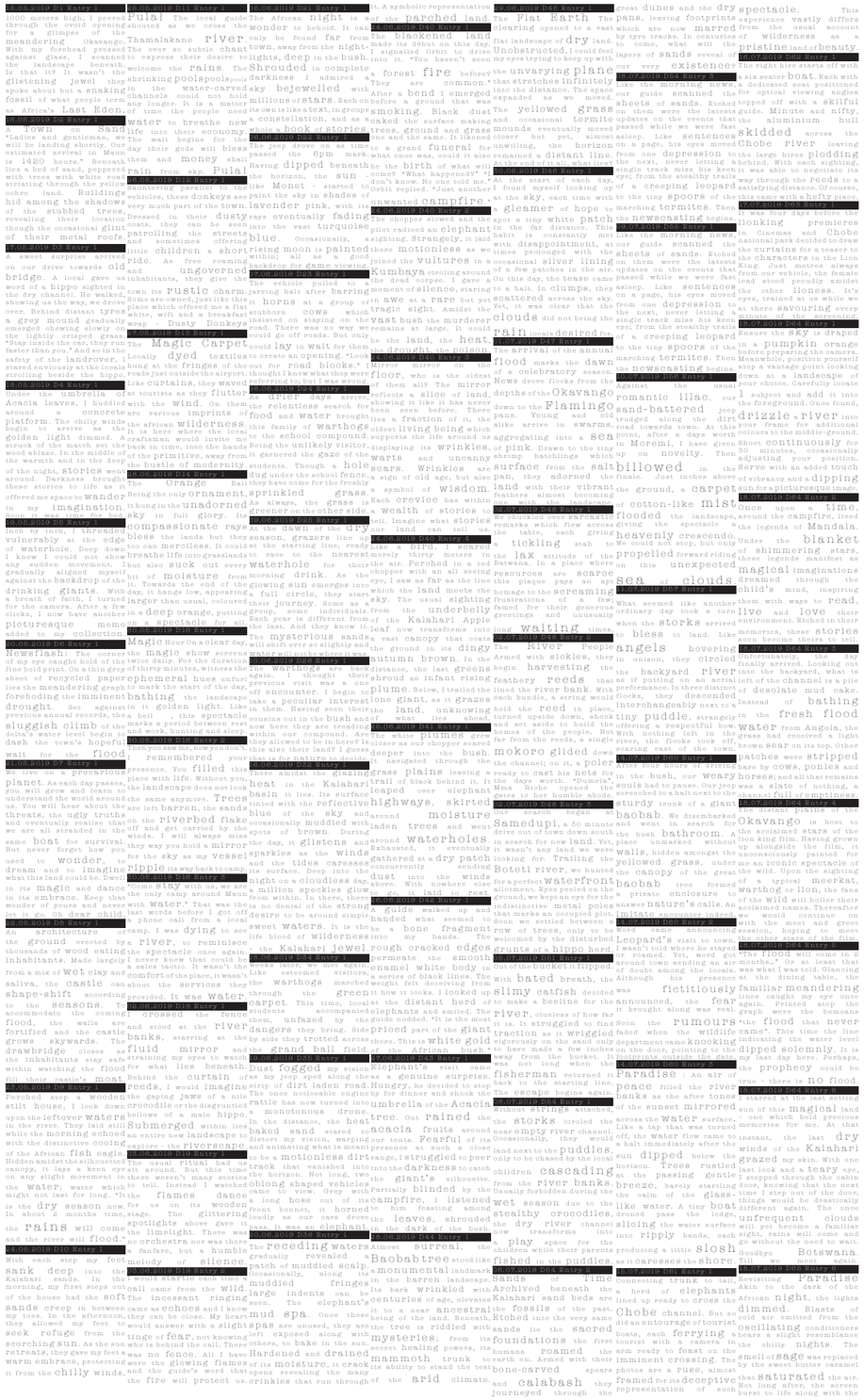
"Welcome to the Ethereal City of Pink!"

Epilogue: The Fragmented Tales of a United Pink.

So where is your city great wizard?

The wizard startled. He knew it was real. Yet he was unable to identify a singular landmark that represented the city. From the window, he pointed into the distant horizon. Look, there is no city. But all that you have seen, heard or described is the city you were looking for. It lies in the colour that wax and wanes, the flowers that bloom and wither, the dia-logue between you and the pink guide, the wreathing steams that billows and fades, the mirrored sky that reflects and refracts, the teeming masses of people that comes and goes, the pink birds that roost and migrate and the white mountains that loom and shrink. Incongruous as it seems, put them together piece by piece, perhaps in your very journal, and you will have it - a pink city that is uniquely yours.

Facing Page. Diary Entry Constructed



Facing Page. Diary Entries Written

From the depths of my diary, birthed a collection of events, stories and phenomena from my 2 months stay in Botswana. In memory of the magical land - Botswana, my thesis obsession stemmed from my attempts to recapture the unexplainable phenomena from a continent laden with myths, fables and folklore. These recorded instances, each became a critical piece in my construct of Botswana as a magical land. The diary, then became my own rendition of the "mythical city", where etched within the pages are the myths I have created through my recollection of each entry. Consequently readers who chance upon my diary will not directly be able to visit the land but only experience it through my stories. Diving into them, they are compelled to employ their imagination to reconstruct their own visions of the land.

Throughout thesis prep, I have came to realise the importance of ecology in the preservation of these phenomena. From the shifting hues of the skies, to the seasonal arrival of rains and the unusual encroachment of wildlife into human settlements all served as a critical litmus to a healthy ecology. To know that the exploitation of natural resources for economic gains severely threatens these ecological systems spurred me on a journey to retain and preserve these phenomena through the reimagining of a new relationship between economy and ecology. Only through our care of the land are we able to preserve the very elements for mother nature to function and continuously create endless spectacle for all to enjoy.

My fascination with the real and the imaginary will continue to take me forward in this project. Where the juxtaposition of new myths onto the existing realities of the land will begin to form the basis of my project. Architecture will there become a co-conspirator in the production of colour and the changing of perception of the coloured myth. It also becomes a unifying tool to promote nationalism and instate a new love for the land and resource. The thesis will continue to investigate the notion of architecture as an imaginary construct.

The consequent project "The Ethereal City of Pink" will speculate a renewed salt mining district in the post-apartheid era. The city aims to protect Botswana's economy and ecology by projecting an alternate myth of purity. The Pink City rises from within the wreckage of capitalistically-driven rumors which condemn the pinkness of the salt as impure. Instead, the city celebrates its colour. The alternate myths of pink will propose infrastructures that aim to subvert the existing narratives of the land; from impurity to purity, vulnerability to resilience, and scarcity to abundance. It is critically reconstructed as a series of juxtaposed truths and half truths; fact and fiction. The thesis stands as a speculative proposal of a min-ing city that instates an ecology of care for its land, resources, wildlife and people.

Facing Page. Me in Botswana

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APPENDIX

2 MONTHS IN BOTSWANA

1 Diary entries and Images

Diary as a library of phenomena, events, stories, myths, folklore and legends.

Ephemerality of the land, people and wildlife come together to form a spetacular and magical experience.

2 News Article on Rain and Water in Okavango Delta Tracing the Delta from Angola to Makgadikgadi Salt Pans

THE FLOOD THAT NEVER CAME
Waiting for Rain

Rain → *"PULA"* ← Currency

ECOLOGY ⟷ **ECONOMY**

MYTHS
Rain in a water scarce Kalahari desert becomes a mythical resource.

Supply → **SALT** ← Demand

Straddling between Ecology and Economy, salt becomes the agent to talk about myth, resource, livelihood and the economy.

Botswana Ash
Establishment for mining of Salt / Soda Ash

Salt as an Ancient Resource
Culture, Traditions, Folklore and Myths

Salt as a Seasonal Resource
Weather and Ecology

Salt as a Staple Resource
Livelihood and Sowa (Salty) Iowa

3 Salt mining and production in Botswana

ECOLOGY
Increased mining strains the non replenishable resource. Dukwe Wetlifield expected to dry up by 2060.

THREAT

THREAT

ECONOMY
Suffered liquidations and markets dipped

A Study In Pink

Salt as an important resource to the African community since ancient times. The bushman once utilised salt as a commodity for trade. It becomes a tool to build friendship with neighbouring villages.

4 Myth of Impurity

MYTH OF IMPURITY
In 1993, pink colouration of the salt was claimed to be impure by the Utah Soda Ash Mining Corporation, America.

Connotations in post apartheid era →

Pink Politics

Coloured politics is not foreign to southern Africa where its history was scored by Apartheid politics. Racial myths about coloured and blacks are woven as a means to construct white supremity.

THESIS
"What if" Botswana Ash weaves an alternate myth of coloured purity?

5 Abstract

EMPLOYS ARCHITECTURE AS A TOOL FOR MYTH MAKING, EXPLORING THE NOTION OF ARCHITECTURE AS AN IMAGINARY CONSTRUCT.

6 Movie Transcripts

The Mythical City of Oz
THE EMERALD CITY

Myths of the Emerald City

DESIRES AND WISHES — **INFINITE RESOURCES** — **IDENTITY**

PARTICIPATE

THE ETHEREAL CITY OF PINK

PROTECT

PROVIDE

TOWARDS A RESILIENT TOWNSHIP
Myth as an avenue to participate in a unanimous stand to reclaim purity and the colored adunity.

PRESERVING SEASONAL SPECTACLES
Myth as a means of protecting Ecology, Culture and Economy

SLOW MINING AND THE THE ECOLOGY OF CARE
Myth as an alternative commodity to reinstate care through the reduced exploitation of a limited resource.

Dawn of a New Wizard

Inpired by the wizard from the emerald city of oz, the thesis takes cues from the movie "Oz the great and powerful" as well as the classic fairytale "the wonderful wizard of oz"

Botswana Ash is reimagined as the wizard in generating alternate myths.

Flower in the Desert

Resilient township is sustainable and employs waste to energy practices to sustain one's livelihood

The Ephemeral Landandscape

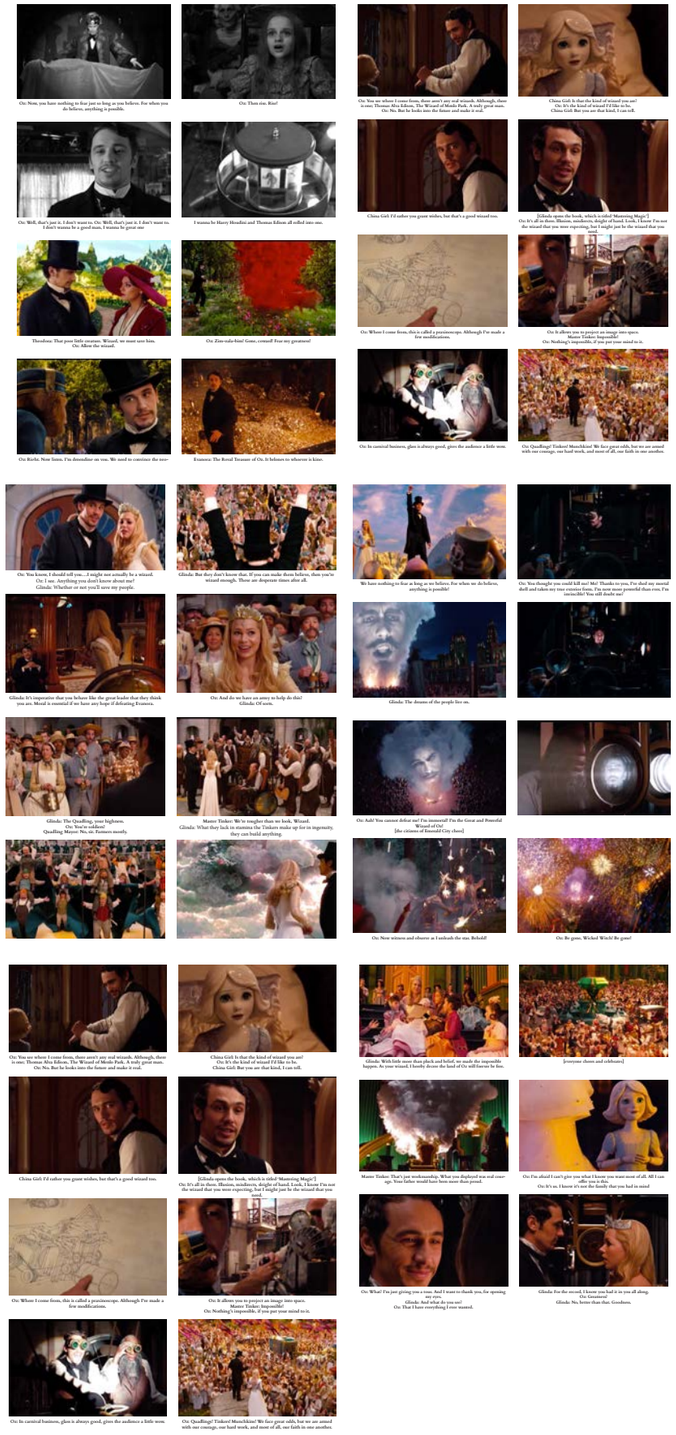
Season spectacles becomes a means for festicity and change. The landscape revolves in cyclical seasons puts forth the need for adaptive architecture

The Gift of Color

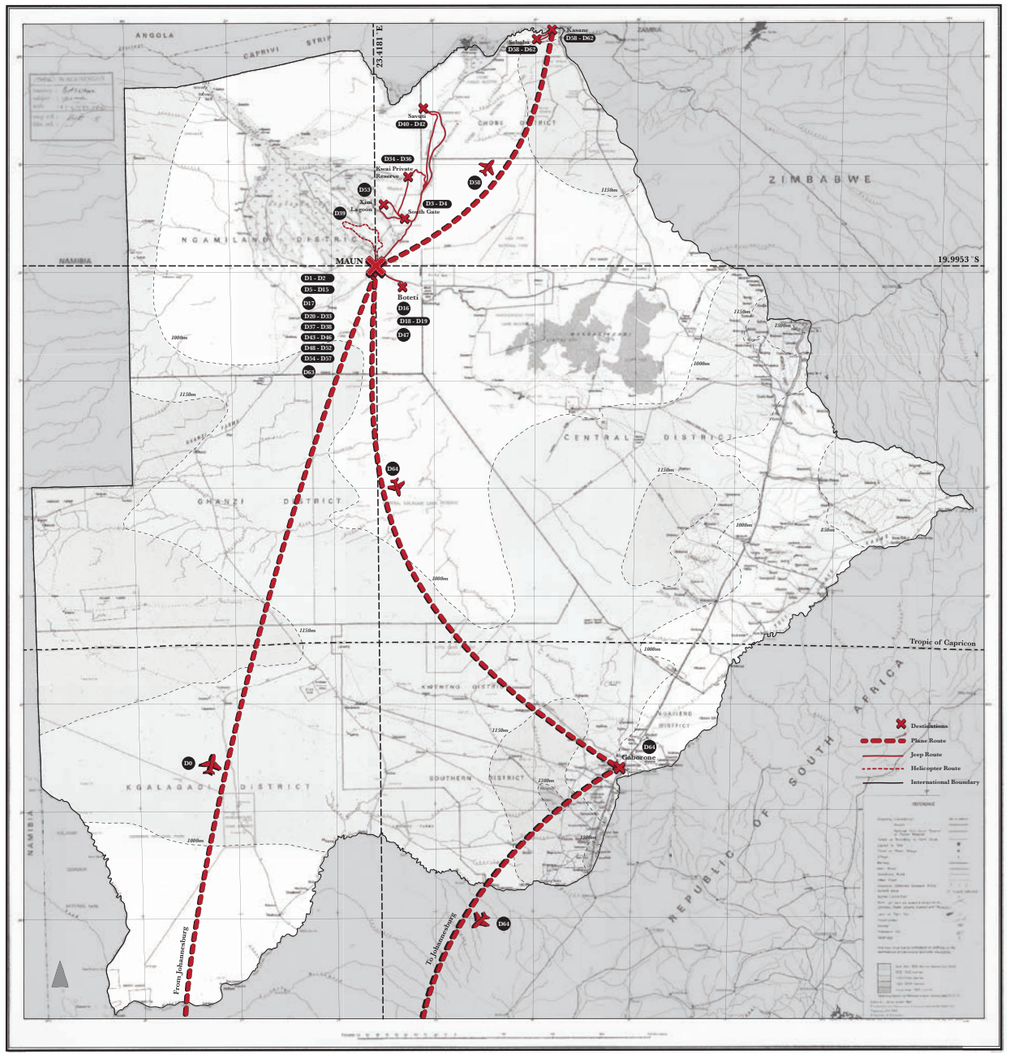
Spectacle becomes the new commodity. Captialising on the pink coloured landscape as an alternative economy while preserving the limited resource - salt.

7 Lexicon

8 Drawings

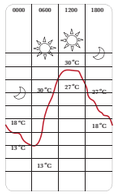

Oz: Now, you have nothing to fear just so long as you believe. For when you do believe, anything is possible.
Oz: Then stay. Run!
Oz: You see where I come from, there aren't any real wizards. Although, there is one: Thomas Alva Edison, The Wizard of Menlo Park. A truly great man.
Oz: No. But he looks into the future and make it real.
China Girl: Is that the kind of wizard you are?
Oz: It's the kind of wizard I'd like to be.
China Girl: But you are that kind. I can tell.
Oz: Well, that's just it. I don't want to. Oz: Well, that's just it. I don't want to. I don't wanna be a good man, I wanna be great one
I wanna be Harry Houdini and Thomas Edison all rolled into one.
China Girl: I'd rather you grant wishes, but that's a good wizard too.
Glinda: Oz, Oz, Oz,

REPUBLIC OF BOTSWANA



MAY						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
		D0	D1	D2	D3	D4
19	20	21	22	23	24	25
D5	D6	D7	D8	D9	D10	D11
26	27	28	29	30	31	
D12	D13	D14	D15	D16	D17	

D0 23rd May 2019
Botswana Lifts Elephant Hunting Ban

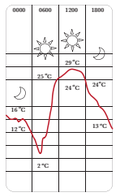


MAY
Average Temperature

Precipitation: 0mm
Humidity High: 94%
Humidity Low: 13%

JUNE						
S	M	T	W	T	F	S
						1
						D18
2	3	4	5	6	7	8
D19	D20	D21	D22	D23	D24	D25
9	10	11	12	13	14	15
D26	D27	D28	D29	D30	D31	D32
16	17	18	19	20	21	22
D33	D34	D35	D36	D37	D38	D39
23	24	25	26	27	28	29
D40	D41	D42	D43	D44	D45	D46
30						
D47						

D39 21st June 2019
Poacher's Poisoning kills Vultures



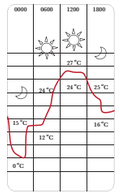
JUNE
Average Temperature

Precipitation: 0mm
Humidity High: 93%
Humidity Low: 11%

JULY						
S	M	T	W	T	F	S
	1	2	3	4	5	6
	D48	D49	D50	D51	D52	D53
7	8	9	10	11	12	13
D54	D55	D56	D57	D58	D59	D60
14	15	16	17	18	19	20
D61	D62	D63	D64			
21	22	23	24	25	26	27
28	29	30	31			

D48 1st July 2019
Poachers invade Botswana

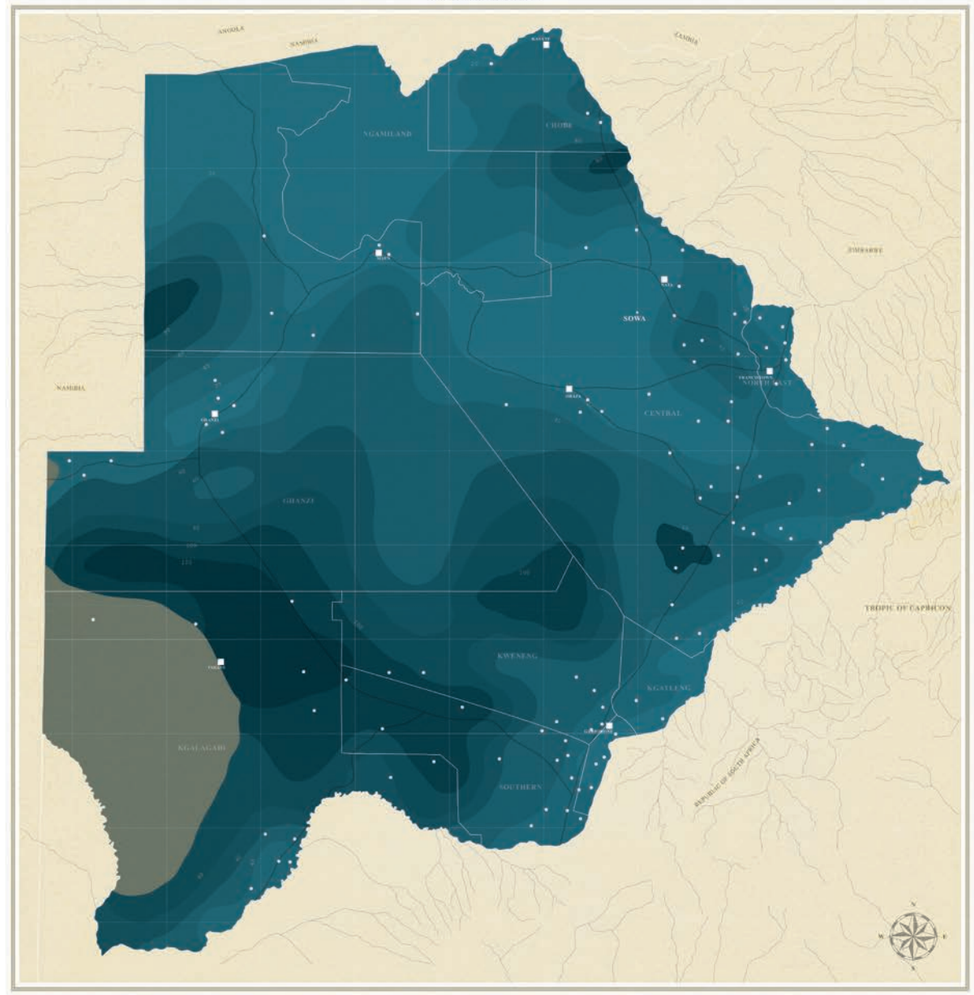
D62 18th July 2019
Lion King Premiere in Cinemas

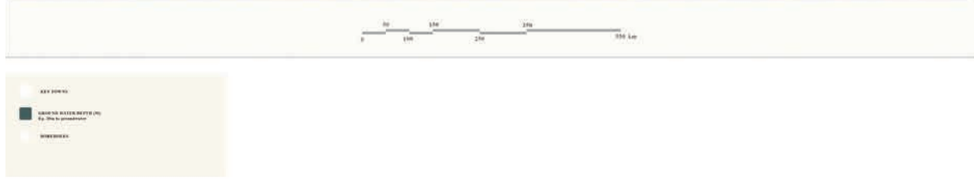


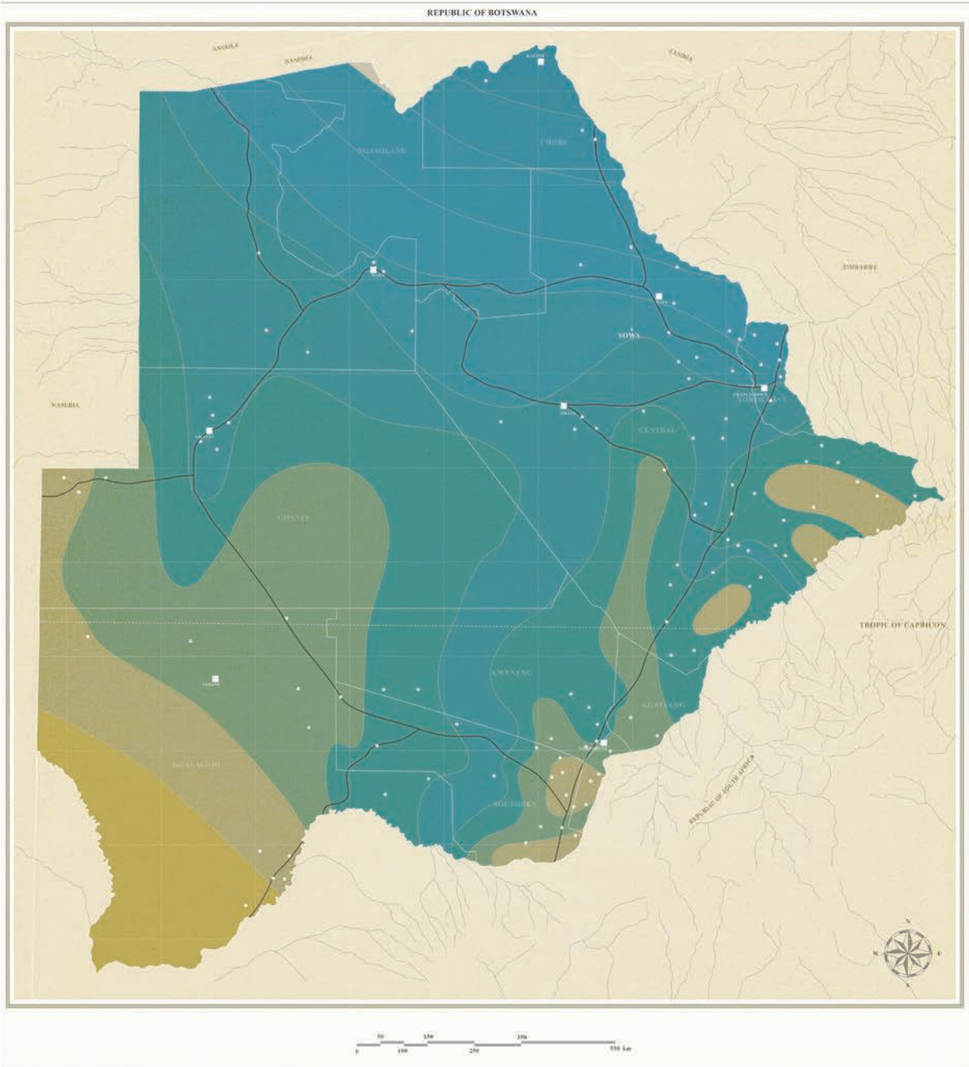
JULY
Average Temperature

Precipitation: 0mm
Humidity High: 87%
Humidity Low: 4%

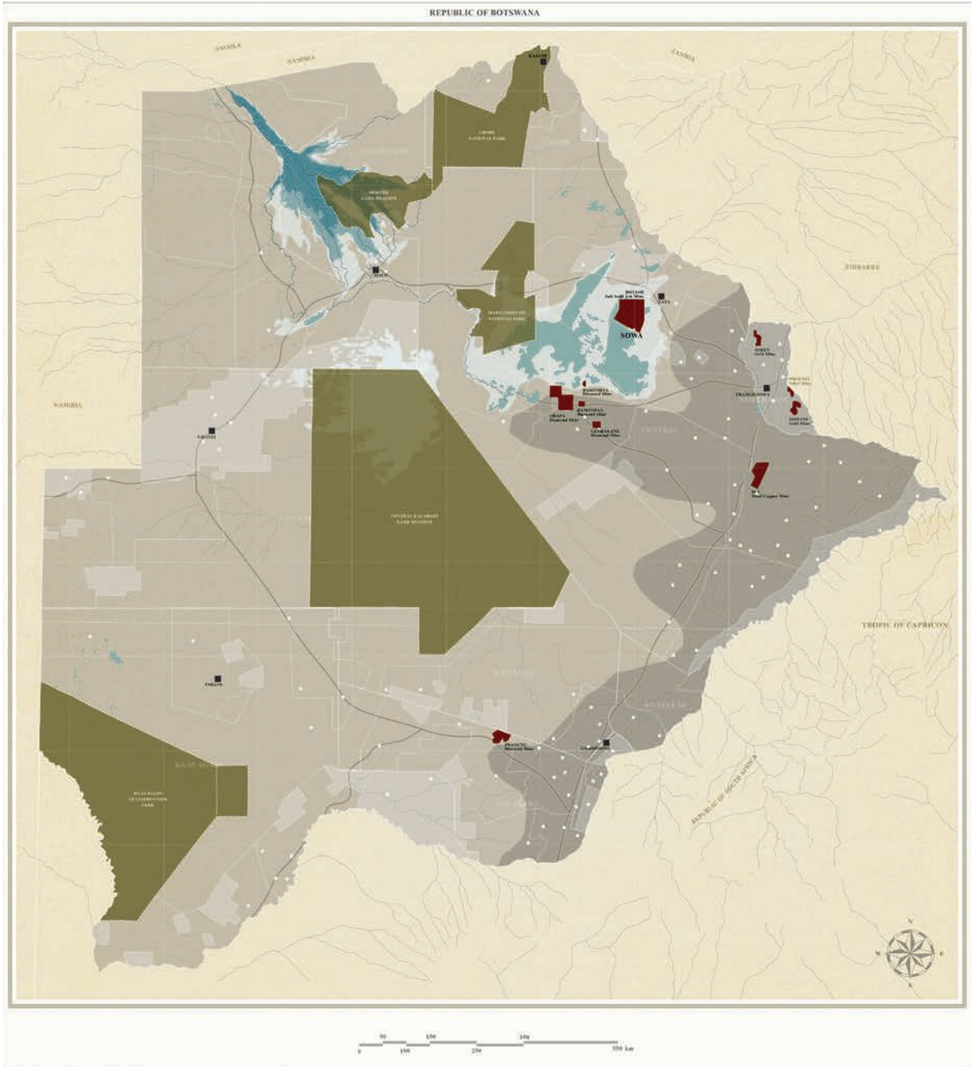
REPUBLIC OF BOTSWANA



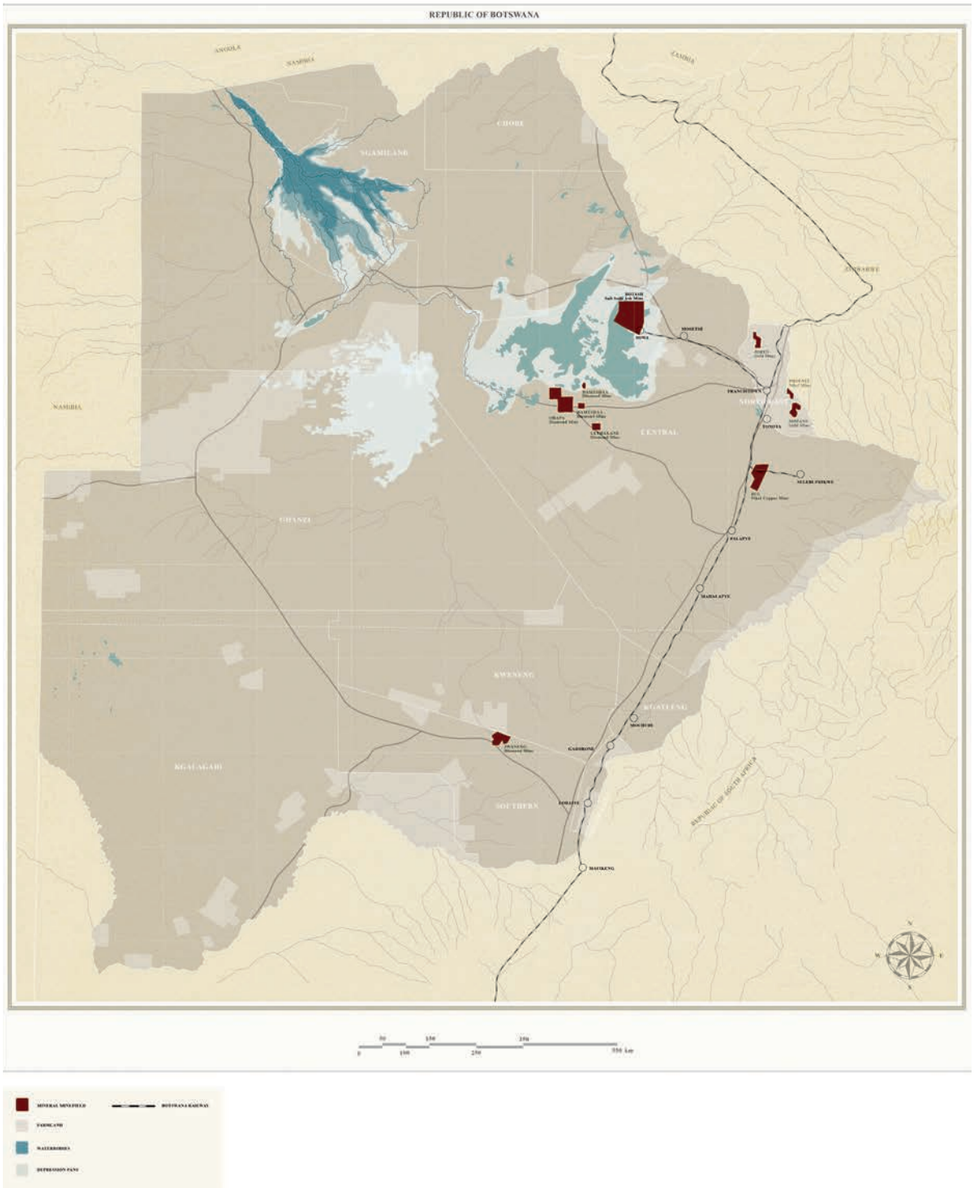



REPUBLIC OF BOTSWANA
ANGOLA
ZAMBIA
ZIMBABWE
NAMIBIA
NGAMILAND
CHOBE
SOWA
CENTRAL
GHANZI
KWENENG
KGATLENG
KALAHARI
SOUTHERN
TROPIC OF CAPRICORN
REPUBLIC OF SOUTH AFRICA

KEY TOWNS
RAIN PRECIPITATION (MM)
BORDERS


REPUBLIC OF BOTSWANA
ANGOLA
ZAMBIA
ZIMBABWE
NAMIBIA
SOWA
CENTRAL
TROPIC OF CAPRICORN
REPUBLIC OF SOUTH AFRICA

KEY TOWNS
FARMLAND
WATERBODIES
DEPRESSION PANS
NATIONAL PARKS / NATURE RESERVES
SOFT/SEMI-SAND KALAHARI BASIN
HARDPAN ROCKS
BORDERS
MINING SITES


REPUBLIC OF BOTSWANA
ANGOLA
NAMIBIA
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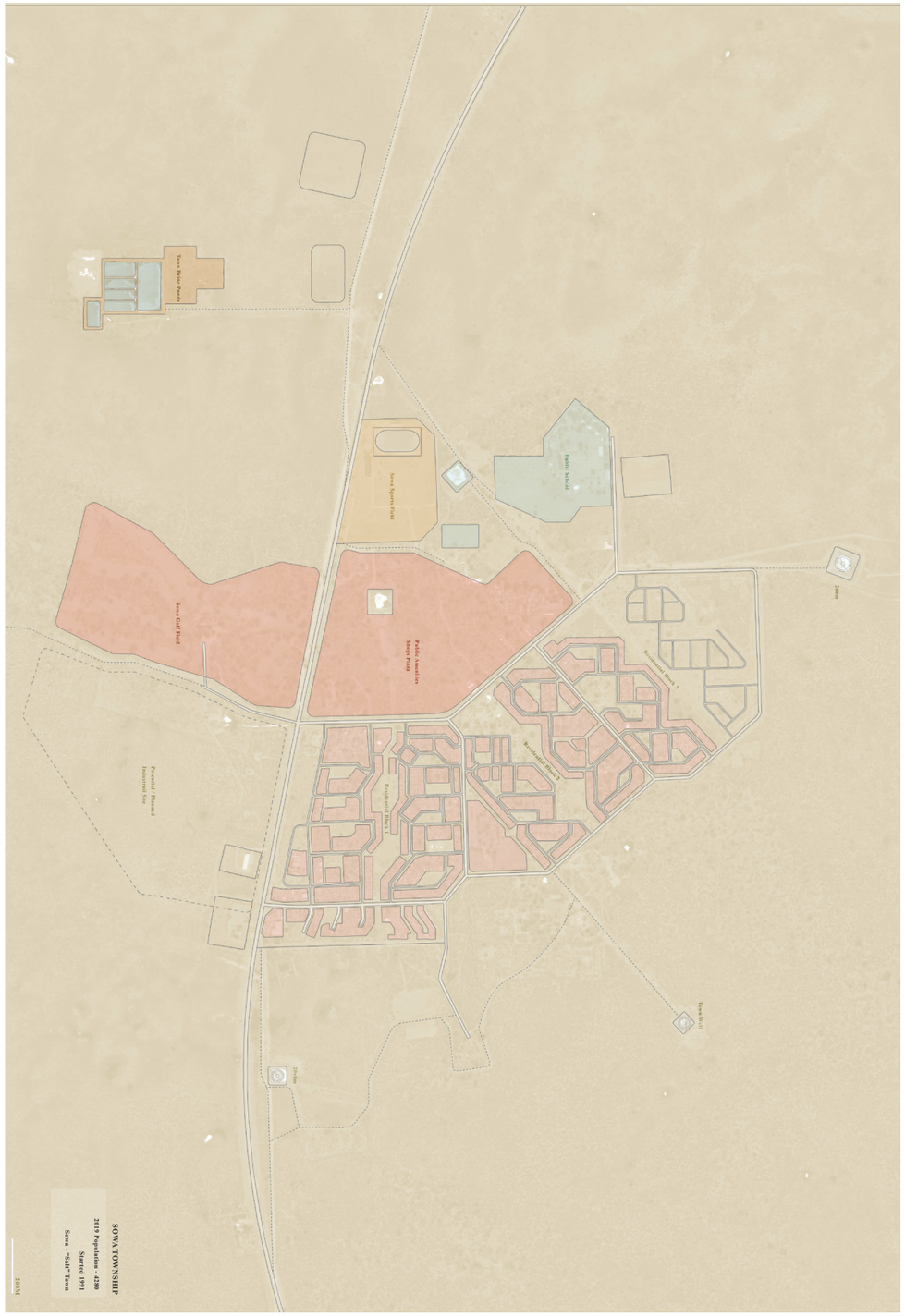
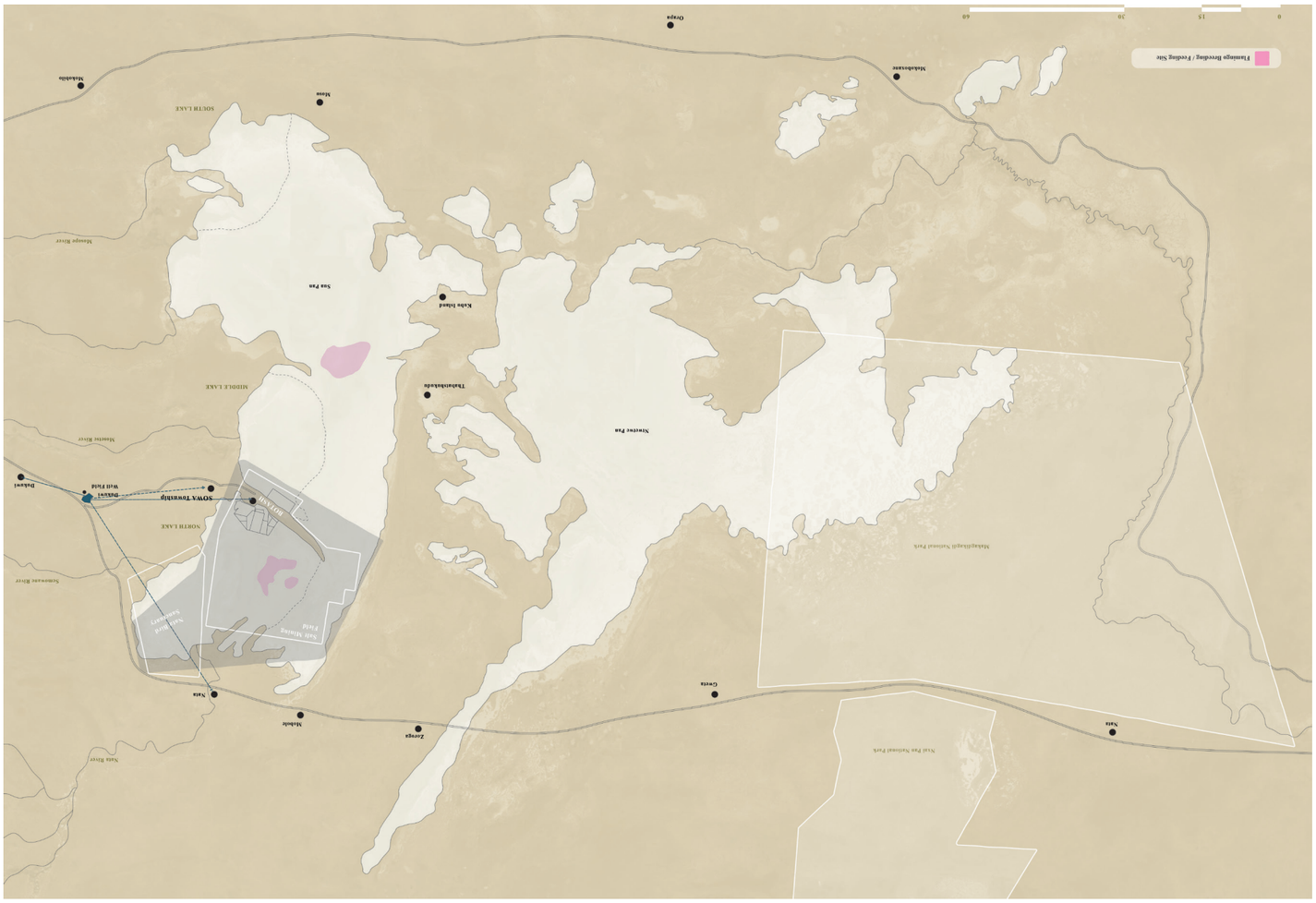
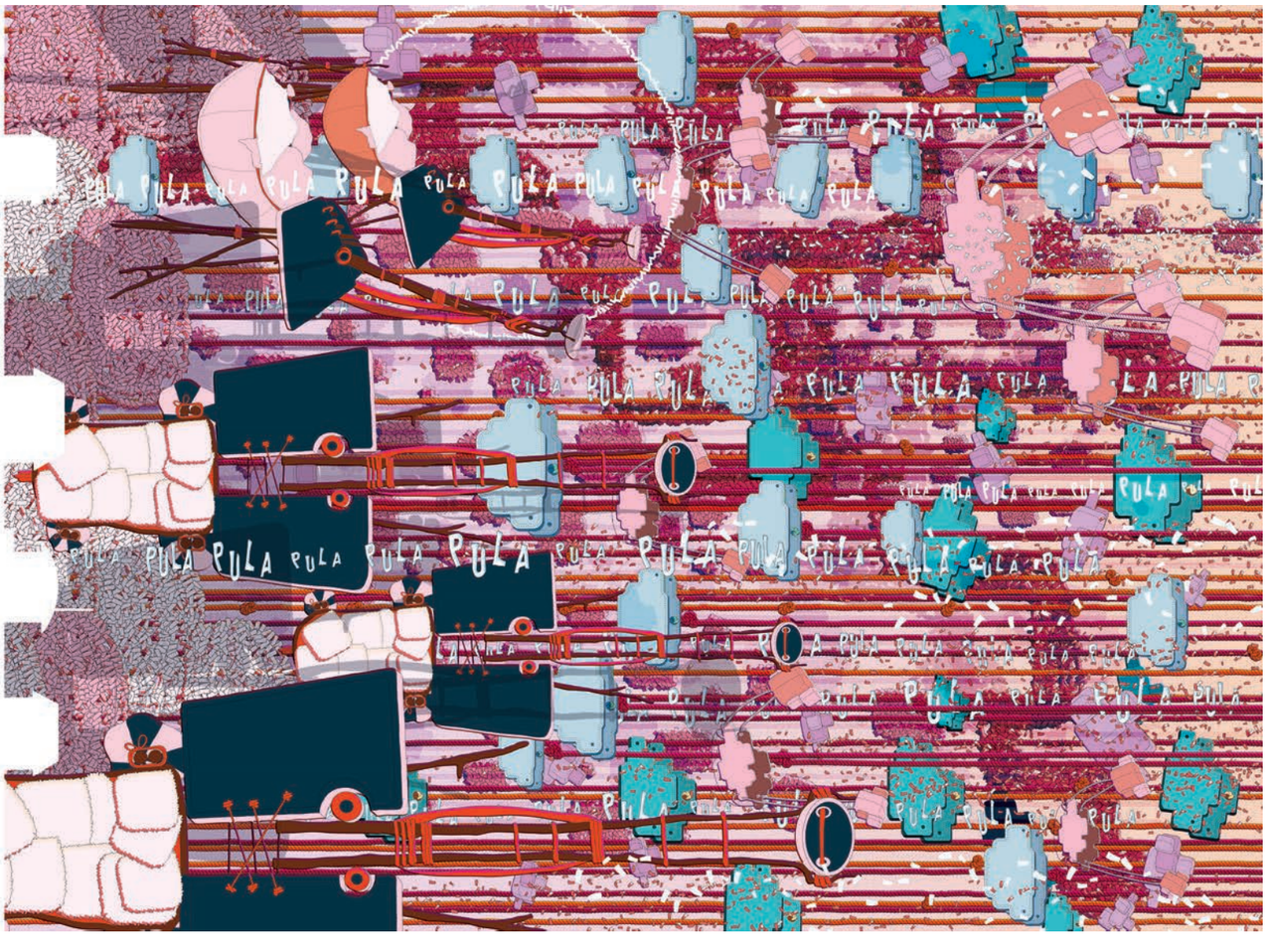
ZIMBABWE
NAMIBIA
SOUTH AFRICA
NGAMILAND
CHOBE
CENTRAL
GHANZI
KWENENG
KGATLENG
KGALAGADI
SOUTHERN
REPUBLIC OF SOUTH AFRICA
MAUN
SHAKTIE
FRANCISTOWN
PALAPYE
MAHALAPYE
GABORONE
LOBATSE
MAHOLOPHOKWENG
MOLEPOLOLE
SEROWE
MAHOLOPHOKWENG
MINERAL MINEFIELD
FARMLAND
WATERBODIES
DEPRESSION PANS
BOTSWANA RAILWAY


SOWA TOWNSHIP
2010 Population - 4280
Started 1991
Sowa - "Salt" Town
Town Water Ponds
Sowa Sports Field
Public School
Sowa Golf Field
Potential Planned Industrial Site
Residential Block 1
Residential Block 2
Residential Block 3
Residential Block 4
Amenities Area
Town Well
Airstrip
2000m


Flamingo Breeding / Feeding Site
0
15
30
60
Nebeboxnor
Ongye
Xai Pan National Park
Xai
Xai River
Zeraqa
Xiloole
Gwera
Xai
Salt Island Fields
Nakaldad Salt Pans
Semonane River
Makgadikgadi National Park
NORTH LANE
SOVA Township
Pukuwi
Well Field
Dukwi
Mosetse River
Nwetwe Pan
MIDDLE LANE
Thabatshabadu
Kabe Island
Zoo Pan
Mosupe River
SOUTH LANE
Mosu
Makalabis



2019 /2020

SEMESTER 1

END