incubated dimension JOSHI 2014

a n u r b a n
campus for
informal
business
development
at the grand
parade
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Master of Architecture (Professional)
Design Dissertation
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University of Cape Town
2014

an urban campus for informal business development at the grand parade

incubated dimension
DECLARATION

1. Nikheel Joshi (jshnik002), am a student registered for the Master of Architecture (Professional) in the year 2014. I hereby declare the following:

I am aware that plagiarism (the use of someone else's work without permission and/or without acknowledging the original source) is wrong. I confirm that the work submitted for assessment for the above mentioned course is my own, unaided work except where I have stated explicitly otherwise. I have followed the required and accepted conventions in referencing thoughts, ideas and visual materials of others (Harvard referencing system). I hereby declare that this dissertation thesis is free of plagiarised material.

________________________
Nikheel Joshi
22 October 2014

This document is submitted in partial fulfilment for the degree: Master of Architecture (Professional) in the School of Architecture, Planning and Geomatics, University of Cape Town, South Africa, 2014.
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Finally, I want to thank my Creator, without Whom none of life is possible.

Sarvoham Vimuktoham
i am all, i am free
“From here on, people can’t be separated by physical obstacles or by temporal distances. With the interfacing of computer terminals and video monitors, distinctions of here and there no longer mean anything.”

Paul Virilio (2012:30)

keywords: digital media, connectivity, boundary, mediation
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INTRODUCTION:

This dissertation is inspired by the age of digital media as a mode of cultural production. This project aims to uncover how social interaction is shaped by digital space and its effects on physical space. This is an exploration of an architecture which mediates between the tensions and contradictions that exist between a digital and physical dimension.

I believe today’s culture is largely driven by the use of digital and social media, be it Facebook, Twitter, Whatsapp, Instagram etc. Through the use of digital media, people are able to consume and produce material (online) simultaneously and collaboratively. I believe this has transformed the manner in which people communicate and establish their sense of identity. Digital media has also made way for the concept of globalisation, where people are brought closer through instant and rapid forms of network communication, thus contesting and collapsing the reality of distance and physical boundaries.

According to Virilio (2012:73), “...we must at least resolve ourselves to losing the sense of our senses, common sense and certainties, in the material of representation. We must be ready to lose our morphological illusions about physical dimensions...”. This indicates that there is a tension between the formal environment and digital space. In this age of digitalisation, the human artefact and its mode of communication is changing; with it, so will our physical environments.

This dissertation seeks to negotiate between these two dimensions, through the architecture and its programmatic response in relation to the urban context of Cape Town city centre.
EARLY CONCEPTUAL EXPLORATION:

The conceptual exploration was done through the use of artefacts, which attempted to explore the interest of digital media as a mode of cultural production. The artefacts aim to uncover the nature of digital media through representation and interpretation. Some of the key issues that were drawn out of the conceptual explorations were production (re-production, co-production, co-consumption), fragmentation, pixilation, boundary, edge, permeability, connectivity. As we move through this dissertation, I request that these key elements be kept in mind.
Between 1893 and 1910, Norwegian artist Edvard Munch produced a series of four paintings known as The Scream, rendering them in different paints, mediums and techniques. As part of this series, Munch created a lithographic representation of the original painting. (Temkin, n.d.) The intriguing aspect to this painting is the ability to reproduce the same image many times. This introduced the concept of repetition of image through mass production, in an age when art had been reserved for an elite society.

By the ability to reproduce the same image many times, the object was able to trans-migrate its state of elite consumerism. The various representations of The Scream painting made it possible for a larger audience to, not only consume it but also to reproduce, and re-appropriate the artwork through mass production. In 1984, Andy Warhol reproduced a screen-print of Edvard Munch’s The Scream as a commentary of the 80’s pop-art culture. Later, many others (artists and non-artists alike) created variations of Munch’s original art-work through the use of digital media and technologies.

I believe that although The Scream was produced by Munch during the Expressionist art movement, it also became the very work of art which initiated a change in the agenda of art and its relationship with its audience. The meaning, and agenda had changed due to the element of reproducibility and mass production (Benjamin, 1935). Through the emergence of digital technologies, and the aid of the internet, this work of art has totally transformed into a product of mass expression through re-appropriation. Digital media and technology further expand the reach and rate at which information material is exchanged, serving as a mechanism of cultural production in post-modernity and cultural identity.

Today, the digital dimension allows for this sort of consumption and [re]production simultaneously. The agenda of the original artefact is able to be re-appropriated due to the nature of mediation between boundaries, information, space, place and time in the digital age of post-modernity.
ARTEFACT 02.

a changing agenda

The second artefact is an exploration of digital media and its mode of communication; networking. This constructs a new order of connection and interaction between people. The mode of network communication transforms the nature of human interaction, thus setting a new agenda of communication and cultural identity.

The transforming agenda of communication technologies have evolved into social platforms, which act as a medium of social and cultural exchange. The individual has become the source of spectacle, where everyone is a celebrity (Facebook), a musician (YouTube), a photographer (Instagram), a journalist (Twitter) etc.

The conceptual model here aimed to explore this new order of networking and how this form of interaction is able to transform the agenda of the original image of The Scream painting. Through the means of fragmentation and layering, the original image of The Scream artwork is distorted and re-configured. Here, the artefact model establishes the product of image, where the authentic original image is distorted and re-configured to create a new image, with a new agenda.

I believe the emergence of media culture has shifted the way in which people communicate; from a one-way channel of communication to the multi-directional mode of network interaction. According to Lyotard (1984), postmodernism is a reaction to the computerisation of society. New systems of communication are presented to a postmodern society as a key component of the ever-evolving human condition. In the twenty-first century, electronic media is supporting the transformation of cultural identity across many scales. Film, television, internet, smart-phones etc., and their integration as 'multimedia' has reconfigured new words, sounds and images, which then collectively cultivate new configured elements of individuality and identity.
Fig. 4: Conceptual model
**ARTEFACT 03.**  
*boundaries*

According to Virilio (2012:7), "McLuhan spoke of 'global village', he was being futuristic and positive. It has now become disturbing.". The author makes it clear that as much as the idea of globalisation was seen as a futuristic ideal, it has now become a reality which has a considerable impact on the human condition today.

Digital technologies are changing the manner in which people interact with themselves and others. The third conceptual artefact focused on exploring the aspect of digital media which allows us to connect with one-another, collapsing the physical limits of distance, space and time through networks of connection and interaction.

This artefact seeks to explore this notion of boundary and the tension between edge and permeability, through the technique of painting used by Paul Klee. According to an online article (Anon., 2013), "Klee's paintings developed a structural tension by alternately emphasising the erratically gridded field and the articulate fragment."

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*Fig. 5 (right and opposite): pencil sketch with water colour paint on A3 water-colour paper*
DIGITAL MEDIA
IN PHYSICAL SPACE:
from public square to public interface

Virilio (2012:13-14) states that, "It is the source of the new contemporariness expressed in the mind of some architects by the notorious aphorism of Rem Koolhaas in 1995, 'Bigness fuck context!'. As public space crumbles and is gradually replaced by networks of communication, it is up to architects to plan for the large and shocking, edifices as shocking as they are large."

Virilio believes that the integration of digital technologies alter the agenda of architecture; physical context seems to deteriorate as a result of digital integration. Virilio has expressed that it is the public sphere that is crumbling while digital networks of communications are replacing the importance of physical space.

Could it be that the digital dimension brings with it a new sense of public space and place? New forms of digital media, perhaps, offer the physical dimension new notions of public platforms. Digital technologies possibly bring with it a reinvention of public space with regards to its function in the physical dimension. Is it that socio-digital media in the twenty-first century is rapidly becoming the new public square? Social networks such as Facebook, Twitter, WhatsApp etc. change the agenda of public space and place in the physical dimension. There seems to be a critical shift with regard to the public sphere, from a traditional public square (physical dimension), to a public interface (digital dimension).

Public spaces have always been a means of public engagement. Public spaces traditionally have functioned as a means to facilitate the exchange of information or commodity. I believe the nature of exchange has transformed with the digital age, thus transforming the nature of public spaces today.

According to Scarponi (2005:48), The Dreaming Wall project was initiated in 2004 and was originally submitted for a competition. The Dreaming Wall (a vertical public space) is a project which was designed for a blank wall in a historical public square of Milan, Italy.

Scarponi (2005:48) goes on to explain:

Collective Subconscious. The wall is seen as a tool of cultural, simultaneous and random collective communication, creating a visual buzz. As a public digital billboard, at night its surface randomly displays text messages sent by people standing in the square, or anywhere else in the world via the Internet. The messages are generated in real time by a chemical reaction between a computer-controlled UV laser projection and phosphorescent panels on the wall, which are 'excited' by the UV light and so release the glowing text messages last 15 minutes before being absorbed by the wall. This constant transience metaphorically suggests the sub-consciousness of a city asleep.

This urban art-work project moves towards an integrated digital element in architecture. The facade of an existing building (physical dimension) is transformed in meaning and its relationship with the city (through digital technologies). The once passive, facade of the existing wall had now become the transient interface, where by night, it is transformed into an interactive public surface, connecting people, the architecture, and the urban environment to one-another. This project illustrates a shift from public square to public interface, where architecture becomes the mediator between the physical object, and the digital means of communication.
Fig. 6 and 7:
Info Forum - The Dreaming Wall,
from public square to vertical public interface
THE BOUNDARY AS EMBODIED INTERACTION:
from passive to interactive


"...‘boundary conditions’ have become increasingly porous. Connectivity (the network) is the chief characteristic of the 21st century. Relationships and communities are formed online, exceeding the limits of physical/geographical habitats, as processes, time zones and locations stream continuously through networks.

"...Space is constituted by places that are created inside territories in an endless process of mutual influences, horizontal and vertical (inside each category and among them)...We’re always immersed in territorial layers (subjectivity, physical, cultural, political, economic) and these layers constitute places." (Lemos, 2010:405).

The architectural project is a conglomerate of diverse elements, which come together to create various experiences, meanings, expressions, ideas etc. Whether these elements are in combination or in contradiction to one-another, together they all start to produce the language and distinction between here and there. Space is constituted by places which are territorialised in some way, be it explicit or implicit, the boundaries of places spatialise the architectural project in the physical dimension.

In the same article, Lemos (2010:405) also goes on to explain, "By informational territory I mean the control (and to be controlled by) of digital information flow in a physical area. It's a new territory within places created by the intersection between urban space and cyberspace. We must understand that places are a result of negotiations among territories." Here, the author is arguing the relevance of the boundary as an important mediator or negotiator, between the physical urban setting and the emergence of the digital media culture of the twenty-first century.

An online article which appeared in the Architectural Record, discusses that "Electronic signs are everywhere, from billboards to taxis, and now buildings are becoming digital canvasses... Digital facade is a broad term, but these dynamic claddings typically feature LED lights or projection systems and might display images. Some newer, energy-efficient 'smart skins' control light and shading in response to the weather and can also display images." (Bowen, 2009).

David Jones (2013) explains that the RMIT Design Hub project (Fig. 8 right) was a collaboration between an art-music collective and an architect to transform the architectural landmark into a massive keyboard and digital scrolling piano.

Jones (2013) goes on to describe:

The glass cells of the building’s ‘second-skin’ on the southern and eastern walls will be internally illuminated. Computer controlled LEDs will animate a curated program of transcriptions of 20th century avant-garde art, architecture and experimental music. A mechanically operated grand piano inside the building will perform the transcriptions in real time. This ‘music’ will then be transmitted over FM bandwidth for radio access by anyone in proximity to the building.

Here, we are presented with a shifting agenda of the very boundary, facade, skin, interface of architecture in the contemporary city. According to Bowen (2009), "the exterior...is lined with thousands of sandblasted glass tubes containing solar collectors. The tubes double as pixels when lighted. The direction is toward essentially all architectural surfaces being potentially programmable,' says William Mitchell, director of MIT’s design lab."
The element of the physical boundary, has played a central role in spatialising physical places, which are essentially constituents of space. The 'wall' in architecture can be used, in combinations or in contradictions to one-another; either setting clearly or loosely the agenda, between here and there. Whether the boundary is designed as a barrier, or an edge or the disaggregation of it, it has been used as a narrative tool in establishing 'either here or there', or 'both here and there'.

I believe that the boundary, in the twenty-first century, may be an integral element which has embodied the role of interaction between people, places, spaces, architectures etc. The boundary in the digital dimension has become the structural material, by which the user is able to transmigrate the architectural (physical) challenge of distance, space and time. Through the distortion, porosity and decentralised structure of the boundary, the user is at once brought into instant proximity with information and interaction, similar to the RMIT Design Hub of the University of Melbourne.

Fig. 8 (below): The Reproducing Building - project by Slave Pianos intended for the Design Hub at RMIT University, Australia
The site selected for investigation in this dissertation project is the Grand Parade, in Cape Town’s CBD. The selection of this site is inspired by its urbanity and public nature. Through the process of theoretical exploration of digital media, it has become apparent that the role and agenda of public environments in the information age has changed. Public space has always been a stage for the interaction, and exchange of information. The mode by which we communicate in today’s contemporary cities are changing, and with it, the nature of public environments today.

Fig 9 (right):
Site Plan.
Grand Parade
The Grand Parade was the first public space in Cape Town, and was used for public events and a regular market. The Grand Parade has been a place where people gathered to celebrate, protest or seek refuge. On the 11 February 1990, many citizens gathered on the Grand Parade to hear the words of Nelson Mandela on his release from prison (Anon., 2009).

Fig. 10 (middle and top): The Grand Parade, a centre for economic activity and trade.

Fig. 11: On 11 February 1990, Nelson Mandela delivered his speech from the City Hall to the masses gathered on the Grand Parade (a space of political gathering).
According to Graan (2013), the Grand Parade had initially been used by the Castle garrison as a training ground and later it became the public centre for trade, congregation and recreation. Despite this, for many years it had remained a natural meadow, traversed by meandering streams of water, travelling from the mountain down to the ocean.

The Grand Parade was originally known as Wapen Plein (Square of Arms) and the site of Jan van Riebeck’s original fort in 1652 which was located on the north-western edge of the site. In 1658, the first Dutch East India Company slaves arrived at the Cape and were housed at the fort (Anon., 2009). Before the 1947 Foreshore Plan for the city, Strand Street is where the original coastline of Cape Town was located. Thus the Castle of Good Hope was first built as a replenishment station which controlled the fresh supply of food and water to passing ships. Between 1666 and 1679 the Castle was commissioned to be demolished and re-built on the north-eastern side of the current day Parade grounds. The new Castle was to be made bigger and stronger to accommodate for the Dutch military as a means to protect their vested interest in the Table Bay region.

In 1763, the Burgers of the Cape planted a number of oak trees around the area, and in 1806 the city decided to erect a water fountain. Despite the site being an open civic ground, over the years buildings have been built on the fringes of the site, reducing the size of the Parade ground by one and a half times its original size (Reedwaan, 2014). Today, the Grand Parade stands at thirty-thousand square meters in area (30,000 m²).

In 1845, the Dutch had setup an ordered system of initial infrastructure around the coastline which were the beginnings of the city of Cape Town and its current urban fabric. As part of the port, the Dutch erected a customs house, post office, warehouse, town prison and a commercial exchange. Canals had also been created to use the natural mountain water for irrigation and other daily uses. These canals were designed in a way which brought a sense of spatial order in defining the Parade grounds from the rest of the city, marking it as an important civic space.
Fig. 13: historical layers - site sketch

1. foreshore _ 1930-present
2. castle of good hope _ 1660
3. customs house,
   port office,
   queen's warehouse,
   town prison
   _ 1845
4. commercial exchange/public library _ 1845
5. water canals _ 1700's
6. caledon square _ 1845
7. fresh river _ 1600's
Fig. 14: historical layers over time through sketch sections
In 1937, Cape Town's coastline underwent a radical transformation where land had been reclaimed from the ocean, expanding the city's fabric towards the Atlantic Ocean. Subsequently in the 1940's and 1950's, town planners, architects and engineers developed many schemes and grand visions for the newly reclaimed foreshore precinct of the city (Botha, 2013:iv).
A photo taken from the north-east showing a model of the replanned Foreshore Area with existing Cape Town as a background.

Cliché pris depuis le nord-est et qui montre la maquette de l'aménagement des terrains asséchés, avec la ville actuelle derrière.

'n Foto uit die noordooste geneem, aantonende 'n model van die herbeplande strandgebied met die bestaande Kaapstad as 'n agtergrond.

Fig. 18: Foreshore scheme, creating strong axial lines between the City Hall, Grand Parade and Maritime Terminal to establish a strong civic spine in the city.
1947 foreshore plan

The 1947 Foreshore scheme was developed through various other schemes over time, taking into consideration the most effective approaches. One of the key decisions that was made was that the pedestrian deck, which crossed over the railway platforms would continue the approach to Grand Parade and City Hall, terminating the vista. It was proposed that the City Hall and other historic neighbouring buildings be replaced by a Modernist tower block. The new City Hall was not to be designed as a monolithic block, but rather an assembly of geometric shapes still keeping the aesthetic of a tower to mark the significance of the building. This plan also included a new deck to be built between the Grand Parade and City Hall. It was also proposed to level the space behind the City Hall, to create another park space, connecting to Rooland Street. This would serve as a symbolic link between Parliament, the inner city and the new civic zone of the city (Botha, 2013:65-74).
Fig. 19: The 1947 Plan for Cape Town’s Foreshore
Fig. 20 and 21: Monumental sense of arrival is created by the staircase which connects the Station to the Grand Parade, along with defining the edge of the Grand Parade.
**SPATIAL ANALYSIS:**

Grand Parade, Cape Town

Piazza Navona, Rome, Italy

Mary Fitzgerald Square, Johannesburg

Green Market Square, Cape Town

Church Square, Cape Town

30 000 sqm

15 600 sqm

11 000 sqm

6 000 sqm

1 700 sqm

Fig. 22: Spatialising a comparative look at the scale of the Grand Parade in relation to other public spaces.
To better understand the Grand Parade in context of the wider urban fabric, this analysis examined activity at three different scales: city (macro scale), locality (intermediate scale) and site (micro scale). The macro scale investigates the role of the Grand Parade in relation to the wider context of the city centre. The intermediate scale refers to the Grand Parade in its surrounding civic precinct. The micro scale is determined by the definition of the Parade as a public space.

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**Site Map**

- **Micro (Site)**: Grand Parade
- **Micro / Macro Level**: City Hall, City Library, Castle of Good Hope, Cape Town Transport Station, Golden Arrow Bus Terminus
- **Macro Level**: Pedestrian friendly high street, Main vehicular routes, Good Hope Centre, The Fringe design district, CPUT Campus, Company Gardens, Green Market Square, Riebeeck Square, Church Square, Thibault Square, Tulbagh Square, CTICC, Artscape, Civic Centre, MyCiti Bus Terminus
At the macro urban scale, the Grand Parade becomes a participant to the civic nature of the City. It is the oldest public space of the city amongst other public facilities located nearby. This site map focuses on a 1km radius, and it is clear that the Grand Parade is located within close proximity to other public spaces in the city. The Grand Parade sits at one of the main gateways into the Cape Town city centre. The site, as a civic space and due to its location, is also an agent to stitching the Foreshore city fabric to that of the older city fabric of Cape Town. The Grand Parade becomes a mediator between the older structure of the city grid and the 1947 reclaimed Foreshore planning scheme. The Grand Parade is also located on a belt of public transportation facilities, marking this precinct as the main transport hub of the city.
The next approach that was taken was to understand the Grand Parade in relation to its immediate, local context. The Grand Parade is surrounded by streets and important historical buildings.

The southern edge of the site (Darling Street) is surrounded by the City Hall and the City Library (old Drill Hall for the Castle garrison). The Castle of Good Hope is situated on the north-eastern edge of the site (Castle Road). The presence that these three buildings share with the Grand Parade, creates a strong sense of heritage and historical value.

The northern edge of the site (Strand Street) is flanked by the Golden Arrow Bus Terminus and the Cape Town Station (taxis and trains). The north-western edge of the Grand Parade is encircled by the Golden Acre shopping mall.

The site also incorporates both vehicular and pedestrian movement in and around the area. Long Market Street runs parallel to the Grand Parade (behind the City Hall), serving as the main public high-street. Darling Street also is an important pedestrian zone, as it serves to link the Cape Peninsula University of Technology (CPUT) and southern suburbs to the city centre. Strand and Darling Streets both create the main vehicular spine coming into the city. Castle Road is also a high traffic zone, as the Golden Arrow buses use this road to gain access into the Golden Arrow Bus Terminus.

Figure 26 (right), is a diagrammatic sketch of the Grand Parade in its local context. This diagram illustrates the generators of movement and activity through and around the site. This sketch is an attempt to uncover the nature of pedestrian movement through the site, and to understand the site in its particular urban context. This illustrates that movement through and around the precinct is diverse, and that the site is usually activated because of other institutions which generate activity across the site. Most pedestrian activity traverses the site due to the massive transport hub (buses, taxis, trains) which is situated on the northern edge of the site.

Fig. 25: MyCiTi Bus Route through Cape Town for 2014

MyCiTi routes as at 5 July 2014
Fig. 26: diagrammatic sketch illustrating the generators of activity in the local context of the Grand Parade

1. central library + college of ope town (city campus)
2. department of home affairs
3. parliament
4. church square
5. flower market
6. golden acre shopping mall
7. cape town station_adderley street
8. cape town bus terminus

Public Node
High public transport activity
site (micro scale):
spatialising elements and informants

Fig. 27: Sketch depicting the sense of place and nature of experience at a human scale.
perception_suffix-parts

does this space present multiple opportunities for interaction at different scales?
movement through physical space
The Grand Parade precinct poses some challenges with regard to the boundary condition on the site's peripheries. The Golden Acre shopping mall on Lower Plein Street, the City Hall and the City Library on Darling Street create positive edges to the Parade. Castle Road in combination with the imposing facade of the Castle of Good Hope creates a hostile barrier for pedestrians. Historically, the Castle and the Parade belonged to one-another. Today, Castle Road dissects the ground between the Castle and the Parade, creating a vehicular barrier over-and-above the existing moat and stone wall of the Castle. This spatial dynamic creates an uncomfortable zone towards pedestrian activity on this edge of the site. Interestingly, the Golden Arrow Bus Terminus, located on the northern edge of the site, creates an undefined edge to the Parade. This space acts as both a through route or a destination point for most pedestrians. This indeterminate sense of agenda in space causes an undefined edge between the Bus Terminus and the Parade.
The Grand Parade is a site of trade. On Wednesdays and Saturdays, a larger scale market is held on the site. These informal traders rely on the movement of people moving through the Grand Parade to get to the Golden Arrow Bus Terminus and the Cape Town Station. Pedestrian movement is prominent from the south-easterly corner of the Parade (from Table Mountain side), through to the transport precinct (C.T. Station). This diagonal route is particularly apparent at particular times of the day (mornings and evenings). The traders however, rely more on pedestrians who arrive at the Parade from the city centre. These pedestrians move through the site on the edge created by the Golden Acre Shopping mall. The edge creates a defining character to the Parade, and is more pedestrian friendly. Thus, informal traders cluster around the pedestrian movement which relates to this north-western edge.

Fig. 31: Diagrammatizing the nature of pedestrian activity on the Parade.
In analysing the socio-economic conditions of the site, an understanding of programmatic elements at different scales was pursued. These elements display a combination of large and small scales of activity. The bigger scale animates the Grand Parade as the event space; the space of spectacle. The smaller scale displays a level of intimate activity in relation to the expanse of the site (30 000 sqm.). The larger scale deals with the planned event such as the 2010 Fifa World Cup Fan Fest. The smaller scale is relevant to the 'every-day', and entails informal economic activity, and parking facilities. This area becomes interesting with regard to the historical context of the Parade ground being used as a daily market place. The following diagram draws parallels to these set of observations made on site.

Drawing from each event, I have found that the site operates both as a civic event space and a daily informal market. From the site analysis, we can draw the understanding that the site accommodates for both the larger event (macro) and the daily market place (micro scale).
event space + informal market

wednesday fleamarket

minstrel carnival

saturday fleamarket

infesting the city

Fig. 34: Spatial diagrams illustrating different socio-spatial conditions (event/informal market)
Informality + trade

Informal trade is a major every-day activity that occurs on site, all year round. Therefore,ocument analysis focused on this aspect of the site in greater detail. Specifically, this investigation attempted to un-pack the nature, scale and character of informal activity at the Grand Parade.

Some of the main challenges experienced by informal traders are crime, climatic conditions (windy and wet), storage facilities for goods, access to financial support (for improving their businesses) and access to infrastructure (water, sanitary and electricity).

**Interviews were conducted on Wednesday, 23 July 2014**

Note: 10 participants were interviewed, however I have represented 6 participants as sample feedback.

**Personal Info:**

- **Name:** Patry Model
  - **From:** Congo (DRC)
  - **Lives in:** Philippi, Cape Town
  - **Age:** 25 years old
  - **Education Level:** Matric

- **Wilson Damar:**
  - **From:** Limpopo, South Africa
  - **Lives in:** Cape Town
  - **Age:** 25 years old
  - **Education Level:** Grade 11

- **Alex Stephen:**
  - **From:** Lagos, Nigeria
  - **Lives in:** Kuyalitsa, Cape Town
  - **Age:** 42 years old
  - **Education Level:** Matric

- **Frederick Mamesh:**
  - **From:** Ghana
  - **Lives in:** Athlone, Cape Town
  - **Age:** 29 years old
  - **Education Level:** Matric + Unw. Diploma

- **Tony Amaronwu:**
  - **From:** Nigeria
  - **Lives in:** Kuyalitsa, Cape Town
  - **Age:** 36 years old
  - **Education Level:** Grade 9

- **Israel Mahema:**
  - **From:** Cape Town, South Africa
  - **Lives in:** Salt River, Cape Town
  - **Age:** 65 years old
  - **Education Level:** Grade 8

**Type of Business/Product:**

- **Patry Model:** Clothing
- **Wilson Damar:** Clothing + accessories
- **Alex Stephen:** Tailoring
- **Frederick Mamesh:** Shoes repair
- **Tony Amaronwu:** Mobile phone + calling service
- **Israel Mahema:** Crockery

**Size of Stall:**

- **Patry Model:** 2.5 - 3 m²
- **Wilson Damar:** 3 - 4 m²
- **Alex Stephen:** 2 m²
- **Frederick Mamesh:** 2 m²
- **Tony Amaronwu:** 2 m²
- **Israel Mahema:** 6 m²

**NO. Of People Employed:**

- **Patry Model:** 1
- **Wilson Damar:** 2
- **Alex Stephen:** 1
- **Frederick Mamesh:** 2
- **Tony Amaronwu:** 2
- **Israel Mahema:** 4

**How often do you trade on the grand Parade?**

- **Patry Model:** Mon - Sat
- **Wilson Damar:** Mon - Sat
- **Alex Stephen:** Mon - Sat
- **Frederick Mamesh:** Mon - Sat
- **Tony Amaronwu:** Mon - Sat
- **Israel Mahema:** Wed and Sat

**What are your challenges?**

- **Patry Model:** - Product range - Storage - Crime / safety - Weather conditions - No toilets + water - Financial capital
- **Wilson Damar:** - Storage - Crime / safety - Financial capital - Weather conditions - No toilets + water - Financial capital
- **Alex Stephen:** - Storage - Weather conditions - No toilets + water - Financial capital
- **Frederick Mamesh:** - Financial capital - Position of stall - Weather conditions - Crime / safety - No drainage systems - Storage
- **Tony Amaronwu:** - Weather conditions - Crime / safety - Storage - No toilets - No electricity
- **Israel Mahema:** - Crime / safety - No local support - No toilets - Forced to buy imported goods (cheaper)

**How long have you been here and has there been growth over time?**

- **Patry Model:** 4 years - There has been very little growth
- **Wilson Damar:** 3 years - There has been some growth, but we are still just surviving
- **Alex Stephen:** 4 months - No growth, I earn very little, enough to buy food and for transport
- **Frederick Mamesh:** 1 year - 1 month - No growth at all
- **Tony Amaronwu:** 6 years - By creating report with customers, the business has grown, but not enough
- **Israel Mahema:** & 50 years (family business) - Recently, business has been tough, not much growth

**What could assist your business in future?**

- **Patry Model:** - Financial capital - If more customers visit and support my shop - Marketing my products
- **Wilson Damar:** - Financial capital - Marketing my stall - If more people come to the Parade during the week
- **Alex Stephen:** - Access to electricity - Access to financial support
- **Frederick Mamesh:** - Access to financial support - Access to equipment - Access to electricity - Access to marketing
- **Tony Amaronwu:** - Access to infrastructure - Access to better equipment/machinery
- **Israel Mahema:** - Financial support

**What is your vision for your business?**

- **Patry Model:** I want to grow my business in future. I want to open many more stalls like this, and sell different products
- **Wilson Damar:** I want to sell more, and make a better profit. I want to become a big business one day
- **Alex Stephen:** I dream of having a better shop. This is just temporary, I want to make money for my family at home.
- **Frederick Mamesh:** Someday, I want to make and sell my own shows. I want to have my own manufacturing company one day.
- **Tony Amaronwu:** I would like to have better access to infrastructure (stall quality), make a better profit so as to expand my business.
- **Israel Mahema:** Obviously, I aim to grow in future, but my issue is how? Times are tough, and there isn't access to government support.
nature of trading at the grand parade

75%  re-selling of clothing
10%  perishable goods (food)
  5%  specialised goods
      (cellular communications, pharmaceuticals, crockery etc.)
  4%  un-skilled services
      (phone booths, ID photos, shoe shining etc.)
  3%  skilled services
      (hairdressers, shoe repairs, electronic repairs etc.)
  2%  micro manufacturers
      (knitting/sewing/stitching of clothes, beadwork, jewellery etc.)
  1%  market related services
      (porters, packers, transport services, public entertainers etc.)

70% of South Africa's population now live in urban areas

23 million South Africans living in poverty in 2013

between 1990 and 2011 the urban population has increased by 10%

in 2013, South Africa's unemployment rate was 25.2%.

8-10% of South Africa's GDP

the informal sector helps create 12000 new jobs in Nov and Dec 2013.

the informal sector contributes about 12% of Cape Town's economy.
The preceding analysis created a complex and multi-dimensional picture of the Grand Parade as a spatial construct. The combination of history, heritage, contemporary needs, uses, and spatial patterns creates a competing set of agendas in a multi-dimensional environment.

A key tool in unpacking the complexities of the Grand Parade as a spatial construct was the aspect of digital media and its potential for creating multiple pathways of connection (network) in complex environments. Similarly, this synthesis which defines the rationale of intervention is a multi-dimensional approach to place-making. The approach can be understood within three overarching agendas; historical, spatial and socio-economic. Much as competing agendas in digital media are seen as opportunities for dynamic exchange, these spatial agendas in relation to the site are not seen as competing. The multiplicity of agenda, rather, are seen as a holistic lens which form a point of departure for the spatial and programmatic responses.
Historically, the Grand Parade was the primary focus in the city. It was the main place of economic activity, the communication of information, education (exhibition) and social exchange. As the city has grown around the site, much of this activity has today become internalised, thus changing the agenda of the Parade over time. As a result the significance of the site has diminished. Its key location, high accessibility and visibility as a primary public space still holds the potential for it to play a role in the contemporary urban, social and economic life of Cape Town.

Fig. 40: Sketch diagram illustrating the historical significance of the Parade and change over time. Parade as the centre for economic activity, exchange of information and education (through exhibition).

historic
activity focused on parade.

contemporary
activity internalised.
significance of parade diminished.
Spatial

While the site is recognisable and legible to users, out of familiarity; the variable edge conditions of the Parade do not optimally define the Parade. As a result, people do not feel as if they are in an urban room. Rather the Grand Parade, especially along Strand Street's and Castle Road's edges read as a 'bleeding space'. Selectively defining edges, especially through activity, can encourage people to linger longer and fully experience the value of a public space of this magnitude.

In addition, the Parade is an integral connection zone between distinct areas of the city. Spatially, this function of connection can be better expressed to create efficient connection, as well as create a visual focus through axial relationship between buildings.

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contemporary definition

- positive edge (defining)
- undefined edge
- barrier (hostile edge)
- lost relationship

Civic Centre
C.T. Station
Grand Parade

Fig. 41 and 42: Sketch diagrams, showing the spatial issues of edge and connectivity
The informal economy, as illustrated through analysis, plays a major role in addressing the twin ills of unemployment and poverty. Digital media has the ability to democratise information, through education and access to information, across a multitude of accessible platforms such as Facebook, Instagram, Twitter etc.

The site is already a space where informal trade occurs. Coupling this existing activity with the potential of social media, allows for a relevant socio-economic role for the site. This is especially powerful as it happens in a highly visible public place, thus is presents an opportunity to dispel myths around the informal economy (especially the negative way in which it is viewed by city authorities and general public).

The site has the potential to become an active, urban laboratory which promotes both a greater understanding of how the informal economy functions, as well as testing interventions which aim to showcase the meaningful role in the development of the wider economic and social spheres of the city.
The contextual analysis highlighted that informal trade is a major activity, both on the site (Grand Parade) and its peripheries i.e. the taxi rank located on the roof-top of Cape Town Station. In the same way that the site acts as a spatial connector between the Foreshore and the city centre, it also acts as a connector between these two major informal trade areas. The architectural intervention thus aims to create an on-site facility which supports this informal economy.
According to an online web-site article, Maxim Entrepreneurship, it was explained that small business incubators are organisations which are geared towards speeding-up the growth and success of start-up businesses. Incubators aid in the development and survival of small businesses, and provide a range of services which help nurture the skills required to grow a business over time. This article goes on to say that research has been able to show that business incubator programmes have dramatically increased the long-term survival rates of small businesses due to the support network and resources which are made available through incubation programmes. (Anon., 2014)

Small business incubators, I believe, have the potential to transform the informal sector in South Africa, as they aim to equip businesses with the necessary skills and knowledge for prosperous economic empowerment.

According to this article (Anon., 2014), some of the typical services which are offered to small businesses in incubator programmes are:

...assistance with business basics; the provision of networking activities; assistance with effective, targeted marketing; editing services; help and advice with financial planning and financial management; easier access to bank loans, loan and investment funds; development of presentation skills; access to higher education institution research resources;...the provision of comprehensive business training programmes..

The article also goes on to state that governments are highly supportive (financially) towards small business incubators as they are seen as major effective contributors to the sustainable growth of the informal economy; small, medium and micro enterprises (SMMEs) contribute more than 40% of South Africa’s GDP. (Anon., 2014)

According to another online article posted by TradeMark Southern Africa, it was discussed that it is better to leverage, rather than fight the informal economy. The main barrier which faces informal economies, innovation and growth is the aspect of risk. The article suggests that the risk can be reduced by improving access to resources such as credit, tools and skills. Further on, the article argues that there is vast potential in using formal technologies to empower entrepreneurs in a way that demonstrates a respect for the decentralised, informal nature of business and trade (Anon., 2011).

According to an article, ICT Access and Usage among Informal Businesses in Africa, it is expressed that ICT’s (information communication technology) have been identified as being critical to development and socio-economic growth. It is understood that ICT’s have the potential to improve the productivity of small, informal businesses (Swarray, et al., 2013). The use of ICT’s allow informal businesses "...the ability to save money and travel time, compare prices, transact with existing customers and increase their customer network."(Swarray, et al., 2013:53). Swarray, et al. (2013:57) explains that several studies have been able to identify the usage of ICT’s in small businesses are one of the key tools to support the success of a business. "The use of advanced ICT devices allows businesses to communicate more efficiently with suppliers, customers and business partners, thus improving their competitive advantage in the industry, facilitating market research and improving information access." (Swarray, et al., 2013:57).

However, most informal businesses tap into the world of information through the mobile phone (Swarray, et al., 2013:60). Informal traders are still faced with relying on the movement of pedestrians and face-to-face interaction as a result. The potential here is to provide the access to ICT’s which can contribute to the growth and success of informal traders and the informal economy of Cape Town.
DESIGN RESPONSE

primary spatial response + precedent

The design development process unveiled a series of possibilities for architectural intervention on the site. These ideas were refined into three key spatial responses which form the basis for generating architectural form, language and for the spatial organisation of the multi-dimensional functional programme.
Diagram 1: Connecting public infrastructure

Architecture as Spatial Connector:
the building and elevated square are used as elements to connect multiple planes of activity

Stock Road Station
Cape Town
ACG Architects

Fig. 43 (top) and 44 (above): Diagrammatic sketch and related precedent
Diagram 2: Re-establishing significance through multi-dimensional programme

**Problem:**
- Historic activity focused on parade.
- Contemporary activity internalised. Significance of parade diminished.

**Response:**
- Re-establishing role of the parade through a public program and a design language of engagement. (Permeable edges, transparent forms, animated facades.)

**Legend:**
- Building A: Market
- Building B: Taxi Holding Bay A
- Building C: Market and associated services
- Building D: Taxi Holding Bay B
- Building E: Storage & Change Facilities
- Building G: Bus Terminal
- Building H: Market
- Building J: Long Distance Taxi Terminal (Between cities)
- Building K: Market and associated services
- Building L: Short Distance Taxi Terminal (Within the City)
- Building D: Market and associated services

**Complex Multi-dimensional Programme:**
This project illustrates how a complex programme can be spatially organised to initiate activity around a public transport interchange.

**Fig. 45 and 46 (above): Diagrammatic sketch and related precedent**

**Bara Transport Facility + Trader's Market**
Soweto, Johannesburg
Urban Solutions
Diagram 3: Defining the edge

**Problem:**
- Contemporary definition
  - Positive edge (defining)
  - Undefined edge
  - Barrier (hostile edge)
  - Lost relationship

**Response:** (deals with potential—i.e. undefined edge)
- Positive edges (defining)
- Display's sensitivity to heritage (castle)
- Establishing a clear relationship

**Selective Edge Definition:**
an example of how an edge making intervention focuses on the boundary with greatest potential to define the space.

**Fig. 47 and 48 (above): Diagrammatic sketch and related precedent**

**Taxi Rank No. 2**
Diepsloot, Johannesburg
2610 South Architects
urban strategies

Fig. 49: Sketch model showing the various responses to the urban context of the site

1. Raising the Parade surface

2. Defining the Parade’s edge

3. Submerging Castle Road
4. Basement Parking Facility

5. Widening Strand Street into Bus Terminus

6. Possible Housing - currently Golden Acre parkade
DESIGN PROPOSAL

building as a connector

The primary aspects of the design proposal focus on the Strand Street edge of the Grand Parade. The intervention is made up of an elevated public space and a fragmented spatial programme surrounding the new elevated square. Together these elements establish a bridging building that connects the Grand Parade to the Cape Town Station and beyond. This connector increases the ease of movement between major destinations in the city, as well as creates a sense of arrival onto the Parade. The integrity of the Parade as a historic site is maintained and its definition is re-enforced through consolidation of a previously poorly defined edge.

Fig. 50 (below):
Diagrammatic sketch illustrating the spatial rationale

Fig. 51 (right):
Site plan illustrating the design response
un-pack the multi-dimensional programme

The programmatic response is inspired by the informal trade that takes place on the Grand Parade. The programme consists of various elements, which responds to scale and the nature of activity. Essentially, the programme provides an on-site business development incubator, catering to the needs of informal traders but also accessible to other small businesses and the public.

The programme is fragmented to create an urban campus (a collection of buildings) which is integrated into the context of the site and respond to its stature as a public space. The various programmatic elements are rationalised to respond to the way in which people use the site and move through it. Thus, more public elements are aligned along movement routes or for high visibility. Private or semi-private activities such as the workshop/light-manufacturing facilities are internalised whilst still remaining accessible. The auditorium as a higher order facility is used as an iconic element and also strategically positioned as a gateway element into the inner city. The site-ing of the small retail that is dependent on passing trade, clips onto the vertical circulation ramp. The ramp and associated retail also form a wind barrier against prevailing south-easterly winds. This makes the elevated public space more habitable and comfortable to users.

Mixed Use Atrium building:
retail workshops + studios resource centre + teaching rooms housing public amenities management office

Retail Stalls
retail food court vertical circulation (ramp)

Auditorium
seats +/- 150 people entrance lobby refreshment kiosk

Fig. 52 (right and opposite): Unpacking the programmatic response
grand parade
building as an edge-making element

The way that edges are treated is particularly significant in creating positive public spaces. Here, variable edge conditions respond to diverse internal programmes whilst also impacting on the outside spatial quality. Through the use of permeable boundaries and defining edges, the building establishes thresholds and spill-out spaces. The primary Parade defining edge (A), provides a clear containment to the space. It is selectively permeable to channel pedestrians safely into the bus terminus, and efficiently towards the station. The edge created by the Atrium block (B) is highly permeable, creating spatial and visual links between the atrium space and the elevated concourse. Edges to the Auditorium building and Retail Wrapper (C) are hard and clearly defining towards the open space.
EMERGING DESIGN:
incubated dimension

The Architectural project, has thus far investigated a variety of challenges, issues and opportunities. This process has clarified the overall intent of the scheme, the nature and scale of the programme, and the formal response. Detailed design elements, materiality and architectural language are still in the process of refinement. This dissertation document, seeks to set forth the agenda of the project, and aims to clarify the design rationale. It is my hope that the document has expounded on what has been an iterative and cyclical design process, and has presented a clear narrative of my findings and responses.

Fig. 54 and 55: Design sketch and physical model, showing how the building form responds to its context.
03. third floor level (typical):
low cost housing units
common room

02. second floor level:
studios
resource library
gallery/exhibition

01. first floor level:
retail stalls
workshops
seminar rooms
lecture auditorium

00. ground floor level:
bus terminus
retail stalls
public ablutions
Fig. 57 (above): South Elevation

Fig. 58 (below): Sketches, exploring the nature of facade in relation to Grand Parade
Fig. 59 (below): Sketches, exploring the nature of facade in relation to Grand Parade

Fig. 57 Grand Parade

table mountain.

perimeter section

exhaustion duct

housing unit
housing unit
housing unit
studios
workshops

common room
resource library
retail
perspective section
view from castle of good hope
view from south-west
view from strand street
view from city hall axis
INCUBATED DIMENSION:

an urban campus for informal business development at the grand parade.

The architectural project addresses the site at both an urban (macro) and an architectural (micro) scale. At the urban scale, the building aims to negotiate between the strong lines of pedestrian and vehicular movement. The building aims to establish a node in the city, which behaves as a gateway into the city, from both the north/south axis (pedestrian) and the east/west axis (vehicular).
The architectural scale was driven by the need to re-establish the role of the site in the contemporary context of Cape Town. This was done by developing a robust programme which responded to the informal economy; which can be found in and around the site. The programme of the building is primarily an on-site, urban campus for supporting the growth of informal traders. The building comprises of studio/workshop spaces where traders are introduced into the process of making, marketing and selling. Through the element of boundary and threshold, the building both spatially and programmatically, allows for a sense of mediation between high pedestrian activity and informal trade.

The building seeks to showcase the process of informal trade, where the physical dimension of the architecture becomes a new mode of communication between buyers and traders, between citizen and city. The physical boundaries/thresholds dissolve and blur at certain points in the building, which allows for the interplay between the public and the informal economy.

Through the use of digital media and social platforms, the architecture seeks to establish a new tectonic, which allows traders to expand their marketing reach to the public. Currently, informal traders are bound by the physical obstacle of being dependent on pedestrian movement on the site. Therefore, this architectural project presents a space which allows the physical dimension to migrate from its limitations of distance and time. The informal economy is freed from its dependence on pedestrian activity. The digital dimension offers these traders a chance at letting the city rely on the informal economy, and not vice-versa. The design dissertation offers informal traders an opportunity to market themselves and their products digitally, establishing a new sense of communicative support, ideal for a contemporary digitalised society.

Fig. 45 (right): Floor Plans
Fig. 66: Site Sections

c.t. city hall

darling street

grand central

grand parade + public use
1. basement parking +/- 600 bays
2. grand parade public square
3. informal trader storage/stall
4. grand parade bus terminus
5. gallery foyer
6. security + entrance to courtyard
7. classroom + seminar rooms
8. resource library foyer
9. rooftop area

STRIP SECTION 1:50
Fig. 70-72: Perspectives

VIEW FROM GRAND PARADE
VIEW FROM STRAND STREET
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LIST OF FIGURES

note: Unless otherwise stated, all diagrams, drawings and images are by the author

Figure 1: Available at: http://tywkiwdbi.blogspot.com/2012/04/edvard-munch-created-four-copies-of.html [Accessed 06 May 2014].

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