



PROJECT SUMMARY

Submitted in partial fulfilment of the requirements for the degree Master of Interior Architecture (Professional) to the faculty of Engineering, Built Environment and Information Technology.

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In accordance with Regulation 4(e) of the General Regulations (G.57) for dissertations and theses, I declare that this dissertation, which I hereby submit for the degree of Masters of Interior Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my dissertation has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

Leandra Levenderis

Site-Specific Opera: A Re-imagined Magic Flute as a Catalyst to the Narration of Fort Daspoortrand Heritage

Project Description: This dissertation intended to bring awareness to the cultural and historical value of the Fort Daspoortrand ruin, through the introduction of a temporary, site-specific opera. The opera as a catalyst aims to serve as an initial event to illuminate the beauty and drama of this old military ruin. The performance will encourage and enhance the appreciation of the fort, after which, if successful, another developer would be able to contribute more permanent function to the site.

Programme: Temporary site-specific opera performed at a heritage site

Site Description: Military Fort Ruin

Site Location: West Pretoria, Tshwane, Gauteng, South Africa

Address: Van Den Berg Street

GPS Coordinates: 25°43'58.9"S 28°04'36.1"E

Research Field: Heritage and Cultural Landscape (HCL) and Environmental Potential (EP)

Keywords: Site specific opera, Cultural significance, Heritage awareness, Preservation, Site awareness,

Scenography, Temporary, Touch lightly

Chosen Client: South African Theatre companies or opera companies

Users: Public, Theatre goers

Interior Architectural Theoretical Question: How can the introduction of a temporary site-specific opera serve as a catalyst to bring awareness to the cultural and historical value of the Fort Daspoortrand ruin?

Interior Architectural Approach: The introduction of a temporary intervention to facilitate an opera and its scenes to create an awareness for the needs for preservation of the site. The design intends to take the audience on a constructed journey of site and opera, revealing the opera and architecture throughout the performance.



ABSTRACT

With the current upsurge of a technological era, there is an underlying global threat to the cultural development of theatre, especially opera. Therefore, there is a need for a paradigm shift that will re-imagine and transcend opera into the 21st century.

Site-specific opera merges the potential of theatrical entertainment and the value of an existing site. Both the location and the performance have the ability to remove the audience from their lives and submerge them in a fantasy or created reality. With the focal approach being the interpretation of the Magic Flute Opera at a site-specific location, a concept of cultural heritage awareness is revealed. With this in mind, the preservation extends into a consideration of the existing site. The site, Fort Daspoortrand, is currently in a state of physical degradation, and the decay of heritage and cultural fabric is prominent. Thus, the potential for preservation and cultural celebration arises.

It is proposed that through a site-specific opera performance of William Kentridge's adaptation of The Magic Flute by Mozart, a sense of awareness can be created for both the site and a South African interpretation of opera. The opera will catalyse the awareness of the site, and the scenography will act as a vehicle to bring site and opera together in a visual and spatial experience. Through the merging of opera and site, the heritage and cultural significance of both entities will be explored, allowing the opportunity for life to be breathed back into both the fort and opera in general.

The design intention of this project is to bring awareness to the existing fabric of the site, as well as the dramatic opportunities that the site naturally presents. In this way, the physical and cultural decay of both Fort Daspoortrand and opera are brought to the public's attention. The intention in this creation of site awareness is to promote an afterlife for the site, by exposing its character in an attempt to ignite future development at the site once the opera has finished. Through combining opera and site, the audience will be exposed to the beauty of the site and the cultural richness of opera simultaneously. The temporary design intervention aims to strategically link the themes of The Magic Flute with the characteristics of the site to explore the relationship between narrative, fort and opera. Emphasis is placed on how to take the audience on a winding and intertwining journey of the site during the performance of the opera adaptation. The fluidity and natural progression of the audience through the site will ultimately create a reflective and emotive understanding of The Magic Flute's theme of the journey from darkness to light.

SAMEVATTING

Met die huidige oplewing van 'n tegnologiese era is daar 'n onderliggende globale bedreiging tot die kulturele ontwikkeling van teater, veral in die ontwikkeling van opera. Daarom is daar 'n behoefte vir 'n paradigmaskuif wat opera sal her-verbeel en oorbrug tot in die 21ste eeu.

Terrein-gedrewe ("site-specific") opera bring die potensiaal van teatervermaak en die waarde van 'n bestaande terrein byeen. Beide die ligging en die optrede het die vermoë om die gehoor van hul daaglikse lewens te verwyder en hulle te onderdompel in 'n fantasiewêreld, 'n geskepte realiteit. Met die benadering wat fokus op die vertolking van "Die Towerfluit" in 'n terrein-bepaalde toepassing, is die bewustheid van kulturele erfenis as konsep aan die lig gebring. Die bewaring van die bestaande terrein val dan ook in hierdie fokus area van kulturele erfenis. By die terrein, Fort Daspoortrand, wat tans fisiese agteruitgang beleef, is die verval van erfenis en kulturele materiaal prominent. Daar bestaan dus die potensiaal vir bewaring en 'n viering van die kulturele geskiedenis van die plek.

Die voorstel is dat deur middel van 'n terrein-gedrewe opera opvoering van William Kentridge se vertolking van Die Towerfluit, geskryf deur Mozart, 'n bewustheid geskep kan word vir beide die terrein en die Suid-Afrikaanse benadering tot opera. Die opera sal belangstelling in die terrein aanwakker, en scenografie sal dien as tussenganger om deur middel van 'n visuele en ruimtelike ervaring die terrein en opera aan mekaar te verbind. Deur die opera en terrein saam te smelt, sal die erfenis en kulturele betekenis van albei elemente onderoek word, wat 'n geleentheid skep om nuwe lewe in beide die fort en opera aan te wakker.

Die ontwerpsdoel van hierdie projek is om bewustheid te skep van die terrein se bestaande toestand, sowel as die dramatiese geleenthede wat die terrein natuurlik voortbring. Op hierdie manier word die fisiese en kulturele agteruitgang van Fort Daspoortrand en opera tot die openbaar onthul. Die voorneme in die skep van terrein-bewustheid is om 'n lewe na die ingryping te bewerkstellig, deur sy karakters te onthul in 'n poging om nuwe ontwikkeling by die terrein aan te vuur wanneer die opera voltooi is. Deur die opera en die terrein te kombineer, word die gehoor blootgestel aan beide die prag van die terrein en die kulturele waarde van opera. Die tydelike ontwerpingryping streef daarna om die temas van Die Towerfluit met die karaktereienskappe van die terrein strategies te verbind, en die verhouding tussen die verhaal, fort, en opera te ondersoek. Klem word geplaas op hoe die gehoor op 'n kronkelende en verwewende reis van die terrein geneem word gedurende die uitvoering van die verwerkde opera. Die vloeibaarheid en natuurlike voortgang van die gehoor deur die terrein bewerkstellig 'n besinnende en emosionele begrip van Die Towerfluit se tema van die reis van donker na lig.



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GLOSSARY OF TERMINOLOGY

The following terms have been defined specifically for the context of this dissertation, to clarify the intended meaning by the author.

Abstraction is a term used to explain the reconstruction of one's thoughts in a symbolic and graphical manner, typically the use of metaphorical and representative imagery

Audience participation are the interactions which takes place between the audience and the environment, this can be influenced through the design.

Back projection is a form of projection in which the projector is placed behind the screen as opposed to in front of the screen

Concept is a non-tangible development of an idea.

Created space refers to the smaller areas within the environment which have been specifically considered and manipulated for this project.

Cultural fabric is the physical material which makes up an object, this refers to something of historical or cultural significance.

Cyclorama the largest single piece of scenery in the theatre, this dyed material is draped in an arched form "to encircle and

partially enclose the scene to form the back ground" (W. Oren Parker and Harvey K. Smith 1979:196).

Dramaturgy is "the theory and practice of dramatic composition." (Google online dictionary, 2017)

Drapery material can be made from various materials, these fabrics are gathered and hung from a support structure, they are flexible and dynamic for the performance.

Drops are large pieces of decorated material which hang on battens and are dropped down into the stage area, the bottom batten ensures the fabric hangs flat and straight.

Escapism is the psychological and emotional removal from one's everyday life, achieved through a created hyper-reality and fantasies where the spectators are encouraged to explore and use their imaginations.

Fourth wall is the term used to describe the metaphorical barrier between the audience and the actor. Typically, it is a physical separation, in the terms of a raised stage or orchestra pitch division.

Heritage awareness is the creation or emphasis on the existing historical fabric, be it cultural or physical

Immersive theatre is a theatre form which identifies the

audience as a co-actor in the production, this concept was defined by research Gareth White (2012).

Stage-lighting instruments "any device employed on the stage to hold a lamp in correct position, to direct and often shape the output of light, and to hold color media in the resulting beam" (W. Oren Parker and Harvey K. Smith 1979:444).

Theatre forms refers the diverse types of theatre performance which have been created over time, for example, experimental theatre, improvisational theatre and site-specific theatre

Theatre movement is the development of the non-typical theatre whereby its structure and idea contradicts the origins and formalisation of the traditional theatre.

The structure of this dissertation varies from the typical structures. To assist in clarity and understanding, the following explanation gives reason for the content order.

CHAPTER 1 - THEORETICAL CONTEXT

To understand the research proposal decisions, it is first important to give a contextual background to the study direction. A fascination triggered the initial interest with the theatre, and how it has developed over time. The chapter shows an investigation of the theatre origins, cultural diversity in theatre, changes in stage configurations, the invention of multiple theatre forms, and opera. Opera and site-specific theatre make up the main focus of this project.

CHAPTER 2 - RESEARCH PROPOSAL

The research proposal lays out the intentions and points of discovery which will be addressed through the dissertation. The problem statement grows from the decline of opera identified in Chapter 1 after which the research questions, aims, objectives, methods and limitations are explored.

CHAPTER 3 - PHYSICAL CONTEXT

Having identified site-specific theatre as the dissertation focus, a site needed to be selected. Chapter 3 is a site analysis, which focuses on the specific and carefully selected points of interest around the site. The heritage value of the selected site plays a key role in the design development.

CHAPTER 4 - THEORETICAL PREMISE

The main theory investigation is the focus of this chapter. Through the chapter, the research question is unpacked and argued. The open-air nature of the project challenges the typical interior expectations. However, the significance of the project is supported and validated in the content. The chapter builds the reader's understanding of site-specific theatre, the interior architecture relevance, and what is to be expected in the design.

CHAPTER 5 - PRECEDENT STUDIES

The three identified precedent studies, explore the use of lighting, sensory experience, projection, and performance. These existing works have helped to inform the design and the consideration of how to effectively use light and projection to layer meaning.

CHAPTER 6 - THE MAGIC FLUTE

The chapter gives the reader a general overview of the Magic Flute opera, introducing them to the characters, themes and environments of the narrative. The chapter consists of a film study of the 1991 version of the Magic Flute at the MET Opera House. Throughout the chapter, an introduction to William Kentridge's 2001 version, and visuals are explored.

CHAPTER 7 - CONCEPT, DESIGN AND TECHNICAL CONSIDERATIONS

EXPLAINING THE CONTENT STRUCTURE

This chapter is divided into two main parts: the initial concept development and design and technical. The general programming, design, and circulation of the site is addressed, after which each scene is unpacked. Each scene's design and technicals aspects are addressed. This helps the reader follow the progression of each scene without the confusion of flipping through the book.

CHAPTER 8 - CONCLUSION

The closing chapter of the book reiterates the development of the project, ensuring the research question is answered and the intention resolved.

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CHAPTER ONE THEORETICAL CONTEXT



Due to the particular research field of this dissertation and its focus on Site-specific Theatre, it is recommended that one familiarise themselves with the terminology used throughout this book. The familiarisation of the terms will be for the greater benefit of the understanding of all the chapters. Please refer to the glossary for the project-specific definition of certain terms which explain the author's understanding of the terms. The glossary can be found on page xxii A breakdown of the book structure is also explained on page xxiii to ensure that an overall consideration of the book structure and progression is understood.

1.1 INTRODUCTION

This chapter aims to establish an understanding of the chosen research topic of this dissertation. In order to understand the development of theatre from Conventional Theatre to the Site-specific Theatre, as well as its limitations and benefits, it is first important to explore and illustrate the history of theatre. The focus of the research is on site-specific theatre, and the multiple forms of theatre which have contributed to the development of this form. These forms and progressions will be addressed through a historical study of theatre and how it has changed and been moulded by society's needs over time.

1.2 OVERVIEW OF THEORETICAL CONTEXT

The theoretical focus of this chapter is the development of theatre and the way in which it forms a vital role in society. In order to understand what Site-specific Theatre is, a historical overview of theatre, performance forms, genres and periodical developments need to be considered.

In producing an in-depth knowledge of theatre, it is important to explore not only the traditional Western Theatre, which South Africans are most frequently exposed to, but also the culturally-different theatres seen throughout generations. To ensure a non-biased approach, a comparative exploration of the cultural diversities within Western, Asian and African Theatre will be studied

The study of cultural theatre has many avenues and is incredibly diverse as a field of research. However, to create a comparison of the cultural diversity, only a select number of the cultures from Western, Asian and African Theatre will be identified for further exploration. The Western Theatre development will focus predominately on Roman and Greek Theatre. Chinese and Japanese Theatre will be the concentration in the Asian Theatre study, and African theatre will be studied by analysing the traditional song and dance of indigenous South African cultures. These cultural diversities are further discussed in

chapters 1.2.2, 1.2.3 and 1.2.4 respectively.

As the development of these culturally diverse theatres forms is not the main focus of this dissertation, a brief overview is given, supported by graphic collages which give an impression of the differences and variations found in each culture.

1.2.1 THEATRE ORIGINS

The Western Theatre originated as a means of appreciative performance, which took the form of group dance and singing. According to Gascoigne (2001), the followers of Dionysus (the god of wine and fertility) were the first society to develop this movement for performances that were used to tell stories of Greek Mythology.

In the 6th century BC Thespis, (a Dionysus priest), was the first to introduce dialogue into the performances. This dialogue took place between Thespis and the chorus, making him one of the first known people to take on the role as an actor. The theatrical contest became frequent at the Dionysus annual festival, with each performance taking place over a full day. The audience was seated on the hillside watching over the circular main stage, behind which stood temporary timber structures used as scenery. In 484 BC, the dramatist Aeschylus added a second actor to his play, thereby increasing the potential for drama. Shortly after this in 468 BC, Sophocles gained victory for adding a third actor into his play. The plots became more

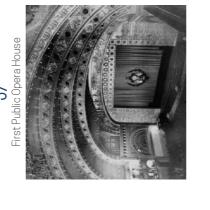
complex, and the personal character interactions aided in the development of the drama (Gascoigne, 2001).

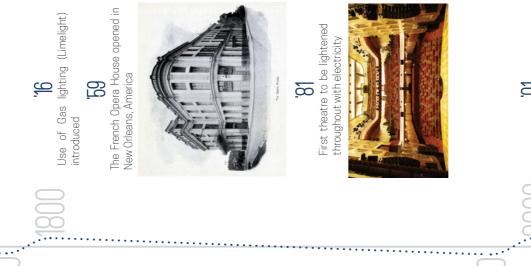
In 360 BC, the first stone auditorium was built to replace the hillside seating. The tiered seating was placed around a semi-circle stage with the occasional aisle - a seating structure still seen today in theatres around the world. This structure is shown in the timeline on the following page, Figure 1.1. In Roman Theatre, entertainment takes the form of plays, gladiator contests and circuses. However, during the collapse of the Roman Empire in the middle ages, theatre did not play a part in general society but is re-introduced in the late 10th century when Christian churches began performing Easter dramas (Gascoigne, 2001).

The following timeline, Figure 1.1 on page 004 - 005, is a graphic representation of the development of theatre architecture from 435BC to the 21st century. A focus has been placed on the structural development of the theatre and the evolution over a few centuries.

ARCHITECTURAL DEVELOPMENT OF WESTERN THEATRE













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Figure 1.1 Architectural development of the Western theatre





1.2.2 WESTERN THEATRE

Originating as a means of appreciative performance, the Western Theatre model is now viewed as a form of entertainment. The Western performing arts include drama, dance, singing and acting, as depicted in the collage, Figure 1.2. Thematic focus is typically on life and the common situations of everyday people. Costumes, staging and set design form an important part of the production.

Precision, accuracy and elegance are used to describe ballet, a form of Western Theatre focused on dance. Dance plays a vital role in supporting the characters and themes of performance. Humour and comical content provide entertainment, and a steady shift in the innovation of the western theatre keeps the audience interested and the theatre itself alive.

1.2.3 ASIAN THEATRE

Asian theatre uses a variety of visual methods to convey different themes, characters and moods. "What is known, is that theatrical arts in Asian and Pacific-island cultures are ancient, highly developed, rich almost beyond imagination in their diversity, and very much alive for large segments of the population." (Brandon 1993:1)

The Asian Theatre has culturally rich and elaborate costume design, with highly intricate and delicate details. Figure 1.3 shows the use of masks, puppets, dolls and shadows, which allow the actors to portray multiple characters simply and efficiently. Puppets are a symbol of the non-human concepts such as animals, demons or gods, giving the audience a clear yet sophisticated understanding of the performance themes. These culturally-rich elements set Asian Theatre apart from Western Theatre, and give innovative inspiration to new developments and entertainment considerations.



Figure 1.3 A collage of Asian Theatre

Figure 1.2 A collage of Western Theatre

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1.2.4 SOUTH AFRICAN INDIGENOUS THEATRE

Ancient African Theatre was developed as a means to worship gods, and was also used for storytelling. Told through energetic dance, song and chanting, the traditional African performances and stories are emotive and expressive. Dancing and singing are the primary forms of communication. The main character chants or calls out to those standing by, inviting them to participate in the cultural experience. Positive energy and participation are characteristics found in members of the tribe or community.

The collage in Figure 1.4 shows traditional African clothing, representing the warrior. Colourful beading and face-paint communicates the layered meaning of each performer. Stories depicting struggles and mighty occasions are celebrated through passionate dance. Loud voices fill the environment, encouraging all to take part and join the celebrations.

1.2.5 CONSIDERATIONS FROM THE CULTURAL DIVERSITY

The diversity of Western, Asian and South African Indigenous Theatre creates multiple possibilities to incorporate innovative methods of visual communication into a production at Fort Daspoortrand. Inspired by the rawness of the African traditional song and dance, and the creative use of puppetry and shadows from Asian Theatre, as well as the accuracy and dramatic stance of Western Theatre, the production at the fort could combine various arts to create an engaging audience experience.

Inspiration is taken from Asian Theatre, where elaborate costumes add to the themes of the story. These details help create the characters personality. The costume design for this project places a focus on using design as part of the scenery and telling more of a story through dress. A deeper exploration of the thematic links and moods is another consideration taken from Asian Theatre, as well as the use of shadows and puppets as characters in the production. In this performance, light has been utilised to create an illusion of a chorus without the use of multiple actors during certain scenes.

The emphasis on storytelling is taken from indigenous South African Theatre, where a powerful voice is used to narrate the performance, bringing together site and performer in a celebration of the story. Drama and set design is a permanent feature in Western Theatre. This project aims to bring these two concepts together to expose the beauty of the site, culture and performance in one celebratory event.

Figure 1.4 A collage of traditional African theatre



DEVELOPMENT OF STAGES

Stage and actors area

PROSCENIUM STAGE

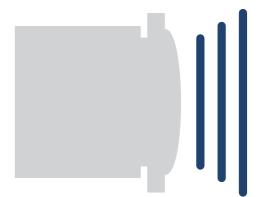


Figure 1.5 Proscenium stage plan and section

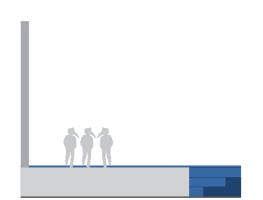
THRUST STAGE



Figure 1.6 Thrust theatre plan and section

Audience area





1.3 THEATRE STAGE CONFIGURATIONS

There are varying types of theatre stages which have developed over the years. The following diagrams, Figure 1.5 to Figure 1.11, depict the stage structure as well as the audience-stage separation. There are six main stage configurations: Proscenium Stage, Thrust Theatre, End Stage, Arena Theatre, Profile Theatre, and Sports Arena. The stage is illustrated in grey and the audience seating in blue - a section is supplied in order to better illustrate the levels between the public (seating) and actors (stage).

The Proscenium Stage, Figure 1.5, was designed with the "primary feature of a 'picture frame' placed around the front of the playing area of an end-stage" (Alderson, 2002). The audience is seated in front of the stage, and the actors are placed behind the 'frame' threshold.

Contrarily in the Thrust Theatre, Figure 1.6, the audience surrounds the stage on three sides, with the fourth side acting as the backdrop to the performance. "In a typical modern arrangement: the stage is often a square or rectangular playing area, usually raised or, surrounded by raked seating" (Alderson, 2002).

Following a similar layout to the Proscenium Stage, the End-Stage, seen in Figure 1.7, places the audience at the front of the raised stage. However, unlike the Proscenium Stage, a part of the performance takes place on the 'audience side' of the stage 'frame' threshold. "Like a thrust stage, scenery serves primarily as background, rather than surrounding the acting space" (Alderson, 2002).

Figure 1.8 illustrates the Arena Theatre as a "central stage surrounded by audience on all sides. The stage area is often raised to improve sightlines" (Alderson, 2002).

END STAGE









Figure 1.8 Arena theatre plan and section

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PROFILE THEATRE

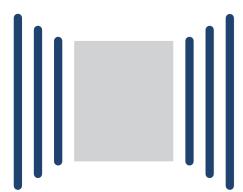


Figure 1.9 Profile theatre plan and section

SPORTS ARENA



Figure 1.10 Sports arena plan and section

In the Profile theatre, "the audience is often placed on risers to either side of the playing space, with little or no audience on either end of the stage, actors are staged in profile to the audience" (Alderson, 2002). The audience-stage separation is represented in the graphics. Figure 1.9.

The final formal stage configuration is the Sports Arena seen in Figure 1.10. It is recognised by "form as it (sic.) resembles a very large arena stage" (Alderson, 2002). However, the stage is typically rectangular.

With the stage configurations changing to facilitate different forms of audience-actor relationships, audience participation in the theatre began to improve. The stage manipulations broke away from the idea of a framed performance, introducing a scenario where the actors are surrounded by the audience, marking a step towards integrating the audience into the performance. The stages mentioned above, although progressive for audience participation, still contained a fourth wall - or physical boundary - between audience seating and the stage.

The final stage variation and that which is more closely aligned with the site-specific performance is the Black Box, seen in Figure 1.11. The black box opens multiple opportunities for the actors to engage in the audience space. No area of the stage is designated to a specific character type – audience or actor. This encourages creativity in the performance and facilitates audience-actor interactions. The black box is best suited to Improvisational, Participatory, Site-specific and Immersive Theatre.

BLACK BOX

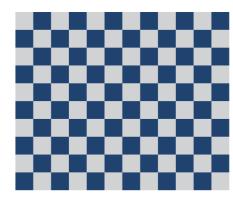




Figure 1.11 Black box theatre plan and section

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1.4 FORMS OF THEATRE

As mentioned in 1.2.1, different forms of theatre evolved from the conventional theatre model. The conventional theatre is defined as a physical space where the audience is seated on stepped levels, looking towards the performance which takes place on a Proscenium-arch-style stage. The 'fourth wall' between the audience and actors is prominent in this form. No verbal or physical interactions between audience and actor occur throughout the performance. Figure 1.12 depicts a conventional theatre seating layout - stepped seating and a Proscenium-arch-style stage.

PRE 1925 Conventional Theatre



Figure 1.12 Conventional theatre seating layout

014

With Experimental Theatre originating in 1925, playwrights such as Alfred Jarry and Bertolt Brecht began to experiment with a theatre movement which explored innovative works and new thematic concepts. Brecht (1961) stated that "in reviewing the experiments...we discovered that they quite remarkably enlarged the possibilities of expression in the theatre." Their works were known for pushing the boundaries of the techniques and performance in stage productions, the unique use of language and the body were used to create a more relatable performance for the audience. "In a world, as fastmoving and dynamic as ours the enticements entertainment are quick to wear out. We must always be prepared to meet the desire for progressive public stupefaction with new effects" (Brecht, 1961). This marked the beginning of the traditional theatre rejection, catering to the entertainment of the audience and using the theatre to make social commentary. Figure 1.13 shows an example of experimental theatre in Antonin Artaud's Theatre of Cruelty.

and narrative skills were developed further in the actor studios, they demonstrated to schools and colleges and ultimately in the founding of a company of performers, called The Theatre Machine" (Yorkshire Post review cited in Johnstone 1979:1). This play exposes that the actors, for the first time, had the freedom to improvise dialogue and develop the storyline of the production. The scripts were not dictated and certain, it was merely a suggestion of what the performance outcome should be. Figure 1.14, illustrates an example of the Improvisational Theatre with an image from the Theatre Language Studio, Frankfurt.

After the invention of Experimental theatre came

Improvisational Theatre. In 1956 Keith Johnstone was

commissioned to write a play which would act as the

foundation of Improvisational theatre. "The improvisational

techniques and exercises evolved there to foster spontaneity.

1925 Experimental Theatre



Figure 1.13 Antonin Artaud's Theatre of Cruelty

1950 Improvisational Theatre



Figure 1.14 Theatre Language Studio, Frankfurt

In addition to the growth of the theatre movements, there was still the opportunity to remove the fourth wall - the verbal and physical boundary between audience and actor. Up until 1985, the audience had remained silent. However, Participatory Theatre challenged this idea, with actors who would call to the audience and in response, the audience would call back. '66 Minutes in Damascus' is an example of Participatory Theatre, as shown in Figure 1.15. "Participatory Theatre is an approach in which the actors interact with the public, based on a real problem. Throughout the participatory event, the public participates to adapt, change or correct a situation, an attitude or behaviour that is developed during the show" (Participatory Theatre... 2017). Performances began to take place amongst the audience, breaking down the typical physical boundaries of the audience-stage realm.

Site-specific Theatre originated in the 1980's as a form of theatre that gave the audience a new and exciting perspective on entertainment. Originally, the performers partook in street art and entertainment, but soon this excitement and spontaneity spread to the theatre house. Site-specific theatre, which is the focus of this project, will be discussed in greater detail in Chapter 4.2. It is characterised by a performance which uses the properties, qualities, and meanings found at or on a given site, be it a landscape, a city, a building or a room. An example of Site-specific Theatre is SZPERA 42, seen in Figure 1.16.

In the year 2000, a company named Punchdrunk developed a theatre movement known as Immersive Theatre, opening with 'Sleep No More', seen in Figure 1.17. "Immersive Theatre is all about creating participative theatre experiences where audience members give up their 'observer' status to become co-actors and co-creators of the narrative and the storytelling process. Our audience members are action wise performers who direct the story by taking decisions, choosing from endless options and negotiating the process" (Immersive Theatre, 2016). Immersive theatre removes the physical and verbal boundaries, making it similar to that of Participatory Theatre. However, it also contributes to the form of Improvisational Theatre, whereby the actors adapt to the interaction of the audience in order to create a new storyline or outcome.

1970 Participatory Theatre



Figure 1.15 66 Minutes in Damascus, participatory theatre

1980 Site-specific Theatre



Figure 1.16 SZPERA 42 site-specific theatre

2000 Immersive Theatre



Figure 1.17 Sleep No More immersive theatre



ORIGINS OF OPERA

Opera is an age-old art form in which singers and musicians create a dramatic display and performance. Opera is considered an elitist entertainment source as it is typically expensive and difficult to understand, due to its complex thematic content and language barrier (often performed in Italian, German, French and other languages). Opera content varies according to the culture in which it takes place, taking on a serious form (Opera Seria) or a comical form (Opera Buffa) (Emmerson, 2012). An example of each of these forms can be found in Donizetti's Maria Stuarda (Opera Seria) Figure 1.18 and Donizetti's Don Pasqual (Opera Buffa) Figure 1.19.

The diagrammatic timeline, Figure 1.20, on the following page gives an overview of the history of Opera and how it has developed over time within each culture.



Figure 1.18 Donizetti's Maria Stuarda

Figure 1.19 Donizetti's Don Pasqual

Started in Italy, as a revival of ancient tragedy 1607 The first opera La Favola d'Orfeo (Monteverdi) Venice was at the centre of opera 1637 First commercial opera house was opened

1700 Naples, Vienna, Paris and London were major operatic centres 1779 Chorus and ensembles were introduced by Christoph Willibald Gluck

Nationalism created a variation in operatic styles, mixture of Seria and Buffa, became more contemporary dealing with recent history. Started to include symphonic music.

1848 Wagner revolutionised opera into "musical drama", orchestras became a part of the performance and leitmotif (musical phrasing) was widely used.

Italian Opera

The voice remained prominent and Buffa (comic) opera and theme were mostly used.

Verdi was the last great Italian composer of 19th Century, he was known for his combination of 'show' and 'emotions'.

Russian Opera

Opera was inspired by history and national literature.

French Opera

'Grand Opera' with scenic effects, action and ballet was common and 'Opera Comique' included spoken dialogue.

Similar developments to that of the 19th Century

Many operas were composed by Puccini including:

1900 Tosca

1904 Madam Butterfly

1926 Turandot

Larger variety of opera performances appeared, evolution in the form of opera performance

Great pieces were reinterpreted as well as staging, setting, and design innovation.

Figure 1.20 Timeline of the history of opera



1.5.1 THE DECLINE OF OPERA

There is no doubt about the decline of opera attendance in recent years. The consensus of the public is that ticket expense, and a cultural divide are some of the main reasons for this decline. However, interest in Opera seems to on the increase as more and more people are enjoying an Opera performance, especially if it has more to offer than just a typical experience. "It is past time we put to rest the notion that opera is somehow an elitist indulgence only enjoyed by few" (Emmerson, 2012).

An 18% drop in audience attendance has been noted by New York's "Metropolitan Opera, which had a 97% attendance rate in 1959 and currently (2014) it has a 79% attendance rate."

There is a motion to reimagine the opera and breathe a new, 21st-century life back into it. "Opera can transport the listener to faraway lands and encompass all the senses. Knowing the power of opera, it makes perfect sense to embrace the idea of 'immersive' production that brings the audience into the action" (How Opera Can Get.... 2017).

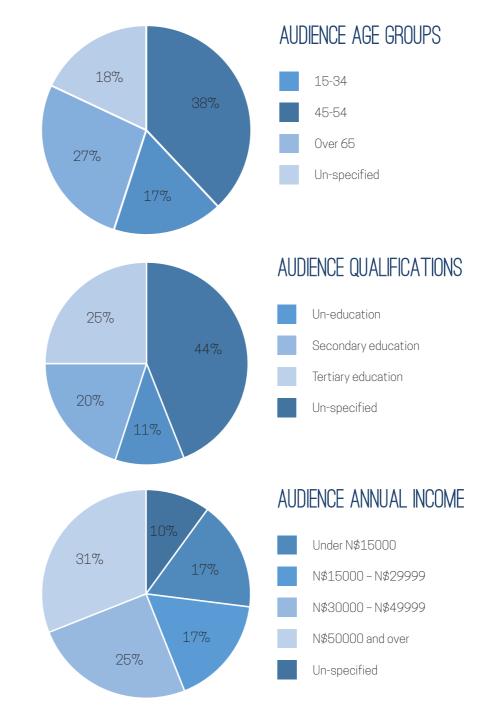
As further explored in Chapter 2: Research and Proposal, the reimagined Magic Flute opera proposed in this project will act as a catalyst both for the re-introduction of Opera, as well as an Introduction of Fort Daspoortrand into the eye of the public. This new life aims to be achieved through a three-dimensional

spatial translation of the Magic Flute opera into an experiential production for the audience members. The spatial experience aims to minimise the language barrier by making the opera – which is traditionally in Italian or German –accessible for all. Both site and opera have an opportunity to create a unique audience experience and give opera the energetic support that it deserves. Opera offers a cultural and educational experience, which is rich with diversity and imagination. This concept will aid to increase the attendance rates of Opera.

1.5.2 OPERA ATTENDANCE STATISTICS

According to the New Zealand Framework for Cultural Statistics, the following information, (Figure 1.21), was provided as an overview of opera and its audience members in 2013. Although the statistics are not South African, they are still useful as they give a general understanding of the regular user group of opera. It was concluded that the audience age range is 45-54 at 38%, with the lower attendance from the age group of 15-34 at only 17%.

The question that must be asked is: Why does the older generation attend opera more than the youth and how can this be changed? When looking at the qualification held by the audience who attend the opera, it is noted that 45% of the audience jointly possess a secondary or tertiary qualification. This creates a challenge to make the opera more accessible to those who are not fully educated. These statistics also show that the opera is attended by 31% of people who are part of the higher income bracket, and again the challenge is to make it more accessible to all income brackets.



1.6 CONCLUSION

The Opera has been identified as an important cultural experience which is in need of preservation. Opera offers a unique experience to its audience members, by telling a story through the use of music, set design and song. To ensure that this cultural entity has a prolonged life, various changes need to take place. The proposed project aims to encourage the youth to experience opera by creating a unique spatial experience. By removing the audience from the conventional theatre realm and placing them into a Site-specific Theatre location, the performance becomes more exciting and encourages participation. Through the spatial experience, and conveyance of the themes of the Magic Flute through site and set design, the opera will be more accessible to those who are not highly qualified and who may struggle with the language barrier. The use of a three-dimensional experience allows people of all ages and levels of education to understand the opera performance.

Ensuring that the opera is more accessible to audience members of all income brackets. The remote location of the site and the unique experience of the performance could cause this to be an expensive project. However, the use of recyclable and reusable materials, as well as utilising existing equipment from a conventional theatre – such as lighting, projectors and sound equipment – will help to lower the cost of production and thereby keep the ticket price affordable for the majority.

Figure 1.21 New Zealand statistics of opera attendance



CHAPTER TWO RESEARCH PROPOSAL



2.1 INTRODUCTION

Opera is a theatrical concept which has been in existence since the late 17th century. Over the past four centuries it has been growing and changing, but sadly in the past 50 to 60 years Opera has seen a decline in attendance. However, this presents an opportunity for it to be reconceptualised in its public presentation. Opera enthusiast Ja-Naé (2014) states in response to the decline and need for re-interpretation of opera, that: "to reimagine opera and start bringing in a new wave of opera audience, we are going to need to embrace a wide range of solutions".

Popular international events which reintroduced the cultural experience of opera are opera festivals such as the 'Arena di Verona Festival', where many operas are put on for a specific amount of time at a particular location. In the year 2017, the opera festival will take place in the Colosseum in Rome, Italy. This annual summer event brings audience members from across the world together to engage in the beauty of opera (Arena di Verona, 2017). This concept draws a number of people of different nationalities to the city to experience

the event. Opera festivals are an innovative means to give opera the new life that it is longing for. Such festivals create an awareness of the cultural value that opera has, and brings a large variety of opera to a diverse audience in an attempt to ignite the enthusiasm that opera deserves.

Site-specific performance is a theatre form which was developed in the 1980's. Distinct locations were identified heritage around a city and used as a stage for a specific performance.

The concept of Site-specific Theatre is to encourage the audience to explore new landscapes and use performance to relatable enhance and narrate a site. Removing the audience from the theatre, and allowing them to explore and view the city from an unfamiliar perspective, deepens the metaphorical meaning of escapism intended by theatre. The site-specific performance Africa, opens potentials to bring architecture and theatrical design future. together in a realm where both performance and site are evolved and given new life.

Attachment of place is rooted in a profound emotional connection to cultural heritage. The value of these places enriches the cultural traditions and memories of the

communities. In order to retain such cultural value and attachment, it is necessary for a place to be preserved. Through the suspension of such decay, the importance and value associated with a place can be prolonged (The Burra Charter, 2013).

The combination of opera, site-specific performance and heritage has the ability to create a spectacle which is culturally stimulating and innovative, bringing light to the historical value of physical context, thus making it socially relevant and relatable. Site-specific opera can be used as a catalyst to the re-imagining of opera and its relevance in the 21st century. The performance has the possibility to act as the narrator of cultural significance found in the heritage-rich sites of South Africa, ultimately bringing together the past, present and future.

2.2 BACKGROUND

With the upsurge of the technological era, there is an underlying threat to the cultural development of theatre, especially opera. "The Metropolitan Opera, which had a 97% attendance rate in 1959 currently (2014) has a 79% attendance rate" (Cooper 2014). Further developed by the growth of technology, society is frequently searching for new methods of entertainment, from the likes of social media applications to virtual reality headsets. The downfall of this digital age is that it can only transport the spectator mentally into a created digital realm. This allows an opportunity for the creation of physical escapism - removing the spectator from their immediate reality and placing them into a new stimulating environment. When talking about opera progression Ja-Naé (2014) stated that "what we need to do is tap into the spirit of elevated humanity that the classic wielded in a way the modern audience can appreciate."

Site-specific Theatre has the potential to fulfil this demand by placing the spectator in a physical environment, removing them from their everyday reality and providing a unique experience. The site, Fort Daspoortrand, is in a state of physical degradation and the decay of heritage and cultural fabric is evident. Therefore, the potential for preservation and cultural celebration arises. Located near the western entrance to Pretoria built into an understated hill sits an exquisite French-designed structure, originally built in 1898 for military purposes. Over the years, the site has fallen into a state of disrepair. However, along with elemental damage comes a delicate and intriguing structural character which tells a beautiful story of the past and present.

The combination of this open-air site and the undying need for opera preservation allows for a unique opportunity which respectfully explores a historical and cultural awareness of the site, opera and heritage.

2.3 PROBLEM STATEMENT

There is a necessity for cultural and historical awareness identified within the local context of Pretoria and found in both the current cultural relevance of the opera and the physical state of Fort Daspoortrand. These two mentioned entities both stand to add cultural significance and value to the greater community. The need for preservation of both opera and Fort Daspoortrand has the potential to bring the awareness of cultural and physical decay into the public eye.



2.4 RESEARCH QUESTIONS

Main research question

How can the introduction of a temporary site-specific opera serve as a catalyst to bring awareness to the cultural and historical value of the Fort Daspoortrand ruin?

Secondary research questions

- How can site-specific opera serve as a catalyst to the awareness of any heritage site?
- How can the thematic values of the opera and site be translated into a three-dimensional experience, reflective of both narratives?
- What additional value and cultural significance can William Kentridge's reimagined interpretation of the Magic Flute opera add to the existing site?
- What is the value in the preservation of the heritage fabric at Fort Daspoortrand?
- How can the combination of the site, Fort Daspoortrand, and the opera, Magic Flute, add to the development of the cultural richness of both entities?

 What value do scenography and site-specific theatre contribute to the domain of interior architecture?

2.5 AIMS

The purpose of this study is to identify a method that will bring the public to Fort Daspoortrand for a cultural experience but also draw them to the beauty of the ruin. The intervention aims to take the audience on a journey of the operatic story while at the same time captivating them in the journey of the site's heritage.

A temporary opera performance, running for three to five weeks, will act as an initial event to draw the public to the site. The William Kentridge re-imagined performance of the well-known opera Magic Flute will awaken the beauty of the site's drama encouraging the audience and public to revisit the site once the performance is over.

A temporary intervention will facilitate the scenes and create an awareness of the need for preservation of the site. A designated walkway will facilitate the human circulation of the site, firstly to take the audience on a constructed journey of site and opera, and secondly to minimise the physical contact with the heritage fabric. This permanent design strategy, which includes new stairs and a new ramp, will ensure the preservation of the site and possibly add an extra layer to the value of the site once the opera performance has ended.

The non-invasive temporary intervention will act as the initial catalyst for the awareness and preservation of the site. The three-dimensional exploration of the thematic developments of the opera will be used to highlight the existing beauty of the site, encouraging the public to revisit the site once the performance has passed.

Through the integration of the audience, site, actor, music and performance, a temporary site-specific theatre will draw attention to the need for preservation of all historical landmarks. The performance will focus on unveiling the existing character and historical relevance of the site, placing emphasis on what the current site has to offer. The audience will be encouraged to explore and experience the space, whilst learning about its heritage value and cultural significance throughout the performance. The site will become a stage, a temporary platform of information, while the performance will tell a story of the past, present and future.

Preservation and site awareness are the main focuses of the project, which will consider both the preservation of site heritage and the cultural value of opera in order to bring awareness to the unique existing beauty of the site.

2.6 SIGNIFICANCE OF STUDY

This study will contribute:

- To the field of interior architecture with a focus on establishing a relationship between set design, interior design, scenography and site to bring about the awareness of heritage and cultural value.
- To an understanding of the value of scenography in the domain of interior architecture.

Since the University of Pretoria does not offer set design as a specific degree, this master's dissertation - and the existing projects of the University of Pretoria which focus on theatre design - can add valuable research to the field of set design and scenography in the domain of Interior Architecture. The collection of work by the University's students can be used as a catalyst for the further exploration of theatre design in the department. The table, Figure 2.1 on the following page, shows a list of honours and masters students who have chosen to contribute to the collective theatre design research of the field of Interior Architecture. The projects range widely in focus, but it is apparent in each of the set design, scenography and theatre design is included under the Interior Architecture domain. The technical development of set design follows closely with temporary interior design, by utilising similar design tools.

According to the University of Oregon (2016), interior architecture opens "opportunities for students preparing to enter professional practice includes interior design within an architectural firm or as an independent interior designer, lighting designer, exhibit designer, set designer, facilities manager and furniture designer". Therefore, this study will contribute to the development of set design through a hybrid-style design which utilises interior design principles, as well as those of set design to create a unified space.

The table, figure 2.1, elaborates on four existing dissertations of the University of Pretoria that deal with a common theme. The purpose of the table, in Figure 2.1, is to illustrate how the student's work has contributed to the Interior Architecture field, and through that, align this dissertation within the same field of research.



YEAR	STUDENT NAME	TITLE OF PROJECT	DESIGN FOCUS	THEORETICAL FOCUS
-	Meera Chita	Reinventing Theatrical Education	Experimental theatre, a means to the education around the theatre. The project was proposed for the UP Campus	Elements that play a vital role in the creation of a theatre, arts and culture relationship for society. It deals with the Relationship between Lynch principles to the theatre realm.
2010	Jason Wiggin	Extending the skin(s) of the Capitol Theatre	The adaptive reuse of the Capitol Theatre	A blurring of the boundaries of interior and exterior
2011	Janri Myburgh	Wood for the trees: a temporary Theatre for the performance of 'Circles in a Forest.'	Temporary Theatre, regenerative and adaptive reuse within the inner city.	The catalyst of theatre performance/space to ignite community use and bring awareness to the existing spaces within the city.
2012	Liza Gerneke	Real fictions: a heterotopic production design for The Lorax	Film production design	Universal message on the design of a production including scenography and set designing.
2017	Leandra Levenderis	Site-specific opera: Areimagined Magic Flute as a catalyst to the narration of Fort Daspoortrand heritage.	Temporary Site-specific theatre, an opera production	Scenography as a strategy to bring awareness to a heritage site. The focus is adding to the site-specific research field within theatre dissertations.

Figure 2.1 Table showing masters dissertations of the University of Pretoria

2.7 RESEARCH METHODOLOGIES AND METHODS

Methodologies

This dissertation aims to use the methodology of historical research as well as qualitative research. Both types of research methodologies will add value to the data collection. To ensure a shared understanding, the following definitions will clarify which methods of research will be utilised in practice.

Historical research addresses issues which pertain to the environment and context created in the past. The focus of such research is on the historical relevance and cultural suitability of the site. Methods such as identifying the social impacts, building styles and city forms are also included under this methodology. Comparative photographic documentation of the history, as well as the current state of the site, adds significant value to the research. The collected data found on the history and heritage of the site is then evaluated and interpreted to ensure that all advantages of the site are exposed. (Groat and Wang 2013, 173-175)

Denzin and Lincoln cited in 'Groat and Wang' (2013:218)

that, "Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials". Such research focuses on the social relationship in architecture and an interpretation of the collected empirical data. Methods such as location mapping, photo documentation and personal observation form part of the collected data.

Methods

The qualitative research will be conducted via a literature review and site analysis. The data collected through such research will be interpreted to ensure that the studies are aligned with the dissertation focus. The relevant theories will help establish the theoretical discourse and direction of the further development of the project and design. The literature review will be conducted with a focus on the relationship between interior architecture, scenography and heritage.

Anin-depth site analysis and comprehensive historical research of the site, derived from various heritage charters, will assist to develop a design strategy which considers the heritage significance and value of the site, Fort Daspoortrand. The

heritage study will form the starting point in the development of the design as the Burra Charter sets out limitations and processes to follow when dealing with heritage sites and cultural significance.

The chief precedent study of 'We Play Macbeth at Fort Point' by We Players will be used for its theoretical and design similarities to this project. The precedent study will be critically evaluated while the visual and interpretative data collected will aid in the further development of the proposed project design. The precedent study is not specific enough to cover all general notion identified in the research questions. Therefore, the selected precedent study focuses on a site-specific performance which involves audience participation and scenography and set design. The precedent study does not address issues such as the heritage and cultural significance of the chosen site.



2.8 DELINEATION AND LIMITATIONS 2.9 OVERVIEW OF STUDY

The site will be kept in its present state, with the exception of the two permanent intervention. The set design, will form part of the temporary intervention, and will ensure that no permanent damage or harm is done to any of the existing structure. The project is limited to the ruin of the fort, however consideration of the historical Heritage Village, at the base of the hill, will be taken into account. This consideration will ensure that the aspects of the Burra Charter and place significance are efficiently and respectively dealt with throughout the project.

With a clear evaluation of various heritage charters, the historical value of the site will be addressed. The Burra Charter states three methods on how to deal with heritage, namely reconstruction, restoration and preservation. For this project, the method of preservation will act as the main means of the retention of the heritage value and cultural significance of the site (the concept of preservation and the Burra Charter will be further explored in the Theoretical Chapter 4.2 to follow). Preservation is the maintaining of the site in its current condition, as well as the minimisation of further decay. Due to this theoretical restriction, the aim of this project is not to restore the site to its original state but to rather use the decay and existing character as an informant for performance and create awareness of the site's possibilities.

Within the study, a focus will be placed on site-specific performance, by explicitly using temporary design interventions to facilitate the opera. The theories and research will support the production as a catalyst to the re-introduction of the fort ruin to the public, as well as the combination of scenography and interior architecture as a homogenous field of study.

Throughout this dissertation, a strong focus on the heritage value and cultural significance of the site and opera are prominent. As the project aims to use the theatre as a catalyst for preservation, the performance will act as a temporary design intervention, bringing about awareness of the historical value of the site. The temporary pop-up nature of the theatre will ensure that no permanent damage is done to the site. The design approach of 'touch lightly and leave nothing' will form the main design concept for the project.

Throughout the following chapters, the relevant theories and considerations will be taken into account, as mentioned in the breakdown of the structure of the dissertation page xxiii.

2.10 CONCLUSION

This chapter aims to set out a clear understanding of the study proposal. It includes the background to the real-world issues; the identified problem and which research questions will be used to address the problem. The aims and objectives define the direction and the intended development of the dissertation - to set out the restraints and outcomes for the design. These directives are further evaluated in terms of research methodologies and methods which will aid in the data collection ensuring that the dissertation is well-informed. The significance of the study is addressed, ensuring that the theoretical and design intents of the project are aligned with that of the Master's qualification. The overview of the study provides a breakdown of what to expect throughout further chapters of the dissertation.



CHAPTER THREE PHYSICAL CONTEXT



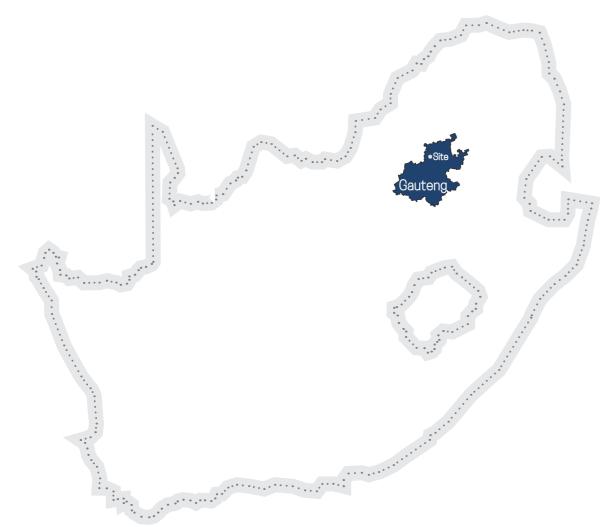


Figure 3.1 Site location in South Africa

For the purposes of this dissertation, a specific site has been identified. The site, Fort Daspoortrand, was selected due to its unique character, and need for historical and cultural preservation.

3.1 INTRODUCTIONS TO THE CONTEXT

Isolated and abandoned on the top of a hill, a beautiful ruin sits quietly and patiently. The great protector of the West, a structure of excessive character awaits its moment to be discovered by the public. Figure 3.1 shows how this historical and charming structure stands in the province of Gauteng, in the capital city of Pretoria (Tshwane). Fort Daspoortrand, as seen in Figure 3.2, is positioned 11.24km from Pretoria city centre and 52.44km from Johannesburg city centre. Placed upon a modest ridge, the fort overlooks the western entrance to Pretoria, with vantage points facing both north and south.

Fort Daspoortrand is one of the four forts which were constructed during the Anglo-Boer war as part of the second fortification plan (Van Vollenhoven 1998). Two of the structures - Fort Klapperkop and Fort Schanskop - have since been repurposed, while the remaining Forts - Fort Wonderboom and Fort Daspoortrand - remain untouched and subject to the ruin of time.

3.2 SITE SELECTION

The unique character of Fort Daspoortrand ruin is its striking bold structure and its sad untold history. The potential to re-introduce the public to the site and tell a part of its story creates a sense of intrigue and opens the site up to the unlimited possibilities. The unique and fascinating architectural structure, together with elemental damage, has created a certain beauty at the site, which will be lost forever if it is not exposed to the public. The fort is constructed of thick natural stone walls – a local material which can be found in the hills around

the site - ensuring that the architecture is camouflaged with the surroundings. The reddish-brown of the natural stone contrasts with the grey concrete, which forms part of the detailing and original roof structure. The structure is hidden from view as it is set into the earth, the natural foliage scattered around the built-up banks acts to disguise the bold architecture. Since the site is easily accessible and currently abandoned, it awaits a design intervention which will breathe life back into it, exposing its beauty and majesty for the public to see.

3.3 GREATER CONTEXT

A thorough site analysis and site investigation will expose the limitations and potential of the site-specific theatre. The analysis will be achieved through an investigation of the macro and micro context surrounding the site.

The macro analysis will focus on the surrounding areas and the general context of the site; giving a contextual understanding of the site. Considerations will include the following: where the site is located with regards to the city centre; how the site is accessed; and what is the site's proximity to other buildings of similar typology. The macro analysis of the site is depicted in the previous illustrations in Figure 3.1 and Figure 3.2. The graphics show the position and context of the site in South Africa and Gauteng, as well as its physical relationship with the Pretoria city centre.

The micro site analysis will look at the chosen site, including the existing structure and architectural design features; the materiality of the existing site; weather patterns; solar studies and decay of the structure. The macro and micro analysis will be further revealed throughout this chapter, unfolding the story of the site and its current state.

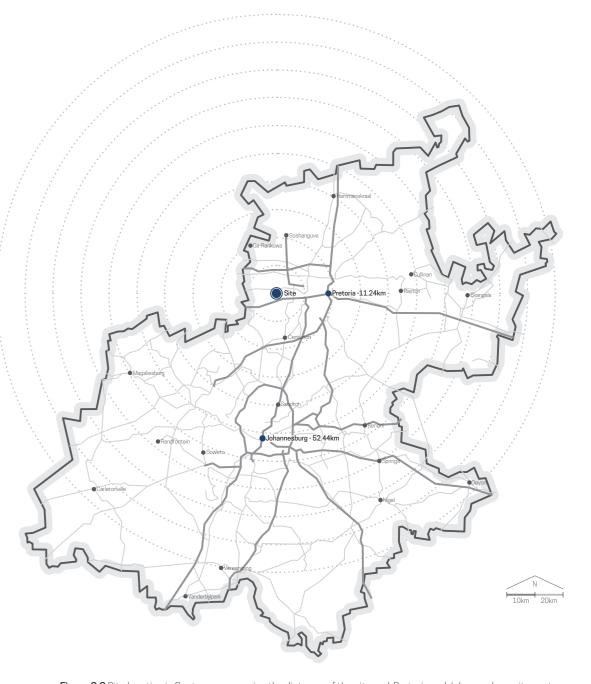


Figure 3.2 Site location in Gauteng, concerning the distance of the site and, Pretoria and Johannesburg city centre.

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3.4 PRETORIA

The site is located within the greater Pretoria City and falls under the municipality of Tshwane. The fort is located 11.24km from the city centre and is easily accessible via main roads. Figure 3.4, on the following page, shows a 1km radius from the site, as well as the radial reach showing where the other three forts are located in Pretoria.

3.5 PRETORIA FORTIFICATION

Before the breakout of the second Anglo-Boer War, there was a concern for the safety of the citizens of Pretoria. This threat to the city's safety ignited a plan to build forts at every entrance, surrounding the city. In 1896, the government approved the Pretoria Fortification plan, the construction of eight forts was proposed as protectors to the entrances to the city of Pretoria. However, due to a lack of funding and the fast-approaching war, only four of the eight forts were built. In 1898 the construction of the four forts, three German and the other French: Fort Klapperkop, Fort Wonderboom, Fort Schanskop and Fort Daspoortrand were completed. Today all four forts still stand, some more preserved than others.

3.6 FORT DASPOORTRAND, THE FRENCH FORT

Originally built in 1898 under the architect Leon Grunberg, Fort Daspoortrand, Figure 3.3b, is one of four military forts in Pretoria. Although this fort was never used, it was built as the protector of the Western entrance to the city. Unlike the other three forts, Fort Daspoortrand was fitted with a telephone, running water and electricity. The layout of this fort also differs from the others with a hexagonal shape, as seen in Figure 3.3a, while the remaining three have a pentagonal shape. The fort was commissioned by the ZAR State Artillery and was previously named 'Westfort'. It is currently owned by the City of Tshwane Metropolitan Municipality (Van Vollenhoven 1998).

As seen in Figure 3.3c, Figure 3.3d and Figure 3.3e the present state of the site is an abandoned ruin. The steel structure was removed soon after it was built and the war had ended, causing the roof to collapse. The existing structure has also been subjected to the elements, causing weathering and soil erosion. The natural periodical ruin of the site has left the structure with an interesting character which exhibits its ages and its history.

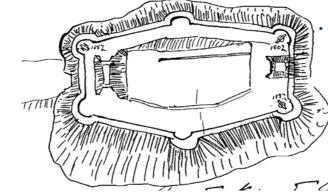


Figure 3.3a Sketch showing fort's hexagonal shape



Figure 3.3b Original entrance to the fort



Figure 3.3c Current entrance and approach to fort



Figure 3.3d Entrance arch

Figure 3.3e Detail on arch

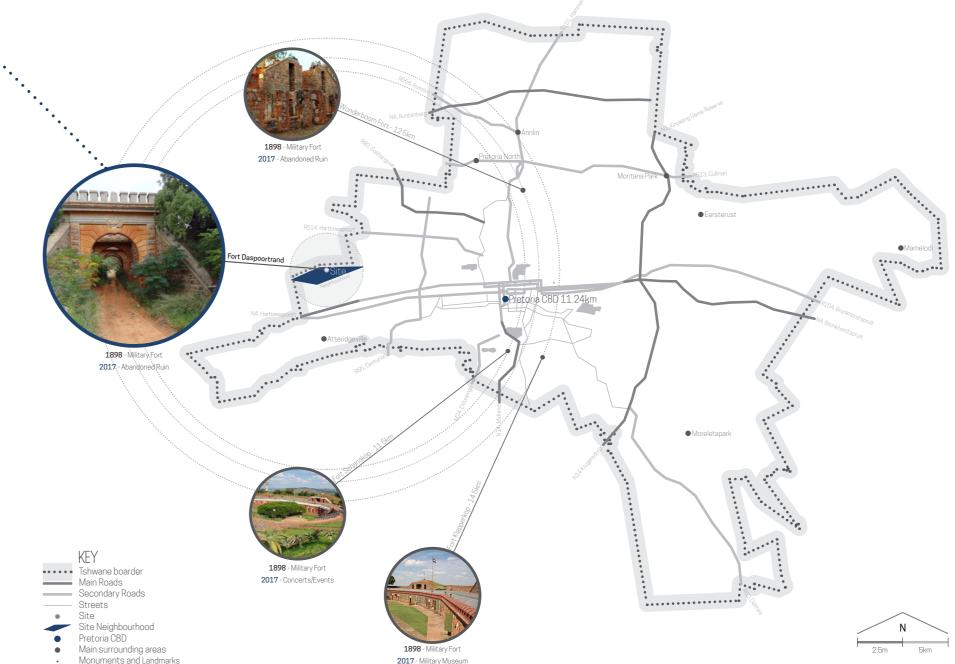


Figure 3.4 Forts of Pretoria, radial proximity to the city



3.7 OTHER FORTS IN PRETORIA3.7.1 FORT KLAPPERKOP

Originally built as the protector of the Southern entrance to Pretoria, and designed by architects Von Dewitz and Werner, Fort Klapperkop was completed in 1898, as seen in Figure 3.5a and Figure 3.5b. After minor destruction of the fort, it has been renovated and is currently home to a Military Museum, Figure 3.5c. The future plan for the fort is to become the new South Africa parliament building.

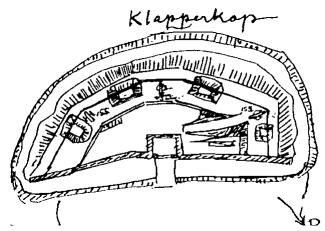


Figure 3.5a Sketch of Fort Klapperkop layout



Figure 3.5b Original photograph of Fort Klapperkop



Figure 3.5c Fort Klapperkop current condition

3.7.2 FORT SCHANSKOP

The pentagonal-shaped Fort Schanskop, seen in Figure 3.6a, was designed by Von Dewitz and Werner. Originally constructed as a military fort, it was completed in 1898 as a protector over the Southern entrance to the city during the second Anglo Boer war. Figure 3.6b shows the original state of the fort. The structure has since been restored and is currently utilised for events and is known for hosting the Park Acoustics music events, see Figure 3.6c.

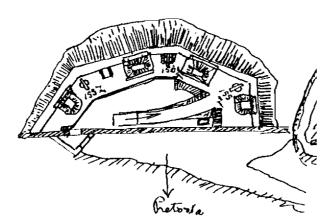


Figure 3.6a Sketch showing Fort Schanskop's pentagonal shape

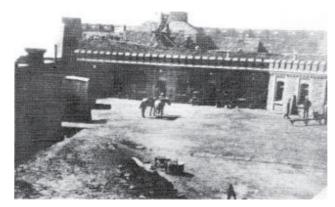


Figure 3.6b Original photo of Fort Schanskop courtyard



Figure 3.6c Current image of Fort Schanskop's state

3.7.3 WONDERBOOM FORT

Fort Wonderboom was completed in 1898, as a part of the Pretoria fortification scheme. The fort faces the Northern entrance of the city, seen in Figure 3.7a showing the original layout. The original intent of the structure was a military fort as seen in Figure 3.7b. The fort is currently derelict and has no use. Accessible only by a 2km hike, the site has an extensive view over the city. The current state of the site is shown in Figure 3.7c.



Figure 3.7b Original photo of Wonderboom's courtyard

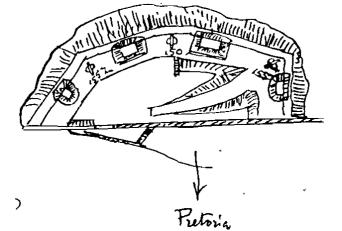


Figure 3.7a Sketch showing Wonderboom's pentagonal shape

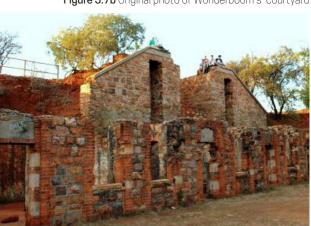
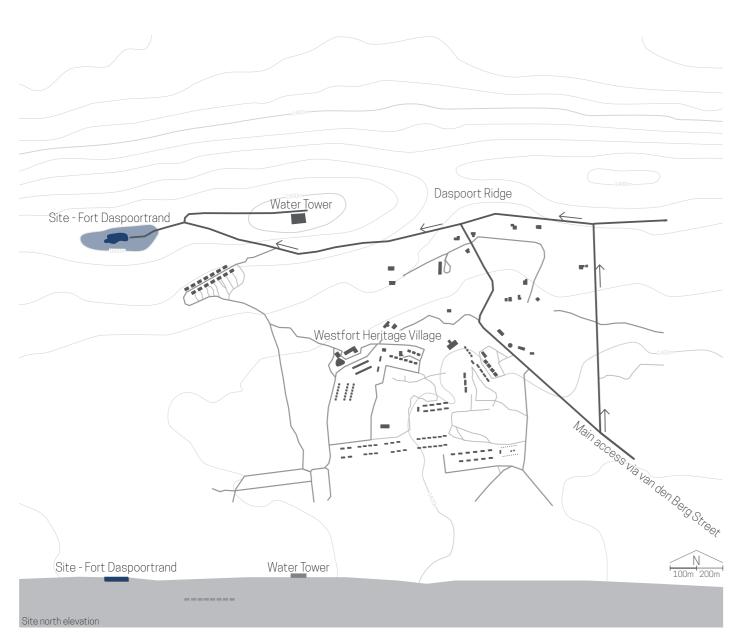


Figure 3.7c Current image of Wonderboom's state





3.8 BROEKSCHEUR 318-JR

Figure 3.8 shows the location of Fort Daspoortrand at the top of the Daspoort ridge, within the Broeksheur 318-JR area. It is accessible by one road, Van den Berg Street. To the east of the fort, there is an old water tower, which is currently still in use.

At the base of the ridge is the old fort village, Westfort. During the period when the fort was in use, this village hosted the facilities such as hospitals and schools for the military employees. The village is visible from the upper (ground) level of the fort.

Figure 3.8 Access and location of Fort Daspoortrand

3.9 WESTFORT HERITAGE VILLAGE

Westfort Heritage Village is not a vital aspect of the design of the Fort. However, it is an important to consider due to the proximity and context. According to the Burra Charter, it is imperative that when dealing with a heritage site, one should consider the relationship the site has with the surrounding, as the potential cultural significance of the site could have a valuable relationship with the surroundings (The Burra Charter 2013:3).

A brief history of Westfort Village explains the original intention of the village, its use as a Leprosy colony and its current use as an illegal housing village. Figures 3.9a to Figure 3.9f show current photographs of the village as an illegal housing settlement. Figure 3.10 on the following page shows an aerial view of the Fort and the Heritage village below.



Figures 3.9a Old city hall





Figures 3.9b Field with village in the background



Figures 3.9c Rondavel-shaped accommodations







ted structure

Figures 3.9d Illegal house

Figures 3.9e Dilapidated structure



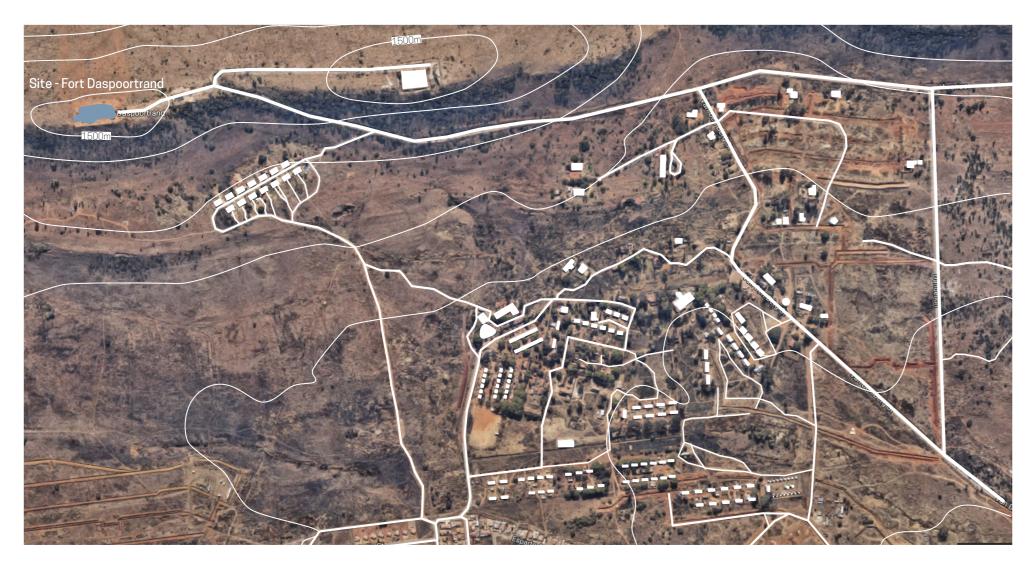


Figure 3.10 Aerial view of Fort Daspoortrand and Westfort Heritage Village

3.10 FORT DASPOORTRAND - ORIGINAL FUNCTION

Positioned as the protector of the Western entrance to the city of Pretoria, Fort Daspoortrand is located on Daspoort Ridge between the Magaliesburg and Witwatersberg mountains. The fort faces both the North and South from its vantage point. Fort Daspoortrand, the only French designed fort, is the biggest of the four, not only in physical size but also by the number of occupants it could facilitate. Architect Leon Grunberg was the leader of a team of Italian craftsmen who assisted in the construction of the fort. Costing the South African government £46 500 the fort was manned by 25 gunmen and four canons. It was one of the only forts to have electricity, water and telecommunication devices (Van Vollenhoven 1998). The image below, Figure 3.11, shows the original programming of the site. The canons were placed at the four corners of the Fort, and the rooms along the Northern side of the structure.

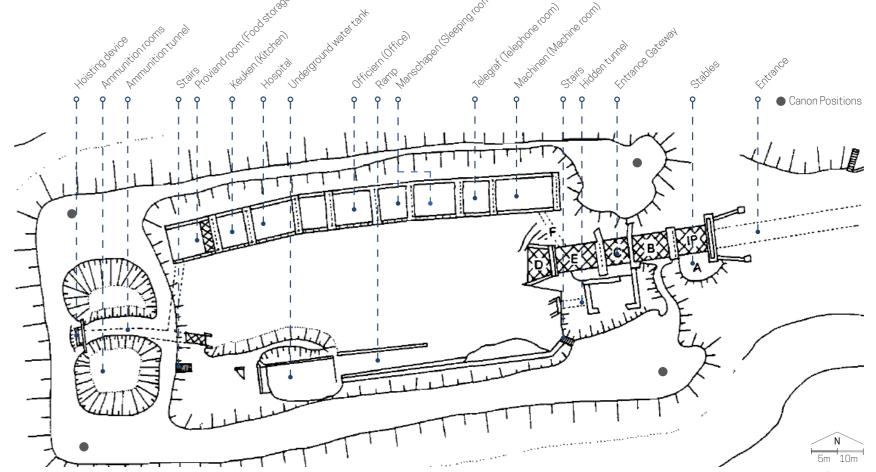


Figure 3.11 Fort Daspoortrand original function

3.11 FORT DASPOORTRAND HISTORY

The damage and destruction at Fort Daspoortrand can be traced back to 1800, starting with the First Anglo-Boer War up until its current state in 2017. The timeline below, Figure 3.12, shows the progression of the Fort over this time.

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Figure 3.12 Timeline of Fort Daspoortrand history

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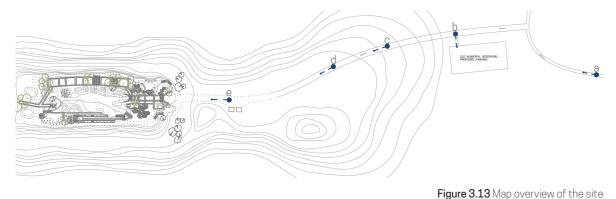






Figure 3.14c Gravel road at the approach

Figure 3.14d Approach to the fort

3.12 APPROACH TO SITE

The approach to the site is important as it is the first time the audience will see the site and the views from its vantage point. The performance will take place during the night, so the audience will arrive as the sun is setting, giving them only a few minutes to explore the site before it is cast into darkness. The darkness will heighten intrigue for the audience as they wonder about what the site looks like, and thus generating interest for a view of the site during the day. Figure 3.13 gives a map overview of the site and its correspondent views on the approach to the Fort. Figure 3.14a is a photograph of Van den Berg Street, the access road to the site. Figure 3.14b shows the old municipal reservoir, which will act as a parking area during the period of the performance. The initial view of the Fort is seen from the gravel road at the approach to the structure; Figure 3.14c shows this road and the top of the fort. As one would approach the fort, more of the structure is revealed, as seen in Figure 3.14d. Finally, the entrance of the fort is revealed, and the beauty of the structure is seen, shown in Figure 3.14e.



Figure 3.14e Entrance of the fort is revealed

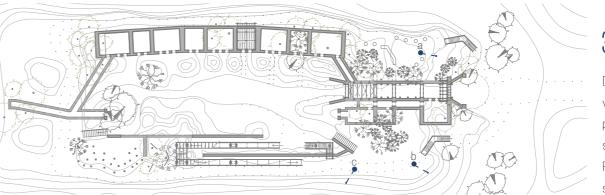


Figure 3.15 Diagram of fort, showing views

3.13 VIEWS DURING THE DAY

During the day, the city of Pretoria is visible from the top level of the fort. The views from the fort give a new landscape and backdrop against which the performances will take place. Since the fort is isolated on a ridge, the views show the remote location and relationship to Westfort Heritage Village below. Figure 3.15 shows a diagram of the fort and the location of the views can be seen in Figures 3.16a to Figure 3.16c.







Figure 3.16b Photograph of the Heritage Village's location to the fort



Figure 3.16c Panoramic view of Atteridgeville, West Pretoria

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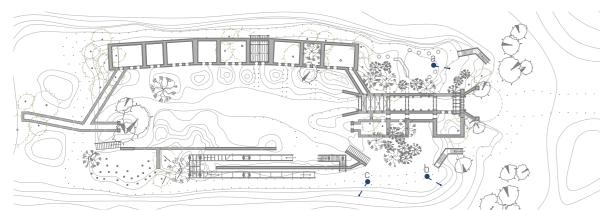


Figure 3.17 Diagram of fort's plan, showing views

Figure 3.18a Setting sun at the fort

3.14 VIEWS AT NIGHT

The performance of the opera, Magic Flute, will take place during the night. It is therefore important to understand what the character of the site will be during those times. Figure 3.17 shows a diagrammatic plan of the site and the direction at which the views are taken. From the site at night, the city's lights, as well as the rural areas around the site are seen, as shown in Figures 3.18a to Figure 3.18f. The nighttime brings a certain mystery to the site, which is enhanced by the vantage point looking down over the villages and people below. The site is quite mesmerising in the dark: its greatness accentuated by the spectacular views,



Figure 3.18b View towards Pretoria city centre

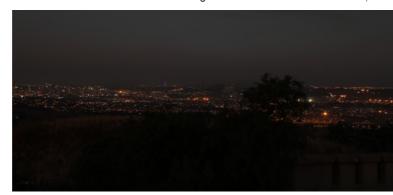


Figure 3.18c View looking towards Pretoria



Figure 3.18d View of the town on the northern side of the fort



Figure 3.18e View looking along ridge towards water tower

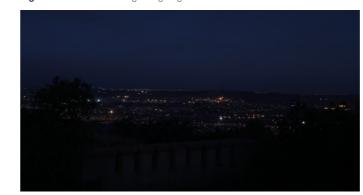


Figure 3.18f View towards Westfort Heritage Village below

3.15 MATERIALS ANALYSIS

The material study takes a look at the existing materials found at the site, both naturally occurring and man-treated. The material analysis forms an important aspect of the design, as the thematic developments of the Magic Flute opera are associated with the existing materials and structures of the site. Figures 3.19a to Figure 3.19f, show the natural materials and Figure 3.20a to Figure 3.20f the man-treated materials.



3.15.1 NATURAL MATERIALS

Loose building matter



Figures 3.19a A mixture between the rubble of the building and the natural environment

Grass



Figures 3.19d Existing veld grass

Stones and burned grass



Figures 3.19b A combination of the building rubble, local stone and Figures 3.19c Existing natural sand burned grass

Sand pathways



Figures 3.19e Local sand exposed through human erosion

Sand



Compacted sand



Figures 3.19f Local sand naturally compacted and exposed through erosion

3.15.2 MAN-TREATED MATERIALS

Regular stone bricks



Figures 3.20a A construction of the local stone, detailed with a cement finish, used to build the majority of the fort

Irregular stone bricks



Figures 3.20d Irregular shaped local stone used in the building structure

Exposed aggregate



Figures 3.20b Erosion of concrete to expose large stone aggregate

Natural stone and cement



Figures 3.20e A combination of the natural stone and cement, used to retain earth

Regular & Irregular bricks



Figures 3.20c A structured construction of the local stone, used to build supporting walls

Construction ruin



Figures 3.20f Areas of construction exposed through aged ruin

3.16 SITE ANALYSIS

The following site analysis shows the identification of five specific areas around the fort; which will be used for the set design of the five selected scenes as discussed in Chapter 7. The site analysis, Figure 3.21, depicts the selected areas of the Fort and the physical character of those areas. The following page shows the sectional views – Figure 3.22 and Figure 3.23 – as well as a front elevation of the site – Figure 3.24. The sections and elevations show the heights and level changes around the structure.

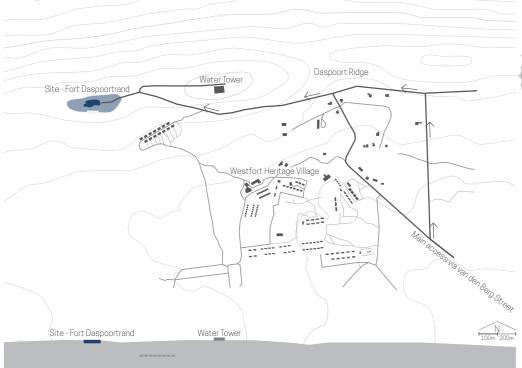
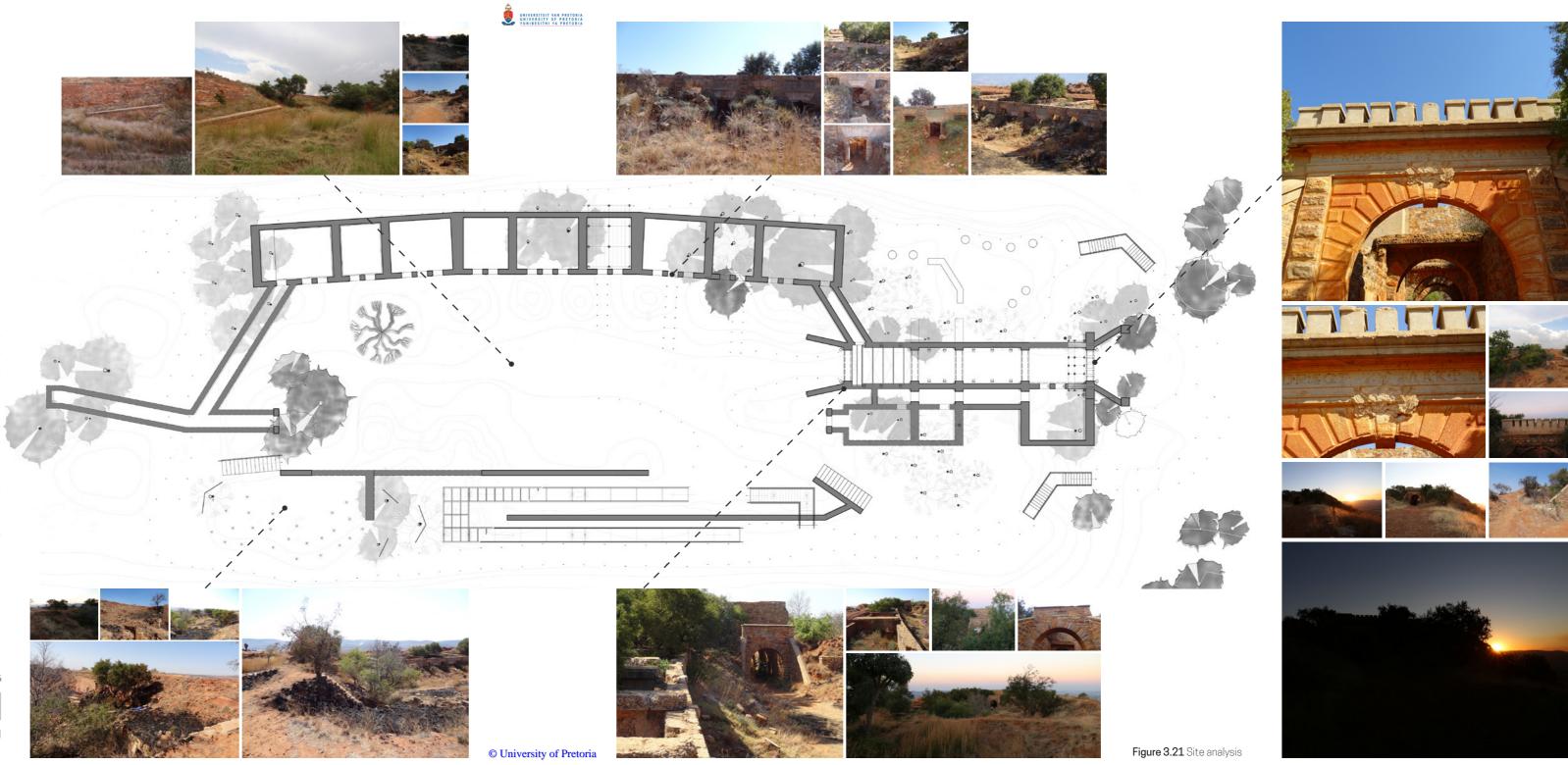


Figure 3.8 Access and location of Fort Daspoortrand





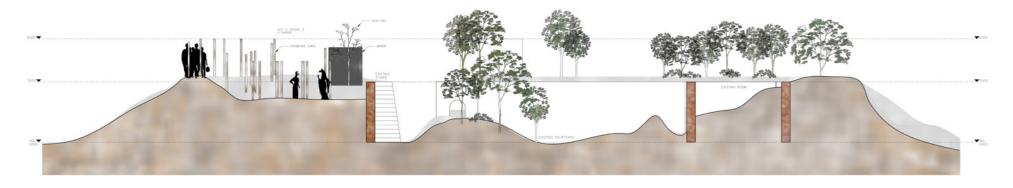


Figure 3.22 Section BB through the width of the fort



Figure 3.24 Front elevation of the entrance

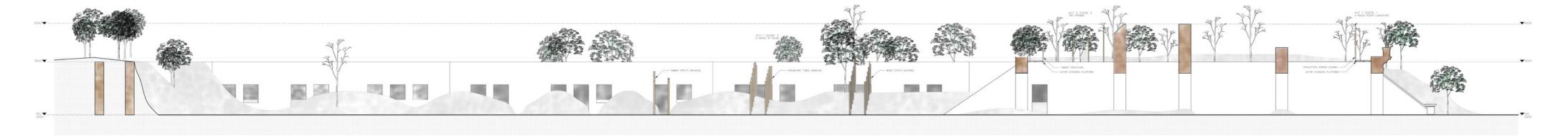


Figure 3.23 Section AA through the length of the fort



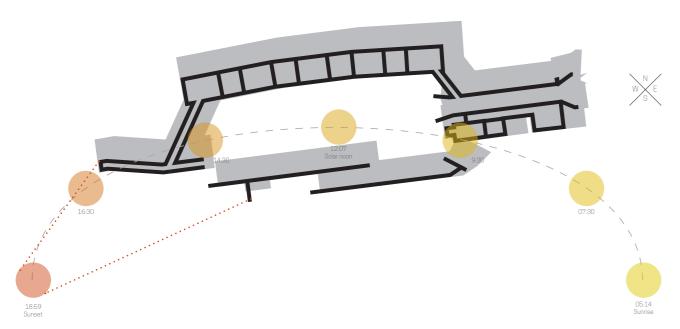


Figure 3.25 Summer sun movements

3.17 SOLAR STUDY

The production at Fort Daspoortrand will take place during the night. However, consideration of the sun's movement and direction in which it will set has been analysed. The audience will be approaching the site as the sun is setting and it is, therefore, vital to consider where the sun will be during those times. The time of sunset will also determine the starting time of the performance to ensure that the event takes place in the dark. (AccuWeather, 2017)

3.17.1 SUMMER SOLSTICE, 21 DECEMBER

The summer solstice for the southern hemisphere takes place on the 21st of December. A simulation of the sun movement and shadows has been used to explain the solar movements at the fort in summer. The following graphic, Figure 3.25, details the times of sunrise and sunset on the 21st of December. The sunrise at 117°ESE at 05:13 and sets at 243°WSW at18:58 making the day length 13h45min3sec, the longest day of the year.

3.17.2 WINTER SOLSTICE, 21 JUNE

The winter solstice for the southern hemisphere takes place on the 21st of June. A simulation of the sun's movement and shadows has been used to explain the solar movements at the fort in winter.

The following graphic, Figure 3.26, explains the sunrise and sunsets on the 21st of June. The sun rises at 64°ENE at 06:53 and sets at 243°WSW at17:25, making the day length 10h31min46sec, the shortest day of the year.

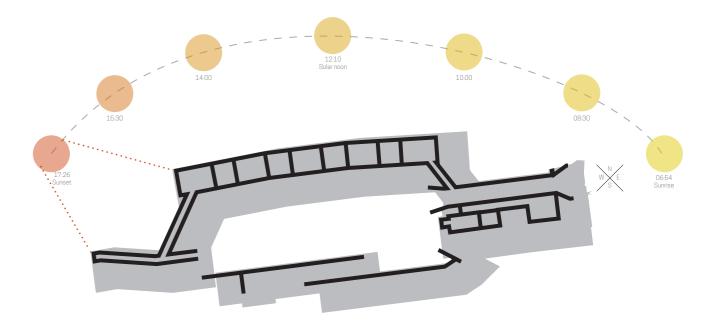


Figure 3.26 Winter sun movements



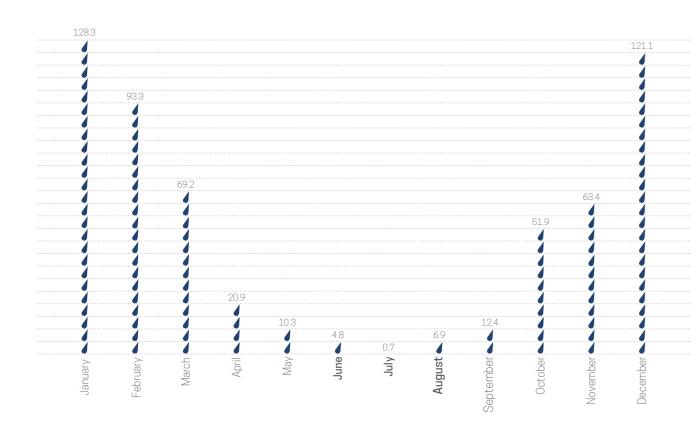


Figure 3.27 Average rainfall over the year

3.18 WEATHER STUDIES

Due to the open-air nature of the site, the performance will take place in the winter months, as the winter season in Pretoria is the dry season. Figure 3.27, shows a chart of the average rainfall over the months of the year (Windfinder, 2017). The months June, July and August are identified as the driest months, ensuring that the performance should not be disturbed by rain. The moon will provide the performance with a natural illumination.

As the performance takes place in the evening and the theatre is in the open, it is vital to understand the weather expectations. The following graphic, Figure 3.28, shows the expected temperatures over the year, with June having temperatures of 21°C max and 5°C min, July with 20°C max and 5°C min and August 24°C max and 8°C min. Since the performance will take place in the winter months, heat and protection from the cold will need to be considered. The audience will be requested to be prepared for the cold. However, blankets will be provided for extra warmth, as well as a disguise and additional comfort for seating.

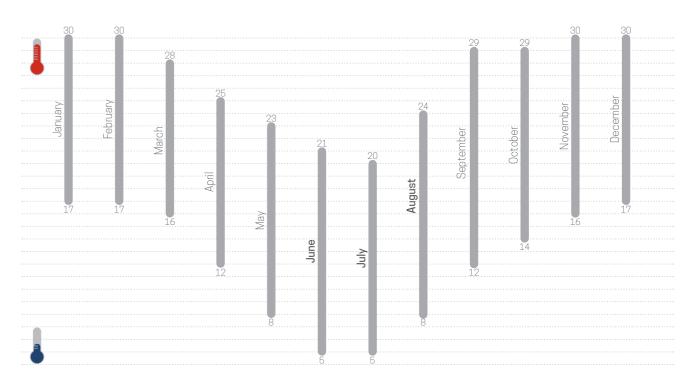


Figure 3.28 Temperature chart of annual averages



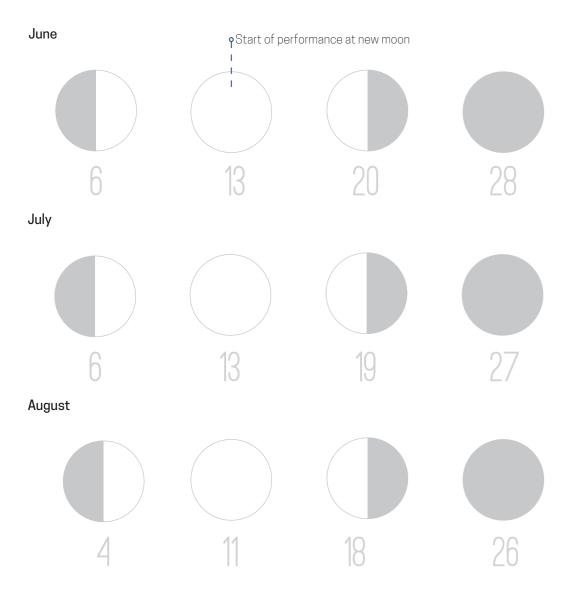


Figure 3.29 Moon phases for 2018

3.19 LUNAR STUDY

Since the opera performance takes place after sunset, it is vital to study the lunar movements, phases and time periods. It is proposed that the opening performance take place on the first new moon of June. This will ensure that the lighting effects have the greatest potential to make the performance spectacular. With every phase of the moon, the performance will change, the natural moonlight will cast different shadows. Due to the site-specific location for the opera, the night sky will become the roof to the performance, providing an important part of the production. Each night, the experience will be unique, enhanced by the clouds, stars and moon movements. The following graphic, Figure 3.29, shows the moon phases for June, July and August 2018 (Date and Time, 2017).

3.20 CONCLUSION

Fort Daspoortrand provides a location which has the structural abilities to facilitate a site-specific theatre. The site has character and unique explorative features which will invite the audience to experience the space. The large built-up area contrasting with open areas provides a variety for different audience-actor interaction. The open-air structure creates an interesting opportunity for the inclusion of the natural elements and the drama of the site. However, it possesses many challenges including bad weather and acoustic considerations. The character and nature elements of the building offer an interesting backdrop and performance opportunities.

The location of the site supports the enhanced effects of the theatre, as the audience are removed from their reality and submerged into the performance. The secluded location encourages the spectators to lose themselves in the performance, and the structure of the building encourages exploration and the sense of adventure. Figure 3.30 gives a graphic summary of the weather patterns for the focal months.

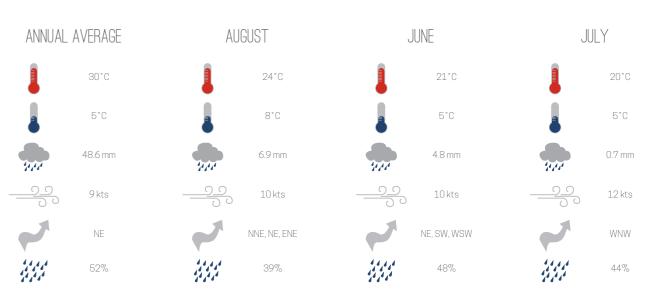


Figure 3.30 Summary of weather conditions



CHAPTER FOUR THEORETICAL PREMISE



4.1 A PRELUDE OF THOUGHTS

There is an evident decline in opera attendance, as identified in Chapter 1.5, and the threat to this cultural entity is prominent. It is identified that site-specific theatre has the ability to bring energy back into these environments and encourage the audience to interact with the selected site. As discussed in Chapter 2.2 - Background - a design intervention which merges site, audience, actor, and performance holds a conceptual solution to this problem. The following Chapter aims to investigate the benefits of Site-specific Theatre, scenography, and historical relevance of site within the domain of interior architecture. Ultimately, the creation of site awareness and emphasis on cultural value could benefit not only the site, Fort Daspoortrand, but also encourage a new audience for opera. The project does not have a typical interior architecture focus, however, the case for the open-air nature of the site, and therefore, its place in the interior architecture domain is argued.

4.2 DEFINING SITE-SPECIFIC THEATRE

Site-specific theatre originated in the early 80's as a means of entertainment to provide the audience with a different and innovative perspective on performance. Originally the performers were involved in street art and street performances, but soon this excitement and spontaneity spread to the theatre house. Mason (1992:3) stated during a time of site-specific performance, that conceptually "the border between entertainer and art, between audience and performer and between the performance itself and the larger social event are becoming less defined". Naturally, with any change to the norm, there was much controversy in the acceptance of theatre changing its form. Mason explains how the conventional theatre lovers find an outdoor theatre to be inferior to the indoor theatre, implying that outdoor theatre is not a 'real' theatre and that the shows are put on by amateurs. "So, outdoor theatre remains the unappreciated outsider busily getting on with its own development and expanding its popularity, with very little recognition of its work." (Mason 1992:3)

Along with the rejection of changes in theatre, Mason (1992:10) explains how film and television have had an undesirable impact on theatre attendance, "the result is that theatre cannot compete on the same terms". Although the

television brings the theatre performance to the people. broadening the viewer reach, it has a negative impact on the attendance at the theatre. This is due to the readiness and ease of accessibility of theatre performances online or via television channels. However, "this has led to the move away from naturalism in theatre. All the trappings that created illusion - realistic set, the lighting and stage effects - were stripped away" (Mason 1992:10). What is unknown to the conventional theatre lovers are the possibilities and new avenues that are revealed by removing the performance and performer from a prescribed and conformed space. A "main advantage of outdoor theatre is the possibility of using quite different materials, locations and effect, with no roof, walls, or fixed seating to limit the possibilities, whole new areas of scale are opened up" (Mason 1992:87).

When referring to the uniqueness and spontaneity found at site-specific locations, as opposed to the indoor theatre, Mason (1992:87) explains that outdoors "the changing conditions and interruptions mean that each performance is a unique event where as indoor performance tends to be more of an easily repeatable production." Outdoor performance typically has a free and exciting atmosphere since an "outdoor performer cannot get away without energy and spirit" (Mason different from the indoor theatre, giving the audience a unique theatre." experience, something to talk about and most importantly something to remember. Not only does outdoor theatre offer

a new environmental experience, but, "the performer can have a greater effect on the audience because they can get amongst them, encircle them, lead them on journeys, play with them, surprise them by appearing in unexpected places, or surrounding them with fireworks" (Mason 1992:12).

When it comes to outdoor theatre "it has also been realised that the great advantage that theatre has over television and film is that proximity of the audience and the possibility of interaction with them" (Mason 1992:11). Mason explains how the proximity between audience and performer means the skills of the actor can be appreciated differently, and how there is a greater effect on the audience, creating a more intimate and personalised experience (Mason 1992:11). A sense of empowerment is given to the audience, allowing them to feel in control of a portion of the performance, giving them something different than a film watched on a television screen. This puts the audience and the performer in a vulnerable position where "being able to see them [sic] (the audience) allows for much more interaction with individuals but having such an intimate response can be alarming and cause problems" (Mason 1992:181). Mason (1992:181) goes on to explain that "although not every outdoor performer uses audience participation they all need to have a much greater awareness 1992:87). Open-air theatre needs to offer something of its mood and composition than is the case for an indoor

Site-specific performance integrates a unique experience where the audience is placed directly in the physical set and design of each scene. The concept of full immersion causes a problematic relationship between the audience, actor and site. There is a balance which needs to be achieved: the site is equally as important and informative as the production itself Each needs to grow from one another to ensure a sensitive and relatable approach is achieved. To have a clearer understanding of these relationships, a look at the Immersive Theatre can bring to light how the audience-actor-site equilibrium can be

4.3 ARCHITECTURAL SETTINGS IN SITE-SPECIFIC THEATRE

Site-specific locations form an important aspect of the Immersive Theatre, where certain sites are chosen to evolve the performance. The attraction to particular sites often occur because "they provide ready-made exploratory landscapes, redolent of the histories, into which performances can be scattered, and in which engagement with the environment can be an important part of the audience experience." (White, 2012). The site is then addressed as the stage and a backdrop to the performance, forming part of the set by giving the play an advanced context. The context and history do not form a vital part of the site selection, however the emphasis is placed rather on the play's relevance to the site.

The interior environment is treated as the director of the performance, moving audience and actor strategically through space, allowing them to explore the narrative and themes. The interior frames the audiences' experience through revealing more detail as they search deeper. "Dramaturgy of the work is created by the physical interior and the way in which the audience members move through space" (White, 2012). "If we, as excitable spectators, stop to think of what the inside of a piece of drama is, we will realise that it is not a place of substance, but the set of surfaces that provoke depth of feeling in us as audience" (White, 2012).

A focus on the creation of the performance space is the "use of architectural interior: extensive environments which audiences explore to find the performance and sometimes to give performance themselves" (White, 2012). A layered approach is often used to develop the relationships between audience, site and actor. "Combining text, movement, video, objects, sound, lights and visuals, we aim for a 'total experience', for 'transportation performances' that result in rendering powerful emotions and eye-opening adventures" (Immersive Theatre, 2016). The site forms the first layer, where the play reveals the character of the environment. The second layer is filled with the details of the environment. This invites the audience to interact and explore the site on a new level. The third layer of the performance is where the scenes are scattered around the site forcing audience members to search for performances. Moreover, the fourth layer is the intended interactions, planned or unplanned, with the actors. "The range and variety of these performative relationships between spectator, environment and performers, and the nuances they bring to spectator experience suggest why these strategies have become so popular with some audience members and practitioners" (White, 2012).

Oddey and White (2006:12) explore the connection between scenography and audience involvement in a production, explaining that "scenography becomes the performance, and the experience of the space for the spectator is integral to the performance experience."

With the use of maze-like spaces, the performance can be further fractured, forcing the audience to become engaged in the adventure of the site. A strategy of anticipation is achieved through restricting the visual field, White (2012) clarifies that the idea of the unknown is often "greater than the idea or the concept of the space". White's intention is to replace the typical audience responses of 'what will happen next' with 'where is he going?' and 'what is happening in the next room?' Josephine Machon cited in (White, 2012) describes that "the proximity of performing bodies, along with the physical interactions of the spectator within the environment means that the experience of the work will be more than usually multi-sensory, and the bodily movements will be one of the senses addressed." White then goes on to make a note of the importance of the senses in the Immersive Theatre: performances should have aspects which become "multi-sensory, making use of exploratory experience of the space and relationship to performer, sometimes introducing touch and smell - things that are not normally part of the traditional theatre" (White, 2012).

Although Immersive Theatre focuses on the audience participation and how to facilitate this interaction. A strong emphasis is centred on the audience and less on making the site the focus of the interaction. However, valid design informants are set out within Immersive Theatre which will aid in the development of the site-specific performance of this project. As mentioned by Mason (1992:11) the audience's understanding is vital to the success of the performance.

Therefore, White's exploration of the audience, performer and site relationship will give a better understanding of the limitations and boundaries accessible in the outcome of the design. Scenography "attempts to show the interdependence and relationship between experiments, which see the potentials of Scenography and Performance and demonstrates the multiple narratives of Scenography and Performance as experiential communication" (Oddey & White 2006:12).

In the Immersive Theatre, the audience can participate in the performances and interact with the actors as requested. However, for this project and its focus on the physical spatial quality of the site, the audience members will not be required to interact physically with the actors and the historic fabric. Due to the heritage value of the site, preservation of the area will form the main design intervention so that the existing value of the site is taken into consideration. It is not advised that the audience have physical access to the site fabric. Rather, according to the heritage preservation design strategy, that they move around and through the space without having contact with it. Demarcated walkways and paths will take the audience on a journey following the performance, becoming involved in the atmosphere and emotion without allowing or encouraging physical involvement with the site or the actors.



4.3.1 ELEMENTS OF INTERIOR ARCHITECTURE

ENVIRONMENT



The environment is defined as the physical space, made up of existing natural or man-created structures. The environment also pertains to how we interact with space. It is important to ensure that harmony and interaction are incorporated into the environment.

With regards to this project, the environment refers to the existing site and what it has to offer to the audience experience. The environment can also be challenged and changed with purpose to create a particular effect on the public.

Space refers to the physical attributes of the environments. It is

classified by the solids and void forms that make up the area. Space

is affected by distance, closeness, views, and existing structure.

SPACE



In this project, space relates to the proportion of the architecture and the openness, scale, confinements, and different physical

properties the site has to offer.

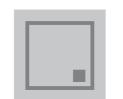
LIGHT



Light typically refers to the natural and artificial use of light and its particular function or purpose. Light in design has many opportunities to enhance the experience of the user.

The design intentions of this project are to use light as a drawing tool, using its flexibility to manipulate and change the spaces, creating information in multiple layers.

ENCLOSURE



The term enclosure typically means a physical structure which acts as a protector. An enclosure does not have to be closed on all sides it can have one, two or three sides open.

For this project, the enclosure pertains to the highly structured and densely built areas, such as the entrance tunnel. However, the enclosed space could also refer to the way that the night's sky acts as a ceiling, or the trees bring the scale of the room down. The site possesses many elements of natural enclosure which can be enhanced through the design.

GROUND PLANE



The ground plane refers to the existing natural level of the ground. This can include levels, inclines, physical changes and slopes. The ground plane is typically the areas of the site where the public or people will come into contact with the environment.

The site facilitates two levels of ground where the audience will have the opportunity to stand. Through the design, the ground plane can be manipulated to create various experiences.

SUPPORT



Support refers to the physical elements added to the space to ensure the audience interact with the site and participate in the experience.

For this project, the support will take the form of the audience's interaction with the performance as well as the way in which the set-design and actors relate to the site and the audience.

DISPLAY



However, for this project display will take the form of a visual exhibition of the actors and their performance. This could potentially include pedestals and other focal structures to enrich the themes and emotions of the performance.

Decoration in interior design refers to the added elements and

Typically display would be used in retail to exhibit certain elements and

DECORATION



furnishings which create the atmosphere or set the mood for the space.

Regarding this project, decoration relates to the details used to give cues to the audience of the mood or the intended thematic development of the performance.

INFORMATION

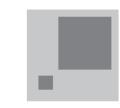


to the public, whether it be direction, content or instruction.

Information is a key design element as it communicates the intentions

Throughout the performance, information will play a valuable role as it will ensure that the audience members follow the performance and remain safe throughout the production.

PROPORTION



ACOUSTICS



Although scale and proportion do not officially form part of these

elements, they are important in the development of this project.

Scale and proportion can be utilised to place emphasis on certain

areas and themes that the performance wishes to enhance. The

scale will help develop the relationships between actor, audience

For this project, the sound quality of the actors' voices and ambient noises need to be addressed. Strategies for acoustic considerations have been addressed in each scene, ensuring the maximum output of sound quality is achieved at the site. Two methods are employed, firstly the sound is captured at the audience end, and secondly the sound is reflected at the actor end.



4.4 A PLACE FOR SCENOGRAPHY IN INTERIOR ARCHITECTURE

According to the Collins English Dictionary (2017) scenography is defined as "the art of portraying objects or scenes in perspective". This non-specific definition gives a sense of flexibility in what can be identified as scenography. Since scenography is seen from the perspective of space, this allows the opportunity to explore tools and methods to create these perceptions. For the clarity of this dissertation, the term 'scenography' refers more closely to the physical means of designing the set or the environment in which the performance takes place. Scenography closely links design tools, such as lighting design, projection, acoustics and illusion, which will form part of the experiential aspect of each scene. These elements are then further developed to enhance the thematic meaning and creation of each scene.

Just as in interior architecture, there are methods and principles - such as proportion, scale, light and space - to the creation of a spatial experience. Scenography employs a variety of tools to create these physical spaces in the theatre. The elements of design are then similarly utilised in the same way in which scenography uses light, acoustics and illusions. This close relationship ensures that both interior architecture principles and scenography tools aid in the creation of physical space intended for public enjoyment.

Interior Architecture as a design profession has developed over the past thirty years with the intention of bridging the gap between architecture and interior design. More specifically, it has evolved to incorporate architectural reframing of existing buildings and interior spaces, while also maintaining respect for the context and integrity of the original building.

According to the University of Oregon (2016), interior architecture opens "opportunities for students preparing to enter professional practice; these include interior design within an architectural firm or as an independent interior designer, lighting designer, exhibit designer, set designer, facilities manager and furniture designer".

Since the University of Pretoria does not offer a course specific to set design and scenography, the aim of this research is to add to the existing documents at the university. This will be achieved through showing the value in research of set design and scenography in the domain of interior architecture. The collection of work by the university's students can be used as a catalyst to the further exploration of theatre design in the department. The following table, Figure 2.1, shows a list of master's students who have chosen to contribute to the collective theatre design research of the interior architecture department.

The projects range widely in focus, but it is apparent in each argument that there is a relevance of set design, scenography

and theatre design under the interior architecture domain. After concluding an analysis on each master's dissertation, it was identified that, although the scope of projects is rather broad, there is a gap in research. The projects mainly focus on the use of a conventional theatre model to create their spatial experience, sites conducive to temporary or permeant theatre are identified, and the conventional form is applied. This is not to say that the projects do not add value to the collective research, but this opens the opportunity to identify a unique and unexplored design approach of site-specific theatre. The focus on site-specific theatre, therefore, has the potential to add valuable information to the collective.

The technical development of set design follows closely with temporary interior design by utilising similar design tools and principles. Therefore, this study will contribute to the understanding of set design and scenography as an extension of interior architecture. However, more importantly, a focus is placed on the possibilities of scenography to become an interior architecture tool which can be used to ignite creative conceptualization at a specific site. This, in turn, will bring awareness to its existing character of the site while also considering the audience interacting with the physical space.

YEAR	STUDENT NAME	TITLE OF PROJECT	DESIGN FOCUS	THEORETICAL FOCUS
-	Meera Chita	Reinventing Theatrical Education	Experimental theatre, a means to the education around the theatre. The project was proposed for the UP Campus	Elements that play a vital role in the creation of a theatre, arts and culture relationship for society. It deals with the Relationship between Lynch principles to the theatre realm.
2010	Jason Wiggin	Extending the skin(s) of the Capitol Theatre	The adaptive reuse of the Capitol Theatre	A blurring of the boundaries of interior and exterior
2011	Janri Myburgh	Wood for the trees: a temporary Theatre for the performance of 'Circles in a Forest.'	Temporary Theatre, regenerative and adaptive reuse within the inner city.	The catalyst of theatre performance/space to ignite community use and bring awareness to the existing spaces within the city.
2012	Liza Gerneke	Real fictions: a heterotopic production design for The Lorax	Film production design	Universal message on the design of a production including scenography and set designing.
2017	Leandra Levenderis	Site-specific opera: A reimagined Magic Flute as a catalyst to the narration of Fort Daspoortrand heritage.	Temporary Site-specific theatre, an opera production	Scenography as a strategy to bring awareness to a heritage site. The focus is adding to the site-specific research field within theatre dissertations.

Figure 2.1 Table showing masters dissertations of the University of Pretoria



Figure 4.1 Collage of William Kentridge's Magic Flute production.

1.5 A THEMATIC FRAMEWORK

The theoretical context is based on an understanding of the close relationship between interior architecture and scenography. These theories have been further developed through the project which explores a local context of a military ruin. The selection of a site-specific theatre production evaluates the balance of design intentions to create awareness of the cultural significance of the site, opera and theatre. A focus has been placed on how a site-specific performance, which takes the form of an opera, can act as a catalyst to the narration of a chosen site to create awareness of its existence and unique character. The aim of the design is not to permanently affect the site, but rather to behave as an ignition for the future development of such sites. The site-specific performance intent is based on a temporary event-like intervention, which focuses on the awareness of the site and what it has to offer in its current state. A lavered design approach will homogenise the site, performance and audience in a narrative of the past, present and future of Fort Daspoortrand.

The design is informed by the site, keeping the focus on site-specificity, which includes looking at the character, drama and architectural structure of the existing ruin. The design proposes to use the site as a starting point and align

closely the thematic concepts of the opera with the physical structure of the fort. William Kentridge's interpretation of the Magic Flute opera by Mozart has been identified as the performance which will take place at the site. The selection process of this specific opera has been further discussed in Chapter 6.1, Selection of the Magic Flute. The aim is not to redesign the current production, but rather to cleverly link what the play has to offer, thematically, with the physical context of the South African Fort. William Kentridge's version of the Magic Flute opera was selected for its unique imagery that the artist has used to depict the characters, themes and atmosphere of the production. Kentridge has adapted the production for the South African context, making the visual components accessible to the local audience. Figure 4.1, shows a collage of Kentridge's use of lighting, illusions, projection and basic scenery. His scenographic tools ensure that the production can be easily reconceptualised in a site-specific performance. Without re-designing each scene, Kentridge's performance provides a useful amount of visual information which can be layered onto the site, while still maintaining its innovation and intricacies.

4.6 CONSIDERATION OF HERITAGE

The value that the preservation of the site can add to the surrounding community is significant. Not only is the site historically rich, it also has unique characteristics which have developed as a result of elemental damage. The intention of the design is to draw awareness to the site, without taking away from its existing properties. Similarly, the opera is a culturally rich entity. However, over the recent years it has seen a decline. This project aims to reinforce the cultural value and significance that opera and the site have to offer in 21st century South Africa.

As mentioned previously in Chapter 2.8, the Burra Charter states three methods on how to deal with heritage: namely reconstruction, restoration and preservation. Initially, all three methods were considered in deciding which would be best suited for this project.

The first approach is 'reconstruction' which is a site-adaptive approach that utilises the existing site and adds new materials to rebuild on the site, giving it a new function or purpose. The intention is not necessarily to remove the cultural significance of the existing, but to rather give it a new reason and importance in its existing context. Reconstruction typically

introduces new materials to complement or challenge the existing materials.

The second approach is 'restoration' in which the 'place' or site is returned to its earlier-known state by removing accretions or by reassembling existing elements without the introduction of new material (The Burra Charter, 2013). Restoration is a sensitive approach to the site which aims to bring the existing structure back to life. Materials and artistry are often expected to be similar to that of the original structure, aligning closely with the significance and value that the site or building has to offer.

The third option is preservation, which is the maintaining of a place in its existing state by retarding deterioration. This design approach focuses on retaining the site no matter the state of its damage. The approach allows for small, sensitive interventions which help to prevent future damage, erosion and ruin of the structure. Although it is recognised that all places and their elements change over time at varying rates, the idea of each heritage approach is to ensure that the maximum value and significance of the structure remains.

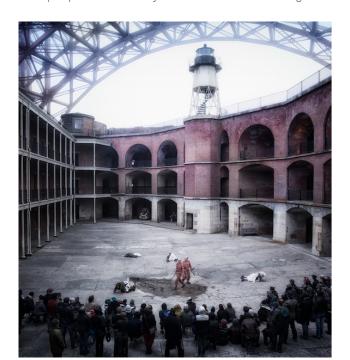
The chosen heritage design approach for this project is based on preservation. Since the site has so much existing character to offer, there is no need to add or remove elements from it.

This reiterates the idea that preservation is the maintaining of the site in its current condition, as well as the minimization of further decay. A theoretical restriction for this project is not to restore the site to its original state but rather to use the decay and existing character as an informant to the opera performance. The objective is to create awareness of the site's possibilities and bring to light the value identified at a found location.



4.7 AUDIENCE PLACEMENT AND SITE-SPECIFIC PERFORMANCE

Site-specific theatre is a relatively new concept, along with site-specific performances which take place in historical or old buildings. The following precedent study shows an immersive theatre adaption of a Shakespearian production in an old structure: Macbeth at Fort Point 2014, is directed by John Hadden & Ava Roy. This site-specific theatre performance utilises the old Fort Point building. The production aimed to express the power and beauty of the performance space through the manifestation of a Shakespearian play. We Players (2017) described the production of Macbeth at Fort Point as "multiple performance trajectories which wind through the



a) Audience grouped and standing

dark stone corridors, narrow passageways, expansive brick casemates, and inner chambers of the fort. The Golden Gate Bridge soars overhead; the city skyline flickers - a full sensory immersion into Macbeth's Scotland as it collides with Civil War era and modern-day San Francisco."

This performance combines two completely different themes and eras. The past and historical value of the performance by Shakespeare, juxtaposed against an old Military fort and the modern city scape. Macbeth at Fort Point is an interesting precedent study which explores the relationship between the site and performance to create a narrative and audience experience. Figure 4.2a to Figure 4.2l illustrates strategic lighting as a focus in the performance. Lighting is used to highlight the character of the fort and reveal the drama of



b) Audience seated on floor

the play. The natural acoustic nature of the site is also used to enhance the drama. This variation changes and enhances multiple audience perceptions of the production. Corridors, courtyards and balconies are used to enhance the audience's auditory experience, while following the actors through the site, exploring the drama of the fort and experiencing a thrilling

Studied as an example of site-specific performance, scenography and architecture, this precedent gives visual clues on how to achieve a performance which has been scattered throughout a specific site. Technical advancements in the use of lighting and the existing levels of the fort help to evolve the design considerations of the site-specific



c) Audience proximity

Figure 4.2 We Players performance of Macbeth at Fort Point, 2014





g) Proportion



j) Lighting



e) Watching actors above



h) Lighting placed to highlight architecture



k) Existing structure



f) Natural sunlight



i) Actor site relationship



I) Site-specific performance



4.8 AUDIENCE-ACTOR VIEW •





Although Site-specific Theatre focuses on audience interaction and how to facilitate it, emphasis is placed strongly on how the audience perceives the characters and interacts with the site. Valid design informants are set out which will inform the development of the sitespecific performance of this project. As mentioned by Mason(1992) under the Site-specific Theatre section, audience understanding is vital to the success of the performance. Therefore, White's (2012) thorough exploration of the audience, performer and site relationship will give a better understanding of the limitations and boundaries accessible in the development of the outcome of this project.

As mentioned in the Immersive Theatre, further explored in Chapter 1.4, the audience is able to give the performances and interact with the actor as requested. However, for the purpose of this project and its focus on the physical space of the site, the audience members will not be required to physically interact with the actors and the historic fabric. Due to the historical value of the site and the intended heritage direction of the project - site preservation, it is not advised that the audience have physical access to the site's fabric, but rather that they move around and through the space without contact. The concept of a designated walkway will take the audience on a journey following the performance, but not allowing them to participate in acting in the scenes. The following diagrams, Figure 4.3to Figure 4.9, show the audience-actor relationships typically used in film and theatre.

SURROUNDED CLOSE

Closeness and intimacy

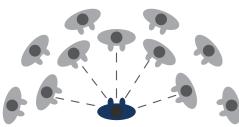




Figure 4.3 Audience surrounding actor

SAME LEVEL

Equality, relatability

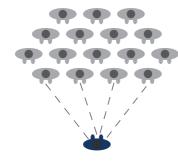




Figure 4.4 Audience facing actor

ACTOR LOOKING DOWN

Power for actor, feelings of intimidation on audience

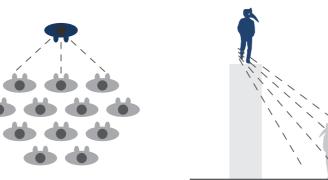
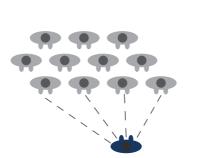


Figure 4.5 Actor above audience

ACTOR LOOKING UP

Authoritative audience, feeling of vulnerability for actor



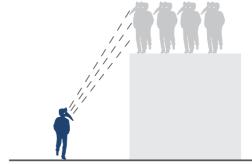


Figure 4.6 Actor below audience

FAR DISTANCE VIEW

Equality, and detachment for actor and audience

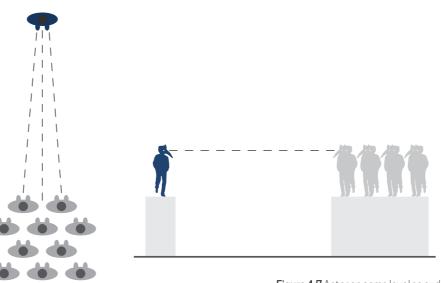


Figure 4.7 Actor on same level as audience

SURROUNDED ACTOR LOOKING UP

Intimidation for actor, sense of pressure

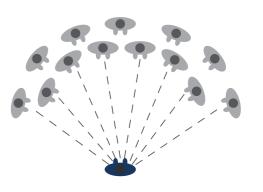
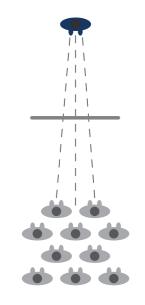




Figure 4.8 Actor below and surrounded by audience

OBSTRUCTED VIEW

Mystery and hidden information, a sense of insecurity



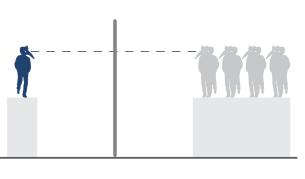


Figure 4.9 Actor view restricted for audience



4.9 A CONTRIBUTION TO THE DOMAIN

Not only will this research and design contribute to the examination of Site-specific Theatre and scenography in interior architecture, but it will also bring awareness to the use of historic sites and culture. The design intention is to add value, although temporarily to the fort, promoting interest in the historic landscapes and abandoned buildings that are scattered around the city. Although the project and its designs are incredibly site-specific, the aim is for it to act as a point of conversation into heritage and historic building re-use. Through the creation of awareness of the Fort, a unique relationship between the physical creation of space and the perceptual creation of scenography is addressed. Scenography aims to act as a narrative tool for the public, by exposing the beauty of Fort Daspoortrand. The scenography adds value to the

interior architecture of the site as it transports the audience into a created realm where they are encouraged to interact with the site in a similar manner to that of a typical interior environment. Scenography is a layering tool which can highlight certain aspects within the design, placing a focus on the site's relationship with the thematic developments of the opera production. The design and research aim is to expose the potential for the case of scenography in the field of interior architecture, exploring the creation of spatial experience as a means for audience and public satisfaction.

Throughout the study, a focus is placed on site-specific theatre. Explicitly the temporary design interventions which will facilitate the opera. The theories and research support the theatre as a catalyst to the re-introduction of the Fort ruin into the public eyes, as well as the combination of scenography and interior architecture as a homogenous field of study. A strong focus on the heritage value and cultural significance of the

site and opera is prominent, and the temporary pop-up nature of the theatre will ensure that no permanent damage is done to the site, this will be achieved with the conceptual design approach of 'touch lightly and leave nothing'. As the purpose of the project is to use the site-specific theatre as a catalyst for the preservation, the performance will act as a temporary design intervention to bring about awareness of the historical value of the site.

4.10 THE FINALE OF THOUGHTS

Site-specific theatre is a unique form of performance which has the potential to combine interior architecture and scenography in harmony. The research in this dissertation has attempted to support the case for the consideration of scenography within the interior architecture domain.

Site-specific theatre can give life back to the unused building. This sustainable design approach has an advantage as it can be used to enhance the richness of a site, while at the same time giving it a second chance and creating an awareness of its existing beauty. Since site-specific theatre identifies ready-made landscapes, it can be applied to a variety of environments. The focus of this dissertation is on the use of a historic site, with a unique physical quality, which can be further exposed and appreciated through the use of the site-specific performance.

Supported by the precedent study and the design intervention, the use of lighting, illusion, set design, and scenography come together to produce an experience which transcends the audience's spatial expectations. The site-specific performance opens a vast opportunity to create awareness of the site. Projection and light are used to enhance and expose the richness of the heritage fabric, illusion gives the audience a fractured visual experience combining site, performance and actors into one realm. In addition, the strategic use of set-design enhances the performance while addressing the sensitivity or drama of the site.

The combination of scenography and interior architecture broadens the potential in both domains. Elements of scenography can be used to enhance the interior spatial experience and similarly, interior architecture principles can be utilised in theatre to enhance thematic conceptualisations. The theatre performance at a site-specific location draws

the public out of their comfort zones and allows them to escape their everyday lives. The physical exploration of the theatre production allows the audience a unique outlook on the performance and the site, with the anticipation that this will create a future interest in the beauty of historic sites and specifically the Fort Daspoortrand ruin. The focal intention for this research and design is to create an awareness of the historical significance and value of both opera and the Fort Daspoortrand ruin. This can be achieved through the introduction of a temporary performance which acts as a catalyst for the renewal of any site. The site is not necessarily required to be of heritage value, however the combination of the site-specific theatre and a historical relevant site creates a more in-depth and intriguing relationship between the site and theatre. Site-specific theatre is a multifaceted design approach which not only adds value to a given location, but also broadens the imaginative development of the audience members who experience the performance.



CHAPTER FIVE PRECEDENT STUDIES



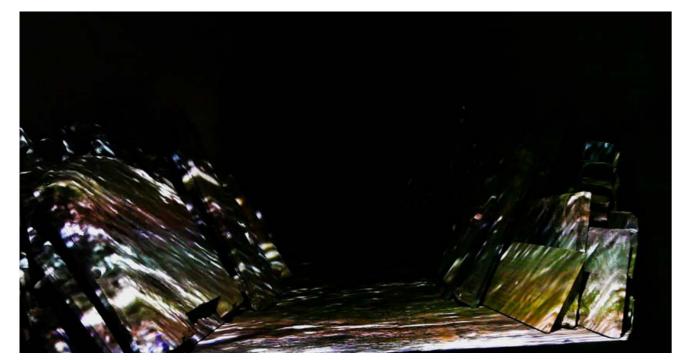


Figure 5.1 Projection



Figure 5.2 Spot lighting Figure 5.3 Focal lighting

5.1 INTRODUCTION

The following precedent studies have been selected to aid in the advancement of the project. Each precedent focuses on aspects which inform the understanding and implementation of certain design choices into the Immersive Theatre. In addition to the We Player Production of Macbeth at Fort Point, elaborated on in 4,7, Krzysztof Wodiczko's Just under the Surface and the Theatre – Public Space are also used as precedent studies.

5.2 TEXTURE, LIGHT AND SENSORY EXPLORATION

'Just under the Surface' is an installation exhibition by the Sensory Sites collective, which took place in the St Pancras Crypt, London in 2011. The artworks "explored the aesthetic, emotional, bodily and metaphysical possibilities of an art keenly aware of all the senses, especially touch" (Driscoll, 2017).

The exhibition used a found space and inserted an exploration of sensory stimulation to awaken the audiences' sensory experience, as seen in Figure 5.1 to Figure 5.10. "Working directly with the remarkable atmosphere and architecture of the Crypt, and using sculpture, moving image, sound and installation, Just Under the Surface created deeply immersive environments conducive to multi-sensory encounters"

(Driscoll, 2017). Lighting, materials, projections, and sound were used throughout the exhibition to create a multi-textual, auditory and visual realm. This precedent has helped with the development of this dissertation through the ingenious use of materials, tactile experiences and lighting to convey deeper symbolism and meaning. The inspiring use of natural and man-made items brings further meaning and depth to the communication of the exhibition. The focus on a sensory experience and the methods used to achieve the expression of the senses has evolved an understanding of the process used to communicate a narrative.



Figure 5.4 Emphasis using light



Figure 5.5 Interactive



Figure 5.6 Textural light



Figure 5.7 Focal object



Figure 5.8 Shadows and light



Figure 5.9 Interactive and taste



Figure 5.10 Smell and touch



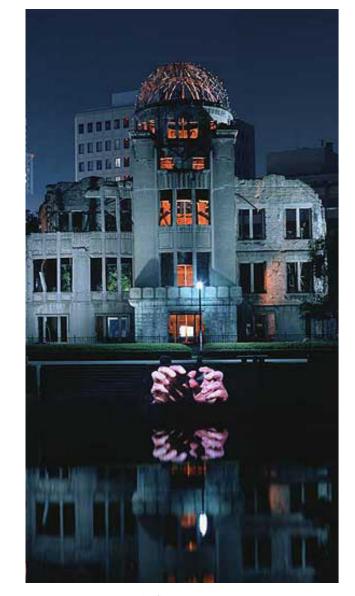






Figure 5.12 Monument and ruin and use of water

5.3 PROJECTION, SCALE AND LIGHT

Krzysztof Wodiczko is an artist who creates public artworks upon historic buildings worldwide. "Since 1980, he has created more than seventy large-scale slide and video projections of politically charged images on architectural façades and monuments worldwide" (Art21, 2016). Wodiczko's method of layering meaning onto architectural fabric through the use of projection narratives sparks controversy amongst viewers, some of his works are seen in Figure 5.11 to Figure 5.17. Wodiczko's usage of sound and motion is a technique of visual communication in his projections. His videos act as a personal reflection for the viewers, where the meaning is related to the individual's life and morals. His works intends to ignite a personalised perception of meaning dependant on the viewer's interpretation. The layered use of projections, voices, sounds and the existing fabric have become a process to communicate multiple narratives and statements.

Although Wodiczko uses his projections as political statements, adding additional meaning to historic architectural monuments, the layered approach of meaning becomes a focal point for discussion. This dissertation intends to build the level of information portrayed to the audience through the means of projections onto the existing fabrics of the site, where the visual medium is interpreted on an individual level.





Figure 5.16 Proportion and scale

Figure 5.13 Relationship between projection and architecture Figure 5.15 Visual impact







Figure 5.17 Layering on existing architecture







Figure 5.18 Natural and artificial lighting

5.4 TEMPORARY, MULTI-LEVEL THEATRE AND LAYERING

The Theatre of Public Space was built for the 1937 Paris International Exposition and was designed by architect Edouard Autant and actress Louise Lara. "Performances in the theatre modelled the experience of an urban plaza by juxtaposing fictional narratives, improvisation, and real situations in multiple, simultaneous scene that both surrounded and were surrounded by the audience" (Read 2005:3). The temporary exhibition theatre stood for one year. Read (2005:3) noted how Autant had specified that the performance hall have "five independent scenes proceed simultaneously, two scattered among the audience and three on raised stages surrounding them."

This temporary performance hall, Figure 5.18 to Figure 5.22, has been an informative precedent study as it addresses the idea of multi-level performance spaces which surround the audience. The relationship created by Autant between each scene and the audience has helped to evolve the development of the site-specific theatre. The method of communication between scene, audience and actor on a system of multiple levels has been observed and noted. "Bringing audience and actors into the same space challenged the boundary between fiction and reality and constructed plays not as fantasy, but as meaningful stories, parables, or allegories that have a real effect in the world" (Barris 1972). Autants used materials such as mirrors, painted scenery, vista views, lighting, shadows, and skylights to create layered depth and multi-faceted experiences for the audience. Inspiration

was drawn from Autants sensitive use of lighting through the use of both natural and artificial light, the natural light being channelled to enhance certain areas and the artificial light juxtaposed against it. Thus an understanding of depth is developed within the intended performance space. The stages are sloped toward the audience to create a seamless appearance and perspective for the viewers. Although this exhibition focused on the perception of the urban plaza, the design interventions and layered approach to the visual language has informed the development of this dissertation.



Figure 5.19 Use of levels



Figure 5.20 Exhibition installation

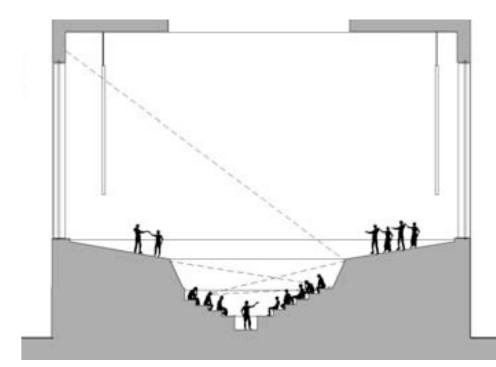


Figure 5.21 Variations of height and use of multiple stages



Figure 5.22 Projection Layers of visual information

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CHAPTER SIX THE MAGIC FLUTE



6.1 SELECTION OF THE MAGIC FLUTE

In the process of searching for a theatrical style which would be best suited to a site-specific performance, the idea of opera was brought to light. Acoustically the opera is a loud and extravagant performance. Musicians and singers perform in competition with each other to create a powerful encompassing auditory experience. As mentioned in the study on acoustics, the open-air environment is ideal for theatrical performances as there are no surfaces for the sound to refract off causing noise cancellation or reverberation. The natural voice is at its best when placed in an open-air environment, provided the sound can be captured. The nature of the site with its lowered courtyard-like area and raised surrounding area is like that of the ancient Roman and Greek open-air theatres. Therefore, the site could essentially be treated as this form of theatre, providing an ideal space for the opera to take place.

To ensure the correct selection of an opera was made, a study of the top five most viewed operas of all time was conducted. According to Operabase (2017), an online worldwide opera statistics database, the top five operas, by number of performances are La Traviata (4190), Die Zauberflote (3310), Carmen (3280), La Boheme (3131) and Tosca (2694). After identifying an opera which is well known, the thematic

views and concept development of each were considered. It was after this that Die Zauberflote (The Magic Flute) was selected as the opera for this specific performance. The opera contains universal themes of love and self-sacrifice which are easily relatable to the public, and the performance has a straightforward storyline for the audience to follow. After identifying The Magic Flute as the chosen opera, a William Kentridge adaption of the performance was found. Throughout his performance, he relates the characters and themes directly to a South African context, once again reinforcing the choice for this specific opera and strengthening the contextual relevance of its performance. The Kentridge adaption was finally selected as the appropriate version for the site-specific performance, as the imagery and relationship to the South African community had already been established. Ultimately, Kentridge's imagery and South African relevance in the Magic Flute will be re-adapted into the context of the selected site, namely the Fort Daspoortrand ruin.

6.2 OVERVIEW, 1991 TRADITIONAL VERSION

The Magic Flute is referred to as one of Mozart's last and greatest work of art. The opera was composed and completed in 1971 during the classical period. The opera takes the form of a Singspiel, which includes dialogue within the musical development of the performance, making the opera easily accessible for first-time opera spectators.

This chapter is a film study of Mozart's, Die Zauberflote, by The Metropolitan Opera in 1991 (Met, 2003) the following imagery of the traditional version 1991 are screen grabs from the viewing of the DVD, Appendix A page 254, shows the film study analysis. The William Kentridge imagery was found in his book Flute (Kentridge 2005).

The Magic Flute is a German comic opera with a strong theme of sacrificial love. The main concept which runs through the opera is the idea of darkness (evil) versus light (love and goodness). These themes and how goodwill always prevails is something very prevalent in the Freemason fraternity of which Mozart was a member. The story is set in ancient Egypt and follows a journey of self-discovery and self-sacrifice which ultimately leads the main character, Tamino, to a state of enlightenment. The Magic Flute consists of thirteen scenes, three scenes in

act one and ten in act two. Scenes are defined as environment changes which take place in the performance.

Throughout the performance, there are 34 sung pieces of music. Mozart uses a solemn and dramatic mood to portray the story of The Magic Flute.

6.3 ACT

The opera begins with an overture, introducing the thematic musical material which is further explored throughout the performance.



6.3.1 SCENE 1 - A ROUGH, ROCKY LANDSCAPE

Lost in a distant land, a handsome prince (Tamino), is being chased by a serpent. The first musical item of the performance is Tamino asking the gods for help "Zu Hilfe! Zu Hilfe" (Help me! Help me!). Three ladies (die Drei Damen), who serve the Queen of the Night, appear to rescue him and kill the serpent. The three ladies argue over who should be left to guard the handsome prince, who is unconscious. They eventually leave to tell the Queen together. While the three ladies are away Papageno (a bird catcher), awakens Tamino and convinces him that he was the one who rescued Tamino from the serpent. Papageno carries his bird catching equipment, and by playing pipes, he introduces himself to Tamino through an aria ""Der Vogelfänger bin ich ja" (I am a bird catcher). Papageno gladly takes the praise and credit for killing the serpent. However, when the three ladies return they are angered by his lies, and they padlock his mouth so that he may learn



Figure 6.1 Act 1 Scene 1- Traditional version 1991

a lesson. The three ladies gift Tamino a portrait of Pamina, the Queen of the Night's daughter. He instantly falls in love with her, singing the aria "Dies Bildnis Ist bezaubernd schön" (This image is enchantingly beautiful). Once the three ladies have captured Tamino's attention, they tell him that Pamina has been caught by Sarastro, a supposedly evil-sorcerer. Tamino vows to rescue her. The Queen of the Night appears, in a dramatic recitative and aria "O zittre nicht, mein Lieber Sohn" (Oh, tremble not, my dear son), telling Tamino that if he saves Pamina, he can have her as his wife. Once the queen has left, the three ladies give Tamino a magic flute, with the power to change sorrow into joy, and Papageno is given a set of magic bells for his protection. Joining them on their journey to Sarastro's temple are three child-spirits. The scene ends with Tamino and Papageno singing the quintet: "Hm! Hm! Hm! Hm!".

FEAR AND LONELINESS



Figure 6.2 Act1 Scene 1 - William Kentridge version 2001



Figure 6.3 "Zu Hilfe! Zu Hilfe" (Help me! Help me!)



Figure 6.5 "Der Vogelfänger bin ich ja" (I am a bird catcher)



Selected Scene



Figure 6.6 "Hm! Hm! Hm! Hm!"

Figure 6.7 "Dies Bildnis ist bezaubernd schön" (This image is enchantingly beautiful)



6.3.2 SCENE 2 - A ROOM IN SARASTRO'S PALACE

Pamina, who has just tried to escape, is dragged in by Sarastro's slaves. Monostatos, chief of slaves and blackamoor, orders the others to chain Pamina and leave her alone with him. Papageno, who was sent ahead, enters with the trio "Du feines Täubchen, nur herein!" (Come in, my lovely

Figure 6.8 Act 1 Scene 2 - Traditional version 1991



Figure 6.10 "Du feines Täubchen, nur herein!" (Come in, my lovely dove)

dove). Terrified by each other's appearance, Papageno and Monostatos flee. Papageno returns to tell Pamina that her mother has sent Tamino, who has fallen in love with her, to rescue her. Pamina is delighted and offers sympathy to Papageno, who longs for a wife. They sing together in a duet "Bei Männern welche Liebe fühlen" (Men who feel the call of love), which explains the joys and greatness of marital love.

DESPERATION AND INTIMIDATION



Figure 6.9 Act 1 Scene 2 - William Kentridge version 2001



Figure 6.11 "Bei Männern welche Liebe fühlen" (Men who feel the call of love)

6.3.3 SCENE 3 - A GROVE IN FRONT OF THE TEMPLE (THREE TEMPLES, WISDOM, REASON AND NATURE)

The three child-spirits have lead Tamino to Sarastro's temple. They tell him in "Zum Ziele fuhrt dich diese Bahn" (This path leads you to your goal) that if he remains patient, wise, and steadfast, he will succeed in rescuing Pamina. After they leave, Tamino is denied access from both the left and right entrances. Suddenly the entrance in the middle opens, and an old priest invites him in. In the recitative "Die Weisheitslehre disee Knaben" (May the wise teachings of these boys) he explains to Tamino that Sarastro is benevolent, not evil, and not to trust the Queen of the Night. The priest tells Tamino that if he approaches the temple as a friend, his confusion will be lifted. Tamino then plays his magic flute and animals appear and start dancing around him in "Wie stark ist nich dein Zauberton" (How strong must be your magic sway). Tamino hears Papageno's pipes in the distance and hurries off to find him.

As Papageno and Pamina enter, they are captured by Monostatos and his slaves. Papageno



Figure 6.12 Act 1 Scene 3 - Traditional version 1991

plays his magic bells in "Schnelle Fube, rascher Mut" (Swift steps and boldness of heart) and their capturers begin dancing around and move off stage. Pamina and Papageno hear Sarastro's approach and become frightened. Pamina decides that telling the truth is the best solution for this situation. Sarastro enters on a lion-drawn chariot, and a crowd follows him to the piece "Es lebe Sarastro, Sarastro soll Leben" (Long live Sarastro)

In "Herr, ich bin zwar Verbrechenrin" (Lord, I am indeed guilty) Pamina, in confession falls to Sarastro's feet, telling him that she tried to escape because Monostatos tried to force himself on her. Sarastro gently and kindly accepts her, explaining to her that all he wishes for her is happiness. Sarastro refuses to return Pamina to her mother, whom he states is a proud and headstrong woman and who has a bad influence on those around her. Sarastro tells Pamina that she will need to be guided by a man.

Tamino enters, being led by Monostatos. This is the first meeting between Pamina and Tamino - they celebrate in an embrace, causing outrage from Sarastro's followers. In the final piece of Act Two "Nun stolzer Jungling, nur hierher" (Proud youth, come this way), Monostatos demands a



Figure 6.13 Act 1 Scene 3 - William Kentridge version 2001



reward for the capturing of Papageno and Pamina as they were trying to escape. Sarastro instead punishes Monostatos for his lustful behaviour towards Pamina, and Monostatos is sent away. Sarastro tells Tamino that he must undergo a trial to prove his worthiness of being Pamina's husband. The priest ends off the act with a declaration that 'virtue and righteousness will sanctify life and make mortals like gods'

TRIAL, KINDNESS AND UNITY



Figure 6.16 "Wie stark ist nich dein Zauberton" (How strong must be your magic sway)



Figure 6.19 "Herr, ich bin zwar Verbrechenrin" (Lord, I am indeed guilty)



Figure 6.14 "Zum Ziele fuhrt dich diese Bahn" (This path leads you to





Figure 6.20 "Nun stolzer Jungling, nur hierher" (Proud youth, come this way)



Figure 6.15 "Die Weisheitslehre disee Knaben" (May the wise teachings of these boys)



Figure 6.18 "Es lebe Sarastro, Sarastro soll leben" (Long live Sarastro)

Selected Scene

6.4 ACT 2

The second act begins with a solemn intermezzo, "March der Priesters" (March of the priests). The music builds the drama so that the audience are placed into the same frame of mind and emotional state as that of the end of Act One.

POWER AND AUTHORITY



Figure 6.21 Act 2 Scene 1 - Traditional version 1991

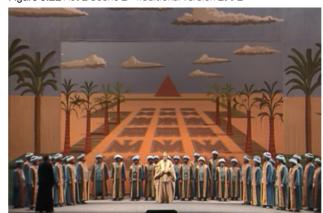


Figure 6.23 "March der Priesters" (March of the priests)

6.4.1 SCENE 1 - A GROVE OF PALMS

The council of priests of Isis and Osiris, led by Sarastro, enter during the end of the intermezzo. Sarastro tells the priests that Tamino is ready to undergo his path to enlightenment. In the Aria and chorus "O Isis und Osiris", (Oh Isis and Osiris), he asks the gods to protect and take care of Pamina and Tamino. As Pamina and Tamino part ways, Pamina sadly sings the terzet "Soll ich dich, Teurer, nicht mehr sehn?" (Dearest, must I never see you again?)



Figure 6.22 Act 2 Scene 1 - William Kentridge version 2001



Figure 6.24 "O Isis und Osiris" (Oh Isis and Osiris)



Figure 6.25 "Soll ich dich, Teurer, nicht mehr sehn?" (Dearest, must I never see you again?)

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6.4.2 SCENE 2 - THE COURTYARD OF THE TEMPLE OF ORDEAL

Two priests lead Tamino and Papageno to their first trial. They are advised about the danger ahead, leave when they realise that they will not be able to make Tamino talk. and the priests swear them to silence in the duet "Bewahret euch vor Weibertucken" (Beware the wiles of women). The three ladies appear to frighten Tamino and Papageno into talking in the

Figure 6.26 Act 2 Scene 2 - Traditional version 1991



Figure 6.28 "Wie? Ihr an diesem Schreckensort" (What? You in this dreadful place?)

quintet "Wie? Wie? Wie? Ihr an diesem Schreckensort" (What? What? What? You in this dreadful place?). Papageno cannot resist talking, but Tamino remains silent and disinterested. The ladies

TERROR AND UNCERTAINTY



Figure 6.27 Act 2 Scene 2 - William Kentridge version 2001



Figure 6.29 "Bewahret euch vor Weibertucken", (Beware the wiles of women)

6.4.3 SCENE 3 - A GARDEN

Pamina is sleeping in the garden when Monostatos appears. He gazes at her while singing the aria "Alles fuhlt der Lebe Freuden" (All men feel love's rapture). Monostatos is about to kiss her when the Queen of the Night appears and chases him away. In the aria "Der Holle Rache kocht in meinem Herzen" (The Revenge of hell rages in my heart), the queen gives Pamina a dagger and orders her



Figure 6.30 Act 2 Scene 3 - Traditional version 1991



Figure 6.32 "Alles fuhlt der Lebe Freuden" (All men feel loves rapture)

to kill Sarastro, or she will be disowned. The queen leaves and Monostatos reappears, threatening to reveal the queen's plot if Pamina does not love him. Pamina is saved by Sarastro who chases Monostatos away. Pamina tries to convince Sarastro to forgive her mother; he reassures her in the aria ""In diesen heil'gen Hallen" (Within these sacred halls revenge is unknown).

ANGER AND CONSOLIDATION

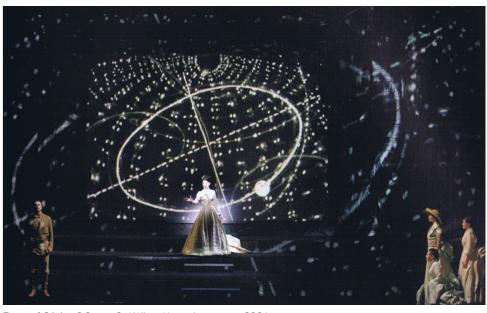


Figure 6.31 Act 2 Scene 3 - William Kentridge version 2001



hell rages in my heart)



Figure 6.33 "Der Holle Rache kocht in meinem Herzen" (The revenge of Figure 6.34 "In diesen heil gen Hallen" (Within these sacred halls revenge is unknow) 097



6.4.4 SCENE 4 - A HALL IN THE TEMPLE OF ORDEAL

Tamino and Papageno are reminded to remain silent by the priests as they are led into the hall. Papageno complains of thirst when an old woman enters to offer him some water to drink. Papageno teasingly asks the old lady if she has a boyfriend to which she replies that she does and his name is Papageno. The old woman disappears as Papageno asks her name. The three

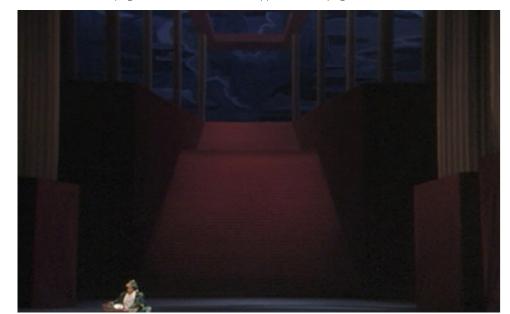


Figure 6.35 Act 2 Scene 4 - Traditional version 1991



Figure 6.37 "Seid uns zum zweitenmal willkommen" (Welcome and second time you men)

child-spirits arrive singing "Seid uns zum zweitenmal Willkommen" (Welcome and second time you men). They bring with them food, the magic flute and bells sent by Sarastro. Tamino plays his magic flute which summons Pamina. However, when Pamina tries to talk to him he, - bound by his vow of silence - ignores her. Pamina believes that Tamino no longer loves her and before she leaves him in despair she sings the aria "Ach, ich fuhl's, es ist verschwunden" (Ah, I feel that it has DESPERATION



Figure 6.36 Act 2 Scene 4 - William Kentridge version 2001



Figure 6.38 "Ach, ich fuhl's, es ist verschwunden." (Ah, I feel that is has vanished)

6.4.5 SCENE 5 - THE PYRAMIDS

The priests are pleased with Tamino's progress, and in the chorus "O Isis und Osiris" (Oh Isis and Osiris), they pray that he will find success and become worthy of their order. Papageno enters, and the priests grant his request for a glass of wine. He then expresses his desire for a wife in



Figure 6.39 Act 2 Scene 5 - Traditional version 1991

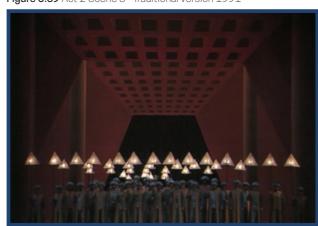


Figure 6.41 "O Isis und Osiris" (Oh Isis and Osiris)

the aria "Ein Mädchen oder Weibchen" (A little maid or wife). The elderly woman reappears and warns Papageno that if he does not promise to marry her, he will be imprisoned forever. He vows to love her faithfully while muttering under his breath 'until someone better comes along'. The old woman is transformed into a beautiful young Papagena. As Papageno rushes to embrace her, he is stopped by the priests who say that he is not worthy of her. LONELINESS





Figure 6.42 "Ein Mädchen oder Weibchen" (A little maid or wife)

■ Selected Scene 099 © University of Pretoria



6.5 FINALE (SCENE 6-10)

Scenes six to ten change without interruption to the music. They form part of the finale where each character is given a chance to conclude their performance.



Figure 6.43 Act 2 Scene 6 - Traditional version 1991



Figure 6.45 "Bald prangt, den Morgen zu verkünden" (Soon to herald the morn...) Figure 6.46 Pamina in "Bald prangt, den Morgen zu verkünden"

6.5.1 SCENE 6 - A GARDEN

The three child-spirits reappear and in the piece "Bald prangt, den Morgen zu verkünden" (Soon to herald the morn...) they reassure a suicidal Pamina that Tamino loves her and that he has not DESPERATION abandoned her.



Figure 6.44 Act 2 Scene 6 - William Kentridge version 2001



6.5.2 SCENE 7 - OUTSIDE THE TEMPLE OF ORDEAL

Two men in armour lead Tamino, in the piece "Der, welcher wandert diese Strasse voll Beschwerden" (He who treads this path of trails). They recite the creed of Isis and Osiris which promises enlightenment to those who successfully overcome the fear of death. Tamino declares his readiness for the final test. Pamina rushes in, and the priests tell Tamino that he is freed from



Figure 6.47 Act 2 Scene 7 - Traditional version 1991

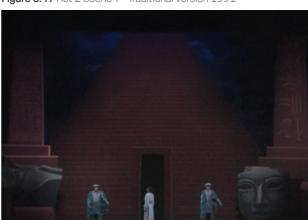


Figure 6.49 "Der, welcher wandert diese Strasse voll Beschwerden" (He who treads this path of trails)

his silence trial. Pamina tells Tamino that she would like to join him in his final test. Pamina hands him the magic flute to help them through the trial, singing "Tamino mein, o welch ein Glück!" (My Tamino, oh what joy). Protected by the magic flute, Pamina and Tamino pass through the chamber of fire. Having completed the trial, the priest tells them they have been triumphant and that they may now enter the temple. The scene concludes with a duet and chorus "Wir wandeelten durch Feugluten" (We have walked through the flames) TREPIDATION AND



Figure 6.48 Act 2 Scene 7 - William Kentridge version 2001



Figure 6.50 "Tamino mein, o welch ein Glück!" (My Tamino, oh what joy)



Figure 6.51 "Wir wandeelten durch Feugluten" (We have walked through the flames) 0101

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6.5.3 SCENE 8 - A GARDEN WITH A TREE

Saddened by his loss of Papagena, Papageno decides he is going to hang himself in a tree. He sings an aria "Papagena! Papagena! Papagena! Weibchen, Täubchen, meine Schöne" (Papagena!

Figure 6.52 Act 2 Scene 8 - Traditional version 1991



Figure 6.54 "Papagena! Weibchen, Täubchen, meine Schöne" (Papagena! Little wife, my dove, my sweet)

Papagena! Papagena! Little wife, my dove, my sweet). Just before he can do anything more, the three child-spirits stop him. They tell him to summon Papagena using his magic bells. Papagena appears and the two sing in a bird-like courting, a piece about their future and dreams and children "Pa-Pagena! Pa-Pageno!" (Papagena! Papageno!). SOLITUDE



Figure 6.53 Act 2 Scene 8 - William Kentridge version 2001



Figure 6.55 "Pa-Pagena! Pa-Pageno!" (Papagena! Papageno!)

6.5.4 SCENE 9 - ROCKY LANDSCAPE OUTSIDE THE TEMPLE (NIGHT)

Monostatos, the Queen of the Night and the three ladies are seen plotting to destroy the temple. They sing together in "Nur stille, stille, stille" (Hush now, absolute quiet) about how the queen has



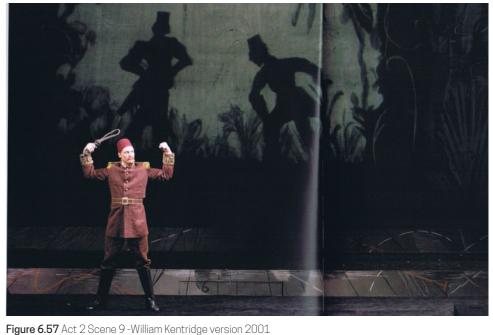
Figure 6.56 Act 2 Scene 9 - Traditional version 1991



Figure 6.58 "Nur stille, stille, stille" (Hush now, absolute quiet)

promised her daughter to Tamino. Just as the traitors are about to enter the temple, they are cast out into the eternal night.

CRUELTY AND SORCERY





6.5.5 SCENE 10 - THE TEMPLE OF THE SUN

The mood of music changes and Sarastro expresses how the sun has been triumphant over the night - good has overcome evil. Everyone praises Tamino and Pamina for his and her courage, giving thanks to Isis and Osiris, and hail the dawn of a new era of wisdom and brotherhood.

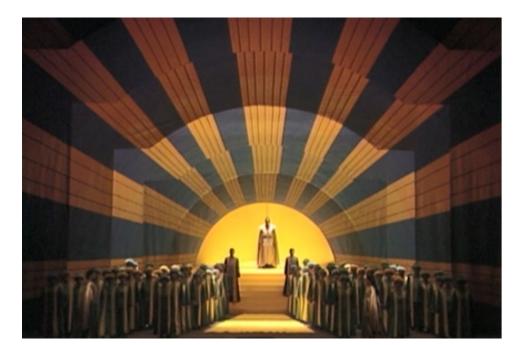


Figure 6.59 Act 2 Scene 10 - Traditional version 1991

6.6 END

A triumphant piece of music concludes the performance of The Magic Flute.

ENLIGHTENMENT AND GOODNESS



Figure 6.60 Act 2 Scene 10 - William Kentridge version 2001

CHARACTER SKETCHES

TAMINO





Tamino is a handsome young prince who is sent on a journey by the Queen of the Night to find her daughter. Along the way, Tamino learns the truth about the Queen and starts on a path to enlightenment. He is a naïve character who is easily influenced by those around him. As the story progresses, Tamino learns more about himself and earns the respect of Sarastro, Pamina and the brotherhood.





enlightenment.

PAMINA



Pamina is the Queen of the Night's daughter; she has

dramatic character, reflected in the musical style used to

describe her. When she finds out that Tamino has fallen in love

with her, she equally and dramatically falls in love with him. She

plays an active part in Tamino's journey to self-discovery and

PAPAGENO





Papageno is a quirky, clumsy and comical birdcatcher. He supposedly been captured by the evil Sarastro. Pamina is a accompanies Tamino on his journey to rescue Pamina, carrying with him a set of magical bells. Papageno's downfall is that he desperately longs to find love, but as the story progresses he meets a beautiful young Papagena to fill his heart with joy.









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PAPAGENA





Papagena is another comical character. She first appears as an old woman to trick Papageno, and soon the two fall in love filling the last act of the opera with a comical and entertaining journey of their love.





QUEEN OF THE NIGHT





The Queen of the Night is a powerful and strong character. She initially tries to fool Tamino into thinking that she is helpless and weak, however she later proves him wrong. The queen is a representation of evil and darkness; she is cunning and wicked. She is portrayed as a cruel mother who is dangerous and manipulative - this theme comes across in her dramatic and powerful arias.





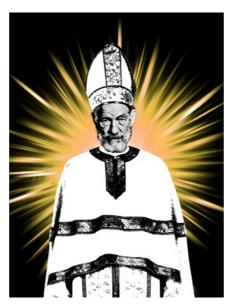
SARASTRO





Sarastro is a father-like character. At the start of the opera, he portrayed as an evil sorcerer. However during Tamino and Papageno's journey and trials his true nature is revealed. Sarastro is a benevolent leader who wishes that all men can reach a state of enlightenment and become deserving of the love of their wives. Sarastro holds profound wisdom and shows great kindness to all.





MONOSTATOS





Monostatos is a 'blackamoor' - an evil black spirit. He represents darkness and evil. Monostatos is constantly trying to trick and deceive all who communicate with him. Towards the end of the opera, justice is served when light (goodness) prevails, and Monostatos is cast off into eternal darkness to live out the rest of his days.







CHAPTER SEVEN CONCEPT, DESIGN AND TECHNICAL RESOLUTION



7.1 A STRATEGY FOR THE DESIGN

The design contribution takes the form of a temporary opera performance running for three to five weeks, which will act as an initial event to draw the public to the site. The William Kentridge re-imagined performance of the well-known opera Magic Flute will awaken the beauty of the site encouraging the audience and public to revisit the site once the performance is over. Figure 7.1 and Figure 7.2, explore the initial conceptual development

of the design intention, and shows a creative combination of site, scenography, atmosphere, and performance.

The main concept was developed around exposing both the existing beauty of the site and the thematic developments and emotions of the opera. Through this, the design was brought to life. A temporary intervention will contribute to the current preservation of the site. A designated walkway will facilitate the human circulation on the site, firstly to take them

on a constructed journey of site and opera, and secondly to minimise the physical contact with the heritage fabric. This will ensure the preservation of the site whilst adding a value to the site in the form of a possibly semi-permanent layer. This non-invasive, temporary intervention will act as an initial catalyst to the awareness and preservation of the site, encouraging the public to revisit the site once the performance has passed.

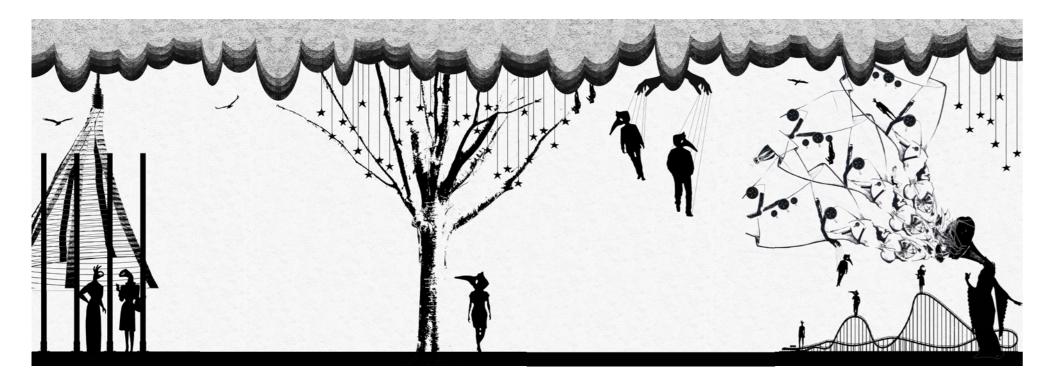


Figure 7.1 Initial moodboard development



Figure 7.2 Translation of moodboard to to photograph of site



7.2 DESIGN INFORMANTS

The design approach for this dissertation, visually explored in the final concept board Figure 7.3, uses a combination of the theoretical data studies (explained in Chapter 4). This includes Heritage, Site-specific Theatre, cultural diversity of theatre, elements of interior architecture and Scenography design - precedent studies (see Chapter 5) and Williams Kentridge's adaptation of the Magic Flute Opera (expanded on in Chapter 6). The mentioned data has been collected and organised throughout this document to inform the design decisions of the project. The design informants act as a means of consideration which form an important part of the design development. The following selected informants have been considered in the design approach for each scene, as see in chapters: - 7.2.5 Elements of interior architecture, 7.2.6 William Kentridge's Magic Flute, 7.2.4 The SANS10400 regulations, 7.2.1 Cultural diversity in the Theatre, 7.2.2 Sitespecific Theatre, and 7.2.3 Heritage.



Figure 7.3 Final concept and mood board

7.2.1 SITE-SPECIFIC THEATRE

Site-specific theatre is a theatrical form which utilises a found location and character of the given site, as the backdrop and set for a production - refer to Chapter 4.2 for an in-depth explanation. The exploration of the site-specific location and the benefits for effective audience response of the existing site is the main informant of this design. Site-specific theatre aims to enhance the natural potential of the existing site, bringing to light its unique qualities, character and structural nuances. In the site-specific theatre, the site acts as the stage on which the performance will take place. Therefore, the selection of the Fort Daspoortrand ruin is a vital consideration for the further design of the site.

The use of the existing site offers a valuable layer of information which in conventional theatre would have to be fabricated. The site-specific location and its natural drama, texture and volumetric spatial qualities can be enhanced and further developed in each scene. The selection of the location for each scene is carefully identified in order to relate to the thematic development of the Magic Flute. The scenes and their locations need to be carefully considered to enhance both the production and the qualities of the site. These selections are further discussed under the unpacking of each scene in the following section, Chapter 7.5. They have also been identified in Chapter 3.16: Site Analysis. The emphasis of the site is achieved by layering information, projection, set and Opera onto the site. The combination of opera and site opens the opportunity to give both relevance in the 21st century.

7.2.2 CULTURAL DIVERSITY

The intention at the onset of studying the cultural diversity of various theatres was to broaden an understanding of the forms and technologies used in theatres around the world. Throughout the research into these variations, the biased western approach to theatre design is challenged, and the richness of cultural diversity is further explored. The approach of the study was not to act as an exact method or replica of the cultural visual forms, but rather to explore the use of different technologies and scenography ideas and take inspiration from these.

The Asian and South African theatres are rich in indigenous cultures, therefore, taking inspiration from these forms will enrich the production in the variety of visual creation methods. The use of back projections and shadow puppets, inspired by the Asian theatre, see Chapter 1.2.5, is used in Act 1 Scene 3 and Act 2 Scene 10. This layering approach adds information and richness to the existing site and heritage fabric. The African inspiration of emotive and energetic performances, as well as strong and powerful voices, is exemplified in the opera performance at the site, linking the cultural relevance of Indigenous South African theatre with the cultural relevance of the opera and site. The Western Theatre is explored through the use of lighting, projection and construction methods in the sets. This combination of cultural richness gives the performance a unique visual approach, reflecting the diversity of South African society.

7.2.3 HERITAGE

under the National Heritage Act as a site at which the heritage must be considered. The site also represents a significant aspect of South African history during the Anglo-Boer war period, further adding cultural and historical significance to the site. Of the three heritage design approaches discussed in Chapter 4.6, the selected heritage design approach is preservation of the existing site. This preservation aims to create an awareness of the site and its unique character. revealing the history and drama of its heritage fabric. The idea of preservation comes firmly into the design through a concept of 'touching lightly', where all set and production structures are temporary in an attempt not to damage the existing site. However, there is an exception to this temporary design nature, as the stairs designed for the site have a permanent and fixed approach. This circulation intervention aims to stop further erosion and degradation of the soil around the fort as well as reducing any future damage to the existing stairs, by avoiding direct foot traffic. It was noted in various visits to the site that the erosion damage from the wet season in early 2017 created a vast amount of damage at the site. The permanent stair intervention aims to minimise the movement of humans over the site and encourage them to rather have minimal contact with the existing fabric, thus promoting less contribution to this erosion. Figure 7.4 and Figure 7.5 show a comparison of the erosion over one year.

Since the selected site is older than 60 years, it is classified

Temporary installations are used to enhance the quality of the site and reinforce the performance, by creating a connection between the two. The structures aim to grow from what the site naturally offers. For example, in Act 2 Scene 3, the abstracted tree forms follow the natural contours of the site. Through this design intervention, an emphasis is placed on the sloped quality that the site has to offer. The trees also take inspiration from the existing trees at the site and aim to build the drama of the human-made forest. The existing levels and trees on the site are seen in Chapter 3.5: Site Analysis. In each scene, consideration of how the structures touch the site is a focus - these will be further discussed in each scene's design exploration. The holistic approach of preservation at the site is to add as much as necessary to support the performance and remove as little as possible from the existing site but expose the existing structure - see Chapter 7.3: Design intentions.







Figure 7.5 Photograph of slope July 2017

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7.2.4 SANS 10400

Since the regulations of conventional theatre do not strictly apply to this open-air performance space, the regulations for a construction site and excavation site have been studied. These regulations address issues such as unstable land, barrierfree drop-offs, and safety at a non-structured location. The safety of the audience and actors poses a unique opportunity to incorporate the safety measures with the design of the temporary interventions. These practical elements have been translated into design solutions which can enhance the performance, becoming one with the scene and transitional spaces between performances. The safety precautions and design approach is later explained and graphically represented on a plan - Chapter 7.4.6. The areas of danger were first identified, and then a general design approach was considered for the safety and security of the audience members. The safest approach is to restrict the audience movements around the dangerous zones using a navigated pathway. The audience will be requested not to move beyond this path to avoid danger areas. Lighting will also be used to expose structural areas of danger, showing the beauty in their damage, whilst also warning the audience to be cautious.

7.2.5 ELEMENTS OF INTERIOR DESIGN

The identification of interior architectural elements, as explored in Chapter 4.3.1, ensures that the design adheres to principles of interior architecture, since the site has an open-air nature. This aspect is vital in the project to ensure that the focus is kept within the field of interior architecture, (and therefore validate such a project under the research of the degree Professional Masters in Interior Architecture.)

A design focus at each scene will be placed on the created spatial qualities, lighting to enhance the space, and the way in which the audience members interact with the site. A typical interior architecture focus of wayfinding and site navigation has been translated at the site to control the movements of the audience and take them on the progressing narrative of the site and production simultaneously. The Wayfinding is achieved by reflective illumination of the pathways and directions and instructions from the ushers and guides. Furthermore, the scenes will focus on the creation of spatial quality and audience experience to align and channel the design correctly within the field of interior architecture. The identification of the selected elements will form an important part of the development of each scene - seen in the unpacking of each scene throughout this Chapter - as well as bringing the performance, audience experience and site together as a unit.

7.2.6 WILLIAM KENTRIDGE

version of the Magic Flute, was so that the project is not focused on the redesigning of the set, but rather the application of the production into the site-specific location. Therefore, the visual quality and imagery created by Kentridge will form part of the scene development, where the three-dimensional spatial quality - based on the abstraction of the themes and narrative of the production - will be developed as the main design focus. The inspirational work of William Kentridge has stimulated the design development of this project, as the consideration of his model making and rough sketching forms an intricate part of the design approach used in this process. Aspects that have been directly used from Kentridge's performance include his use of light, projection and layering to enhance the audience experience, as well as his adaptation and consideration of the South African relevance of this production.

The intention behind the selection of William Kentridge's

7.3 DESIGN INTENTIONS

The three main design intentions for the project are: a consideration of the environmental effects of the structure and materials used, respect for the heritage fabric, and the use of the Magic Flute as a catalyst to the awareness of the site. Through the use of temporary structures which have little impact on the site, sustainable design methods and renewable materials, a respect of the environmental impact of this project can be achieved. In the 21st century, the conscious understanding of the sustainability of materials and the construction of design is important. For that reason, it is vital to understand the reusability, recyclability and renewability of materials and the environmental impact that the design of this production will have on the site and the environment. The balance and respect of the heritage fabric of the site poses many challenges in the design. Since the production will not add to the future deterioration of the heritage fabric, careful consideration is placed on how the set and structure at the site will be erected. To turn William Kentridge's version of the Magic Flute into a three-dimensional experience, the approach of abstraction of the thematic forms and narrative has been considered. The themes of each scene have been unpacked and explored with regards to a spatial and volumetric design solution. The use of scenography and theatre design will emphasise the beauty of the site to create an awareness of its cultural and historical value.

7.3.1 TEMPORARY STRUCTURES AND SUSTAINABILITY

To keep with the 'touch lightly' concept of preservation, temporary, recyclable and reusable structures will be used as the main method of construction. This will inform the design approach and essential aesthetic appeal and spatial quality. Not only will the materials be reusable or recyclable, but the method in which they touch the historic fabric will be temporary and have minimal damage to the structure. The intentions are that whatever created fabric is brought to the site, can be reused and repurposed once the production has finished, thus, ensuring that the maximum consideration for the sustainability of the project is achieved. Preservation extends beyond the physical preservation of the site, but also into the longevity of the environment through the material and future preservation and awareness of the site. A permanent intervention of the stairs and ramp as mentioned in 7.2.3 will further aid in the preservation of the site, minimising human foot traffic over areas of erosion.

7.3.2 ABSTRACTION

The visual consideration and three-dimensional development of the intervention are based on the abstraction of the themes and narratives of the Magic Flute. Both the original and Kentridge's version of the production use symbolism and visual imagery to enhance the themes of the performance. However, in translating these ideas, the approach of abstraction allows for a more conceptual approach linking the site closely with the creation of the scenes and their spatial qualities. The visual abstraction will be achieved through the use of illusions – mirrors, reflections, and projection – playing with proportion, colour and movement, and lighting effects. During the unpacking of each scene, these abstractions and thematic developments will be further detailed.



7.4 DESIGN EXPLORATIONS

The design approach for this project is twofold. The first aspect of the design focuses on the circulation at the site and the general functioning of the productions. This design focuses on audience safety, navigation, services, ablutions, refreshments and general movements at the site. The second aspect of the design approach focuses on the individual scenes - unpacking and exploring the way in which scenography and The Magic Flute Opera will be viewed by the audience. The design will consider the details of the layering of the design, as well as the methods of construction used in each scene to achieve the experiential outcome.

7.4.1 GENERAL PROGRAMMING

A general idea of the site programming gives an overview of the location of services about the architectural structure of the site. Within the general programming graphics, seen in Figure 7.6, ablutions, services, stairs, site approach and designated bar areas have been identified. These design interventions should be temporary. However, they do not form the focus of this project; the design of the scenes is the main development for the design. The stairs form an important part of the audience circulation and therefore in the technical consideration, the design and implementation of the three staircases will be explored in detail.

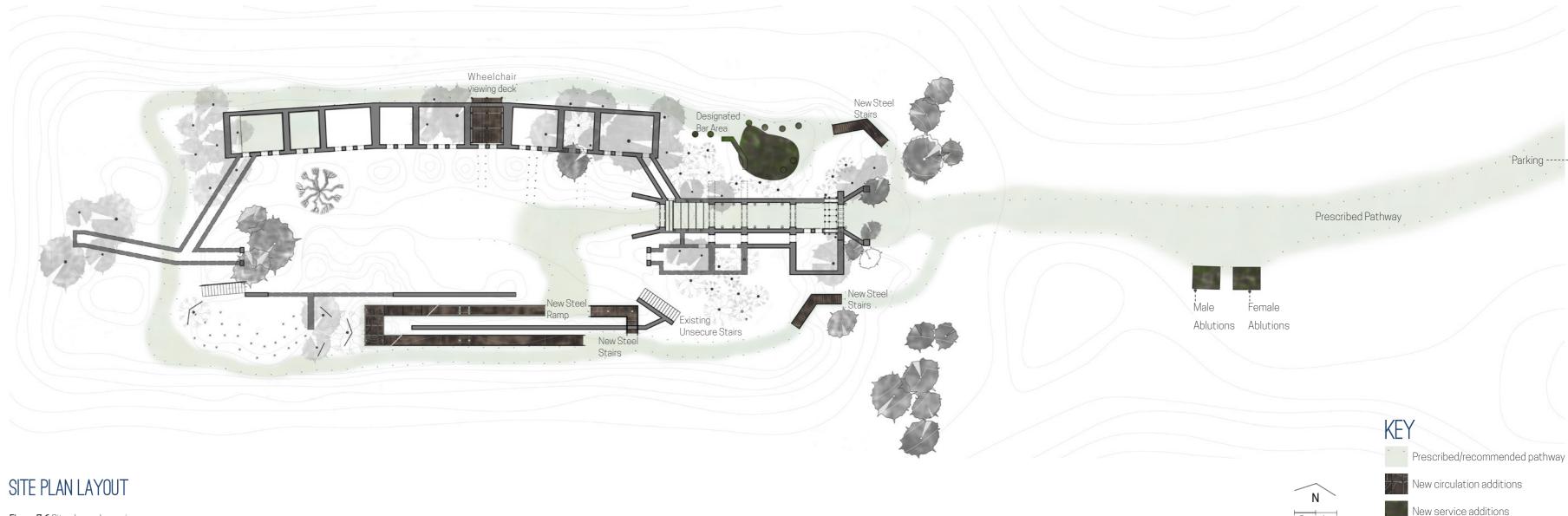


Figure 7.6 Site plan and overview

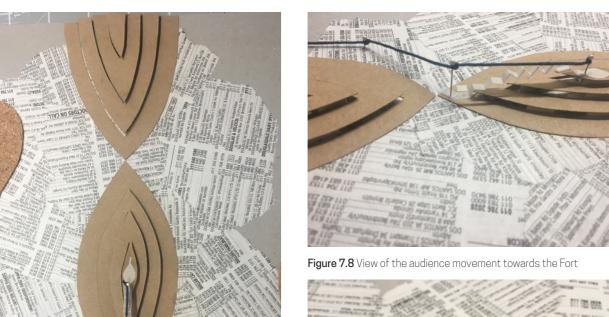
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7.4.2 CONCEPT MODEL OF SITE CIRCULATION

audience, actors and site, concept models have been used to explain the thought process connecting all three visually. These initial concept sketches Figure 7.7 to Figure 7.15, graphically represent the audience's expected movement at the site.

For a better understanding of the relationship between the For clarity of the three-dimensional collage the following information is needed: brown card represents the contour at the site, cork represents the other smaller contours around the site, newsprint is a means to communicate the rest of the landscape, light brown paper represents the fort, white pins



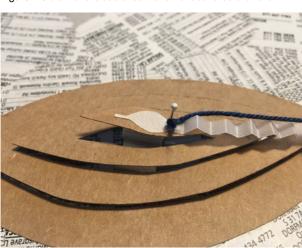


Figure 7.9 Fort location at the top of the contours

Figure 7.7 Macro illustration of site main access





Figure 7.10 Pathway leading from parking bay to Fort

represent the audience movements, tracing paper shows the path of cleared movement, and blue string shows the path along which the audience movement will take place.

Figure 7.7 to Figure 7.9 represent a macro view of the fort, with a focus on the road access to the site. Figure 7.10 to Figure 7.12 represent the movement of the audience from the parking bay to the Fort. Figure 7.13 to Figure 7.14 shows the expected and conceptual movement of the audience through

the Fort, taking them on a journey around the site.

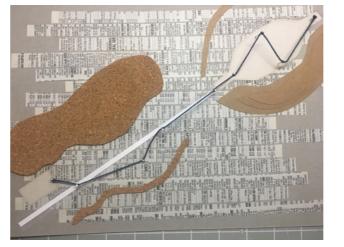


Figure 7.11 Overview of the audience movement on site



Figure 7.12 Blue string shows the height movement of the audience



Figure 7.13 Overview of the movement around Fort



Figure 7.14 Conceptual illustration of the audience movement



Figure 7.15 View of expected audience movement



7.4.3 CONCEPT MODELS OF AUDIENCE MOVEMENT

After the conceptual models - which give an initial idea of site. audience movement - the same principles were used to give a more site-related impression of the audience and actor movement. The following models give a structural overview of the fort, including the built-up areas and different levels of the

These models, like the previous ones, are best understood while considering the following information: the white built structure represents the existing fort, newsprint represents

Figure 7.16 Overview of the scene to scene movements at the site

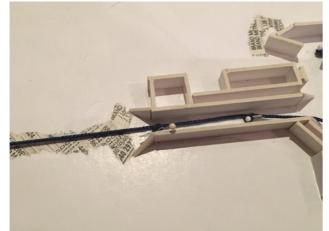


Figure 7.17 A focus on the first scene movement through the tunnel



Figure 7.18 Relationship between the scene to scene movement



Figure 7.19 Overview of audience and scene movement

the walkable areas around the site, blue string shows the movement of the actors from scene to scene and brown string the audience movement, grey built-up areas seen in Figure 7.22 represents the newly-built work for the development of the scenes.

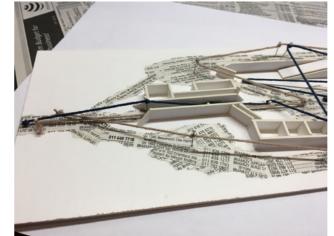


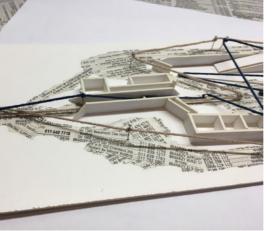
Figure 7.20 View at entrance where audience and scenes meet



Figure 7.21 View of scene movement and audience movement

Figure 7.16 to Figure 7.18 show the movements from scene to scene. The scenes are scattered around the site, making use of the different levels and areas of unique character. The models shown in Figure 7.19 to Figure 7.21 depict both scene movement and the audience movement to reach each scene.

The intentions of the scenes are to move the audience around the site, exposing them to all aspects that the site has to offer. Figure 7.22 to Figure 7.24 show the initial attempt at adding information and structure to the site once the scenes and audience movement has been identified.



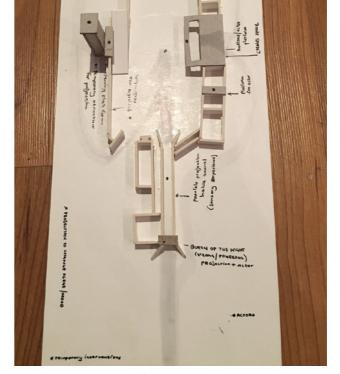


Figure 7.22 First additions of scenes on site

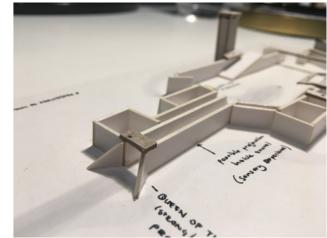


Figure 7.23 Focus on the entrance scene

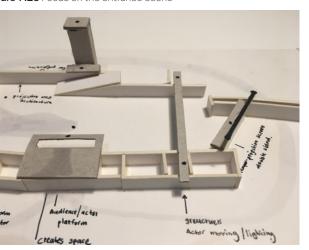


Figure 7.24 Relationship between heights of scene development



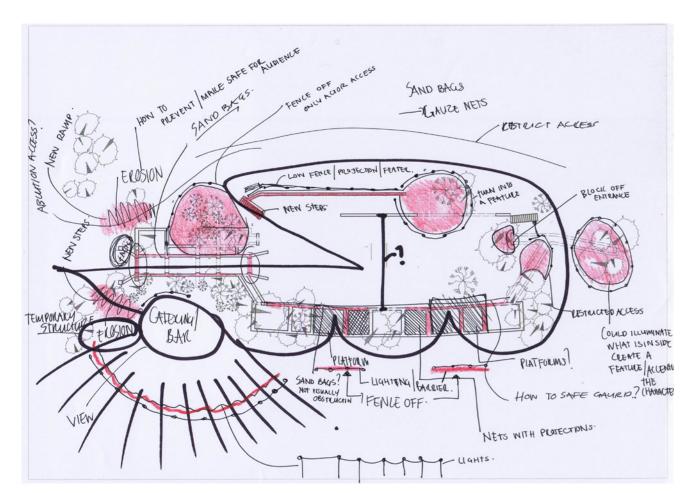
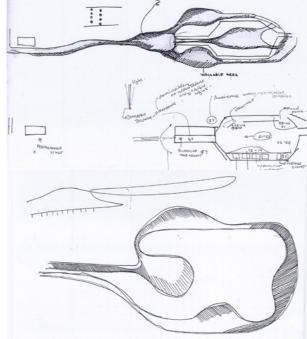
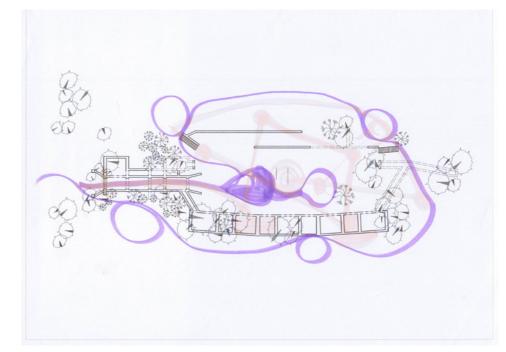


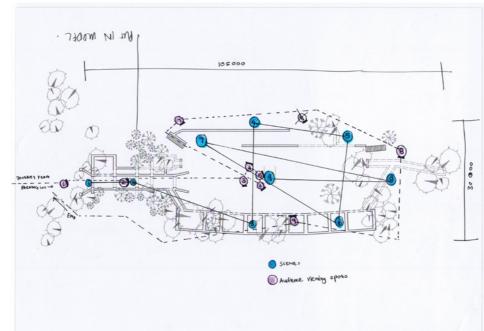
Figure 7.25 Scene location concept sketches

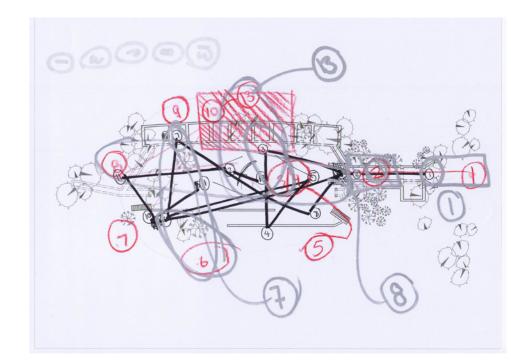
7.4.4 SCENE LOCATION INITIAL CONCEPT

Figure 7.25 and Figure 7.26 explores the initial scene location. The site selection for each scene is linked to the thematic developments of the Magic Flute narrative. The intentions for the scene location is to take the audience on a journey through and around the site, revealing its characters and drama.









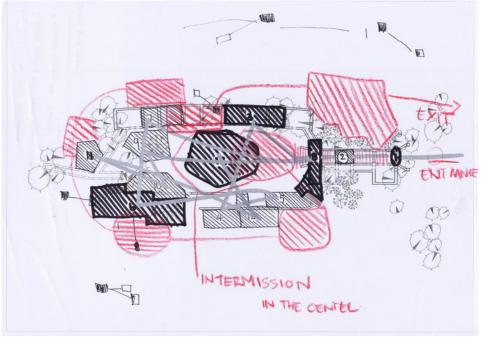
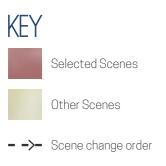


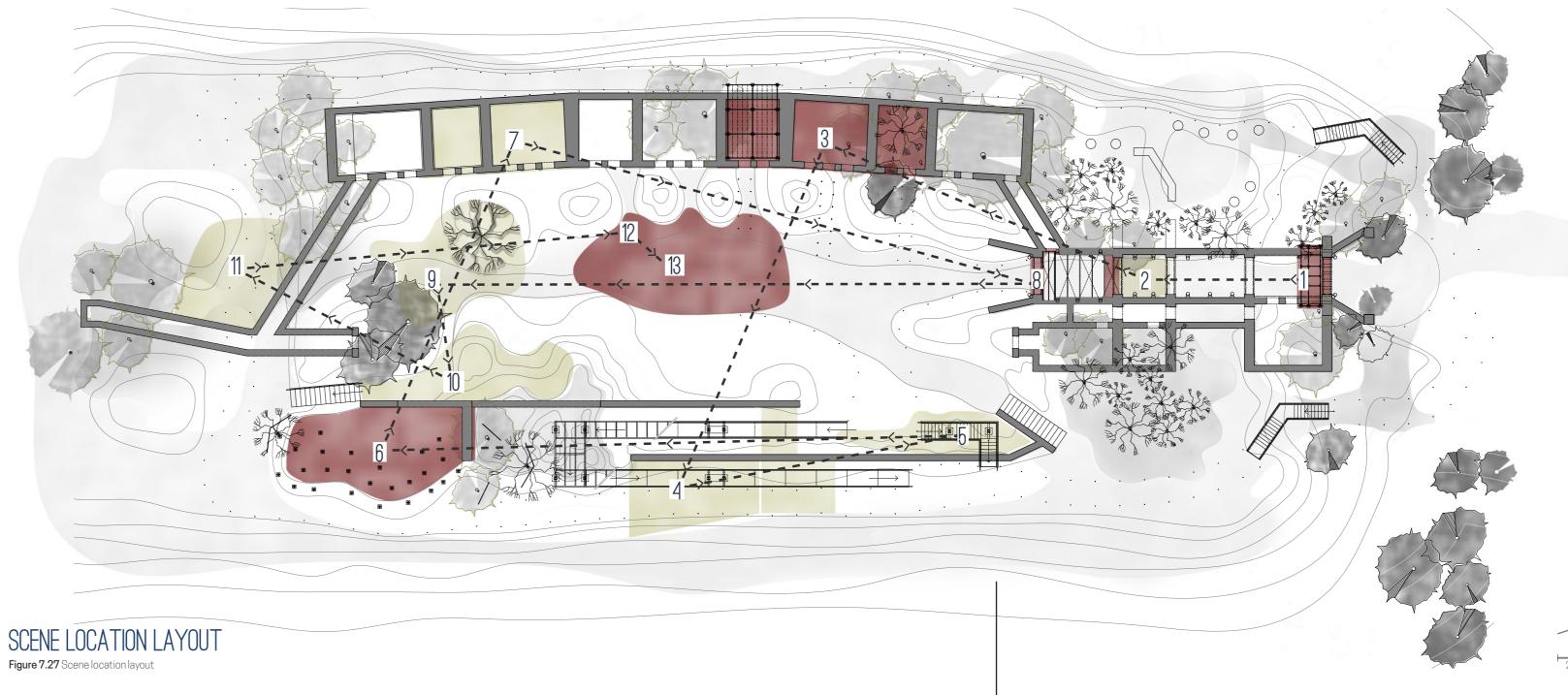
Figure 7.26 Scene location concept ideas



7.4.5 SCENE LOCATION

Although not all the scenes of The Magic Flute have been fully designed in this project, their location around the site and the movement of the actors is important. Figure 7.27 shows a graphic representation of the site and the location of the 13 scenes in the entire performance. The four selected scenes have been depicted in red, while the other remaining scenes are shown in yellow.

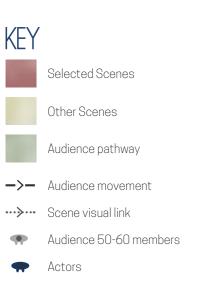


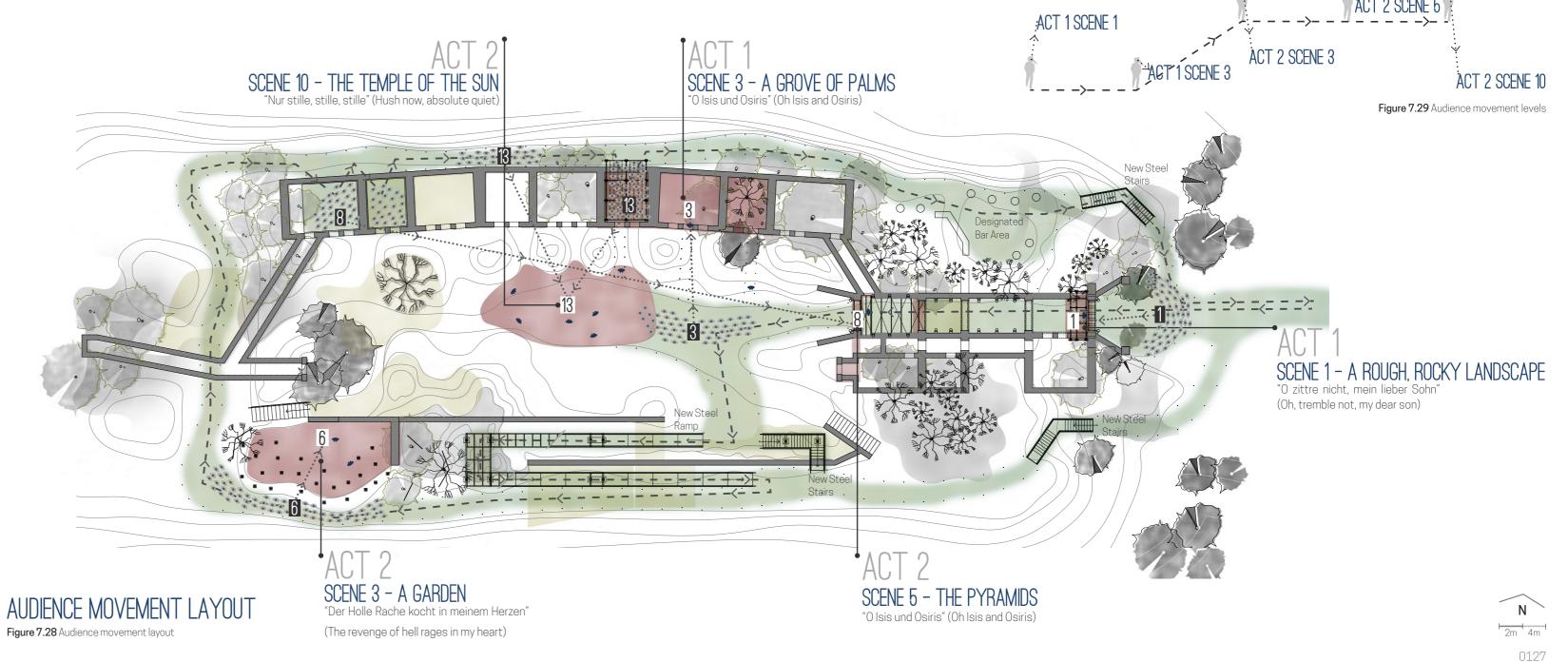




7.4.6 AUDIENCE MOVEMENT

Figure 7.28 shows the audience movement – green – around the site. The intention is to take the audience on a journey of the site, allowing them to explore the various levels of the structure. The concept behind the journey is to combine the narrative of The Magic Flute with the narrative of the site, exposing the drama of the production and historical fabric simultaneously. Figure 7.29 shows the level relationships between the audience and the scene view.



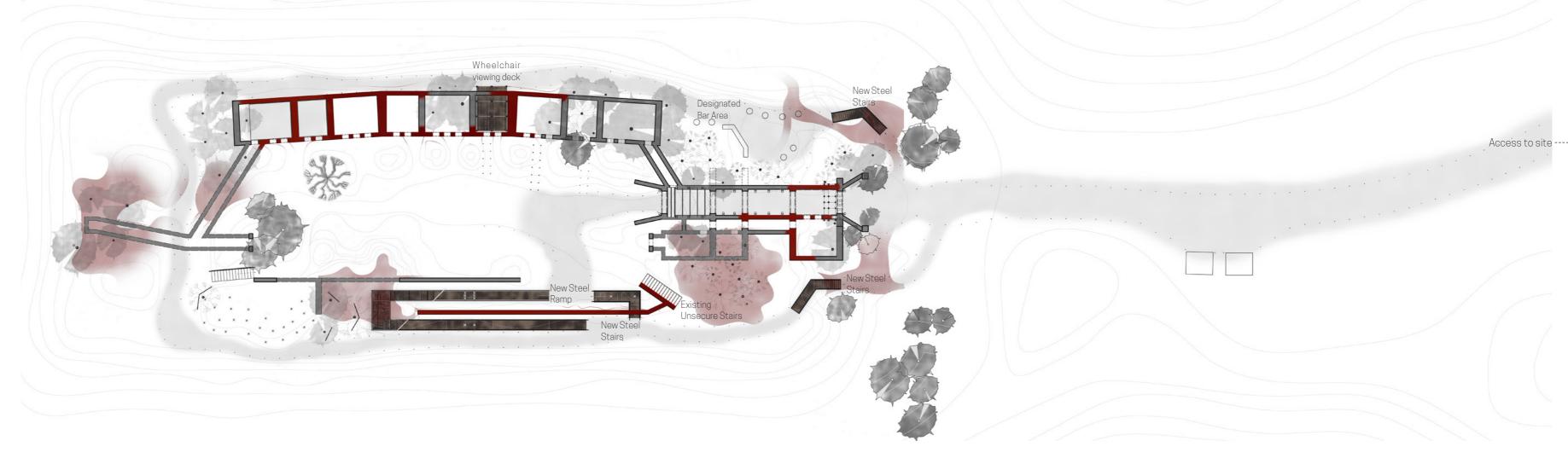




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7.4.7 SITE SAFETY HAZARDS

Since the site is a ruin, there are structurally compromised areas, steep un-barricaded high levels, and unstable ground. To ensure the safety of the audience, it is part of the design proposal to incorporate safety measures into the scenes and transitional spaces between scene. Highlighted in Figure 7.30, are the areas of concern identified within site. This graphic shows the dangerously high levels in the existing architectural fabric, unstable ground, boundaries of safe, walkable areas, as well as places deemed safe for the movement of the audience. As a means to restrict the movement of the audience into unsafe areas, reflective illuminated pathways will show the audience which areas are safe. The ushers and guides will also assist the audience in their movement around the site. The audience will be requested not to deviate from the cleared pathways, for their own safety.



Safe walkable area
Unstable ground
High, dangerous levels

New circulation additions

SAFETY HAZARDS LAYOUT

Figure 7.30 Safety Hazard bird's eye view



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7.5 GENERAL TECHNICAL CONSIDERATIONS

This section focuses on the general technical development of the project, through a look at circulation, functional services, navigation, disability, energy, lighting, temporary structures, materiality, theatre equipment, set construction, colour in theatre, theatre lighting, theatre equipment, sound, and acoustics

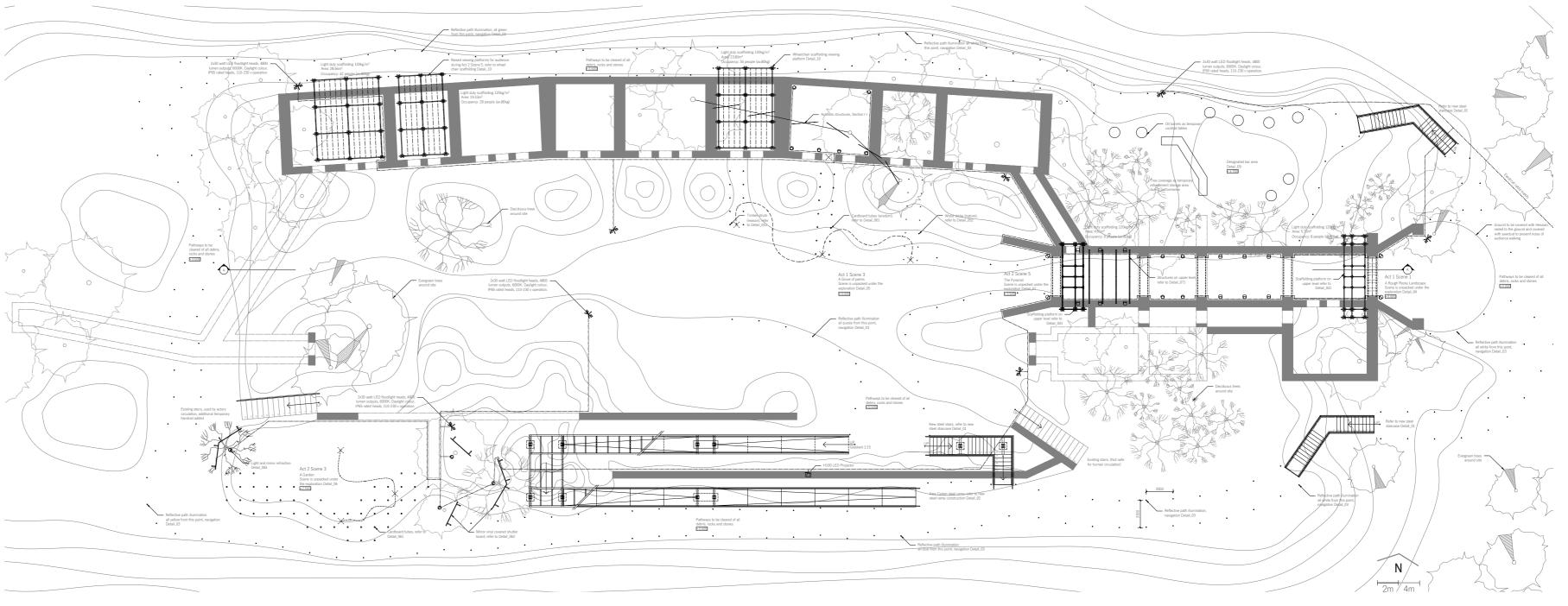


Figure 7.31 Initial proposed plan



7.5.1 CIRCULATION

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Audience circulation is an important aspect of this design. Since the site is in a state of physical deterioration, a strategy must be put in place to ensure the future preservation of the site. As mentioned in the Heritage Chapter 7.2.3, the erosion over the last year at the site has been significant - this erosion was documented on multiple site visits. Through the photographic evidence recorded, it was found that the cause of the erosion is from grass loss, human foot traffic, and heavy rains. The strategy proposed for the circulation is therefore, to remove the foot traffic over these areas allowing the site to rehabilitate naturally over time. After consideration, it was decided that a permanent intervention for circulation be placed on the site. It was decided that if a temporary intervention is used and then removed after the performance, the returning movement will continue to damage the site further. Three staircases and one ramp are therefore placed on the existing site, as seen in Figure 7.32. The structures touch the site minimally to ensure that the overall design keeps with the concept of heritage fabric preservation. The materiality of the steel stairs and ramp responds to the existing site, ensuring that the structure will weather and change in the same way that the site does. Figure, 7.33 shows the materiality of Corten steel, a structurally intact corroded steel, which will give the new structures a dynamic nature, changing with the progression of time. Ideally the structure will be built one and a half months before the production so that some corrosion and colour change is visible.

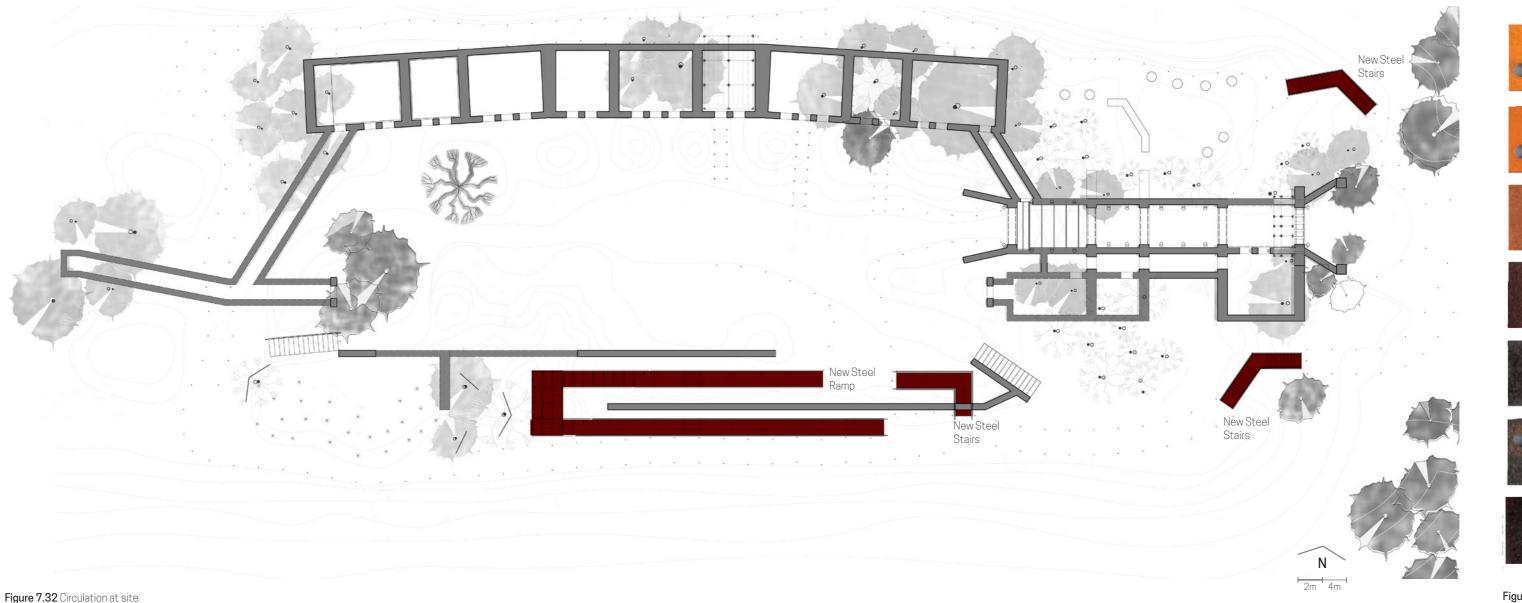


Figure 7.33 Corten steel weathering examples

0.5 Months

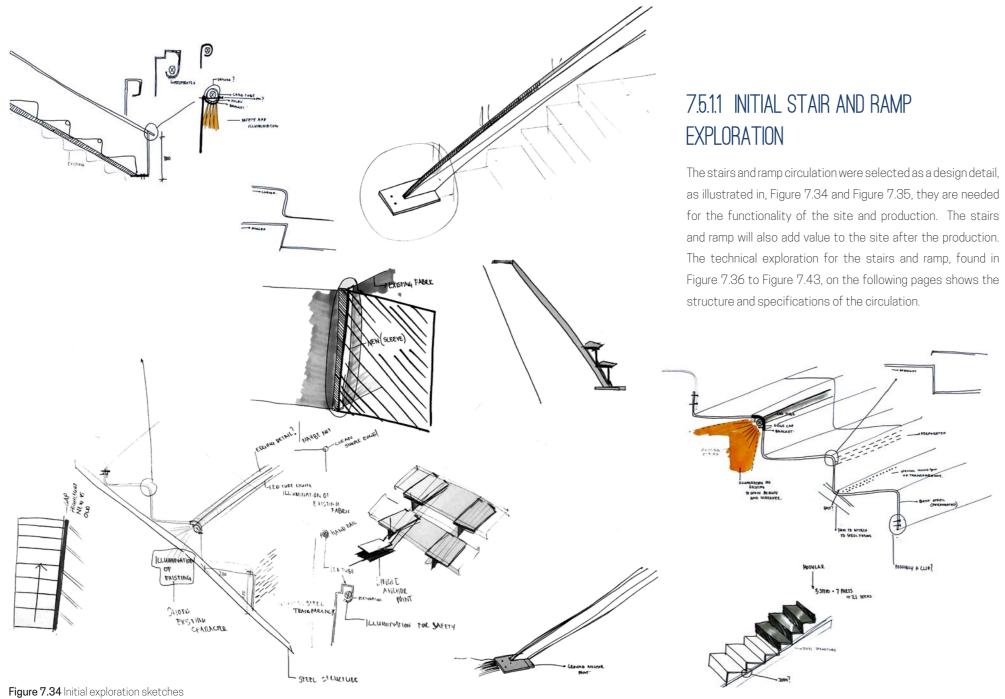
1.5 Months

6 Months

22 Years

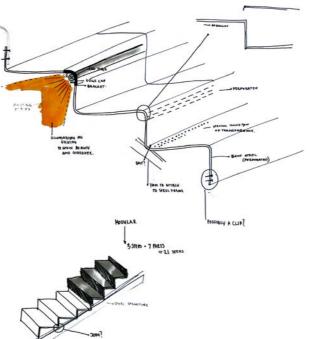
40 Years



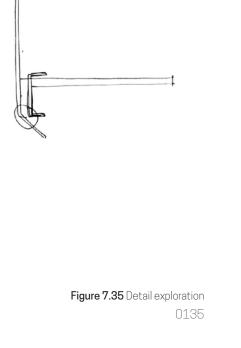


0134

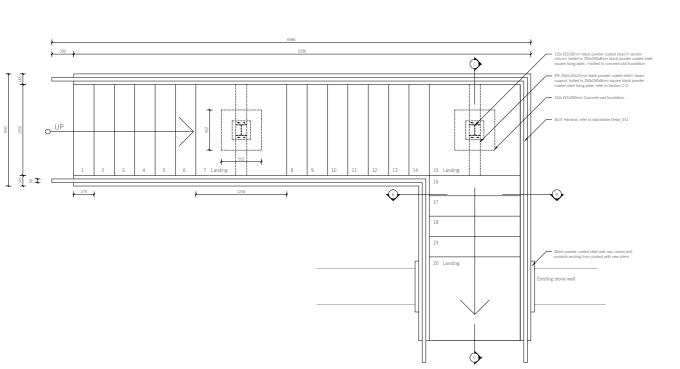
as illustrated in, Figure 7.34 and Figure 7.35, they are needed and ramp will also add value to the site after the production. The technical exploration for the stairs and ramp, found in





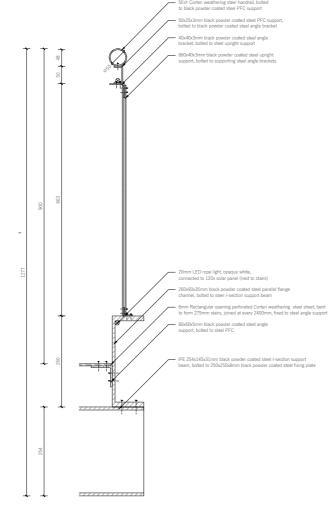






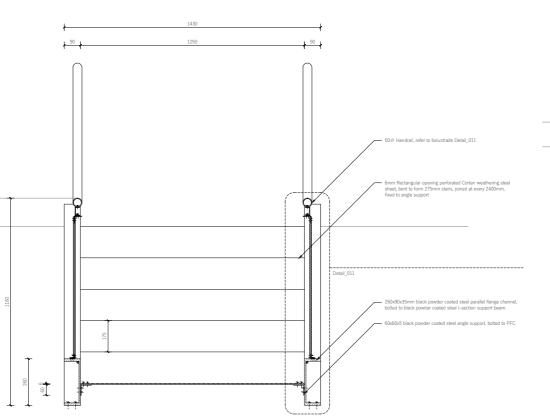
NEW STEEL STAIRCASE PLAN

Figure 7.36 New steel staircase plan



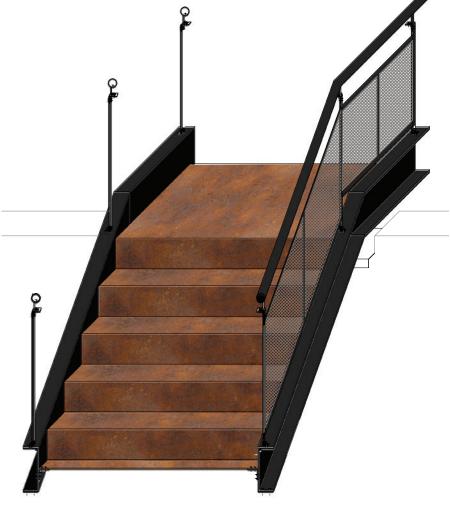
BALUSTRADE DETAIL_011

Figure 7.37 New steel staircase balustrade



NEW STEEL STAIRCASE SECTION B-B

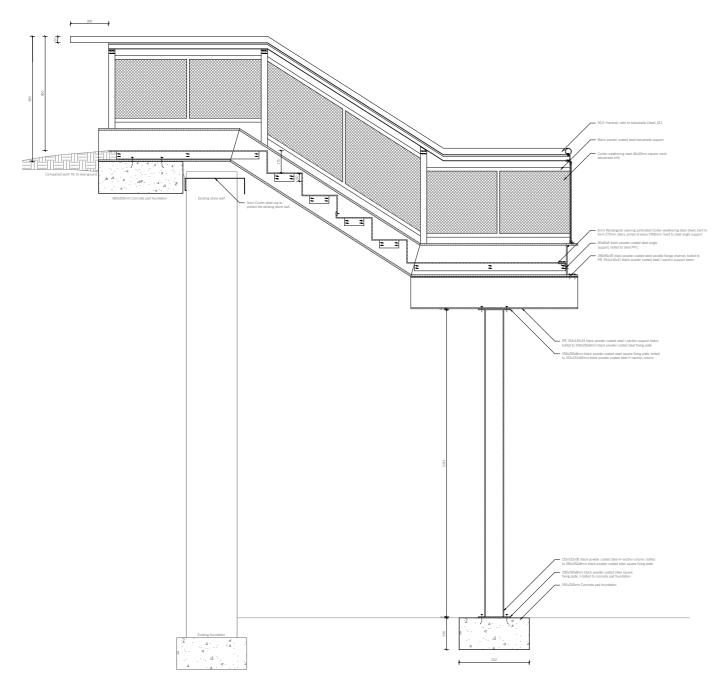
Figure 7.38 New steel staircase section SB-SB



MATERIAL EXPLORATION STAIRCASE 3D

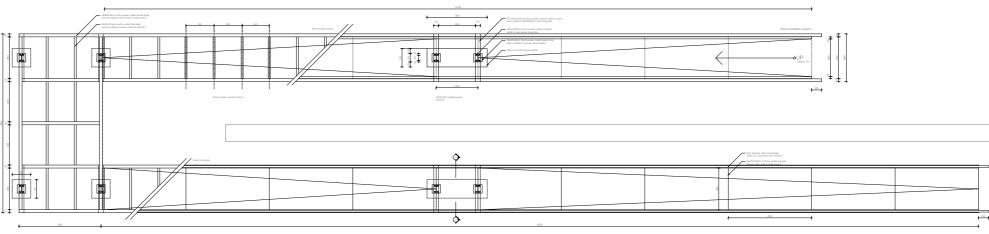
Figure 7.39 New steel staircase axonometric





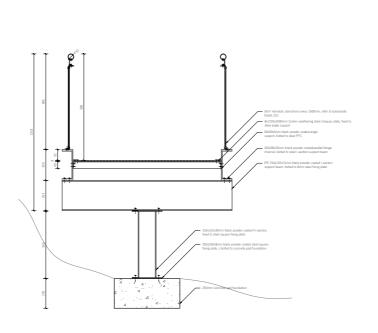
NEW STEEL STAIRCASE SECTION C-C

Figure 7.40 New steel staircase section SA-SA



NEW STEEL RAMP CONSTRUCTION DETAIL

Figure 7.41 New steel ramp plan



NEW STEEL RAMP SECTION D-D

Figure 7.42 New steel ramp section



NEW STEEL RAMP 3D

Figure 7.43 New steel ramp axonometric

0139



7.5.2 FUNCTIONAL SERVICES

Services and functional requirements for the project have been addressed with temporary interventions - these details are highlighted in Figure 7.44. Portable ablution blocks will be provided for males and females, including disabled persons. These ablutions will be hired on a temporary basis for the duration of site construction and performance. Figure 7.45 and Figure 7.46 shows the types of ablutions that will be used.

The temporary bar will be constructed from found materials, such as crates, pallets and oil drums. These objects will be repurposed after the performance has commenced. Oil drums will be used as cocktail tables, and plastic drink crates and repurposed timber pallets will be used in the construction of the bar. Figure 7.47 to Figure 7.50 suggest the aesthetic look of the bar. The layout of the bar is defined for this project, however no further design detail will be developed. The bar area will act as a meeting point for the audience members after the production, giving them a view of the city lights from the top of the fort. The bar will be open during the performance and is available for audience members; guides will assist with their navigation. Portable refreshments will be served at an intervallike event during the performance. The location of the bar also allows for storage under the trees to be used. This will keep the mess to a minimum and hidden from the audience's view.

The main storage at the site will be incorporated into the space created under the new ramp. Beneath the large landing in the centre of the ramp there is a void, which can be temporarily closed up to create a secure storage area. Prop storage and backstage areas have been included into the design of each

scene, ensuring that the actors do not have to travel far to retrieve props needed for the scenes. As the actors do not have clothing changes, they will not require a dressing room during the performance. However, an allocated area will be provided for the inactive actors. This area will, however, be a temporary structure which is retrieved from the storage space

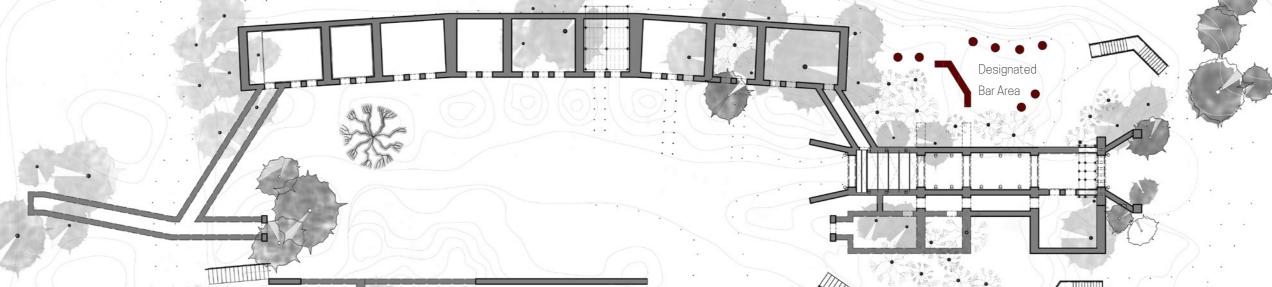


Figure 7.47 Repurposed timber palette bar Figure 7.48 Pop up bar installation



Figure 7.49 Coca-Cola crates table and chairs Figure 7.50 Oil drum table







Ablutions Ablutions

Figure 7.45 Portable ablution block



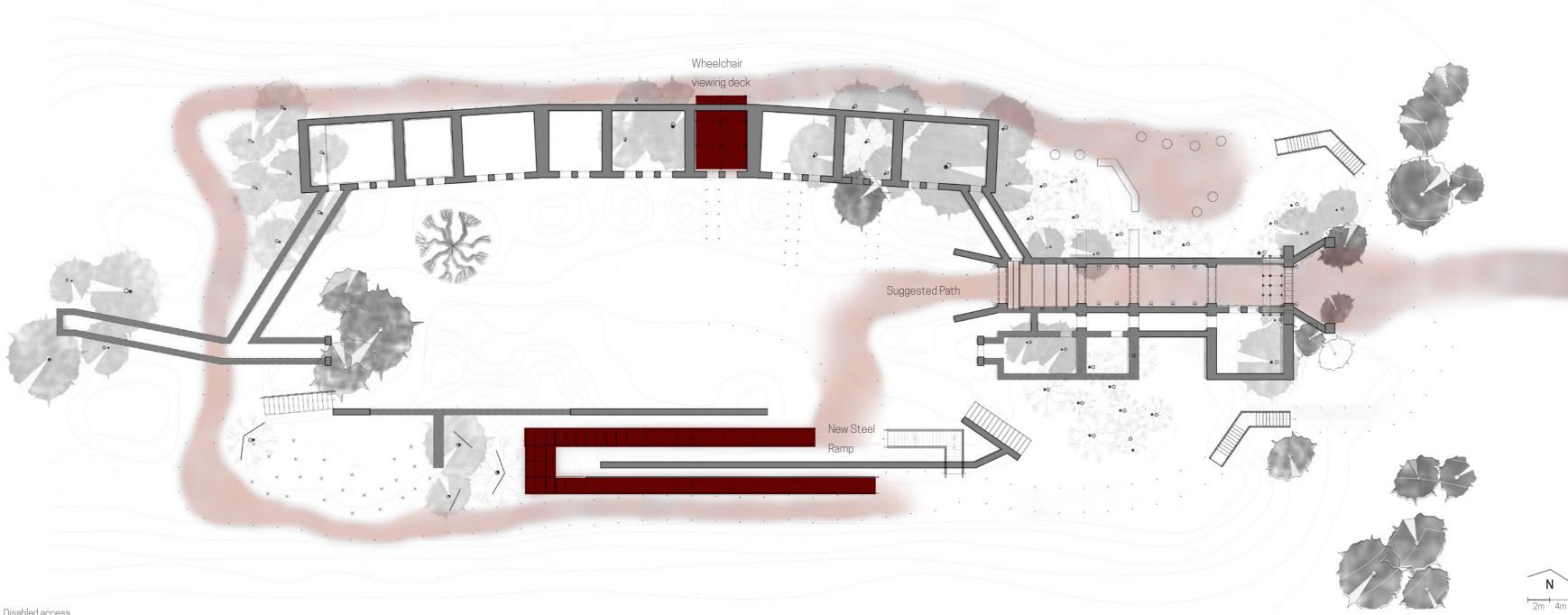
Figure 7.46 Portable disabled ablution block

Figure 7.44 Functional services plan



7.5.3 DISABILITY CONSIDERATIONS

The inclusive design for this immersive experience has been taken into careful consideration. A viewing platform and disabled ablutions have been allocated for audience members who utilise a wheelchair. The disabled audience members who need to use a wheelchair will be requested to meet at the site earlier than the other audience members. The reason for this is that they will have an opportunity to visually explore the scenes of the performance before it begins, and after which take their place on the viewing platform. The location of the ramp in the interior of the fort will allow the disabled audience members to take the same journey that the other audience members will take during the performance. A guide will be allocated to each disabled audience member and assist them in any way needed during the production. Figure 7.51 shows the path which the disabled audience members will take. Audience members with significant visual impairment will be requested to arrive at the site before the production starts, and they will give a verbal guided tour of the scenes. The visually impaired will be assigned a guide who will assist them throughout the production, reminding them of the scenes that were explored earlier in the evening. This ensures that all members of the audience will have a similar experience. Auditory impaired audience members will be welcomed to partake in the visual experience of the performance. They will be requested to bring an interpreter who will assist in the verbal communications, or they can request that an interpreter guide is supplied. The production of the Magic Flute is presented in a three-dimensional exploratory form. The lighting effects and projections enhance the narrative, making this performance easier for the auditory impaired audience members to enjoy.





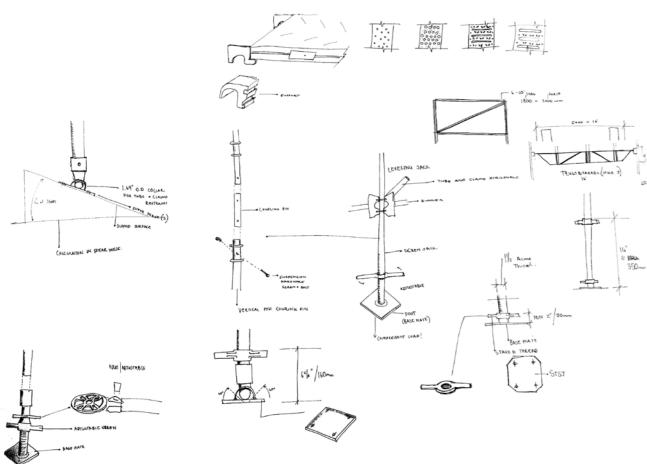
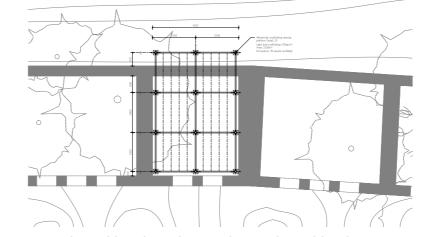


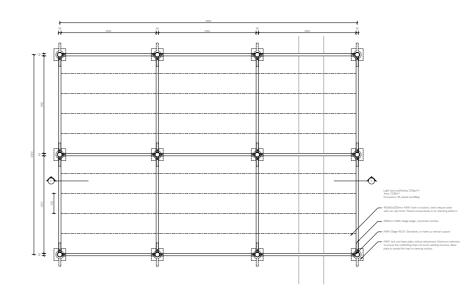
Figure 7.52 Initial scaffolding exploration

7.5.3.1 DETAIL DESIGN

The viewing platform makes up a portion of the focus design details. A scaffolding structure has been used to construct the viewing platform, selected for its temporary nature as the structure can be removed and re-purposed once the performance has concluded. Figure 7.52 depicts the initial exploration of the scaffolding and the structures which are most commonly used. A standard KWIK scaffolding was identified as the preferred structure, with the intention to hire the needed components for the duration of the performance, after which the structure is removed. The second-hand scaffolding with paint, damage and corrosion will form part of its aesthetic appeal, Figure 7.53 to Figure 7.55. The design of the platform, Figure 7.56 and Figure 7.57, is made up of standard parts. It stands within and over the existing room. A 100mm gap between the existing and the new work ensures that the structures do not touch and get damaged in the process. Lighting from below the structure will illuminate the recess between the two as an added heritage consideration. The ground under the KWIK jack and base place will need to be compressed and secured before the structure is erected. The adjustable jacks allow for the scaffolding to be adjusted for the varying heights of the existing soil. The platform will perch over the existing wall, and join at the ground level to create a seamless transition, easy for wheelchair use. KWIK hook-onboard will be used to create the standing platform, ensuring the easy disassembly of the structure at a later stage.



WHEELCHAIR SCAFFOLDING VIEWING PLATFORM LOCATION



WHEELCHAIR SCAFFOLDING VIEWING PLATFORM PLAN DETIAL_10 Figure 7.56 Viewing platform, scaffolding plan



Figure 7.53 Swivel Coupler

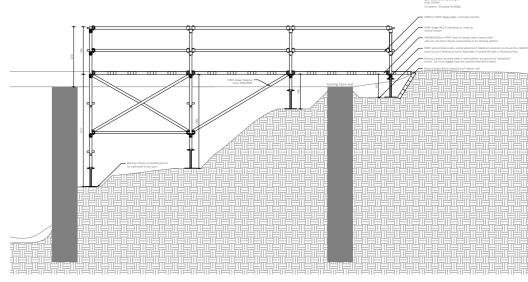




Figure 7.54 Flange Coupler



Figure 7.55 90° Coupler



TEMPORARY SCAFFOLDING WHEELCHAIR VIEWING PLATFORM SECTION E-E

Figure 7.57 Viewing platform, scaffolding section



7.5.4 NAVIGATION OF SITE

The audience movement and navigation at the site is vital to the success of the production. The site-specific production aims to take the audience on a journey of the site, as they follow the narrative from scene to scene, shown in Figure 7.58. Due to the deterioration and dangers at the site - as identified in Chapter 7.4.6 - the audience's movements around the site needs to be designed and controlled. The addition of a navigation system aims to control the movement of the audience, directing them to the site and keeping them away from the danger areas. Initially, the idea was to use solar jars to provide light over the pathway. However, the cost of the jars and the risk of theft defined that all the jars would have to be removed every night and put out every day. It was decided that this would be an uneconomical choice. The second

challenge was that if the path were lit up constantly during the performance, it would detract from the lighting effects of each scene. The solution to this problem was to use timber stakes, Figure 7.59, 38mm x 38mm x 600mm knocked into the ground and covered with different coloured reflective tape. This extra layer of information means that different colours can be used for different directions of navigation. All reflective stakes moving away from the scenes will illuminate in red, showing caution that the audience is moving in the wrong direction. The stakes leading towards the scene along the path will be covered in a reflective colour which reflects the thematic development and transition between the scenes. Since the reflective tape responds to light, two suggestions for their use are proposed. Firstly, the use of ushers or guides who will assist the audience by illuminating the pathway with a torch, and secondly to request that the audience download a phone light

management application. The application will automatically turn on and off the audience's phone lights as they are needed between scenes and during the scene. The control of the light is important, as ambient and uncontrolled light will detract from the light effects in the scenes. The application will allow for all lighting to be controlled and manipulated.

The timber stakes are placed along safe, cleared and walkable areas of the site at 2000mm intervals, the pathway also measures 2000mm wide. The colour changes are identified on the plan, Figure 7.58. The audience will be requested not to move beyond the pathway, as these designated areas will be the only ones deemed safe for their movement. The guides will ensure the audience co-operates with this request and assist any persons who would like to use the ablution facilities during the performance.

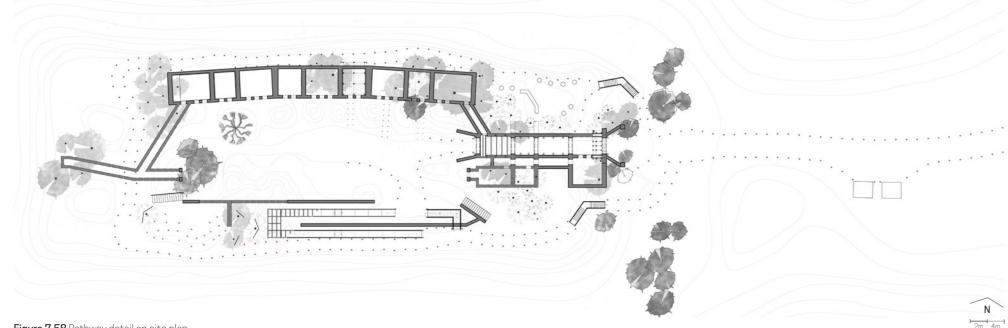
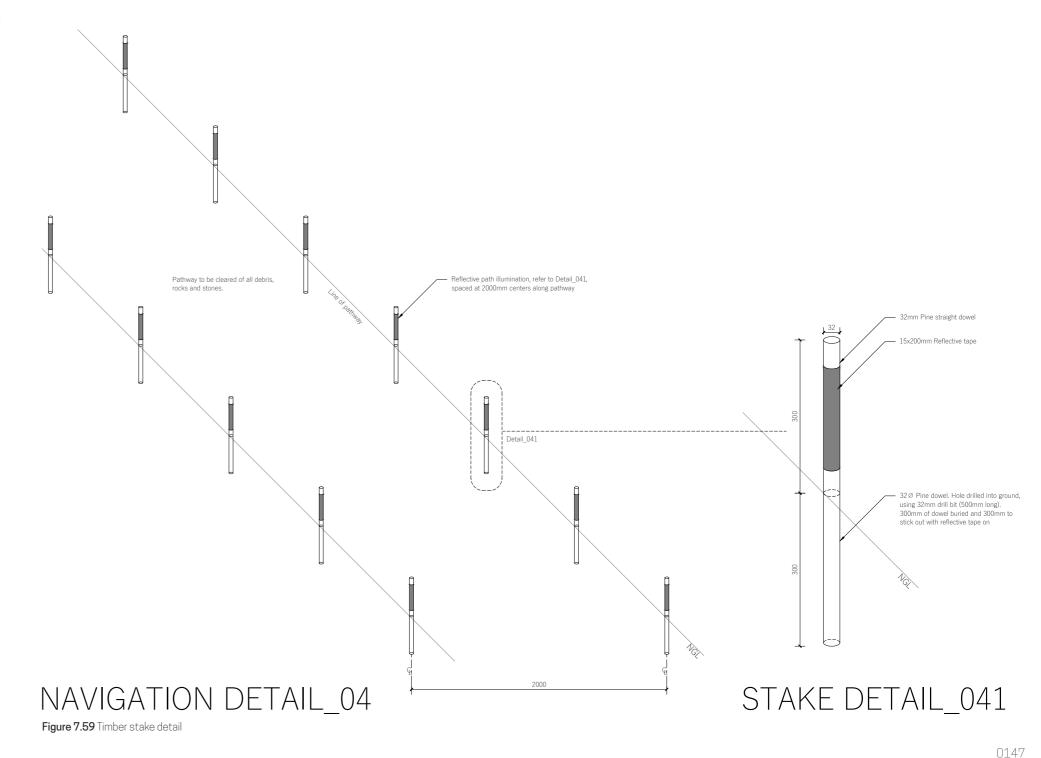


Figure 7.58 Pathway detail on site plan





7.5.5 ENERGY SUPPLY

0148

The isolation of the site means that there is no municipal connection to electricity. Various means of power were considered and evaluated to ensure the best choice of electricity supply. Stage lighting, projections, general lighting, and speakers are elements which require an energy source. Initially, the use of batteries was proposed as the means of power. The batteries would be placed at each scene - carefully disguised - and the lights, sound, and projectors would be connected to them. After looking at the logistical side of the batteries, it was discovered that they would need to be removed every evening after the production, taken off-site for charging and then replaced the following afternoon before the start of the production. The movement and management of the batteries would create unnecessary work and effort. The basic calculation of five batteries per scene was proposed, making this exercise very costly. Alternatively, the batteries could be charged on-site, using a generator, this would mean that the generator would also need to be provided at the site. The second idea was to bypass the batteries and supply energy using only the generator. Typically, generators produce a large amount of noise, ranging between 72 and 75 dBA at 7m. The ambient noise of the generator against the natural silence at the site would then interfere with the performance. A study into silent generators was then done. Although these generators are more expensive to purchase, they would be more suited to the performance. A silent generator produces between 62 and 66 dBA. Figure 7.60 gives a comparison by the Occupational Safety and Health Administration (D.P Driscoll, 2016) of typical noises produced. It was also proposed that the generator be hired by the theatre company, for the duration

of the production. However, that would amount to the same price as buying the needed equipment. The generator would be located away from the primary areas of the site, ensuring that the reflected sound travels away from the performance areas, see Figure 7.61. Cabling from the generator to each scene will be further explored in the scene unpacking. Exterior cabling and outdoor plugs will be required for the performance.

required for portable solar trailers would be too high. On the following page in Figure 7.62, is a comparative table showing the different energy options for the project. In conclusion, the option of a silent generator is best suited for the functions at the site. The most eco-friendly option is an 8kva LPG natural

- 140 Threshold of pain
- The option of solar was considered, however, the cost
- 130 Jet taking off 120 - Operating heavy equipment 110 - Night Club 100 - Construction site 90 – Boiler room 80 – Freight train 70 - Class room chatter 60 - Conversation 50 - Urban Residence 40 - Soft whisper 20 - Silent study room

Figure 7.60 Occupational Safety and Health Administration dBA chart

0 - Threshold of hearing

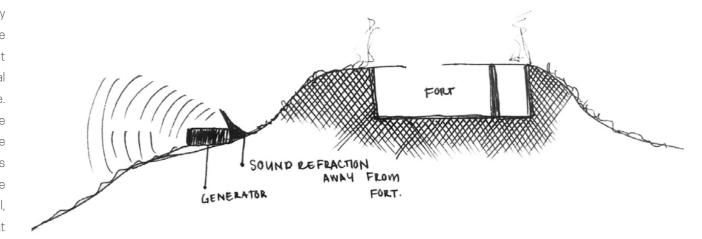


Figure 7.61 Generator sound containment sketch

MODEL	TYPE	KVA	PRICE	DIMENSIONS	WEIGHT	ECO-FRIENDLY	NOISE (DBS)
Turn1™ 610 Car Battery	Battery	45AH	R19 875 (25)	235mm x 300mm x 220mm	13kg	No – battery	0
APC Smart-ups Srt (Lead Acid)	Battery	8kva	R13084.00	43.2cm x 68.2cm x 13cm	91kg	No – Lead Acid	0
BP5000-G Petrol Generator	Generator	5.0 kva	R16 540.00	692mm x 687mm 638mm	81kg	No - Petrol – 27I	75 @ 7m
BP5S-M Diesel Generator	Generator	5.0 kva	R18 100.00	920mm x 545mm x 650mm	171kg	No - Diesel – 13	72 @ 7m
BP8S-G Gas Generator	Generator	8.8 kva	R 38 640.00	1218mm x 638mm x 732mm	175.4kg	Yes - LPG natural gas Figure 7.62 Table comp	62 - 66 @ 7m



7.5.6 LIGHTING TYPES

There are two main types of lighting used in this project. The first is general lighting for the site, this will be used in the case of an emergency and at the end of the production. The other lighting type is theatre lighting as discussed in 7.5.9.3

7.5.6.1 GENERAL LIGHTING

General lighting, Figure 7.63 is needed at the bar, ablutions, entrance and pathway to the parking. The strategy for this lighting will be the use of temporary floodlights, shown in Figure 7.64, to provide enough lighting for general functionality. Since the spaces between each scene do not have a main source of light, a solution for emergencies must be considered. In the event of an emergency, flood lighting placed around the site will be turned on, illuminating the entire fort and allowing the audience to evacuate the space. Towards the end of the performance, these floodlights will be turned on briefly in the final scene. This will be the first time at the audience see the entire site. This brief experience intends to create intrigue, and attract the audience to the site once the production time has passed. The following energy calculations show the required amount of energy needed for the production. The 8kva generator will produce more than enough energy for the requirements.

According to Architective (2013:376), the typical theatre requires 100 Lux of light on stairs, corridors, and audience movement areas. Lux refers to the amount of lumen per square meter. The total area of audience movement is approximately 250m², therefore approximately 25000 lumens are needed in the general areas of the site. Since the performance requires darkness, these lights will act as a backup for emergencies and the brief illumination at the end of the performance. Six floodlights have been placed in the interior of the fort, and three at the path from the fort to the parking. This provides substantial light for the audience's movement.

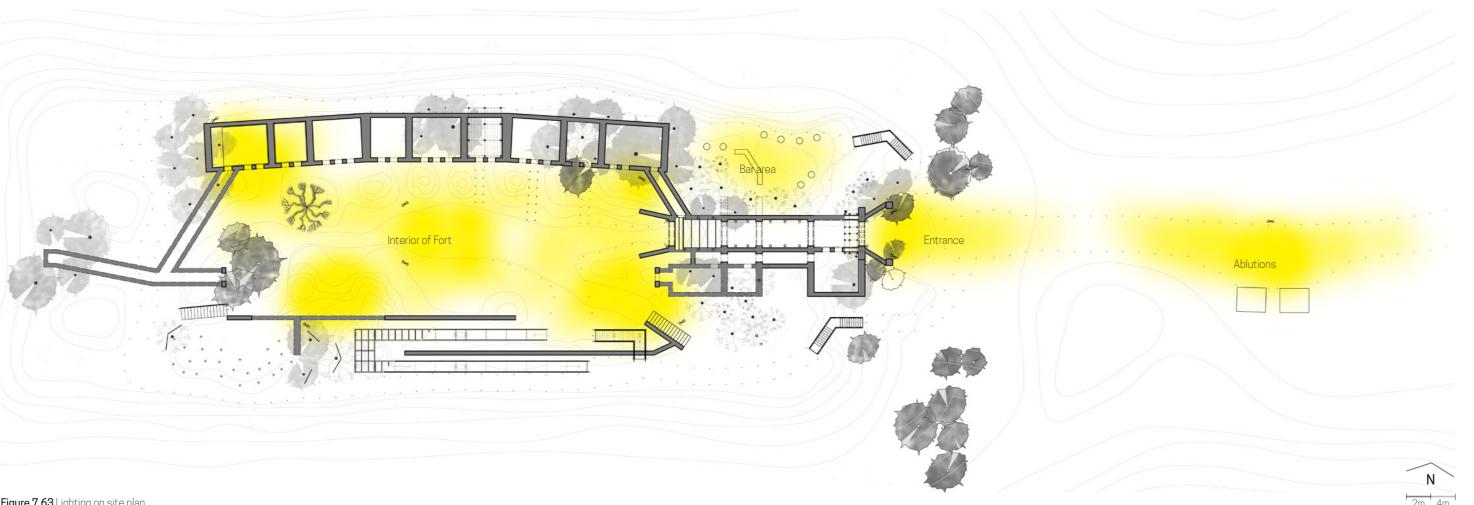


Figure 7.63 Lighting on site plan

Energy Calculations

Lux = Lumens ÷ Area of the site Therefore, Lumens (required) = Lux x Area Lumens = 100Lux x 250m² Lumens = 25000

Lighting for emergency at site = 25000 lumens ÷ 4800 (floodlight)

= 5.2 floodlights are needed ~ 6 floodlights



2x30 watt LED floodlight heads, 4800 lumen outputs, 6000K daylight colour, IP65 rated heads, 110-230 v operation.

Figure 7.64 Floodlight





Figure 7.65 Shigeru Ban cardboard tube bridge



Figure 7.66 Stair structure of bridge



gure 7.67 Context of bridge over water



Figure 7.68 Steel modular joint system

7.5.7 TEMPORARY STRUCTURES PRECEDENTS

Temporary structure inspiration was taken from a collection of various precedent imagery which helped inform the material choices for the project. Since the focus of the project is on temporary design; lightweight materials, local resources, and available and regenerative materials were considered. Chapter 7.5.8 takes a further look at the materials and how the choice of materials to use was made. Figure 7.65 to Figure 7.68 looks at a bridge design by Shigeru Ban. The bridge is constructed from cardboard tubes and a modular steel joint system. The boundary of the material's tensile strength is challenged, and the structure defies the expected. Figure 7.69 to Figure 7.75 explores the use of simplistic timber structures, in an attempt to create temporary designs. Figure 7.73 depicts the use of lightweight fabric as a medium of construction. All the above materials and structures are used and built with the intention of being temporary. The set design of the scenes has taken inspiration from these structures and utilises their aesthetic qualities to enhance the production.



Figure 7.69 Steel roof structure over path



Figure 7.70 Repetition of timber structure



Figure 7.71 Lightweight fabric and timber



Figure 7.72 Timber and fabric structure



Figure 7.73 Lightweight Structure



Figure 7.74 Bamboo structure



Figure 7.75 Nature build structure





Figure 7.77 Domestic materials application

Figure 7.76 Domestic materials

7.5.8 MATERIALITY

The materiality choices reflect the temporary design focus of this project. The intention is to use materials that can either be reused, repurposed or recycled after the production. Initially, a list of domestic, construction, organic material and waste were evaluated. Appendix B, page 258 shows a material audit which takes a look at the qualities, characteristics, costs, availability, recyclability and more. After all the materials were identified, a further indepth look was placed on the limits of the domestic and organic materials. Figure 7.76, a collage shows domestic materials which can be recycled, re-used and re-purposed. The organic materials, Figure 7.77, most of which are found at the site, would be used in conjunction with the domestic waste. A further exploration of material selection can be found under each scene development. where the materials were critically selected to enhance the themes of the narrative.

with the GBCSA Greenstar rating, SBAT or LEED, however, efforts have been taken to ensure that the designs and additions to the site are respectful of the environment and the heritage significance of the site. For the brief requirements, a Greenstar report has been produced to evaluate the project. The criteria focus is on the materiality of the design, energy use, and design for disassembly. As mentioned above the materials selected have been chosen for their reusability and their ensured afterlife. Therefore, just as the intention of the project is focused on preservation, the choice of materials consider the ecological preservation impact it will have. The chosen energy generator uses natural gas, a more sustainable and eco-friendly alternative to petrol or diesel. Design for disassembly links closely with the choice of materials, to ensuring that the materials can be fully reused. The design considers how every element will be constructed and deconstructed for reuse purposes. Figure 7.78 shows the report generated from the Greenstar assessment.

This project does not strictly align its self





Score Sne

Credit	Credit Name	Aim of Credit	Points Available	Points Targeter
Management	t Category			
Int-Man-1	Green Star SA Accredited Professional	To encourage and recognise the engagement of professionals who can assist the project team with the integration of Green Star SA aims and processes throughout all stages of a fitout's design and construction phases.	1	1
Int-Man-2	Commissioning & Tuning	To recognise effective commissioning and tuning processes during a project's design and construction phase that ensure all services and installations can operate to their optimal design potential.	2	2
Int-Man-3	Occupant Users' Guide	To encourage and recognise the provision of information to fitout owners and users that helps them understand a project's systems, environmental attributes, and maintenance requirements.	1	1
Int-Man-4	Environmental Management	To encourage and recognise the adoption of a formal environmental management system in line with established guidelines during construction.	1.5	1.5
Int-Man-5	Construction Waste Management	To recognise and encourage management practises that minimise the amount of demolition and construction waste going to disposal.	2	2
Int-Man-6	Work space efficiency	To recognise the design of workspaces that provide spatial efficiency and improve productivity and occupant performance.	2	n/a
Int-Man-7	Green Lease	To recognise and encourage collaboration between the building owner and tenants in order to manage and operate the building along environmentally sustainable principles whilst realising mutual benefit.	2	n/a
Int-Man-8	Learning Resources	To encourage and recognise sustainability initiatives implemented in the development as learning resources for building users and visitors	1	1
Management			12.5	8.5
Indoor Envir	onmental Quality Category			
Int-IEQ-1	Quality of Internal Air	To encourage and recognise projects that provide high quality air to occupants.	4	n/a
Int-IEQ-2	Thermal Comfort	To encourage and recognise fitouts that achieve a high level of thermal comfort.	2	n/a
Int-IEQ-3	Lighting Comfort	To encourage, recognise and reward well-fit spaces that provide appropriate levels of lighting comfort to occupants.	3	2
Int-IEQ-4	Visual Comfort	To recognise the delivery of well daylit spaces that provide high levels of visual comfort and views to fit-out occupants.	3	n/a
Int-IEQ-5	Acoustic Quality	To encourage and recognise buildings that are designed to provide appropriate acoustic qualities to enable the functionality of the space.	2	2
Int-IEQ-6	Reduced Exposure to Air Pollutants	To recognise projects that safeguard occupant health through the reduction in internal air pollutant levels.	5	3
Int-IEQ-7	Mould Prevention	To encourage and recognise the design of services that eliminates the risk of mould growth and its associated detrimental impact on occupant health.	0.5	n/a
Int-IEQ-8	Ergonomics	To recognise the choice of equipment and design of spaces that promotes wellbeing, efficiency and effectiveness	2	n/a
Int-IEQ-9	Indoor Plants	To encourage and recognise the installation of indoor plants that improve indoor environment quality and also provides occupants with a connection to nature.	1.5	n/a
	onmental Quality credits		23	7
Energy Cate				
Int-Ene-1	Greenhouse Gas Emissions	To encourage and recognise projects that minimise the greenhouse gas emissions associated with tenant fit outs.	12	8
Int-Ene-2	Electrical Sub-metering	To encourage and recognise the installation of electrical energy sub-metering to facilitate on-going management of electrical energy consumption.	2	1
Energy credi			14	9
Transport Ca				
Int-Tra-1		To encourage and recognise developments that select a site near public transport and facilitate the use of mass transport.	1	1
Int-Tra-2	Local connectivity	To encourage and recognise projects that are located within walking distance of high quality amenities such as shops and parks, thus reducing private vehicle use and the associated negative environmental impacts.	1	0
Int-Tra-3	Alternative Transport	To encourage and recognise projects that promote and facilitate the use of alternative modes of transport over the use of private cars.	2	2
Transport cr	174		4	3

Trucci outcy	0.9			
Int-Wat-1	Potable Water	To recognise projects that minimise potable water consumption	6	4
Int-Wat-2	Water Sub-metering	To encourage and recognise the installation of sub-metering to facilitate on-going	2	0
		management of water consumption	2	U
Water credits	s .		8	4
Materials Cat	tegory			
Int-Mat-1	Operational Waste	To encourage and recognise developments which include space and an operational		
	Management	waste management plan that facilitates the recovery of resources used within the	2	2
		developments to reduce waste going to disposal.		
Int-Mat-2	Furniture	To recognise the selection of fit-out furniture that has a reduced environmental impact	8	6
		when compared to available alternatives.		
Int-Mat-3	Assemblies	To recognise the selection of fit-out assemblies that have a reduced environmental	8	6
		impact when compared to available alternatives.		
Int-Mat-4	Flooring	To recognise the selection of flooring that has a reduced environmental impact when	6	0
		compared to available alternatives.		
Int-Mat-5	Wall coverings	To recognise the selection of wall coverings that have a reduced environmental	3	0
Int-Mat-6	Land Commission	impact when compared to available alternatives.		
int-Mat-b	Local Sourcing	To encourage and recognise the environmental advantages gained, in the form of	2	2
		reduced transportation emissions, by using materials and products that are sourced within close proximity to the site.	2	2
Int-Mat-7	Sundries Materials Sourcing	To recognise the selection of fitout finishes that have a reduced environmental impact		
IIIt-mat-1	outluties materials obuicing	when compared to available alternatives through responsible manufacturing, product	1	1
		stewardship and resource efficient design.	1	1
Materials cre	dits	stewardship and resource emident design.	30	17
	d Ecology Category		- 50	
Int-Eco-1	Site selection	T		
IIII-ECO-I	Site Selection	To recognise and reward a tenant for selecting their space in a building that reduces their environmental impact due to the building's base building design attributes.	4	4
		lineir environmental impact due to the building's base building design attributes.	7	,
Land use an	d Ecology credits		4	4
Emissions C				
Int-Emi-1	Impacts from refrigerants	To encourage and recognise developments that minimise light pollution into the night		
III(-EIIII-I	and insulants	sky.	3	1
Int-Emi-2	Light Pollution	To encourage and recognise the avoidance of substances that contribute to the		
	Light i onation	deterioration and long-term alteration of the Earth's atmosphere.	1.5	1
Emissions of	redits	action and long term and action of the Editine announce.	4.5	2
Innovation C	ategory			
Int-Inn-1	Innovative Strategies &	To encourage and recognise pioneering initiatives in sustainable design, process or		
	Technologies	advocacy.		
Int-Inn-2	Exceeding Green Star SA	To encourage and recognise projects that achieve environmental benefits in excess		
intenni-z	Benchmarks	of the		
		current Green Star SA benchmarks.		
Int-Inn-3	Environmental Design	To encourage and recognise sustainable building initiatives that are currently outside		
	Initiatives	of the		
		scope of this Green Star SA rating tool but which have a substantial or significant		
		environmental benefit.		
Innovation of	credits	10	0	
		TOTAL POINTS AVAILABLE	100	54.5
		TOTAL TOTAL OF TAXABLE	100	J4.3

Figure 7.78 Greenstar rating summary



7.5.9 THEATRE EQUIPMENT

It is proposed that this performance be produced by a theatre company, which has access to the equipment needed for a theatre production. The existing theatre equipment such as lighting, projectors, cables, scaffolding, platforms, basic set design, and props will be utilised from the theatre. All additional equipment will need to be hired.

7.5.9.1 THEATRE SET CONSTRUCTION

Scenery and set design forms an important part of the narrative, however these decorative and functional objects need to be constructed with care and consideration. "First, it must be portable and lightweight in structure so as to move easily on the stage and from theatre to theatre; second, scenery has to be able to assume large-scale proportion for either decorative or masking reasons, therefore large areas of scenery must be furnished with a minimum of structure and maximum of portability; last, because scenery is here today and gone tomorrow, it must be economical." (W. Oren Parker and Harvey K. Smith 1979:191). The intention of this project is to maximise on the above-mentioned qualities to ensure that the structures are economical, environmentally friendly and sensitive to the site. Scenery is divided into two groups: twodimensional scenery, and three-dimensional scenery. These categories are then further divided: two-dimensional scenery into framed and soft scenery, and three-dimensional scenery into weight-bearing and non-weight-bearing scenery.

In traditional theatre, soft scenery includes drapery materials, drops, and cyclorama - these typically provide large areas of scenery. In the Site-specific Theatre, the chosen location replaces the soft scenery, as the existing environment provides the background and setting for the performance.

Framed scenery describes the type of scenery which is planned and supports itself. This scenery would comprise loose objects and details which stand out from the soft scenery, giving a three-dimensional effect. The three-dimensionality of the fort, ensures that minimum framed scenery is needed. The specific scene locations are selected to create the right environment for the narrative, meaning the scenery does not need to be constructed, but rather enhanced through the set design.

Weight-bearing structures typically give the actor a standing platform. They take the form of stairs, ramps, rocks and abstract forms. It is important to ensure these structures are sound and safe. The use of raised platforms and suspended stages in the project is an example of weight-bearing structures. Pipe or steel platforming and scaffolding is the generally used methods for construction, the modular systems allows for flexibility in creating the desired shape and size platform.

Non-weight-bearing structures, are three-dimensional forms which the actor does not physically interact with, such as columns and trees. The texture and materiality of these elements is used to further enhance the narrative.

7.5.9.2 COLOUR IN THEATRE

Colour and the phycological effects of colour are said to play a role in the experience of the audience. However, "the phycological effect of colour on a theatre audience is difficult to measure as a group. The design depends on measurable individual responses, hoping they will multiply" (W. Oren Parker and Harvey K. Smith 1979:248). Colour plays a role in this production through the reflection of the narrative's themes in the colour selected per scene - this is discussed in depth in 7.8. In W. Oren Parker and Harvey K. Smith (1979:248) it is stated that "within the framework of traditional training and conventions, the six basic spectrum hues can be described in terms of their emotional response, as follows":

- Yellow radiant, light giving, golden, saintly; in light values near white - virginal
- Orange Festive, earthly, peasant colours, neutral shades, nature in the fall
- Red Active, passionate, full of inner warmth, fiery, strong, forceful
- Violet royal, piety, deeper shades, shadows, terror, chaos, a reddening colour
- Blue Passive, receding, deep, cool, purity, icy tints
- Green Tranquillity, compassion, nature in the spring and summer

The colours chosen to enhance the narrative of the Magic Flute is further discussed in each scene. Chapter 7

7.5.9.3 THEATRE LIGHTING

Theatre design relies heavily on the use of lighting, as it contributes to the drama. Lighting can be used to enhance the themes, narrative and actor's character. Various forms of lighting are generally used to illuminate the scenery, actors and focal aspects. The quality of light can also affect the performance. Various methods are used, including manipulation of light intensity, distribution of light path, and colour.

The lighting of the actors' faces can portray and reveal their individual characters. The light can either show their entire face, one side, high areas, or focal points. The lighting directions can enhance the actor's character, visually explaining this to the audience. The lighting manipulations, angles and effects will be unpacked per scene.

There are various types of stage-lighting instruments. These include: spotlights, beam projectors, floodlights, and strip lights.

"On the modern stage the spotlight is far and away the most important instrument of all" (W. Oren Parker and Harvey K. Smith 1979:445). This high-intensity light beam can be shaped and manipulated into many forms. The spotlight is typically used to highlight specific areas, actors or objects in the performance. The follow spot is a spotlight which can be manipulated and changed, but also used to follow a moving actor. Figure 7.79

7.5.10 SOUND

There are two options for sound production at the site. The first option is to hire a baroque orchestra – a small 20-piece orchestra – to accompany the actors. However, the space limit in the site poses a problem and the cost to hire the orchestra would make the performance expensive. The second option is to have a pre-recorded track playing on speakers, providing the chorus singers and music for the actors. Both options are viable. The orchestra would need careful placement to ensure the sound at each scene is in balance, and the speakers would require the use of the theatre's equipment. Ideally, an orchestra would be preferred as the sound quality produced combined with the natural acoustics of the site would enhance the audience's experience.

7.5.11 ACOUSTICS

An indoor theatre often spends time and money on achieving a natural sound quality. The theatre building is designed to mimic natural reverberation, taking into consideration audience absorption. Fort Daspoortrand supplies the playing area with a natural acoustic already in place. The amphitheatre-type layout ensures that the sound will travel from the lower interior to the upper level. The remote location of the site eliminates ambient noise, and the frosty winter night will provide a harmonious background of natural noises.

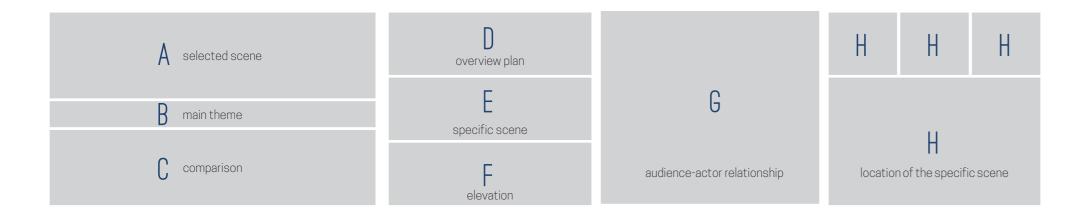
To ensure that the audience members can hear the actors at every point across the site, acoustic refraction and

projection has been considered at each scene. The sound is either projected towards the audience from the actor's side, or the sound is captured on the audience side. The acoustic developments for each scene will be explored.



Figure 7.79 Follow spot





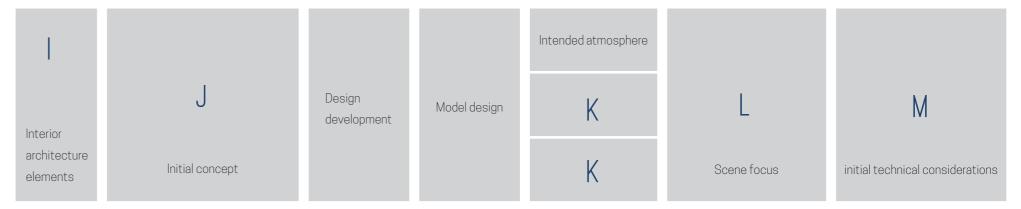


Figure 7.80 shows a graphic representation of the design template used for each scene.

7.6 THE TEMPLATE

Each scene has been developed according to a template. This ensures that every scene follows the same process, making it legible and simple to comprehend. The following Figure 7.80 gives a graphic representation of the template used in each scene.

A) The **selected scene** template starts with an exploration of the traditional plot of The Magic Flute. This gives an overview of the narrative of the scene. Themes are identified and isolated - these themes will be further explored in the three-dimensionality of the design.

- B) The **main theme** of the scene is illustrated
- C) A **comparison** of the visual representation of the traditional version and the William Kentridge version of The Magic Flute is made to show the differences between depictions of the same scenes.
- D) An **overview plan** shows the location of the scene on the

- E) A closer view of the **specific scene** shows where the audience and actors are located, as well as the line of sight between the two.
- F) The **elevation** represents the differences in the height of the site, showing the audience-actor relationship.
- G) The **audience-actor relationship** is represented to show how this manipulation adds to the thematic development of the narrative.

- H) Since the selection of the **location of the specific scene** is vital to the site-specificity of the project, the identification of the scene is visually represented. The main graphic focuses on the view of the site during the day from the audience perspective. The smaller graphics highlight important considerations for the scenes.
- I) The interior architecture elements identify key focuses that each scene will take into consideration, ensuring that the design is aligned with the interior field, and that the spatial development of the scene is thought out.

- J) An **initial conceptual** collage explores the site, main themes, Kentridge imagery, and characters in a graphic representation of the intended mood.
- K) The images show the **intended atmosphere** of the scenes, which includes graphic projection overlays, characters, and the site, giving visual representation of the expected design outcome. The graphics are represented from the audience's perspective.
- L) Smaller graphics show the progression of each scene and the **focus** on lighting, projection, and actor movement.
- M) The sketches explore the **initial technical considerations** for the scene. Hand-drawn sketches show basic construction ideas and material considerations.



7.7 SCENE TECHNICAL CONSIDERATIONS AFTER DESIGN

Four scenes have been identified for an in-depth technical exploration, each chosen to explain the overall design of the project. Figure 7.81 gives an overview of the site, identifying each scene and design intervention. This plan summarises the positioning of the selected scenes, general programming design, main circulation points, path navigation, and scene interventions.

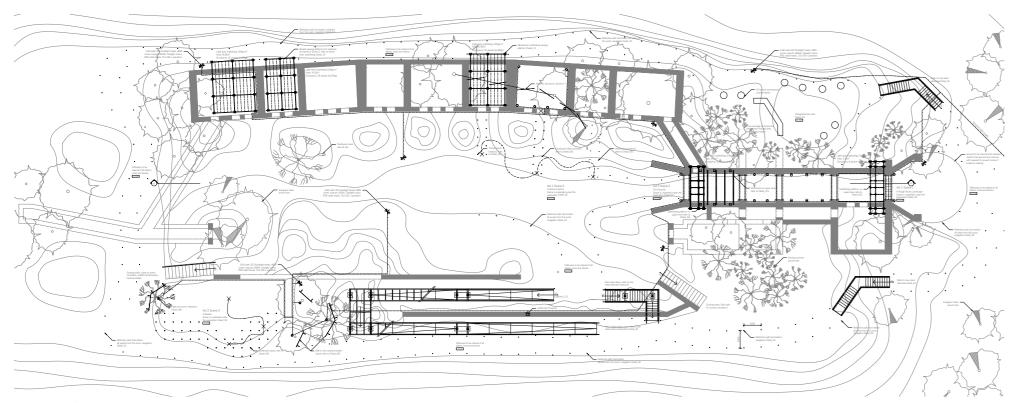


Figure 7.81 Plan overview



Figure 6.4 "O zittre nicht, mein Lieber Sohn" (Oh, tremble not, my dear son)



Figure 6.1 Act 1 Scene 1 - Traditional version 1991

7.8 ACT 1 SCENE 1 – A ROUGH AND ROCKY LANDSCAPE

The scene begins when the Queen of the Night appears, in a dramatic recitative and aria "O zittre nicht, mein Lieber Sohn" (Oh, tremble not, my dear son), telling Tamino that if he saves Pamina, he can have her as his wife. The plot is further discussed in Chapter 6.2.1. The Queen is portrayed as a weak and distraught character, however she is very cunning and deceptive as she persuades Tamino to rescue her daughter Pamina. At the start of the aria, the Queen aims to come across as a fearful and lonely mother who is pining for her child. However, it is evident by the power in her voice and the greatness in her theme music that she is much more than a worried lady. These strong themes of sadness and worry are portrayed through her facial expressions and the translation of her song. This scene was selected as it is one of the first arias of the opera and forms an important introduction to the characters in the narrative.

FEAR, WORRY AND LONELINESS



Figure 6.2 Act 1 Scene 1 - William Kentridge version 2001

01.60

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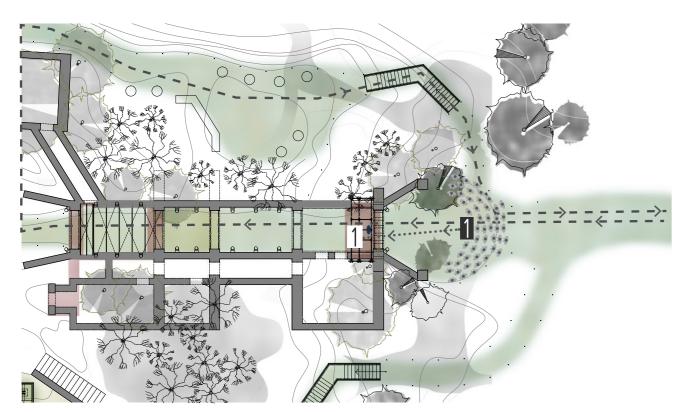


Figure 7.83 Audience-actor relationship section

SHITE ROOM SOME WORK TOUTHER STANDAY, ATTACHED TO SCHITTLING STANDAY, WIN A HOSE-ON GUP SHITM

Figure 7.82 Plan of Act 2 Scene 3 location

KEA

Selected Scenes





->- Audience movement

···>··· Scene visual link

• Audience 50-60 members

Actors

7. 8.1 SCENE LOCATION

Act 1 Scene 1 is in a rough and rocky landscape outside of the city. As this scene forms part of the initial performance at the fort, the location for the scene is at the entrance to the fort as seen in Figure 7.82. Selected for its large dominating scale, the architecture becomes a representation of the queen and her underlying power and strength. On the plan, the actress is located at the white [1] and the audience at the black [1]. In the graphic, the symbol for the audience is a grey bird's-eye figure. The queen is placed above the audience, and her face is projected onto a large screen behind her, accentuating her power. Figure 7.83 depicts this section of the scene and the relationship between the audience and the actress. The illustration in Figure 4.5, as discussed in Chapter 4.8, shows the type of audience-actor relationship, emphasising the actor's power in this view.





Figure 4.5 Actor above audience

7. 8.2 LOCATION CHARACTER

Selected for its dominating and striking architecture, the scale of the entrance structure dominates one's view. The decorative archway forms an interesting juxtaposition between the natural landscape and the man-made fort. The boldness and majesty of the entranceway is exemplified in Figure 7.84. The entrance to the fort forms an important part of the performance, as it is the first time that the audience will be exposed to the existing structure. Figure 7.85 shows the sunset at the entrance to the fort. This graphic is a realistic depiction of what the audience will see as they approach the site, as only the lighting for the scene will reveal the structure of the site. Figure 7.86 shows the approach to the site and the pathway which the audience will take to reach the fort. The gravel road poses a challenge to the audience circulation, however this is dealt with in the technical development. The detail at the site forms an intricate part in the reveal of the depth of the narrative. The archway detailing, Figure 7.87, shows the intricacy of the architectural design. The strength of the architecture is used to accentuate the power of the queen, the imperfections in the structure a reflection of her weaknesses and downfalls. The structure and the boldness of its built-up existing areas become a metaphor of power and authority of the queen.



Figure 7.85 Sunset at the Fort



Figure 7.84 Main entrance arch



Figure 7.86 Approach to entrance



Figure 7.87 Detail of arch way

0162



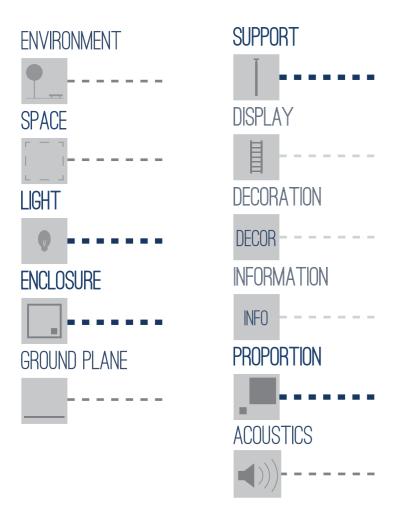


Figure 7.88 Interior Architecture Principles

7. 8.3 A LINK TO INTERIOR ARCHITECTURE

Act 1 Scene 1 has a focus on the proportion of the architecture and the scale of the actress against the structure. The interior architecture elements, shown in Figure 7.88 and discussed in Chapter 4.8, which are focal points in the creation of this scene include proportion and scale, lighting, support, and enclosure as main elements, and environment, space, and the ground plane as the secondary elements. These design details will be later explored in the design development, Chapter 7.8.5 of this scene. The combination of the proportion of the architecture and the actress will help to manipulate the thematic development of her underlying power and her façade of weakness and loneliness. The lighting in this scene will focus on revealing the architecture to the audience, enticing them into space and exposing the character and drama of the existing ruin. The ground plane plays an important part in the success of the scene and the manipulation of the audience. Noise creation at the location will enhance the drama of the performance. This design consideration will be further developed in the technical development in Part three of this Chapter.

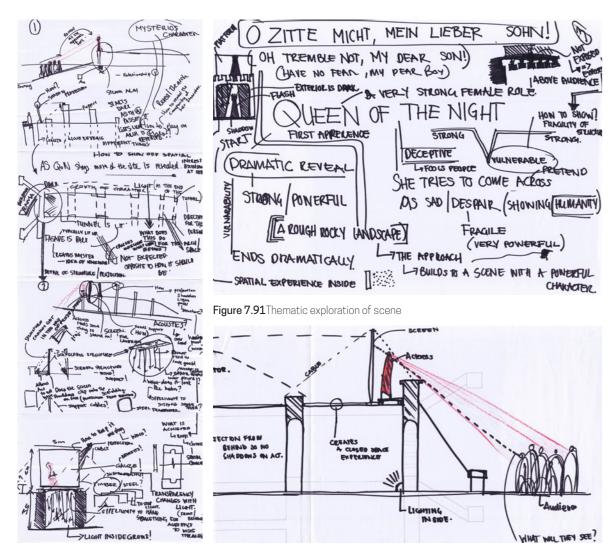
7. 8.4 INITIAL CONCEPTUAL MOOD BOARD

The initial concept board, Figure 7.89, brings together all the necessary elements for the scene. The black and white graphic of the fort entrance depicts the location of where the actress will stand during her performance, and the view suggests that the audience is below her. The location of the scene is shown in the white plan overlay. The images focus on the scene at the entrance to the fort. A character image of the queen - as developed in Chapter 6.3 - is used to represent the actors positioning in the scene. Careful consideration of her costume is needed, as the lighting for the scene is a challenge. This will be further developed in technical considerations The imagery of William Kentridge's version of The Magic Flute is then placed over the scene graphic, showing the design connection between his graphic development and the concept for the scene. The collage brings the necessary aspects of the scenes together to create an emotive and expressional mood board for the design initiation.



Figure 7.89 Initial mood board collage





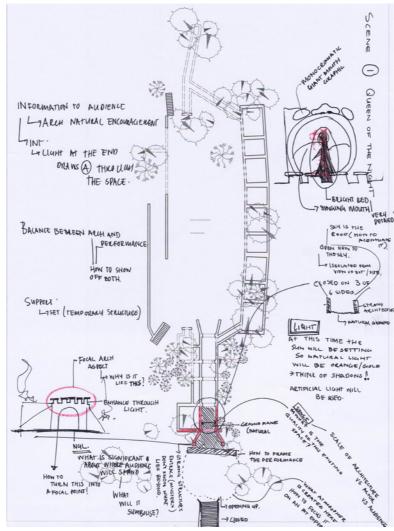


Figure 7.90 Initial exploration of site and scene

Figure 7.92 Sectional exploration of scene

Figure 7.93 Related site, plan exploration

7. 8.5 DESIGN DEVELOPMENT

The following page of conceptual drawings Figure 7.90 to Figure 7.94, represent the initial ideas for the development of the scene. The collage-like layering of information shows the progression of thoughts as the scene and initial design is unpacked. The journey starts with the original narrative of The Magic Flute Act 1 Scene 1, and the discovery of the thematic qualities of the performance. These qualities include the concealed power of the queen and her fear, worry, and loneliness. The site is then selected as it acts as a metaphor for the gueen - the strength of the gueen re-iterated by the scale of the architecture. Focal aspects of the scene location are identified and further considered. The castle-like silhouette of the entrance and the relationship between the gueen and her 'castle' - the minimal damage to this portion of the structure a metaphor for the queen's power. Along with the design, considerations, include an understanding of the materiality needed to create the scene. The emphasis on recyclability and reusability as the main design challenge is identified. Together with the thematic development of the scene's plot and the existing site character, a three-dimensional design of the site, narrative and audience experience can be created. The focus of Act 1 Scene 1 is to reveal the structure and use light as a drawing tool to enhance and expose the existing character of the site. The manipulation of the proportion of architecture and the actress also forms an important part of the way the audience perceives the performance.

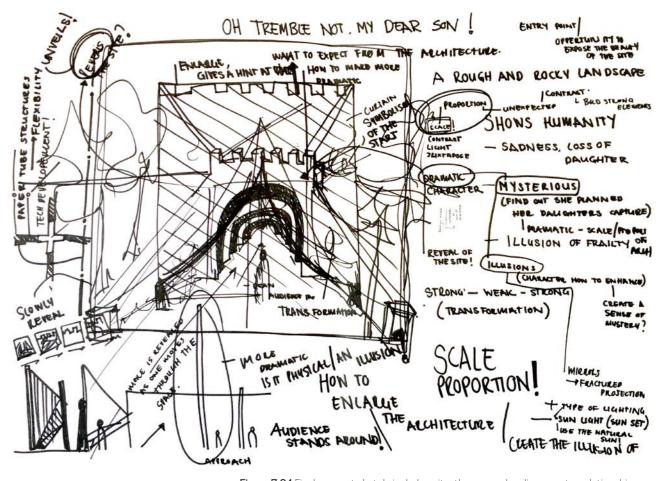


Figure 7.94 Final concept sketch, includes site, themes and audience-actor relationships



7.8.6 MODELS AS A TOOL FOR DESIGN **EXPLORATION**

The following images of the models have been used as a means to explore the design of the scene. The final outcome of the design development has been informed by iterating the models, and assessing the feedback of the scene design. Figure 7.95 shows the initial model before intervention. Figure 7.96 to Figure 7.98 explore the use of light to enhance the scene. Figure 7.99 to Figure 7.104 depicts the audience view and positioning during the scene. Figure 7.105 shows the scene with lighting in the dark.



Figure 7.95 Initial model post additions



Figure 7.96 Light exploration and project of Queen



Figure 7.97 Lighting of existing structure



Figure 7.98 Lighting from behind scene



Figure 7.99 Audience view



Figure 7.100 Obstructed audience view

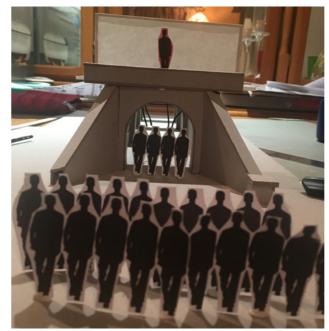


Figure 7.101 Positioning of audience

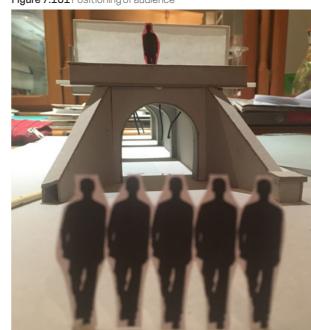


Figure 7.102 Audience view range



Figure 7.103 Finalised audience position



Figure 7.104 Audience locational view



Figure 7.105 Dark view of model



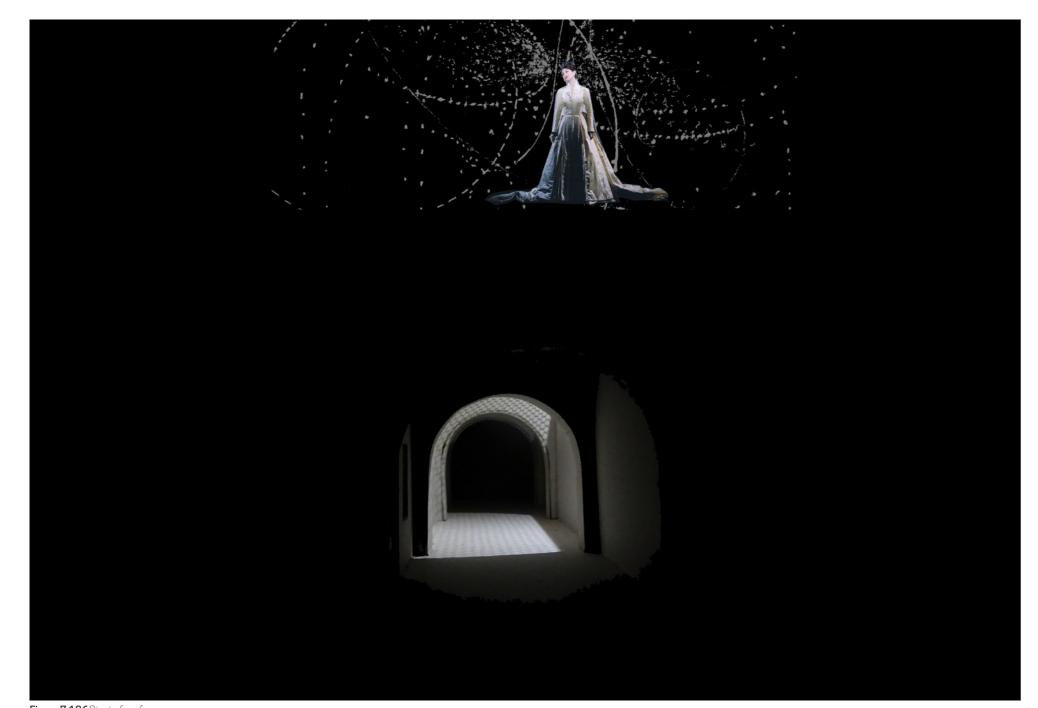


Figure 7.106 Start of performance

7. 8.7 DESIGN OUTCOME

As mentioned above, the focus of Act 1 Scene 1 is to introduce the audience to the site and to the performance, with an emphasis on bringing the two together. Figure 7.106 gives a graphic representation of what the audience will see at the start of the performance. As the audience approaches the site the sun will be setting, casting deep and dark shadows over the

fort. The audience will only visually explore the entrance to the site at this point, creating anticipation of what will be revealed in the rest of the site. The tunnel, which is more than 20m long, will draw the audience in towards the scene. Lighting at the end of the tunnel will create a scene of excitement as the light grows to reveal more of the site as the scene progresses. Figure 7.107 and Figure 7.108 show the growing light during the performance and the way in which more of the architecture

is revealed as the queen's character and motives are revealed. Figure 7.109 - the final representation of the scene - shows how the queen and the site have been fully revealed and the audience now wait in anticipation to move through site and explore what the site has to offer. The metaphorical connection between the queen and the site takes the audience on a visual exploration of the reveal of their characters and the drama of their personas.

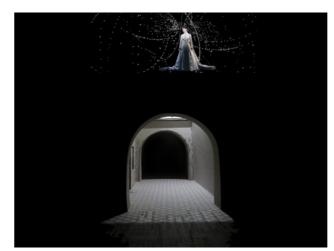


Figure 7.107 Lighting progression of scene



Figure 7.108 Growing light in tunnel



Figure 7.109 Final development of scene



7.8.8 LIGHTING EXPLORATION

The lighting in this scene plays an important part in the reveal of the gueen and the exposure of the character of the fort. The following photographs taken of the model with added lighting, show the possibility of lighting different sections throughout



Figure 7.110 Sequence 1 of light in tunnel



Figure 7.113 Sequence 4 of light in tunnel

the tunnel entrance. Figure 7.110 - the initial graphic shows the light at the end of the tunnel, used to encourage the audience to move through the space. Figure 7.111 to Figure 7.113 show how more of the site can be revealed using the light. Figure 7.114 gives an idea of the effect that different light colours can have on the creation of the atmosphere, and Figure 7.115

depicts the way in which the rest of the fort entrance can be revealed using light. The lighting for Act 1 Scene 1 is further developed in technical considerations

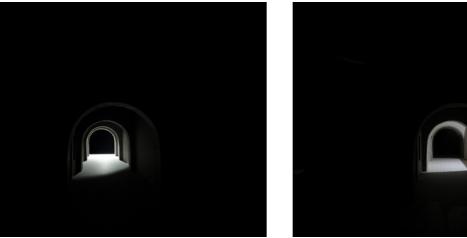


Figure 7.111 Sequence 2 of light in tunnel



Figure 7.114 Lighting on projection screen



Figure 7.112 Sequence 3 of light in tunnel

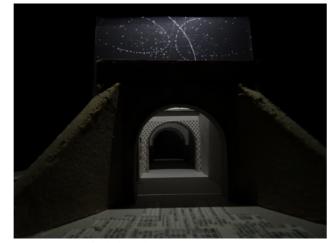


Figure 7.115 Further light exploration

7. 8.9 INITIAL TECHNICAL EXPLORATION

The following figures - Figure 7.116 to Figure 7.118 - explore the initial attempt at technical development. The focus is placed on the lighting, projection, and audience views at the site. Figure 7.116 gives a sectional view as to where the audience and actress will stand during the performance. The angle of view range forms an important part of the success of this scene. Figure 7.117 gives a sketch perspective of the lighting consideration of the tunnel - the yellow representing the need for lighting to expose the existing character of the site. Projection in Act 1 Scene 1 is important to re-iterate the proportion of the architecture against the proportion of the queen. Back projection - represented in Figure 7.118 - onto a scrim gauze material will allow for the enlarging of the queen's face and mouth onto the screen.

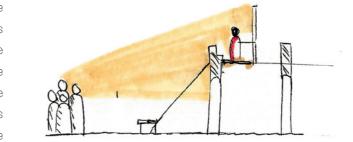


Figure 7.116 Sectional view, audience to actor relationship



Figure 7.117 Perspective of tunnel entrance



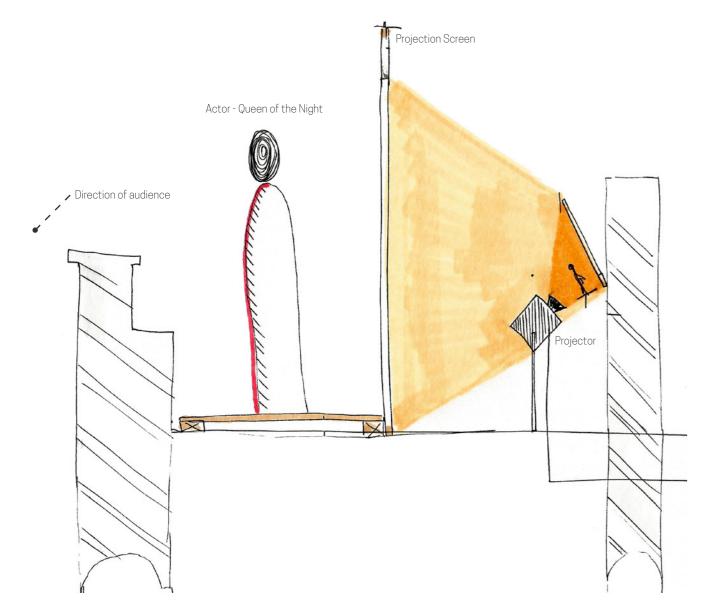


Figure 7.118 Back projection onto gauze scrim 0174

7.8.10 TECHNICAL CONSIDERATIONS

The initial scene of the performance, "O zittre nicht, mein Lieber Sohn" (Oh, tremble not, my dear son) as discussed in Chapter 7.8 focuses on the portrayal of the Queen of the Night and her initial reveal to the audience. She is a powerful character and the scene should reflect that. In the initial technical exploration, Chapter 7.8.9, a focus is identified in the use of lighting, projection, and the audience's view to enhance the actor's character. The final technical exploration, Figure 7.119 to Figure 7.127 takes a look at the lighting in Act 1 Scene 1 is used to reveal and enhance the beauty of the site. LED neon-flexible lighting is placed on each arch in the tunnel, enhancing the form of the fort. The lighting sequence for the scene, as explained in Figure 7.119, shows at which points in the aria the lighting is used. The experiential approach is for the light intensity to grow as the scene progresses, enticing the audience to explore beyond the tunnel entrance. Figure 7.120 shows the plan of Scene 1, showing the specific areas in which the lights are placed, as well as a section, Figure 7.121 on page 17+, showing the angle and illumination of the lights. The LED-B06 RGB 3W x 54 LED PAR light, Figure 7.122, are used as spotlights to illuminate the walls of the fort and reveal its character.

As one moves through the tunnel, the light grows and the fort's character is exposed. The first room is lit with LED rope lights along the base of the wall. This only reveals a small amount of

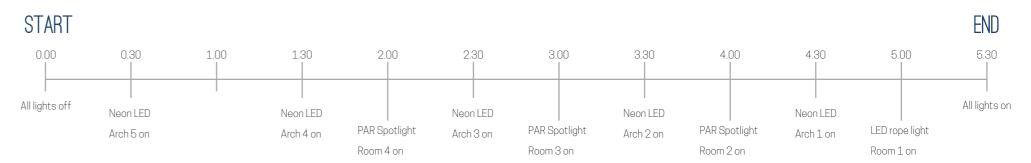


Figure 7.119 Lighting sequence

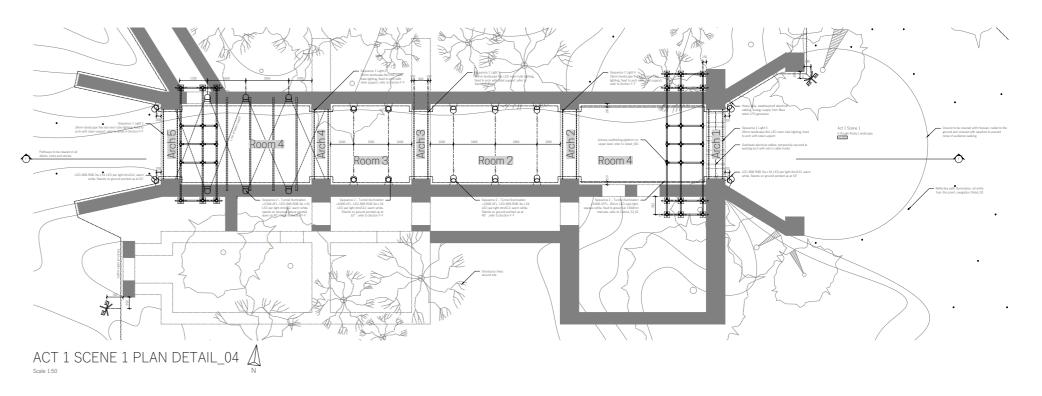
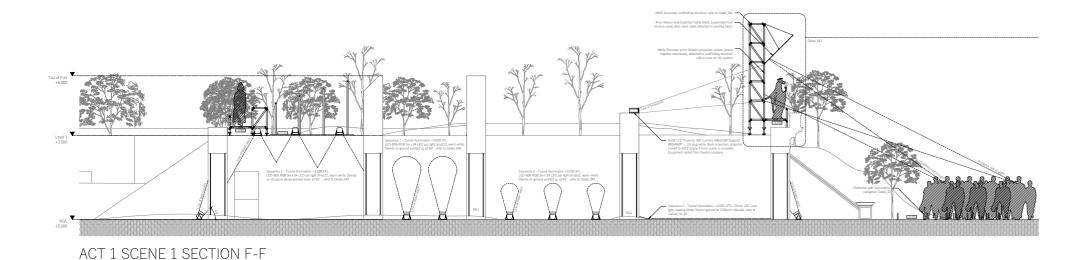
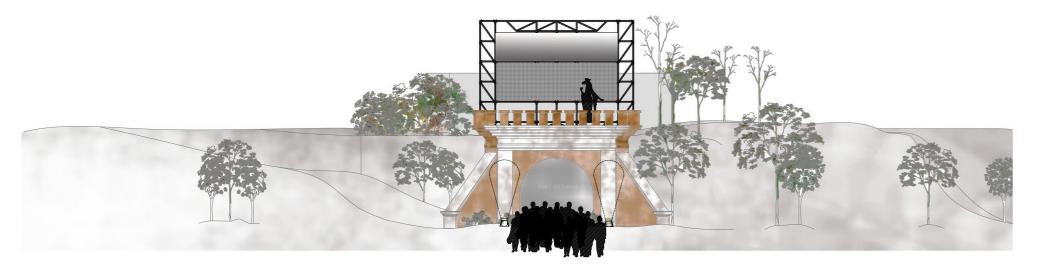


Figure 7.120 Act 1 Scene 1 plan

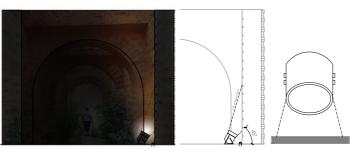






ACT 1 SCENE 1 ENTRANCE ELEVATION

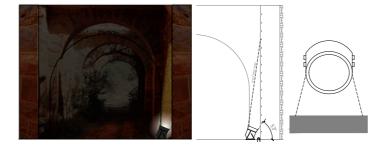
Figure 7.121 Lighting section and elevation



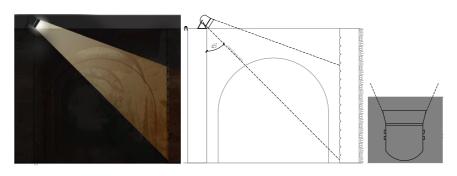
20mm LED rope light, opeque white, fixed to ground at 1500mm interval, secured using a U pin

DETAIL_042 LED PAR LIGHT 45°

CALLOUT_S1_01



DETAIL_043 LED PAR LIGHT 53°



DETAIL_044 LED PAR LIGHT 45° DOWN

Figure 7.122 Lighting details

light beam is positioned up the wall at a 45° angle, shown in Figure 7.122. This reveals more of the structure for the audience. In the thirdroom, a 53° angle PAR light exposes more of the structure. Finally, in room four, the PAR light is placed on the top of the wall, with the beam flooding the entire wall with light. In this room, all the character and detail of the fort's architecture is revealed.

information of the state of the site. In the second room, the PAR

The scaffolding structure is perched above the entrance tunnel, giving the actress a place to stand. She is placed on the raised platform so that the audience members below can see her clearly. The height of the platform is worked out by looking at the typical eyelevel of an average human (approximately 1550mm) and projecting lines up towards the fort entrance. Behind the actor is a Roscotex scrim Gobelin projection screen, Figure 7.124, with prerecorded images of her face back projected onto it. The images of her face grow as the scene develops, until only her mouth is seen on the screen. The Projector, Figure 7.125, is positioned behind the scaffolding and screen to ensure that the actor's shadow is not cast onto the screen. Figure 7.123 shows technical development of the scaffolding, the front section of the scaffolding structure, similar to that used for the disabled viewing platform. The reinforced ledger ensures that the desired span between the two existing walls can be achieved. The acoustic refraction structure is visible in the section. The 4mm mason board is used to reflect the actors voice towards the audience below, ensuring no sound is lost during her performance.



Light duty scaffolding 120kg/m² Area: 5.75m² Occupancy: 8 people (av.80kg)

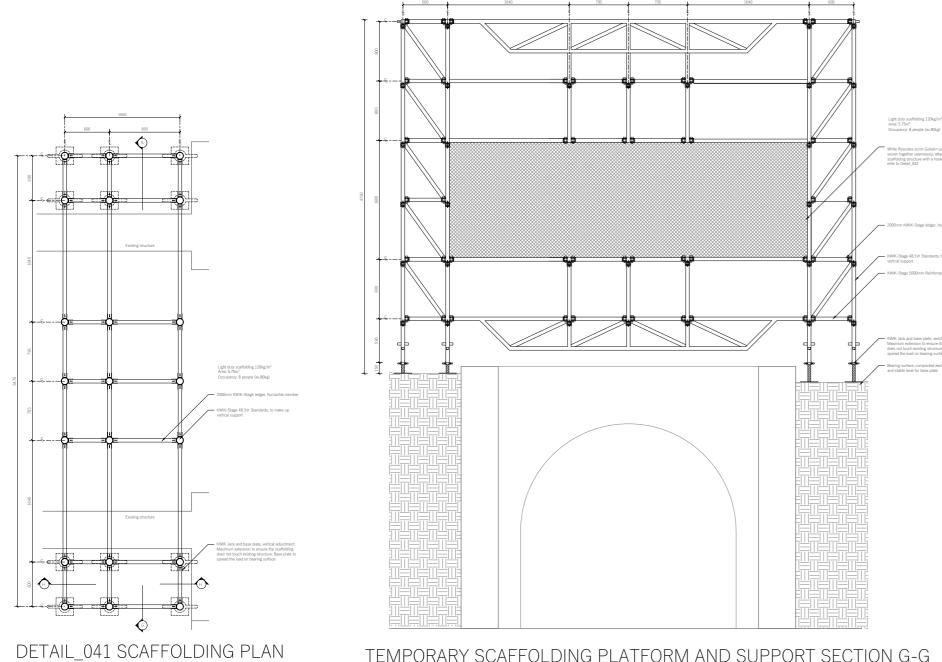
KWIK temporary scaffolding structure, hired for the — duration of the performance 4mm Mason board painted matte black, suspended from structure using 3mm steel cable, attached to scaffolding

together seamlessly, attached to scaffolding structure with a hook-on clip system, refer to Detail_042

KWIK-Stage 48.3 Ø Standards, to make up vertical -2000mm KWIK-Stage ledger, horizontal member -

400x60x2000mm KWIK hook-on boards, steel chequer plate with non-slip finish. Placed consecutively to for standing platform. Accessed via 800mm KWIK hook-on ladder

Maximum extension to ensure the scaffolding does not touch existing structure. Base plate to spread the load



TEMPORARY SCAFFOLDING PLATFORM AND SUPPORT SECTION G-G

SCAFFOLDING PLATFORM CONSTRUCTION SECTION H-H



Figure 7.126 Spot Light

 White Roscotex scrim Gobelin projection screer woven together seamlessly — 48 Ø 2000mm KWIK-Stage ledger, horizontal membe - Secure tie, ensures hook does not come loose

SCRIM CLIP DETAIL_042

Figure 7.123 Scaffolding detail 0178

0179





Queen of the night first reveal



Light illuminates the existing tunnel



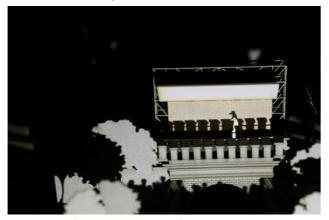
Light used to enhance the drama



Projection of Kentridges Magic Flute to enhnace her performance



Architecture is more exposed



Combination of structure and Queen of the Night



Light suggests the character of the structure



Scene ends with reveal of the structure



Audience view of the Queen of the Night

Figure 6.20 "Nun stolzer Jungling, nur hierher" (Proud youth, come this way)

7.9 ACT 1 SCENE 3 - A GROVE IN FRONT OF THE TEMPLE

In Act 1 Scene 3 – as discussed in Chapter 6.2.3 – Pamina and Tamino meet for the first time. Sarastro explains in "Nun stolzer Jungling, nur hierher" (Proud youth, come this way) that the two young and in-love children will need to prove their worth and go on a path of enlightenment if they wish to be together. The scene was selected as it is the final scene of Act 1 and is a key point in the development of the thematic notion of enlightenment and the path to greatness. A strong sense of light versus dark is evident in this scene, and the design development later explains the significance of this. The scene takes place outside the temples. The three entrances read, 'Wisdom', 'Reason' and 'Nature'.

TRIAL, KINDNESS AND UNITY



Figure 6.12 Act 1 Scene 3 - Traditional version 1991



Figure 6.13 Act 1 Scene 3 - William Kentridge version 2001



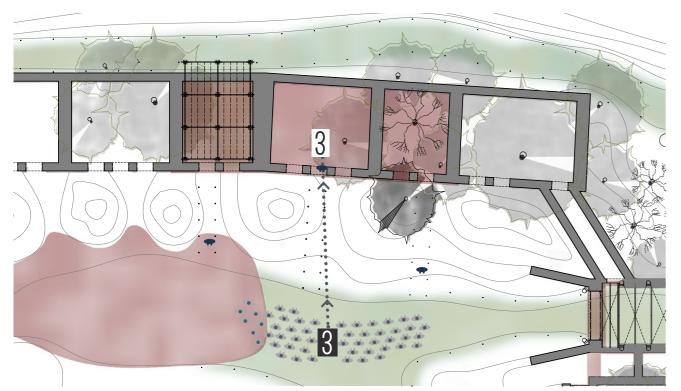


Figure 7.128 Plan of Act 1 Scene 3 location

KEY

Selected Scenes



Audience pathway



···>··· Scene visual link

• Audience 50-60 members

Actor

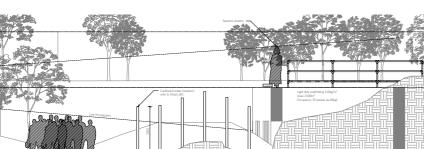


Figure 7.129 Sectional view of Act 1 Scene 3

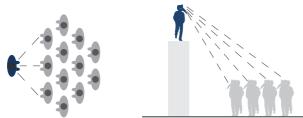


Figure 4.5 Actor above audience

7. 9.1 SCENE LOCATION

Act 1 Scene 3 takes place in front of the temple. In order to achieve the effect of the temple-like original environment, this scene takes place above and in front of the original ruin rooms at the site. In Figure 7.128, the white [3] shows the actors positioning and the black [3] the audience's location. The audience is required to stay within the prescribed walkable area as to not encounter any danger from the damage of the ruin. The members of the audience are represented by the grey bird's-eye view figures. The audience will be both on the same playing level as the actors, and viewing the main actor Sarastro from below, giving him a sense of authority. Figure 7.129 shows a section of the scene, and the relationship between where the actors and audience are located. As discussed in Chapter 4.8, Figure 4.5 shows the relationship between the audience and actor, where the actor is placed above the public, giving the actor a sense of power and authority. Figure 4.4 shows an illustration of the actor and audience on the same playing level, denoting a sense of equality and relatability. In this scene the main father-like character - Sarastro - is placed above the audience and the two younger children - Tamino and Pamina - at the same level of the audiences showing their immaturity.

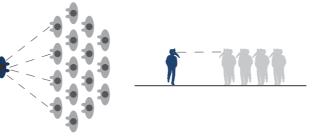


Figure 4.4 Audience facing actor

7. 9.2 LOCATION CHARACTER

Selected for its similarity in architectural structure to the temple scene of the original Magic Flute, the site plays an important role in this scene. The height differences and structure allow the actors to be placed on both levels to reiterate their psychological character. As seen in Figure 7.130, the built-up nature of the rooms lends themselves to the needed structure for this scene. The three selected areas, as seen on the plan Figure 7.131, represent each of the three temples, Reason on the left, Nature on the Right and Wisdom in the middle. Figure 7.131 gives an overall view of the existing rooms at the site and the amount of natural erosion and degradation of the structure. Similarly, Figure 7.132 depicts the view from the upper level of the fort, showing the open nature of the rooms. Inside the rooms, trees and plants have started to grow. In this scene, these elements add to the creation and relatability of the thematic development of the narrative to the site. The trees will also be used to suspend acoustic boarding to ensure the sound is controlled. This will be further developed in Part three. The photograph in Figure 7.133, shows the view that the audience will see when watching the progression of the scene.



Figure 7.131 Overview of the rooms where the scene takes place



Figure 7.130 View towards the playing area of the scene



Figure 7.132 View from upper level, looking at scene location



Figure 7.133 Audience view of scene



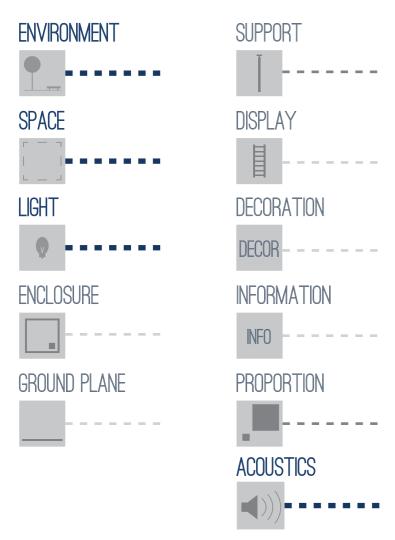


Figure 7.134 Interior Architecture Principles

7. 9.3 A LINK TO INTERIOR ARCHITECTURE

Act 1 Scene 3 focuses on the creation of the environment in which the performance takes place. The interior architecture elements, Figure 7.134, selected for the scene are: environment, space, and lighting as the main elements, and support and proportion as the secondary elements. These design details will be explored later in the design development, of this scene. The relationship between the existing site fabric and set design is an important aspect of the design. A metaphorical abstraction assists in the creation of the environment which in turn responds to the site and the set design for the scene. Lighting and projection are used to enhance the thematic development of the narrative and give and add to the visual information by laying existing, new and previous works onto the same playing area. The support structures for this scene address the acoustics and staging for the actor. These will be further developed in Part three. technical considerations. Proportion is manipulated in this scene through projections onto the acoustic panelling, which serves a dual purpose.

7. 9.4 INITIAL CONCEPTUAL MOOD BOARD

The initial concept board, Figure 7.135, brings together all the selected elements of the scene. The black and white photographic image shows the physical location of the site, representing the audience view of the performance. The white plan gives a graphic representation of where the site is located in the fort. The bird illustration and yellow shinning graphic are taken from William Kentridges version of the magic flute, ensuring that this scene utilises the imagery that he has already created. The dark figure represents Sarastro - his character development can be seen in Chapter 6.3. The collage of imagery brings together the site, actors and audience, aligning the scene with the site-specific nature of this project. The existing structure will be illuminated to ensure focus is placed on its character as well as the additional scene design.



Figure 7.135 Initial mood board collage



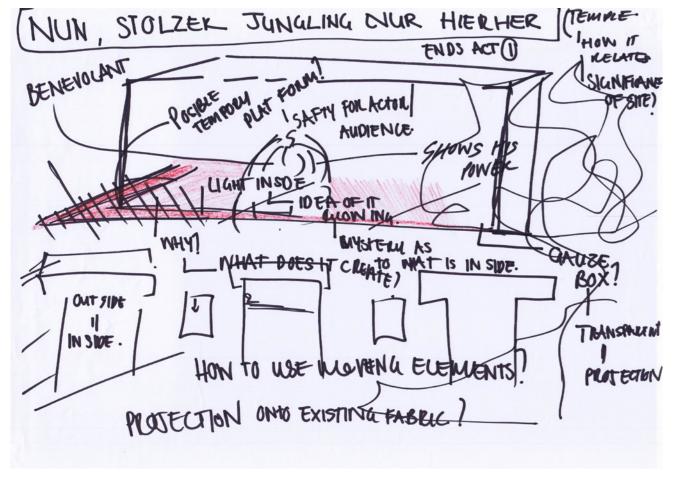


Figure 7.136 Interior Architecture Principles

7. 9.5 DESIGN DEVELOPMENT

The following two concept development sketches, Figure 7.136 and Figure 7.137 on the following page, shows the initial design exploration of the scene. Both graphics focus on the use of the existing site as the starting point for the scene progression. The themes identified in The Magic Flute narrative are then layered onto the existing site, growing from the information already provided. An example of this is the choice of this location to host Act 1 Scene 3. The similarities in structural nature of the site and the temple in the narrative are prominent. This ties the performance to the existing site and gives it an opportunity to enhance the performance with its unique character. The scene focuses strongly on the path towards enlightenment and the fact that light will always win. These themes are then developed and enhanced using lighting and projection. Materiality play an important role in this scene - the materials used to highlight the paths towards the temple carry metaphorical meaning, giving the performance more depth. The cardboard tubes are used to represent 'Reason', the man-made structure enhancing the metaphor. Natural sticks are uses to symbolise the 'Nature' temple, the organic form placing emphasis on nature. 'Wisdom' is represented by a combination of both cardboard - man-made - and sticks - nature-made. The refined timber columns represent both 'Reason', 'Nature', and together the two show the maturity and balance of 'Wisdom'.

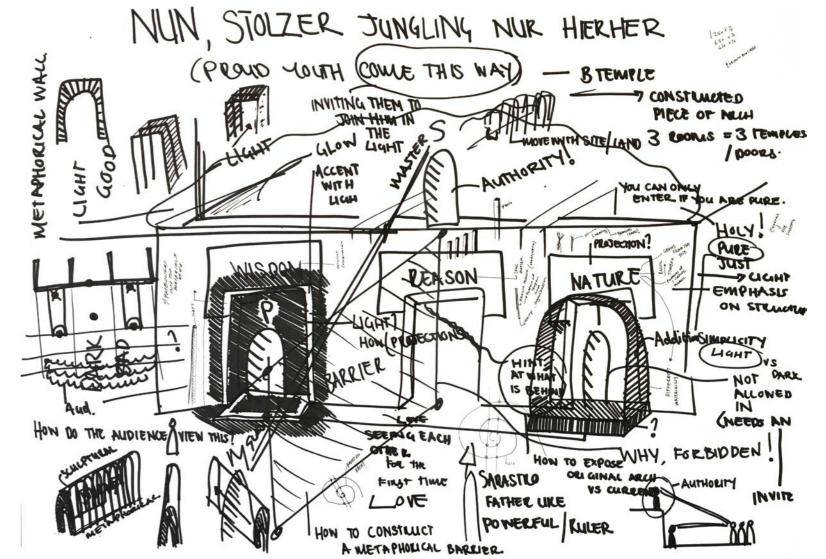


Figure 7.137 Interior Architecture Principles





Figure 7.138 Paper walkway

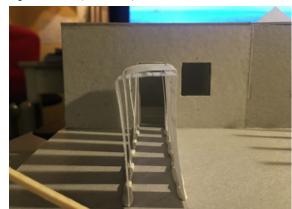


Figure 7.139 Paper exploration



Figure 7.140 Walkway paper idea



Figure 7.141 Above view of paper

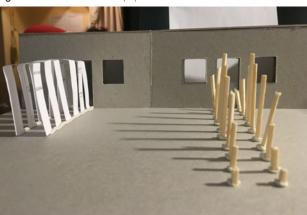


Figure 7.142 Stick exploration



7.9.6 MODELS AS A TOOL FOR DESIGN **EXPLORATION**

The following images, Figure 7.138 to Figure 7.148, show the use of the model as a means of design exploration. The images focus on the manipulation of the pathways and how the materials can be changed to create different effects. Various materials are explored: Figure 7.139 to Figure 7.141 show the use of paper and Figure 7.142 to Figure 7.147 use wooden sticks. Figure 7.148 shows a darkened view of the model after final additions. The model iterations form part of the design development for each scene.



Figure 7.143 Side view

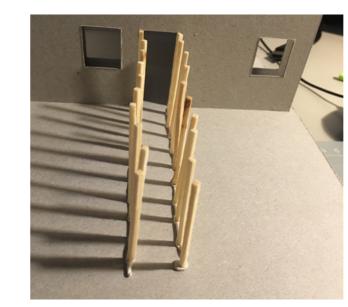


Figure 7.144 Same height

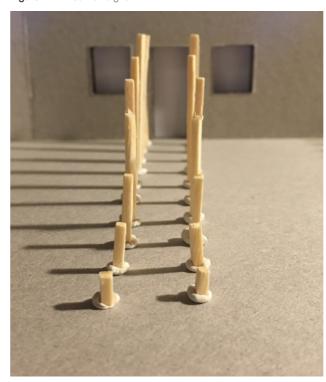


Figure 7.147 Height variation

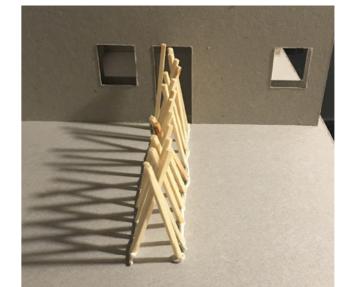


Figure 7.145 Cross over

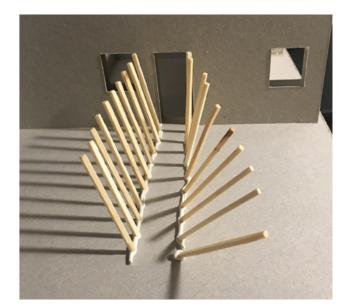


Figure 7.146 Open effect



Figure 7.148 Darkness view



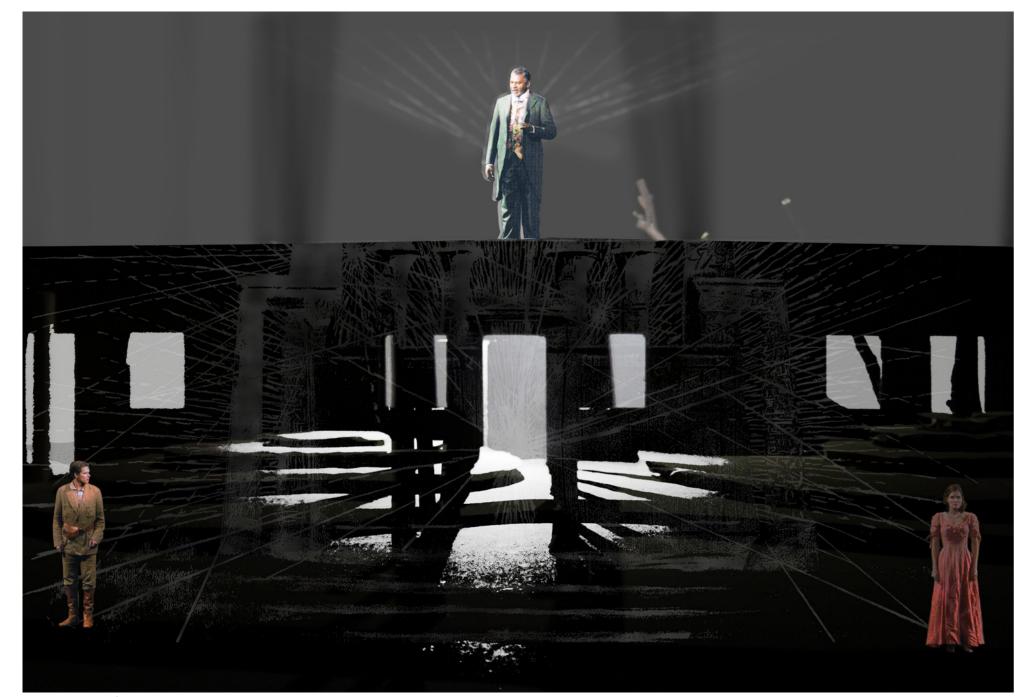


Figure 7.149 Start of Act 1 scene 3

7. 9.7 DESIGN OUTCOME

As mentioned above the focus of this scene is on the creation of the environment, layering of visual detail, and the metaphorical meaning in the selection of materials. Lighting and projection also play an important part in the design of the scene. Figure 7.149, shows the start of the scene, where the focus is on the actors performing. The lighting at the start of the scene focuses on Sarastro, who stands above the existing structure. He is the most powerful character and the light enhances his character's enlightened state. Figure 7.150 shows the final moments of the scene. The playing area is flooded with light and the couple head toward the temple to begin their journey to enlightenment. Figure 7.151 to Figure 153 show the various use of materials. These materials carry the metaphors of the theme through the scene. The materiality, acoustic and lighting design will be further discussed in technical considertaion.



Figure 7.151 Cardboard tubes representing reason

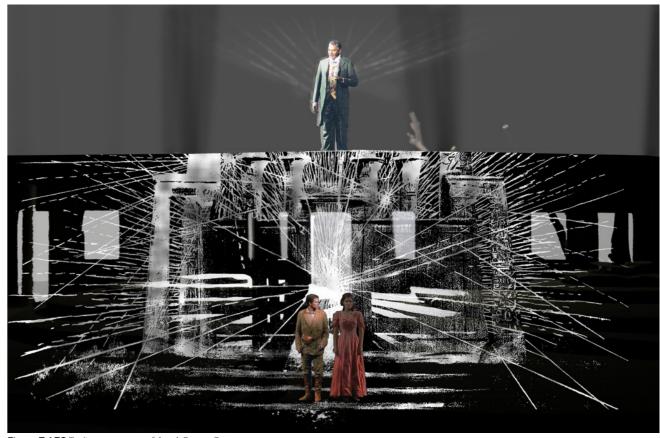


Figure 7.150 Ending moments of Act 1 Scene 3



Figure 7.152 Timber poles representing wisdom



Figure 7.153 Sticks representing nature



7. 9.8 LIGHTING EXPLORATION

The following images, Figure 7.154 to Figure 7.156 show the manipulation of lighting on the models of the scene. Lighting,

as mentioned, is important in the metaphorical development of this scene. The light becomes a symbol of all things good and the power which comes with following the light.







Figure 7.155 Focal light on interior of room



Figure 7.156 Light Highlighting structure

7.9.9 INITIAL TECHNICAL EXPLORATION

The following figures, Figure 7.157 to Figure 7.162, explore the initial attempt at technical development. Focus is placed on the use of lighting and projection.

Figure 7.158, as well as the choice of materials, Figure 7.159 to Figure 7.161. The technical design for this scene is further explained.

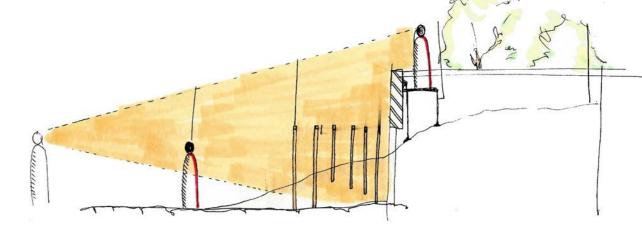


Figure 7.157 Audience view towards performance

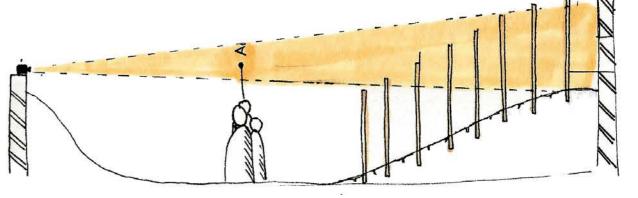
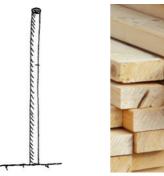


Figure 7.158 Projection layering for scene





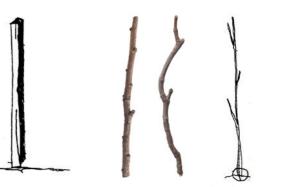


Figure 7.161 Natural sticks

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Figure 7.159 Cardboard tubes



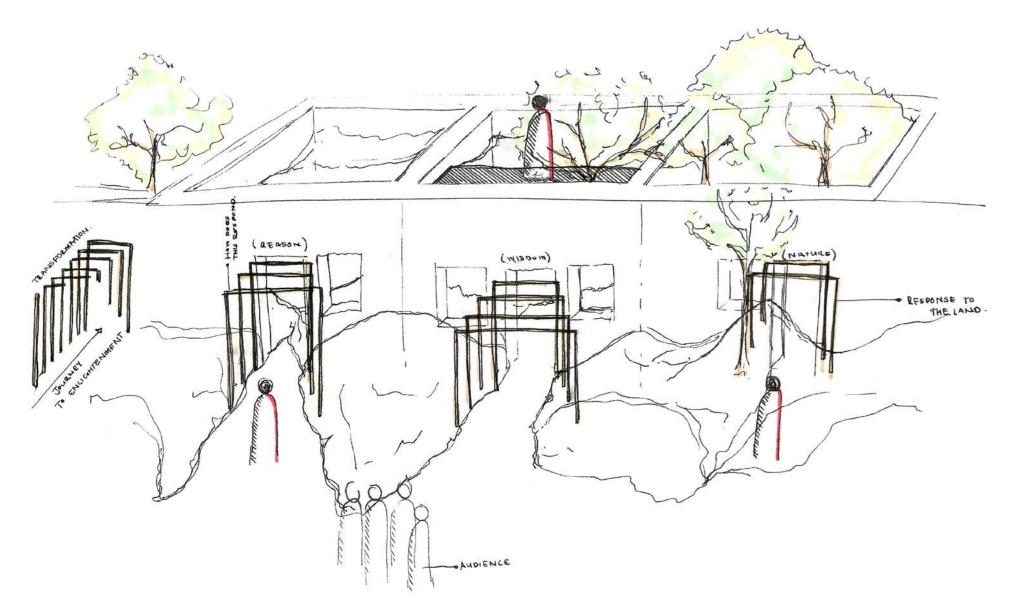


Figure 7.162 Scene overview

7.9.10 TECHNICAL CONSIDERATIONS

In "Nun stolzer Jungling, nur hierher" (Proud youth, come this way), as discussed in 7.9, the theme of good versus evil is prominent. Lighting and projectionare important aspects of achieving this drama of dark versus light. Acoustic considerations and enhancements as well as the exploration of materials and symbolic means are another focus in this scene's technical development, Figure 7.163 to Figure 7.171. As mentioned in the lighting exploration, Chapter 7.9.8, the illumination of the existing fort's rooms is used to create a glowing effect. The colour yellow is used for its psychological properties, mentioned in Chapter 7.5.9.2 . Most of the light is focused on the interior of these spaces, to create the illusion of a temple (symbolizing good and light). At the start of the scene, the light on the interior is dim and it then grows, controlled by a dimmer controller, Figure 7.163. The LED spotlights, Figure 7.164, have a bright intensity making this effect possible. The cabling for this scene is concealed by the fort structure.

Acoustic panels, which are painted cardboard structures as seen in Figure 7.165, have been suspended between the two sets of trees on either side of the playing area. The use of cardboard allows for the flexibility of bending the material and recyclability in its afterlife. The cardboard sheets are suspended from a steel cable using a hook method. String keeps the cardboard curved and rocks are used as weights to



Figure 7.163 Dimmer Control



Figure 7.164 Spot Light

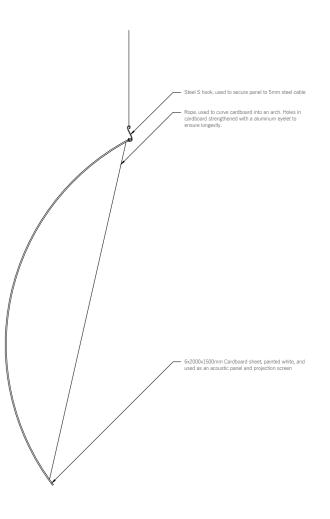
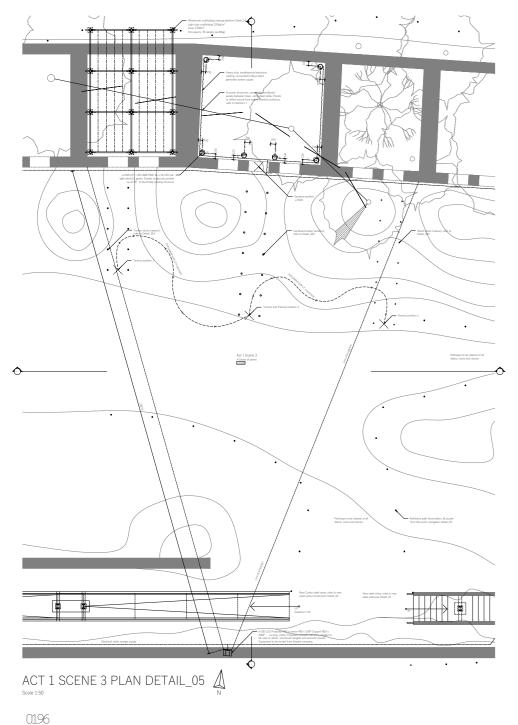


Figure 7.165 Hanging acoustic panel





prevent the panels from swinging in the wind. The acoustic panels capture the actor's sound and reflect it towards the audience, Figure 7.168. The panels, Figure 7.170, also serve a dual purpose as a projection screen. For the projection in this scene, the projector is situated behind the audience, Figure 4.1, William Kentridge's images are projected onto the existing site, acoustic panels, actors and audience to fracture the narrative while the intensity of light grows throughout the scene.

Figure 7.166 - the plan of Act 1 Scene 3 - depicts the simplistic intervention. These timber, cardboard and natural stick walkways are symbolic of the 'Wisdom', 'Reason' and 'Nature' temples in the opera, Figure 7.167. Therefore, the selection of the materials and their symbolism is important. A range of materials were studied and identified; the table below, Figure 7.169, shows the comparison of the three materials and their qualities.

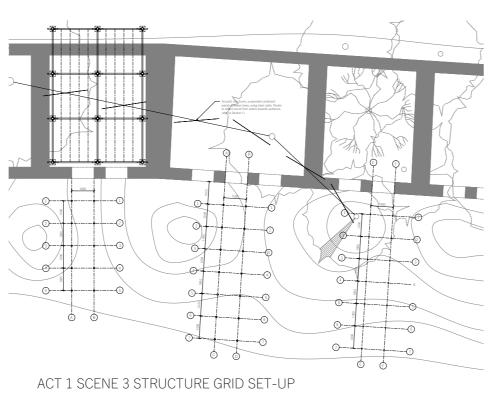


Figure 7.166 Act 1 Scene 3 plans

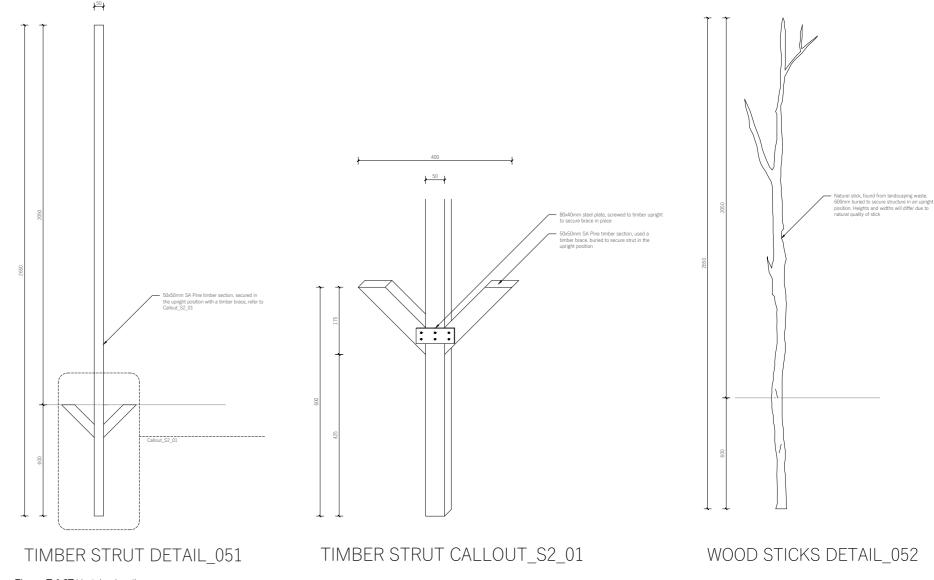
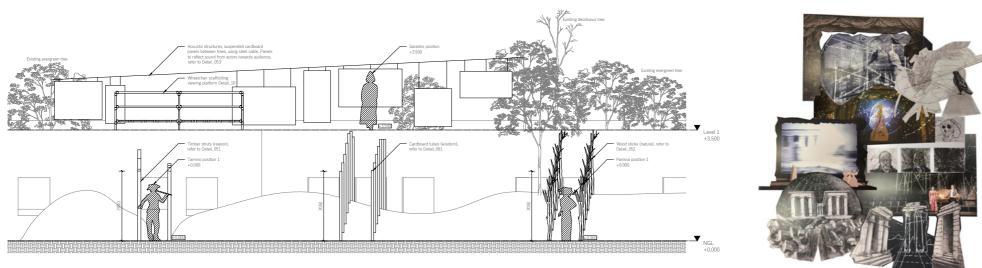


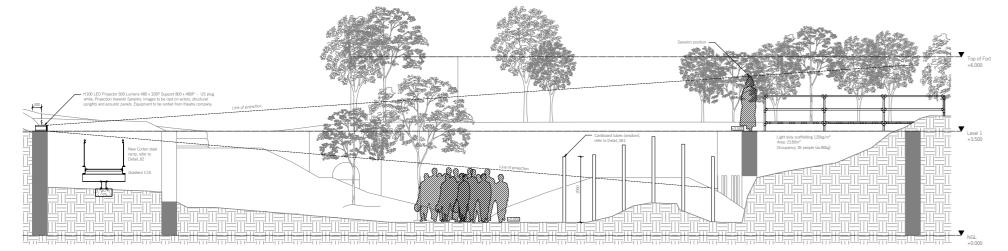
Figure 7.167 Upright details





ACT 1 SCENE 3 SECTION I-I

Figure 4.1 Collage of William Kentridge's Magic Flute production.



ACT 1 SCENE 3 SECTION J-J

Figure 7.168 Act 1 Scene 3 sections

Materials	Qualities			Availability		Cost		Recyclable (Sustainable)		Re-use afterlife			Noise Production		n	Acoustic qualities		Time frame (life)		
	Structural	Semi-structural	Aesthetics	Found	Created	High	Affordable	Cheap	Reuse	Recycle	Recycle	Biodegradable	Reuse (Donate)	High	Moderate	Low	Absorb	Refract	Temporary	Permanent
Cardboard Tubes	х			х	x		х		х				х		х		х		х	
Timber (pine)	х			х			х		х				х		x			x	x	
Landscape waste		x		x			х			х		х			х		х		х	

Figure 7.169 Materials comparison table

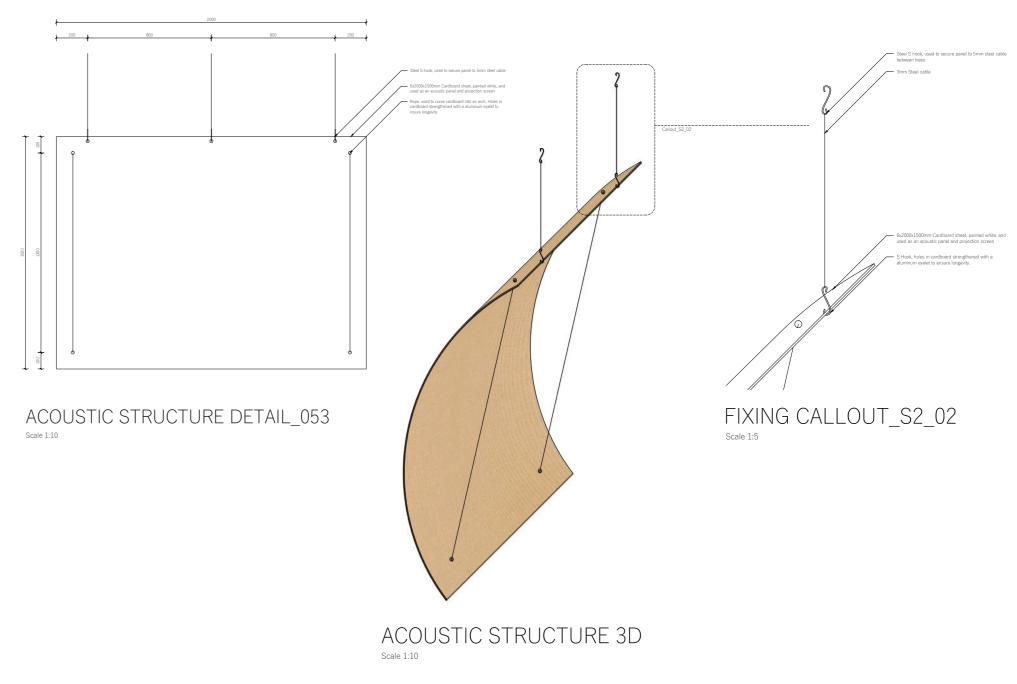


Figure 7.170 Acoustic detail











Exploration of light, cool colours

Reveal of Sarastro













A Point of enlightenment

Light used to enhance the purity of his character

Figure 7.171 Final Model

7.10 ACT 2 SCENE 3 - A GARDEN

The plot of Act 2 Scene 3 is discussed in Chapter 6.2.6 wherein the aria "Der Holle Rache kocht in meinem Herzen" (The revenge of hell rages in my heart) the queen gives Pamina a dagger and orders her to kill Sarastro or she will be disowned. Selected as one of the most well-known arias of the Magic Flute, this piece of music is dramatic, emotion-filled and exposes the power of the soprano's voice. Throughout the piece, the Queen of the Night tells Pamina - her daughter - of the betrayal and disappointment that she feels towards her. The Queen of the Night sings in anger at her dissatisfaction with Pamina. The strong themes of anger, disappointment and betrayal ring through this aria, creating a dramatic and powerful performance.





Figure 6.33 "Der Holle Rache kocht in meinem Herzen" (The revenge of hell rages in my heart)

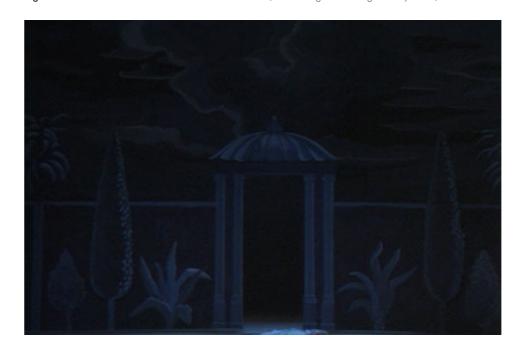




Figure 6.30 Act 2 Scene 3 - Traditional version 1991

Figure 6.31 Act 2 Scene 3 - William Kentridge version 2001



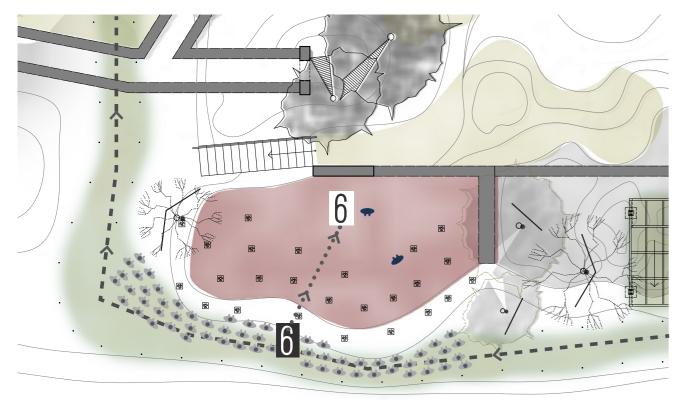


Figure 7.172 Plan of Act 2 Scene 3 location

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Audience pathway

->- Audience movement

···>··· Scene visual link

Audience 50-60 members

Actor

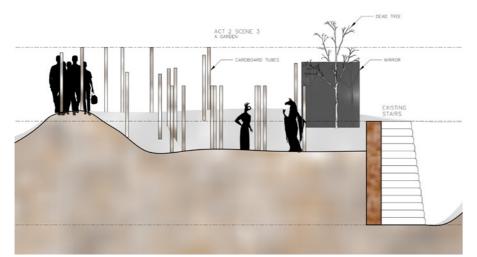


Figure 7.173 Sectional view of Act 2 Scene 3

7.10.1 SCENE LOCATION

Act 2 Scene 3 takes place in the palace gardens. The location of this scene was chosen due to the proximity to the existing trees on the site. Figure 7.172 shows a plan of the scene - the red highlights where the performance will take place, the white [6] shows the actors positioning, and the black [6] shows where the audience will be located. The arrangements of the audience will be in a rounded line around the scene; the audience is denoted by grey bird's-eye view figures. The degradation at the location of the scene enhances the thematic emotion of disappointment that the queen feels; the damage at the site mimicking the destruction of her trust. The actor's stage area is placed lower than the audience, giving the queen a sense of vulnerability, and showing how her daughter's betrayal has weakened her. The levels of audience-actor relationship are seen in the section, Figure 7.173, and in the illustration, Figure 4.8, which was previously discussed in Chapter 4.8.

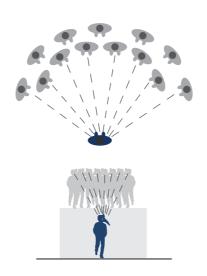


Figure 4.8 Actor below and surrounded by audience

7.10.2 LOCATION CHARACTER

The site was selected for the trees which surround the playing area (stage) as well as the level change between where the audience would stand and where the actress will perform. Figure 7.174 showing the audience's view shows the lone tree which stands at the top of the stairs. As the trees form an important part of this scene, an emphasis in the scene design of the scene will be placed on this tree. The other trees around the scene location are seen in Figure 7.175, where the stage is viewed from the interior of the courtyard, looking towards the playing area. Figure 7.176 also shows the stage from a different perspective, showing the size of the stage and the sloped incline towards where the audience stands. Since the degradation and natural damage at the site play an important part in the link to the thematic developments of The Magic Flute, Figure 7.177 shows the deterioration of the existing stairs which form part of the backdrop of the scene.



Figure 7.175 Fragility and damage to site



Figure 7.174 View of playing area from audience perspective



Figure 7.176 Actor playing area



Figure 7.177 Deterioration of the existing stairs



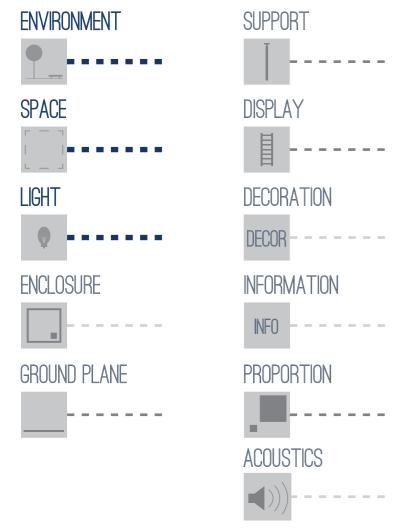


Figure 7.178 Interior Architecture Principles

7.10.3 A LINK TO INTERIOR ARCHITECTURE

Act 2 Scene 3 focuses on the use of lighting, projection and reflection from mirrors to create effects for the scene. The interior architecture elements, as seen in Figure 7.178, which have been focused on for the creation of the scene are: environment, space and light as the main elements, and ground plane, support, display, and proportion as secondary elements. The creation of the garden-like environment and the fragmented visual space has been created through the use and focus on the lighting experience in the scene. These design details will be later explored in the design development, Chapter 7.8.5 of this scene. Lighting forms an important part of the scenography and design creation for this performance. Different lighting effects and methods have been used to create an illusion or environment within the design.

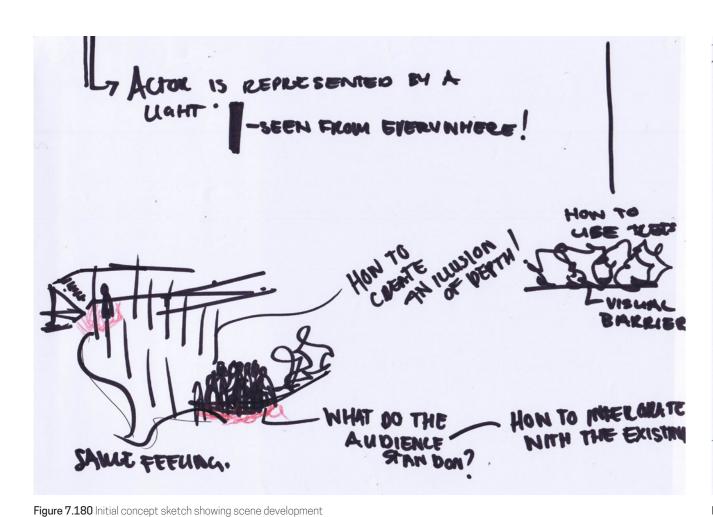
7.10.4 INITIAL CONCEPTUAL MOOD BOARD

The initial concept board, Figure 7.179, brings together all the selected elements of the scene. The site location is shown through the photograph in the background of the sketch, emphasising the trees which are vital to the performance of this scene. The monochromatic plan overlay display the location of the scene at the fort. Character's images developed in Chapter 6.3 are used to represent the actors in the scene: the large dominating figure represents the Queen of the Night as the main character, and the smaller figure represents her daughter, Pamina. The red imagery which is placed over the scene is William Kentridge's graphics from his adaptation of The Magic Flute. Together this collage of imagery gives a basic conceptual idea of the focal aspect of the scene. These notions are then translated into the three-dimensional design.



Figure 7.179 Initial mood board collage





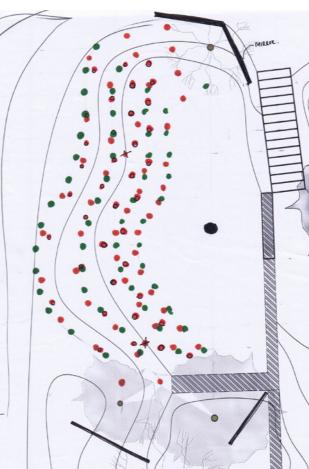


Figure 7.181 Attempt at plan development

7.10.5 DESIGN DEVELOPMENT

The following concept pages, Figure 7.180 to Figure 7.182, shows the initial design exploration of the scene. At first, the site was identified and explored, then a focus was placed on what the existing site has to offer, whether it be the builtup areas, structured walls, or in this case the location of the tree which forms a vital part of the design. The scene and its thematic developments were then broken down into core themes by looking at the character progression through the scene and identifying what needs to be visually conveyed to the audience. This scene focuses a lot on the gueen and her emotions of betrayal towards her daughter Pamina. She is a powerful character, and the use of projection to enlarge the queen exposes her dominance. The scene is then graphically and emotively explored to convey the dramatic feel, and the layering of information shows the design considerations for the scene.

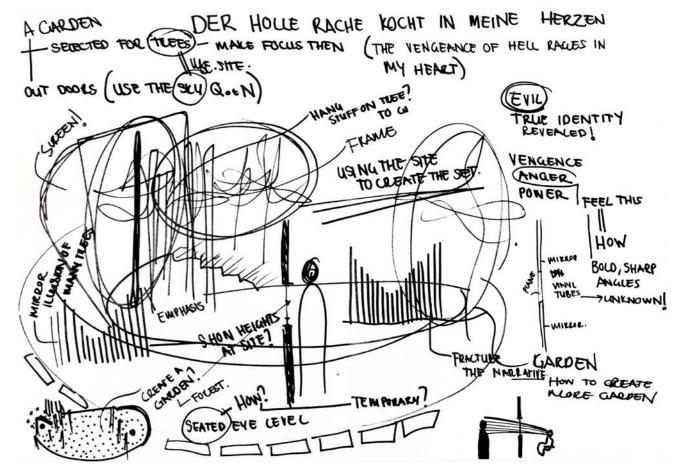


Figure 7.182 Concept page of site, performance themes and set development





Figure 7.183 View from audience position



Figure 7.184 Plan of cardboard tube layout

Figure 7.187 Exploration with less tubes

Figure 7.186 Actor view through tubes

7.10.6 MODELS AS A TOOL FOR DESIGN EXPLORATION

The following images, Figure 7.183 to Figure 7.189 of the models have been used as a means to explore the design of the scene. Iterations of the models coupled with the feedback of the scene design has informed the outcome of the design development. The materials used are foil-covered straws to mimic the effect of mirror vinyl-covered cardboard tubes.



Figure 7.185 Close up of tubes



Figure 7.188 Density of tubes



Figure 7.189 Final view from audience standing position





Figure 7.190 Start of Act 2 Scene 3

7.10.7 DESIGN OUTCOME

The focus of Act 2 Scene 3 is to create the illusion of a forest in addition to the existing trees at the scene location. The use of angled mirrors behind the existing trees reflects multiple trees through the space. The mirror vinyl-covered cardboard tubes scattered through the playing area represent more trees. The intention of the mirror finish on the tubes is to reflect the existing trees, as well as the actresses and audience members to create a fractured narrative. The cardboard tubes are all the same heights and are placed on different contours of the scene to accentuate the natural slope and flow of the site. Projections of William Kentridge's graphics add to the creation of the scene and lighting that shines on the bases of the mirror columns accentuates the forest-type environment. The use of mirrors allows the audience to view the performance, the site and themselves in one visual collage. Figure 7.190, shows the start of the scene when the Queen of the Night arrives. The queen is lit up by her costume which has integrated lighting, to be explored further. Figure 7.191 shows the scene towards the end of its duration. The queen has grown in proportion - created using perspective and projection. The smaller images, Figure 7.192 to Figure 7.194, show a progression of the lighting and reflections of the mirrors in the scene. As the mirrors need light to reflect effectively, the lighting of this scene is very important for the success of the visual experience.



Figure 7.192 Reflections of Queen of the Night



Figure 7.191 End of Act 2 Scene 3



Figure 7.193 Queen in the mirror forest



Figure 7.194 Layering of lighting and colour



7.10.8 INITIAL TECHNICAL EXPLORATION

The following images, Figure 7.195 to Figure 7.201 explore the initial attempt at technical development. Focus is placed on how to develop the temporary structures for the set design in the scene. Lighting is also a vital part of the technical development. The technical design for each scene is further explained in technical consideration

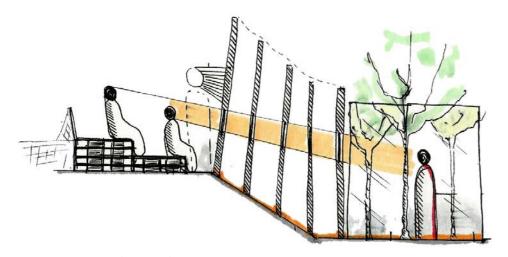


Figure 7.195 Section showing audience view

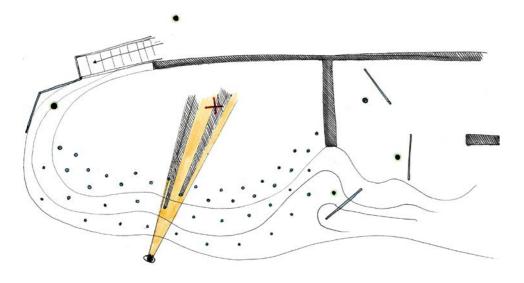


Figure 7.196 Plan showing restricted audience view

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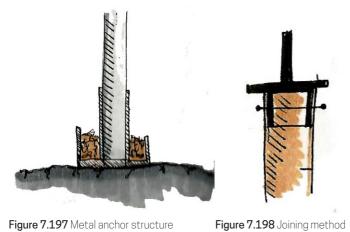


Figure 7.197 Metal anchor structure

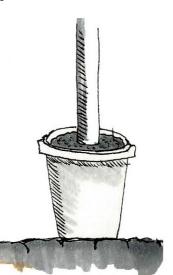


Figure 7.199 Bucket anchor



Figure 7.200 Cable anchor

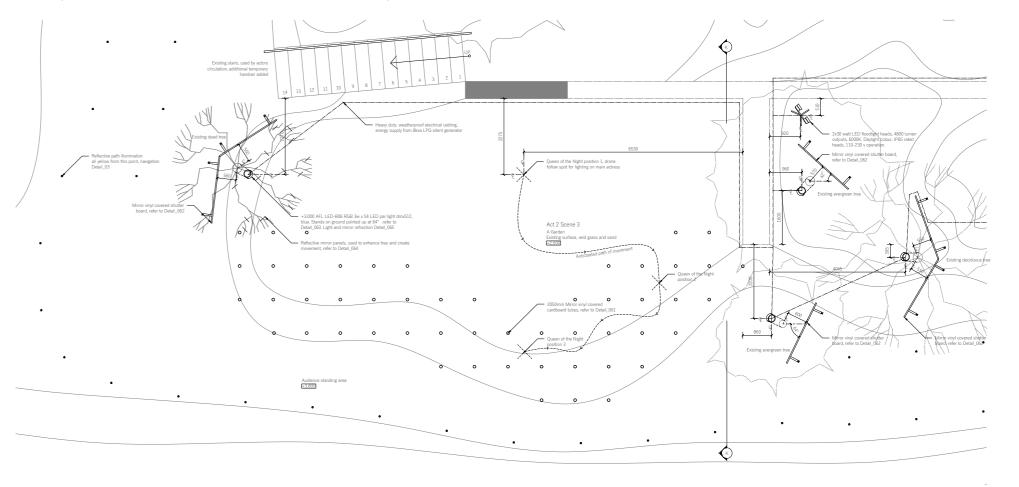
Cardboard tube detail

Figure 7.201

7.10.9 TECHNICAL CONSIDERATION

as discussed in Chapter 7.8, the power of the gueen's character is revealed in a dramatic and scene location. The section in Figure 7.208 depicts the audience-actor relationship as explained emotion-filled scene. The technical focus, Figure 7.202 to Figure 7.209 of this scene is placed in the scene exploration before this. Violet and blue lighting is used to mimic the chaos and night on the development of the temporary set intervention. Since the structures will all be removed in this scene. once the performance has finished, all additional structures need to be simple to disassemble and

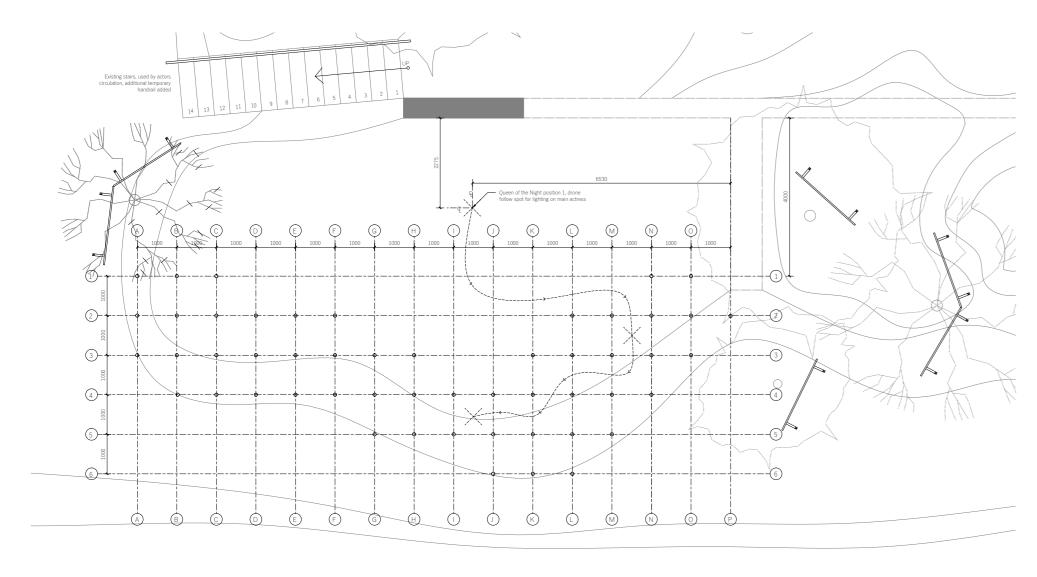
recycle or reuse. The tree-like structures are created from mirror vinyl-covered cardboard tubes. They intend to reflect the performance, site, and audience simultaneously. The plan of Act 2 Scene In the aria "Der Holle Rache kocht in meinem Herzen" (The revenge of hell rages in my heart), 3, as seen in Figure 7.202 shows the layout of the forest and its response to the contours at the



ACT 2 SCENE 3 PLAN DETAIL_06 Scale 1:50

Figure 7.202 Act 2 Scene 3 Plan





ACT 2 SCENE 3 MAN-MADE FOREST LAYOUT GRID Scale 1:50

Figure 7.203 Act 2 Scene 3 forest grid

The materials used are lightweight, cost-effective, standard sizes and easy to manipulate. Figure 7.205 shows the intended tree-like structures design. A simple bracket with a steel stake is used to secure the structure in the ground, with minimal site interference. The bracket will be knocked into the ground at the specified intervals and then the cardboard tube will be secured over it. Re-used AC Convolute cardboard tubes (made of fabric) or AZ Spiral cardboard tubes (made of paper) will be sourced and used for these structures. The use of the standard 2050mm lengths tubes, shown in Figure 7.204, has been specified, however this will be determined by availability.

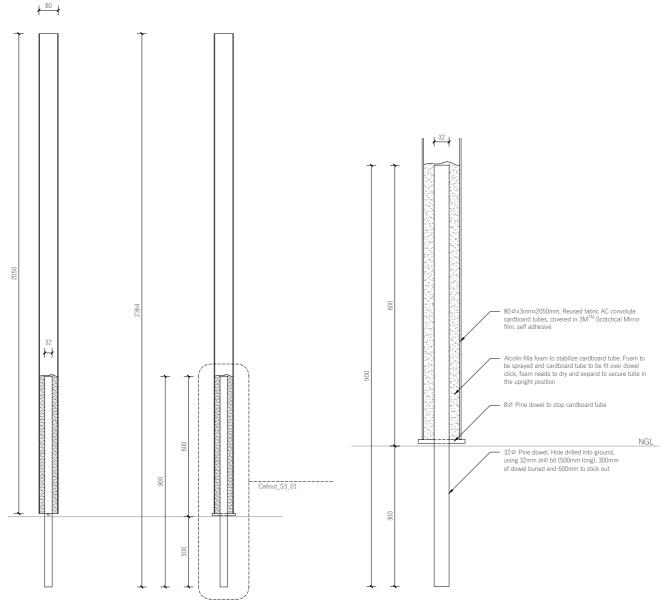


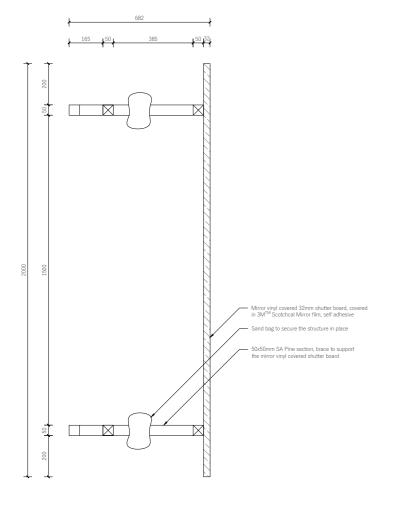
Figure 7.204 2050mm Cardboard tube

CARDBOARD TUBE DETAIL_061

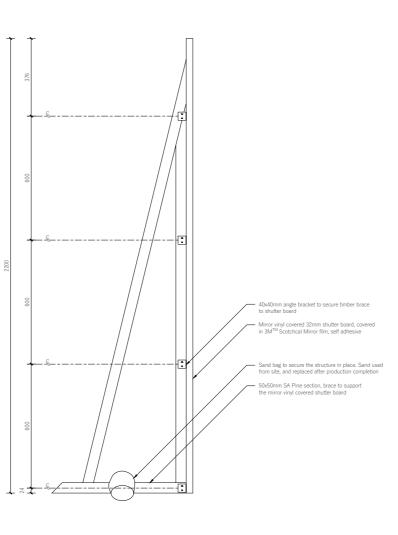
CARDBOARD TUBE CALLOUT_S3_01

Figure 7.205 Cardboard tube detail

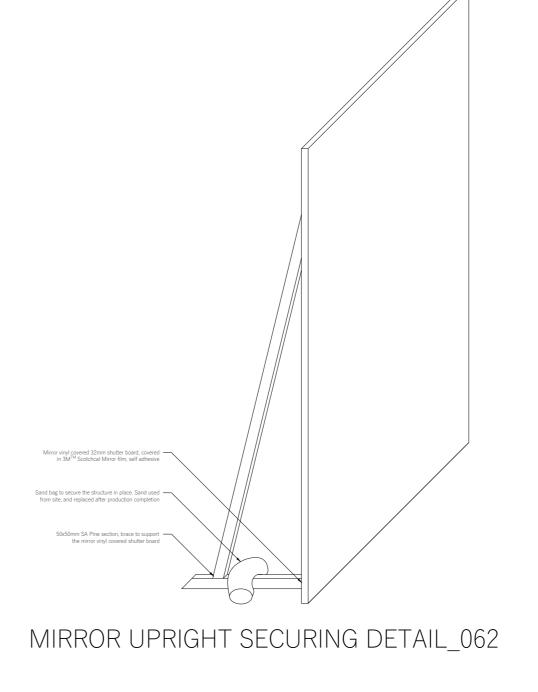




MIRROR UPRIGHT DETAIL_062



MIRROR UPRIGHT ELEVATION

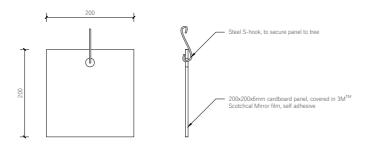




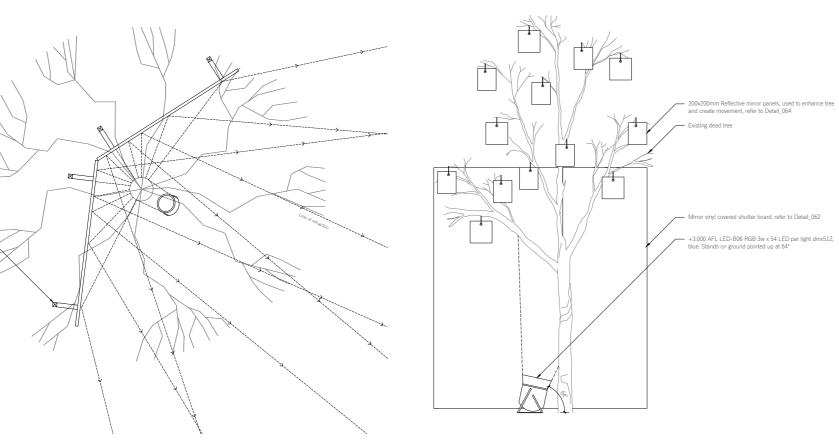
MIRROR UPRIGHT 3D

Figure 7.206 Mirror upright detail





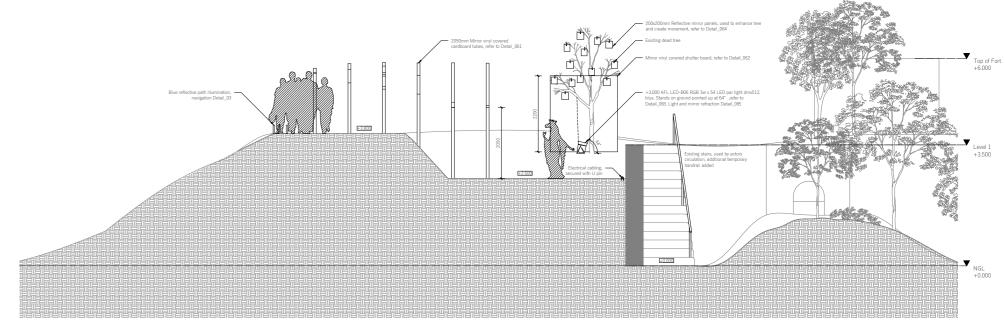
REFLECTIVE TREE DETAIL_064



LIGHT POSITIONING DETAIL_063

Figure 7.207 Reflection of light detail

LIGHT AND MIRROR REFRACTION DETAIL_065



ACT 2 SCENE 3 SECTION K-K



Figure 7.208 Act 1 Scene 3 final sections





Audeince view of the queen



Tree reflection in mirror detail

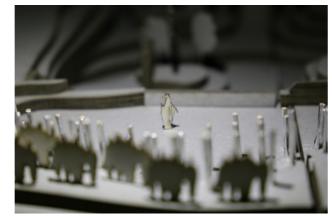
Figure 7.209 Act 1 Scene 3 model final outcome



Fractured narrative



Reflection of cardboard tubes





Light used to enhance the drama

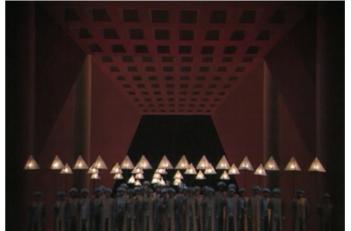


Figure 6.41 "O Isis und Osiris" (Oh Isis and Osiris)



as it makes use of a chorus, as well as strong freemason symbolism. Since the cast of this specific production is small, there is no availability for a chorus. Therefore, this is achieved using dynamic lighting and projection, further explored in Part three of this chapter. Strong themes of trial and worthiness are prominent in this scene, and the music mimics a prayer-like tone.

TRAIL AND WORTHINESS



Figure 6.39 Act 2 Scene 5 - Traditional version 1991



Figure 6.40 Act 2 Scene 5 - William Kentridge version 2001



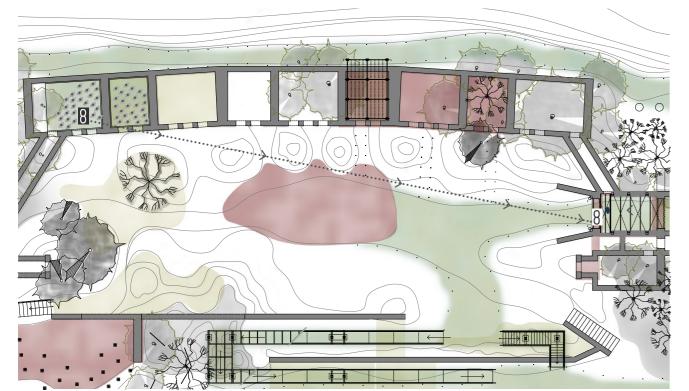


Figure 7.210 Plan of Act 2 Scene 5









···>··· Scene visual link

Audience 50-60 members

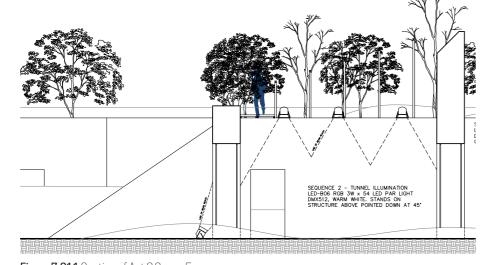


Figure 7.211 Section of Act 2 Scene 5

7. 11.1 SCENE LOCATION

Act 2 Scene 5 takes place in the pyramid of the ordeal. The use of the exit side of the tunnel provides the structural needs for this scene. The location of this scene is shown on the plan, Figure 7.210, where the white [8] represents the positioning of the actor and the black [8] the location of the audience. The audience is standing on a scaffolding structure which is perched above the existing fabric. On the plan, the audience is represented by the grey bird's-eye view figures. To represent the levels at which the audience views the performance, a section - Figure 7.220 - shows the heights and audience views. Figure 7.221 shows the illustration, as discussed in Chapter 4.8, of the audience and actor on the same elevated level of

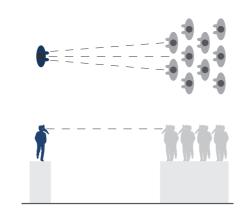


Figure 4.7 Actor on same level as audience

interaction.

7. 11.2 LOCATION CHARACTER

As mentioned the location of the scene was selected for the composition of the existing structure. Over the distance from where the audience stands to the actor's position, the natural perspective of the structure implies a triangular shape. This shape relates to the imagery and symbolism of the narrative, and can be used to enhance the performance. Figure 7.212 gives a view of the playing area from where the audience is located. The triangular shape is seen on the walls leading up to the arch. At some points during this scene, the audience perspective will be fractured; Figure 7.213 shows the restricted view of certain audience members. Figure 7.214 shows the view from the built platform, again accentuating the triangular form while including other views around the site. To keep the focus on the structure, lighting will be used to emphasise the existing fabric. Figure 7.215 shows a view of the actor playing area, the height at which the actor will stand is accentuated in this image.



Figure 7.213 Restricted view from platform approach



Figure 7.212 View from audience platform



Figure 7.214 View from audience platform



Figure 7.215 Actor playing area



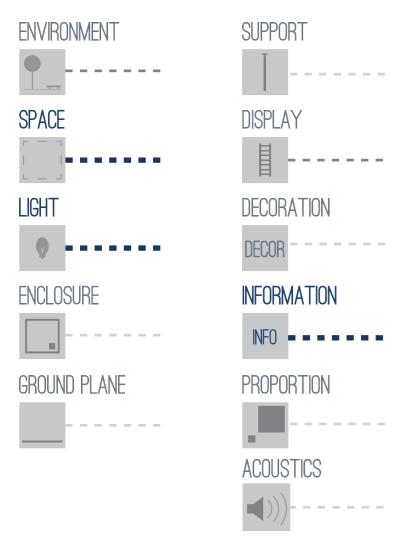


Figure 7.216 Interior architecture principles

7.11.3 A LINK TO INTERIOR ARCHITECTURE

Act 2 Scene 5 focuses on the layering of information to convey the themes of the scene. The interior architecture elements, Figure 7.216, of most importance is space, light, and information. Secondary to this, is environment and display. These elements have become the focus in the design development of the scene, ensuring that the site and performance come together in one realm. The physical use of the existing fort is a point of interest for the scene. It will be enhanced with lighting and layering of information, later explored in the design development, Chapter 7.9.5 of this scene.

7. 11.4 INITIAL CONCEPTUAL MOOD BOARD

The initial concept board, Figure 7.217, brings together the selected elements of the scene. The monochromatic image of the existing site, layered with a white plan to show its location, gives an indication of the environment for the performance. The layering of William Kentridge's graphics provides the viewer with more information about what is to be expected in the scene. The black and grey figures represent the chorus and Sarastro, the repetition of the imagery emphasising the fraternal brotherhood. As a whole, this collage suggests the intended outcome for the scene.



Figure 7.217 Initial concept mood board



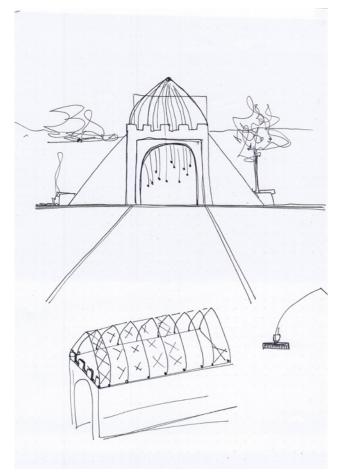






Figure 7.219 Emotive sketch exploring imagery

7. 11.5 DESIGN DEVELOPMENT

The following pages of concept sketches show the initial design exploration of the scene. The imagery starts with an exploration of the existing site and how the scene can grow from it. Figure 7.218 shows the structure of the existing fabric used to enhance the triangular shape and extend the architecture beyond where it stands. The graphic in Figure 7.219 shows the initial idea of repetition of the triangular form. This is used to enhance the idea of the chorus and keep with the strong imagery of William Kentridge's narrative. The thematic development of this scene has a focus of the fraternal order and the freemason society - the repeated imagery also represents this part of the narrative. Lighting and movement in the scene are important in order to mimic the idea of a larger chorus. The scene focuses on how to enhance the existing structure and create the needed symbolism from it. Figure 7.220 shows the unpacking of the scene, starting with the site, then narrative and then merging the two.

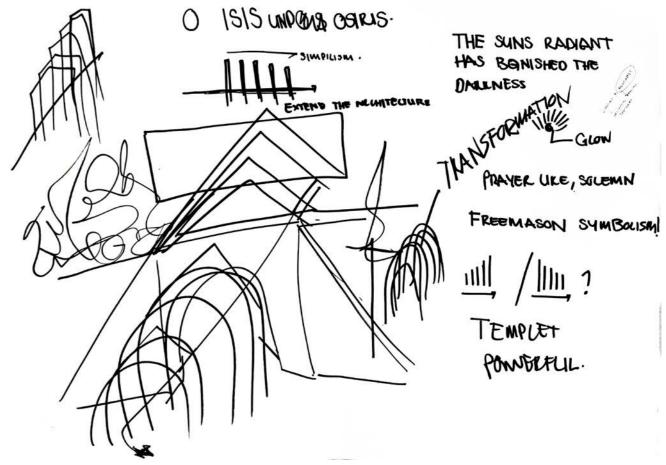


Figure 7.220 Initial unpacking of the scene









Figure 7.222 Development of rounded form



Figure 7.224 Angular structure development

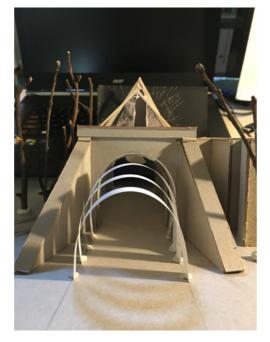


Figure 7.223 Mimicking of the archways



Figure 7.225 Exploration of site and form relationship

7.11.6 MODELS AS A TOOL FOR DESIGN EXPLORATION

The following images, Figure 7.221 to Figure 7.228, show the models used to explore the design development of the scene. The iterations of the scene show the progression of the design and the intention of the added structures. Testing of the design on the model was an important part of the design process. Figure 7.221 is an example of the initial model. The triangular form is prominent; this is then further explored to ensure that the choice of design is correct. Figure 7.222 and Figure 7.223 show the use of a rounded structure to mimic the arches. However, these structures do not enhance the narrative imagery. Figure 7.224 and Figure 7.225 show a progression of a more angular curve, again not supporting the narrative imagery. Finally, Figure 7.226 and Figure 7.227 mimic the triangular structure found at the site and within the narrative. Figure 7.228 gives an overview of the scene in the darkness, using lighting to enhance the triangular structure.

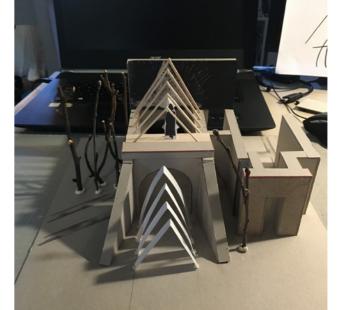


Figure 7.226 Development of triangular form



Figure 7.227 Focus on extending the architecture



Figure 7.228 Final model, in darkness, to enhance the form



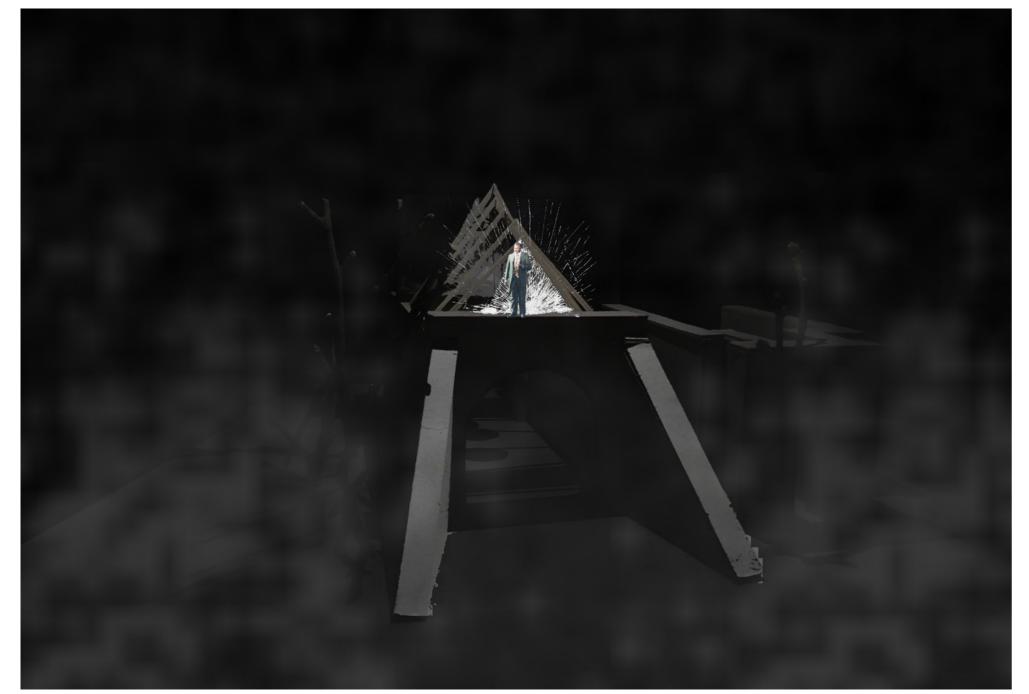


Figure 7.229 Start of Act 2 Scene 5

7. 11.7 DESIGN OUTCOME

The focus of Act 2 Scene 5 is to create imagery that relates to both the site and the narrative. The use of the freemason triangular shape is important in this scene of The Magic Flute. Therefore, it forms an important part of the scene development. In the scene, the chorus and Sarastro stand above the existing structure, surrounded by triangular forms. The use of lighting and projections enhance the symbolism and the form. Figure 7.229 shows the start of the scene. A focus is placed on the main actor and the triangle form. As the scene progresses so does the lighting, and the dynamic movement of the light. Figure 7.230 shows the end of the scene and how the light has grown; this is achieved using projection and filtered lighting. Figure 7.231 to Figure 1.233 explore the lighting at the scene, using light and shadows to emphasise specific aspects.

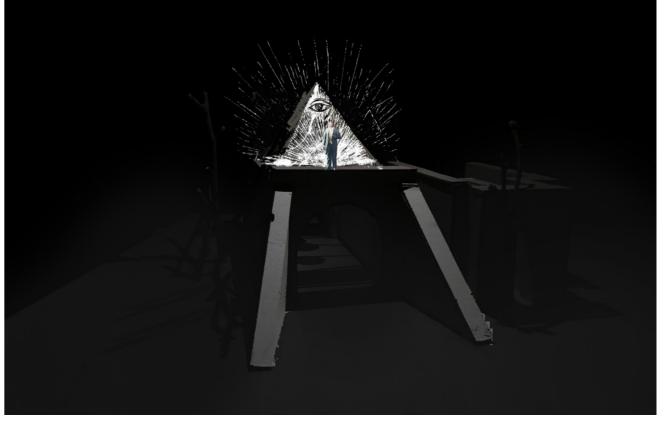


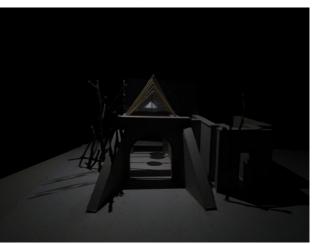
Figure 7.230 End of Act 2 Scene 5



Figure 7.231 Tunnel lighting exploration



Figure 7.232 Light from the side of structure



0231

Figure 7.233 Light to emphasise the existing form



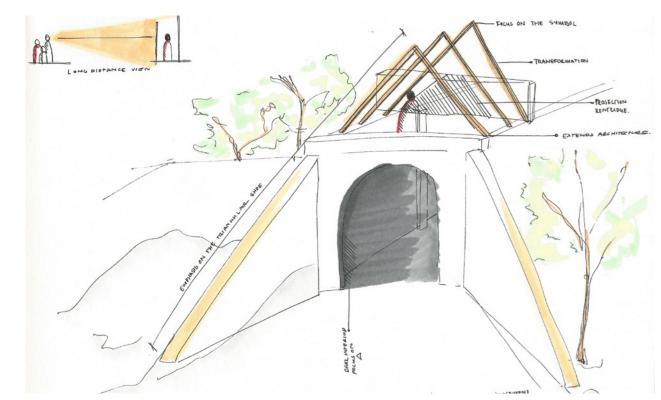


Figure 7.234 Perspective of initial concept

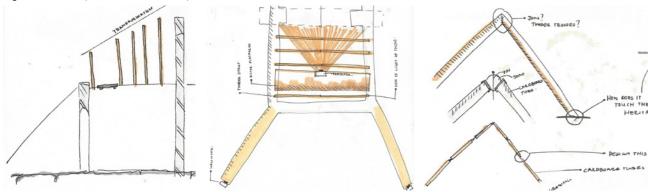


Figure 7.235 Repetition of triangular form **Figure 7.236** Projection consideration of scene **Figure 7.237** Joining of structural elements 0232

7. 11.8 INITIAL TECHNICAL EXPLORATION

The following figures - Figure 7.234 to Figure 7.237 - explore the initial attempt at technical development. Focus is placed on the triangular symbolism and form, which is further explained later.

7.11.9 TECHNICAL CONSIDERATION

In "O Isis und Osiris" (Oh Isis and Osiris), the site forms an important informer of the narrative - the triangular symbolism of the scene is created using lights and the existing site fabric. The movement and textured use of light is also relevant. William Kentridge uses the term to 'draw with light'. His imagery, as seen in Figure 7.248, gives a suggestion on how to achieve the textured light. The use of filters and moving light is explored in this scene, see Figure 7.238 to Figure 7.245depicting the type of equipment needed for the performance.

The other technical focus of the design is the way in which the temporary structures touch the site. These lightweight timber structures, gentle and securely touch the site to keep with the sensitivity of heritage presentation. Timber protection is used over the existing structure, and cables secured into the ground are used to fasten the triangular structure (details to be resolved).

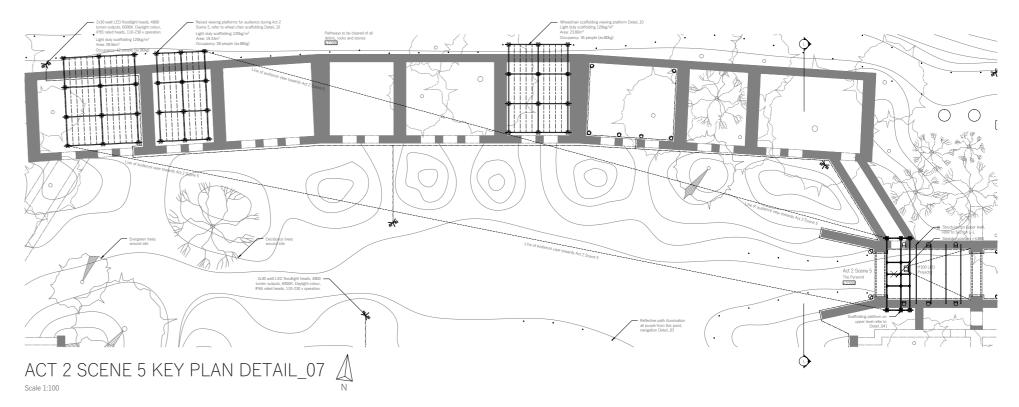
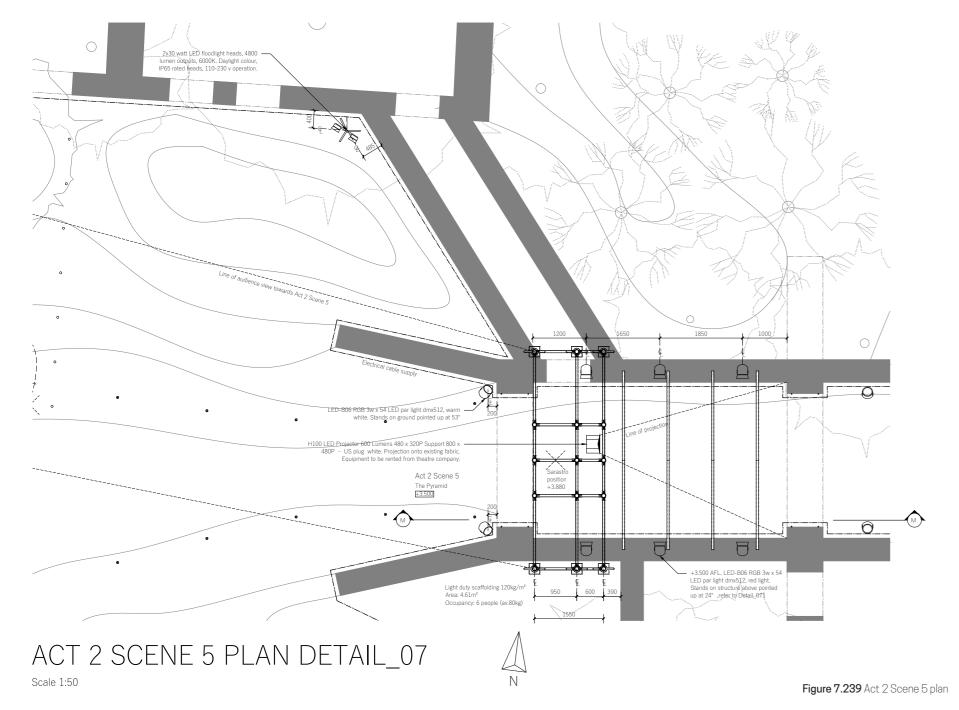
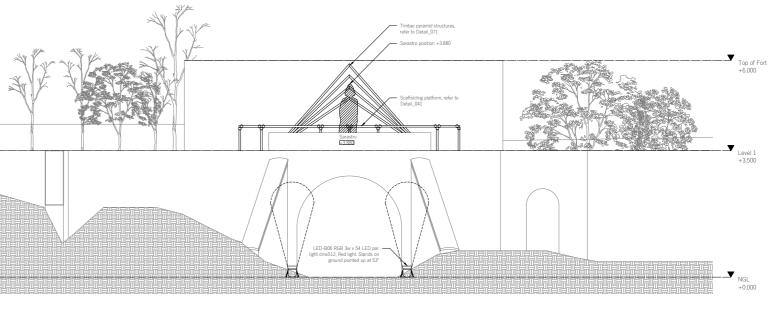


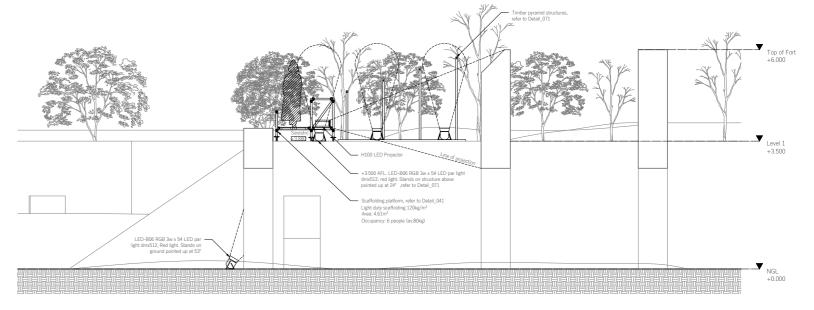
Figure 7.238 Act 2 Scene 5 key plan







ACT 2 SCENE 5 SECTION L-L



ACT 2 SCENE 5 SECTION M-M

Figure 7.240 Act 2 Scene 5 section and elevation





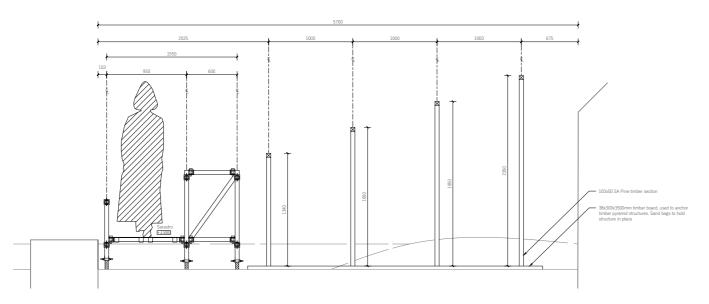
Figure 7.241 William Kentridge drawing with light



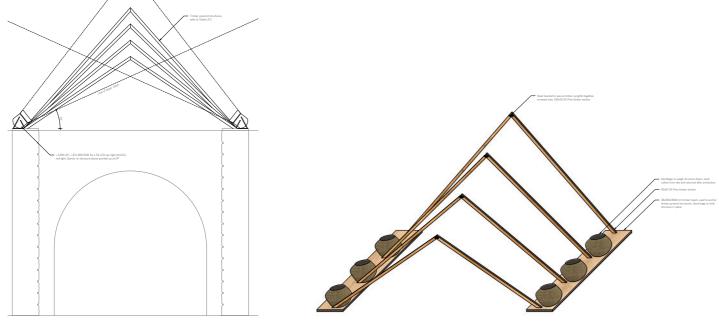
Figure 7.242 Colour light filters



Figure 7.243 Example of light filter texture



TIMBER PYRAMID STRUCTURE DETAIL_071



TIMBER PYRAMID STRUCTURE FRONT ELEVATION TIMBER PYRAMID STRUCTURE 3D Figure 7.244 Pyramid structure detail

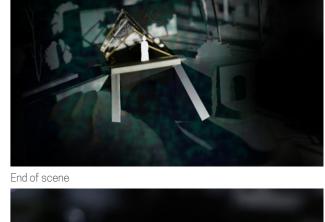


Start of scene



Middle of scene





Light used to create movement, shows of actor move across the structure, illusion of chorus



Light reveals structure





End of scene

Figure 7.245 Act 2 Scene 5 model outcome



CHAPTER EIGHT CONCLUSION



CONCLUSION

This dissertation intended to bring awareness to the cultural and historical value of the Fort Daspoortrand ruin, through the introduction of a temporary, site-specific opera. The opera as a catalyst aims to serve as an initial event to illuminate the beauty and drama of this old military ruin. The performance will encourage and enhance the appreciation of the fort, after which, if successful, another developer would be able to add a more permanent function to the site.

Opera in the 21st century has been identified as a culturally rich entity which can add value to society. However, opera around the world has seen an attendance decline over the last decade. This dissertation has provided a way in which the re-imagining of an opera can challenge and encourage a new range of audience members, ultimately making opera an all-inclusive cultural experience. The site-specific performance of The Magic Flute can give life back to the fort and opera, by taking the audience on a journey of the site, creating a homogenous experience of site heritage, theatre, and escapism.

The audience will have minimal contact with the heritage fabric; this is achieved through controlled walkways and circulation interventions. The initial intent was not to add any permanent structures to the fort, but rather to use temporary interventions and materials to develop the design. However, it was noted through the exploration of the site that the erosion from the human movement poses a threat to the future preservation of the ruin. Therefore, permanent circulation was proposed, creating the possibility of the public revisiting the site once the opera has finished. The materiality choice for the new structures would ensure sensitivity, allowing the structure and site to weather and change together, slowly becoming one.

The temporary scene design poses a non-invasive method in the creation of the three-dimensional experience. Re-used, recycled and repurposed materials compose the additional fabric, ensuring that a sustainable and ecological approach is achieved. The design intervention highlights and exposes the unique character of the fort, using lighting, projection and minimalist structures to simultaneously uncover the drama of the heritage fabric and reveal the narrative of The Magic Flute. The strategy of 'touch gently and leave nothing' is considered throughout the design, ensuring the preservation of the historical and cultural value of the site.

Since this dissertation project has a temporary and short-term life-span, the theories set out for scenography in interior architecture can be further explored in future projects. The Magic Flute at Fort Daspoortrand could become a benchmark and model to create awareness of uncelebrated historical landmarks of South Africa.

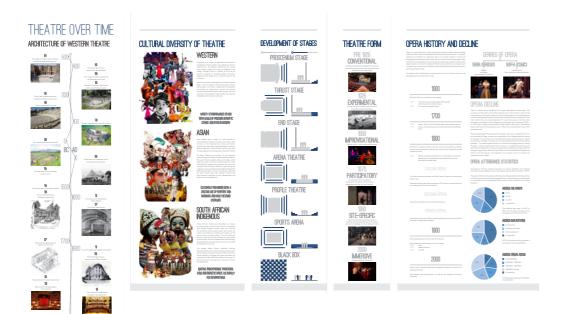


FINAL PRESENTATION

Theatre theory



Cover Page



Proposal

PROPOSAL=

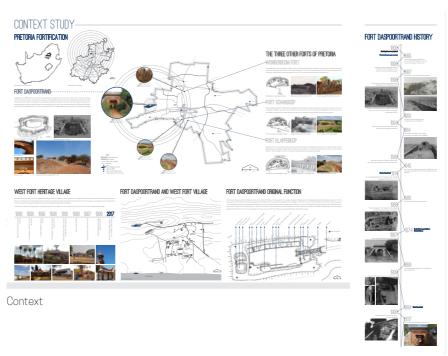
PROBLEM STATEMENT

RESEARCH QUESTIONS

RESEARCH METHODOLOGIES AND METHODS

DELINEATION AND LIMITATIONS







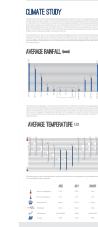
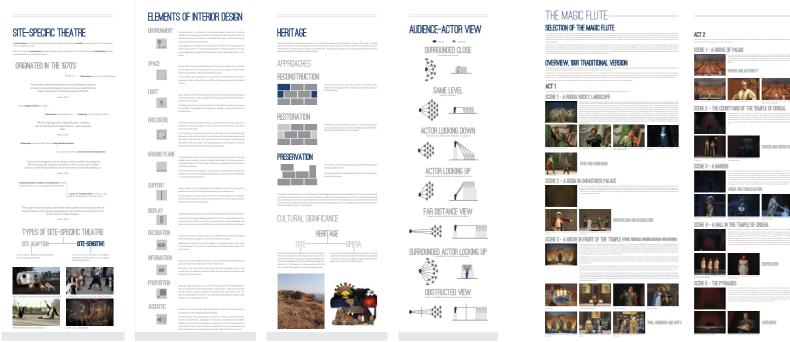
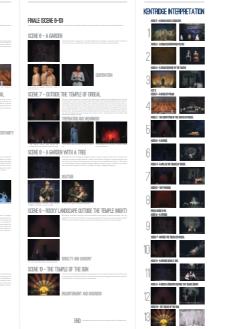


Figure 8.1 Final presentation scheme





The Magic Flute opera







Design informants

TEMPORARY STRUCTURES

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DESIGN INFORMANTS

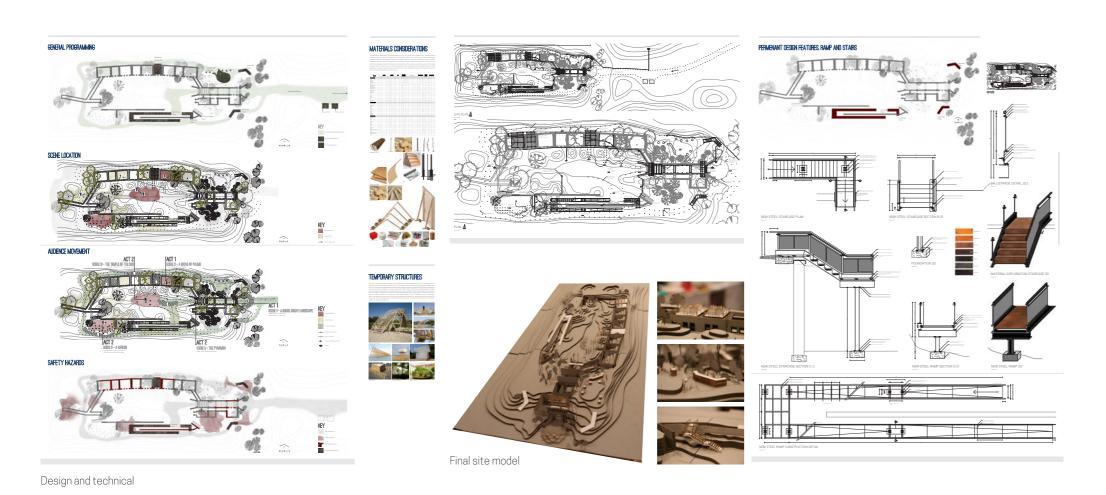
SITE-SPECIFIC THEATRE

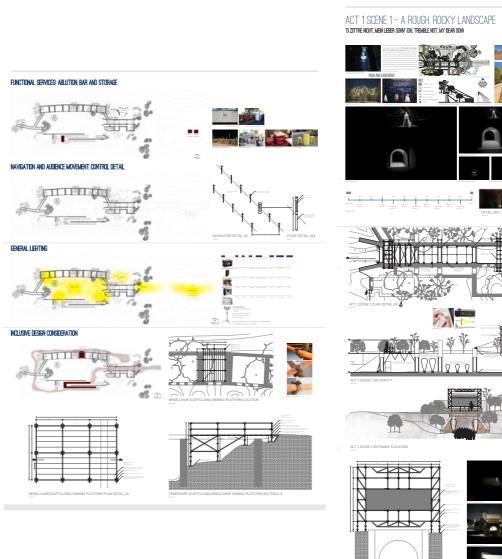
ELEMENTS OF INTERIOR DESIGN

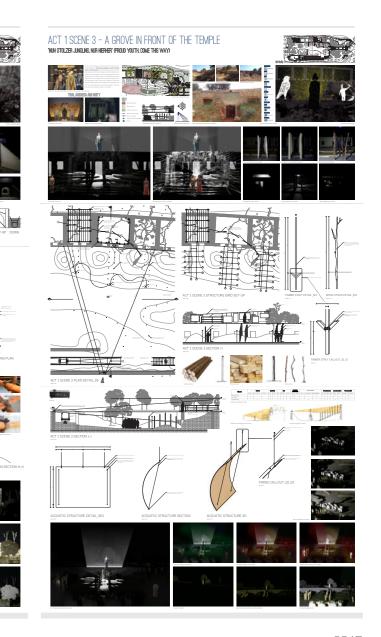
WILLIAM KENTRIDGE

Main theory

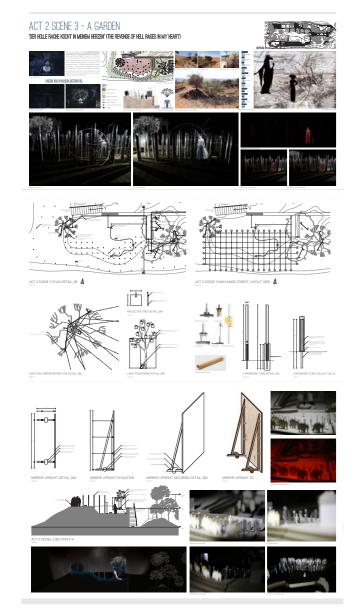


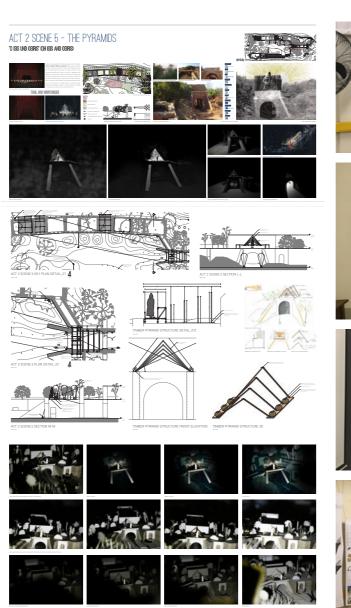




























Final Presentation



THANK YOU

Barbara

For your constant support, inspiration, encouragement and knowledge that you have shared over the last two challenging years.

Catherine

For your dedication, enthusiasm and for creatively nudging me along throughout the year.

Mom, Dad, Dane and Kaley

For your endless love, belief, handiness and support. You have inspired me to always reach further than I can see and to believe in the seemingly impossible.

Frank

For pushing me to my limits and encouraging me to reach beyond my potential. You have been my rock, pep talker, late night companion, social translator, best friend, and inspiration.

Children of Jekot (2016) Armand and Leani

For all your encouragement, acceptance and love you showed towards me. You made the new-comer feel like she belonged.

Sassy interiors (2017) Antonette, Laurika and Mark

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APPENDIX A

Chapter / Arie Number:	Act 1:1-2	1	3-4	2	5 - 6	3	7	4	8	5		
Arie Name:	Zu Hilfe! Zu Hich verloren	Hilfe! Sonst bin	Der Vogelfang	er bin ich ja	Dies Bildnis ist schon	bezaubernd	O zittre nicht, Sohn! Zum le auserkoren		Hm, hm, hm, hm			
Translation:	'Help! Help! lost '	Otherwise I am	The bird catch	er am I	This is a portra		Do not tremb son!	le, my dear	-			
Actor/s:	Tamino, Drei	Damen	Papageno, Tan Damen	nino, Drie	Tamino, Drie	Damen,	Queen of the	Night	Papageno, Tamino, Drie Damen			
Stage layout:		ROCK DROP		II A				a				
Graphic Illustrations:	parties of the second		BIGO CAGE	Summer of the su	A A A A A A A A A A A A A A A A A A A	and the state of t	ALLE THE THE PARTY OF THE PARTY			The state of the s		
Themes:	Tension amo Reflection of Lively Lustrous Fear Fighting		Introduction or motif Trust Thankfulness Deception (Page		Love Passionate and Emotion of lov Desire Instant Love	lour	Pain of daugh Mysterious ch queen	ter's loss naracter of the	Humour Punishmer	nt for a lie		
Environment Comment:	Day, Exterior		Day, Exterior		Day, Exterior		Night, Exterio	r	Day Exterior			

Chapter / Arie Number:	Act 2: 20	9	21-22	10	23	19	25	11	28 - 29				
Arie Name:	March der P	riester	O Isis und O	siris	Soll ich dich, mehr sehn?	Teurer, nicht	Bewahret et weibertucke		Oh weh, die K Nacht	onigin der			
Translation:	March of the	priests	O Isis and O	siris	Shall I see you more?	ı, dearer, no	Protect your wiped out	rself from being	Oh, the queen of the night				
Actor/s:	Orchestra		Sarastro, Ch	noir	Pamina, Saras	stro, Tamino	Zwieter Prie	ster, Sprecher	Queen of the night, Monostatos, Pamina				
Stage layout:	Scene chang			()	Ī		Scene cha	SE M	Scene change				
Graphic Illustrations:			MM			D. Junga	The transfer of the state of th						
Themes:	Themes for s Solemn	econd act	Immense hu Solemn Nobility (Tai Strength Uneasy (Pag	mino)	Love Leaving Sadness		Delicate		Aggressive an Evil Vindictive Betrayal Love (Bad) Blame on Pam Cold-blooded	iina			
Environment Comment:	n/a		Exterior, Da	У	Exterior, Day		Night, Interio	or, storm	Dark, Interior, Thunder				



Chapter / Arie Number:	31	15	32-33	16	35	17	37	18	39	20		
Arie Name:	In diesen heil	gen Hallen	Dialogue – Hie beide allein ul	er seid ihr euch perlassen	Ach, ich fuhl's verschwunder		O Isis und Os	iris	Ein Madchen oder Weibchen			
Translation:	In these holy	halls	Here you are l	eft alone	Oh, I feel it, it	's gone	O Isis and Os	iris	A young girl or a young wife			
Actor/s:	Sarastro		Papageno, We	eib	Pamina		Choir		Papageno	Papageno (fun Charcter)		
Stage layout:			Scene change				SCENE CHAN	IGE	Scene Cha	nge		
	<u>[6]</u>	IEI.					e		P9 =			
Graphic Illustrations:		,		Control of the Contro	The state of the s	Thomas -						
Themes:	Peaceful lightness Humanistic id Good and evil Light and dark Fantasy (celes	l k			Pain from lost Broken heart Melancholy Anxiety Sadness	Love	Majestic prav Light hearted	yer d atmosphere	Lonely Desire for love Want for love Depression Conditional Love Dramatic Superficial Symbolism of future			
Environment Comment:	Night, Exterio	г	Night, Interior		Night, Interior		Interior Nigh	t, Artificial Light	Night Exterior			

Chapter / Arie Number:	41	21	43		45		46		47			
Arie Name:	Bald prangt, de verkunden	en Morgen zu	O welch ein gl	uck	Papagena! We Taubenchen!	eibchen!	Pa-Pagena! P	a-Pageno!	Nur stille, stille, stille			
Translation:	Soon the sun v		Oh, what a luc	cky one	Papagena! Fer	male! Pigeon!	Pa-Pagena! P	a-Pageno!	Only quiet, quiet, silent			
Actor/s:	Drie Knaben, P	amina	Pamina, Tamir geharnischten		Papageno, Dri	e Knaben	Papagena, Pa	pageno	Monostatos, Queen of the night, Drie Damen, Sarasto, Choir			
Stage layout:	SCENE CHAN	ดเดเ	SCENE CHA	MUE.	Scene change	Pag	Pop	Rep	Scene change			
Graphic Illustrations:	7111101111	minu	MAN	and sie.			-		- 1			
Themes:	Human frailty Passionate love Temperamenta Desire for love Anguish from lo Sorrow Tormented love Dramatic love	ove	Love will concu Love will preva Journey to trui Sacrificial Love Love for a pow	ail th love	Desperate Lov Happy Sad Heart on fire Very passional		Childish Love Juvenile Temperamen Reunited Love delight Joy	tal Love	Enlightenment Journey through darkness Strength of love Love prevails			
Environment Comment:	Night, Exterior					3 6	Day, Exterior	草原	Exterior Night (bright light)			



APPENDIX B

	Qualities			Availability Cost					yclable	Re-use afterlife				Noise Production			Acoustic		Time frame (life)	
Materials	Structural		Aasthatias			High	Affordable	Choon		ainable)	Danisla	1		-				lities		1
Domestic Waste	Structural	Semi-structural	Aesthetics	Found	Created	High	Allordable	Cheap	Reuse	Recycle	Recycle	Biodegradable	Reuse (Donate)	High	Moderate	LOW	Absorb	Ketract	Temporary	Permanent
Paper			x	х						x	×				x			x	x	
			X	x						x	×				x			×	x	
News paper Magazines			X	×						×	×				×		+	×	x	+
			-	×						×	×			-	X			×		
Telephone books Tin cans			x	×					x	*	, ×		X	x	, x			X	x	
Aluminium cans			X	×					X				X	X			\vdash	X		
				-					_					-			_		x	
Plastic bottles			Х	x					х				х	х			-	х	Х	
Cardboard Boxes	x			x	х				х				X	-	х		х		х	-
Cardboard Sheets	x			х					х				х	-	х		х		Х	-
Cardboard Tubes	x			х	x				х				х	-	х		х		х	
Glass bottles			х	х		-			х				х	х			_	х	×	
Plastic bags			x	х						x	х				х		-	х	×	
Fabric			х		х	-			х				х	_		х	х		х	
Rope			x	х		-			х				x	-		x	х		х	
String			х	х					х				Х			х	х		х	
Twine			х	х					х				х	_		x	х		х	
Foil			x	х	х					х	х			_	х			х	х	
Plastic crates			x	х		<u> </u>			х				х			х		x	х	
Polystyrene			x	х						x	х				х		х		x	
Construction waste																				
Timber (pine)	х			х					х				х		х			x	х	
Wood Pallets	х			х					х				x		x			х	х	
Metals	х				х				х				х	x				х		х
Glass		х			х				х				х	x				х		x
Steel	х				х				х				x	х				х		x
Concrete	x				x				х		x					х		x		x
Masonry	x				х				х		x					х		х		x
Copper		x			x				х		x			x				x		x
Drywalling	x				х				х		x				x		х			x
Scaffolding	х			х					х				x		x			х	x	
Organic materials																				
Landscape waste		х		х						х		х			х		х		x	
Thatch		х		х						х		х			х		х		x	
Grass			x	х						х		х				х	х		х	
Leaves			х	х						х		х		х			х		x	
Water			х	х						х			х		x			х	x	
Sand			х	х						х		х				х	х		х	
Stone	x			х						х		х		х				x	x	
Rocks	х			х						х		х			x			х	х	
Earth Bags	х		İ		х				х				х			х	х		x	1
Bamboo	х				х				х				x			х		х	x	
Organic Blocks (Mushrooms)	x				х					x		x				x	х			х
Hemp	x				х			1	1	x		x				х	х		×	
Sugar Cane husk		x		x						x		x			x		x		×	
Agricultural waste(husks)		x		x						x		x			x		x		x	
Straw	1	x		x						x		x			x		x		x	
	1	^	1	_ ^						_ ^		_ ^			_ ^	\perp	_ ^		^_	