



DESIGN FOR SOCIAL INNOVATION

A CASESTUDY OF HUMAN CENTERED DESIGN
IN KHAYELITSHA - CAPE TOWN



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PREFACE

This thesis has been carried out in a loose collaboration with the SHIFT, a South African based non-profit company working with social design in marginalized communities. SHIFT was contacted in late autumn of 2014 and functioned as our initial link to South Africa. When we arrived in Cape Town in February 2015 SHIFT introduced us to the township of Khayelitsha, where they had been asked to participate in a social design project, a project that further came to be our focal point throughout this thesis. Although SHIFT facilitated as the link to the project, this thesis has been developed independently to them.

Our participation in the project in Khayelitsha was a great practice and we hope that this thesis will give the reader an insight of the enlightening experience we have gone through by making our project.

Amanda Larsson & Anna Sunnefeldt Nyberg

Uppsala, November 2015

ABSTRACT

During the last decade the world's urban population has grown extensively and today more than half of the global population lives in cities. Sub Saharan Africa (SSA) is currently the fastest urbanizing region in the world and the change is concentrated to a few metropolitan areas. South Africa is one of the countries in the SSA region that early got to experience high rates of urbanization. In 1960 Johannesburg became the first city in the region to exceed 1 million inhabitants soon followed by Cape Town.

Due to the extensive governmental interference during the apartheid years (1948-1994) South Africa has an unusual urbanization process. Even though apartheid was abolished over 20 years ago its legacy is still a dominant feature in many South African city structures, one of them being Cape Town. Through the history Cape Town has been formed by numerous of laws and zoning rules. The city structure is shattered, divided into small islands keeping the diverse population and its different livelihoods separated from each other. The majority of the poor population lives in the fringes of the city, far away from economic and social opportunities. Today the spatial planning system of Cape Town does not appoint with the existing poverty in an efficient way making it hard to create opportunity for bottom-up development, much needed when the formal economy has failed to absorb the mostly unskilled job seekers.

In line with a bottom-up approach participatory practices have shown to be successful. This thesis aims to investigate how participatory practices can be implemented in planning and design to create opportunities for social development in an economically and socially marginalized community. This has been done through a case study of Human Centered Design (HCD) in a site-specific design project in the township Khayelitsha, Cape Town. The site-specific project demonstrates how the method of HCD could be implemented while developing an activity centre for youth and focus on the value of HCD as a participatory tool when designing for social innovation. The result reveals that power relationships within the group can have a great impact on the result because of the highly social nature of a participatory process, and that it's important to distinguish the long-term opportunities from the wishes that could be resolved immediately. When it comes to development of participatory practices landscape architecture can contribute greatly serving as a link between the physical, ecological and social aspects needed to create holistic environments for the future.

ACKNOWLEDGEMENTS

We would like to thank everyone who has supported us during our work, both directly through contribution to the thesis and indirectly through encouragement.

Our sincerest gratitude goes to the people that helped us with our study in Cape Town, especially to the SHIFT team and the community involved in the project in Makhaza for openly sharing your stories and experiences. Without you this thesis would not have been possible to make!

In addition we would like to thank SIDA and the MFS scholarship for giving us the opportunity to conduct our field study in Cape Town. We thank our supervisors Camilo Calderon, Hildegun Nilsson Varhelyi and Gunilla Lindholm who has been with us in different stages of our work for inspiration and inputs.

Thanks to Sizwe Mxobo Urban Planner at the Community Organisation Resource Centre (CORC) and Marco Geretto Senior Urban Designer at SPUD for interesting conversations about the challenges for urban planning in Cape Town and for giving us a greater insight of your work in the townships.

Finally we would like to thank Janine Johnston CEO at SHIFT for letting us be a part of the Makhaza project, great inspiration and the delicious grilled tuna!

SAMMANFATTNING

Den här uppsatsen är baserad på en fältstudie utförd i Kapstaden, Sydafrika under våren 2015. Studien är finansierad av styrelsen för internationellt utvecklings arbete (SIDA) genom uppsatsprogrammet Minor Field Studies (MFS).

INLEDNING

Under det senaste decenniet har jordens befolkning ökat avsevärt och idag bor mer än hälften av jordens population i städer (UN 2014 p.1-7). Subsahariska Afrika (SSA) är idag den snabbast växande urbana regionen i världen och förändringen är koncentrerad till ett fåtal storstadsområden (UNICEF 2012, p.4). Sydafrika är ett av de länder i SSA-regionen som tidigt fick erfara hög urbanisering. Johannesburg blev år 1960 den första staden i regionen att överskrida 1 miljon invånare tätt i följd av Kapstaden (UN 2004).

Sydafrika har haft en ovanlig urbaniseringsprocess på grund av den sydafrikanska regeringens strikta kontroll över befolkningens bosättningsmöjligheter under Apartheid eran mellan 1948-1994 (Besteman 2008, p.1). Även om Apartheid upphörde för över 20 år ses spåren fortfarande i många Sydafrikanska stadsstrukturer idag, en av dem är Kapstaden (Turk 2012, p. 21). Genom historien har Kapstaden formats av åtskilliga lagar och zonerings (Turk 2012, p. 4). Idag är stadsstrukturen splittrad och kraftigt uppdelad i mindre distrikt som separerar den multikulturella befolkningen och skapar segregation. Majoriteten av den fattiga befolkningen är bosatta i utkanten av staden långt ifrån ekonomiska och sociala resurser (Todeschini 2015, p.245). Det fysiska planeringssystem som idag råder i Kapstaden samspelar inte med den existerande fattigdomen på ett effektivt sätt och ger inte utrymme för botten-upp utveckling. Något som är önskvärt när den formella ekonomin misslyckats med att tillgodose en majoritet av de okvalificerade

jobbsökande (Todeschini 2015, p. 246).

I linje med ett botten-upp förhållningssätt har metoder av medborgardialog visat sig framgångsrika där brukarna på olika sätt involveras i designprocessen (Hussain, Sanders & Steinert 2012).

Denna uppsats syftar till att undersöka hur medverkandemetoder kan användas inom planering och design för att skapa möjligheter för social utveckling i socialt- och ekonomiskt utsatta områden. Detta har gjorts genom en fallstudie av Human- Centered Design (HCD) i ett platsspecifikt projekt i kåkstaden Khayelitsha, Kapstaden. Projektet rör utvecklingen av ett aktivitetscenter för två ungdomsorganisationer i området Makhaza i Khayelitsha.

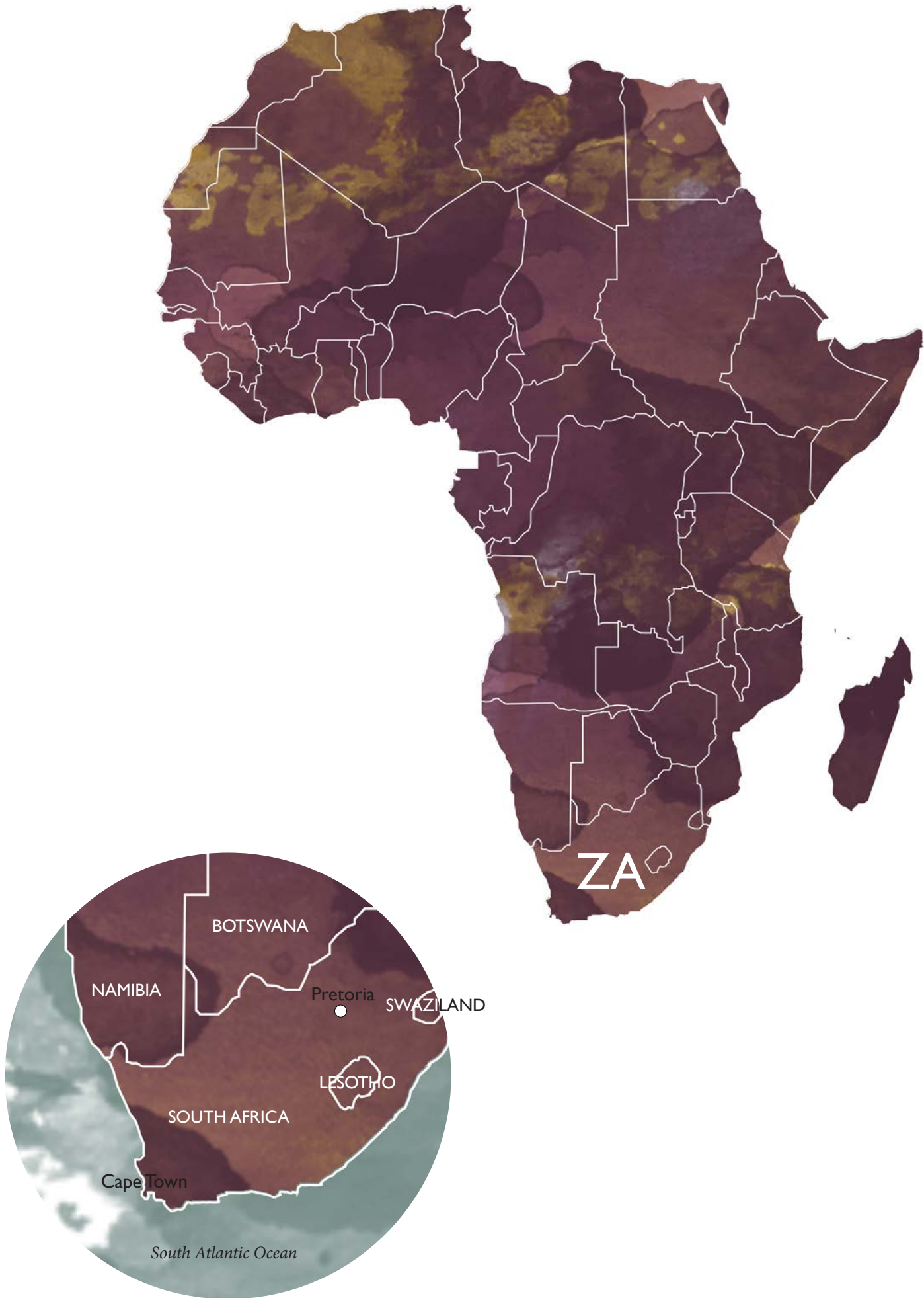
FRÅGESTÄLLNING OCH BEGRÄNSNINGAR

Följande huvudfrågeställningar har används:

Hur kan HCD metoden implementeras i ett design projekt för ett ungdomscenter i Makhaza?

- Vilka är faserna i en HCD-process och hur uttrycker sig dessa i Makhaza projektet?
- Vilka är förutsättningarna för Makhaza projektet?
- Vilka slutsatser kan dras från Makhaza projektet?

Studien har begränsats tematiskt till metoden HCD och geografiskt till området för projektet i Makhaza. Vidare är vår undersökning av HCD-metoden avgränsad genom samarbetet med SHIFT och det faktum att projektet rör en privat tomt. Vidare är både vår studie och arbetet kring uppsatsen begränsad av tid. Vår fältstudie i Kapstaden utfördes under åtta veckor och inkluderar endast delar av projektet i Makhaza.



BAKGRUND

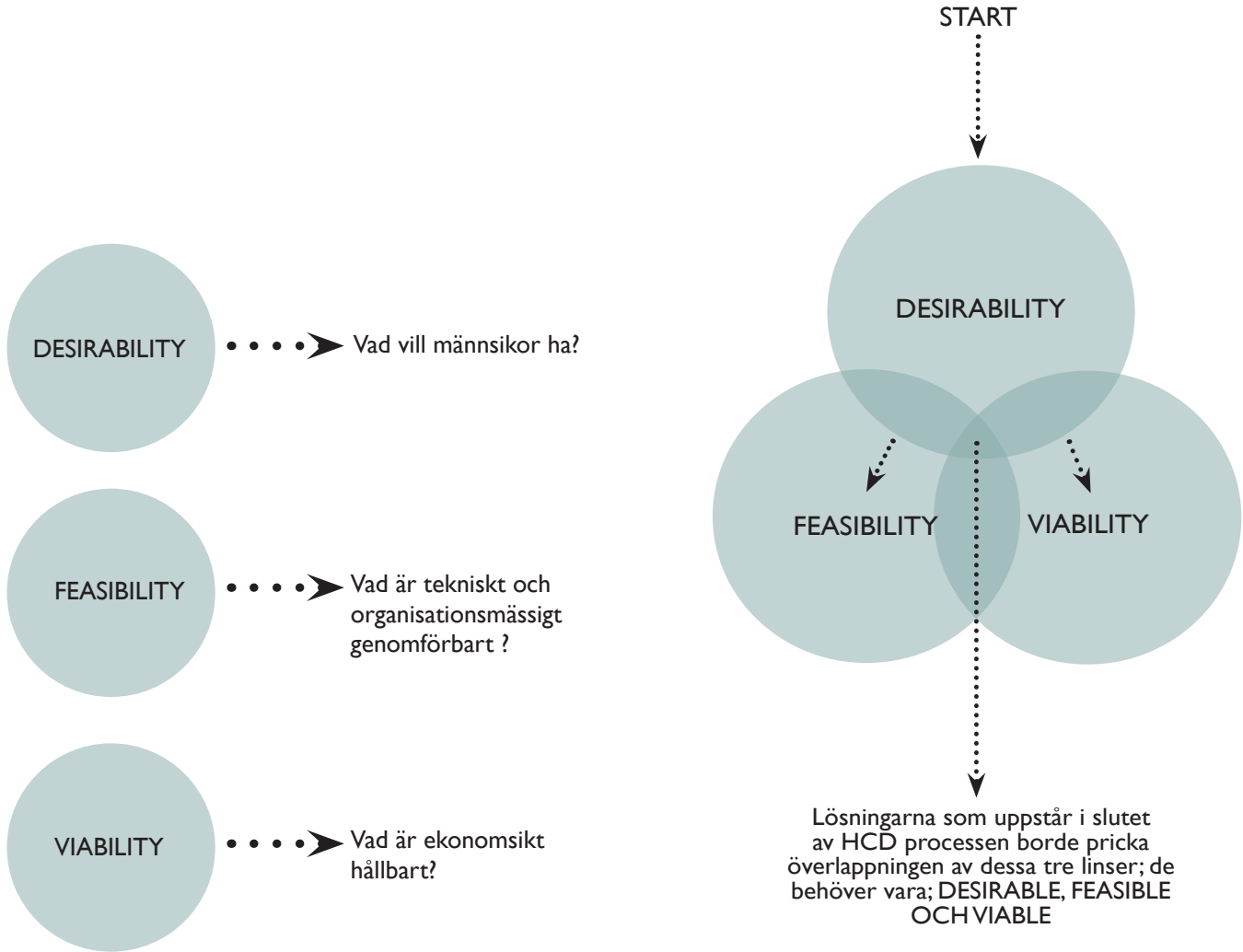
Sen andra världskriget har planeringsteorin påverkats av två större omvandlingar. Den första skedde på 1960-talet när urban planering kom att ses som en rationell process vars resultat uppnåddes genom specifika strategier och policys (Healy 1999). Innan 1960 hade planeringsämnet i huvudsak fokuserat på den fysiska aspekten av bostadsbyggande men snart breddades perspektivet och större vikt las vid aspekterna som formade människors vardagsliv som de sociala, ekonomiska och kulturella (Horelli 2003, p.610). I den rationella planeringsprocessen hade planeraren en viktig roll och hade tillsammans med lokala myndigheter full kontroll. Detta synsätt på planeraren som expert kom att ändras vid den andra omvandlingen i planeringsteorin som skedde på 1970- och 1980-talet. Under denna tid ändrades planerarens roll från teknisk expert till kommunikatör eller diskussionsledare med uppgift att underlätta för medverkande att uttrycka sina åsikter (Taylor 1998). Denna omvandling innebar att planeringsprocessen blev mer kommunikativ och förde planeraren närmare folket samt det allmänna beslutsfattandet (Healy 1999 refererat till Innes 1995).

Metoder som uppkom under denna omvandling uppmuntrade kommunikation och interaktion mellan deltagarna olika intressenter. Dessa metoder dominerade den akademiska diskursen under 1990-talet. Idag används kommunikativa eller medverkarmetoder i många länder och de mest intressanta verktygen för medborgardialog har skapats i utvecklingsländer (Horelli 2003, p.608-610). Imparato & Ruster (2003) menar att medverkandeplanering är den mest inflytelserika metoden när det gäller att forma utvecklingsarbetet i teori och praktik.

Human Centered Design

Ungefär samtidigt som de sociala aspekterna fick större inflytande i planeringsteorin uppkom flera medverkandemetoder inom designämnet. En av dessa var Human Centered Design (HCD) som liksom många andra designmetoder med fokus på användaren hade sitt ursprung i teknologi industrin (Di Russso 2012). Idag är en utav de ledande utövarna av HCD metoden den internationella designfirman IDEO. IDEO grundades 1991 och använder HCD som metod för att hjälpa organisationer i både den offentliga och privata sektorn att utvecklas och lansera nya idéer och designlösningar fokuserade social hållbarhet. Till sin hjälp har IDEO en verktygslåda innehållande tekniker och metoder med användaren som utgångspunkt (IDEO 2012, p.10). IDEO's HCD metod börjar med ett specifikt designproblem som behandlas i tre faser, Hear, Create och Deliver. Under den första fasen Hear, undersöks behoven, drömmarna och beteendet hos de människor som designen påverkar. I den andra fasen, create, behandlas informationen från det första steget och omsätts till möjligheter, lösningar och prototyper. Under den sista fasen, Deliver, utvärderas lösningens genomförbarhet utifrån en rad olika aspekter. Huvudtanken är att lösningen ska kunna genomföras på ett bra sätt och vara hållbar på lång sikt (IDEO 2012, p.10).

Förutom de tre faserna innehåller IDEO's metod även tre linser, Desirability, Feasibility and Viability. Informationen från det första steget Hear, utgör linsen Desirability, denna ska användas för att granska designens olika aspekter igenom under hela processen. Efter att vad som är önskvärt har identifierats introduceras linserna Feasibility (vad som är tekniskt och organisationsmässigt genomförbart), samt Viability (vad som är ekonomiskt hållbart). Den slutgiltiga designen ska överlappa alla dessa tre linser (IDEO 2012, p.10).



METOD

Medverkandemetoder inom urban planering och design är ett komplext ämne som oftast involverar flertalet aktörer och intressenter. Under ett medverkandeprojekt påverkar många faktorer processen som rådande planeringslagar, ekonomi, politisk styre, kultur och sociala dynamiker. För att undersöka detta komplexa ämne har fallstudie valts som metod för denna uppsats. Fallstudiens främsta styrka är triangulering, att flertalet metoder används för att säkra fallstudiens giltighet (Johansson 2003).

I vår fallstudie har vi använt oss av följande metoder:

- Litteraturstudier
- Nyckelintervjuer
- Deltagandeobservation
- Human Centered Design



Litteraturstudier.

Inom fallstudien genomfördes i huvudsak två litteraturstudier. För att få en djupare förståelse för den Sydafrikanska kontexten behandlade den första litteraturstudien följande två aspekter; Sydafrikas kultur, politik, ekonomi och historia samt Kapstadens styre och de främsta utmaningarna för stadsplaneringen

Den andra litteraturstudien genomfördes för att få inblick i teorin kring medverkandemetoder inom design och planering, i synnerhet HCD metoden. Följande ämnen studerades; grunderna inom designteori och medborgarmedverkande samt Human Centered Design (HCD)

Nyckelintervjuer

Under fältstudien genomfördes intervjuer med utvalda nyckelpersoner. En nyckelperson kan tillhandahålla expertisinformation om ett speciellt ämne. Informationen samlas oftast under ostrukturerade eller semi- strukturerade intervjuer (Johnson 2013). Semi-strukturerade intervjuer har en anpassningsbar struktur baserat på ett ämne snarare än specifikt utvalda frågor. Ambitionen med en semi- strukturerad intervju är att inrymma flexibilitet både vad gäller typ av ställda frågor och inom vilka ämnesområden. Detta för att ge en större möjlighet att följa upp och förändra ämnet vid senare skede. Intervjuerna kan således formas efter forskarens intresse och den intervjuades kunskap (Lewis Beck, Bryman & Futing Liao 2004). På grund av att apartheid och segregation fortfarande är känsliga ämnen i Sydafrika användes det semi- strukturerade upplägget under intervjuerna med nyckelpersonerna. I denna uppsats syftade metoden till att uppnå tre mål:

- Få förståelse för stadsplaneringssystemet i Kapstaden
- Få inblick i olika intressenters åsikter och relationen mellan dem
- Få expertiskunskap om stadsplaneringsfrågor på den lokala nivån

Deltagandeobservation

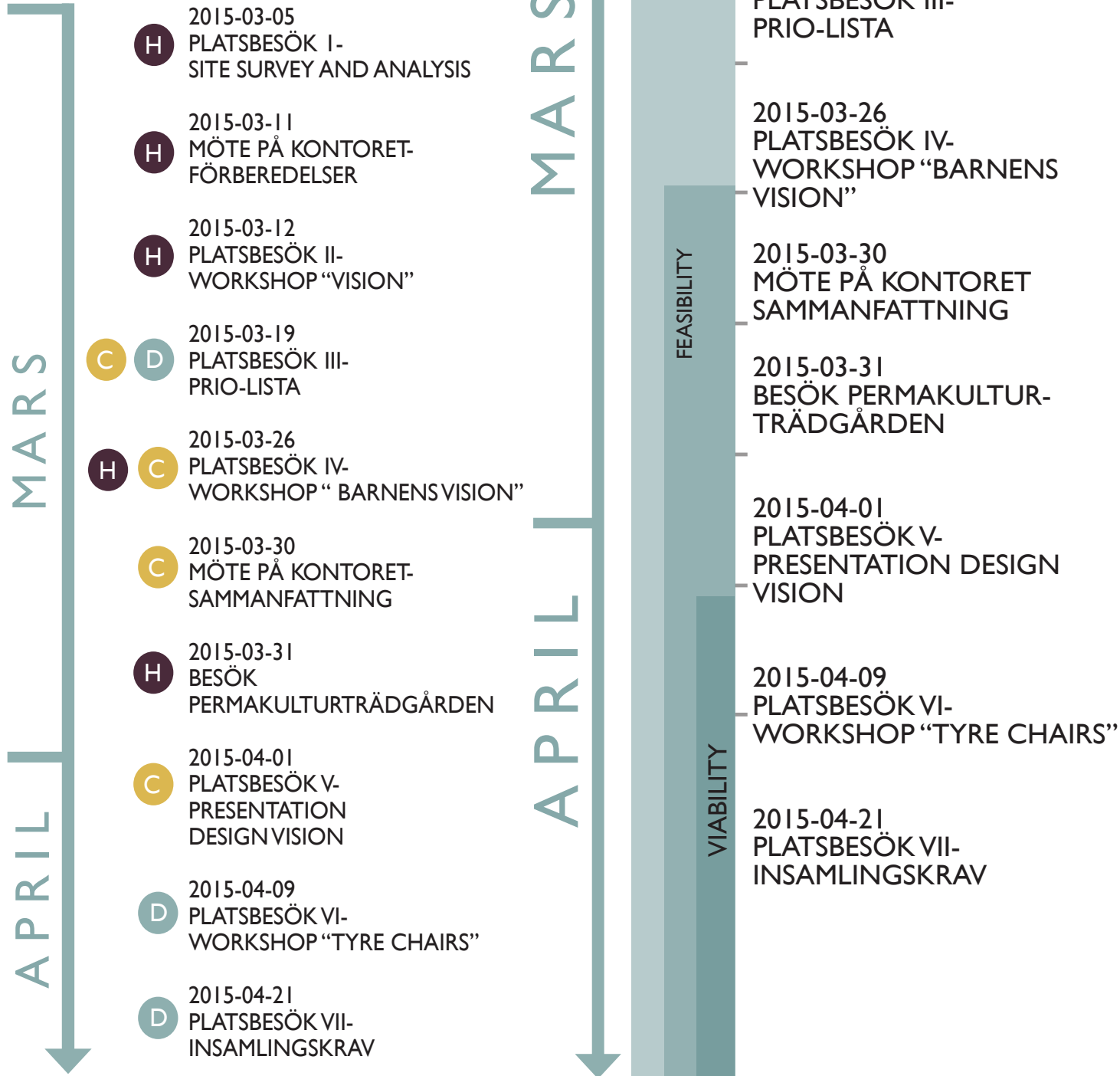
Som en del av uppsatsen valdes ett platsspecifikt projekt ut för att förstå hur medverkarmetoden Human Centered Design (HCD) kan användas. Projektet rörde utvecklingen av ett aktivitetscenter för barn och ungdomar i Makhaza, i kåkstaden Khayelitsha. Detta gjordes i samarbete med det ideella företaget SHIFT som är specialiserade inom hållbar design i Kapstaden. För att få insikt i både HCD metoden och dynamiken i projektet valdes deltagandeobservation som en metod. Vi deltog i projektet som observatörer av designprocessen och samtidigt som landskapsarkitekter, med vår expertis. Dokumentation av projektprocessen skedde genom att kontinuerligt skriva en detaljerad projektdagbok samt att skissa och ta foton.

Human Centered Design

Under projektprocessen i Makhaza användes flertalet metoder. Som tidigare nämnts kan en HCD-process delas in i faserna Hear, Create och Deliver. Trots denna indelning är processen inte linjär utan mer som en spiral då faserna oftast överlappar varandra. Följande metoder användes under projektets olika faser; inventering, rundvandring, SWOT-analys, gruppdiskussioner, workshops, prioriteringslistor, prototyper och crowd funding.

PROJEKTET I MAKHAZA

Under 7 veckor samarbetade vi med designfirman SHIFT för att följa medborgardialogsprocessen och ta fram en design vision tillsammans med intressenter och användare. Totalt deltog vi i 10 möten, både i egenskap av medverkande och som observatörer av processen. Projektprocessen i Makhaza kan kategoriseras enligt IDEO's faser som tidigare presenterats; Hear, Create och Deliver och även enligt de olika linserna; Desirability, Feasibility and Viability. Följande illustration är en tidslinje där mötena presteras i kronologisk ordning markerad med en symbol för vilken fas av HCD som var mest utmärkande för just det mötet. Vidare illustreras hela projektet kategoriserat efter HCD's olika linser.



Erfarenhetsåterföring
I detta stycke kommer de mest betydande erfarenheterna från HCD- projektet i Makhaza kortfattat presenteras i följande punkter:

- Fastställandet av rätt intressenter och förmånstagare i ett projekt bör ske i projektets tidiga skede för att undvika konflikter.
- Separering mellan olika målgrupper exempelvis män/kvinnor eller vuxna/barn under workshops och möten kan vara en bra idé för att underlätta deltagande på lika villkor.
- Var tydlig med de medverkande och intressenters roller och ansvar från början av ett projekt.

DISKUSSION

Vi hoppas att denna uppsats har visat hur en designprocess kan utgå från användarna och vikten medverkandemetoder i projekt rörande marginaliserade områden. Utifrån våra erfarenheter är medborgardialog ett bra tillvägagångssätt för att engagera människor i sin närmiljö och för att involvera utsatta människor i botten- up utveckling. Lokala myndigheter har mycket att vinna genom att förbättra sin relation till dess invånare genom medborgardialog och medverkarmetoder kan ha stor betydelse när det gäller att övervinna ekonomiska och sociala ojämlikheter.

När det gäller HCD metoden och dess relevans för landskapsarkitekter anser vi att metoden är ett bra stöd och inspiration när man arbetar med medborgardialogsprojekt. Dock används metoden generellt för design av objekt och inte ofta för platser. Därför är metoden inte helt relevant för landskapsarkitektur och urban planering. Från vår erfarenhet är det grundläggande tankesättet för HCD metoden, att placera designen i ett socialt medvetet sammanhang och att bevara resultatet över en lång tidsperiod, den viktigaste aspekten av metoden. Således är de mer generella delarna av metoden som linserna Desirability, Feasibility and Viability mer relevanta. I en tid av ökad urbanisering och globalisering kommer betydelsen öka för ett mer socialt medvetet tillvägagångssätt gällande utformningen av våra städer. Vi anser att landskapsarkitekturämnet kan bidra avsevärt till utvecklingen av medverkarmetoder genom att fungera som en länk mellan de fysiska och sociala aspekterna av platsskapande. Vi tror att användandet av medverkarmetoder behöver ökas inom urban design och planering, inte bara i utvecklingsländer utan även i andra kontexter där social utveckling behövs.

DEFINITIONS AND TERMINOLOGY

Holistic- In the Merriam-Webster dictornary (2016a) holistic is defined as:
“*relating to or concerned with complete systems rather than with individual part.*”

In this thesis holistic planning or design of environments are considered to include multiple aspects such as social, ecological, economical and aesthetical.

Informal settlement-

In this thesis the definition used is the one that City of Cape Town and Statistics South Africa use for their figures.

They define an informal settlement as:

“*An unplanned settlement on land which has not been surveyed or proclaimed as residential, consisting mainly of informal dwellings (shacks).*”

Further they define an informal dwelling as:

“*A makeshift structure not approved by a local authority and not intended as a permanent dwelling*”

Permaculture-

In the Merriam-Webster dictionary (2016) permaculture is defined as:

“*an agricultural system or method that seeks to integrate human activity with natural surroundings so as to create highly efficient self-sustaining ecosystems*”.

Perry (2011) argues that permaculture has a long tradition in South Africa and is commonly used in the rural communities even though people do not describe their framing or gardening referring to this term.

Public space-

An area that is open and accessible for everyone in the community not requiring payment or consumption

Shacks not located in backyards-

A makeshift structure not intended as a permanent dwelling located on land not proclaimed as residential making it informal

Social economy of place-

The combined assets of a place, tangible and intangible, necessary for wellbeing and supporting livelihoods

Township-

The term has no formal definition but in South Africa it generally refers to the residential areas built during Apartheid and reserved for the non-white population

ABBREVIATIONS

CCT- City of Cape Town Metropolitan Municipality
CFR- Cape Floristic Region
CORC- Community Organisation Resource Centre
HCD- Human Centered Design
MFS- Minor Field Studies
NGO- Nongovernmental organization
SAA- Sub Saharan Africa
SIDA- Swedish International Development Cooperation Agency
SPUD- Department of Spatial Planning and Urban Design
ZAR- South African Rand

1 ZAR approximately 0,63 Swedish Crowns (Source: XE, 18th of October 2015).

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1

INTRODUCTION

THE DEMAND FOR BOTTOM-UP DEVELOPMENT

The first chapter sets the context for the thesis describing the fast urbanization that is currently taking place in the world and especially in the sub-Saharan region, focusing on the situation of South Africa and Cape Town. It describes the governmental intervention during the years with apartheid planning laws and its consequences for the urban structure of Cape Town. Further the prevailing urban planning approach in Cape Town is discussed and the need to integrate it with opportunities for bottom-up development and social innovation. The chapter ends with the aim, research questions and limitations.



The Township Khayelitsha outside of Cape Town is rapidly growing along with the social and economical issues.

BACKGROUND

The global urban population has grown extensively since 1950, from 746 million to 3.9 billion in 2014. In the year of 2007 something remarkably happened, for the first time in history the world's urban population exceeded the world's rural population. This trend is expected to continue and the UN predicts that the population living in urban areas 2050 will be 6, 3 billion, around 66 per cent of the total global population (UN 2014 p.1-7). A majority of this trend (93 per cent) will take place in urban areas in developing countries (UN 2013, p.25). Paradoxically the sub-Saharan region of Africa is one of the fastest growing in the world, but remains the world's least urbanized. In contrast to the rest of the world Africa is mostly rural with 40 per cent of its population living in urban areas (UN-Habitat 2014, p.13). But this is changing rapidly. Today sub-Saharan Africa (SSA) has an annual growth rate of nearly 5 per cent, twice as high as Asia and Latin America (UNICEF 2012, p.4). It's expected that a majority of the sub-Saharan population will live in cities by the end of this decade (UN-Habitat 2014, p.13). The urban growth has been, and will continue to be concentrated to a few metropolitan areas in the region (UNICEF 2012, p.4).

URBANIZATION AND SEGREGATION IN SOUTH AFRICA

South Africa (see figure 1) is one of the countries in the sub-Saharan region that early experienced a high urbanization rate in the metropolitan areas. In 1960 Johannesburg became the first city in the region to exceed 1 million inhabitants, in 1970 four cities reached above the same mark, one of them was Cape Town (UN 2004). Today South Africa has a total population of 50 million

people and nearly two-thirds of the population lives in urban areas. The experience of urbanization in South Africa is unusual in several aspects, the most significant being the extensive government intervention in the process. At first the government encouraged temporary rural-urban migration because workforce was needed in the metropolitan areas, later they restricted people to move to cities (Turk 2012, p.3).

Until the 1990's South Africa was lead by a white minority government that promoted racially hierarchy trough a system known as apartheid. During the apartheid years (from 1948 to 1994) black people could not own property, had limited citizen rights and were subject to many complicated laws concerning their bodies and movements (Besteman 2008, p.1). The South African government introduced a wide range of policies to control the household mobility, institutions and laws were founded to give the government power over the black population's ability to own land and to choose areas to settle (Turk 2012, p. 4). Social and economic opportunities as well as infrastructure where placed on coveted land reserved for those whom the government categorized as racially 'white'. The inhabitants excluded from this category were forced to move to the outskirts of the cities where infrastructure and basic services was scarce or non-existent. At the same time people living in the rural parts of South Africa began to seek the economical and social benefits of an urban life, often escaping a vulnerable and unproductive rural landscape. This development created townships that later evolved to huge informal settlements burdened with major problems of poverty and social disadvantages (Massey 2013).

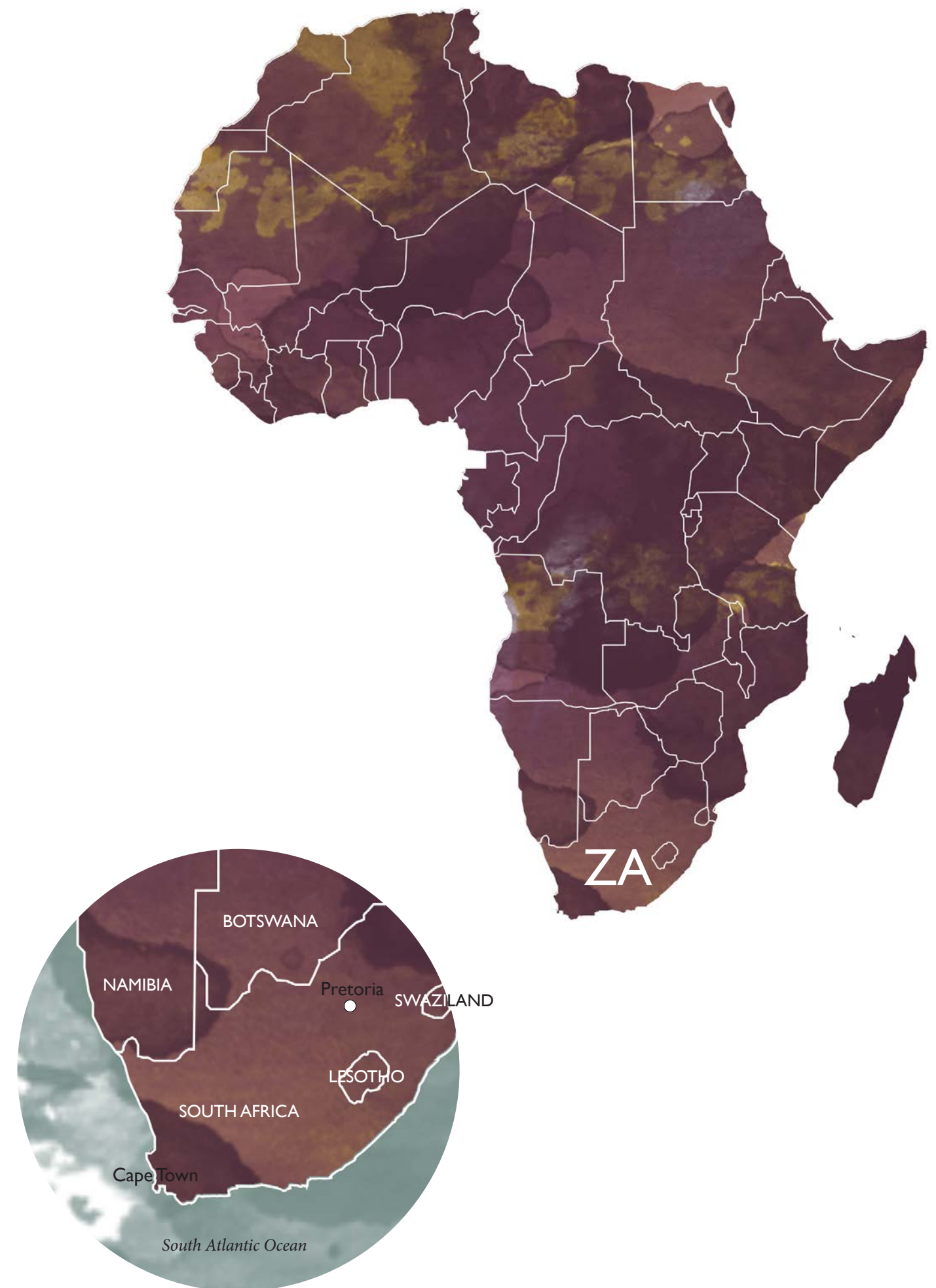


Figure 1. Map of South Africa with neighboring countries

PREVAILING SITUATION IN CAPE TOWN

Today the legacy of Apartheid still is a dominant feature in many South African city structures, one of them being Cape Town. Cape Town is South Africa's second most populous city and a place of great contrast. The city is known for its beautiful setting by the foot of the Table Mountain and is internationally recognized as a centre of culture and design (Southworth n.d, p.3). Cape Town has many wealthy residents from all around the world but at the same time almost 13 per cent of the city's population, about 400 000 people live in informal settlements (City of Cape Town 2006).

Throughout the history the landscape of Cape Town has been formed by numerous laws and zoning rules. The city structure is shattered, divided into small islands that keep the diverse population and their different livelihoods separated from each other. Land use functions such as work, housing, recreation and movement are spatially separated and city's infrastructure is primarily built for cars (Todeschini 2015, p.245). Many neighbourhoods are inward focused and railways or highways are placed as barriers between the different areas in the city. This fragmented structure was mainly created during the high population growth after 1940 when the planning ideology was closely associated with the modernist movement and the ideas of racial separation (Southworth n.d, p.3). The segregated urban form of Cape Town, with the majority of the poor population living in the fringes of the city, far away from the economic opportunities still remains the same even though apartheid was abolished over 20 years ago. Turk (2012, p. 21) states that the geographical separation between different social groups still is a fact because of several reasons. He points out that the durability of the built environment and constant income inequalities between races are the main reasons of this stagnated development (Turk 2012, p. 21).

Even though land reforms have been carried out to return land to the people dispossessed during the apartheid years, the reforms have been slow and ineffective (UN 2014, p.239). The fragmented urban structure of Cape Town does not only generate segregation between different groups but is also problematic in terms of ecological and economical aspects. The separated structure of the city demands long journeys, contributes to carbon emission, is costly for the municipality in terms of infrastructure and undermines the productivity of the city (Turk 2012, p. 21).

Todeschini (2015, p. 246) argue that the spatial planning system in Cape Town has been, and is mainly preformed by transportation planners and engineers with a macro-perspective on settlement building. He further state that this approach doesn't appoint with the existing poverty in a sufficient way or make opportunity for bottom-up development, much needed when the formal economy has failed to absorb the mostly unskilled job seekers. As a consequence the informal economy and the informal settlements have grown significantly together with the discontent of its citizens (Todeschini 2015, p. 246).

PARTICIPATORY METHODS AND SOCIAL DEVELOPMENT

When it comes to create new solutions to deal with poverty in a sustainable way it's often stated that the key is the use of participatory methods. By including the users of the solution in the process it is easier to understand their real needs (Hussain, Sanders & Steinert 2012). Participatory methods have been used in urban planning since the 1970's. One of the leading experts within the subject is the architect Nabeel Hamdi. He states that participatory methods are necessary to build a community and the social economy of place, to

sustain livelihoods and support human development. Further he argues that participatory practice is a good way of defining the beneficiaries of a certain project, to identify conflicting interests and to build partnership between different stakeholders. With participatory practice it's easier to get accurate information, information that can be hidden in a place and reviled through the participatory process. When participatory practice is done right it will reduce the dependency of outsiders though creation of social and economical opportunities (UN- HABITAT World Wide 2014).

Today the rapid urbanization and increasing globalisation brings both social and environmental challenges to the urban areas. One of these challenges is the growing segregation and alienation between different social groups. The prevailing approach to urban planning is often characterised by a top-down philosophy. We believe that it's crucial to see beyond the physical structures and consider the social aspects in a wider extent for long-term sustainability. Focus should be on the social economy of place to create more inclusive and holistic environments.

THE MAKHAZA PROJECT

With this thesis we want to investigate how participatory practices can be implemented while designing an environment to create opportunities for social development, in an economically and socially marginalized community. The focus of the investigation is the participatory process through a case study of the method Human Centered Design in a site specific project. The project concerns the development of an activity centre for youth in the community of Makhaza in Khayelitsha, Cape Town.

Location and character

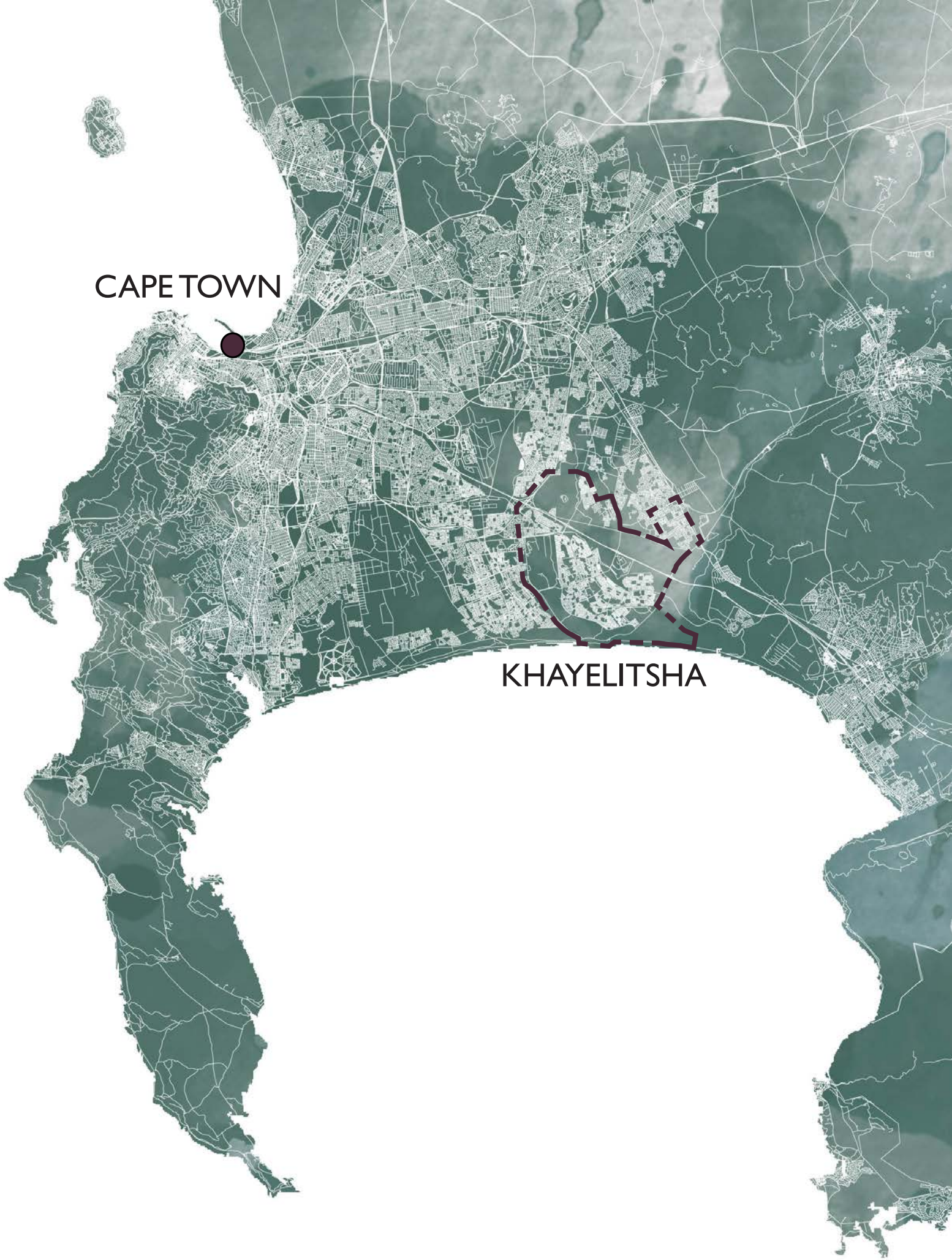
The site of the project is situated in the north east part of the township Khayelitsha, located 27 km south east of the centre of Cape Town (see figure 2 and 3). Khayelitsha was created during the final years of apartheid in the early 1980's as a solution to the increasing immigration and overcrowding issues. The development of Khayelitsha was done according to a modernistic planning approach with a super-block structure. The area consists of four "towns" in a curved row where each town is surrounded by a motor vehicle access road (Huchzermeyer 2003). Since Khayelitsha is a product of the apartheid ideology the

area is located far away from the economic opportunities, situated on unattractive land, costly to develop due to a high water table and a sandy terrain. The area is mainly informal to 62 per cent and is today the fastest growing residential area in Cape Town. Khayelitsha's population isn't homogenous but the majority is classified as poor, living under hard conditions often reinforced by social issues (CCT 2010). According to the 2011 census Khayelitsha had a population of 391 749 people (Stats SA 2011), but some estimate the population to be close to 1 million (University of Cape Town 2005).



N ↑ 1,5 km

Figure 2. Map of Khayelitsha and Makhaza



N ↑ Figure 3. Map of Cape Town with Khayelitsha

AIM AND RESEARCH QUESTION

How can the method of Human Centered Design (HCD) be implemented in a community design project for a youth center in Makhaza Khayelitsha?

Sub questions;

- What are the phases of a HCD-process, and how are these expressed in the Makhaza project?
- What are the conditions for the Makhaza project?
- What conclusions can be drawn from the Makhaza project?

LIMITATIONS

This thesis recognizes social development as an important aspect of urban planning and design. The thesis conducts a case study that includes a community design project, focusing on the participatory process.

The study is thematically limited to the method of Human Centered Design (HCD) and geographically by the project site in Makhaza, Khayelitsha, Cape Town. Further our work is limited by investigating how the method of HCD can be implemented in collaboration with the non-profit design company SHIFT when developing an activity centre for the non-governmental organisations Umthombo Wempilo (UW) and Connect. Therefore, development of other spaces within the community is not considered. Since we are both investigating and taking part of the participation process our background and previous experiences are an

important limitation that can't be disregarded. Further our work with both the study and the thesis is limited by time. Our field study in Cape Town was conducted during eight weeks and only the early stages of the HCD project in Makhaza are covered in this thesis.

TARGET GROUP

This thesis is addressed to anyone working with design and planning for people, particularly in disadvantaged communities. Our study can serve as an encouragement towards the City of Cape Town for a socially sustainable approach while working with marginalized communities. Further we aim towards the South African authorities to emphasize the importance of having a diversity of different professionals such as architects, planners, engineers and anthropologists at those departments working with matters that affect the urban structure.

In addition, we want to inspire other architects and designers around the world to engage in projects in developing countries. This thesis can also be of interest for people and NGO: s living and operating in Khayelitsha. Further we aim towards SIDA that has made this study possible through funding.

2

THEORY

PARTICIPATORY PRACTICES

Chapter two addresses the theoretical framework for participation in planning and design tradition. It starts with origin and definition of participatory planning and the common characteristics of participatory methods used today. Following section describes enabling tools that can be used in a participatory process to simplify communication between the stakeholders and allowing citizens to express their opinions and values. The chapter continues with participation in design tradition and especially the method of Human Centered Design which the toolkit of SHIFT used in the Makhaza project is based on.



Over the years Khayelitsha has gone through some upgrading programs and is today consisting of a mix of formal and informal urban structures.

PARTICIPATION IN PLANNING THEORY

Since the Second World War urban planning theories has been affected by two major shifts. The first shift took place in the 1960's when urban planning came to be considered as a rational process which outcomes were achieved by specific strategies and policies (Healy 1999). Before the 1960's planning tradition had mainly focused on the physical aspect of settlement building with the goal of producing blueprints and master plans. The new approach to planning considered other aspects affecting people's everyday life, such as economical, social and cultural (Horelli 2003, p.610). In this rational process the planner was given an important role, and had together with the authority full control over the whole planning process.

The second shift in the planning tradition came during the 1970's and 1980's. Changing the view of the planner from a technical expert to communicator, or facilitator making stakeholders or participants express their opinions and make judgments valued in the planning process (Taylor 1998). This shift led to making the planning process more communicative and interactive, bringing the planner closer to the community and public decision- making (Healy 1999 referring to Innes 1995). This communicative or collaborative shift in the planning tradition became a term referring to practices or methods that emphasise communication and interaction between different stakeholders and dominated the academic discussion of the 1990's (Horelli 2003, p.610).

Today collaborative or participatory planning is used in many parts of the world and some of the most interesting participatory tools have been created in developing

countries (Horelli 2003, p.608). Imprato & Ruster (2003) argues that participatory planning is the most influential trend when it comes to shaping development cooperation in practice and theory.

DEFINITION OF PARTICIPATION AND COMMON CHARACTERISTIC OF METHODS

Today there are several participatory planning methods used, the names of method vary according to the author. Alongside the variation of names there are also many definitions. The definitions focus on different aspects but are always based on the aim of involving citizens in the planning process. Calderon (2008, p.33) state that although the principles behind participatory planning has mainly been discussed in a western theoretical area, the principles have foremost been implemented in the developing world. Therefore many definitions of participatory planning focus on involving disadvantaged communities and in several cases marginalized people. One of these is Imprato & Ruster's definition presented in Slum Upgrading and Participation - Lessons from Latin America.

“Participation is a process in which people, and especially disadvantaged people, influence resource allocation and policy and program formulation and implementation, and are involved at different levels and degrees of intensity in the identification, timing, planning, design, implementation, evaluation, and post-implementation stages of development projects” (2003, p.20).

A more general definition of a participatory planning is Horelli's definition that could be used in a broader spectrum of planning projects and gives the facilitator a greater freedom to adapt the process to the prevailing context. Horelli's definition is presented in the chapter A Methodology of Participatory Planning in the Handbook of Environmental Physiology and defines participatory planning as following:

“a social, ethical and political practice in which individuals or groups, assisted by a set of tools, take part in varying degrees at the overlapping phases of the planning and decision-making cycle that may bring forth outcomes congruent with the participants' needs and interests.” (p.612).

As mentioned before even though definitions defer they all aims for a participative process. By comparing different definitions Wiesenfeld & Sanchez (2002 p.631) have summed the common characteristics of prevailing methods of participation planning.

The first similarity is that participation is seen as a process with different stages in which the community aims to achieve a common goal, motivating the members of the community to take different actions based on the sociopolitical context and goals to be achieved. In this process there is a tension between the citizen's needs and the state control over the resources required to satisfy the citizens, as well as the states own opinion of those needs. Community participation can therefore be seen as an attempt to influence the decisions important to the achievement of the community goals. The second

similarity is that participation is seen as a voluntary action that happens when everyone involved understand the value of participation and believe that the whole group benefits from the activities in a participatory project. The third similarity is that participatory projects all vary with prevailing time and context. Community participation is based on the interaction between the participants, the nature of the project, access and control to resources and political conditions for participation. The participants will decide themselves over the quality of their participation though interaction between the different stakeholders. Hence the experience of participation will differ from project to project. Participation is a social construction, subject to the prevailing context. The forth common characteristic is that the participants input to the process will follow the set course of community participation. This makes it possible to predict when and how an activity will generate inputs that will influence important decisions in the process. Adding to this it's most common that the participants influence over decisions gradually becomes greater over time (Wiesenfeld & Sanchez 2002, p.631).

ENABLING TOOLS USED IN PARTICIPATORY METHODS

In most participatory project its desirable that the citizens take responsibility and contribute to the process as much as possible. To make this happen it's usual that facilitators use enabling tools. Horelli (2003, p.618) state that an enabling tool is any technique or even traditional research method that increase the transaction of knowledge between the stakeholders during a participatory process. The tools should support

the communication between the participants and their physical and socio- physical environment. Horelli (2002, p.621-624) have classified commonly used enabling tools into four categories; *diagnostic, expressive, organizational and political*.

Diagnostic tools are used to give the participants possibility to determine existing resources, the context and outcomes of the process. Mapping is one tool in this category, where participants for example can mark out places in the community with different colours where each colour represents a specific character. This is done to find out how the different participants experience their environment aiming for a collective solution. Another diagnostic tool is the SWOT- analysis, which is done to understand the strengths, weaknesses, opportunities and threats to the project or place. This is one of the quickest ways to carry out a contextual analysis and can be done from different perspectives such as women/men, children/adults (Horelli 2002, p.621).

Expressive tools enable the stakeholders to understand their own importance and express themselves sufficiently. Expressive tools are important when it comes to enable the children or elderly in a community. Architects often use drawing as an expressive tool for communication and can increase children's involvement in a participatory process. Drama, role playing and visioning are other expressive tools commonly used (Horelli 2002, p.622).

Organizational tools are used to organize processes, resources and events. According to Horelli (2002, p.614) organizational tools can be consensus building and help to overcome possible conflicts during the process. Time planning is an essential organizational tool that sets the frame for the process and helps the stakeholders focus on the specific project and the relevant issues.

The final category is *Political tools*, an important group since participation often is related to power issues and these tools can ease the situation. Fund raising is one example of political tools as well as goal setting and prioritizing of needs (Horelli, 2002, p.614).

Horelli (2002, p.618) state that diagnostic tools often dominate the initiation stages of the process, while expressive and organizational tools are most common in the planning phase. The implementation and maintenance phase often lack enabling tools; in these stages it's more common with to organize actions. Later, in the phase of evaluation and follow up enabling tools are used again (Horelli 2002, p.618).

According to Horelli (2002, p.618) the quantity of enabling tools used depends on the nature and size of the specific project. Further she states that in higher levels of participation a larger spectrum of tools and methods can be used or created.

DESIGN THEORY AND PARTICIPATION

About the same time planning ideology came to focus on social aspects, participatory methods were introduced in design tradition. Just as in planning tradition the development of the different participatory methods didn't arise in a linear progression, several of them were created at the same time but in different fields or faculties (Di Russo 2012). In the 1980's when participatory design became internationally recognized as a methodology it was foremost used in the field of information and communications technology (ICT). The early work with participatory design was mainly carried out by researchers and the aim was to open up the ICT- system to participation of future users (Sanders, Brant & Binder 2010).

The outcome of the early participatory designs was good usability but emotional response to the product was left out. In several cases user testing of the designs was abandoned when it turned out that the users had conflicting views with the designers (Di Russo 2012). A shift in participatory design happened when design theorist Donald Norman introduced User-Centered Design and user testing became more focused on the interest and needs of the users. The user became central to the development process as well as the user's experience of the design. User- Centered Design came to be a more humanistic methodology than its predecessors mainly because of legacy in behavioral sciences (Di Russo 2012).

During the 1990's User Centered Design and Human-Centered Design (HCD) were compatible terms concerning design process integrated with the end users.

Like many other participatory methods in the field of design, Human- Centered Design evolved from the technology industry. In the late 1990's when participatory design methods shifted focus from technology to humanism, human centered-design began to develop as an own method. The method of HCD came to be manifested more as a mindset than a set of actual tools (Di Russo 2012). To explain this mindset Di Russo (2012) cites William B. Rouse from his book Design for Success: A Human-Centered Approach to Designing Successful Products and Systems. His definition of HCD is quite philosophical and follows:

“Roles of humans in complex systems, enhancing human abilities, aid to overcome human limitations and foster user acceptance” (Rouse, 1991 pp.6-123) cited by Di Russo (2012).

Even though Rouse operates within the field of product and system engineering he's definition of Human-Centered Design broadens the perspective of the users and situates them in a more socially aware context. The current evolution phase of HCD started at the turn of the millennium with the increasing awareness of social- and environmental problems. Today HCD is a method aiming to solve social issues by humanize the design process and emphasize with the participators (Di Russo 2012).

HUMAN CENTRED DESIGN BY IDEO

One of the leading practitioners within the Human-Centered Design (HCD) method is the international design firm IDEO founded in 1999. IDEO takes on the HCD method to help organizations with innovation and development in both the public and private sector. The firm works with the branding and visioning of new companies, designing products, services and spaces. IDEO aims to build a creative culture and an internal system needed to support innovation within organizations. To achieve this IDEO has developed a set of techniques and tools used to create design solutions such as products, services, environments, organizations, and modes of interaction (IDEO 2015).

THE THREE LENSES OF HUMAN CENTERED DESIGN

IDEO's Human Centered Design method is based on a concept of three lenses; Desirability, Feasibility and Viability (see figure 4). According to IDEO's a HCD process begins with an investigation of the needs, dreams and behaviours of the people that will be affected by the design. The aim is to understand what the people want; this information will make up the lens of Desirability. IDEO states that the Desirability lens should be used throughout the whole process to view the different aspects of the design solution. When a range of what is desirable is identified the design solution is carefully viewed through the lenses of Feasibility and Viability. The design solutions that emerge at the end of a HCD process should hit the overlap of the three lenses and should be Desirable, Feasible and Viable (see figure 5) (IDEO 2012, p.6-7).

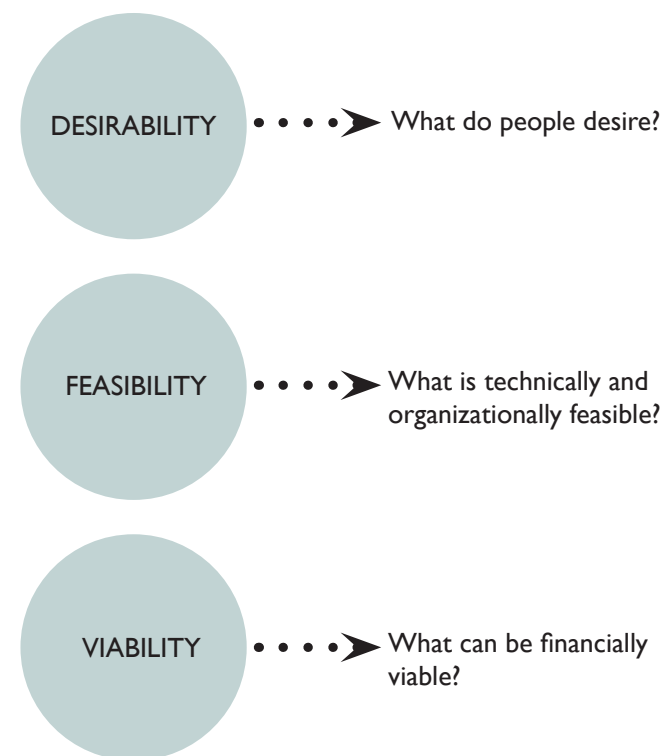


Figure 4. Illustration of HCD lenses
(based on illustration IDEO 2012, p. 10).

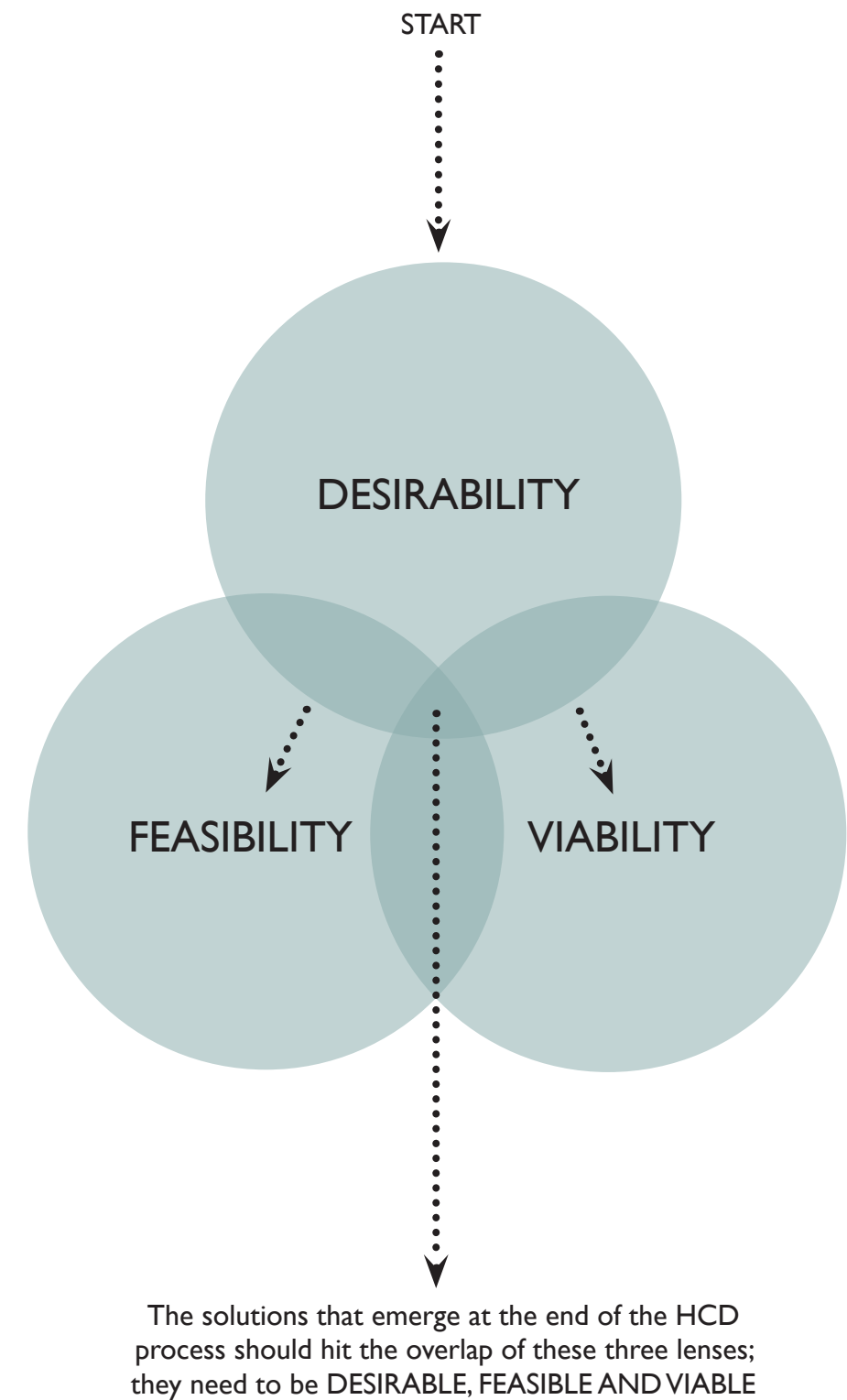


Figure 5. Illustration of HCD lenses
(based on illustration IDEO 2012, p. 10).

THE THREE PHASES OF HUMAN CENTERED DESIGN

In addition to IDEO's three lenses, the method also includes three phases with different goals and outcomes. According to IDEO the process of HCD starts with a specific design challenge and goes through three main phases; Hear, Create, and Deliver. IDEO describes the process as moving from concrete observations about people, to abstract thinking revealing themes and insights and then later back to tangible concrete solutions (IDEO 2012, p.8-9).

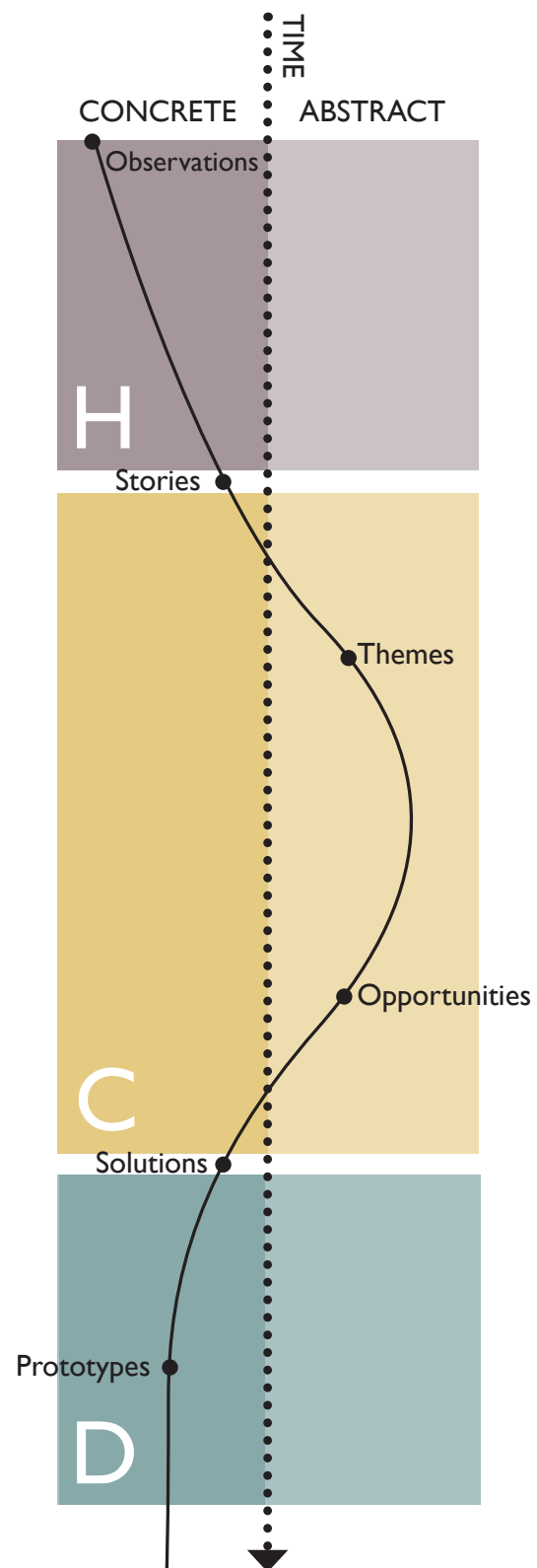
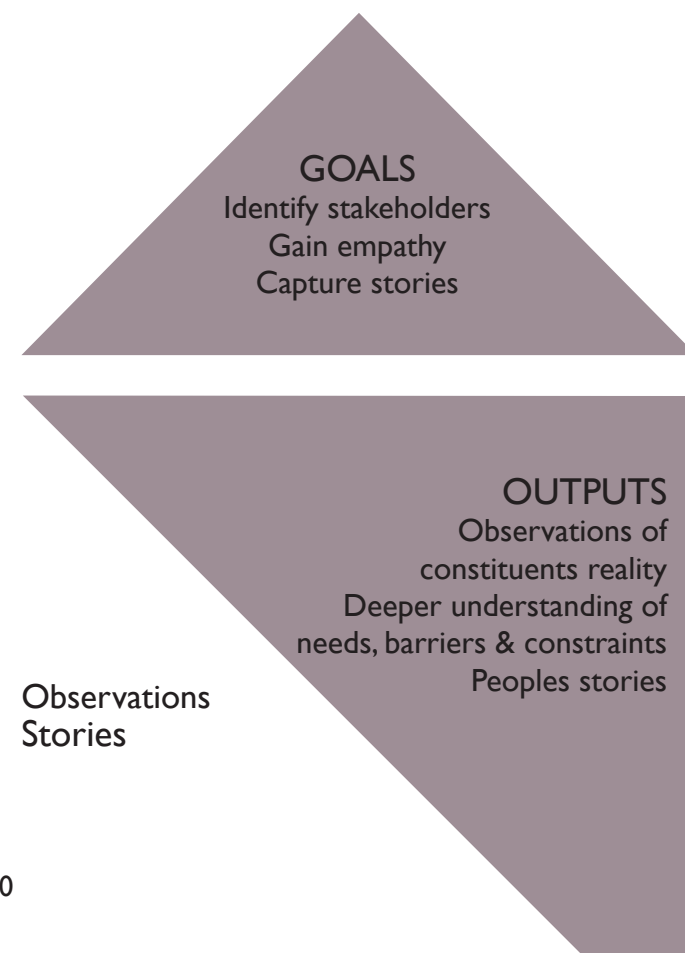


Figure 6. Illustration of HCD phases along the project process (based on illustration IDEO 2012, p. 8-9).

HEAR PHASE

The first phase Hear includes preparation and conduction of fieldwork, collection of stories and inspiration from people and to understand their needs, dreams and behaviors. During this phase IDEO's toolkit uses qualitative research methods to engage people in their own context to understand the issues deeper. Qualitative research methods are good at revealing the hidden information and useful in early stages when the researcher doesn't know of all possible answers. It can help unveil sensitive subjects such as people's economic, social and cultural opportunities as well as their barriers. Important to notice is that qualitative research methods don't determinate the average behaviours or attitudes since the research is only committed in a small group, not large enough to be of statistical significance. In the early stages of the Hear phase the qualitative methods are used to inspire and bring up intuition about new ideas and opportunities. In the later stages the methods can be used to quickly understand people's response to proposed solutions and ideas and their potential (IDEO 2012, p.29-34).



CREATE PHASE

During the Create phase the stories and inspiration will be translated into frameworks, opportunities, solutions and prototypes (IDEO 2012, p.11). The Create phase is about moving from research to real solutions though a process of interpretation and synthesis. The process will narrow down the information received during the previous phase and translating it to future opportunities. When the opportunities are defined the design team will brainstorm solutions and make a few of them more concrete through prototyping. During the create phase the solutions are formed only with the lens of Desirability in mind.

The create phase moves through four different stages, synthesis, brainstorming, prototyping and feedback. Synthesis is the act of understanding things seen and heard during the first phase. With the synthesis it's possible to establish a new perspective and recognize opportunities for innovation. The second stage brainstorming, allows the group to think freely about an issue. To come up with a few great solutions often requires brainstorming of a 100 mediocre ideas. The third step is prototyping, and is a method for making solutions tangible fast and to a low investment. By creating many different prototypes of the different aspects prevents the team from getting too attached to the idea early in the process, as well as giving people the possibly to give constructive feedback. For the HCD process feedback is essential and brings the participators back in the design process, inspiring them to develop the solutions further (IDEO 2012, p. 81-82).

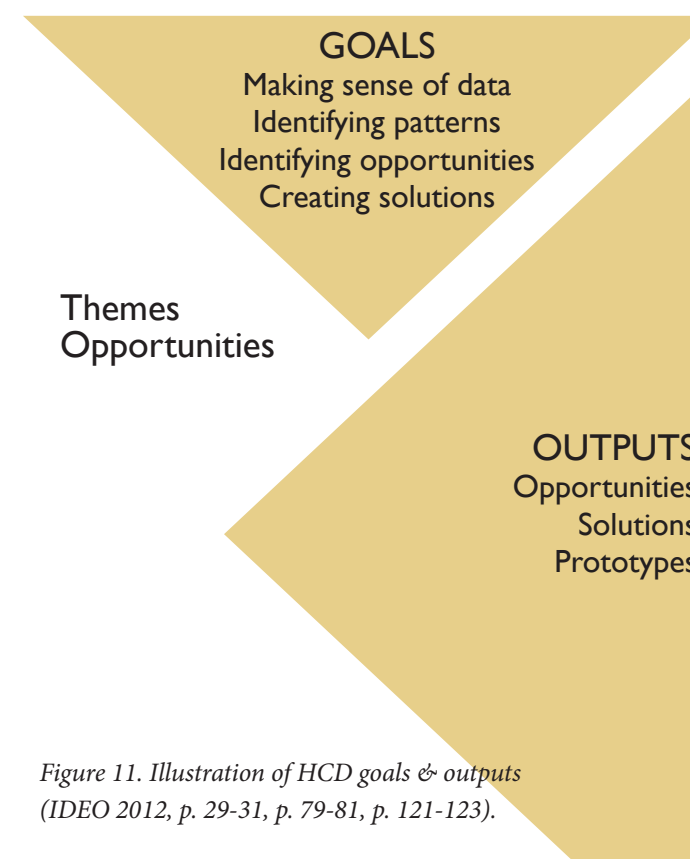
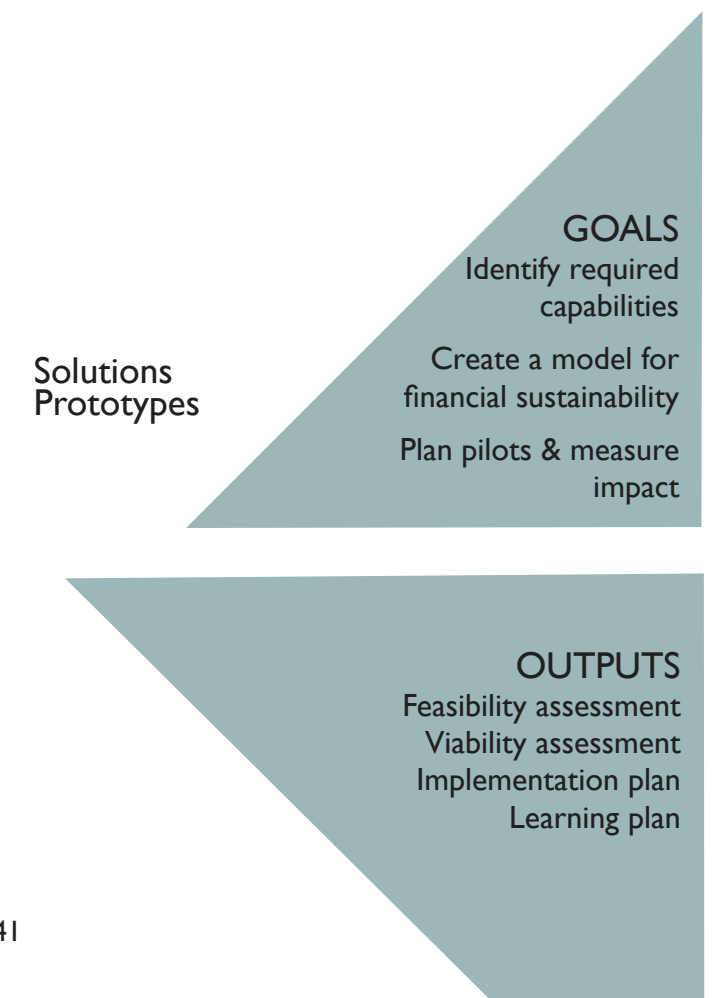


Figure 11. Illustration of HCD goals & outputs (IDEO 2012, p. 29-31, p. 79-81, p. 121-123).

DELIVER PHASE

The third and last phase is the Deliver phase. During this phase the design solution will be evaluated through cost modelling, capability assessment and planning of implementation (IDEO 2012, p.11). During this phase it's important to make sure that the solutions provided are well implemented and can be sustained over a long term. This is done by creating financial models and a plan for recurring learning opportunities.

One way to try the solutions and models in the real world is to design a pilot of the model informing and paving the way for the real model. This is done in order to gain a deeper understanding for the system, what partners that could be engaged in the final solution, what resources that are required and improvements that can be done. It's likely that many pilots and prototypes will be required to find a good support system for the design solution. During the deliver phase the key is to encourage future development, evaluation and iteration for the design solution to stay grounded in the real-world and to continue to make impact.



PEOPLE, PLANET AND PROSPERITY- SUSTAINABLE DESIGN TOOLKIT OF SHIFT

SHIFT is a non-profit South African-Swedish Design Company based in Cape Town, South Africa. SHIFT aims to empower youth and under-resourced communities by providing them with skills, knowledge and confidence through collaborative practices targeting development challenges. To achieve their aim SHIFT has developed a toolkit inspired and developed from several organizations working with sustainable design such as IDEO, INDEX: Design to Improve Life, the Designers' Accord and the Swedish Industrial Design Foundation.

SHIFT's toolkit is divided into three cornerstones; *People, Planet and Prosperity*.

Under the first cornerstone *People*, the toolkit focus on innovative design solutions targeting the Millennium Development Goals together with the IDEO's design process of HCD with the phases Hear, Create and Deliver. Under the second cornerstone *Planet*, the toolkit focuses on sustainable green design solutions and especially the Cradle-to-Cradle method. The Cradle-to-Cradle method is about creating economical, industrial and social systems that not only work efficiently in the green aspect but also are waste free. With the last cornerstone *Prosperity*, the toolkit focuses on co-operative business models. The co-operative business model has an open and voluntary membership and is based on values of democracy, equality, self-responsibility and solidarity. The profits made through the activities of the members are invested in community development to generate sustainable livelihoods (SHIFT 2012).

TECHNIQUES OF SHIFT

Based upon the toolkit SHIFT has developed their own approach and specific methods suitable for the type of projects they specialize in within the South African context. Many of SHIFT's previous projects have been associated to schools located in the townships. In general their projects have a rapid implementation process taking approximately 1 to 10 days to carry out, though with a lot of organisation and planning required.

SHIFT also arranges workshops and operates as facilitators at different events related to social innovation. Depending on the type of project the SHIFT team collaborates with several of other organizations and actors. The SHIFT's implementing techniques are based upon different games and smart innovations to generate activity and connection. Important methods and tools they use on a reoccurring basis are the Sunshine Cinema, the Litre of Light and seating made out of tyres.



Through the mobile solar powered projector **Sunshine Cinema** SHIFT has arranged different events with showings of informative movies for the community.



The Litre of Light is an innovation made of whatever recycled material one could come up with. The design is very simple consisting of any kind of see through container filled with a mix of water and chlorine. The see through container should be placed in a hole on the roof, when the sun reflects in the liquid, light is spread without any electricity. The chlorine is used to eliminate algae blocking the sunlight.



Tyre seats is an easy way to create affordable seating made of cheap materials often found in the townships. The process of making tyre seats can easily be passed forward to others making it an ideal design solution to use in workshops.

3

METHOD

A CASE STUDY OF HUMAN CENTERED DESIGN

Chapter three describes the different methods used for conducting this thesis. The main body is based on the case study methodology to examine the use of participatory methods to create opportunities for social development in Cape Town, South Africa. This chapter will explain the benefits of the case study method and how it was used in this specific case. Further the chapter presents the other methods used within the case study. At last a discussion of the different methods, their limitations and strengths encountered during the work process is presented.



Preparations for a workshop within the HCD-project at SHIFT's office in Cape Town centre.

THESIS OVERVIEW

This thesis is a part of the Minor Field Studies program funded by the Swedish International Development Cooperation Agency (SIDA). The purpose of the program is to give Swedish students the opportunity to gain knowledge and understanding for developing issues by conducting field work for their bachelor or master thesis in a developing country.

The thesis was carried out from February 2015 to November 2015 and the work could roughly be divided into three stages. At the first stage preparations for the field work were done in Sweden, at the second stage 8 weeks of field work were conducted in Cape Town, South Africa and at the third stage compilation of the thesis was done in Sweden (see figure 8).



Figure 8. Schematic overview of the thesis work process

CASE STUDY

A participation process in urban planning and design is a complex subject and that often involves several actors and stakeholders. When dealing with participation project many factors contribute to the process. The project is not an isolated island; its conditions and outcomes are highly affected by prevailing planning laws, economy, political situation, governance, culture and social dynamics. Johansson (2003) claims that the case study methodology is a useful method when it comes to understanding the complexity of a single case since it include several methods. Today the methodology is commonly used in a wide range of subjects including economics, psychology, and anthropology as well in several practice oriented fields. Johansson states that the main feature of the case study methodology is triangulation, the combination of methods, strategies, techniques or theories. Triangulation illuminates the different angles of a case and is important to ensure the validity of a case study (Johansson 2003). The case study method is chosen as the main method for this thesis because of the complexity of the subject as well as for the possibility of using several methods through triangulation.

The case study of this thesis concerns the use of community participation in urban planning and design in Cape Town, South Africa. The focus of the study is a community design project in Makhaza, Khayelitsha and the participatory method Human Centered Design. To understand the project and its context we have studied

the relevant conditions in multiple scales; city level (Cape Town), neighbourhood level (Khayelitsha) and further to plot level (project site in Makhaza).

To get a deeper understanding of the subject and to ensure the validity of the research following methods were used: literature review, key interviews, participatory observation and the HCD-method. These methods will be described further in following paragraphs.



Figure 9. Triangulation of methods

LITERATURE REVIEW

The main body of the literature for the thesis is primarily based on online publications such as reports, articles and dissertations together with printed sources. The articles and dissertations were found through the SLU library database Primo and the scientific databases Google Scholar and Science Direct. Relevant reports from different international organizations and governmental agencies were found either through the chosen organization or agencies’ website or through references from other published theses. The printed sources were found at the library of The Nordic Africa Institute in Uppsala. Within the case study two main literature reviews were conducted. To gain an understanding of the contextual background of South Africa, the first literature search covered two main aspects:

- Culture, Politics, Economy and History of South Africa
- Governance and Urban Planning in Cape Town, background and challenges of the future

The second literature search was carried out to understand the theoretical framework of participatory practices and in particular Human Centered Design. The following subjects were studied:

- Participation in planning and design
- Human Centered Design and its desirable outputs

KEY INTERVIEWS

During our case study we conducted interviews with key informants. A key informant is a person how can provide expertise information about a certain subject. The information is often gathered in an unstructured or semi-structured interview (Johnson 2013). Semi-structured interviews have an adaptable structure based upon a topic or a theme rather than a set of specific questions. The aim with a semi-structured interview is to ensure flexibility, both in terms of what questions are asked and what areas that might be followed up later on with other interviewees. In this way the interview could be shaped both after the researcher’s interests and the interviewees own knowledge (Lewis Beck, Bryman & Futing Liao 2004). For this thesis the interviews were used to serve three main objectives:

- To gain understanding of the urban planning system in Cape Town and the municipalities approach to participatory methods
- To get insight of different stakeholder’s opinions as well as the dynamics between them
- To gain expertise knowledge regarding urban planning at the local community scale

Interviews with key informants were carried out with local urban planning authorities in Cape Town. Two urban planners and one landscape architect were interviewed during two meetings. The interviews took place at the office of City of Cape Town and lasted for around an hour each. Questions were asked about topics

concerning the municipality’s approach to community participation and urban planning, particularly in Khayelitsha (see Appendix 1 for sample questions). The information obtained from the interviews is included in the background. To attain further insight and information of the neighbourhood scale and urban planner from a non-governmental organization outside of the project was interviewed. The questions of the interview concerned the background of Khayelitsha and on-going work regarding community participation within the area (see Appendix 1 for sample questions). For a presentation of the actors see Appendix 2.

PARTICIPATORY OBSERVATION

As a part of the case study a site specific project was chosen to understand how the participatory method Human Centered Design (HCD) could be implemented. The chosen site-specific project regarded the development of a youth activity centre in the area Makhaza, Khayelitsha. This was done through collaboration with the non-profit company SHIFT specialized in sustainable design in Cape Town. To gain knowledge and insight of both the method of HCD as well as the different dynamics within the project the method participatory observation was chosen. Participatory observation is a qualitative research method traditionally used in the ethnographic field to study populations. The method can be used to understand multiple perspectives within a community as well as the relationship between them. To get this understanding the researcher both observes and participates, to various extents, in a community activity. The researcher takes objective notes on what they see, informal conversations and interaction between the community members (FHI360 2005, p.13).

In our case meetings with the stakeholders of the project were continuously held along the project process. In total ten meetings were held with seven of them taking place at the project site. Around 5 to 15 persons from different target groups attended the meetings affecting the outcomes and dynamics from time to time. We participated in the project as and observers of the design process and at the same time as landscape architects, able to provide with our expertise. Our documentation of our study of the project process was done through continuously writing a detailed project diary as well as making sketches and taking pictures.

HCD METHODS IN THE MAKHAZA PROJECT

During the case study several methods were used in the Human Centered Design project in Makhaza. As mention in chapter 2 the design process of HCD could be divided into three different phases; Hear, Create and Deliver. Even though the method is divided into three phases the process of a HCD project is more spiralling rather than linear with the phases overlapping each other. After finishing the fieldwork, the whole project was analysed in relation to HCD by identifying the phases Hear, Create and Deliver as well as the lenses Desirability, Feasibility and Viability. This was done to enable and ease our investigation of the HCD method and its feasibility within the site-specific project process. The following section is a presentation of the different methods used in the Makhaza project.

Hear phase

The first phase Hear is about identifying the stakeholders, gaining empathy and capturing stories to get a deeper understanding of the reality with its needs, barriers and constrains. In the Makhaza project a site survey and a walkabout guided by the community was carried out to understand the existing psychical conditions as well as capture people's knowledge about the soundings. This information was later analysed though a SWOT- analysis. A SWOT-analysis breaks down the investigated material into internal and external factors, either favourable or harmful by categorizing the factors into strengths, weaknesses, opportunities and threats (Boverket 2015). Several SWOT's were carried out to target different perspectives and further determine the key points of the obtained information.

During the meetings with the community several enabling methods, customized to the prevailing situation by SHIFT, were used. Other methods used during the Hear phase were group discussions, workshops and list making.

Create phase

The second phase Create is the stage when to make sense of the collected data and when to identify patterns and opportunities and further create openings, solutions and prototypes. In the Makhaza project group discussions and list making were foremost used to come up with solutions, ideas and opportunities for the development of the activity centre.

Deliver phase

The third phase Deliver is about identification of required capabilities, creating models for financial sustainability and planning pilots measure the impact. This is done to enable a feasibility and viability assessment to further be able to make implementation and learning plans for establishment of long-term maintenance. When entering phase Deliver different workshops were held and a crowd funding eventually was put up. Based upon the collected data and analysis we made a general design proposal in order to inspire the people through easing the picture of the vision.

DISCUSSION OF METHODS

In following part, the methods of this thesis are discussed. Since the result concerns the design process of HCD with its different phases and methods a more extensive discussion of the method of HCD will be presented in Discussion, Chapter 7.

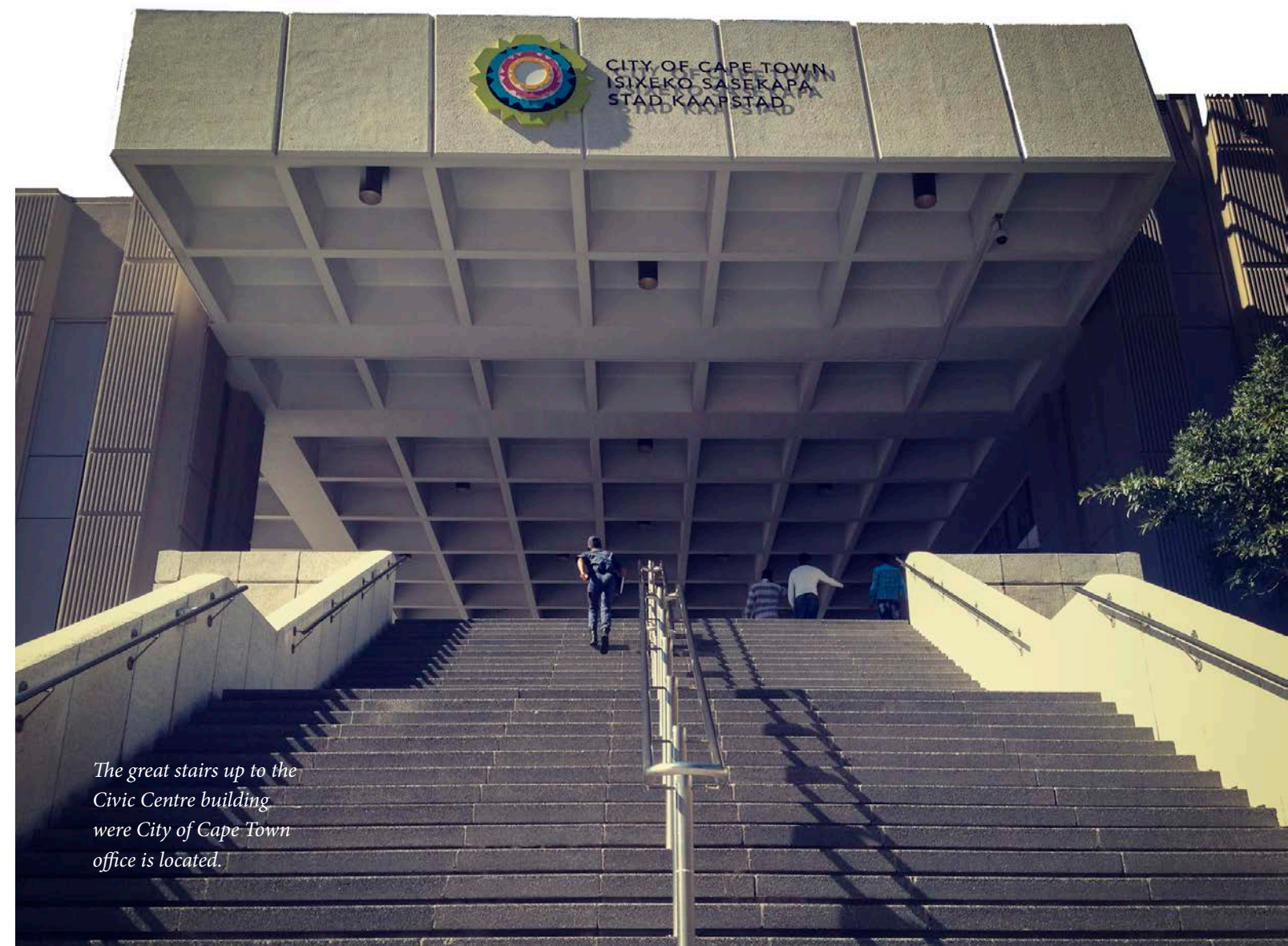
The case study method is useful when studying complex processes and situations. Whether one can make a generalization of the result depends primarily on the selected case. The case chosen for this thesis was the use of participatory methods to create opportunities for social development in a project in Makhaza, Cape Town, South Africa. The choice of case could be criticised in some aspects. The specific location of the study in Cape Town may affect the result. In relation to other places in South Africa, Cape Town is well known for an open minded freethinking approach with a force to adapt to new ideas. This may be an easing factor for the success of the study but also leading to a research with a less general result adaptable in other contexts. However, since participatory methods are a growing approach within the field of design and planning it is an interesting case to study and evaluate. We hope that other organisations working with community participation could benefit of the findings of our research.

The case study included several methods. Due to the complex topic of participation some methods tended to carry more weight than others within the study. We got the great opportunity to participate in an actual project taking up most of our time during the field study. Because of the key interviews outside of the project were carried out in less extent. For a more accurate and scientifically proven result, a wider range of interviews should have been carried out. Though the interviews

accomplished were of great value and provided an understanding of community participation and planning matters in different scales as well as an insight into current social issues, politics and everyday occurrences. By participating in a real project where the participatory method HCD was carried out we were able to get a deeper understanding of and insight in the investigated question. One reoccurring challenge was to define and deal with our role and responsibility within the project. Since we'd chosen an approach through participatory observation we contributed to the project as both landscape architects and observers of the process. It took some time to figure out how to adapt the chosen method to the project but eventually we managed to find a convenient balance. In general, we split the work between the two of us, one being more present and attendant while the other one observing, making notes and taking pictures. Sometimes it became very complicating due to the meta-structure of the research but without using the method participatory observation we had never been able to get the insight and understanding of the project and the dynamics that we in the end achieved. The presented data from the participatory observation is based upon our own individual sense and judgement of the project dynamics of the case and its success.

Coming to South Africa as a white European foreigner brought some difficulties while working within the context. Due to the country's past of apartheid leading to the segregated society it is today some topics were sensitive to bring up. Communication between different stakeholders was sometimes lacking and it was quite hard for us coming from outside to understand the conflicts, dynamics and relationships. Within the project the language barrier was a major problem since most of the people within the project only spoke Xhosa and barely any English.

It was nearly impossible to predict the extent of the project in advance due to its context and participatory nature. It was also hard to tell how the actual result would turn out, the major focus was rather laid on the project process. Our fieldwork was limited to the duration of 8 weeks and after attending our last meeting the project was far from completed. The project kept on running but the fact that we weren't able to experience the result and the whole third phase Deliver affects the dependability of the study. The greatest strength of this thesis is the combination of diverse methods. Our multi-method approach has proven successful when it comes to the reliability of the study and given us grounded insight into real world matters.



The great stairs up to the Civic Centre building were City of Cape Town office is located.

4

CONTEXT

SOUTH AFRICA THEN AND NOW

Chapter four begins with an introduction of South Africa, including basic facts about the country, climate, and nature, political and economic structure. The chapter continues with a history section, focusing on colonization and Apartheid politics. Although the main subject of this thesis is participation, the history of South Africa is key when it comes to understanding the prevailing conditions for urban planning and the socio-political context in which our project exist. The next section covers contemporary Cape Town, its administrative structure, conditions for urban planning and sums up the main challenges in urban planning and governance for the city.

*The old City Hall of Cape Town
was built during the colonial era.*



THE REPUBLIC OF SOUTH AFRICA

South Africa, officially the Republic of South Africa (RSA), is located on the southern end of the African continent (see figure 10). The country has a long and relatively even coastline, stretching along the Indian Ocean and the South Atlantic Ocean. South Africa borders to Mozambique and Swaziland in the east, Botswana, Namibia and Zimbabwe in the north, and is surrounding Lesotho (Nationalencyklopedin 2015).

CLIMATE AND NATURE

Most parts of South Africa consist of vast high plains with an altitude between 900 to 1,800m. The core of the country is kept separate from the coastal plain by a steep escarpment (The Great Escarpment) forming majestic mountains in the south and east (BBC Weather 2007). The country is mainly located in the sub-tropical zone of the Southern Hemisphere, except from the south western part that has a Mediterranean climate with rainy winters (NE 2015). The eastern parts are warmed by the Agulhas current flowing from the tropical latitudes, while the western shores of South Africa are cooled by the Benguela current that flows northwards from the Southern Ocean (BBC Weather 2007).

In the summertime (December- February) temperatures ranges from 21- 24°C, in the western parts from 24– 29°C. During the winter the temperature is about 10°C, but in the eastern parts much higher because of the warm Agulhas Current. Frost and snow occur in the highest parts of South Africa (NE, 2015). Rainfall is modest, with the highest precipitation in the eastern parts and gradually decreasing westwards. The Western, Eastern and Northern Cape Provinces and the Gauteng Province are mostly semi-deserts and have unreliable and low rainfall (BBC Weather 2007).

The South African landscape is one of the most diverse in the world, especially in the Western Cape Province (NE 2015). The Cape Floral Kingdom is one of six floral kingdoms in the world supporting 9 600 plant species, 70 per cent of them can't be found anywhere else on the planet (Fauna & Flora International 2015). The landscape and vegetation varies greatly within South Africa with nine biomes being identified (SANBI 2014). The country has 20 national parks and many natural reserves. One of the biggest and most famous national parks is Kruger National park with its rich mammal fauna including the Big Five; lion, rhino, buffalo, elephant and leopard (NE 2015).

POLITICS AND ECONOMY

The first democratic elections were held in South Africa in 1994. The Republic of South Africa is a unity with a mix of central government and federalism where nine provinces has authority in matters regarding education, culture and economic planning. The constitutional law came into force in 1997 and stated that the legislative power should be held by the two chambers of the parliament: the National Assembly of 400 members elected on the basis of proportional representation every fifth year and the Senate's 90 members, ten from each province elected by the province parliaments. The President is head of state and head of government and is elected every fifth year. The President can be re-elected once (NE 2015).

As expected, the first democratic election taking place in South Africa in 1994 was won by African National Congress (ANC) and Nelson Mandela with 62, 7 per cent of the votes. The Nationalist Party (NP) that had ruled the country under apartheid never succeeded to gain

THE REPUBLIC OF SOUTH AFRICA SINCE 1961

Area: 1, 2 million km²

Population: 53, 7 million (2014)

Capitals: Bloemfontein, Cape Town, Pretoria

Major languages: zulu, xhosa, afrikaans, english

Government type: republic

Head of state and government: Jacob Zuma ANC (president)

Life expectancy: 58 years; women 60 years, men 56 years

Infant mortality: 45 per 1000 live births

Urban population: 62 % (2013)

Land use: agricultural (12 %), forest (5%) and other (85%)

(Source: CIA 2015).

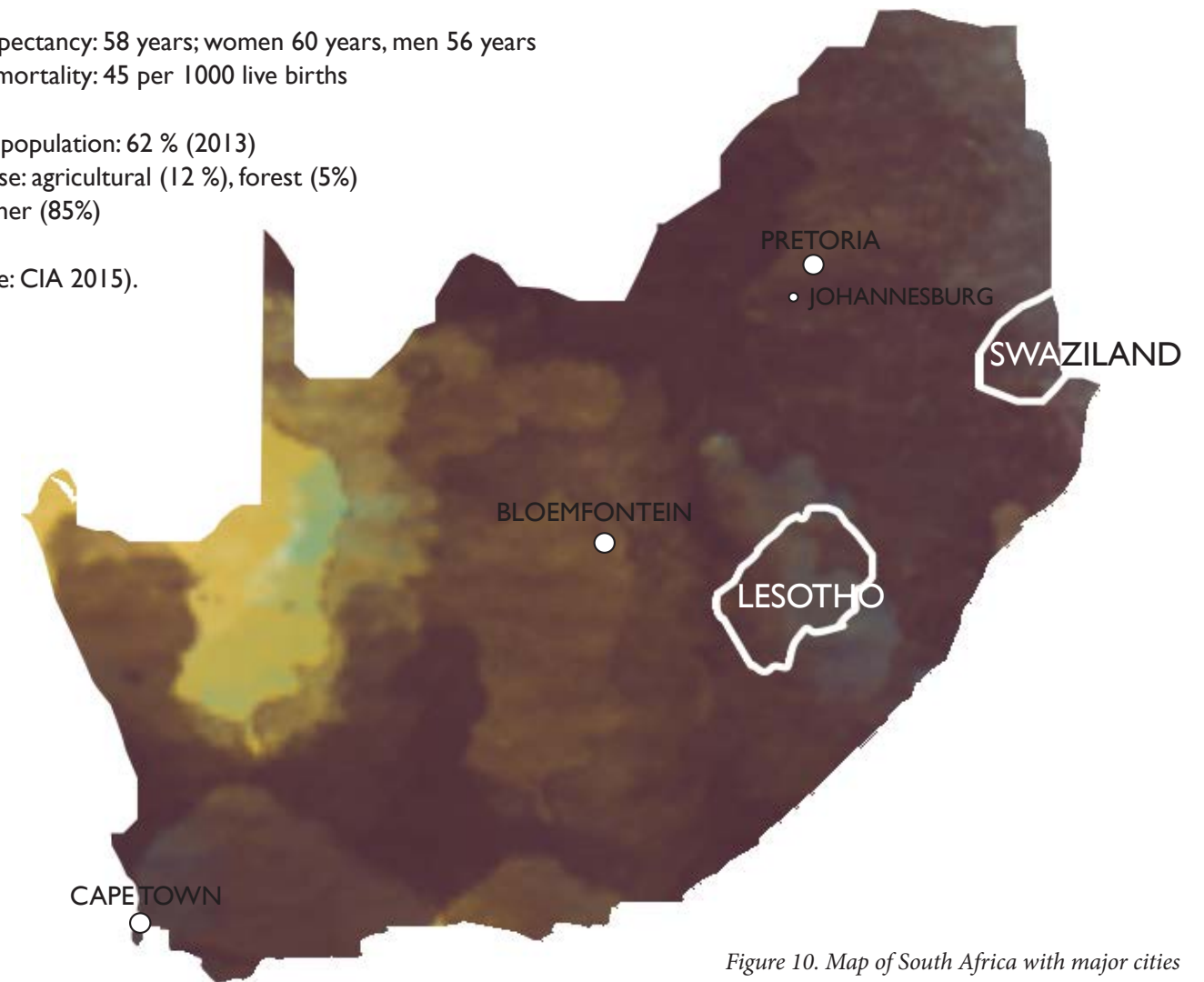


Figure 10. Map of South Africa with major cities

support from the black population and was dissolved in 2005. Over the years the party system has remained stable but has mainly been defined by race. ANC's radical platform has gradually been replaced with a more market orientated direction causing criticism from their allies South African Communist Party (SACP) and the union movement. ANC have managed to keep their strong support and governmental power but have suffered from internal divergences. The current president Jacob Zuma is at his second term of office being elected as party leader in 2007 and appointed president after the general election in 2009. The official opposition party is the liberal Democratic Alliance (DA) that got 22, 2 per cent of the votes in the general election in 2014 and became the biggest party in Western Cape with 59, 4 per cent (NE 2015).

South Africa is one of the largest economies in Africa along with Brazil, Russia, India and China member of the BRICS, an association of emerging economic powers (BBC 2015). Compared to the rest of the world South Africa is a middle income market with great supply of natural resources and has well developed sectors in finance, communications, legal, energy and transport. The modern infrastructure provides the country's major cities with goods quite efficiently but the unstable electricity supply is preventing economic growth. In 2014 economic growth was just above 1.5 per cent. South Africa is facing many challenges; rates of unemployment, poverty and inequality levels are among the highest in the world. Official unemployment is nearly 25 per cent of the work force and much higher among the black youth (CIA 2015).

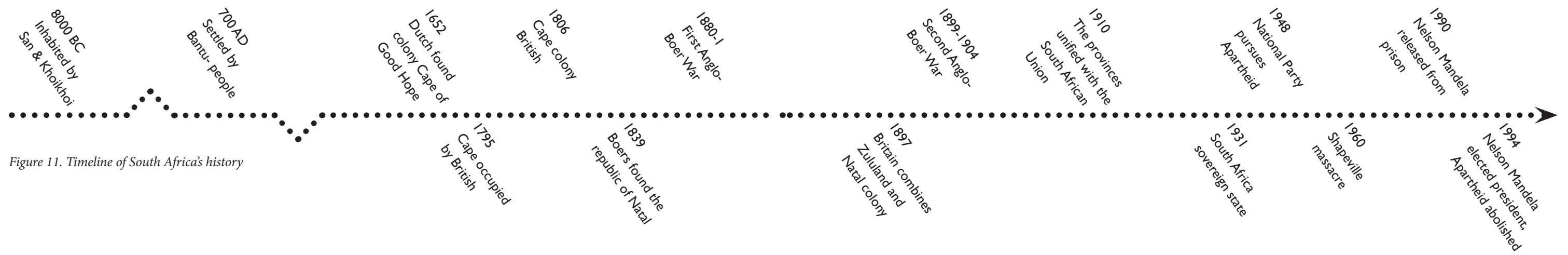


Figure 11. Timeline of South Africa's history

HISTORY

Thousands of years before the written history of South Africa began, with the arrival of the European seafarers, the San and Khoikhoi people lived on the southern tip of Africa. The San people were hunters- and gathers and the Khoikhoi herders, whom had learned cattle breeding from northern African tribes and wandered into South Africa. The San and Khoikhoi were closely related and often mixed under the name Khoisan. Later during the first centuries of our Current Era, the Bantu people, originally from Zimbabwe settled and started farming. These indigenous people are the ancestors to the tribes Zulu, Xhosa, Sotho and Tswana living in South Africa today (NE 2015).

COLONIZATION

The history of South African colonization started in 1652 when the Dutch East India Company based their merchant fleet in Cape Town. The merchant base soon evolved into a colony which later grew with the immigration of Germans and French. Together the white population created their own culture and language; Afrikaans developed from the Dutch language. The Khoisan people often came in contact with the Afrikaans inhabitants, in the beginning through peaceful trading, later during conflicts about landownership and livestock. The Khoisan people were driven away to the desert areas in the north, polarized as servants and contaminated by new diseases from Europe such as smallpox. It was common that European men took Khoisan women. The ancestors of these became the “coloured” people whom had greater rights than the black population but still discriminated by the whites (Government of South Africa 2013).

Until the end of the 18th century the colonists settled further east and north as cattle farmers and became known as Boer people. In the Eastern Cape the trading with the Xhosa kingdoms evolved a series of wars, which gradually forced the Xhosa people to give up their land. In the year of 1795 Great Britain took control over the Cape colony during the war with revolutionary France, whom had occupied the Netherlands. The Netherlands later managed to gain back the colony for a short period of time, between 1803- 1806. The Cape colony finally became British 1806 (NE 2015).

During the British rule changes were made, the servants got some protection against their masters and they were given restricted civil rights. The slavery was abolished in 1833 and 39 000 slaves were released. This development didn't please the Boer people and they wanted economical compensation for the loss of labour force. When the British didn't accept Boer's demands the Boer families moved north and north east, to make a new home away from British control. This event is known as “The Great Trek”. The region where the Boer people came to was shattered and quite easily concurred because of many convulsions amongst the African tribes. The land along the Oranje and Vaal rivers became the main settlements and later the states of Oranje and Transvaal became Boer sovereign republics. During the same time the Cape colony transited to autonomy with electoral laws allowing non- whites to vote in the parliament if they met certain economical standards, in the Boer republics no liberal development was made (Government of South Africa 2013).

The discovery of diamonds and gold in the 1870 and 1880s changed the South African economy also affecting the social and political conditions. During 1875- 1900, the white population tripled in numbers and the need for African labour at farms and mines grew. This development led to recruitment of male workers from other African countries and British colonies such as India. Many of these workers later stayed in South Africa. The discovery of diamonds and gold made South Africa worth exploiting, and the British decided to gain control over more land. This was made through victory in the Zulu war (1879) and Boer war (1899-1902). In 1910 the former Boer republics, the Cape and Natal provinces unified to the South African Union (NE 2015).

THE RISE AND FALL OF APARTHEID

As an attempt to overcome the conflicts within the white population in the new union, the first Prime Minister Louis Botha introduced segregation policies against the non- white population (NE, 2015). Before 1910 the laws and policies used to implement racial segregation had varied from province to province but the situation changed in 1913 when Botha introduced the Native Land acts. The Native Land act prevented the black population from owning land outside specific land reserves (Staff 1998, p. 45). The act restricted 75 per cent of the union's population to live on 7, 5 per cent of the land in South Africa. All the urban areas and the most fertile agriculture lands were allocated to the white population (Vestbro 2012). Later the Native Urban Acts were passed in 1923 with the aim of creating separate residential areas for the black population. Harrison (1992) state that the act did not only empower local authorities to reserve land for the black citizens and provide them with housing in the urban periphery, but also the act restricted them to

move into urban areas through an influx control system. During the 1940's South Africa industrialized rapidly and African workers flocked to the metropolitan areas. This together with the up rise of the African freedom movement, foremost through African National Congress (ANC) created fear and aggregation among the white population. The ANC youth league, with Nelson Mandela and Oliver Tambo amongst others, started mass protests and in 1946 the mine industry was paralyzed by the strike of black workers (NE 2015). The government responded to the white aggregation with introducing stricter policies against integration with the Asiatics Land Tenure Act in 1946 which later lay the groundwork for the Group Areas Act (Staff 1998, p. 46).

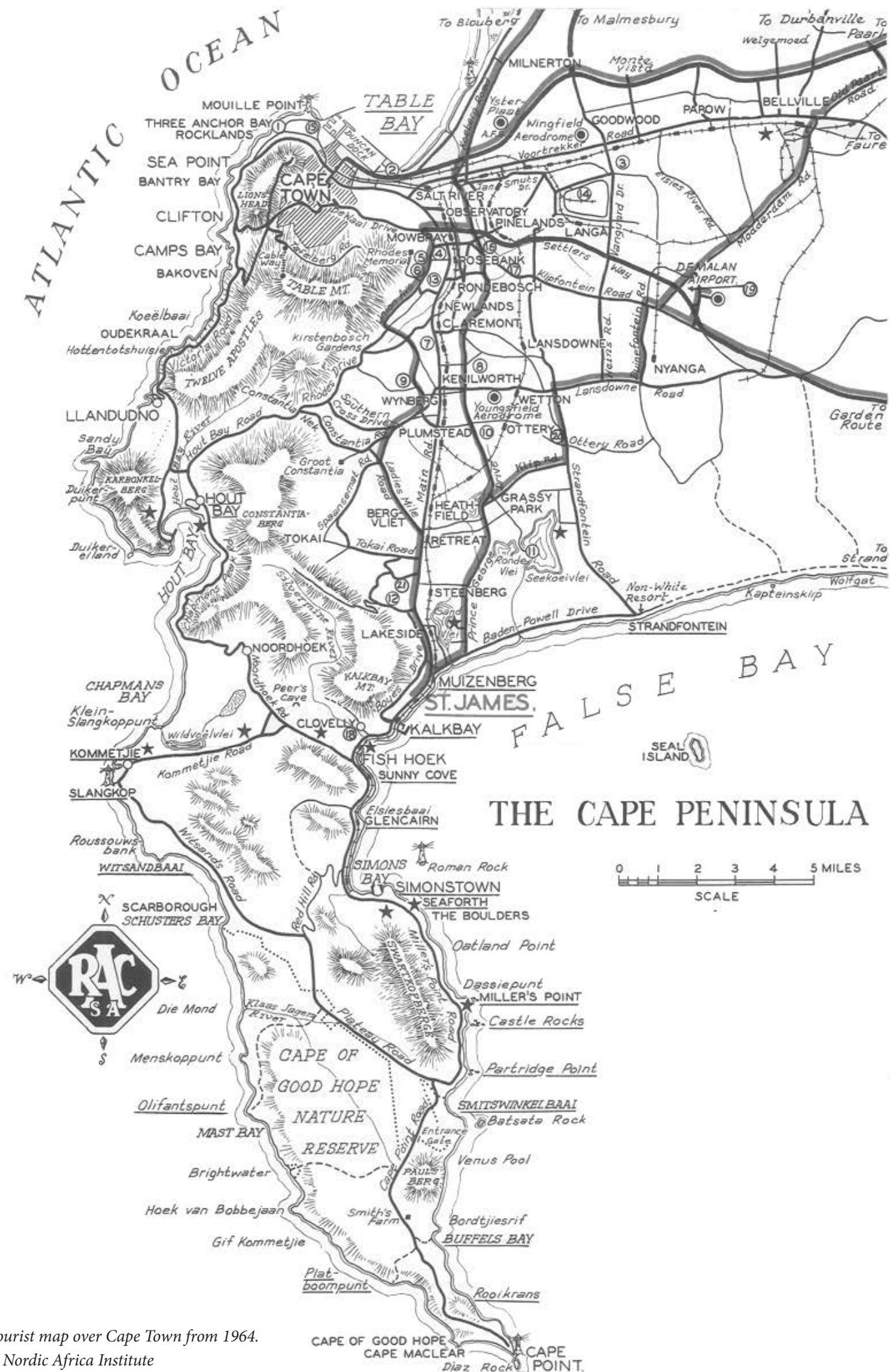
In the all-white elections held in 1948 the open racist National Party won with their apartheid politics. The new government immediately started to enact laws and policies to establish the apartheid state, mixed marriages were banned, compulsory race classification introduced as well as separate amenities for the various races (NE 2015). The most significant act introduced in 1950 was the Group Areas Act (GAA) that produced a fragmented and racially unequal urban form. Under GAA all urban land was divided into separate areas for Blacks, Coloureds, Asians and Whites. During 1950 and 1984 the implementation of GAA resulted in about 630 000 people and over 2 771 traders being evicted or relocated from their business or homes (Staff 1998, pp. 48-50).

The apartheid politics were vehemently opposed by all non-whites and met with civil obedience and strikes. In 1960 a peaceful demonstration in the neighbourhood of Sharpeville, against the pass laws degenerated and 69 black people were killed and 180 injured by the police. The Sharpeville massacre became a symbol of the anti-apartheid movement and led to international protests. The National Party responded with banning the ANC, Pan-Africanist Congress (PAC) whom had organized

the demonstration, and the relatively strong communist party. Leaders such as Nelson Mandela were sentenced to lifetime imprisonment. When the prime minister of Great Britain joined the critics South Africa left the British Commonwealth and declared itself a republic in 1961 (NE 2015).

During increasing international isolation, the Nationalist Party continued to implement their ideology with the creation of Bantustans, homelands where the black population could live their own "tribal life". Millions of black people were displaced to live in crowded and unfertile land. The aim with the Bantustans was to create cohesiveness within the different tribes and disruption between them so they wouldn't be a threat against the governmental power. During the 1970's the domestic resilience and the international sanctions began to burden the South African government. Protests shook the country and even the white population began to realize that apartheid wasn't sustainable. The government tried to adapt to the new situation with abolishment of certain social segregation laws, so called petty segregation (racial segregation, segregated amenities and some pass laws).

In 1984 a new Trichamberal Parliament was set up, with chambers for Whites, Indians and Coloureds but without suffrage and representation of Blacks. This caused a new wave of protest and the new Prime Minister F.W. de Klerk decided to negotiate with ANC and release Nelson Mandela in 1990. In the first general election held in April 1994 ANC won big and Nelson Mandela became the first president in the free South Africa. The apartheid laws were now abolished, but still visible in the South African society with high unemployment amongst the black population, crime and violence, and uneven distribution of social services such as health care and schools (NE 2015).



Tourist map over Cape Town from 1964.
© Nordic Africa Institute

CAPE TOWN

Cape Town is South Africa’s second largest city located on the west coast, 40 km north of Cape of Good Hope. The city is South Africa’s oldest, often referred to as the “Mother City” and home to the parliament (NE 2015). Cape Town has a key role in South Africa’s growth and development and is a significant centre for economy, business and politics. The city is a preferred residential location and the growth trend is expected to continue, in 2030 the population is anticipated to reach 4, 4 million inhabitants (CCT 2014a).

ADMINISTRATIVE STRUCTURE OF CAPE TOWN

Cape Town metropolitan municipality is governed by a 221 member council. The council is both a legislative and executive body and has the power to make decisions regarding the performance of all the functions and use of powers in the municipality. The city is divided into 111 wards, which elects one member of the council. The other 110 members of the council are elected by a system of proportional party list representation (CCT 2011 p.10). The wards are represented by a ward councillor who is elected by the community. The ward councillors are members of a sub- council, today 24 sub- councils exist

in the municipality. Usually each sub- council consists of three to seven neighbouring wards. The sub- councils assists the municipality to carry out its duties and to exercise its powers on a decentralised basis (CCT 2014b).

The City council of Cape Town (see figure 12) elects an Executive Mayor every 5th year. The Mayor is the head of local government and responsible for identifying the needs of the municipality and recommends the council appropriate actions to fulfil those needs through the budget and Integrated Development Plan (IDP). She or He is in charge of monitoring the administration and reviews the performance of the municipality and delivery of services. The City council also elects the Executive Deputy Mayor, the Speaker and the chair members of the different committees. The Speaker is in charge of Council meetings and responsible for local government participation, mainly through the forums in the wards, by ensuring that they run effectively. The most important functions of the City council are the development and implementation of bylaws, the Integrated Development Plan and tariffs for the budget and services. The council also debates government issues on a local basis, rejects or ratifies proposals (CCT 2011 p.10).

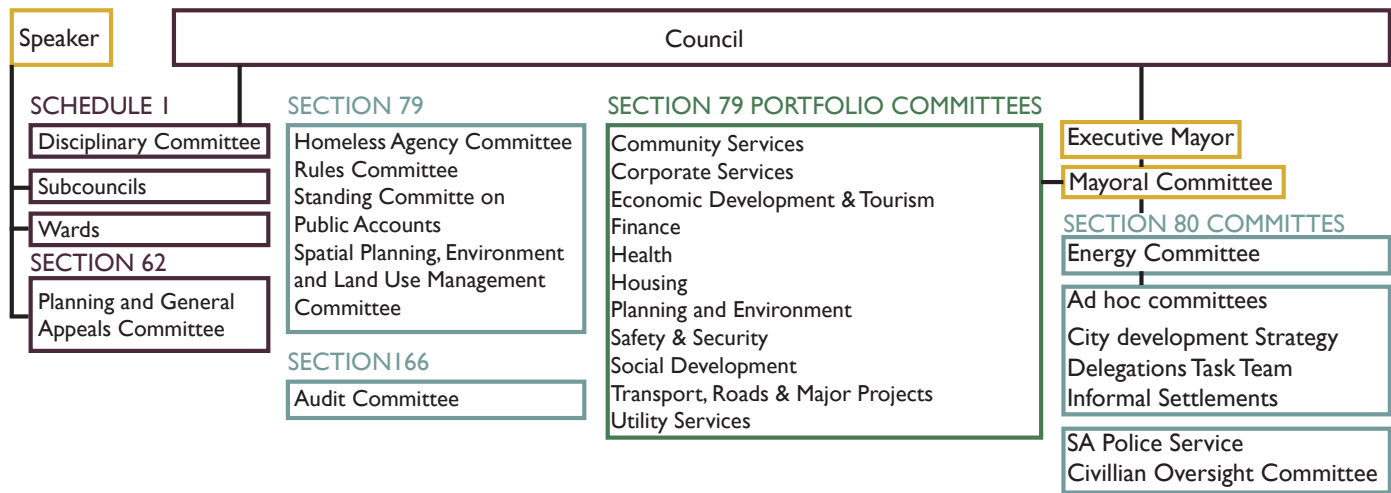


Figure 12. Illustration of Cape Town’s political structure (based on CCT 2011, p. 10).

URBAN PLANNING IN CAPE TOWN

The Directorate of Strategy and Planning is in charge of urban planning in Cape Town from development of long term strategies to approval of development plans. The long and short term development of the city is based on the City Development Strategy (CDS) and spatial development plans (CCT 2011, p. 57-58). One of the most important planning instruments is the Cape Town Spatial Development Framework (SDF). The SDF states the City’s desired future urban development through indication of areas suitable for development, areas that should be protected, and areas where development is possible if it’s done in a sensible manner. The framework aligns with the Integrated Development Plan (IDP), spatially guides and prioritizes investments in infrastructure and social facilities. The SDF is renewed every 10th year (CCT 2014c).

URBAN PLANNING IN THE TOWNSHIPS

The City of Cape Town is divided into eight planning districts (see figure 13), Khayelitsha/ Mitchell’s Plain being one of them (CCT 2014d). Applications for urban development projects in the townships are submitted to the Informal Settlements Department and if approved passed on to the Department of Spatial Planning and Urban Design (SPUD). SPUD is in charge of the projects, writing reports for the tendering process and choosing the appropriate consultants. Most projects are done by consultants since the City of Cape Town only has a few urban planners and architects in house. The SPUD use community participation in some project, usually in the small scale projects because it’s easier to identify the beneficiaries. The participation is foremost done though meetings with community representatives when the framework for the project is set¹

1 Marco Geretto Senior Urban Designer at SPUD, Conversation 17th of April 2015

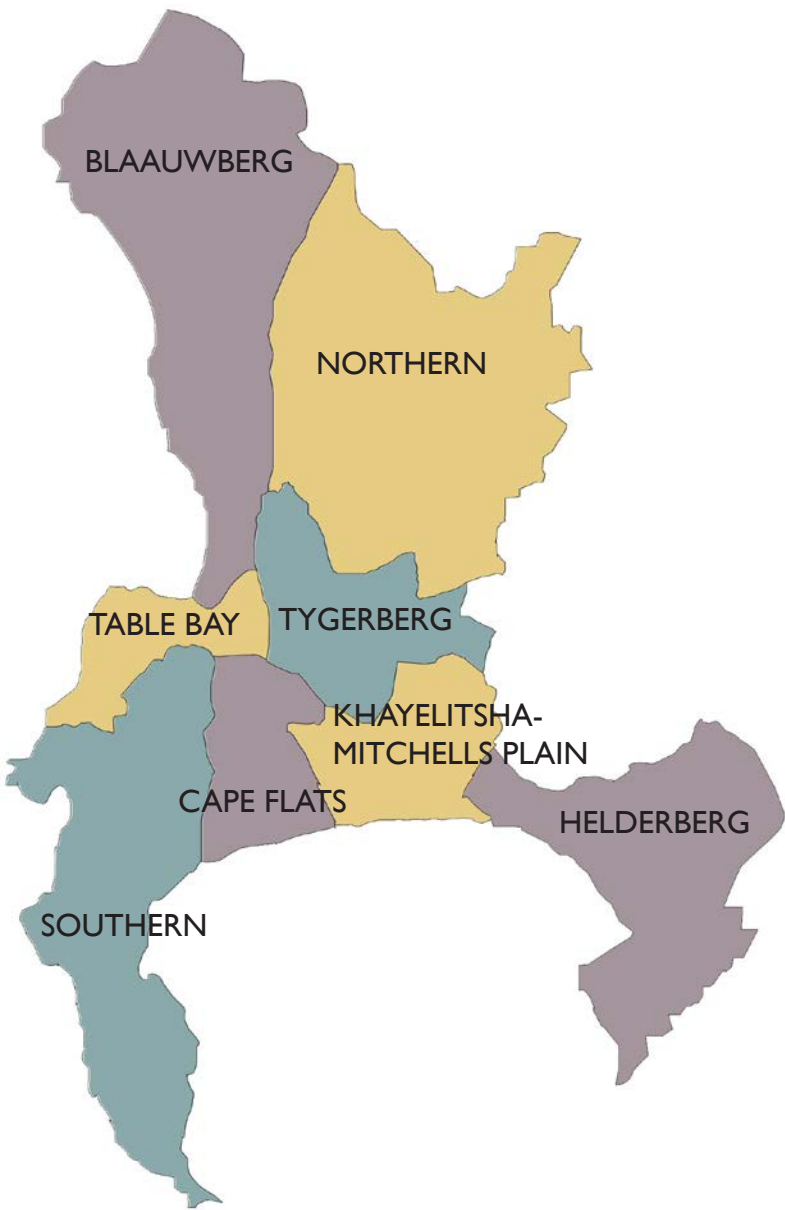


Figure 13. Illustration of Cape Town’s eight planning districts (map based on map CCT 2014d).

1795

During British rule the open channels and sewers is covered with paved streets

The city grows organically in the hands of developers

1848

Company's Garden is overlaid with a Victorian layout

1913

Foundation of Kirstenbosch botanical garden

1934

A centralized town planning department is established

1966

District 6 bulldozed, inhabitants forced moved to the Cape Flats

1994

South Africa's first democratic elections, increasing tourism leads to large scale investments in shopping centers, attractions and luxury facilities

1652

During Dutch rule the city is developed according to the grid pattern style

Company's Garden is established

1838

The residential area District 6 is built in the city center to accommodate released slaves

1900's

Two major influences on city planning; the British garden city movement and American functional zoning, separation of land uses

1923

Native Urban Areas Act, foundation of Langa township

1948

Nationalist Party's victory, urban development aiming for total racial separation

Large scale township development on the Cape Flats begins

1983- 1985

Khayelitsha township is built

2009

Cape Town stadium and several other urban renewal projects are built for the FIFA World Cup 2010

Figure 14. Timeline of Cape Town's urban history

GREEN STRUCTURE

The department of City Parks under the Community Services Directorate is in charge of public spaces and greenery in Cape Town. The department manages 11 district parks, over 3000 community parks, 36 cemeteries, close to 2000 hectares of sensitive nature areas and recreational areas along water bodies and rivers (CCT 2011, p.31).

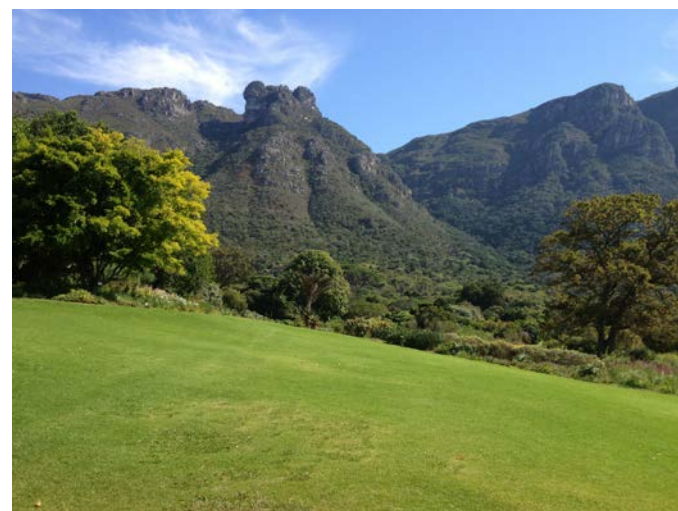
Cape Town offers many green recreational options with Table Mountain National Park located within the city boundaries. One of the bigger parks in the city is The Company's Gardens established in 1652 by the Dutch East India Company originally to supply the merchant fleet with fresh vegetables. The garden was built in a Baroque "kitchen- garden" style, but was later overlaid by a more Victorian layout, a "pleasure garden" during British rule in the mid 18th century. At this time only a part of the park was open for the public and visitors had to pay an entry fee. It was not until the end of the 18th century when the Company's Gardens was taken over by the local municipality that the garden became open for all (CCT 2014e). Today the garden holds many important land marks such as the Houses of Parliament, St George's Cathedral, the slave lodge and the Iziko South African Museum and Planetarium. The garden features the oldest cultivated pear tree in South Africa (1652), a rose garden, an herb and kitchen garden as well as many botanically and historically valuable trees (CCT 2014f).

Another notable park, which is not under the management of The City of Cape Town, is Kirstenbosch National Botanical Garden. The garden was established in 1913 to promote and conserve the unique Cape flora and is situated on the slopes of Table Mountain. Kirstenbosch is managed by the South African National Biodiversity Institute (SANBI) and holds a great variety the South

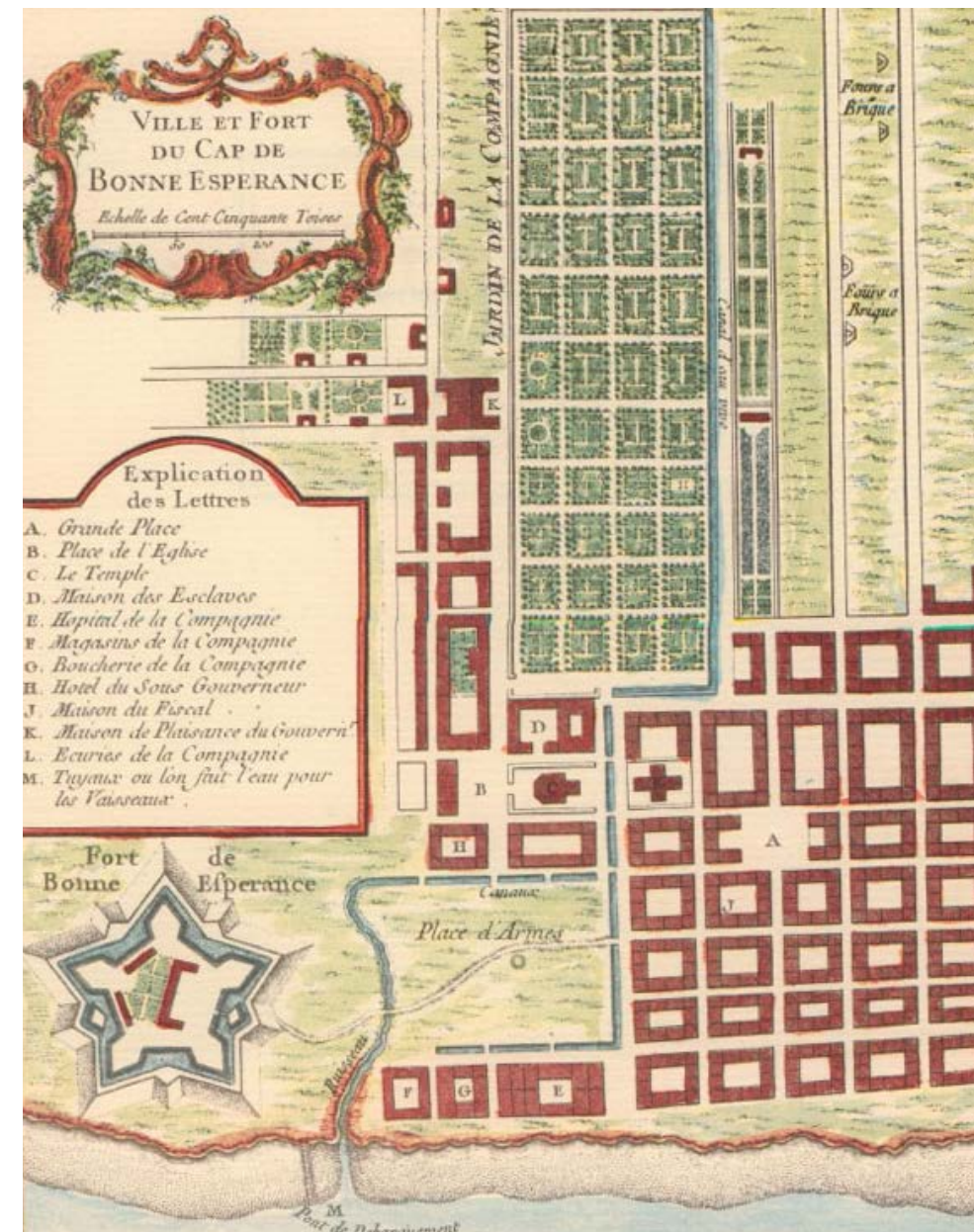
African fynbos vegetation including pincushions (*Leucospermum* spp.), sugarbushes (*Protea* spp.), and heaths (*Erica* spp.) (SANBI 2015).



Fynbos vegetation. King Protea (*Protea cynaroides*) on the slope of Table Mountain.



Kirstenbosch National Botanical Garden with Table Mountain in the background.



Early layout of Garden Company's Garden (CCT 2014f).



Company's Garden 1890's layout (CCT 2014f).

MAJOR CHALLENGES FOR URBAN PLANNING AND GOVERNANCE

As many other Southern African cities Cape Town's major challenges concern segregation, poverty and inequality, urban sprawl, informality, lack of basic service and infrastructure.

"No city is without its challenges, and Cape Town is no exception. One of the major problems facing local administration is a legacy of low social standing within the Cape Flats communities as well as underdevelopment in African township areas." (City of Cape Town, Five year Plan 2012, p.21)

Housing

One of the most urgent problems in Cape Town is the lack of affordable housing. The continuous urbanization and inflow of people looking for a better life in the city has put a great pressure on the local government to provide housing and basic services. The municipality lacks reliable information regarding migration into and out of the city making the population growth hard to estimate. The CCT states that despite their best efforts to resolve the housing problem, they can't see any improvements in the situation. According to the database of the Housing Directorate, 386 590 households are waiting for housing. Adding to this, it's estimated that approximately 187 392 households have not yet registered with the database. This estimation is based on figures declaring that more than half of Cape Town's population has a monthly household income of less than 7,000 rand, making them



depending on the state to meet their housing needs (CCT 2012, p.25). According to the UN (2014b, p. 239-241) social housing delivery for the poor population in South Africa is significantly under demand. In Cape Town and Johannesburg, 10,000 units are built annually, despite this, both cities lack roughly 400,000 units. This is mainly because of the absence of infrastructure required to create viable neighbourhoods (UN 2014b, p.239-241).

Informality

With the housing backlog and growth of the city, the increase of informality is inevitable.

The CCT (2012, p. 26) estimates that close to 182 000 households in the city are living in Cape Town's 223 informal settlements. Both the City of Cape Town and Statistics South Africa define informal settlements as:

"An unplanned settlement on land which has not been surveyed or proclaimed as residential, consisting mainly of informal dwellings (shacks)."

Further, they define an informal dwelling as:

"A makeshift structure not approved by a local authority and not intended as a permanent dwelling" (The Housing Development Agency 2013, p.6).

The Housing Development Agency (HAD) uses two categories while presenting statistics regarding informal settlements, shacks located in backyards or shacks not located in backyards (HAD 2013, p.15). The separation



is made because it's common that households living on formal plots rent out their backyards for others to build shacks on. This makes the backyard shack an informal dwelling but not an informal settlement because it's built on land proclaimed as residential².

In the recent years, there has been a great increase of this type of dwelling all over the Western Cape Province, from 2001 to 2011 with roughly 127 per cent (HAD 2013, p.12). Cape Town has the highest percentage of households living in shacks not in backyards in the whole Western Cape Province, with 13 per cent (HAD 2013, p.15).

The City of Cape Town aims to integrate the informal settlements with the rest of the city's urban fabric. During the recent year, the main focus has been to provide basic services such as sanitation, electricity and water supply (CCT 2012, p.26). The access to sanitation has improved; in 2001, 35 per cent of the households living in shacks not in backyards in Cape Town had access to either a flush toilet or a pit latrine with ventilation, in 2011 this number increased to 48 per cent (HAD 2013, p.19). In many of Cape Town's informal settlements, the municipality has provided the neighbourhood with portable toilets along major roads. But in most cases, the portable toilets aren't clean and emptied as often as they should. The portable toilet solution has been criticized for being temporary, only to improve the statistics and to be used as a political advantage³.

² Marco Geretto Senior Urban Designer at SPUD, Conversation 17th of April 2015

³ Sizwe Mxobo Urban Planner at the Community Organisation Resource Centre (CORC), Conversation 11th of March 2015

With the expansion of the informal settlements comes the expansion of informal trade and services. The municipality is challenged to create work opportunities in the same way as they are struggling to provide housing. The informal trades and service providers are an important complement to the formal system and often engage with them (UN 2014b, p. 239-241).

For example, Cape Town has a well-developed informal system of minibuses that compete with the formal bus and taxi transport system. To handle informality successfully, the UN recommends (2014b, p. 239-241) local governments need to integrate bottom-up development with top-down priorities at all scales, from city-wide to community scale. Further, the governance is required to take on a more encouraging and inclusive approach towards the informal sector instead of only focusing on their regulation (UN 2014b, 239-241).

Urban Sprawl and Spatial Inequalities

The foundation of the Cape Town's sprawling urban structure was laid with the Apartheid planning legislations (Future Cape Town 2013). The creation of townships in the urban periphery, the strict zoning policies (separation between residential, commercial and recreation facilities) and the promotion of the car as the major means of transportation are some of the main factors behind urban sprawl in South Africa (Vestbro 2001). Urban growth in Cape Town has during the last



20 years been conducted in a low density approach. According to the African Green City index Cape Town is today the least densely populated city compared to the other 15 major African cities (Accra, Addis Ababa, Alexandria, Cairo, Cape Town, Casablanca, Dar es Salaam, Durban, Johannesburg, Lagos, Luanda, Maputo, Nairobi, Pretoria and Tunis) in the Index. The population density in Cape Town is 1 500 inhabitants/km² compared to the average of 4 600 inhabitants/km² for all of the 15 African cities (Economist Intelligence Unit 2011). The sprawling city demands longer journeys; this increases the cost of services and supplies such as food and contributes to higher carbon emissions. Further sprawl increases the costs of managing electricity supply, centralized transport and water services and waste management (UN 2014b, p. 239-241).

The legacy of Apartheid planning is not only one of the main factors behind urban sprawl but is also the root for the spatial inequalities present in Cape Town today, where the majority of the poor population still live in the outskirts of the city. The population density in Cape Town varies greatly, the suburbs have an average of 4-12 persons/hectare and the townships and informal settlements have an average of 100-150 persons/hectare. This has caused an uneven distribution of public services such as recreational facilities, libraries and schools across the city. The uneven distribution increases the spatial inequalities, often leaving the poorer communities with less accessibility to education and recreation (Turk 2012, p. 21). According to the UN (2014b, p.239-241) the key issue for national and city governments in South Africa is the unequal socioeconomic structure that foster the spatial segregation.

Crime

Even though crime rates in Cape Town have decreased significantly during the last years it is still a factor that affects the everyday life negatively (CCT 2012, p.33). Gang violence is commonplace in many areas in Cape Town and it is not unusual with vigilante killings in the informal settlements, often related to petty crimes such as theft (UN 2014b, p.36).



According to CCT (2012, p.33) the main contributions to crime are drug-related behaviour, social issues, HIV/Aids and dislocation of communities. The CCT (2012, p.33) state that community activities and facilities, especially for youth, is one of the best methods to prevent the young population from engaging in criminal and gang-related behaviour. There is a high demand for these kinds of facilities particularly in Cape Town's poorer areas and the citizens are generally enthusiastic to engage with young people to prevent crime (CCT 2012, p.33). In the Integrated Development Plan (IDP) from 2012 City of Cape Town declares that the city "would benefit from investment in the development of holistically integrated, healthy communities from both a spatial and a social perspective" (CCT 2012, p.33).

Political sustainability

Like in other South African cities protest and riots are frequent in Cape Town. There is a general discontent and disbelief towards the local authorities that often results in violent protest with people setting tyres and debris on fire⁴. According to the UN (2014b, p.35) the discontent is often rooted in the government failure to deliver housing and basic services together with corruption and nepotism common in authorities in South Africa. The high level of youth unemployment, inequality and poverty is a breeding ground for political instability. The UN (2014b, p. 239-241) predicts that majority of political constituency in Southern Africa will resident in cities by 2050, making urbanization a key factor when it comes to shaping the socio-political dynamics of cities. Today the urban planning system is failing to meet the basic needs for the poor population and a shift in the planning system seems to be necessary for the future. Overcoming the inequalities, provision of basic services, affordable housing together with transitioning or gap markets should be a main priority of governments in the Southern African cities (UN 2014b, p.239-241).



Natural Resources

Cape Town is rich in natural assets, diverse ecosystems and landscapes. The city is located in area of exceptional biodiversity, the Cape Floristic Region (CFR). Over 70 per cent of the 9 600 plant species in the CFR can't be found anywhere else in the world. The CFR is internationally recognized as 'hot spot of biodiversity' and is one of the most threatened ecosystems in the world. During the last 50 years significant amounts of biodiversity have been lost because of human development and invasion of alien species. To protect the sensitive ecosystem and to ensure that the unique biodiversity is retained for the future the CCT has committed to a conservation plan, the Biodiversity Network, mapping out areas of biodiversity in the city to formally conserve (CCT 2012, p.27).



Cape Town's coastline is not only one of the greatest economic assets to the city, but is also an important social, recreational and ecological asset. If the 307 km coast is protected and used in a sustainable way it could play important role in Cape Town's future development and wealth. Because of its importance the CCT has implemented the Integrated Coastal Management Act, protecting natural coastal processes and environments and ensuring the public access to the coast (CCT 2012, p.28). According to CCT (2012, p.28) the pollution of natural water is a serious and long-term problem in Cape Town. Polluted storm water, leaking pump stations and damaged sewers, raw sewage from informal settlements are all common and contributes to threaten the city's access to fresh water. CCT (2012, p.28) state that "The state of the city's inland water systems can only be described as poor and deteriorating".

⁴ Marco Geretto Senior Urban Designer at SPUD, Conversation 17th of April 2015

5

HUMAN CENTERED DESIGN IN ACTION

Chapter five gives an introduction to the site specific HCD-project taken place in Cape Town, Khayelitsha. The chapter gives an overview of the project; its location, context, its actors and stakeholders. Additionally a documentation of the project process and its dynamics is presented through our field diary from the project. The chapter ends with an evaluation of the project process based upon the HCD method and further lessons learnt.



THE HCD-PROJECT IN MAKHAZA

Our correspondence with the SHIFT started several months before we arrived to Cape Town while doing our research for the MFS-application with intentions to cooperate in a design project focusing on social sustainability. When we arrived to Cape Town nothing was quite set but Janine, the CEO/Founder of SHIFT had invited us with saying “there’s always a lot on the go!”- something we got to experience during our first meeting.

We met up with Janine at the SHIFT office at Harrington Street in Cape Town a rainy afternoon in the beginning of March. The actual meeting was held in their exhibition hall Harrington Street 75 where a showcase of innovative designs currently was on display making the whole place buzzing with creativity and life. During our first meeting Janine told us about their approach to design and gave us a quick brief on the project that we were invited to take part in for the next 7 weeks. Janine had been approached by the non-profit organizations Connect and Umthombo Wempilo (UW) working with youth empowerment, about developing an activity centre in the township of Khayelitsha. The suggested location for the activity centre was a small plot with four shipping containers situated in the area Makhaza (see figure 15). Permission to use the plot had been given to UW by the municipality through the local ward councillor already one year ago. The UW used the containers to accommodate after-school tutoring sessions every now and then but eventually the activity stopped due to lack of resources. Since the plot was not in use by UW the councillor temporarily gave permission for a day care centre to occupy it. The idea of an activity centre with an after school program was born when UW and Connect joined forces.

"50 percent of the residents in Khayelitsha feel that it is not safe to move around in their area during the day and; 94 percent feel that it is not safe to move around at night."

(CCT 2010, p.20)

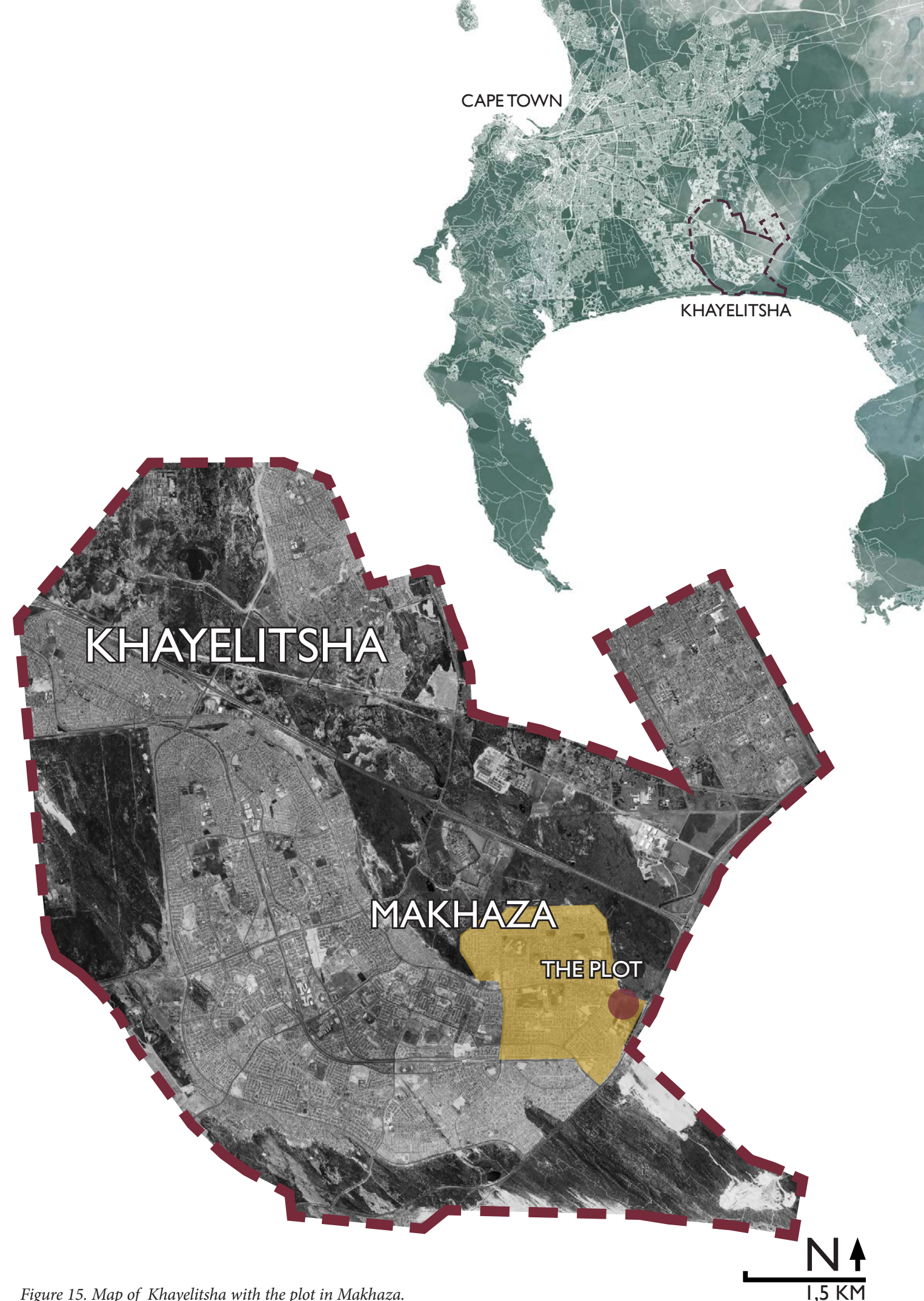


Figure 15. Map of Khayelitsha with the plot in Makhaza.

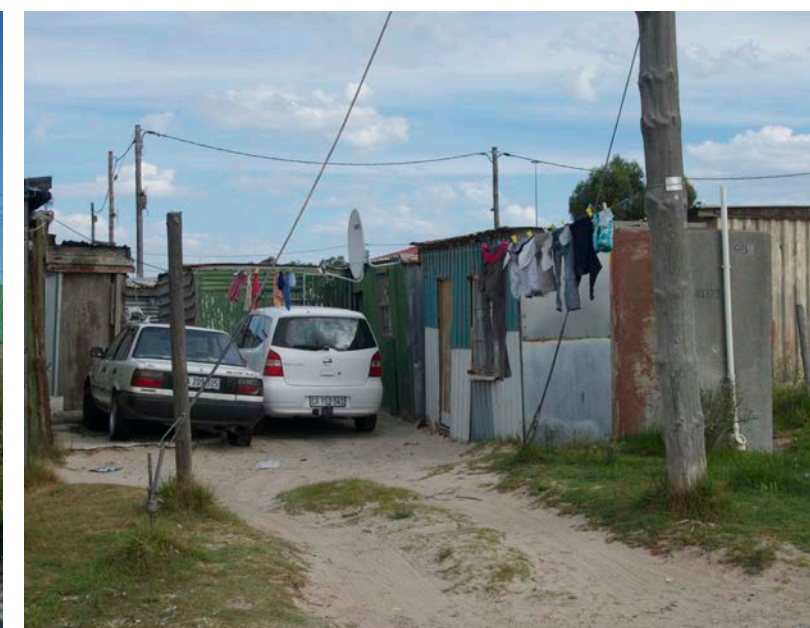


Figure 16. Map showing the surrounding of the plot in Makhaza.

THE SITE IN MAKHAZA, KHAYELITSHA

The site of the project is situated in a residential area in Makhaza in north east Khayelitsha (see figure 16). During apartheid Makhaza was a buffer zone and used as a waste dump. In the early 2000's the municipality started to upgrade parts of the informal settlements in Makhaza and implemented a housing program (Massey 2013).

The area around the plot is rather formal consisting of less dense neighborhoods with a few squatters and backyard sheds. Nearby the site there is a vast open field and a school. There are some public spaces in the neighborhood such as playgrounds and a green area referred to as the wetland park by the community.



Photos from the walkabout showing Nyanda ave. and public spaces in the community.



Figure 17. Map of the plot and the surrounding garden.

THE PLOT

The site consists of a plot with an area of roughly 400 m² (20m x20m) and is located next to the crossing of the roads Nyanda Avenue and Qhekezana Street. It is surrounded by a vegetable garden managed by a group of older women living in the neighbourhood. At the plot there are four shipping containers placed in a square shape surrounding a yard of grass in the middle. The containers are not insulated and have holes in them due to rust. Today a women is using two of the containers for her day care centre. In the north east corner of the

plot there is a small house with four toilets installed by the municipality. The whole plot is surrounded by a high barbed wire fence and there are two entrances facing the street. As common for Khayelitsha the soil at the site is extremely sandy with almost no organic material. The site has no higher vegetation, making it exposed to wind and sun.



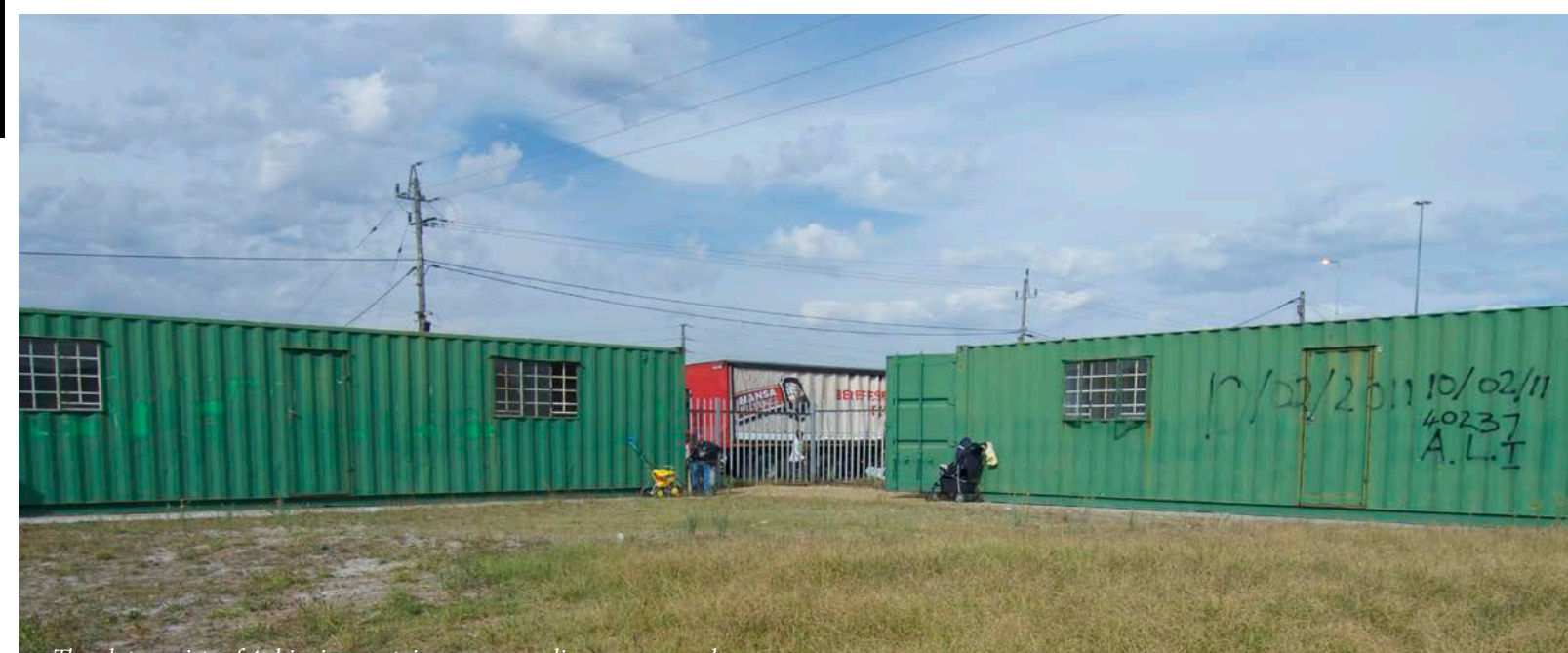
The plot is surrounded by a garden where some mamas grow vegetables.



During summer it could get up to 40 degrees in the containers due to lack of insulation.



The containers are placed upon concrete making them easier to access.



The plot consists of 4 shipping containers surrounding a grass yard.

ACTORS AND STAKEHOLDERS

During the project process we cooperated and got to know different organisations and people. In following section the people that came to play a central role in the process will be introduced. Some names have been altered to protect the privacy of individuals.

SHIFT TEAM

Janine, CEO/founder of SHIFT

Stefan, founder of SHIFT's based in Malmö

Imari, SHIFT employee

Keziah, SHIFT employee

Nkoliza, SHIFT participant, living in Khayelitsha and specialized in permaculture

Siyamthanda (Sia), SHIFT participant, living in Khayelitsha

Us; Anna & Amanda, Landscape architect students participating with SHIFT and observing the HCD method of the project

UMTHOMBO WEMPILO (UW)

NGO facilitating life skills programme to empower young people in Khayelitsha.

Steve, project manager for UW

Peter, project manager for UW

The kids, four boys members of UW ages 8-14

CONNECT

Connect Community Development is a registered non-profit company working with youth development through rugby, boxing and chess.

Dubula, project manager and rugby coach

Ryan, rugby coach

Team of young coaches, two boys and one girl in their early twenties

The boys, seven boys ages 14-16 years from the rugby team

OTHER ACTORS

Sia's mother, working at the local police station

Sizwe, urban planner at CORC

Maria, manager at the day care centre located at the site

The garden Mamas, a group of three old ladies from the community that manages the garden surrounding the plot

Permaculture guys, two guys who run a permaculture gardening business at Alexander's farm in Cape Town city centre

THE SUNSHINE CINEMA

The Sunshine Cinema is a mobile solar powered cinema co-created by The SHIFT and film activists Makhulu to share innovations that uplift, educate and inspire.

MAKER LIBRARY NETWORK

Maker Libraries are spaces for creativity, showing and learning. The network consists of several libraries, foremost in the UK and South Africa but is currently expanding globally. Each Maker Library is lead by a librarian that is interested in fostering creative and social thinking through a dynamic program of workshop and activities

Marc, engineer working for Maker Library in Cape Town

DEFINITIONS

"The Group/the people" All participants attending at the meetings and within the project.



Logos of the different actors within the project.



The group of stakeholders getting ready for the vision workshop

THE PROJECT PROCESS

The HCD-project started right in time for our arrival to Cape Town and during the following 7 weeks we attended in total 10 meetings together with the participants. Meetings were held approximately once a week at the site in Makhaza Khayelitsha and were lasting for around 3-4 hours. Following part is a summary of the course of events at every meeting along the project.

2015-03-05

SITE VISIT I- SITE SURVEY AND ANALYSIS

At the first site visit we and the SHIFT met up with Connect and the woman currently having a day care centre at the site. We made a site survey of the existing physical conditions and further a SWOT-analysis based upon the site survey together with aspects and data we collected along the project.

2015-03-11

MEETING AT THE OFFICE- PREPARATION

The next step in the project process was to localize different interests for the site. Following meeting was set up at SHIFT's office in Cape Town centre where we assisted the SHIFT team in preparing for coming "vision" workshop.

2015-03-12

SITE VISIT II- WORKSHOP "VISION"

At the second meeting on site representatives from Connect, UW and the community attended for the Vision-workshop. The SHIFT team set up different games and activities to make the people define their visions for the site. At last a summary of everyone's vision was made.

2015-03-19

SITE VISIT III- PRIORITY LIST AND MOVING TO ACTION

At the third meeting we discussed the viability of the visions for the site and tried to concretize them through a priority list.

2015-03-26

SITE VISIT IV- WORKSHOP "KIDS VISION" AND WALKABOUT

To reach out to the future main users; the kids, SHIFT put up another vision-workshop specially for them. We also made a walkabout in the neighbourhoods around the site to widen our site survey.

MARCH

2015-03-30

MEETING AT OFFICE- CONCLUSION

Further a meeting was held to concretize things around the project. The meeting resulted in a list of everyone's wishes and interests for the sight. To possibly accelerate the process, we and the SHIFT team agreed in us to make a general design proposal where all the different interests were taken into account.

2015-03-31

VISIT AT PERMACULTURE SITE

To show the possibilities of food gardening we, UW, Connect and the mamas owning the garden around the plot went for a field visit at a permaculture site.

2015-04-01

SITE VISIT V- PRESENTATION DESIGN VISION

At the fifth meeting on site we presented our general design vision where we illustrated a suggested combination of the different wishes and needs for the site.

2015-04-09

SITE VISIT VI- WORKSHOP "TYRE CHAIRS"

To make people from different target groups get together SHIFT arranged a workshop learning out how to make tyre seats.

2015-04-21

SITE VISIT VII- FUNDRAISING REQUIREMENTS

After quite many weeks with not much result the SHIFT team and we decided to confront the participants within the project. It turned out that the activities already started through afternoon tutoring sessions. UW got introduced to fundraising and a future time plan was put up.

APRIL

PROJECT DIARY

Following part presents a more detailed documentation of our project diary. It describes the course of event in chronologic order day by day to get a deeper insight in the dynamic of the project and an understanding of the challenges of designing within the context.

Figure 18. Timeline of the project with its phases

2015-03-05

SITE VISIT I

-Site Survey and analysis



A pumpkin from the mamas garden.

Today we went out to the site for the first time. Met up with the SHIFT team at the office in town and collected a camera, tape measure, pens and papers for the survey. On our way out to the site in Khayelitsha we also picked up Sia, another member of the team. At the site we met up with Dubula, rugby coach and member of the organization Connect. Together with the organization Umthombo Wempilo Connect has an interest in developing the site.

Today the site is already in use; social meetings are held every now and then and a woman named Maria is currently occupying two containers for her day care centre. When we arrived Maria looked very concerned, she was probably terrified that we'd come to throw her out since the site and containers officially belongs to Umthombo Wempilo. Once Dubula explained the situation, why SHIFT is here, she seemed slightly less tense but still wasn't smiling. Dubula made it clear though that the main purpose should be to host activities for youth since the councillor have handed over the plot to Umthombo Wempilo.

Janine put up a vision to create an environment where kids could come to do their homework and once they're done attend to different activities such as games, soccer, "ping out", gym facilities etc. She says it could be a good idea to mix kids from different schools to potentially reduce the risk of future gang formations. The site could provide the neighbourhood with coffee and healthy food as an alternative to the fast food market. There is already a garden surrounding the site managed by some elderly women from the community. That together with the day care centre creates a lot of activity and generates potential for development of the site.

To round up the meeting at the site the SHIFT team identified the basic actions and needs regarding power,

safety, locks, ventilation, windows and insulation. The SHIFT's intension is to put up a workshop at next meeting in Thursday and invite everyone with interest of developing the site. It's important to create a wider research group and to establish the idea of the project for long-term sustainability. Also it'd be good to invite the Mamas who are managing the garden since it could become a source to nutritious food. Dubula will contact the people for next week.

OUR IMPRESSIONS:

Khayelitsha is huge and surprisingly planned with basic infrastructure, train stations and a centrally located shopping mall. The urban structure is a great mix of formal and informal, new more luxurious houses and squatters.

When it comes to the project communication seems to be lacking between the different stakeholders, Maria had obviously not been informed by Dubula about Connect and Umthombo Wempilo's intensions. The fighting over resources can perhaps become a problem later on. In further work it's important to make clear we're here to help without lots of money, mainly to connect people. The site has a lot of potential and beautification could be done quite easily. Though the project is still in need of a long-term plan, for instance the garden requires a much longer development process. We're looking forward to next meeting and are curious about the people's opinion and vision of the place.

TO DO:

- Put up a timeframe
- Make SWOT-analyses out of the survey
- Preparation meeting Monday/Tuesday next week
- Workshop on site next Thursday 11 am



Photos showing the kids of the day care center playing and the Mamas working in the garden.

Site Survey and analysis

STRENGTHS

THE SITE IS A CORNER PLOT, CENTRALLY LOCATED WITHIN THE NEIGHBOURHOOD

THERE ARE ALREADY ESTABLISHED SOCIAL ACTIVITIES THROUGH THE GARDEN AND THE DAY CARE CENTRE MAKING IT EASIER FOR FURTHER USE

THERE IS ALREADY AN ESTABLISHED INTEREST IN THE POSSIBILITIES OF THE AREA

THE EXISTING STRUCTURE HAS GREAT POTENTIAL FOR REQUESTED USE AND FOR A FLEXIBILITY OF ACTIVITIES

WEAKNESSES

THE LACK OF SAFETY WITHIN THE CONTEXT CREATES A HUGE CHALLENGE OF KEEPING THE PLACE SAFE

THE PLOT IS VERY EXPOSED TO SUN AND WIND WITH NO SHELTERING ELEMENTS AROUND

THE SOIL CONDITIONS ARE DRY WITH LACK OF NUTRITION AND NO EXISTING VEGETATION

THE ACCESSIBILITY IS LACKING -EXISTING CONDITIONS ARE NOT SUITABLE FOR THE PURPOSE OF A YOUTH CENTRE

THERE ARE MANY DIFFERENT INTERESTS AND WILLS AND A SHORTAGE OF COMMUNICATION

OPPORTUNITIES

THE AREA HAS GREAT POTENTIAL TO BECOME SOCIAL MEETING SPOT FOR MULTIPLE OF TARGET GROUPS WITHIN THE AREA

THE SITE COULD TURN INTO AN INFORMATION CENTRE OF CREATIVITY- TO FURTHER BE SPREAD

THE ESTABLISHMENT COULD LEAD TO AN INCREASE OF THE USERS TO FEEL RESPONSIBILITY, POTENTIALLY MAKING THE SITE AND THE AREA SAFER

THREATS

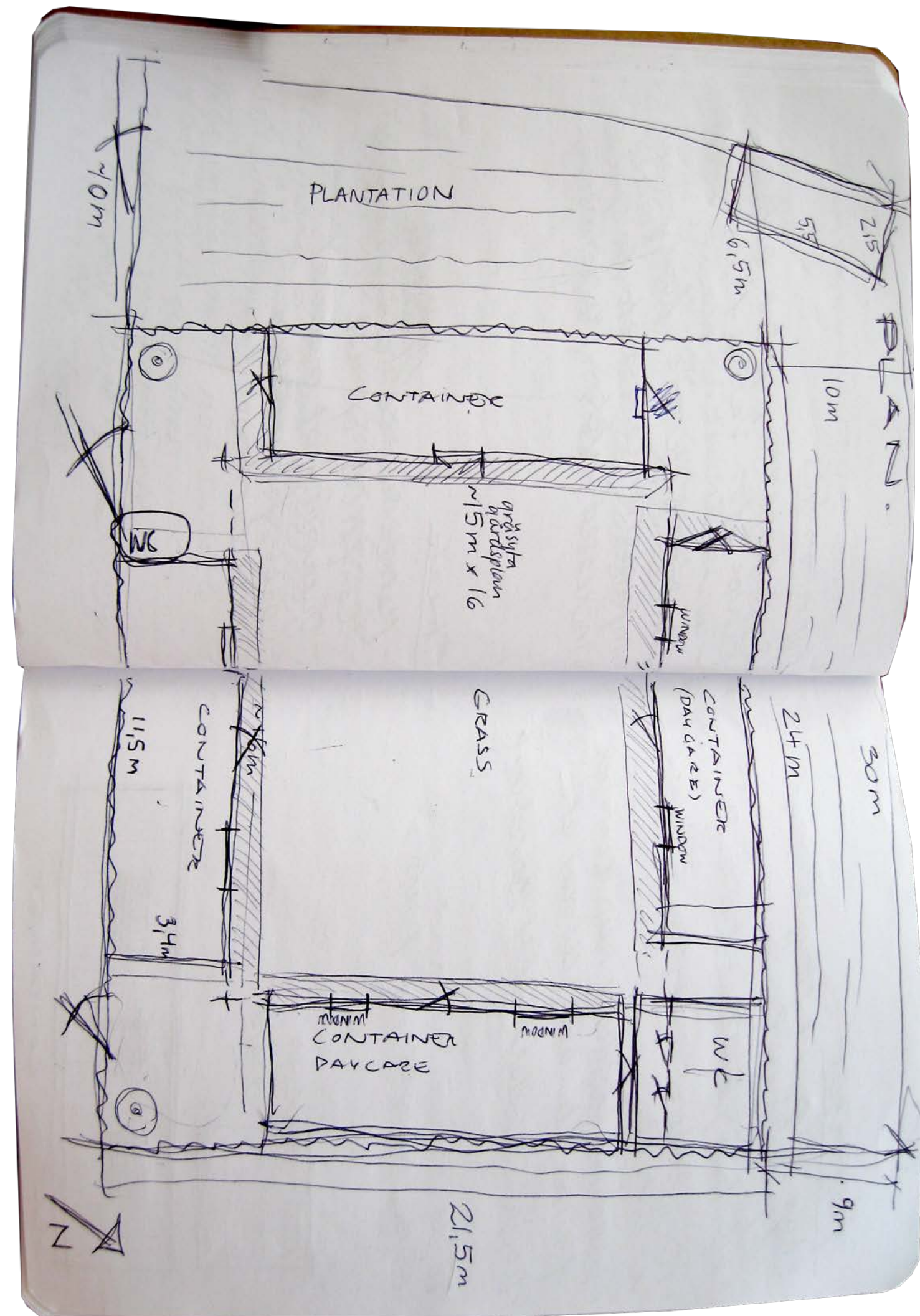
THERE IS A HUGE CHALLENGE IN MAINTENANCE OF THE CONCEPT AND THE INTEREST

DURABILITY OF THE MATERIAL COSTS, FUNDING

CONFLICTS COULD APPEAR BETWEEN USERS WITH DIFFERENT INTERESTS AND

TOO HIGH EXPECTATIONS OF THE RESULT FROM THE STAKEHOLDERS ON US AS DESIGNERS

The SWOT-analysis based upon the site survey together with aspects and data we collected along the project process.



2015-03-11

MEETING AT OFFICE *-Preparations*

Today we had a meeting with the SHIFT team and an urban planner named Sizwe working at the Community Organisation Resource Centre (CORC). We discussed the project process and suitable tools and methods for the first meeting with all the people at the site tomorrow.

During the meeting the SHIFT team presented the different games and methods that they often use for community meetings, to break the ice and to get the participants ideas and wishes. Janine pointed out the importance of planning and limiting the duration of time of the games, maximum 10 minutes for the best result.

Janine explained that to establish community ownership the first thing SHIFT have to do tomorrow is to make clear who we are and the intention of being there. It's important to point out that we're a group standing outside of the impending organization without any money or physical strength; we're there to make their vision happen a little bit quicker. Tomorrow is about to get the vision for the site from all the people and further to come up with a project plan. We want to harvest the ideas that already exist for social sustainability. Since the place was already used as a tutoring centre last year there are probably already plenty of ideas. What if the site could be ready at holiday time in April 1th already? We'll test it tomorrow. Sizwe will facilitate the meeting since he has the most impartial position within the project.

DESIRABLE OUTPUTS FROM TOMORROW'S MEETING:

- Peoples visions for the site
- Identify the resources we have and the resources needed
- Small practical steps

OUR IMPRESSIONS:

The SHIFT team is really excited about tomorrow's meeting and seems very pleased to have Sizwe as a facilitator. He's appears to be a person with a lot of knowledge and experience, perfect to take on the task. It'll be interesting to see SHIFT's methods in action tomorrow and what outputs they will generate.

TO DO:

- Meeting tomorrow 12th - bring sunscreen, hat, water, charge cameras and phone
- Go through SHIFT's toolkit more closely
- Further set a meeting with Sizwe regarding CORC



Parts of the SHIFT team outside the office at Harrington Street, Cape Town city centre.

2015-03-12

SITE VISIT II

-Workshop "Vision"

We met up with the SHIFT team at the office in town to pack the car with equipment for the vision workshop and some fruits and juice. When we arrived to the site around 10 people from UW, Connect were waiting for us, all adults. It was great to see that so many people had taken their time to come and participate in the meeting and workshop.

To make the group more familiar with each other Sizwe opened the meeting by making everyone introduce themselves and their interests. The meeting continued with two games to break the ice and generate positive energy. The first game was "count to 10" where the participants shake their hands and legs ten times, followed by the game "3 pinkie fingers" where the group connected different body parts on demand from a leader (e.g. five left feet, three pinkie fingers, two bums). The games generated lots of laughs and a more cheerful, relaxed atmosphere.

The meeting continued with Janine explaining the role of the SHIFT team, everyone seemed to understand and the atmosphere became more reserved and quiet. After this the meeting adopted more of a workshop mode. The first step was to give everyone a small glass bottle and encourage them to fit something in it that representing their feeling for the site and further to keep it till the next meeting. At the next step everyone in the group got 15 minutes to illustrate and write their vision for the site. Our and the SHIFT team's vision for the plot was very bright, colourful and vibrant. The others' visions on the other hand were stricter, stiff and rational, focusing on basic needs such as safety and with fixed activities in each and every container.

To sum up the meeting Janine told the group of people that she was very happy with the progress and the engagement from the group. With the consent of the group a summary and priority list of everyone's visions was made (see following page). The skills and resources that we have and need were also identified.

WE HAVE:

- Creative network -SHIFT has a huge network and inventions to share.
- Educational network -Connect has 6 computers,
- Dubula's knowledge of gender and permaculture, the

- Mamas knowledge of gardening, the SHIFT's workshops
- Sports network -Rugby team, other organisations?
- Security network -Sia's mother
- Connect has a budget of 10 000 ZAR to start with

WHAT WE NEED:

- Timeline and action plan, meetings once a week
- Goals divided into phases
- Make responsibilities clear

OUR IMPRESSIONS:

Overall the meeting and workshop went well. Some methods and games worked better than others. The step with the glass bottle was a bit too vague and could have been given more time to catch the essence of the site. It's obvious that our backgrounds play a significant role when it comes to visioning future opportunities. We at the SHIFT team imagined colourful and grand ideas while the members of the community focused more on basic facilities, probably reflecting the reality and everyday life in Khayelitsha. There is still an uncertainty about what activities that should take place on the site and for whom the site is for. Both UW and Connect don't seem too pleased about the day care centre. It's important that we try to convince them that this could be a place for all in future for viability of the project.

The garden Mamas and Maria didn't say much at all during the meeting and if they tried to speak up they were interrupted by the men. It might be a good idea to hold another workshop where men and women are separated. Another important thing to notice is that no kids from Connect attended today. Their visions and ideas are perhaps the most important once since they will use the site the most. Sizwe did a good job as a neutral impartial leader but still it's hard to make everyone participate. So many good ideas were brought up and people seem to share the same vision.

TO DO:

- Make timeline and strategic action plan, set meetings once a week
- Goals divided into different phases
- Send pictures of the program and vision to UW
- Wait and see what actions and initiative the people have taken at next meeting
- Make a summary of each and every SWOT-analysis and add new facts



Vision workshop in action, bottom; Janine summarizes the visions

Visions and Summary

- SECURE PERIMETER
- ELECTRICITY
- WATER + IRRIGATION
(only inside the toilets)
- FIX CONTAINERS: LEAK
PAINT/COLOR
- SCREENS
PARTITIONING HEAT
- WINDOWS FIXED
BURGLAR BARS, DOORS
- STRETCH CANVAS FOR SPACE
- GRASS / GARDEN + COMPOST (FOOD)
RAISED BEDS
- TABLES + SEATS
- TOILETS FIX
- RECYCLING SYSTEM
- ARCHITECTURAL PLAN
- JUNGLE GYM
- OUTSIDE BASIN

STRUCTURE FOR THE PLACE

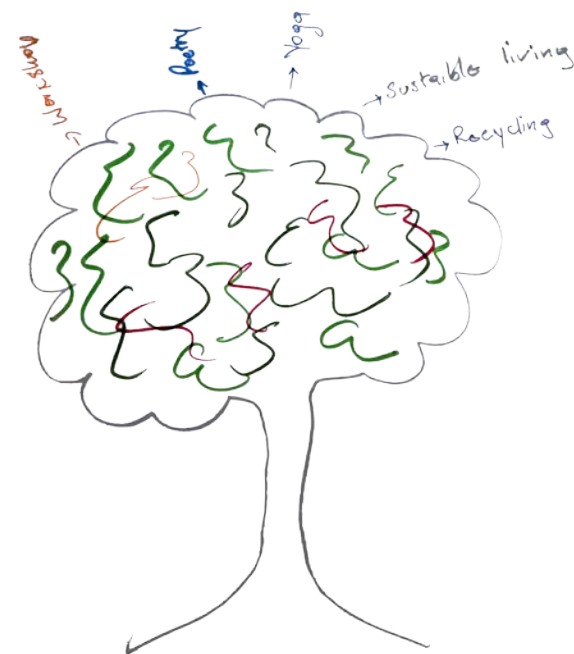
- HUMAN RESOURCES
- CLEAN UP

① STRATEGIC ACTION PLANS

- TIMELINES + RESPONSIBILITIES

WHAT WE HAVE:

- ✓ R10.000
- ✓ SKILLS
- ✓ NETWORK / CREATIVE
↳ TO REQUEST
+ SPORTS EDUCATION
- ✓ 5X COMPUTERS ++
- ✓ SECURITY



2015-03-19

SITE VISIT III -Priority list

The SHIFT team and Marc from Mobile Maker Library met up at the office in town for a short catch up and preparation for today's meeting at the site. Janine pointed out that the main focus for today's site meeting was to identify the different phases for the project and put up a hypothetical timeline. Time is running but Janine believes it is possible to change the site completely over one single day if we have the right resources. Janine continued the preparation meeting with discussing the different methods and steps for the meeting. One of them was to introduce the group to sustainable designs such as The Litre of light and Sunshine Cinema to inspire (see page xx). After the catch up we packed up the car with different tools such as a huge pinup board and further headed off to site.

Janine opened the meeting by talking about last week's meeting and pointed out that we already have lots skills within the group and that we'd identified three main aspects in the project: electricity, safety and water. Dubula (Connect) continued with bringing up a summary of what had happened since we last met. During the week people had been looking up things, for example Steve from UW had been to Eskom regarding the electricity. Unfortunately, it'll take at least three months to get electricity to the site; the situation is the same when it comes to the water supply. To establish the project the local ward councillor had been invited to today's meeting but he never showed up.

Dubula further underlined that security should be the most prioritized aspect. He suggested we should put up more wirers, something the SHIFT team doesn't agree with. According to them more wires would not provide a welcoming atmosphere but Dubula was concerned about keeping the donated computers safe.

The meeting continued with Janine trying to make the group agreeing on the different phases and what's needed for each of them. In the first phase there's not much to keep safe since there's nothing of value at the site at the moment, she explained. The atmosphere got a bit resigned, the group was probably disappointed over the

time it'll take to install the basic needs. To enliven the mood Janine suggested we should move into action and picked one of the bullets on the priority list, leakage. Using SUGRU, mouldable glue that turns into rubber over time, we fixed some doors, windows and roofs. After fixing the leakage the meeting turned over to security discussions again. Janine told the group about SHIFT's previous experiences of that fences and wires only giving an expression of that there's something to steal. Eventually the group bought it and finally started to focus on what we could do right now. Dubula brought up a project he read about, they'd made a hole in the roof and put a transparent bowl filled with water where the daylight reflected and light spread over the whole room. This made Janine very exited since the SHIFT team often use this solution -the Litre of Light. Janine introduced the whole group to the design solution by showing them a clip on her computer. Everyone got really excited and inspired.

To end the meeting, we all agreed on what could be done during the first phase; clean up the site, make a paint job of the containers, put padlocks on the containers, hold a workshop with kids showing them the Litre of Light and how to make tire seats or solar cookers.

OUR IMPRESSIONS:

Today's meeting got into a quite rough start because of all setbacks. By moving to concrete action of fixing the leakage and showing the group some innovative design solutions the meeting was ended on a high note. There is still a huge challenge in finding a balance creating both a safe and at the same time friendly atmosphere.

TO DO:

- Identify phase 1, 2 and 3
- Till next meeting 26th we'll search for solutions for leaking and security
- Look for quick, easy, inexpensive solutions for the holes in the roofs and a way to fix the broken window
- Are there any reference areas around Khayelitsha where the design team could visit for inspiration?



Janine is introducing
the group to the Litre
of Light.



-Workshop "Kids Visions"

Wishes of a 7 year old boy.

After about an hour some kids from UW and Connect's rugby team finally arrived, a group of five boys in various ages between 8-14 years. Dubula immediately started to tell the kids about the vision for the site we had created during the vision workshop with the adults. Janine brought the kids to another part of the container away from the adults. She started the workshop with encouraging them to draw or write how the site would look in their dreams, surprisingly quite similar to the grown ups visions.



The image is showing the board full off the vision of the kids and to the right Janine is leading the workshop.

2015-03-26

SITE VISIT IV -Workshop "Kids Visions"

While Janine continued the workshop we went for a walk in the neighbourhood with Steve from UW. This explore the surroundings of the plot and locate schools, public spaces, paths and crossings. Once we got back to the site Janine was about to wrap up the meeting and told the group we now had collected the visions from both the adults and the kids. Next is to make everyone to agree on one idea. Janine will be in Johannesburg next week but encouraged the group to have a meeting without her or better off; have a workshop with the support of some members of the SHIFT team.

OUR IMPRESSIONS:

Today's meeting gave us a broader understanding of the site and its context through the vision workshop with the kids and the walkabout in the neighbourhood. Overall the meeting went well, though one concern is the adults' impact on the kids' visions. The kids were told to draw their dream vision with whatever they could imagine. Still they all made one whole container into an administration block which mainly will serve the adults. It seems like kids aren't comfortable wishing the things they really wanted. Also while presenting their visions for the group they were dead serious, maybe it'd been better to have workshop with the kids in full absence of the adults. It'll be interesting to see whether the group will hold a meeting or workshop next week without Janine being present. The other members of the SHIFT team will wait for the group to take the next step.

It'll be interesting to see whether the group will hold a meeting or workshop next week without Janine being present. The other members of the SHIFT team will wait for the group to take the next step.

TO DO:

- Figure out how to combine all the interests within the site
- Join Dubula and Connect to take the Mamas to the permaculture guys garden in town
- Figure out the founding for step 2, 3
- Prepare for a possible seat/bike fixing workshop for the kids next week



Photos from the walkabout showing Nyanda ave. and public spaces in the community.



2015-03-30

MEETING AT OFFICE -conclusion

Today we had a meeting with the SHIFT team at the office and discussed the project and process. We talked about the accessibility of the site, if the activities only will be for the members of Connect and UW. This will be an important aspect to discuss during the next meeting on site. The meeting continued with discussions of how to include everyone's visions in one idea.

We all at SHIFT agreed on that it'd be good to have some kind of illustrations of the idea, how the site could be like for the next meeting with the group. Shade and isolation is still a big challenge. The group might not be that bothered by it because they are used to it but it's not an ideal situation having activities for kids in containers heating up like an oven in the summer and being freezing cold in the winter. After some sketching we came up with a location and combination of activities within the site.

OUR IMPRESSIONS:

Since the project has not been as efficient as we at SHIFT hoped for we will change our approach a bit. We all agreed on that it could be good to show the group the possibilities in an illustrated design with everyone's visions combined. The decision of excluding the other people in the actual design could possibly speed up the process and give the group a more tangible goal to work towards. The illustration would only be a suggestion for a potential design that could be changed along with people's wishes.

TO DO:

- Make the illustrated design vision for day after tomorrow
- Meeting tomorrow 31th with the project group at Permaculture guys site

HOW MIGHT WE INCLUDE ALL UW'S WISHES?

- ADMINBLOCK: Printer
- LIBRARY
- TUTORIAL SPACE CAFÉ
- I-CAFÉ/ICANO
- GAMES ROOM: CHESS (MINICRAFT)
- RESTAURANT/KITCHEN/CAFÉ
Soup + Sandwich SHOP?
- FOOD GARDEN
- SOCCER/S-A-SIDE PITCH
- MOVIE ROOM
- BICYCLES
- W/SHOP/TOOLS/FIX HUB
- MEETING ROOM
- LOCKER ROOM
- MUSIC/DRAMA ROOM
- GAME PLANS + STRAT.
- RECYCLING SYSTEM:
collection compost

2015-03-31

MEETING AT PERMA- CULTURE SITE

*Trench plantations should be
used in Khayelitsha,
dig 0,5m down in the sand,
mix with compost - done!*

Today we visited the permaculture guys site at Alexander's farm situated in the Cape Town city centre. The area was used for military purposes and has been restricted throughout the history. Therefore, the municipality hasn't been allowed to exploit and the site has remained an open area. Today some people are squatting in the abandoned old military buildings and the land is occupied by a few shacks and the permaculture guys' garden and plantation.

We arrived on time after climbing up the steep hill to the garden while the group from Khayelitsha arrived 1, 5 hours later with the Mamas way behind. We couldn't imagine the effort they been put though leading the ladies up that hill in the heat.

The permaculture guys had made a plantation and garden at a slope of a hill and built terraces with a huge variety of eatable plant species. Lovely guys with a huge passion for their work, real permaculture souls, amazing to see their engagement and enthusiasm. They're both living at the site and working 8 hours every day to take care of their plantation. Their vision is to educate people about permaculture and sustainability.

OUR IMPRESSIONS:

The field visit was a good inspiration for a development of the garden at the site in Makhaza, a lot could be done with a few tricks. It felt like the visit brought the group closer and it felt important to take the Mamas to the site to increase their participation within the project. Through them the old garden generation could possibly be brought closer to the younger ones and their improvement of including the garden in the project play an important role for the viability of the project in future.

Site visit at the permaculture
guy's site at Alexander's Farm in
Cape Town.



2015-04-01

SITE VISIT V Presentation

Today we went out to the Makhaza to present our illustrations of the idea for the site. Only two people attended, Steve from UW in the beginning and later Dubula from Connect. The SHIFT team's intention was to hold a tyre chair workshop but no kids showed up today either. Due to this we started with presenting our illustrated vision. After the presentation everyone was really excited and happy about the ideas. Dubula seemed a bit disappointed over that the idea of the stretch tent canvas was left out in the design vision. Janine tried to explain to him that a stretch tent is very expensive and probably will be stolen, that it'd be more ideal to create shade with other local materials.

The meeting continued with discussions about what happened since last time. Steve managed to get in touch with the councillor but he still needs to come to the site and see the vision. In the end of the meeting Janine brought up the fact that we need financing to make things happen. To be able to start fundraising the group needs to get together and identify the phases of the project and costs of every action.

OUR IMPRESSIONS:

After today's meeting we're happy about the positive feedback we got after our presentation. It is a great feeling to be able to produce something for the project process and not just observing. Unfortunately, there were not many people from the group attending the presentation. This could depend on several reasons; maybe it was a bad time of the meeting or a miscommunication in the group. Since Steve and Dubula are representing their organisations they will possibly pass the design vision on and explain it to the others in the group.

In the car back to town Janine asked us and the rest of the SHIFT team what our feelings are regarding the fact that Maria and her day care centre obviously are gone. At the presentation maybe we should have made it more clear how the day care centre could be integrated in the site as well. It feels strange that Maria and the babies suddenly disappeared but at the same time it is officially UW's site.

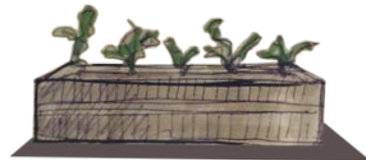
We also need to consider our role as facilitators in the project and not interfering too much in the decisions from the community. The SHIFT team thinks the purpose of an expensive stretch tent and making one whole container to an admin block is to show off power and success in the community of Makhaza.

TO DO:

- See what the councillor and the other people says, work from there
- Put up phases, create a budget for each of them
- Make a crowd founding campaign
- Attend workshop sometime next week



Tire seats could be placed all over the site.



Plantation boxes could be placed along the container facades.



Trees could improve the micro climate at the site.



Photos from the presentation of our design vision.

Design Vision

THE TUTORING/MEETING/MOVIE CONTAINER

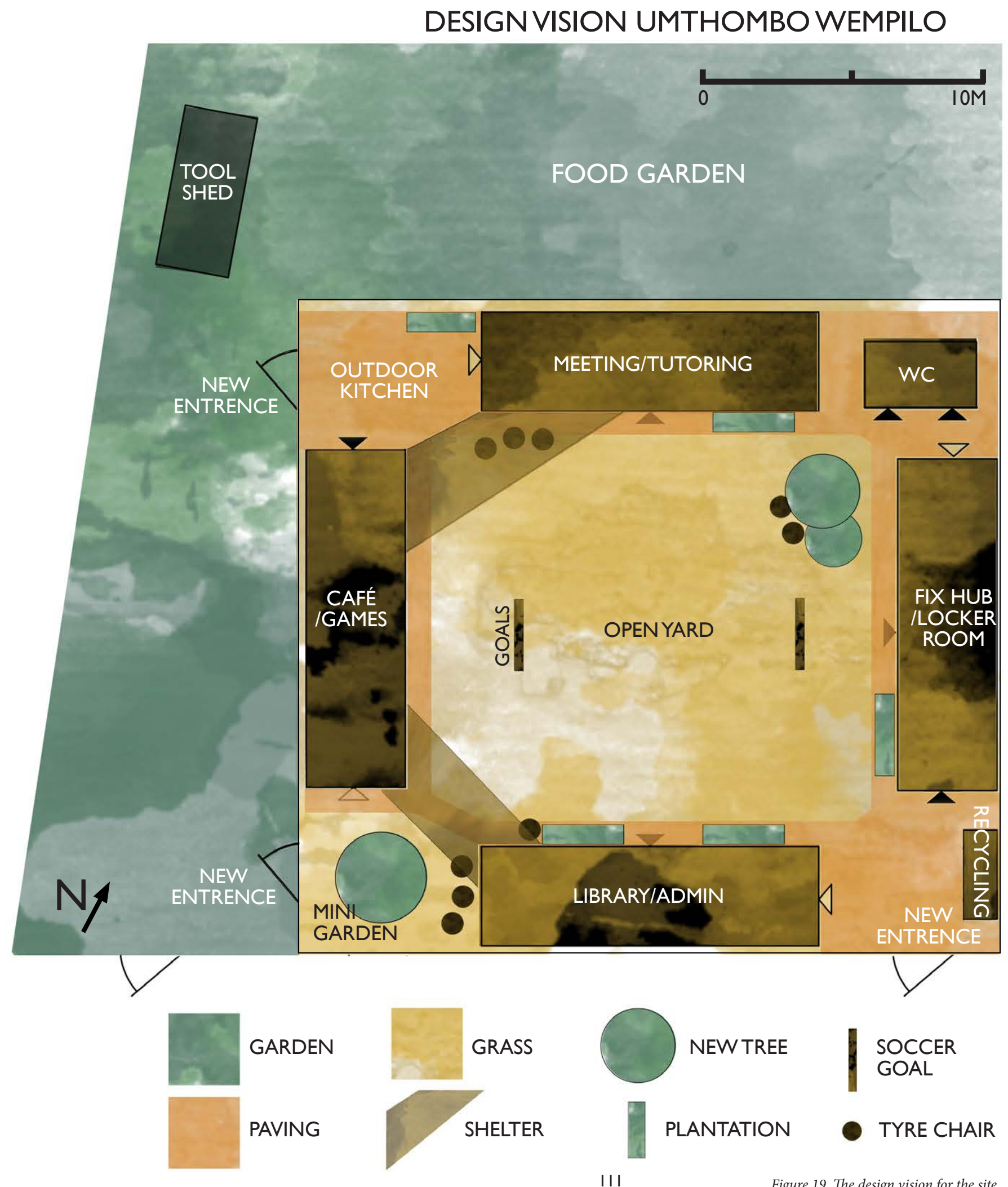
This is an area for smaller community meetings as well as a place where the children could do their homework. A white board is put up on the wall and the interior could consist of smaller portable tables to be re-arranged for different needs. When meetings are held the tables could be put together as one big table and split into smaller groups or single tables when it's time for tutoring. The container could also turn into a movie room by moving all the furniture away. In the end of the container there is a computer area where kids could access information as well as play some games. As a suggestion there could be a system where kids would access the computer games as a treat once they finished their homework.

THE OPEN SPACE

We've suggested the yard to remain open and be covered by grass to make the area more dynamic and to allow spontaneous activities such as games, soccer, ping pong, workshops and community meetings etc.

THE CAFÉ/GAMES CONTAINER AND SEPARATE KITCHEN

Many people in the group wished for an internet café, with computer access in combination with coffee shop or small restaurant. We figured that the mix of those facilities might not be the best, imagine someone spilling a soda over a computer, then it's over, game over. Instead it this container could be a place where kids can come and play games such as chess in a relaxed social atmosphere enjoying a locally produced light meal or coffee. The food could be collected at a counter at the inner part of the container as well as through a window facing the yard, for the people outside. Cooking inside the container would make the air smoky and humid, due to the lack of ventilation. For the convenience we suggested that the kitchen should be located outside next to the garden for easy access of fresh vegetables. The interior consists of portable informal and formal seating making the place flexible to facilitate a workshop or concert. A small stage could be placed in a corner for events and spontaneous performances.



Design Vision

THE FOOD GARDEN

The garden maintained by the Mamas has great potential to turn into a food forest with a big diversity of fruits and vegetables. The vegetables and fruits can be prepared in the outdoor kitchen to provide the kids with healthy and nutritious food. Organic material should be added into the soil.

THE ADMIN/LIBRARY CONTAINER

An Administration counter is placed next to the entrance of this container. From here the administrator could work and the kids could register their visit and potentially leave their bags. The rest of the container is a library where the kids quietly could study and read. The counter should also manage the library and make sure the rules are followed.

THE NEW ENTRANCE

The main entrance is moved to the southeast corner. The new placement is more centrally located and is facing the crossing. This will make people see the entrance from a greater distance and also increase the safety. The entrance area could be developed with a colourful design to create a more welcoming feeling. The new entrance eases the access to the Admin container where the kids should register.

THE TEST GARDEN

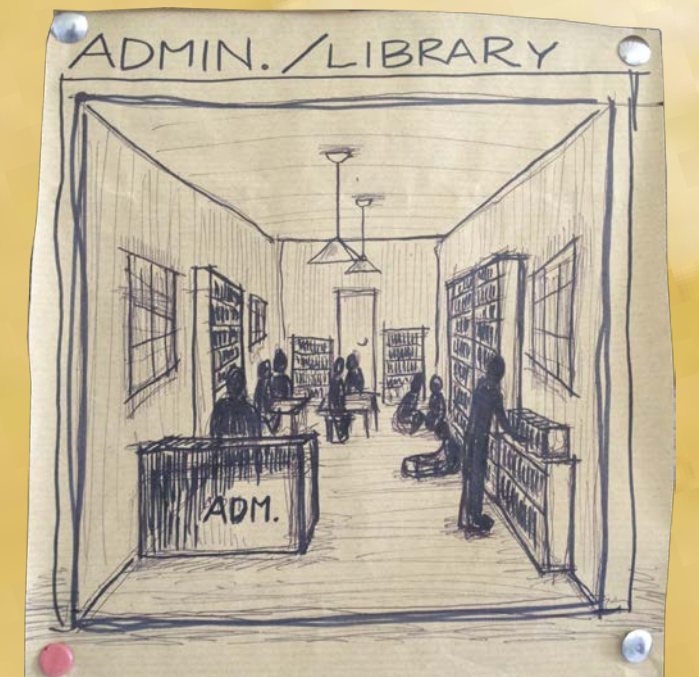
The previous entrance area has great potential to be developed into a test garden where kids could try their skills outside of the Mamas' big garden. A tree could give shade and create a nice atmosphere for reading and socializing. The area could also become a meeting point where classes gather before entering the big garden. By adding another entrance to the Mamas' garden right next to the test garden the area could become a meeting point before education

THE FIX HUB/LOCKER ROOM CONTAINER

Lockers, hooks and benches could be placed at one side of this container. Here the kids could change for soccer games etc., to create their personal space where their stuff is safe. The other side of the container could become a fix hub where kids could bring whatever they need to fix. There will be a counter where you can borrow tools from a tool wall. Portable tables could be arranged as a workshop space. A recycling station is placed next to the entrance together with a tap for washing of hands. The recycled material could be used at workshops or fixing inside the fix hub.

THE PAVING

Today the ground closest to the containers consists of cement. To make the area more accessible, especially during winter when the grass lawn turns muddy, the different areas of the site should be linked together with paving. We think it'd be a good idea to pave the entrance and outdoor kitchen as well, making them more resilient to wear and tear.



Sketches from the presentation showing the suggested interior of the containers.

"Remember when we used to think;
my dad can fix anything!
The fix hub will give Kids the opportunity
to fix stuff with help from others. This
will make people of different age come
together and learn from each other."
— JANINE

2015-04-09

SITE VISIT VI *Workshop "Tyre chairs"*

We met up with the SHIFT team at the office and packed the car for today's workshop where we'll make tyre chairs. We went out to the site and were met by only a few people and again no kids. We spoke to Dubula and he told us the kids would be there in two hours.

We made the decision to start making at least one chair with the people around and told them to spread the knowledge and their new skills further once the kids arrived. Eventually some kids from Connect did come (only boys again in age 14-16) and the whole workshop turned in to a success. Keziah went out to help some younger kids at the street to fix their coaster car. Anna introduced a knot for the boys to use to attach the strings with. Amazing to interact and connect with the young guys as well.

OUR IMPRESSIONS:

Feels great to move into some more action and see everyone's enthusiasm and happy faces. To bad there's always such a bad influx of people at the meetings but at least the knowledge of making the Tyre chairs is given to some people that hopefully will spread it further.



Tyre chair workshop in action!

2015-04-21

SITE VISIT VII -fundraising requirements

We all meet up at the office and had a quick catch up in the car on our way out to the site. Just like us Janine felt that the project process is going too slow, that we put in a lot of energy into which hasn't paid off yet. We are at a crossroad; the SHIFT team doesn't want to keep on having just meetings when resources can be used in a better way. In today's meeting at site we needed to figure out how to continue with the project and find out the group's expectations of SHIFT.

When we arrived only Steve and one other member of UW were there. The meeting started with Janine trying to sort out the details and questioned if UW really is willing to commit to the project. Janine showed the requirements of the funding, a long and demanding list of documents required. Further Janine explained that we can have way more fun than this and be more productive if we stop having just meetings every week and instead actually start doing something. We got some feedback on the design vision, overall positive but UW still wants a whole container for the admin block. Steve had shown the councillor the sketches and he seemed very excited as well.

Hope and expectations on the different partners UW and SHIFT was also brought up. Steve said that he would appreciate some ideas to complement UW's program and also some help with the crowd funding. Janine explained that SHIFT could have the leadership but the whole project should be done together as a team. The starting point still has to be that we're all sharing the same vision to work towards the same top goal. The whole UW need to sit down and make a list of the most important things for the fundraising and discuss what kind of workshops they want SHIFT to arrange at the site. Janine encouraged responsibility and suggested that Steve should talk to his team and get feedback as well as identifying the skills within the team for the fundraising process. There is also

a need of a written agreement between UW and SHIFT regarding responsibilities and activities.

After a while some kids, both boys and girls, arrived to the site for a tutoring session with UW. Apparently there are already activities running on the site, something we had no clue about. Connect brings the tutors and some learners. From 14.30 to 16.00 it's tutoring before the rugby training and some days they have tutoring in the morning as well.

OUR IMPRESSIONS:

Today was about finding out if the UW and partners are willing to commit to the project. Even though the meeting was a bit tough it was important to sort out the essential questions. Steve seemed to understand the severity of the situation and was willing to fight for the project.

When the kids showed up for tutoring the mood lightened. Seeing that there was a schedule for activities already made us hopeful for the project even though the whole fundraising project will be a demanding journey. Today's meeting was the last time we attended the site and Khayelitsha for this project. We hope that the project will keep going and that all participants will agree and succeed with their visions for the place.

We at SHIFT are a bit disappointed that the group still wants a whole container for administration. Our intension with the design vision was to show flexible designs when space is scarce. For SHIFT participation is about to meet half way and wont support actions they don't feel are in line with their agenda of sustainability. Time will tell if all actors and stakeholders will agree. will keep going and that the group will succeed with their vision for the place.

*Discussions about
the meaning of an
administration block*





ENKOSI!

EVALUATION OF HCD IN MAKHAZA

During seven weeks we got the opportunity to observe and participate with the origination the SHIFT at the project in Makhaza through the method of HCD. Supported by SHIFT's developed toolkit and methods the aim was to solve social issues by humanizing the design process and emphasizing with the participators (see chapter 2).

According to IDEO a HCD project process could be categorized the different lenses Desirability, Feasibility and Viability as well as the different phases Hear, Create and Deliver (see chapter 2, Human Centered Design by IDEO). Following section is an evaluation of the HCD method in the project in Makhaza where the causes of events are presented through the lenses and phases of HCD.

HCD-LENSES OF THE PROJECT

As mentioned in chapter 2, IDEO's HCD method is based on the concept of the three lenses Desirability, Feasibility and Viability. The Desirability lens should cover the whole project process starting with an investigation of the needs, dreams and behaviours of the people that will be affected by the design to understand what the people want (IDEO 2012, p.6-7).

To define what was desirable within the project in Makhaza we started to get to know the context of the site through making a survey of the existing and physical conditions. Further we participated actively at meetings to get to know the people within the project to get a sense of the social dynamics and hierarchy within the group. All along the project process different activities such as games and workshops was put up for the wishes and ambitions of the community to come forward.

The lenses Feasibility and Viability should carefully be introduced in the later stages of the project. In Makhaza the project was viewed through the feasibility lens when the desirable actions were prioritized and categorized into three phases based on the needs and accessible resources. Further the existing skills and assets were identified. Once the implementation of phase one started (basic actions and workshop activities) the project could be viewed through the Viability lens. Eventually, fundraising and economical sustainability for the project was introduced. Additional examples of specific events will be presented further in this chapter.



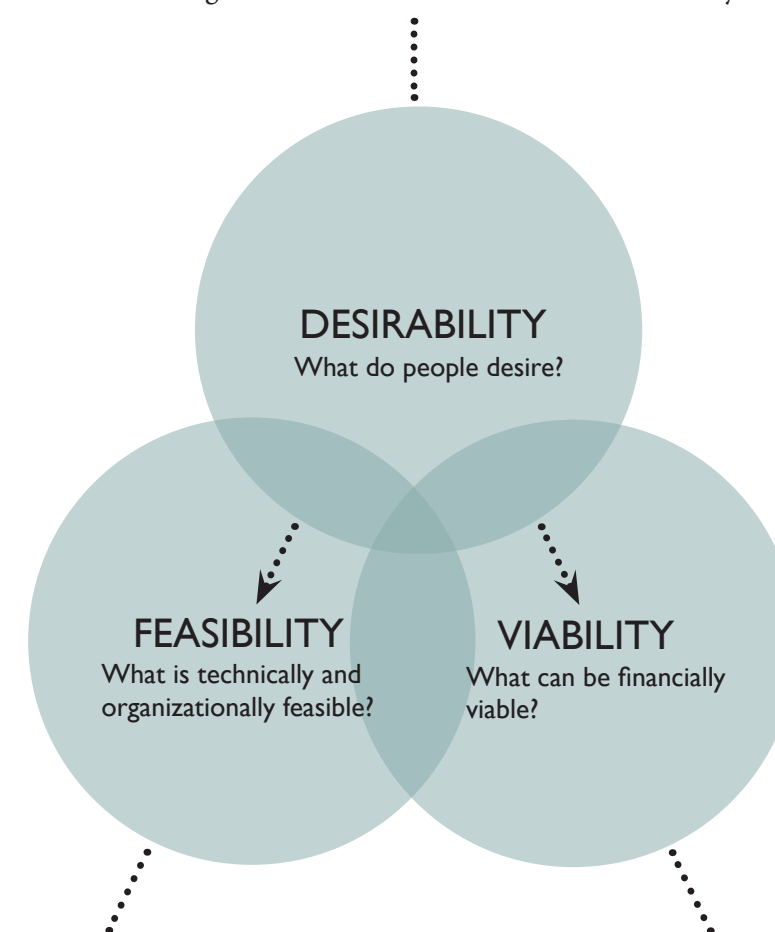
Figure 20. Timeline for the Makhaza project

SITE SURVEY AND ANALYSIS

Getting to know the context of the site in Makhaza, survey of existing physical and social conditions.

MEETING, GREETING AND CONNECTING

Getting to know the people and the dynamics within the group, relations and hierarchy between stakeholders. Defining the wishes and ambitions of the community.



IDENTIFYING CHALLENGES AND NEEDS

Feasibility of the different visions and defining the resources required to fulfil them. Identifying existing skills and assets.

IDENTIFYING THE PHASES AND PRIORITIES

Prioritizing and categorizing the actions in three phases based on needs and accessible resources.

MOVING INTO ACTION

Implementing phase one, basic actions and starting workshop activities.

ESTABLISHING THE PROJECT

Viability for the project, introducing fundraising and economical sustainability.

Figure 21. Lenses for the Makhaza project

HCD-PHASES OF PROJECT PROCESS

The project went through all three phases of HCD during our participation in the project though some phases got more attention than others. During our attendance at the project the Hear phase got the most capacity and was carried out consistently along the process. Less progress was made during the Create and Deliver phases, though some steps were taken. To notice is that different phases did not always appear in chronological order along the project process as seen in the figure..

All through the process the same or similar goals as the ones described in the HCD method were reached and the meetings resulted in similar outputs. When it comes to the method and games that SHIFT used in the process they generally achieved a desirable result. SHIFT was able to predict the outputs of the different methods and collect the amount of information needed to proceed to the next step in the process. Following part identifies the significates of the different HCD-phases within the project further.

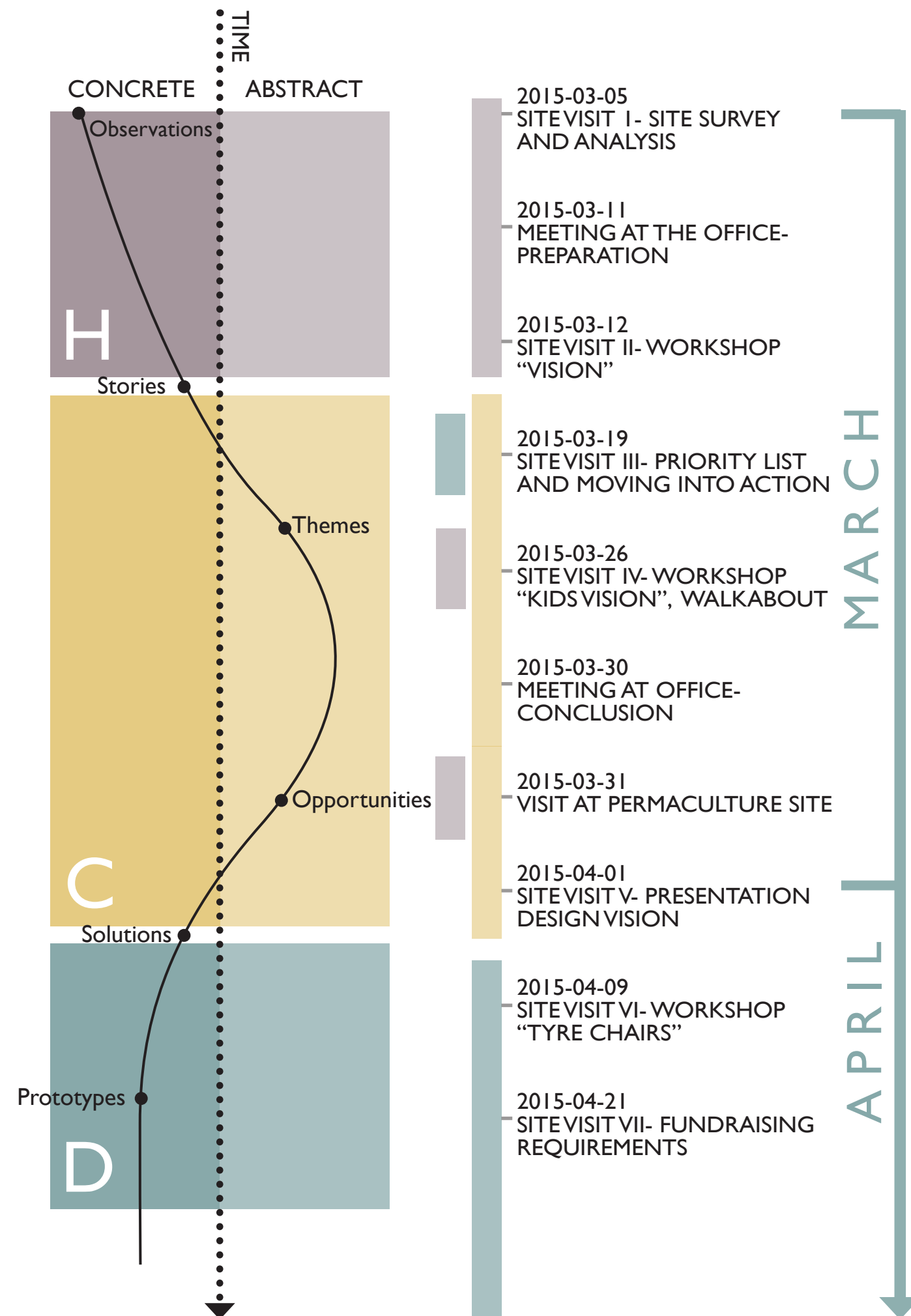


Figure 22. Hear, Create, Deliver phases.

Figure 23. Timeline of the project with its phases



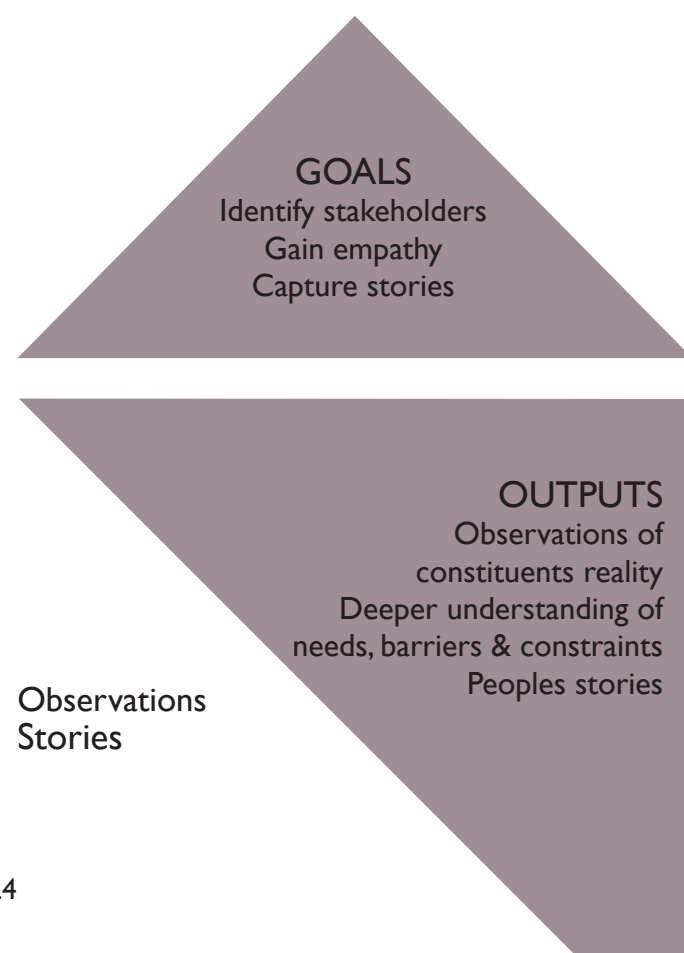
Figure 24. Timeline of the project with its phases

Figure 25. Illustration of HDC goals & outputs
(IDEO 2012, p. 29-31, p. 79-81, p. 121-123).

H EAR PHASE

In line with the phase Hear (see p. 40) qualitative research methods were used to understand the needs, barriers & constraints within the project in Makhaza. The process begun with an observation of the existing physical conditions and social dynamics through meetings with the people involved at the site. Activities on site along with the field visit at the permaculture site enabled the SHIFT team to inspire the group and gain empathy as to capture stories and get insight of the needs hopes and dreams of the people. The vision-workshops enabled an understanding of the different interests and desires as well as constrains, barriers and hidden needs of each individual within the project group. The fact that safety and administration turned out to be the most important topics thought us a lot of the context.

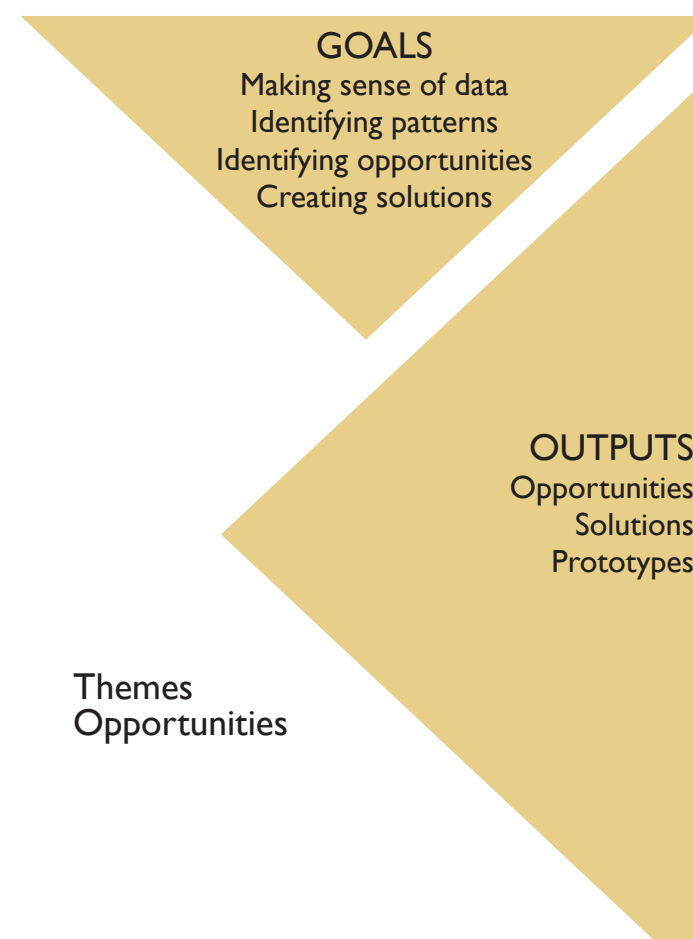
An effort to identify the actors and stakeholders within the project was done through workshops and group discussions. This step could perhaps have been done more cautiously and subtle to avoid conflicts between different actors that further appeared along the project. Minority groups with less power got pushed aside, for example the day care host Maria disappeared all of a sudden and barely any children attended at the meetings.



C REATE PHASE

After been capturing stories and inspiration from the Hear phase the project entered the Create phase where the received information was translated into frameworks, future opportunities, solutions and prototypes. The Create phase could be defined by four different stages synthesis, brainstorming, prototyping and feedback as previously mentioned (see p. 41). At the synthesis stage, after the vision workshop and site survey the SWOT-analysis was completed new perspectives were recognized especially concerning administration and safety. The project entered the brainstorming stage when further processing everyone's visions from the workshop that later resulted in the priority list.

The Create phase didn't turn out as efficient as desired. At the conclusion meeting the SHIFT discussed how to possibly accelerate the process. To include all UW's wishes in one design ,more tangible in terms of investment, a prototype (the design vision) was made. Once we had presented the Design Vision we left it with participants to bring them back in the process.

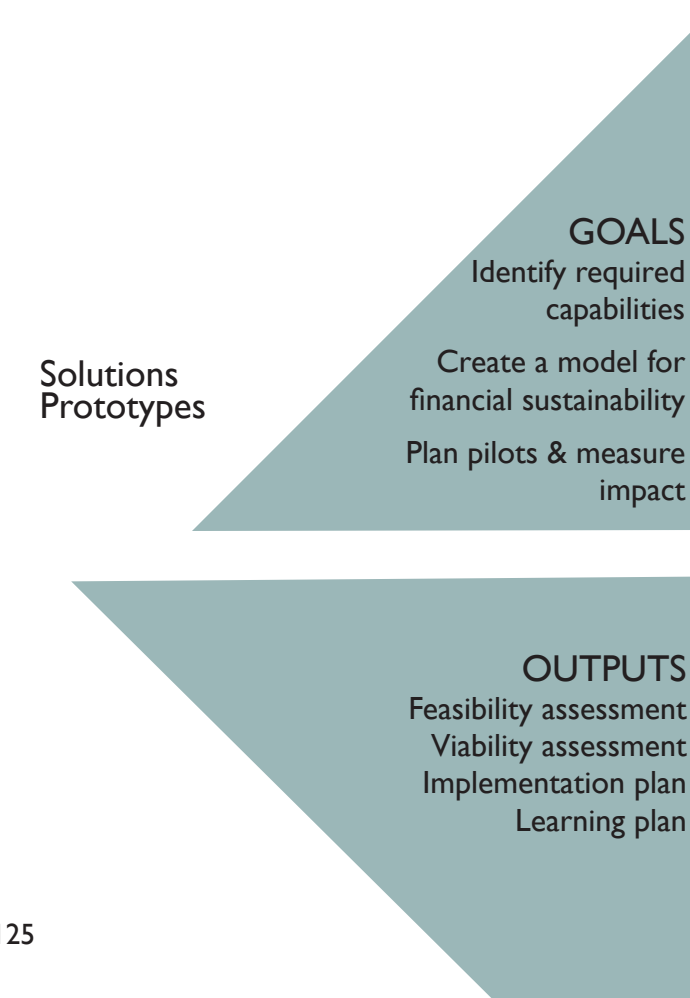


D ELIVER PHASE

At the end of our participation in the project the process was just about to enter the third and last phase Deliver (see p. 41) where the design solution should be evaluated through cost modelling, capability assessment and planning of implementation.

During the Create phase the project got divided into three phases of action extent with a range of what could be done with a few quick fix to costlier operations done over long term. To accelerate the project process and moving into action Phase 1 SHIFT successfully arranged the workshop of learning how to do tyre seats, a part of the concept of the site of making people from different target groups get together and connect.

After quite many weeks with an inefficient process with not much result the SHIFT team and we decided to confront the participants within the project. It turned out that the activities already started through afternoon tutoring sessions. UW further got introduced to fundraising and a future time plan was put up.



LESSONS LEARNT

Even though the project was not completed during our stay (and still isn't) in terms of physical results, we believe that the initial phase of the project had a positive effect on the community. The implementation of HCD in Makhaza became a platform for different groups to collaborate, exchange knowledge and set a common goal to work towards. At the time of writing, the project is in the fundraising stage and the plot in Makhaza has been used for workshops, a tutoring program and community meetings. Following section is a summary of the lessons learnt during the HCD project in Makhaza.

Identification of stakeholders

From the very beginning of the project it is crucial to find out whom the project will affect and have an impact on. We believe it is important to make sure that the right beneficiaries and stakeholders are identified before moving further into the project to avoid conflicts and improve efficiency along the process. In the Makhaza project the woman working with the day care centre was at first a major part of the group but was later on excluded by the community. More time and effort could have been put on making sure who the beneficiaries were and further have the whole group to agree on that.

Separation of different target groups

Another conclusion that can be drawn from our experiences with the Makhaza project is that separation between different target groups can be a good idea. We experienced that the women as well as the children had a hard time speaking up in front of the men within the group and that the adults affected the children's visions. To get accurate information workshops with different target groups could be to prefer.

Identification of roles and responsibilities

Even though the SHIFT team was clear about their role as facilitators all from the start it was not until the last meeting we attended that the roles and responsibilities were accurately established. We believe that the process could have become more efficient if the expectations on different stakeholders were discussed in a much earlier stage within the process.

Consideration of the extent of participation

From our experience not involving the community in the actual design process was beneficial for the process. The prototype (Design Vision) was based on the ideas and wishes of the group and made it possible to move on to the fundraising stage. We believe that in what stages of the process community participation should be used depends on the project and the prevailing context. In some cases it can be good to make your own design suggestion after hearing the ideas from the community to have a synthesis (based on the community wishes) for future discussions that can be adapted further.

Powering effect of concrete action

At last but not least, during the project we got to experience how concrete action can fuel a slow process. By moving to action and together quickly fixing the leaks of the containers we lightened the mood of the group and encouraged problem and were further able to move on within the process. Through our design proposal we made the people's vision more tangible easing the imagination of a potential future for the site.



Separation of different target groups could be necessary.



For efficacy the extent of participation could vary.



The powering effect of concrete action.



It's important to identify roles and responsibilities within the project.

6

DISCUSSION

REFLECTIONS ON THE CASE STUDY

Chapter six will follow up our main research question, discuss the project in Makhaza and method of HCD from the perspective of designing environments. Further the chapter reflects on the need for a holistic approach to urban planning in Cape Town and participation in relation to landscape architecture.



DISCUSSION

With this thesis we wanted to investigate how participatory practices can be implemented to create opportunities for social development in an economically and socially marginalized community. Our research questions were;

How can the method of Human Centered Design (HCD) be implemented in a community design project for a youth center in Makhaza Khayelitsha?
-What are the phases of a HCD-process, and how are these expressed in the Makhaza project?
-What are the conditions for the Makhaza project?
-What conclusions can be drawn from the Makhaza project?

The following discussion will address the key aspects encountered working with this thesis. The insights and conclusions from our participation in the HCD project in Makhaza, the HCD method as a tool for designing environments and the challenges for the urban planning system in Cape Town are discussed. Further we discuss the future for participation and encourage landscape architects to use participatory practices in a greater extent as well as to contribute to the development of such methods.

THE MAKHAZA PROJECT

As revealed in the evaluation of HCD in chapter 5 the project process in Makhaza was relatively successful though some phases could have been done differently for a more efficient process and a grater physical impact. The challenges we encountered in the process were mostly related to power balance issues between different groups of stakeholders and actors including the SHIFT team

and ourselves. As mentioned in chapter 4, Horelli (2003, p.618) sates that participatory methods often encourage a community driven process with external experts or designers as facilitators, in this case the SHIFT and us. When participating as an expert with a complete different background and with the history of the apartheid structures in mind we found it hard to recognize when it was appropriate to interfere and when to step back in the process.

In an early stage the SHIFT team choose to have a passive approach as far as possible to ease the establishment of the project within the community. As an attempt to hand over more responsibility of the process to the community Janine, the CEO of SHIFT, often impeded to the group that activities and actions could take place even without the SHIFT team being on site. When no significant progress was made we and the SHIFT team decided that we should make a design vision (prototype) without direct involvement of the group.

The design vision (prototype) that we made was an illustrated architectural suggestion of the site's layout and content based upon the visions of the group collected during the meetings and workshops. The decision to not directly involve the group in the making of the design vision (prototype) was done after discussions between the SHIFT team and us, were we agreed on this action to speed up the process and give the group a clear goal to work towards. The action had a positive effect on the process and major steps were taken forward. Even though participation is the pillar of HCD we believe that this action was necessary in the Makhaza project, due to the dynamics between different stakeholders within the

group, to continue the process. From our experience it is a good idea to consider the extent of participation and in which stages participation is most beneficial for the process and the people that we are designing for.

All through the project we got a feeling of the process being slightly inefficient when always coming back to the same issues meeting after meeting. As time went by the SHIFT team and we construed the absence of progress as a lack of commitment from the group. However, at our last meeting our discredits turned out to be a bit suspended when we confronted UW and they told us about their tutoring program already taking place at the site. This served as a lesson for us, that even though no physical results were visible the community's view of the site and their use of it had changed during the HCD-project process.

The role of SHIFT

A potential contributory factor of the sometimes inefficient project process in Makhaza could be the chosen passive approach of SHIFT. In relation to previous projects of SHIFT the Makhaza project was rather extensive and as far as we understand the first time where SHIFT implemented the HCD method in a larger scale. Our interpretation is that the SHIFT team was used to work in environments with a similar social context but on different terms. In previous projects in collaboration mainly with schools, SHIFT's agreement with the board had given them more authority to act giving the possibility for their team to transform places entirely in a short amount of time. In the Makhaza project the terms and circumstances were different where the SHIFT team had a more facilitating role leading to a much slower

process in comparison to their previous projects. The idea of making a rapid and comprehensive transformation was there from the start but as time went by the SHIFT team decided to change their approach slightly when they realized that the makeover of the site probably would take years.

Another insight we got during the process regarded SHIFT's wishes to incorporate previously used design solutions within the Makhaza project. On one hand the use of the same solutions in several projects could be seen as ignorance to the specific project and its conditions and context, not in line with the philosophy HCD method when every solution should be derived from the community. On the other hand the introduction of the design solutions can be seen as a method to inspire the community to similar innovations and further be an object to gather around. The commonly used solutions such as the tyre chair workshop could work as objectives for workshops to generate activity and strengthen the sense of affiliation within the community.

Conclusions

From our participation in the Makhaza project we came to two main conclusions. These conclusions are not of a general character since they are related to the specific project, but will serve as lessons that we will carry with us in our future work.

The first conclusion is that while talking to the community in a participatory process it is important to distinguish the long-term opportunities from the wishes that can be fulfilled and solved on a shorter basis. It's crucial to address the actions that can be done at the

moment that still has an impact on the long-term goal. With this approach the dreams of the community are kept alive and at the same time the immediate actions will keep the motivation up. The second finding is related to the power balance issues experienced during the project. Because of the highly social nature of a participatory process power relationships can have a major impact on the result. To make sure that the project, in terms of location, use and content discussed is relevant to the group a primary definition of stakeholders could be done in the initial phases of the process. Later this definition can be fully determined when the power structures at the local scale is understood.

THE HCD METHOD AS A TOOL FOR DESIGNING ENVIROMENTS

This section discusses the HCD method from a general perspective based on the literature review and our experiences gained from implementing the method in the Makhaza project.

Horelli (2003, 618) states that a community driven process often is achieved by using enabling tools. The HCD method by IDEO with the phases Hear, Create and Deliver is a collection of enabling tools that can be used in a participatory design process. Di Russo (2012) explains that HCD in the early days was considered as more of a mind-set, placing the users and the design in a socially aware context rather than being an actual set of tools. This mind-set of social awareness is common in participatory methods used today. Hamdi (UN- HABITAT World Wide 2014) uses the term social economy of place, the combined assets of a place necessary for wellbeing and sustaining livelihoods. This term and its significance is not much different from IDEO's lens of Viability, advocating that a design should

be able to sustain itself in the long-term by economic viability and preferably serve as an opportunity for social development. We experienced this mind-set to be necessary for building a relationship with the participants, to understand their reality, to capture their stories and to communicate in a productive way.

When it comes to IDEO's HCD toolkit we think that the tools are mainly focused on design of specific objects and solutions, not entirely compatible with design of environments. Nevertheless we found the toolkit useful as inspiration and support for the participatory process. The lens of Viability and the idea of the design sustaining itself in the long-term became the most important aspect of HCD for us, since this perspective has been absent during our landscape architecture education.

Like any other participatory process some outcomes of HCD method might be intangible but can still make a difference for the community in terms of social development. Therefore it's important not to determine the success of a participatory solely based on physical results. We believe that participatory process should be evaluated from the community's perspective, for example in terms of improved relationships or skills development.

HOLISTIC ENVIRONMENTS FOR FUTURE CAPE TOWN

During our field study we got in touch with a range of actors working with urban planning, design and empowerment of marginalized communities as well as with the City of Cape Town Metropolitan Municipality. We got to experience the huge challenge of including the townships in the city structure, of overcoming segregation, fight inequality and to make life easier in the marginalized communities, a huge task impossible to solve overnight.

In the Integrated Development plan from 2012 the CCT explains that the city would profit from an investment in healthy and holistically integrated communities from a spatial and social perspective (CCT 2012, p.33).

This statement shows that there is an awareness of the issue and the resources required yet the solutions and investments still are conspicuous by their absent. The urban planners at the municipality don't seem to have any support from policies or strategies in how to work with development projects in the townships, even less in how to include the community. The approach from the municipality seems to vary from project to project and if the community is allowed to participate it is in the late stages of the process. One clear indication of that the current approach is not working well is the recurring vandalism of the new public places made by the municipality and the frequent riots. Our personal opinion as landscape architects is that there is a need of a more holistic and inclusive approach to urban planning to overcome the increasing problematic.

We believe that the approach recommended by the UN (2014b, p. 239-241), to integrate top-down priorities with

bottom-up development in order to handle informality successfully also should be implemented in the urban planning of Cape Town. Urban planning should be done in a more inclusive manner creating opportunities for social and economical development. The community ownership and responsibility of a place could potentially become much greater if the development is done with participation from the community. It would be preferable to the develop environments supporting social opportunities such as community centres that make room for small-scale economic opportunities. This approach to developing and designing environments could be a good opportunity for the municipality to gain trust from the community, cutting down costs for vandalism and expanding the tax revenue by improving their relationship with the inhabitants in a long term perspective.

The Cape Town civil society and NGO:s take on huge responsibilities when the government has failed to provide its inhabitants. We experienced that the inhabitants of Khayelitsha were very eager to engage in matters concerning their neighbourhood whether it regarded activities for youth or gardening. We believe that it is of great value for the municipality to identify key NGO:s ranging at different target groups in every neighbourhood and use representatives from each and one of them when conducting participatory development projects. To enable a change the local government needs to learn how to use this engagement as a valuable asset in urban planning matters.

Since it is predicted the majority of the South African population to be living in cities by 2050, issues concerning urbanization and urban life will have a huge

effect on the social political dynamics in the future. Politicians need to address the need for a more holistic and social sustainable planning system to govern successfully. The sooner this is done; the sooner Cape Town and South Africa can start with overcoming the spatial segregation and social inequalities existing.

THE FUTURE FOR PARTICIPATION

When discussing participation within the field of urban planning and design the connection is often made to developing countries and issues of poverty. One reason for this might be explained with Calderon (2008, p33) statement mentioned in chapter 4, that the implementation of participatory practises mainly has been carried out in the developing countries but the methods and techniques have been elaborated in the western world. From our experiences participatory practice are a good approach to engage people in their surroundings and to include marginalized communities in bottom-up development. Local authorities have much to gain by improving their relationship to the citizens though community participation and could be an influential tool to overcome inequalities.

The importance of a more socially aware approach to place making will continue to grow with the increasing urbanization. We believe that the field of landscape architecture can contribute significantly to the development of participatory practices by serving as a link between the physical and social aspects of planning and design of environments. The use of participatory practices can be done to a wider extent, not only in developing countries but also in any context where social development is needed.

POSTFACE

This thesis has been a part of a Minor Field Study funded by the MFS scholarship and SIDA. By highlighting the importance of social development in place making we hope that this thesis will contribute in the development of the subject.

We believe that the importance of social aspects in urban planning and design will continue to rise with the rapid urbanization and globalisation. To create holistic and inclusive societies for the future it is crucial to see beyond the physical aspects of place making and consider the social economy of place.

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APENDIX I

Sample questions and topics of discussion

MEETING WITH CITY OF CAPE TOWN,
DEPARTMENT OF SPATIAL PLANNING AND URBAN
DESIGN, 23RD OF MARCH 2015

Approach to upgrading townships, basic
services? Relocation, demolishing, building new
houses

National approach and in the approach in Cape
Town?

Approach to public places within townships,
slum upgrading through public spaces
and facilities

The use of community participation, a luxury
only working within small scale projects driven
by NGO:s?

Anything specific on the plot in Makhaza, Khayelitsha

The background of Khayelitsha, inhabitants, development
(shortage of cheap housing?), actions made in history,
actions done now, the long term plan for the area

Policies, documents, action plans, maps of development?

MEETING WITH SIZWE, URBAN PLANNER AT
CORC, 15TH OF APRIL 2015

How does CORC work in Khayelitsha? Projects,
methods?
Challenges working in Khayelitsha?

Relationship and approach towards the
municipality City of Cape Town?

Challenges for the future, urban sprawl, social
integration?

MEETING WITH CITY OF CAPE TOWN,
DEPARTMENT OF SPATIAL PLANNING AND URBAN
DESIGN, 17RD OF APRIL 2015

What kind of projects do you work with?

Methods, policies, guidelines for your work?

The approach to upgrading, now and before? What is the
difference?

Main focus for upgrading, basic services, housing?

Challenges and possibilities working in the townships?

Experiences working with community participation? Do
CCT use a certain method or working order?

APENDIX 2

SPUD –THE DEPARTMENT OF SPATIAL PLANNING
AND URBAN DESIGN

SPUD is in charge of the physical and spatial
transformation of Cape Town by developing, monitoring
and coordinating spatial plans, development and policies.
The department is responsible for the city wide spatial
development framework (SDF) that includes aspects that
affects the growth of the city.
The department aims to express landscape and urban
policies though design, facilitation and implementation
of projects and programs. SPUD also gives input to
development applications made to the City (CCT 2014e).

CORC- THE COMMUNITY ORGANISATION
RESOURCE CENTRE

CORC is a partner of Slum Dwellers International (SDI)
South Africa. CORC is a gathering of independent
professionals and grassroots activists how act collectively
to support community networks and their own resources.
CRORC specialize in two different areas, informal
settlements with issues concerning basic services,
eviction, upgrading and women’s collectives through
savings (SASDI Alliance 2012).