Real Fictions

A Heterotopic Production Design for The Lorax

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"And I hear, from your voice, the invisible reasons which make cities live, through which perhaps, once dead, they will come to life again"

- Italo Calvino in Invisible Cities

ABSTRACT

The aim of this dissertation was to research the field of production design as a sustainable heterotopic image during the various phases of film production. As production topic, *The Lorax* (Seuss 1971) was explored for its continuing relevant message of warnings against avarice. To provide the production with *zeitgeist*, the local Pretoria context was implemented to portray this universal narrative message.

Information on production design is limited and inadequate. Sources ignore the influences and potential of production design behind the camera lens, which can be quite profound. Production design is influenced by the location and the location is influenced by the production design.

Filmic structure and the traditional production design process were researched to provide a structure for the design process. To design the production, film industry conventions were employed with influences from the field of interior architecture.

The result of the research is the first step to an inclusive look at production design and its place in the film industry, as well as in society. The result of the design process is a preproduction design package that can be handed over to production companies for further development.

In order to complete a production design, the production designer needs a support network of various departments and resources. This dissertation, as the attempt of an individual, is a step to recognize the full potential of the field of production design, by means of a practical example – **The Heterotopic Production Design for *The Lorax***.

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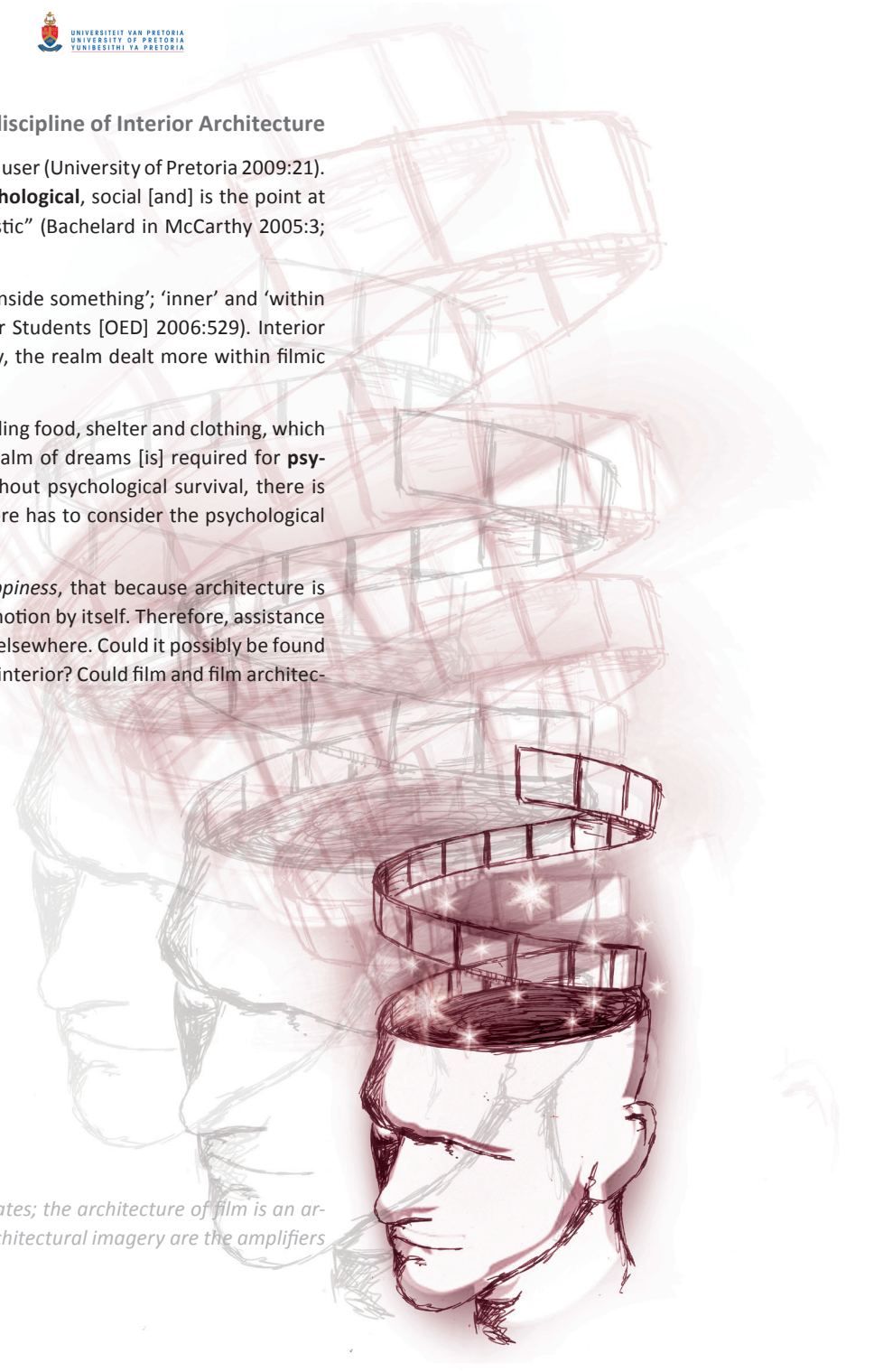
Interiority : Film Architecture and its place within the discipline of Interior Architecture

Interior Architecture as a discipline, focuses on the **needs** of the user (University of Pretoria 2009:21). Interiority, on the other hand, can be "climatic, physical, **psychological**, social [and] is the point at which the understanding of what an **interior** is, becomes elastic" (Bachelard in McCarthy 2005:3; own emphasis).

The word 'interior' can also be defined as 'situated within or inside something'; 'inner' and 'within the mind or soul' (The Compact Oxford English Dictionary for Students [OED] 2006:529). Interior thus also has to do with inner human feelings and psychology, the realm dealt more within filmic design than architecture.

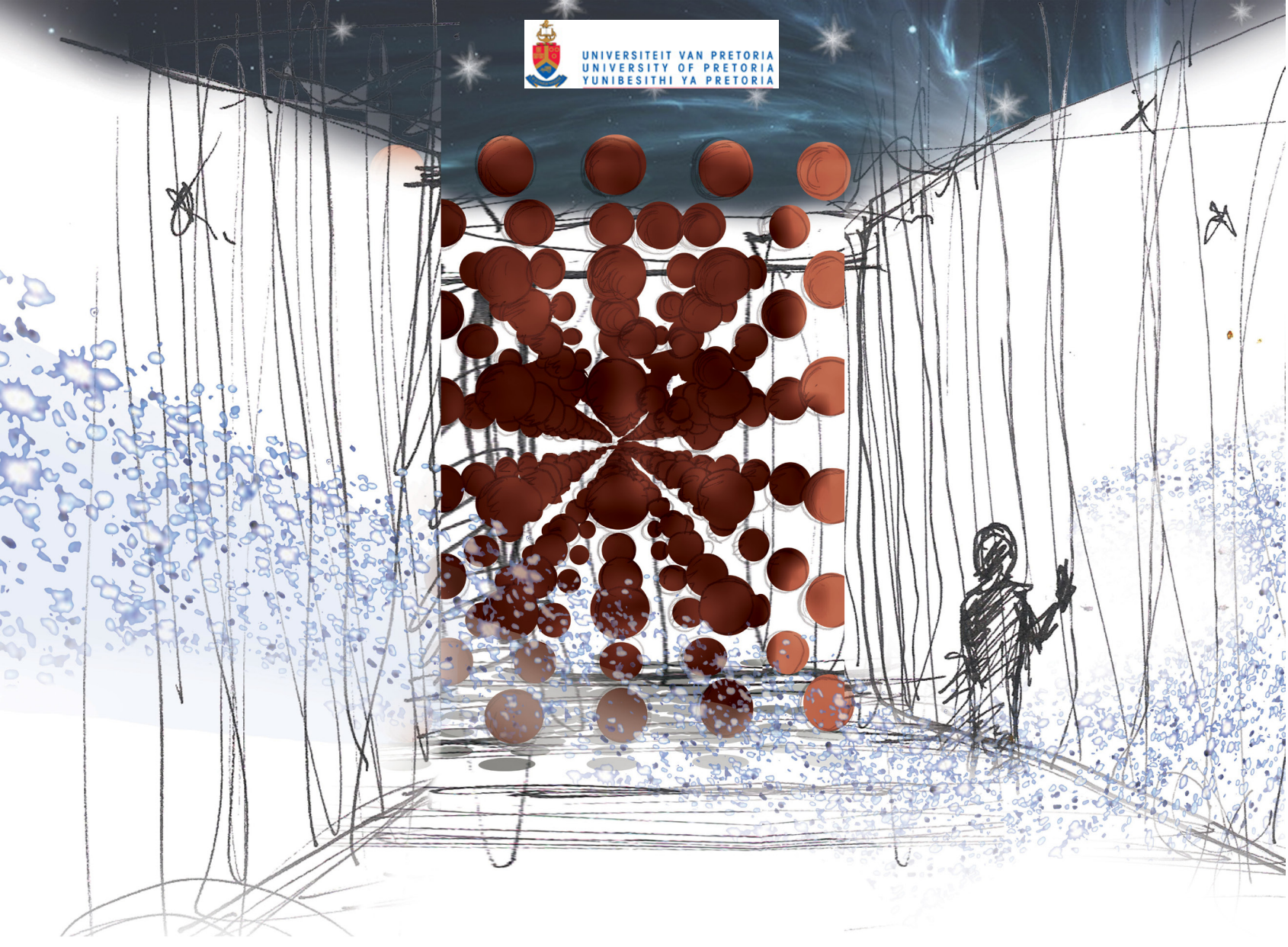
According to Louis Kahn; "Needs are basic requirements, including food, shelter and clothing, which make biological survival possible...on the other hand, [the] realm of dreams [is] required for **psychological survival**" (Coleman 2005:156; own emphasis). Without psychological survival, there is no desire for biological survival. The interior architect therefore has to consider the psychological (interior) needs of the user.

Alain de Botton (2006), concluded in *The Architecture of Happiness*, that because architecture is open to numerous external influences it cannot truly create emotion by itself. Therefore, assistance in meeting the psychological needs of the user has to be found elsewhere. Could it possibly be found in the realm of art most involved with working with the human interior? Could film and film architecture bring designers closer to the inside?



"Cinematic architecture evokes and sustains specific mental states; the architecture of film is an architecture of...melancholy, happiness or ecstasy...Space and architectural imagery are the amplifiers of specific emotions" (Pallasmaa 2001:7).

1. INTRODUCTION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1.1.1 PROBLEM STATEMENT

This dissertation researched filmic architecture - the field of production design - and its previously unmentioned contributions during the phases of the film production process. It is a discipline that can have an impact on screen and behind the scenes.

The Lorax (Seuss 1971), a fable about the dangers of avarice, was chosen as a practical example for its continuing relevance in the world today. The universal message of the narrative was adapted to the local context of Pretoria in order to create a production design with *zeitgeist.* The real and imaginary worlds and the blurring of the boundaries between the two, were investigated, in what was called a heterotopic image; 'heterotopia' being a place which is at the same time both real and imaginary (Foucault 1967).

Literacy on the discipline of production design is limited and inadequate, as the importance of production design in film was only recognized in 1939 (Barnwall 2004:13), the discipline has a limited number of practitioners and tertiary courses on the subject is in its infancy. The discipline is also part of the secretive preproduction film phase, which possibly contributes to lack of information (Weavind 2009).

Therefore this study aims to give a brief summary of the field of production design and the film industry conventions necessary to complete a production design. The precedent studies analyse the 'unmentioned' behind the scenes aspects of the discipline, as well as how technological advances, such as the Steadicam, can influence the design of sets.

This research is then employed in designing a production design for *The Lorax,* on the location of Lillian Ngoyi Square (previously Strijdom Square).

1.1.2 THE CLIENT

The end result of this dissertation, excluding the summary on production design and film industry standards, can be handed over to a production company to develop further into a full fledged production resulting in either a feature or short film.

1.1.3 AIMS AND GOALS

The aim is to produce a production design that

> has a universal message, applicable to current society, in a local context, in order to produce a design with *zeitgeist*;

> is designed to be built in actuality, as opposed to virtually in CGI, as far as possible;

> where possible maximises the input of the production designer during each phase of the film production process;

> is true to the original message of the narrative;

> is responsible - socially and environmentally;

> adheres to film industry standard where possible.

Furthermore a brief summary of the discipline of production design and its relation to the film industry and its conventions are necessary, as sources studied only provided selective information necessary.

1.1.4 DELIMITATIONS

Feature films are created by large teams of specialists during a time period that varies from three to five years (Louw 2009). Production designers have various departments and resources at their disposal during the production design process, which can last anything between a few months to a several years.

Therefore the following delimitations has been set, as this dissertation is the attempt of an individual in the time period of ten months.

> The study implements the function of a production designer and not the rest of the film production team;

> due to the fact that this study is done under the discipline of interior architecture, lighting design was included. This is contrary to standard film industry conventions where this is a function of the director of photography;

> in the chapter on design methodology the design process is explained. Only sections of the different levels of production design was completed, with each level increasing in detail.

1.1.5 DOCUMENT STRUCTURE

The document starts with the theoretical premise and its influence on the dissertation topic and design development.

A brief summary of production design and the current conventions of the discipline, is then given in the chapter on production design. The next chapter demonstrates how production design conventions and film structure is implemented to form a design strategy.

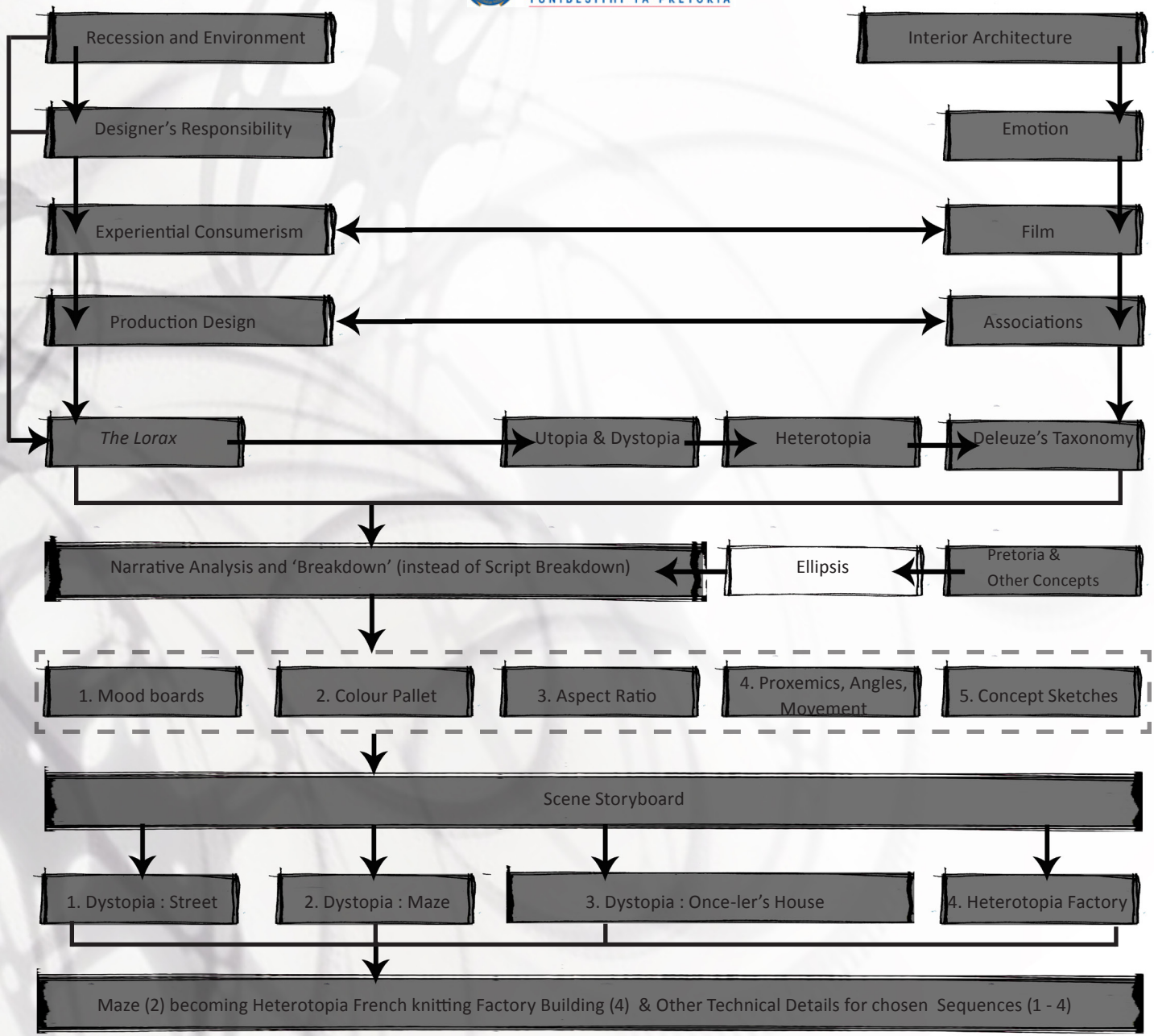


Figure 1.1 Connections between parts of the dissertation

The three chapters following 'design methodology' deals with the context. First the narrative context of *The Lorax*, then the context of film in South Africa, followed by the location context of Lilian Ngoyi Square. After the section on the context the precedent studies follow.

Subsequent chapters deal with design development - first production design development and then lighting design development. It is important to note that before any design development could take place, it was essential to understand the technical aspects of the film industry. The technical chapters follow design development, but the two are in fact inseparable. Please refer to the technical chapter if any convention in design development is unclear.

The conclusion is the final chapter, with an extensive glossary following in the appendix.

Please refer to the figure to the left for a general idea of how the various parts of the dissertation link together.

1.1.6 ABBREVIATIONS

PD	Production Designer
DP	Director of Photography
AD	Art Director
IMDb	Internet Movie Database
OED	The Compact Oxford English Dictionary for Students 2006

1.1.7 CONTRIBUTIONS TO THE FIELD OF INTERIOR ARCHITECTURE

The associations and emotion needed in production design (see the chapter on the theoretical premise) can assist interior architects in developing meaningful and metaphoric designs. Production design can be seen as a 'sister' discipline which can provide interior architecture with a fresh approach to looking at the world. Interior architecture and architecture on the other hand, can provide production design with a more holistic lens for viewing its role in society.

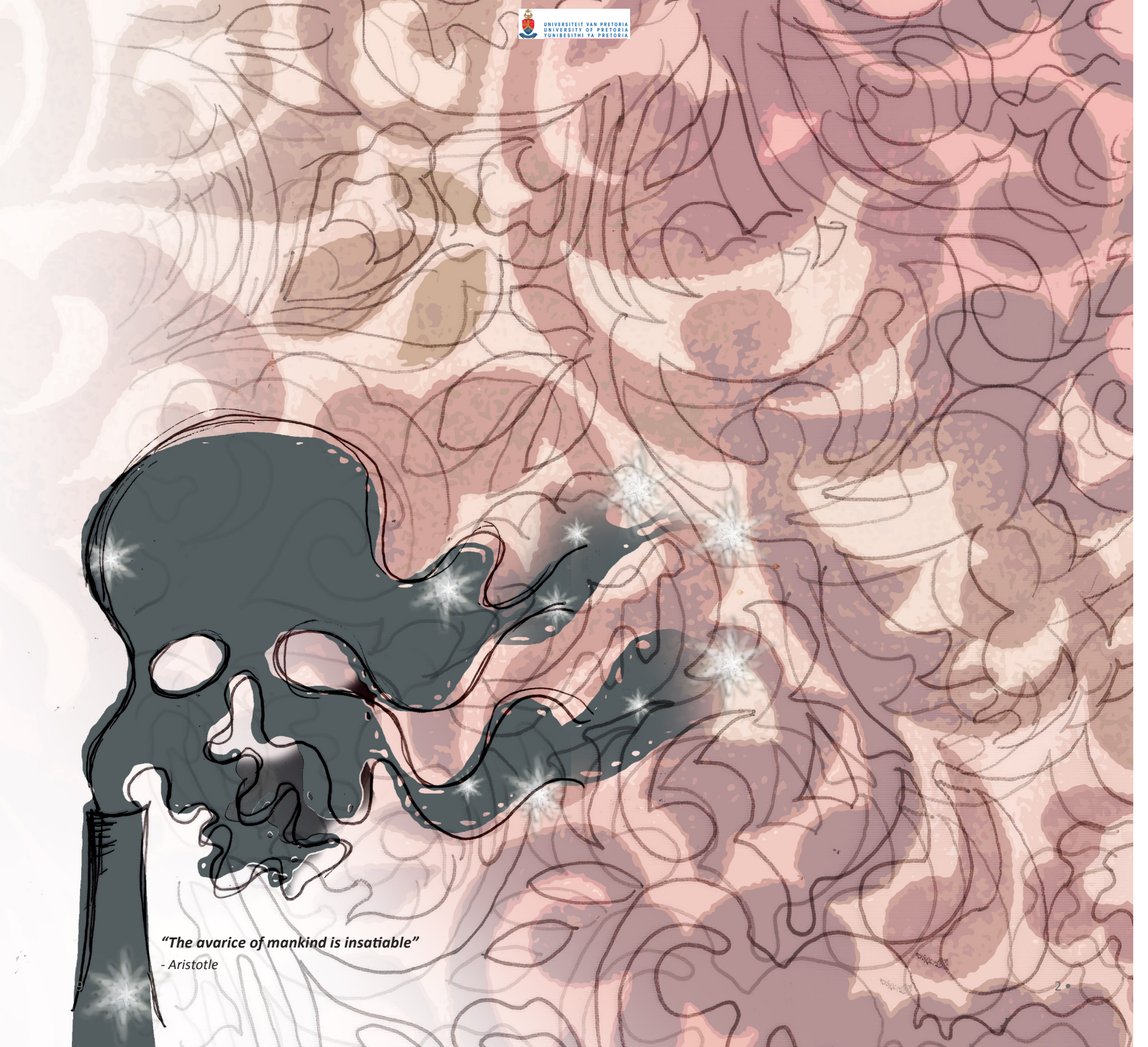
1.1.8 CONCLUSION

The discipline of production design is a fascinating one with limitless possibilities that, with a bit of extra effort, can change the real world through the fictional world created.

2. THEORETICAL PREMISE

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

- Dr Seuss



"The avarice of mankind is insatiable"

- Aristotle

2.1 A UTOPIA OF AFFLUENCE

During the last two years the world appeared to be between two opposite extremes. On the one hand the world was entering a state of dystopic recession. Warnings of a second Great Depression filled the news. At the same time designers were turning out more utopian promises in the form of glittering chandeliers, sparkling wallpapers and laser cut flower patterns than ever before (Icon Magazine Online 2007). Design was producing things the world didn't need - "form followed frivolity" (Cannell 2009). The world believed the utopian promises of consumerism and shopping districts around the world could have been confused with the Seregenti during migration.

> *"Early in the age of affluence that began after World War II, retailing analyst Victor Lebow declared: "Our enormously productive economy...demands that we make consumption our way of life, that we convert to the buying and use of goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption…We need things consumed, burned up, worn out, replaced and discarded at an ever increasing rate" (Lebow in Durning 1992: 21-22).*

The world has since heeded Lebow's call. The advocates of consumerism argued that if no one spends, no one sells and then no one will work – which could in turn lead to a repeat of the Great Depression (Durning 1992:106). Their advice of excessive spending has led exactly to the outcome they feared most.

Because of the utopian dreams of materiality and success, people have been spending too much and the world's debt has led to dystopic recession (Kateb in Manuel 1966:239; Lebeko and Dreyer 2009:20; Van Graan 2009). The situation appears to be improving, but the lesson still needs to be learned, so that the world does not fall into the same trap again.

Apart from economic problems, the consumerist search for utopia is also hastily consuming the natural environment. The Western world has been "...trapped on a treadmill of more work, more consumer goods and hence more destruction of the earth" (Starke in Durning 1992:12).

Despite all this, **materialistic** purchases were not bringing people any closer to utopia or happiness, as research has confirmed and to what Skitovsky referred to as the 'joyless economy' (Durning 1992:23; Van Boven 2005:2).

The dystopic mess was greatly contributed to by designers. Chapman and Gant (2007: xvi) asked the question; "Are designers guilty of killing the planet?" Nussbaum (2007) stated that "The rap against designers is that they design CRAP that hurts the planet."

This gave rise to the question – what is the responsible designer's role in this? What is the appropriate reaction? What lessons need to be learned? People will keep on consuming – without finding happiness – for as Aristotle said; "the avarice of mankind is insatiable" (Durning 1992:37). Yet to stop designing will not help. What can bring people happiness in a time of recession/post-recession in an environmentally responsible way?

2.1.1 THE GOLDEN AGE OF HOLLYWOOD

This lead to an exploration of what exactly did happen in design and the arts when the world was previously in a state of economic turmoil. During the Great Depression the focus was on

utopia
"An imaginary place, society, or situation where everything is perfect."

dystopia
"an imaginary place or society in which everything is bad."

(OED 2006:311;1147)

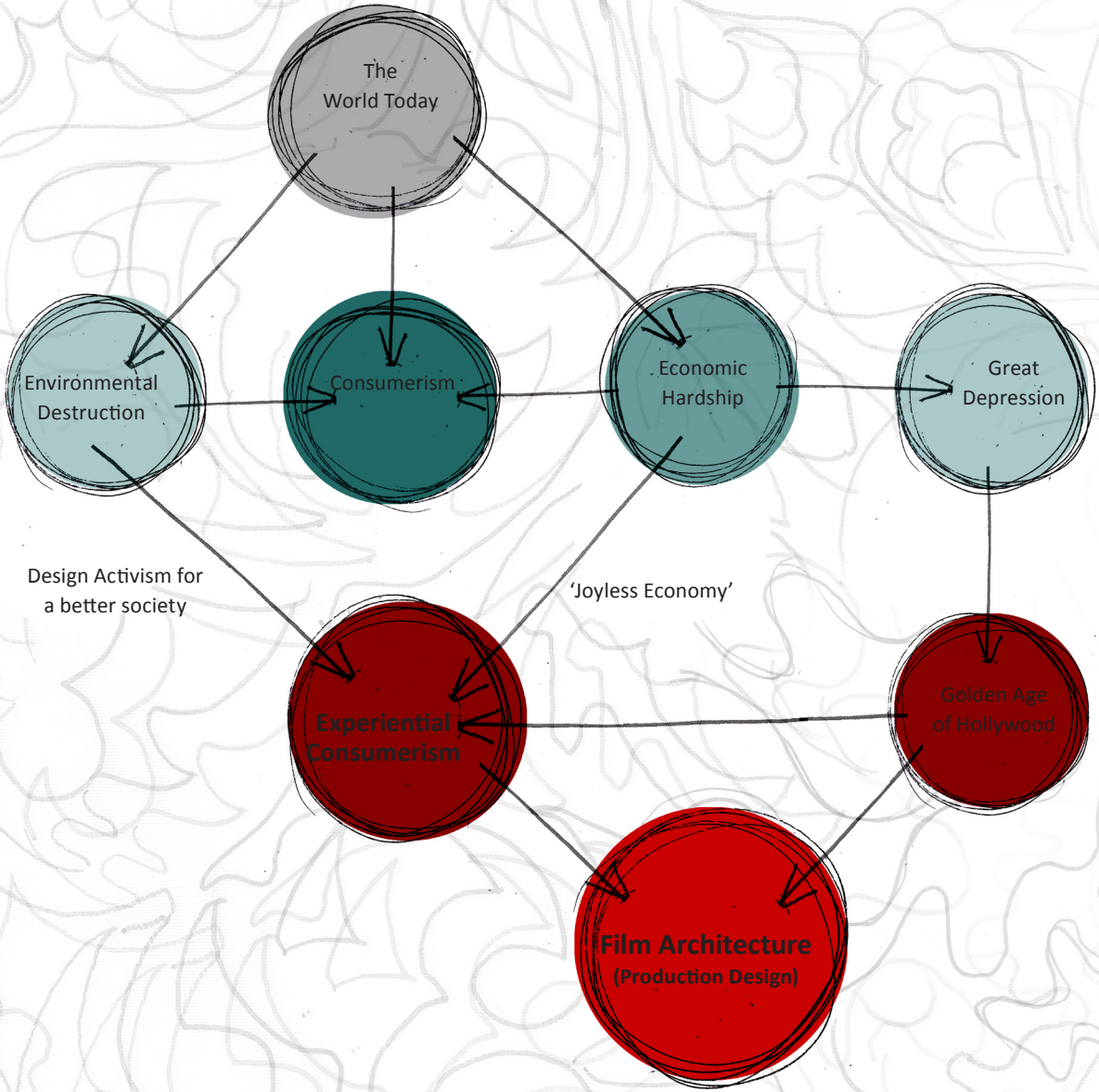


Figure 2.2 Theoretical thought process

entertainment. Especially the film industry flourished, during this time, often referred to as Hollywood's 'Golden Age'. Hollywood turned out film after film, satisfying the escapist needs of audiences (Library of Congress 2002; Lone Star College 2008).

2.1.2 EXPERIENTIAL CONSUMERISM

Apart from the mere escapism luring the audiences of the Great Depression era to cinema houses, recent research gives another possible explanation of the choice of film as a favourite pastime. Research has proven that money can indeed buy happiness, if spent on an **experience,** instead of a **materialistic** purchase (Howell and Hill 2009; Van Boven 2005; Van Boven and Gilovich 2003).

Studies on experiential consumerism, indicated that experiential purchases (as opposed to materialistic purchases) brought more happiness to participants, as well as increased happiness to those around them (Howell and Hill 2009:2; Van Boven 2005:1; Van Boven and Gilovich 2003:9). Firstly, this was due to increased relatedness and successful social interaction, because a life experience is a better source of conversation than a materialistic purchase (Howell and Hill 2009:6; Van Boven:1). Secondly, experiential purchases improved happiness because it is less prone to social comparison than materialistic purchases (Howell and Hill 2009:2; Van Boven: 7). Lastly, the research indicated that people were also more inclined to remember the memory of the experience (Howell and Hill 2009:8; Van Boven 2005:1). Even if such an experience prove slightly unpleasant at the time, after a while the memory of the experience improves in retrospect (Van Boven 2005:6).

This increase of happiness due to the experiential purchase of a film, undoubtedly must have been another reason for the lure of film during the Great Depression.

Van Boven and Gilovich (2003:9) conclude by saying that; "[their] research suggests that individuals will live happier lives, if they invest in experiences rather than material possessions. By the same token, **communities** will have happier citizens, if they make available an abundance of experiences to be acquired" (own emphasis).

A few designers concur and have caught onto this. 'Experience Design' has been mentioned as a design activism for a better society (Chapman and Gant 2007:30). **Experience design** is defined as

> *The practice of designing something that creates an experience with consideration to the 'moments' of engagement and memories created (Chapman and Gant 2007:30).*

2.1.3 AN EXPERIENCE WITH *ZEITGEIST*

It has been stated that society has consumed its way into dystopic economic and environmental state. Research has proven that people do not find comfort in these materialistic purchases which got the world in such a state. People can, however, find comfort in experiential experiences or purchases that will increase the level of contentment for themselves and those around them. Even communities would do best to invest money in experiences for their inhabitants, as stated above.

It would therefore appear that designing an experience would be a given choice for a designer concerned with the 'interior' of society.

With so many experiences that can be pleasurable to society, it would have been difficult to decide what kind of experience to design, if history had not proven what people prefer to experience in uncertain times. **Film as experience**, proved to be the 'golden choice' in such dystopic times.

When also considering the fact that a film can entertain millions over and over; it is more sustainable than theatre and also more inclusive, as it can be enjoyed in various places at relatively inexpensive prices by anyone at anytime.

One has to agree with Bordwell and Thompson (1997:169), that "[o]f all the techniques of cinema, ***mise en scène*** is the one with which we are most familiar;" *mise en scène* being that what appears (or is implied), in the film frame. It is what we experience when watching a film. This is also what is available to work with to give filmic emotive cues. The *mise en scène* includes the film set, props, lighting, costume design and sound.

The film set, of course, is a piece of architecture, either real and permanent architecture, sometimes temporary virtual architecture; or both. Pallasmaa (2001:20) even states; "[t]here are hardly any films that do not include images of architecture." This statement holds true regardless of whether buildings are actually shown in the film or not..." as a distinct place is always implied.

Therefore filmic architecture as an experience and its nature of being real, virtual or both, will be explored for this dissertation.

syntagmatic
"Referring to the syntax or organization ot the elements that make up a sentence or film image and how each element relates to the other parts of that sentence or image. In 'film language'...the elements of space and time are a vital part of the equation" (Rizzo 2005:320).

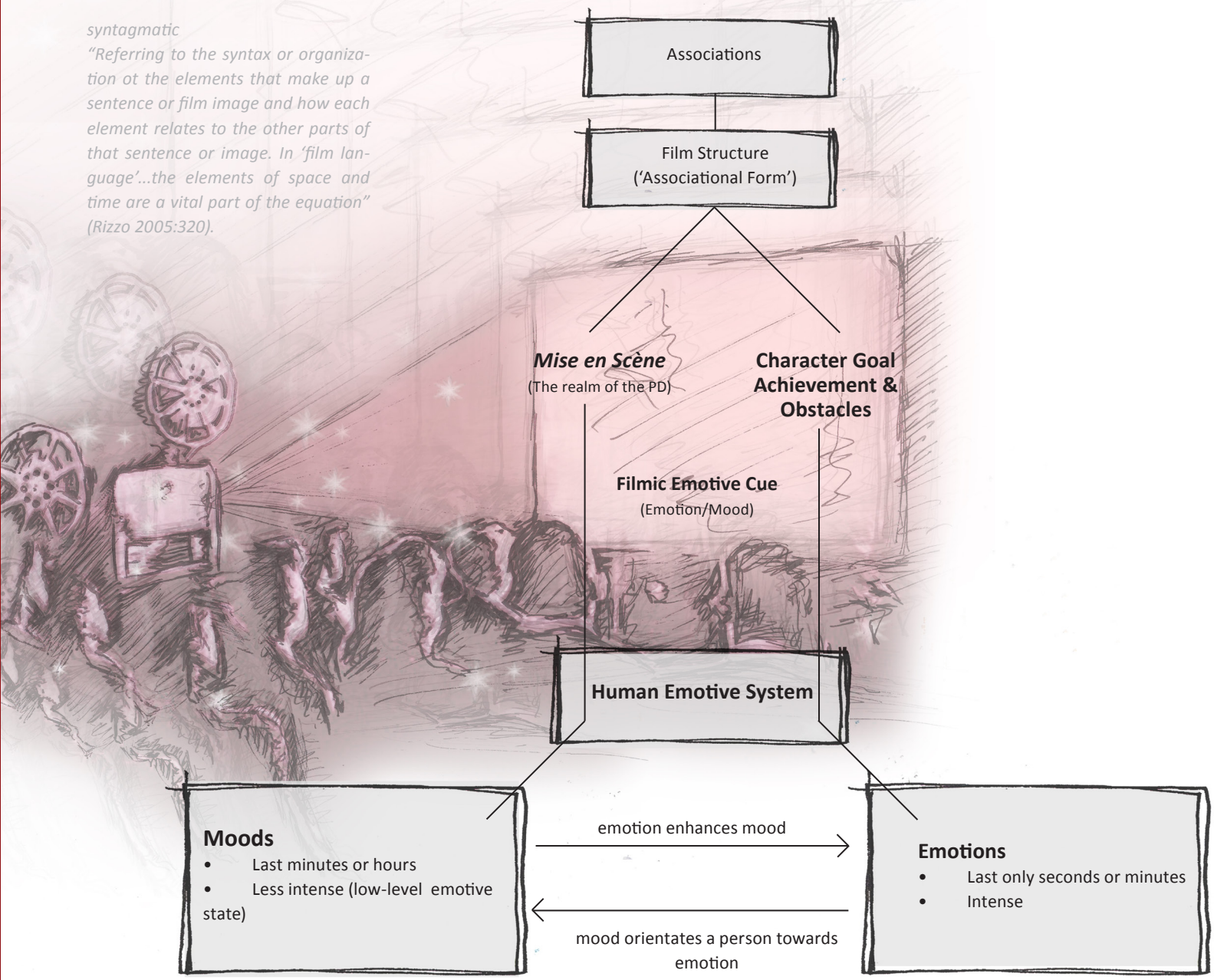


Figure 2.3 The process by which emotions and moods are evoked when viewing a film

In order to create filmic architecture that speaks to the 'interior' needs of an audience, the way in which films create emotion needs to be understood.

2.2 FILM AND EMOTION

Despite differences between how individuals or cultures experience emotions, there are limited, but foundational 'universals' in the human emotion system that are cross-cultural and which can be used to elicit emotion in film (Smith 2003:35).

The human emotion system can be divided into **two types of emotive states**. The first is that of **emotions**, which are brief (seconds or minutes) and intense emotive states. Emotion is an "action tendency to spur us toward functional activity" (Smith 2003:37).

Secondly there are **moods** that are less intense, low-level, emotive states, which tend to last longer (hours or minutes). The function of moods in the emotion network is to orientate people toward their environment by means of focussing the body's attention on particular stimuli and thus changing the way the environment is interpreted. A person in love (mood), are more likely to experience a sunny day as pleasant (emotion), than a person who is angry (mood) and might see the heat and glare of the sun as irritating (emotion). The mood framework allows people to sift through their environment to experience brief emotions aligned with that of the mood. People are in fact looking for opportunities to experience the particular emotion (Smith 2003:37-38).

Moods have inertia that keep people orientated toward experiencing the same emotion. Moods orientate a person to revisit the stimulus time and again, thus refreshing the emotional experience with a new burst of emotion. These emotional surges in turn refresh the mood. This cycle continues while emotional stimuli is present (Smith 2003:38).

Smith (2003:42) argues; "...that the primary emotive effect of film is to create mood." In order to get **emotions** out of the audience, a **mood** needs to be created first. Audiences are more likely to experience emotions if they are in the right orienting state. "**Film structures** seek to increase the film's chances of evoking emotion by first creating a predisposition toward experiencing emotion: mood. Films rely on being able to elicit a lower-level emotional state, which can be established with less concentrated cuing than would be required for emotion" (Smith 2003:42; own emphasis). In order to sustain this mood, occasional brief moments of emotion need to be supplied by a film. Mood and emotion sustain each other. "Mood encourages us to experience emotion and experiencing emotion encourages us to continue in the present mood" (Smith 2003:42).

Films use a range of perceptual cues included in the *mise en scène* to evoke mood, such as set design, lighting, camera, sound, music, character, narrative etc. (Smith 2003:8, 42; own emphasis). "Each of these cues can play a part in creating a mood orientation or a stronger emotion" (Smith 2003:42). The mood-reinforcing emotions are created by means of goal achievement and obstacles of characters (Smith 2003:44). Thus;

***MISE EN SCÈNE* > PERCEPTUAL CUES > MOOD**

GOAL ACHIEVEMENT & OBSTACLES > EMOTION

Because of the variety among individual viewers' emotion systems, a single cue can be misinterpreted or missed by some audience members. Therefore films provide a variety of emotive cues to improve the likelihood that the audience will get to a desired mood state. These filmic cues need to operate within a **coordinated structure** to orientate the emotive state of the film as a whole, which can be achieved by **associations** (Smith 2003:42-43). According to to McCarthy (2005:4), "...interiors are controlled and potentially controlling, environments..." which is exactly what the film environment is.

In effect a controlled and structured environment needs to be created by means of associations, in order to evoke what's on the inside first -moods and then by means of that, emotions

Working with associations allows filmic designers to be able to use unconventional means of expressing emotion. "Although emotion prototypes powerfully shape our experiences, associations make it possible to bypass prototypical functioning" (Smith 2003:23). "Associations can link emotions to seemingly unconnected objects…and the emotion system can connect emotions that appear to be opposites" (Smith 2003:34). **Associational form or Syntagmatic form** in film is where the filmic elements "...are juxtaposed to suggest similarities, contrasts, concepts, emotions and expressive qualities" (Bordwell and Thompson 1997:477). To create the mood or desired effect, key characteristic needs to be emphasised, while others are toned down (Barnwell 2004:21).

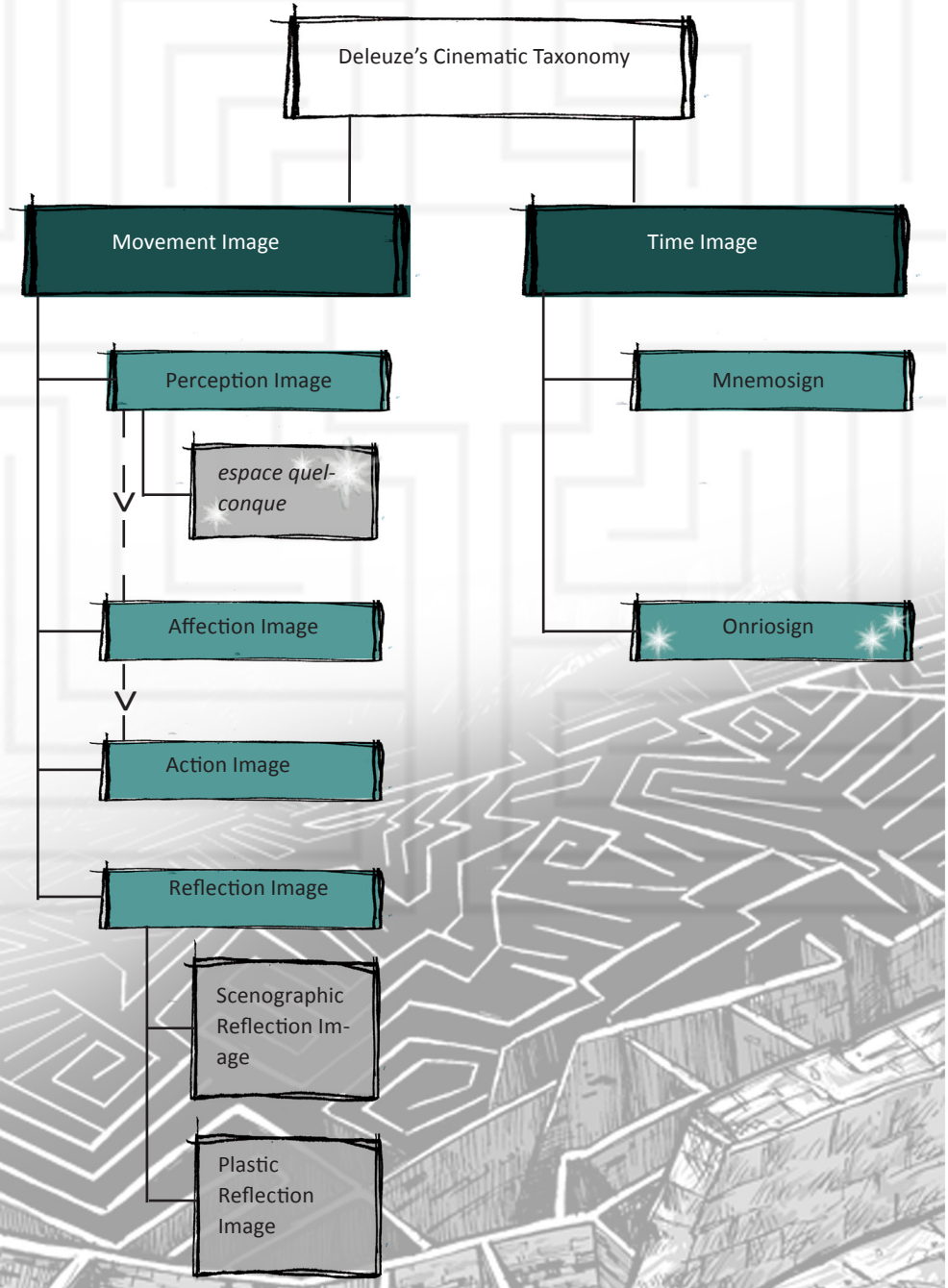


Figure 2.4 Deleuze's Taxonomy

It is clear that to create an 'interior' based production design, a structured associational system needs to be created between the various elements of the film. A good starting point would be a filmic taxonomy that dissects the different parts of a film. Such a system could then be used to do an analysis or 'breakdown' of the narrative text to see which parts are important for the production design. It can then assist in creating a structured diegetic world for the film.

Gilles Deleuze created an extensive taxonomy of signs for cinema by analysing films from a wide range of eras and genres in his *Cinema 1: The Movement Image* (1983) and *Cinema 2: The Time-Image* (1985) (Bogue 2003:1-2). This was used as a starting point for an **syntagmatic filmic taxonomy**.

Deleuze's taxonomy disregarded the important role of **place** in cinema, as will be discussed. Foucault's theory on heterotopia's fills in this shortcoming, to complete a new taxonomy that can be used as a basis for doing a 'breakdown' and forming a concept.

2.3 DELEUZE'S CINEMATIC TAXONOMY

According to Deleuze; "[t]he universe is a vibrational whole – a virtual past, coextensive with all that has ever happened…", pressing through the present into the future, by means of memory (Bogue 2003:6, 14, 25).

The onward thrust of a past through a present and into a future, is manifested in images that incorporate a 'before' and an 'after' within a 'now' (Bogue 2003:7). It is an "**interplay of the virtual and the actual**" (Bogue 2003:6).

For Deleuze, this vibrational universe is comprised entirely of *images* – living and non-living. These images are divided for the cinematic taxonomy (Bogue 2003:4). He distinguished between two main types of images, namely the **movement image** and the **time image**, each with 'sub-images'. Deleuze even goes so far as to say, if everything in the universe comprises of images in movement then the universe itself is a cinema - a metacinema (Bogue 2003:34-35).

The **movement image** is time as portrayed in the commonsense world and perceived by the senses. Classic cinema only used movement images with its linear narrative structure comparable to reality (Bogue 2003:4-5). Opposed to this is the **time image** – where the common sense conception of time breaks down and shattered time emerges. It is found in modern cinema (Bogue 2003:5).

2.3.1 THE MOVEMENT IMAGE

The movement image is divided into six types of images, of which four were selected for relevance. These are the perception image, the affection image, the action image and the reflection image.

Perception Image

Occurs when the living image perceives the outside world (Bogue 2003:4). For human beings there is no division between internal mental reality and external material world. By means of the subtractive perception image we only perceive what is important to us (Bogue 2003:33).

Affection Image

The affection felt after perceiving something through the perception image, before an action is taken (Deleuze 1986:221-2). The perception and the affection images always go hand in hand (Bogue 2003:37-38).

Deleuze only briefly discusses the ***espace quelconque*** as a subcategory of the affection image. It is characterized as a fragmented, disconnected and decontextualized, space with no logical coordinates. There is also an absence of linkage in such spaces and it is a virtual space (Bogue 2003:80; Deleuze 1986: 112). The ways of constructing an *espace quelconque* can either be with shadows or fog, as found in German Expressionistic film; or by means of colour that absorbs the characters in a film or void empty frames (Bogue 2003:81 and Deleuze 1986:114-123).

Action Image

The living image acts on the affection image (Bogue 2003:4).

Reflection Image

A "...sign which, instead of referring to its object, reflects another" (Deleuze 1986:222). It can be compared to metaphors, metonymy, allegory, hyperbole or inversion (Bogue 2003:94). The reflection image can further be divided into two types. The **Scenographic Reflection Image** is a portrayal of a current event as a replay of a future event still to happen. An example of the second type, the **Plastic Reflection Image** (Bogue 2003:93), is the maze theme in *The Shining* (1980); as symbol of entrapment (see precedent study on *The Shining*).

2.3.2 THE TIME IMAGE

Deleuze distinguishes between five types of time images, of which only two are relevant:

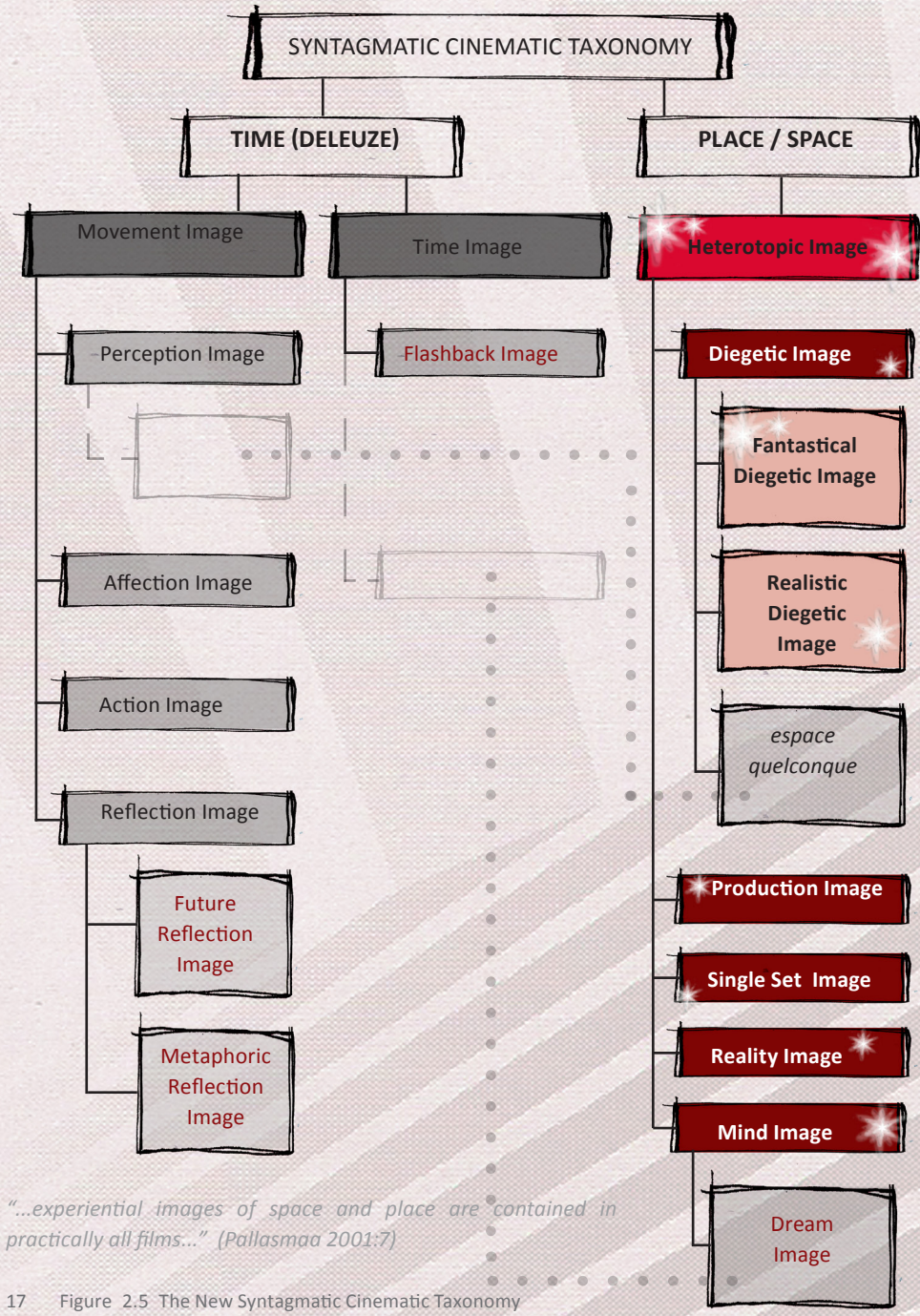
Mnemosigns or flashback memories (Bogue 2003:5 & 115).

Onriosigns or dream landscapes such as Hollywood musicals (Bogue 2003:5).

2.3.3 THE MISSING IMAGE

According to Deleuze, *time* was "the fundamental element of cinema" (Bogue 2003:12). Time - either linear (movement-image) or fragmented (time-image) - is important, but cannot exist without space. Cinema, cannot exist without space. Not if the space is fragmented, such as a complete white screen, or more concrete like architecture. In fact, Pallasmaa (2001:20), feels that nearly all films include images of architecture, regardless of whether the building is shown or not, a place is always implied. He also states that a cinematic narrative event is "...inseparable from the architecture of space, place and time..." (Pallasmaa 2001:20) Time cannot exist without space or a place, just as a space exists within a period of time. Despite this important connection, Deleuze hardly discusses or considers space or place in his taxonomy.

Not all spaces in film are fragmented, disconnected or decontextualized with no logical coordinates and an absence of linkage (*espace quelconque*); or dreamlike (onrio sign). Most diegetic worlds are environments connected in a logical and recognizable manner with linkage, even though portrayed in narrative time as opposed to real time. Apart from the blatantly opposite of an *espace quelconque,* there are also other 'place images' that are not necessar-



"...experiential images of space and place are contained in practically all films..." (Pallasmaa 2001:7)

Figure 2.5 The New Syntagmatic Cinematic Taxonomy

ily fragmented but not realistic either, as will be discussed on the following page.

Therefore it is proposed that a new cinematic taxonomy be created, including this 'image of place'. A few types of 'place images need to be accommodated in the new taxonomy.

Firstly fantasy, sci-fi, graphic, period drama or western films provide spaces that, even though it is not related to a commonsense place, has internal logic. In fact, **films that attempt to create alternative environments, such as fantasy and science fiction films need an internally consistent logic and "...an extreme attention to consistent, self-referring design because of the extra difficulty of creating a world that by its very nature appears odd"** (Tashiro 2008). This is completely opposed to the *espace quelconque*. Not all fantastical environments are dreamlike either, but for the duration of the film are perceived as an alternative reality. It is proposed that this image be called the **fantastical diegetic image**.

Secondly "...in fiction films even the most realistic of cinematic environments provide a structured, dramatically heightened world. Details are included for their thematic and symbolic relevance to story and character..." (Tashiro 2008). Only 'interesting' or 'dramatic' details are included (Tashiro 2008). The space created is not necessarily fragmented or dreamlike, but it is far from realistic. Even in a documentary only the important space or place is portrayed as a cut piece of reality. This image will be called the **realistic diegetic image.**

Thirdly the very nature of the film industry for various reasons such as budget, more often than not, use places for filming other than that where the scene is actually supposed to be. "Scenes

that take place in New York or Los Angeles...are actually shot in Canada" (LoBrotto 2002:2). Or a scene is simply shot on a constructed sound stage set. Also the same place in reality, portrayed by two different directors, will not be the same place on film. It is precisely due to the looking at a place through the 'eyes' of the film that film provides us with a new way to look at our own city, our own architecture. This type of image will be called the **production image.**

Fourthly, the fascinating films made in a single set or place, need to be included. *Rope* (1948) and *Lifeboat* (1944) by Hitchcock and *Wavelength* (1967) by Michael Snow, are some of the most exiting examples (Wollen 2002:214). To accommodate filming requirements such single-set or single-location films needed to become a whole different level of the abstraction of place. *Rope* will be discussed in more detail as a precedent study. This image will be called the ***single set image.***

The fifth 'place image' is an image that appears in the real world. A piece of a world that is not meant to be where it is or in the time that it is such as Disney World, Lost City and Venice, as a time-capsule. This image will be a **reality image.**

Finally, there are those places which exist only in the mind, such as daydreams, memory or dreams, which are not necesarily flashback images like mnemosigns. These types of images will be called **mind images.**

Due to the focus of the dissertation on the blurring boundries of the film world and reality – other multimedia 'place images' will not be included in the discussion.

It is proposed that ***espace quelconque*** be moved to fall under **diegetic images** and **mnemosigns** be moved to **virtual images. Scenographic reflection images** will be renamed **future reflection images** and **plastic reflection images** will be renamed **metaphoric reflection images**. **Mnemosings** will be referred to as **flashback images** and **onriosigns, dream images**. These changes will more readily accommodate the new system and ease of use.

All of these places mentioned have one fundamental aspect in common – they are both **real** in the diegetic world and **virtual** in the real world. Foucault in his *Of Other Spaces, Heterotopias* (1967), discussed exactly such places - **places that are at the same time both virtual and real** (much the same as Deleuze views the universe). He called these places heterotopias meaning 'other place'. Therefore all these 'place images' will be called '*heterotopic images*' in the new cinematic taxonomy.

2.4 HETEROTOPIAS

Foucault suggests that in contrast to utopias ('no place'), there are 'counter-sites' which are real places where utopia is effectively enacted. Places of which it is possible to indicate the location in reality. He presents the mirror as an example of a heterotopia. In the mirror one is presented there where you are not – it gives an unreal, virtual reflection. At the same time the mirror is real and tangible, a piece of glass connected to its surrounding space. The mirror, at the same time, is real and unreal and therefore is a heterotopia (Foucault 1967).

Foucault lists a number of principles that heterotopias adhere to, of which only relevant principles are listed (Foucault 1967).

> Heterotopias are either restricted to varying degrees and reserved only for certain individuals at certain times. Or heterotopias can seem free and open, but in fact only create an illusion of entry. Either way it is not freely accessible. The cinema house and theatre is subject to selective entrance. So too the film set of which normally only crew and cast members are allowed, not the public. When viewing a film it appears that one has entered the diegetic world, when in fact one has not.

> A heterotopia can juxtapose in a single real place several incompatible spaces. The cinema screen or film and the theatre stage are capable of bringing together a series of incompatible places.

> Another type of heterotopia is a perfect and well structured place, as opposed to the real world. The diegetic worlds of cinema are perfectly structured and include only relevant objects.

> Lastly heterotopias function outside of realistic time – for instance accumulating time, as in a monument or museum, or portraying years of narrative time in an eighty minute film. It can also be where time has come to a standstill, like in a cemetery.

It is therefore proposed that a *heterotopic image* be created as experiential product, whilst considering psychological interior needs and being environmentally sensitive.

*"These are the cities...which we are supposed to ameliorate by adding new building and more modern highways and what is the result? We turn them...into dystopias...What is wrong with us? Here is reality and here are our dreams – why don't they lead anywhere? And then I came to the realization that they are not properly connected, because reality and dream move on different planes...**What we need is a place where the dream can meet with reality...**" (Doxiadis 1966: xi)*

3. TOWARDS A DEFINITION OF PRODUCTION DESIGN

The truth is stranger than fiction.

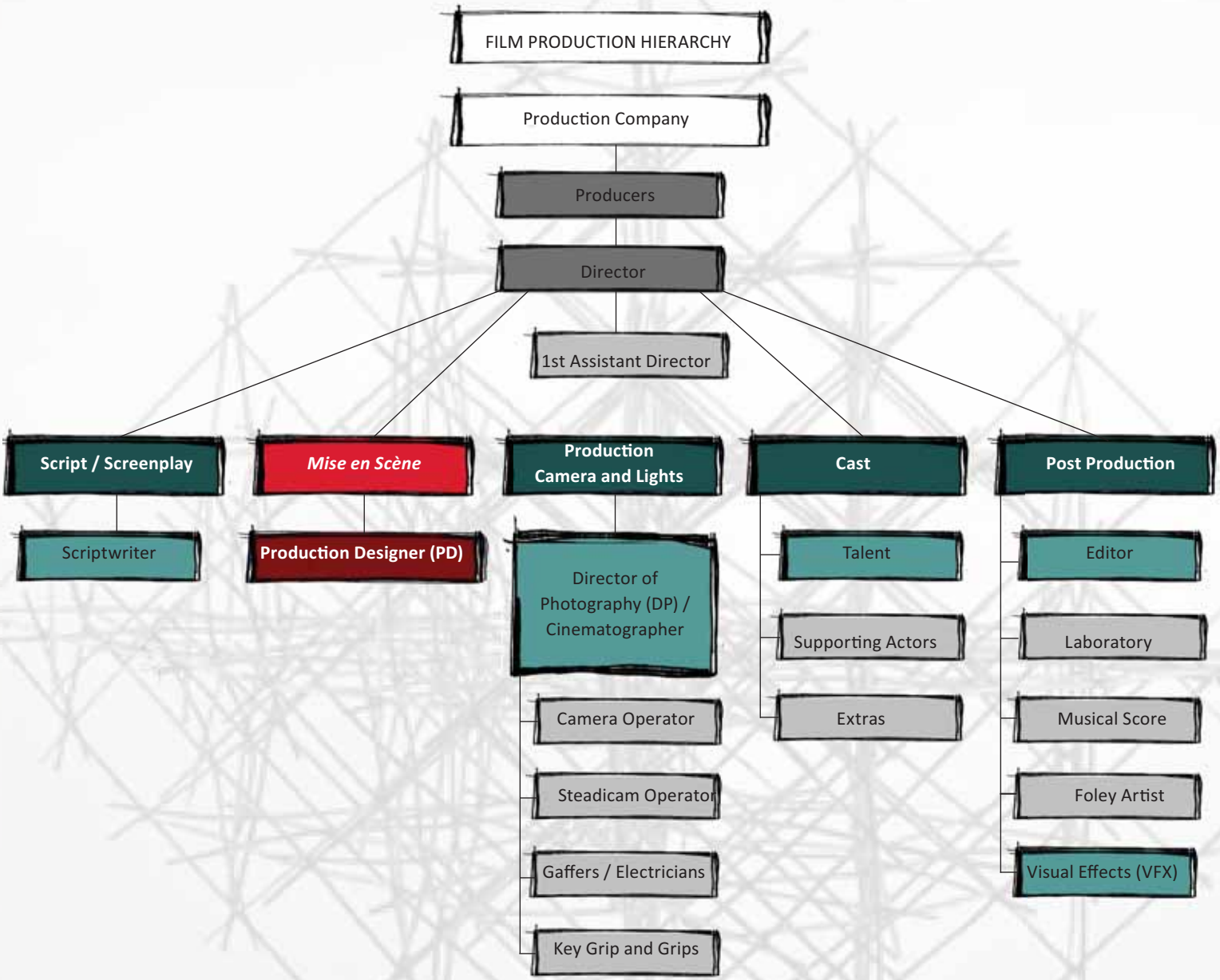


Figure 3.6 Film Production Hierarchy

Production Design is the design of cinematic environments. In order to understand the role of the production designer (PD) within the film production process, it is important to have a broad understanding of the numerous role players and their tasks within the film production process as well as the film production process itself.

3.1 THE PRODUCTION DESIGNER'S ROLE IN FILM PRODUCTION

Feature films are created by teams of hundreds of people, working for between three to five years (Louw 2009). The production team is started with producers that maintain the budget and the director who is the central creative force (LoBrotto 2002:15). The director is "[u]sually the key decision making force in all stages of a film" (Mamer 2002:418).

The look and style of a motion picture is created by the collaboration between the director, director of photography or cinematographer (DP) and PD. The three parties corroboratively, are referred to as the 'trinity'. The PD together with the DP has to create an atmosphere for the film, that the director can use to direct the cast in and determine the cinematography together with the DP (Barnwall 2004:21).

The responsibilities of a PD vary from one film to the next. It is determined by the director and the production designer. It depends on the director's strength of visual style and the desired involvement of the PD (Weavind 2009; Tashiro 2008). The collaboration of the trilogy determines how much of an environment the production designer will create (Tashiro 2008).

In general, the director and DP "is responsible for the visual decisions that determine staging and camera setup" (Katz 1991:97). "After the director, the PD is the person with the most comprehensive artistic overview of a project" (Tashiro 2008). The PD has to interpret the script and the director's vision into physical environments - in essence visualize the narrative to create an environment in which the film can take place (LoBrotto 2002:1,5).

To achieve this, the PD needs to integrate several departments (see diagram below) such as sets, wardrobe and props, to create an integrated whole "guided by the director's overall conceptual and thematic plan" (Campbell 2002: 16; Katz 1991: 97).

Camera, composition, light and movement is the domain of the DP. "The DP is usually brought onto the production team later than the PD, due to budgetary reasons, as the DP is more expensive (Barnwell 2004:46; LoBrotto 2002:15). The PD and the DP work closely together during preproduction and early production (Tashiro 2008).

Production design technically ends at the edge of the frame, so it is ideal if the designer knows how the director and DP want to frame a scene (which in turn is influenced by photographic processes and lens choices). Because this changes frequently many designers build the whole set in order to prevent later frustration. Directors also prefer to get as much **coverage** as the budget allows to have more editing options (Campbell 2002:167).

The manner in which the DP will light the scene has certain technical aspects the production designer need to consider – such as space for lighting equipment (Tashiro 2008; Weavind 2009).

Other key parties in film production can be seen on the diagram to the left . The departments under the PD will be discussed under 3.3.

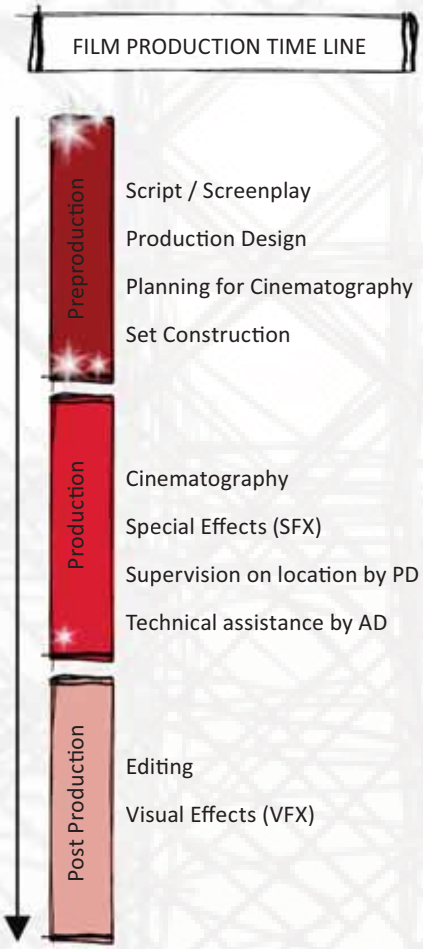


Figure 3.7 Film Production Time Line

Figure 3.8 Film Production On Location (adapted from AFDA 2009)


Director of Photography (DOP or Cinematographer) Responsible for the quality of the photography and the cinematic look of the film
Assistant Cameraman Assists the Camera Operator
ip Reports to the Director of Photography; work with all of the camera support equipment on the set; co-ordinates camera movement
Focus Puller Adjusts the focus of the lens as the actor moves closer to or further from the camera, or when the camera moves during a dolly shot
Clapper-Loader Loads the camera with a new roll of film as needed, and operates the clapper board
Costume Designer Conceives and designs the costumes to be worn by the actors in the film
Make-up Artist In charge of make-up applied directly on the skin of an actor for cosmetic or artistic effect
Director Interprets the script and unifies the components of the film into something that bears his or her signature
Assistant Director (AD) Controls the shooting schedule and is responsible for keeping the production on schedule
Producer Given control over the entire production of a motion picture and is ultimately held responsible for its success or failure
Executive Producer Secures financing for a film

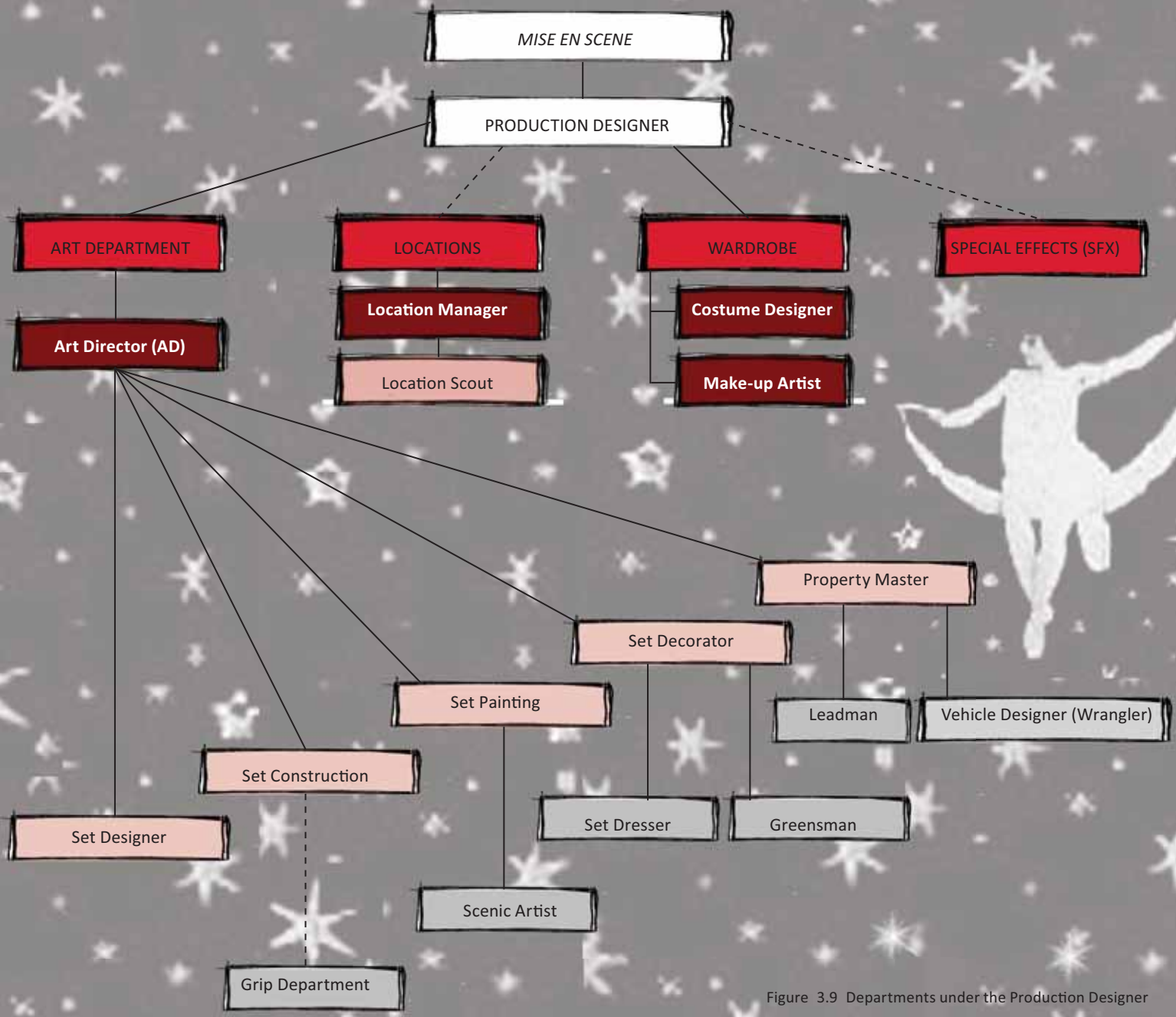


Figure 3.9 Departments under the Production Designer

The term 'production designer' is often confused or used interchangeably with 'art director' (AD) or 'set designer'. In order to understand this, a brief look at the history of production design is necessary, as the change in terms relates to the role becoming more complex over time (Barnwall 2004:8; Ward 1994:49).

3.2 A SHORT HISTORY OF PRODUCTION DESIGN

The origins of production design were born out of the collaboration between the decorative arts, theatre, and architecture, of which architecture had the most pronounced influence (LoBrotto 2002:93). Many production designers originally came from the field of architecture and "brought structural design concepts to cinematic storytelling" (LoBrotto 2002:98; Barnwall 2004:13).

"The title 'technical director' was one of the earliest credits used in the US, then 'interior decorator', only moving on to 'art director' in the 1930's...the changing terms reflect the changing complexity and focus of the role over time" (Barnwall 2004:8; Ward 1994:49).

The term 'production designer' was first used to describe the contribution of William Cameron Menzies in *Gone with the Wind* (1939), by the producer David O. Selznick. Before this, the physical environments depicted in films were inexpressive and suppressed in favour of the narrative. Art directors merely designed sets and scenery. Menzies was the first to fully visualize a motion picture in its totality and to create a film environment that impressed in itself (Tashiro 2008 and LoBrotto 2002:2). Menzies "designed the shot itself, in terms of size, angle and movement" (Barnwall 2004:13). The role and relationship of director and PD had become blurred. The PD's role was no longer just supplying the background as the AD before him had done, but he was involved in the fundamental planning of the film. The PD's assistant became known as the art director (Barnwall 2004:13).

The AD was now responsible for managing the art department budget and supervising the construction of the sets, while the overall design of the film was the responsibility of the PD. This is the same division of responsibilities that is still maintained today, but it varies from film to film. The director directs the actors and the PD directs the visual elements (Barnwall 2004:13).

3.3 THE PRODUCTION DESIGN TEAM

3.3.1 THE ART DEPARTMENT

This is the department where the production designer will be most involved. The team includes the AD, set decorator, set designer, scenic artist and property master, digital concept artist, concept illustrators, graphic designers, storyboard artists, property department and construction department (Barnwall 2004:124; Rizzo 2005:317).

Art directors plan and execute the design of the sets; are responsible for the budget and have to oversee the art department crew (Rizzo 2005:317). On-set AD's run the show during production (LoBrotto 2002:44).

Set designers do the actual drafting (Campbell 2002:16).

Conceptual artists assist the PD in conceptualizing fantastical world spaces, objects or creatures such as those in Star Wars (Campbell 2002:16).

The **scenic artist** is responsible for "work which includes the preparation, painting and/or coloration of all textures, plastering, appliquéing on scenery, sets and properties; the application of all decorative wall or surface coverings; all lettering and sign work...and the painting and aging in the construction studio or on the set" (Internet Movie Database [IMDb] 2009).

The **set decorator** is in charge of "decorating the set with all furnishings, drapery, interior plants, and anything seen on indoor or outdoor sets" (IMDb 2009).

The **set dresser** maintains, moves and resets the set decoration items according to the decorator's requirements and to accommodate camera, grip and lighting setups. The set dresser is also responsible for set decoration continuity (IMDb 2009).

The **property master** is responsible for all props - items handled by actors (LoBrotto 2002:21). This can mean designing or buying props. Props also include all movable objects in the film (Bordwell and Thompson 1997:19).

The **leadman** is the assistant to the property master and responsible for tracking down props (Bordwell and Thompson 1997:19).

The **construction department** is responsible for building the set (Skillset s.a.).

3.3.2 THE LOCATIONS DEPARTMENT

Although not actually under the PD, the location department has to work closely with the PD, as locations form a crucial part of production design.

Figure 3.10 A scenic artist doing the final touches to one of the sets for *Coraline* (2009) (Annazhu.com s.a.)

Location scouts find appropriate locations and **location managers** makes arrangements for use of locations and supervises locations during production.

3.3.3 WARDROBE DEPARTMENT

The **costume designer** needs to work in collaboration with the PD and AD to ensure that the costumes adhere to the visual concept of the PD.

3.3.4 SPECIAL EFFECTS

Special Effects "refer to effects produced on the set, as opposed to those created in post production" (IMDb 2009). This department is also technically not under the PD, but because this has a visual impact on the setting, close collaboration is necessary.

3.4 THE PRODUCTION DESIGN PROCESS

A film setting is a metaphor. Vast amounts of information can be communicated with one set, that would have taken pages of dialogue and description in a novel or other non-visual narrative medium (Barnwall 2004:27). The creation of a connected visual metaphor from the narrative is the key role of the PD.

"Production design is a branch of architecture in which environments are built, but seldom in their entirety and seldom to last. What the production designer creates are spaces, facades and even entire towns. Through these, the designer can evoke mood, establish themes and give characters life" (Heisner in Barnwell 2004:120).

3.4.1 PREPRODUCTION

Preproduction is the period of planning and preparation, before actual filming starts (Mamer 2002:27). This period can last two to three months or several years. For the film as a whole there are five phases of preproduction namely scriptwriting; production design; script analysis; cinematography (when the DP joins the team) and rehearsal (Katz 1991:98). Preproduction is the phase where the PD is most involved (Weavind 2009).

In this time the designer has to conceptualise, research, draw, plan and build (Barnwell 2004:59).

Analysis - The Script (Barnwell 2004:47-48)

> The script is the starting point. It is important to note that "[t]he set is conceived in relation to the shooting script, which details the movements of the actors and camera." This helps the designer create sets that will actually be in shot. Director may decide certain script parts unnecessary or changed etc. (Barnwell 2004:48).

> It needs to be broken down into more digestible units such as locations, interior and exterior, day and night, period, etc. This will assist the production designer in establishing how many settings there are. This is known as the breakdown.

> For each setting a breakdown of essential items, characters, special effects etc are needed.

> The emotion of each scene can also be noted as this will form an important part of the concept.

In the case of the production for *The Lorax*, the starting point was the picturebook with the same title, instead of a script.

Research

Production Design

> The concept or approach needs to be established. "Without the concept there is no overall design, just disparate sections of setting" (Barnwell 2004:50). This needs to consider the director's vision and the intention of the script (Weavind 2009 and Tashiro 2008).

> The script needs to be rewritten in visuals. This can be done by means of sketches, production illustrations or **storyboards**. These are done by production illustrators and storyboard artists. Knowledge of aspect ratio's proxemics, camera angles and camera movement is essential to create these (Tumminello 2005:248; Weavind 2009).

> After the concept has been established, choosing the **colour palette** is essential (Weavind 2009).

> The designer needs to consider the composition of the mise en scene.

> The designer needs to consider any practical lighting required by the DP, i.e. ligthing that is actually seen or used in the scene (Barnwell 2004:59).

The Budget

"Films [sic] noirs of the 1940s are classic examples of budgetary influence on setting. The lack of money for extensive sets induced the need for sections to be lost in shadow" (Barnwell 2004:48). Another means of lowering costs is to use one space and rework it.

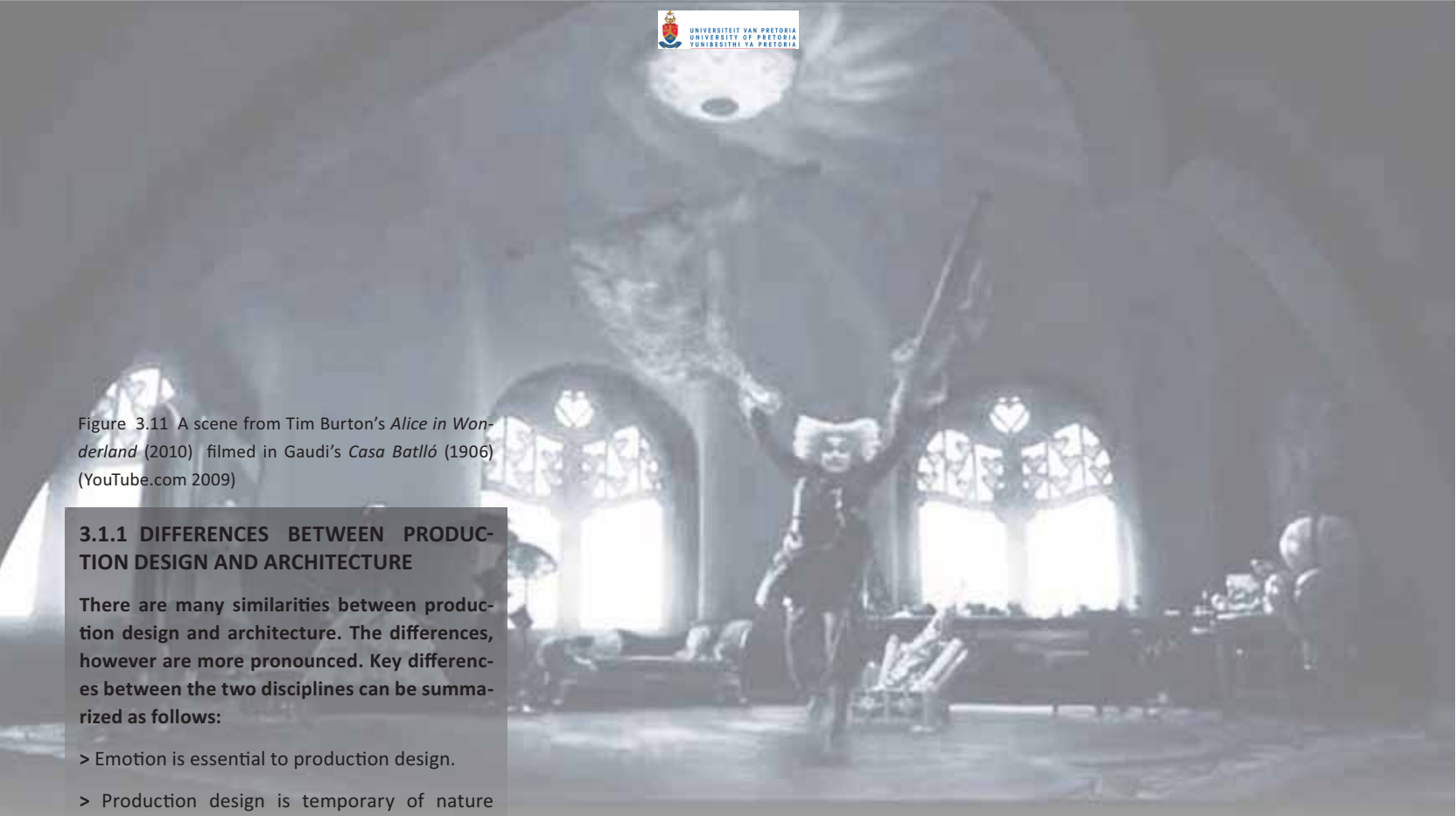


Figure 3.11 A scene from Tim Burton's *Alice in Wonderland* (2010) filmed in Gaudi's *Casa Batlló* (1906) (YouTube.com 2009)

3.1.1 DIFFERENCES BETWEEN PRODUCTION DESIGN AND ARCHITECTURE

There are many similarities between production design and architecture. The differences, however are more pronounced. Key differences between the two disciplines can be summarized as follows:

> Emotion is essential to production design.

> Production design is temporary of nature (Barnwall 2004:24; LoBrotto 2002:99).

> Practicality is not at the core of production design (Barnwall 2004:24).

> Knowledge of aspect ratios, proxemics, camera angles, camera movement and camera lenses is essential (Weavind 2009)

> The location for a film (a site in architecture), is of less importance and usually chosen later in the design process than in architecture. It is often usually only chosen after the storyboards have been done. The location can also change at very short notice before shooting (Weavind 2009).

"It is undeniable that the cinema has a marked influence on modern architecture; in turn, modern architecture..." influences cinema (Mallet-Stevens in Neumann 1999:14)

The Shooting Schedule

The PD needs to adhere to the shooting schedule and work as economically with time as possible. This also requires creative thinking on the part of the PD. To save time one location can be used, a location or set can be revamped instead of being made from scratch or scenes can be shot out of chronological order (Barnwell 2004:50). Sets can be used for filming while other are being prepared.

Filming doesn't always take place in sequence and the designer can use this in designs.

Location Scouting

While location scouts are photographing possible locations, the designer together with storyboard artist, concept illustrators and concept modellers produce sketch ideas and 3D models (Rizzo 2005:49).

Animatics

According to Rizzo (2005:59-60) an animatic is more than a mere 'moving storyboard' that determines how scenes flows into each other (as is the general assumption). Each storyboard frame is analysed by means of a computer generated image according to plan, elevation, isometric sketches, set info, camera info and additional equipment info where applicable.

Technical Drawings

Both architectural and theatrical drafting styles are tolerated in Hollywood, although the former is the preferred convention (Rizzo 2005:139-141). Technical drawings are sometimes referred to as director's plans, blueprints or bluelines (Rizzo 2005:197; 308). It depends on the budget if the designer, art director, set designer or a draftsperson draws the technical plans (Barnwell 2004:72). From these drawing the sets are constructed.

Set Construction

Set Painting

Finding Props

Set Decoration

"...[T]he set is furnished and propped by the set dresser, who will have plans from the designer to work to" (Barnwell 2004:76).

3.4.2 PRODUCTION

Production is when actual filming takes place (Mamer 2002:27). The PD is on set if budget allows. On set duties include ensuring that everything happens according to their specification, checking that there are no colours that clash with that of the film's colour palette and checking that there is no branding or signage in view of the camera (Weavind 2009).

On larger production there is usually an onset AD seeing that their head of department's ideas are communicated, while the designer is setting up the next location (Barnwell 2004:78).

"Once production begins...the designer's importance diminishes considerably. While designers are likely to remain on the payroll through production and are often asked to perform work during shooting, their creative input at that stage moves from the conceptual to the technical..." (Tashiro 2008). Last minute things often need to be done, as will be discussed in the precedent study of *The Bang Bang Club* (2010).

3.4.3 POSTPRODUCTION

The set is struck and set decoration and property are returned.

Editing and detailed finishing processes take place (Mamer 2002:27).

4. DESIGN METHODOLOGY

"And action!"

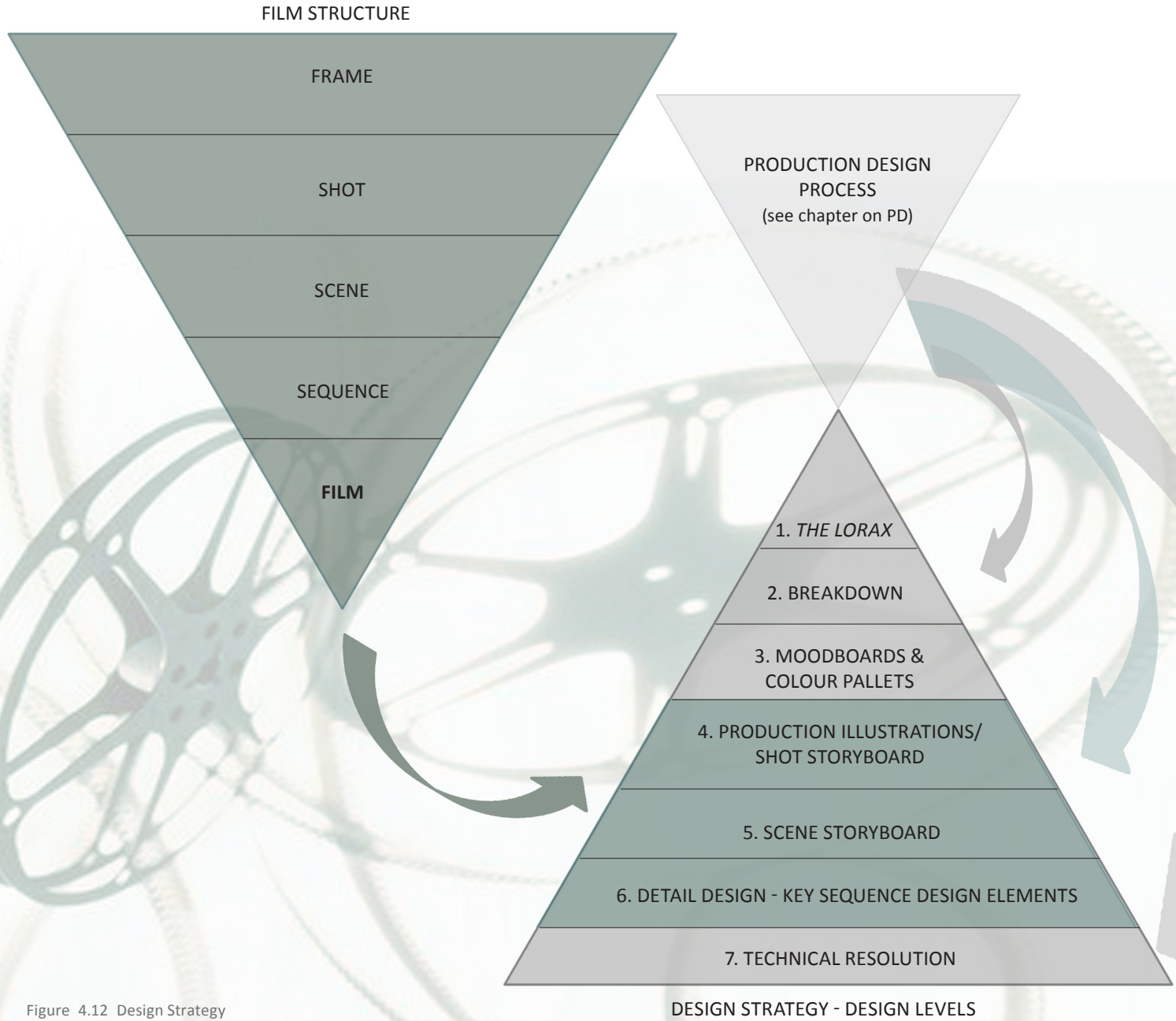


Figure 4.12 Design Strategy

4.1 DESIGN METHODOLOGY

The design process for production design differs from the design process in architecture. The **production design process** and **film structure** were used in order to create a **design strategy** for the production design of *The Lorax* (1971).

The **production design process** is related to the film production process and its numerous role players. As stated, film involves hundreds of people working for approximately three to five years on a feature film, with large budgets to their disposal (Louw 2009). During this time the PD heads various departments that need to assist in creating their vision for the film. The PD's key responsibility is to create a structured visual metaphor for the film from the script. The production designer needs to oversee everything from breakdowns to the final construction of the diegetic world. (The production design process was discussed in more detail in the previous chapter regarding production design and its role within the film production process.)

In addition, **film structure** was implemented as a supplementary aid in the design strategy for the production design of *The Lorax*, due to restraints regarding time and resources. The different levels of film structure was used as basis to decide the level of detail needed for various film structure levels for the production design of the Lorax. A film's structure is built up of numerous amounts of frames that become a shot. A film typically shows twenty-four frames per second. A number of shots become a scene and scenes start to form a sequence, which eventually becomes the final product - the film (Mamer 2002:3).

The production design process and film structure were combined to form a **pyramid type design strategy** that goes into more detail at each 'level'. Due to time and resource restraints **only parts of previous levels were selected to complete in the following level**.

For the design strategy firstly the breakdown of original text of *The Lorax* was done according to production design techniques in conjunction with the theoretical argument (see chapter 2). This whole design level was done completely.

Secondly, mood boards and colour pallets were done as in the production design process. This 'level' was also done completely. Thirdly the concept sketches (production illustrations) and shot storyboard were done only partially to assist with designing the fifth 'level'.

The important fifth level of scene storyboards (see chapter 9) was done completely, to gain a full understanding of the visual appearance of the production design. Techniques used supplementing the design of the storyboards, were mood boards and a technique similar to **montage techniques** - the combining of separate images to form a single image for a scene storyboard. This also links with the theoretical idea of heterotopic images (see chapter 2) - the combining of real and unreal images – as photos, images and sketches were combined.

From the fifth level, it was apparent that some of the storyboards sequence elements, were starting to speak the same visual language. These elements were further explored in the detail design level up to the level of technical resolution (please see the design development and technical resolution chapters for more in formation).

It is also important to note that the **concept design and storyboards were done slightly before and while selecting the location** of Lilian Ngoyi square, as is the case in the production design process (as opposed to normal architectural procedures selecting sites first).

Traditionally the production designer does not get involved in **lighting design** for films (Weavind 2009), as this is the field of the DP. Seeing as no atmosphere can be created without the lighting in a film and film essentially is light, the production design for *The Lorax*, was expanded to include lighting design. Also, lighting is a crucial part of interior architecture as a discipline.

The aim was also to adhere to **film terminology**, (as opposed to architectural terminology,) as closely as possible. Please refer to the glossary for all terminology. The industry abbreviations was also used (see chapter 1).

For a detailed diagram of the relations between chapters and design thought processes see the diagram in chapter 1 the introduction.

NARRATIVE GLOSSARY

Bar-ba-loots

Brown bear-like creatures that are playful and eat Truffula Fruit (Seuss 1971).

dank

"[D]amp and cold" (OED 2006: 249).

Grickle-grass

Extremely tall black grass that grows very sparsely "[a]t the far end of town." It is the only growing thing in the melancholic part of the narrative. Deep in the Grickle-grass you can see where the Lorax once stood (Seuss 1971: 1-2). With the 'gr' alliteration Seuss achieves the sound of the Grickle-grass in the wind.

Humming-Fish

Brown fish that make comfortable humming sounds (Seuss 1971).

Lerkim

The Once-ler's house. "He lurks in his Lerkim" (Seuss 1971).

Lorax

Anthropomorphic protagonist who pops out of a Truffula Tree stump. According to the Once-ler he is 'shortish, oldish, brownish and mossy'. The Lorax 'speaks for the trees' and the environment. The word 'Lorax' can also imply 'lower axe' (Seuss 1971).

Once-ler

Antagonist in *The Lorax* (1971) who tells the narrative through a flashback image. As symbol of greed in the narrative, only his green hands are visible. He is the inventor, designer and builder of the Thneed, Super-Axe-Hacker and the Thneed factory.

pail

bucket (OED 2006: 729).

Snuvv

A "secret stange hole" in the Once-ler's "gruvvulous glove where he hides payment for telling the story of the Lorax (Seuss 1971).

Street of the Lifted Lorax

A deserted street "[a]t the far end of town", where only Grickle-grass grows, a sour wind blows and one old crow hovers in the air (Seuss 1971).

Super-Axe-Hacker

A machine designed by the Once-ler to chop off four Truffula trees at once (Seuss 1971).

Swomee-Swans

Brown and yellow birds with long tails (Seuss 1971).

Thneed

According to the Once-ler a multifunctional wardrobe item that also has other uses besides being a garment, when in fact it cannot be worn. The Once-ler knitted from the Truffula tuft of a chopped down tree (Seuss 1971).

Truffula Seed

Seed from the Truffula Tree. The last seed is thrown to 'You' by the Once-ler at the end of *The Lorax* (Seuss 1971).

Truffula Trees

Brightly coloured trees with pompom-like tufts that are "softer than silk" and have "the sweet smell of fresh butterfly milk" (Seuss 1971).

tuft

"[A] bunch of threads, grass, or hair, held or growing together at the base" (OED 2006: 1114).

UNLESS

The Lorax left a "small pile of rocks" with only the word "UNLESS" (Seuss 1971).

Whisper-ma-phone

The device with a long "snergelly hose" through which the Once-ler tells the secret of the Lorax (Seuss 1971).

'You'

The narrator in *The Lorax*. Unnamed by Dr Seuss in order to achieve universality with narrative message.

5. NARRATIVE CONTEXT: TEXT BREAKDOWN

"It's a book about going easy on what we've got."
-Dr Seuss

"I went right on biggering...selling more Thneeds.

And I biggered my money, which everyone needs."

*****

"UNLESS someone like you

cares a whole awful lot,

nothing is going to get better.

It's not."

(The Once-ler in Seuss 1971)

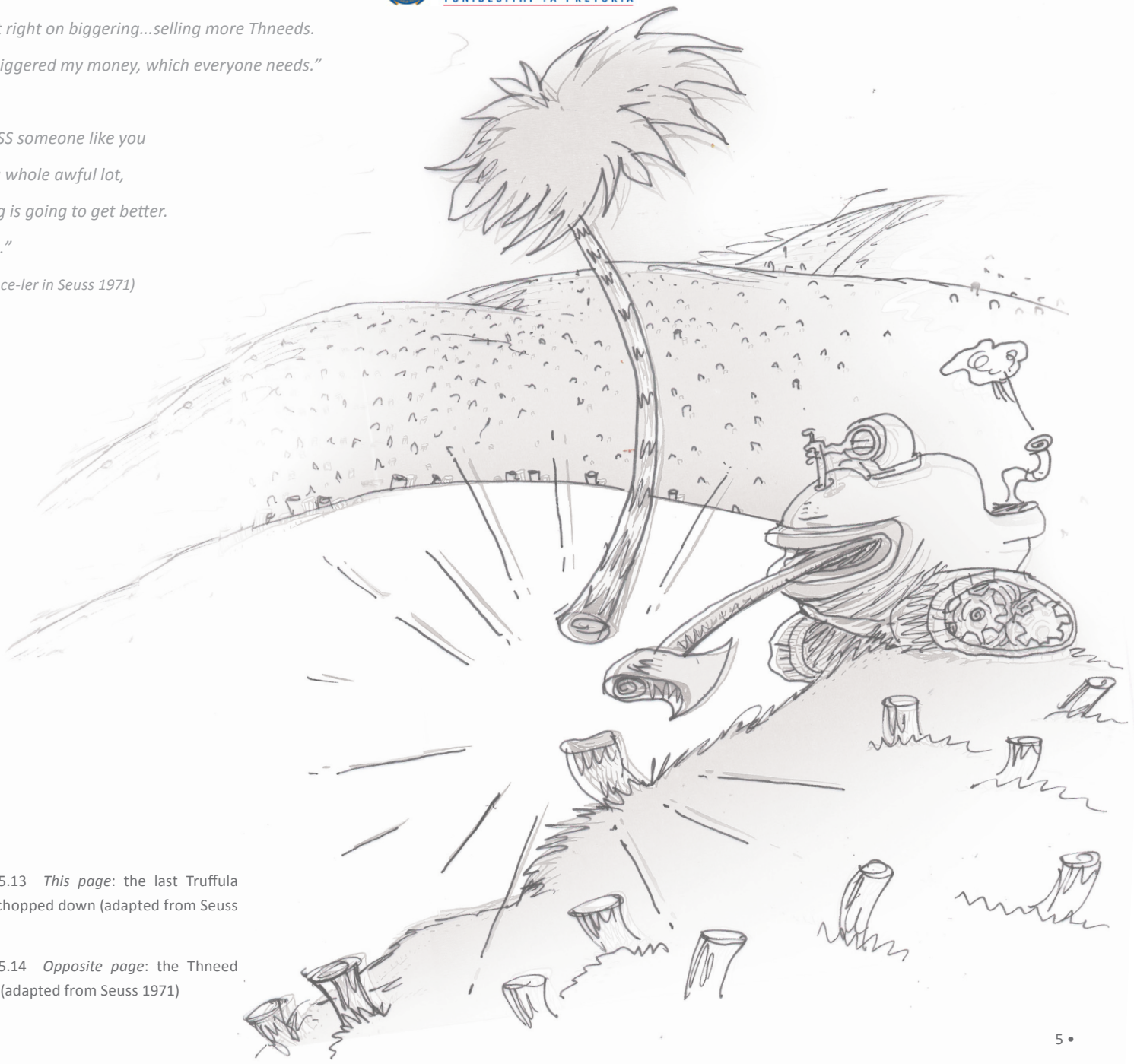


Figure 5.13 *This page*: the last Truffula Tree is chopped down (adapted from Seuss 1971)

Figure 5.14 *Opposite page*: the Thneed factory (adapted from Seuss 1971)

5.1 SYNOPSIS OF *THE LORAX* (1971)

The Lorax (1971) by Dr Seuss (Theodore Seuss Geisel), is a children's fable that warns against the dangers of avarice, consumerism and its effect on the environment.

The story is told by the narrator, a boy known only as 'You', who wants to know the secret of what 'the Lorax' was.

To hear the story, he goes to the 'Lerkim' of the 'Once-ler' (the antagonist). The Once-ler lives 'at the far end of town' deep in the 'Grickle-grass', in a melancholic and lifeless setting.

The Once-ler tells the story about how beautiful the place was when he arrived a long time ago, in a flashback of the past.

The Once-ler then destroyed the environment by chopping down all the 'Truffula Trees' - the source of life - for the trees' tuft, of which he made a useless and frivolous object called a 'Thneed'.

The Lorax, the protagonist, appeared to speak on behalf of the environment and warns the Once-ler against his deeds of avarice.

The Once-ler was blinded by his greed until the last Truffula Tree was chopped down and the environment destroyed.

The Lorax then left , only leaving a pile of rocks with the words 'UNLESS', behind.

At the end of the book the Once-ler throws the last Truffula seed to the narrator -'You' - by which Seuss places the responsibility in the hands of the reader.

5.1 WORLD CONTEXT AT THE TIME OF *THE LORAX*

A year prior to the release of *The Lorax,* on 22 April 1970, the first Earth Day was celebrated (Earth Day Network 2009).

> *"Published in 1971, at a time when Earth Day and the ecology movement were gaining counterculture traction, 'The Lorax' addressed then-unconventional issues such as deforestation, pollution and greed. It was 'An Inconvenient Truth' for children…Although Rachel Carson is credited with launching the environmental movement with her 1962 book, 'Silent Spring,' Dr. Seuss made that message palatable for all ages" (Himmelsbach 2008).*

5.2 NARRATIVE SELECTION

The Lorax was chosen for its relevance in the world today. *The Lorax* is about "market-driven environmental ruin...[t]he relentless pursuit of profit leads to environmental - and economic - ruin" (Adler 2005). The character of the Once-ler, being an inventive fellow, also addresses the designer's role and responsibility.

The book is a picture book, but the aim was to mostly follow the text and not the images, in order to create a film version of *The Lorax* with zeitgeist specific to Pretoria.

5.3 NARRATIVE DESIGN

Films are usually made from scripts. A 'breakdown' is then done by all department heads. A breakdown notes whether a scene is 'exterior' or 'interior', the time period, location etc.

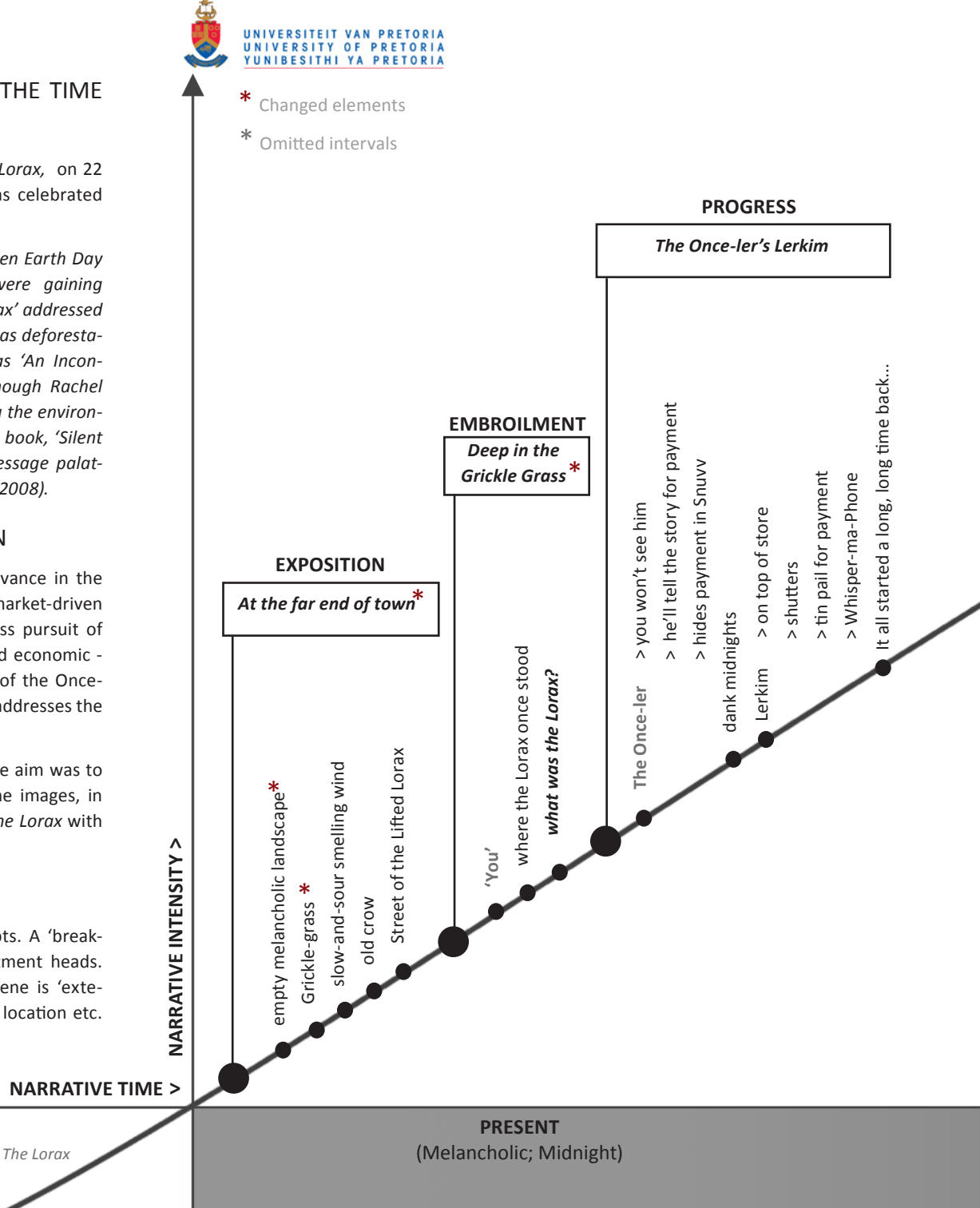
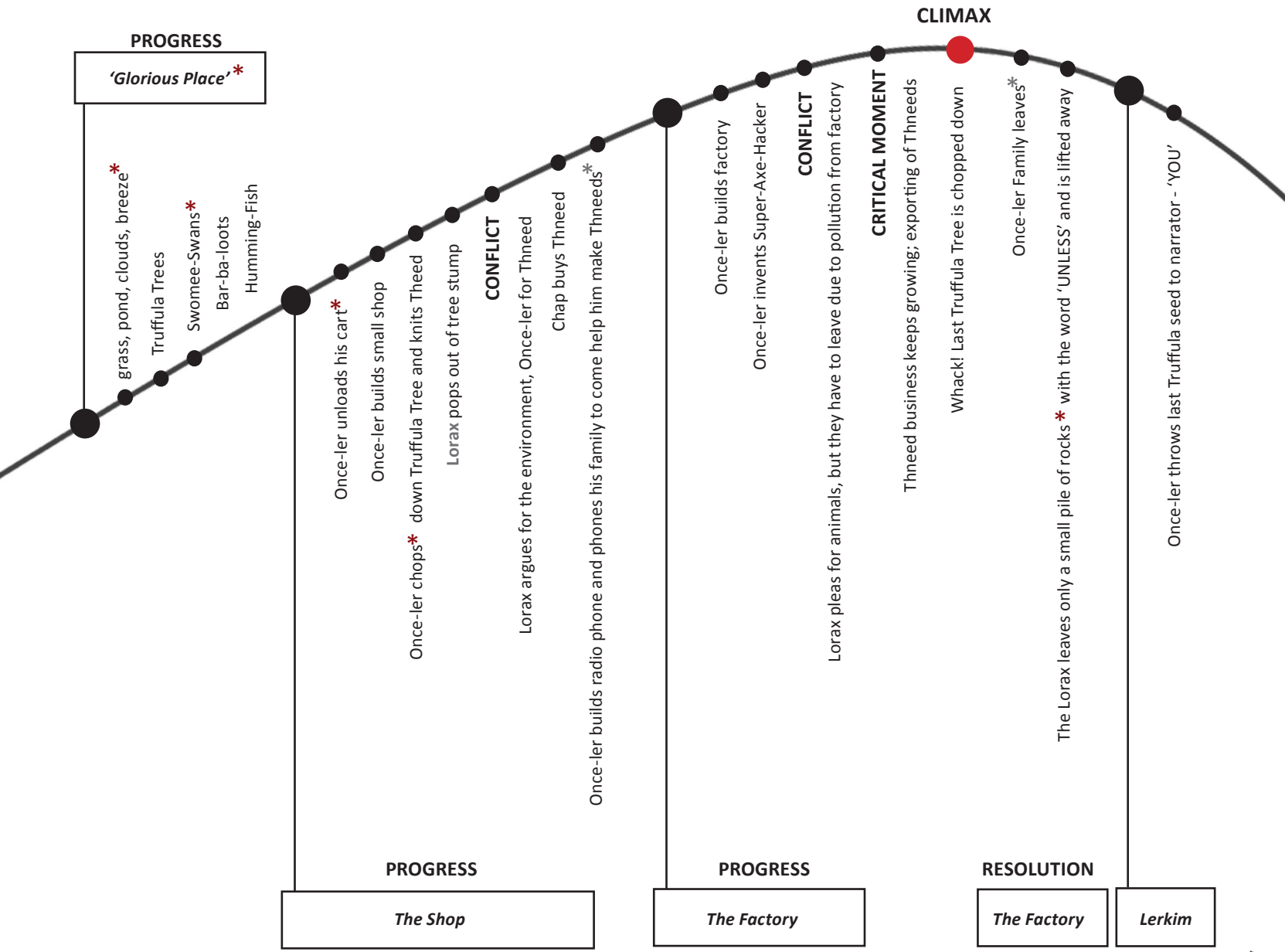


 Figure 5.15 Narrative Design of *The Lorax*


CLIMAX
PROGRESS
'Glorious Place'*
grass, pond, clouds, breeze*
Truffula Trees
Swomee-Swans*
Bar-ba-loots
Humming-Fish
Once-ler unloads his cart*
Once-ler builds small shop
Once-ler chops* down Truffula Tree and knits Theed
Lorax pops out of tree stump
CONFLICT
Lorax argues for the environment, Once-ler for Thneed
Chap buys Thneed
Once-ler builds radio phone and phones his family to come help him make Thneeds*
Once-ler builds factory
Once-ler invents Super-Axe-Hacker
CONFLICT
Lorax pleas for animals, but they have to leave due to pollution from factory
CRITICAL MOMENT
Thneed business keeps growing; exporting of Thneeds
Whack! Last Truffula Tree is chopped down
Once-ler Family leaves*
The Lorax leaves only a small pile of rocks * with the word 'UNLESS' and is lifted away
Once-ler throws last Truffula seed to narrator - 'YOU'
PROGRESS
The Shop
PROGRESS
The Factory
RESOLUTION
The Factory
Lerkim
PAST
(Glorious Place; Morning)
PRESENT

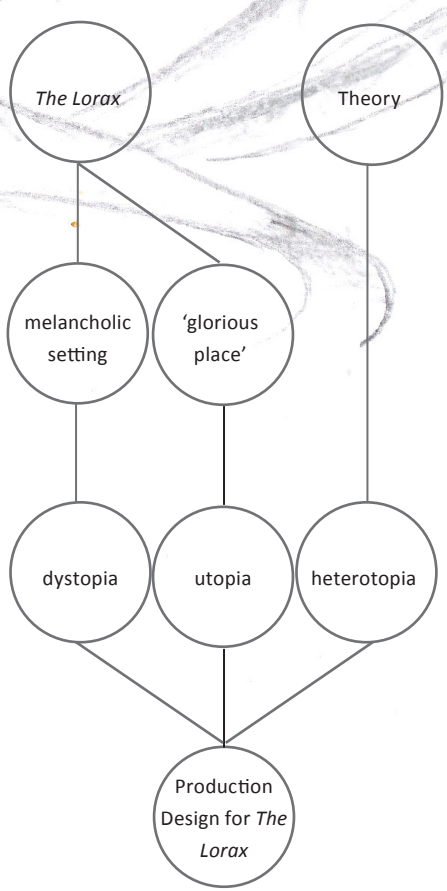


Figure 5.16 The development of the thrree time periods for the production design of *The Lorax*

(Garvy 2007: 77-87).

In the production design for *The Lorax*, the original text was treated as the script, of which the narrative design was analysed. Certain parts of the original text were left out (ellipsis) or changed, as is usually the case with the transition from the script to the shooting script. The adapted version for the production appears in Figure 9.3 The Diegetic and Production Time Line.

The original narrative is divided into two parts - that of the 'past', before environmental destruction (bright colours) and that of the 'present' melancholic landscape after environmental destruction (sombre colours).

5.4 UTOPIA / DYSTOPIA

The narrative can be seen as divided into two parts - the melancholic world, post environmental destruction and the 'glorious place' of before. These extreme opposites are reminiscent of the concepts of utopia and dystopia.

Foucault in his *Of Other Spaces, Heterotopias* (1967) discussed in the theoretical premise, states that '"first there are the utopias [which] are fundamentally unreal spaces". Therefore to supplement the heterotopic image, the concepts of utopia and dystopia will be added to the narrative analysis. The text can therefore be divided into the three time periods of dystopia, utopia and heterotopia. Heterotopia of course being the combination between the real and unreal, will be the transitional phase between utopia and dystopia (see narrative and theoretical influences on the design).

Utopia

The word 'utopia' is derived from Greek and literally means "no place". It conjures the notion of a fictional society somewhere. The word was first used by Sir Thomas Moore in his 1516 book with the same title . It was loosely based on Plato's *Republic* (Lebeko and Dreyer 2009: 6). It is significant that utopia also puns the Greek word *eutopia,* meaning 'happy' or 'fortunate' place, which possibly gave rise to its positive associations (Logan and Adams 2002: xi).

Hesiod's *Theogony* contains one of the oldest Western description of human origin. "A number of human ages followed creation, the first was golden." During this age "a 'golden race' occupied the nourishing world: a time of original bliss still dreamed of long after its passing." (Coleman 2005:25) Utopian literature is saturated with nostalgia for the first, lost garden of Paradise (Baker-Smith and Barfoot 1987:3 and Eliade in Coleman 2005:26). Much the same as the original images in *The Lorax*.

The future ideals of utopias redescribe an age of gold and paradise to create an earthly version of paradise with 'instruments of the Fall' (Coleman 2005:27,28; Doxiadis 1966:24; Lebeko and Dreyer 2009:18) and "[s]ince utopias envision improved conditions intended to replace existing ones, their concern is as much with the past and present as with the future" (Coleman 2005:27; own emphasis).

The chosen site of Lilian Ngoyi Square, previously named Strijdom Square, has been described by Hook (2005) as follows; "Strijdom Square constituted an entire city block devoted to Afrikaner heritage, accomplishment, and culture. It was to many...apartheid's sa-

cred precinct, a monumental public space that aimed to build and mould an Afrikaner National identity." In a sense apartheid was also a form of avarice (ANC 1967). Apartheid has been described as "an ill conceived utopia..." (Lebeko and Dreyer 2009:19). In a sense apartheid was also a form of avarice (ANC 1967). The chosen Square can therefore be described as a 'utopic' square that turned in to a 'dystopic' square, which started approximately with the collapse of the gigantic Strijdom head statue and vault, on 31 May 2001 (see the chapter on the location context for more detail).

Dystopia

'Dystopia' can be defined as an imaginary difficult or evil place. It was first used in the 1868 writings of J.S. Mill (Doxiadis 1966:87). Fictional dystopias are usually portrayed as urban areas without a natural environment and often cover the topic of utopia-gone wrong (Lebeko and Dreyer 2009:9). Lewis Mumford spoke of the Necropolis or dead city (Doxiadis 1966:16). Lilian Ngoyi Square can be said to be as such, for during evenings and weekends, there is little activity. Even during the day, the Square is only used as a shortcut to walk through (see the chapter on the location context).

5.5 CIRCLES OF FEELING

Architect Christian Norberg-Schulz in his *Existence, Space and Architecture* "describes architecture and space as a series of ever-widening affective circles extending from the human subject. He proposes five basic categorical circles: graspable objects, furniture, the house, the street and landscape" (Tashiro 1998:18). For a theory of cinema, Tashiro (1998) added two categories. Firstly that of clothing at the beginning of the scale and secondly, cosmic space, at the end of the scale. This together with the theoretical premise can be used for compiling a break down list.

Costume, Jewellery and Make-up

Film attire that differs greatly from the current clothing worn by the audience, being the first affective circle, is one of the first things noticed by the spectator. To solve this, stylized attire needs to be justified by a higher degree of verisimilitude (Tashiro 1998:18-19).

Objects (Props)

Norberg-Schulz's first category of graspable objects – that which is closest to humans – can be compared to props (Tashiro 1998:20).

Furniture (Decor)

Furniture becomes the next category – and is not only furniture, but includes everything which the actor does not hold – i.e. decor (Tashiro 1998:26).

The Livable: The House/The Set

"With Norberg-Schulz's next level, 'architecture' appears. Cinematic architecture gravitates towards two poles: the location or the soundstage set. A location exists before the film with all the inconveniences [or opportunities] of a pre-existing space...As such it exercises greater control over the film than exercised over it" (Tashiro 1998:28).

The walkable: Streets

"The urban level..." (Norberg-Schulz in Tashiro 1998: 32)

Landscapes

This level deals with man's interaction with the environment. It can also be defined as that which cannot be captured in a single camera shot (Norberg-Schulz in Tashiro 1998: 34-35).

5.6 THE BREAKDOWN SHEET

		Circles of Feeling					
		Landscapes	**The walkable: Streets**	**The Livable: The House/The Set**	**Furniture (Decor)**	**Objects (Props)**	**Costume, Jewellery and Make-up**
Dystopia	***Dystopia 1: At the far end of the town***						
	Grickle-grass			Reflection Image			
	slow-and-sour smelling wind	Affection Image					
	crow				Reflection Image		
	Street of the Lifted Lorax		x		x		
	Dystopia 2 : Grickle-grass	Reflection Image	Reflection Image				
	deep in the Grickle-grass you can see where the Lorax once stood before it was lifted away				Reflection Image		
	What *was* the Lorax?						
	Dystopia 3a : ***Once-ler Lerkim, pre flashback***						
	Once-ler						
	you won't see him						
	he'll tell you how the Lorax was lifted away if you're willing to pay						
	he hides what you paid him in his Snuvv						Reflection image
	Lerkim						
	Once-ler peaks out of the shutters			x			
	on top of store			x			
	on the end of a rope he lets down a tin pail for payment					x	
	Whisper-ma-Phone that has snergelly hose					Reflection Image	
	dank midnights	x					
	secrets			Affection Image			
	It all started a long, long time back...						
Utopia	***Utopia (glorious place)***						
	Truffula Trees with bright-coloured tufts	Reflection Image					
	clean clouds	x					
	fresh morning breeze	x					
	Swomee-Swans, Bar-ba-loots, Humming-Fish	x					
	heterotopia 1 : utopia to dystopia						
	Once-ler unloads his cart					Action image	
	Once-ler builds small shop			Action image			
	Once-ler chops down a Truffula Tree		Action image			Action image	
	Thneed						
	Once-ler knits Thneed from tuft					Reflection Image	
	Unwearable garment						
	Multifunctional						
	Lorax						
	shortish, oldish, brownish, mossy						x

Heterotopia	popped out of stump with a ga-Zump						
	"I speak for the trees"						Reflection Image
	Chap						
	buys Thneed						
	can't see his face						
	heterotopia 2 : factory						
	business grows						
	Factory		Reflection Image				
	working full tilt, busy as bees, to the sound of the chopping of Truffula Trees.						
	Super-Axe-Hacker		Reflection Image				
	Invented by Once-ler						
	Chops down multiple trees at once						
	Once-ler biggers his waggons						
	Once-ler ships out Thneeds to the South, to the East, to the West and the North		Reflection Image				
	heterotopia 3 : heterotopia to dystopia						
	Animals leave						
	Last Truffula tree chopped down with a sickening whack		Affection image				
	Lorax leaves (lifted away)						
	UNLESS		Affection Image, Reflection Image				
	Lorax only leaves a small pile of rocks with the word UNLESS						
Dystopia	***Dystopia 3b :*** ***Once-ler Lerkim, post flashback***						
	The word of the Lorax now seems clear to the Once-ler						
	UNLESS someone like you cares a whole awful lot, nothing is going to get better. It's not.		Affection Image, Reflection Image				
	The Once-ler throws the last Truffula Seed to 'You'		Affection Image, Reflection Image				

6. SOCIO-CULTURAL CONTEXT: FILM IN SOUTH AFRICA

Think globally, act locally.

CONTEXT TIMELINE

1896 First public screening of moving images in South Africa in the Empire Theatre in Johannesburg (Maingard 2007:4).

1898 First moving images are made, including images of President Paul Kruger in Pretoria (Maingard 2007:4).

1910 First South African Feature Film – *The Kimberly Diamond Robbery* by Springbok Films (Tomaselli 1981:139)

1915 The African Film Production (AFP) is established by I.W. Schlesinger. AFP had a "...virtual monopoly over the production, distribution and exhibition of films until the late 1950's." (Maingard 2007:22)

Isadore W Schlesinger "pioneered the mass media in this country, creating a nationwide network of cinemas and theatres. He also created the first radio broadcasting organisation run on a commercial basis, and from this the SABC emerged" (www.sahistory.org South African Film).

1916 – 1919 "Gauteng was home to flourishing local production industry" (Gauteng Film Commission 2009).

1920's The rise of the popularity of American films overwhelmed the South African film industry. This influenced local culture eg. jazz and gangster style in Sophiatown and Marabastad (Gauteng Film Commission 2009).

1935 Film about Pretoria: *Inheritance in Pretoria* (IMDb 2009)

1948 Film about Pretoria: *Pretoria to Durban* (IMDb 2009)

1976 The late introduction of television in South Africa kept local cinemas busier than their American counterparts.

1979 Film about Pretoria: *Pretoria, O Pretoria!* (IMDb 2009)

1993 Film about Pretoria: *Die Prins van Pretoria* (IMDb 2009)

2005 *Tsotsi* (2005) is the first South African film to win an Oscar (Maingard 2007:4)

2010 Film about Pretoria: British Footprint Films' *Inside Out: Escape from Pretoria* will be finished. (IMDb 2009)

6.1 THE FILM INDUSTRY IN SOUTH AFRICA, GAUTENG AND PRETORIA

6.1.1 INTRODUCTION

Feature films shape the way in which we see the world. Films about South Africa also influence the way people around the world see the country.

The film industry in South Africa has slowly been growing to one of international recognition. Slowly but surely more locally made films such as *Tsotsi* (2005), *District 9* (2009) gain international recognition and more international productions are being filmed in South Africa. South Africa's film industry currently brings in R2 billion annually (www.sahistory.org South African Film). The large *Cape Town Film Studios*, that will open in 2010, is further proof of the growing market.

This is beneficial to South African audiences, as people relate much better to "films which wrestle with [their] own fears, hopes and struggles" (www.sahistory.org South African Film).

Previously just like its monuments – such as Strijdom Square - South African cinema was intertwined with its political history (Maingard 2008:2), which was not very popular with international audiences (www.sahistory.org South African Film).

Fortunately this is changing. The international popularity of *District 9* (2009) - a film about an alien ghetto in Johannesburg – indicates that the unique South African perspective can be interesting to more than just local audiences.

6.1.1 REASONS FILMS ARE MADE IN SOUTH AFRICA

> **Economic reasons**. The fact that the Rand has a weak exchange rate against the Dollar, Pound and Euro has had an influence (www.sahistory.org South African Film), as well as the fact that locations up to recently did not charge for shooting. Cheap labour is also readily available.

> **Beautiful and diverse locations** (www.sahistory.org South African Film), that are diverse in nature – everything from deserts to snow covered landscapes and everything in between is available. Certain landscapes and cities can double as something else. The Karoo can be a moonscape and Cape Town can be shot to appear to be many different cities.

> **Good weather conditions**. Good weather conditions during winter, makes this the preferable time for filming, due to light quality (Weavind 2009). At certain times of the year rain is also not a problem.

> **English literacy** (Weavind 2009).

> 25 000 people working in the film industry (www.sahistory.org South African Film).

6.1.1 REASONS WHY NOT MANY SOUTH AFRICAN FEATURE FILMS HAVE BEEN MADE

> **Lack of infrastructure** (www.sahistory.org South African Film).

> **A lack of good scripts**, due to lack of funding for script development (www.sahistory.org South African Film).

> **Small budgets for marketing and distribution** (www.sahistory.org South African Film). The large marketing budget for Tsotsi (2005) was one of the reasons the film succeeded internationally (Weavind 2009).

> **A lack of respect for intellectual copyright laws** by means of illegal duplication of films (piracy) (www.sahistory.org South African Film).

> **Lack of government involvement** (www.sahistory.org South African Film; Weavind 2009).

> According to David Wicht, producer and owner of Film Afrika, the fact that most films from South Africa have **apartheid themes**, was not beneficial to the industry. He says about the South African film industry; "We need to grasp the fact that we're in the entertainment business, not sociology" (www.sahistory.org South African Film).

> **Lack of studio space**, in South Africa and especially Pretoria. In Pretoria the State Theatre Opera stage and workshop areas are often used for filming commercials (Viljoen 2009).

“At the far end of town” (Seuss 1971)

7. PHYSICAL CONTEXT : LOCATION ANALYSIS

In a forgotten part of town

"...[F]eature films...[provide] a fresh glimpse of a familiar terrain..." (Sanders 2002:10) .

"[W]e must remember that drama and theatre are not special and separate and private things in our lives. They are the stuffs of living, the heart and soul of any true city. It follows that we must begin to provide architectural stages upon which our vast populations can act out their lives (Bradbury in Sanders 2002:10).

1.1 FILMING ON LOCATION

Location filming became increasingly popular as technology allowed more portable equipment (Barnwell 2004:14). Real locations, as opposed to sound stage sets or backlot sets, are often "... favoured for the sake of authenticity over convenience and manipulation." Real locations are less clinical then sound stage sets (Barnwall 2004:14, 29).

Filming on location gives a film *zeitgeist* - the German term for "spirit of the time" (Ingham 1998:86-87). "In the same way that buildings and cities create and preserve images of culture and a particular way of life, cinema illuminates the cultural archaeology of both the time of its making and the era that it depicts...both create experiential scenes of life situations." (Pallasmaa 2001:13) This is much the same as interior architecture. "[Interiors] are, for Abercrombie (1990), "a celebration of a very particular time, place and situation"' (McCarthy 2005:10-11).

Real locations give *zeitgeist* to films because filmmakers shooting on location draws from the display, "...allowing their films to be shaped, or at least influenced, by the sights and sound around them" (Sanders 2002:423).

"You have to deal with the city every second that you are shooting, the place doesn't stop. The chaos, of people and traffic, is simply the chaos of life itself. And the movie if you allow it, feeds of that life" (Berman in Sanders 2002:424).

Production designer Ted Haworth is quoted in *Pretty Pictures* (Tashiro 1998) on saying about filiming on location that "what you see in real life starts to tell a story better than the script you're shooting. You go half-mad trying to get some of those things into the picture" (Tashiro 1998:6-7).

The city becomes a character in its own right. In contrast with theatre where the actor is extremely important, narrative on the film screen can exist without actors. "A banging door, a leaf in the wind, waves beating on the shore can heighten dramatic effect. Some film masterpieces use man only as an accessory, like an extra, or in counterpoint to [architecture or] nature which is the true leading character" (Bazin in Bordwell and Thompson 1997:172).

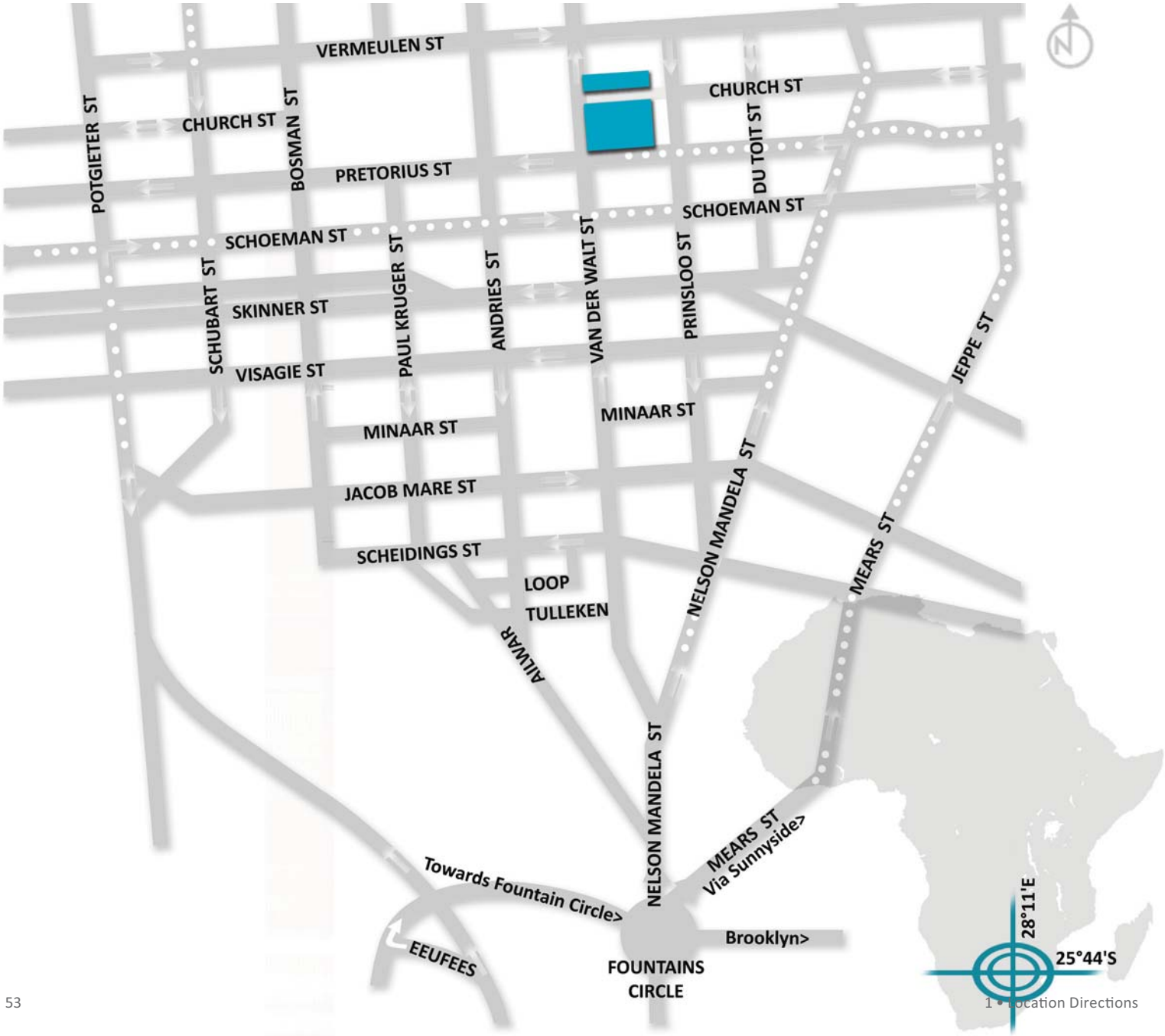
Locations are also subject to change at the last minute, due to unforseen circumstances (Weavind 2009). Therefore the design started out with a prototypical location, but the perfect prototypical location was found in Lilian Ngoyi Square. The designed sets could, however, be adapted to another location, without too much effort, if need be.

Lilian Ngoyi is a location where film and place could influence each other during all the stages of production. The Square is full of history and memories, meaning it could be the subtle background character strengthening the narrative (Barnwall 2004:26). The history of the square is closely linked with the avaristic nature of man. When a location is used for filming, it has to be the perfect match with the theme of the story. The location has to have a meaning that needs to correlate with that which the narrative is trying to send (Barnwell 2004:14). This Lilian Ngoyi Square, indeed does have this with *The Lorax* on some levels, such as a heap of rocks at the end of both the narrative and the story of the location up to now. Both can also be described as a 'utopia' (albeit in the case of the location a distorted utopia) gone dystopic.

With the production design of *The Lorax*, the Square will become a place where "the real and the mythic cities will intertwine, become entangled, just as they so often do in our memory" (Sanders 2002:4).

"...[S]paces enter a narrative with pre-existing associations of value; they leave the story changed by their use." (Tashiro 1998:7) There is also an inverse relationship by which the film narrative changes the place. The place where a film is shot will forever be where the scene of the film was shot – and it becomes part of the place's narrative. "[The] relationship between stories and the outside world [is] one of constant, mutual exchange and interaction...Once placed in a narrative, objects and spaces acquire meaning specific to the film" (Tashiro 1998:7).

1.2 LOCATION DIRECTIONS



1.3.1 SCRIPT LOCATIONS

> Dystopia

> Utopia

> Heterotopia

1.3.2 PHYSICAL LOCATION

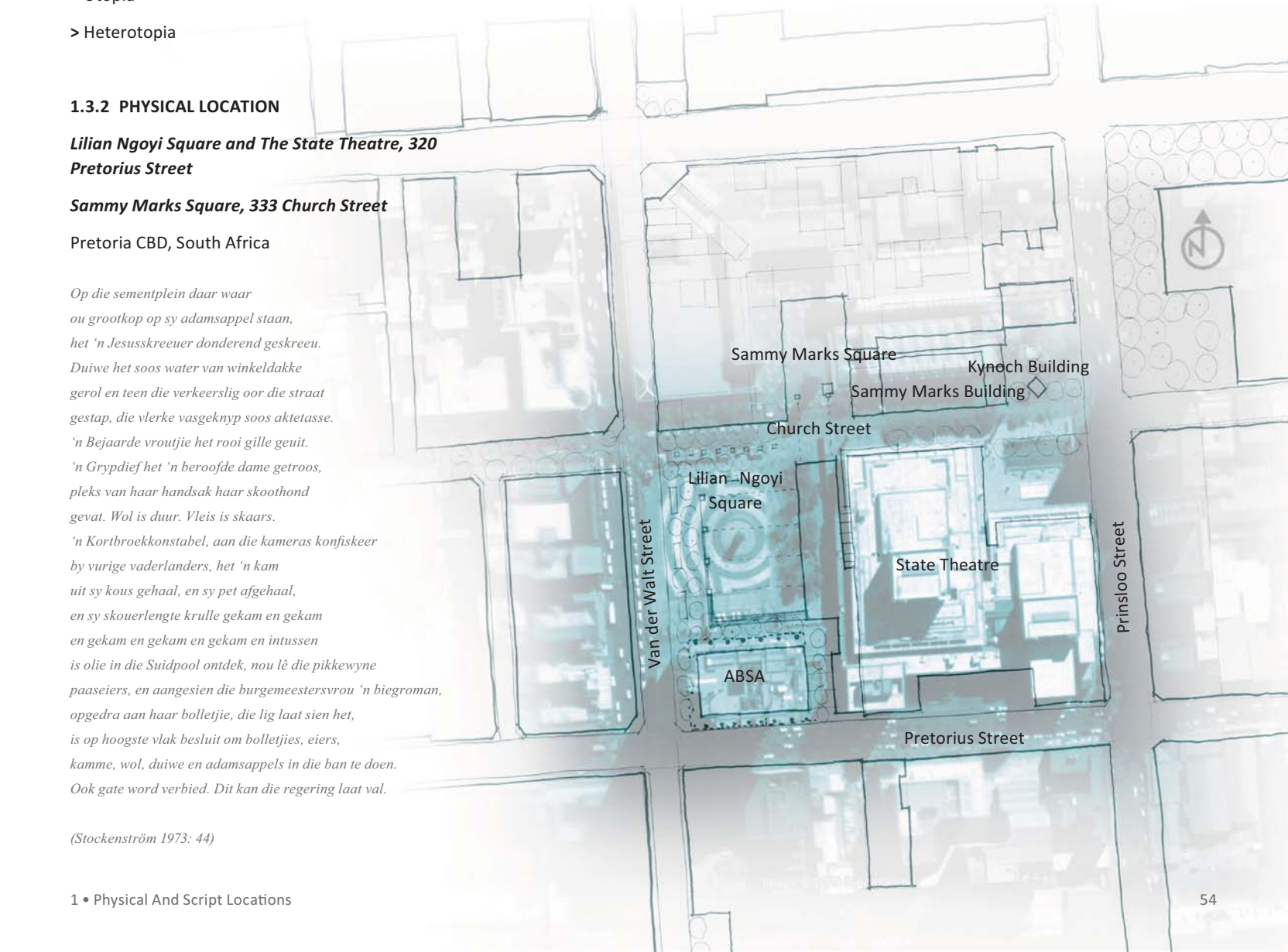
Lilian Ngoyi Square and The State Theatre, 320 Pretorius Street

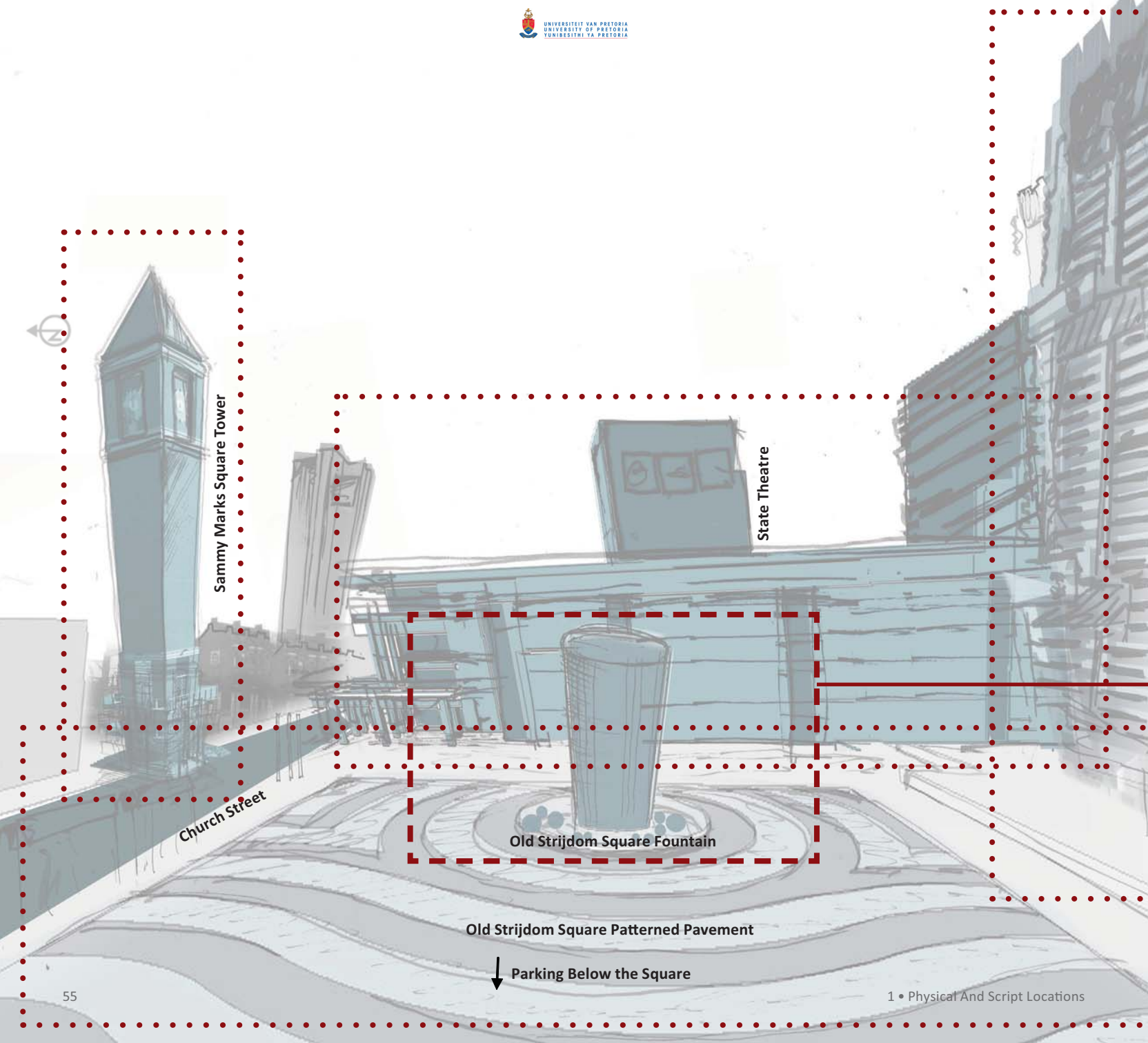
Sammy Marks Square, 333 Church Street

Pretoria CBD, South Africa

Op die sementplein daar waar
ou grootkop op sy adamsappel staan,
het 'n Jesusskreeuer donderend geskreeu.
Duiwe het soos water van winkeldakke
gerol en teen die verkeerslig oor die straat
gestap, die vlerke vasgeknyp soos aktetasse.
'n Bejaarde vroutjie het rooi gille geuit.
'n Grypdief het 'n beroofde dame getroos,
pleks van haar handsak haar skoothond
gevat. Wol is duur. Vleis is skaars.
'n Kortbroekkonstabel, aan die kameras konfiskeer
by vurige vaderlanders, het 'n kam
uit sy kous gehaal, en sy pet afgehaal,
en sy skouerlengte krulle gekam en gekam
en gekam en gekam en gekam en intussen
is olie in die Suidpool ontdek, nou lê die pikkewyne
paaseiers, en aangesien die burgemeestersvrou 'n biegroman,
opgedra aan haar bolletjie, die lig laat sien het,
is op hoogste vlak besluit om bolletjies, eiers,
kamme, wol, duiwe en adamsappels in die ban te doen.
Ook gate word verbied. Dit kan die regering laat val.

(Stockenström 1973: 44)




Sammy Marks Square Tower
State Theatre
Church Street
Old Strijdom Square Fountain
Old Strijdom Square Patterned Pavement
Parking Below the Square

1.4 LOCATION ELEMENTS

Lilian Ngoyi Square is an underutilized location holding the remains of what used to be a monument to the achievements of the Afrikaners (Hook 2005). The location comprises of a number of architectural objects and elements that dominate the space.

The ABSA Building (1976)

Architects: Pauw and Botha

Lilian Ngoyi Square is bordered by the ABSA Bank building to the south. This building is Pretoria's second tallest building at 132m (Janneke 2009). The building had to serve as a backdrop for the Strijdom monument that was previously on the Square. It had to be a landmark for orientating the city dweller, as well as be a monument for what Volkskas (Nation's Chest) Bank and Afrikaners achieved on economic terrain (Pauw and Botha 1969:13). The building initially housed a retail and cinema complex (Janneke 2009). Today the Absa building and the Reserve Bank give the Pretoria skyline its identity.

The State Theatre (1981)

Architects: Botha and Smit

To the east of the Square is the State Theatre's western facade that is closed off and has no connection with the Square, except for balconies on levels one and four overlooking the Square.

The Sammy Marks Square Tower (1993)

Architects: Stauch Vorster

On the north side of the Square is the adjacent Sammy Marks Square, with a tower.

Remaining Strijdom Square Fountain Column (1972)

All that is left of the fountain and monument that used to grace Strijdom Square, is the column surrounded by rocks. Previously four horses representing the then four provinces of South Africa topped the fountain column (Hook 2005 and Saunderson-Meyer 1979).

Pavement Pattern

The existing pavement pattern dates from after the collapse of the Strijdom Square monument.

Church Street

Church Street is Pretoria's main street, the longest urban street in South Africa and one of the longest straight streets in the world (Allexperts s.a.).

ABSA Building

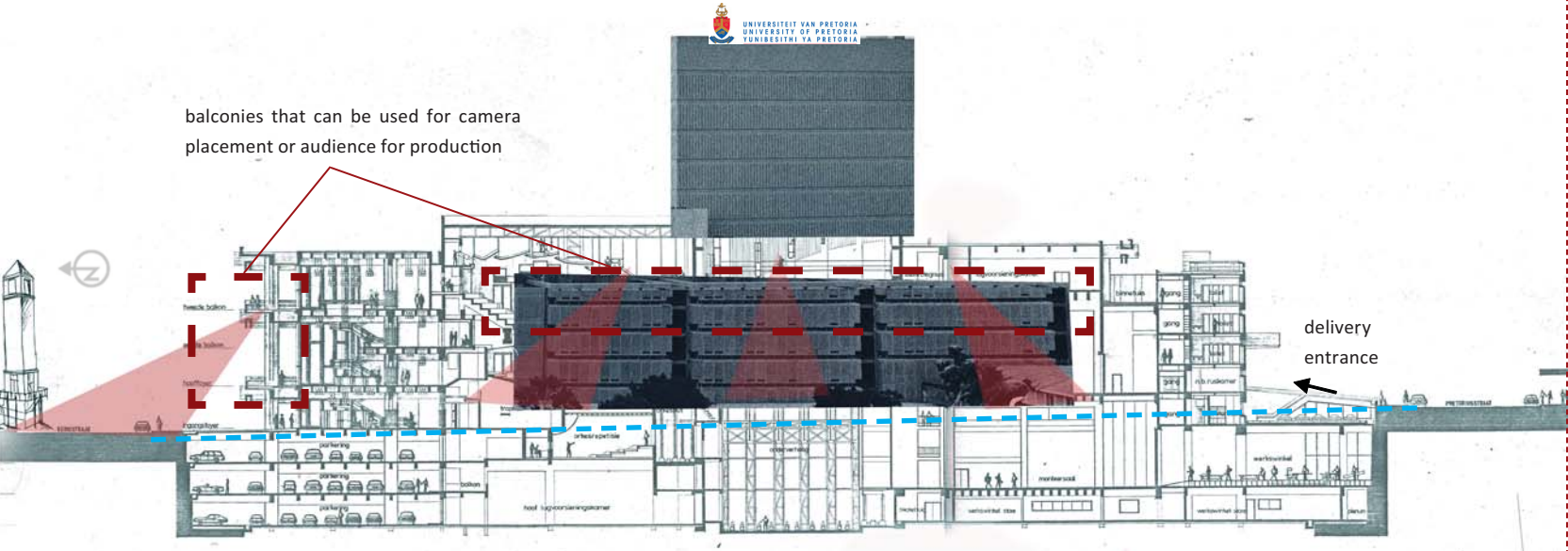


Figure 1.15 Vantage points from the State Theatre

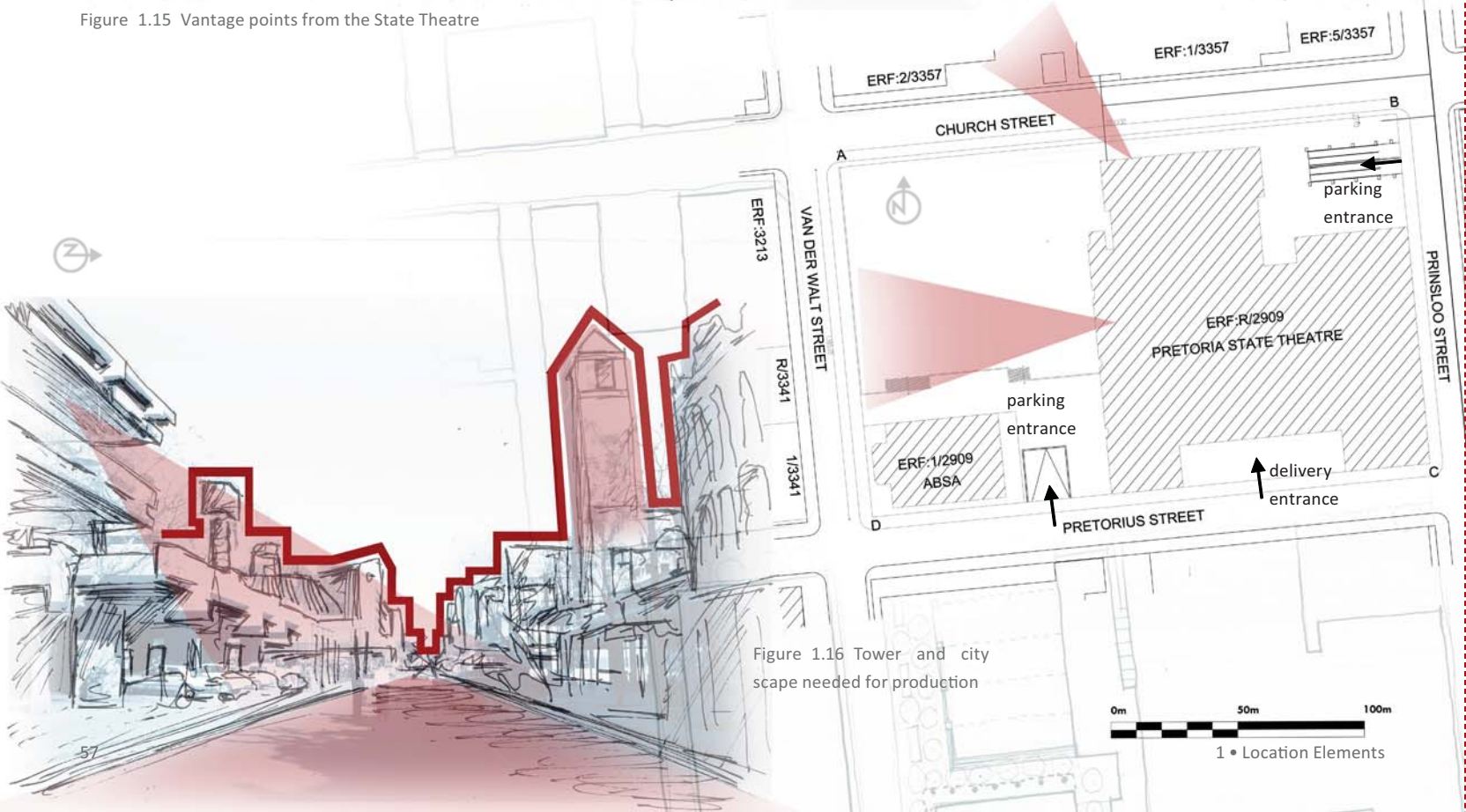


Figure 1.16 Tower and city scape needed for production

1.5 LOCATION BENEFITS FOR PRODUCTION

> All sequences can be accommodated on this single location, maximizing time as a resource and also minimizing transport (Gravy 2007:89-90).

> The Square itself is **underutilised**, especially during the night, when most of the filming will take place.

> The State Theatre has large areas that can be used for staging, dressing, holding and rehearsing (Stark 1979; Viljoen 2009 and Maier 1994: 77).

> The State Theatre has balconies on the 1st and 4th floors with views of Lillian Ngoyi and Sammy Marks Squares. This is beneficial for the following reasons:

1. Additional high angle shots can be achieved quickly and cost effectively.

2. Public audience can watch the production phase of the filming at scheduled times without interfering with the production process.

> The State Theatre has fully equipped workshops for metal, timber, plastic, painting and assembly, as well as electrical requirements. Currently the production workshops are underutilised and only used for maintenance or hiring by a production company. This is due to the fact that the State Theatre is only used to showcase productions from outside production companies. Due to the lack of studio space in Gauteng, especially Pretoria, the stages and production assembly areas are hired for filming advertisements (Stark 1979 and Viljoen 2009).

The workshops can be used for set construction. Materials needed for construction can also be stored in the storage areas. Sets can be moved to location via the delivery entrance in Pretorius street (Gravy 2007:163).

> The large parking areas beneath Lilian Ngoyi Square of the State Theatre are beneficial for crew equipment trucks and parking needs (Maier 1994:73).

> Ample space for standard trucks on a production, namely the art department, lighting, grip, camera, wardrobe, prop and catering trucks as well as a production trailer (Campbell 2002:1) is available on this location.

> Church street is a **pedestrian street**, which means any possible road closures will have a minimal disruptive effect.

1.6 LOCATION BENEFITS FOR PRODUCTION DESIGN

> The location is a metaphor for the history of greed in various forms in South Africa. This links with the central theme. It is also a warped 'utopia ' gone dystopic, linking with the concept for the adaptation of the narrative.

> The scene storyboard indicates a faint **city scape** in the background. The location has a few different vantages to choose from.

> The scene storyboard requires a **long street** for which Church Street can be used.

> The **Sammy Marks Tower** is an added benefit and is reminiscent of the tall and narrow Onceler house in the the original text.

> The **parking basement** has an industrial appearance that can be used for filming the 'sectional' factory scenes. Although over capitalized during weekdays – the parking basement is virtually empty after 5pm and on weekends and public holidays (Van der Merwe 2009).

> The location contains mostly of **monotonous colours** – colours are mainly greys, browns and blacks. The location thus lends itself to easy integration with the production design colour palette.

1.7 OBTAINING A PERMIT

1. A request for filming needs to be sent to the local film commission where the shoot will take place. For the production of *The Lorax* the request should include that following information:

> Name and type of project

> Location address

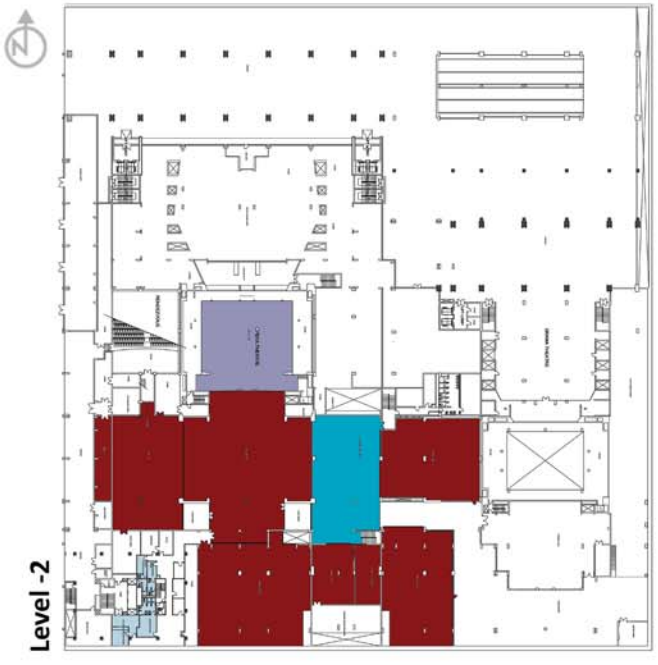
> Number of crew and cast

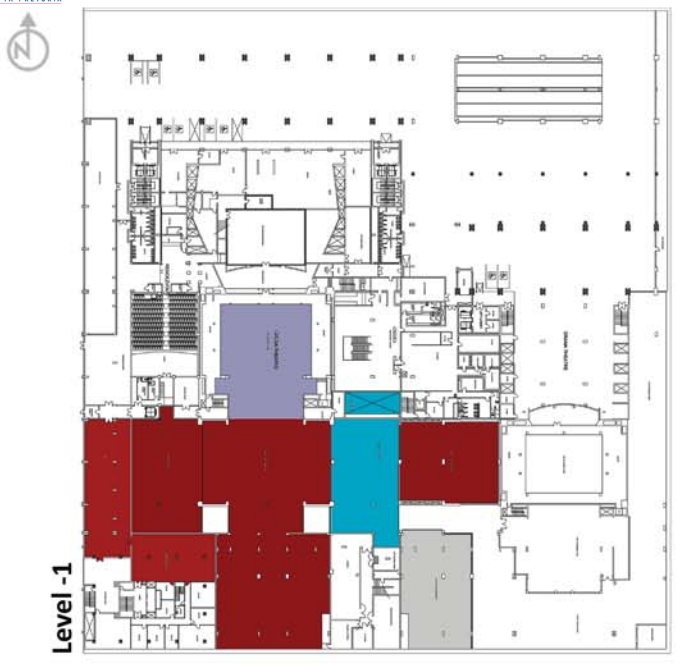
> Number of vehicles

2. The request is then sent to the necessary Metro Police Department

3. Once the request is approved, the filming permit payment is made and the permit is obtained.

(Mogoshane 2009)





1.8 ACCESSIBILITY: SUPPORT AREAS

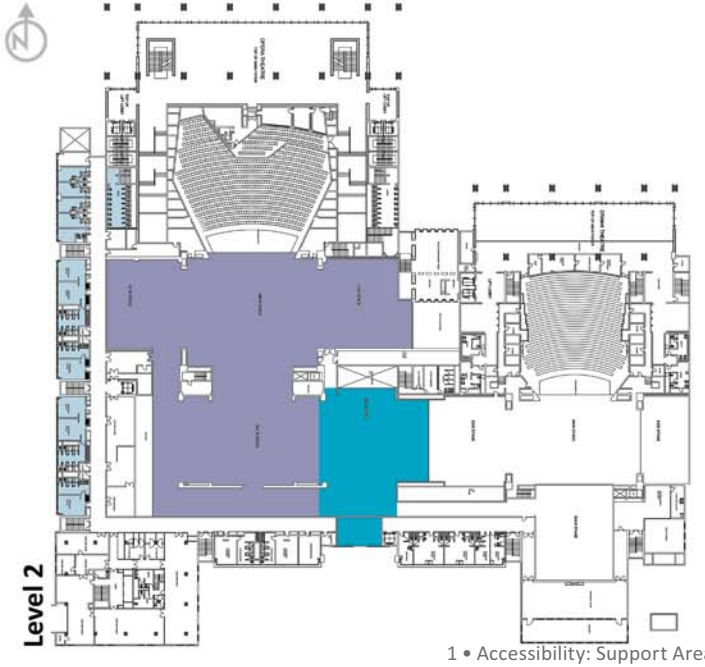
- Existing under utilized workshop areas. Possible staging area
- Delivery area with lifts. Beneficial for equipment transport
- Dressing rooms. Areas for dressing and holding
- Roof patios. Areas for positioning camera for high angle shots
- Stage areas for Opera Theatre

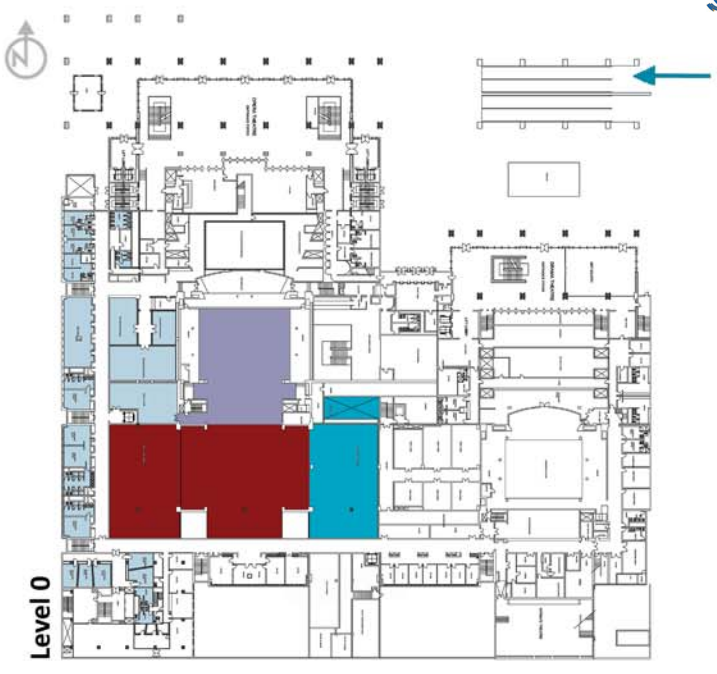
Staging: Room for preparing film equipment

Dressing: Space for make-up and hair

Holding: Space for extras to rest and change

(Maier 1994: 77)

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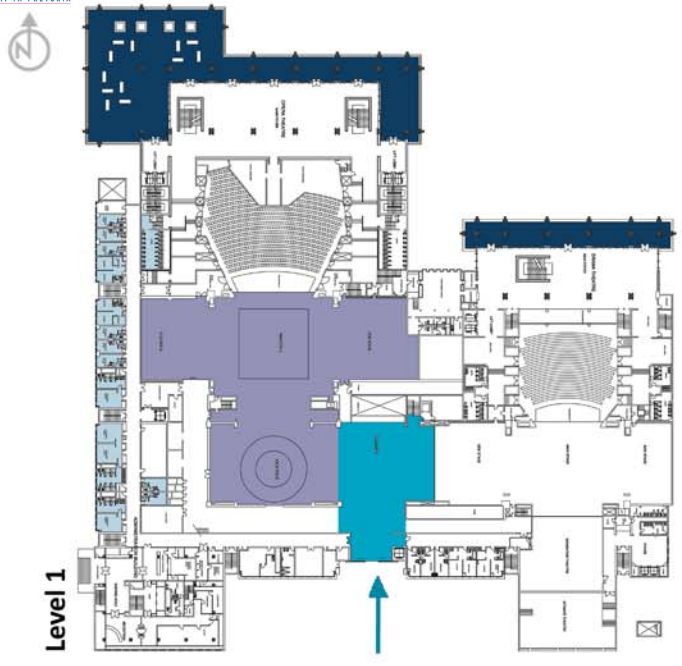
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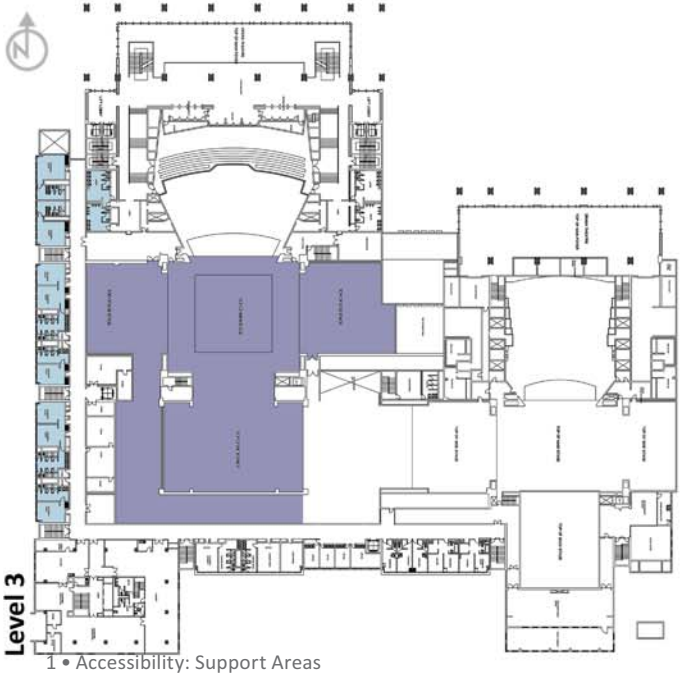
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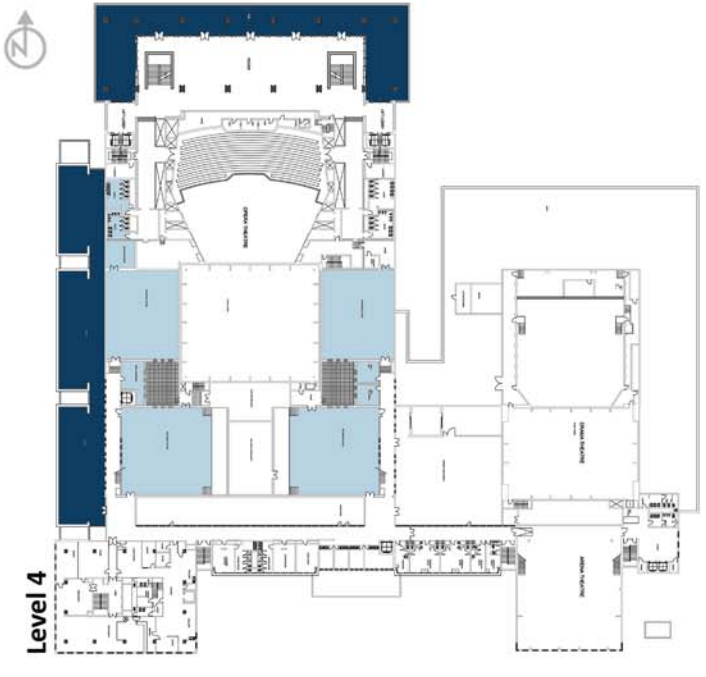
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1.9 LOCATION WEATHER

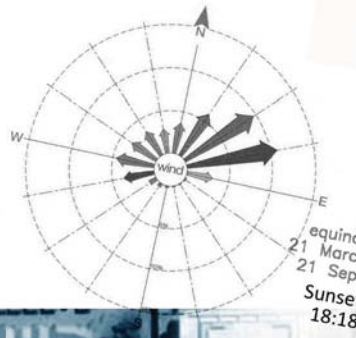
°C / mm

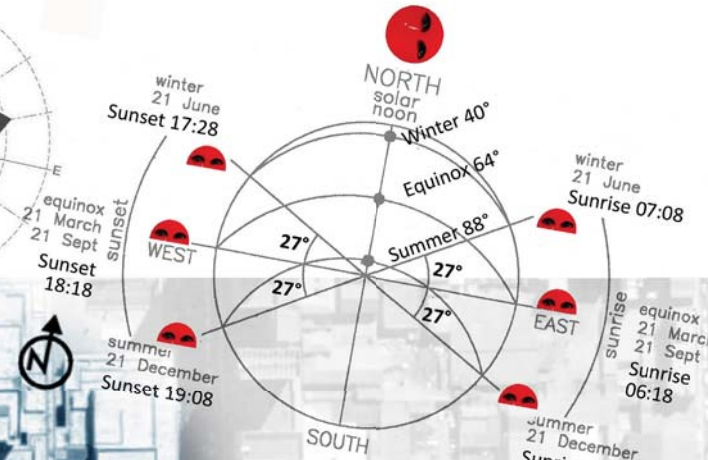
20 40 60 80 100 120 140 160

January
February
March
April
May
June
July
August
September
October
November
December

min temp
max temp
rainfall

Pretoria, 25°44' S , 28°11' E, Time Zone UTC +2 hours





1.10 LOCATION SOLAR STUDY

Figure 1.17 31 May 2001 - 40 years to the day, after the South Africa became a Republic, the Strijdom Monument collapsed into the State Theatre parking lot

The location is one where various uncanny incidences took place. This is beneficial to the production of a fantasy genre film. Key events in the history of the location frequently happened on the same date of 31 May. The poem *Laat Berig* (1973) eerily hints at future events on the location. The location is a future reflection image of what happens when greed takes over - be that economic greed or greed such as that of apartheid, linking with the anti-avaristic theme of the text. The most uncanny similarity of the Square to that of the text of *The Lorax,* is that at the end of greed filled era of the square, only the heap of rocks surrounding the column remains - the same as at the end of the text. .

1.11 THE UNCANNY HISTORY OF THE LOCATION

1870 The location's history started as the Market Place and economic hub of early Pretoria. (State Theatre Pretoria 1981).

1884 Soon afterwards the first shops in Pretoria were erected. Of these the Kynoch building still remains today as"the oldest existing shop building in Pretoria" (State Theatre Pretoria 1981; Van der Walt 1993: 49).

1903 Next to the Kynoch Building is the Sammy Marks Building - the second oldest retail building in Pretoria (State Theatre Pretoria 1981).

1891 On the Market Place the Market Building was eventually erected. (State Theatre Pretoria 1981).

31 May 1961 The Republic of South Africa is born. The country turns its back on the world with its utopian policies of racial segregation (Hook 2005).

31 May 1972 Unveiling of the Strijdom Monument, named after JG Strijdom, 5th Prime Minister of South Africa .

> The cupola enclosed the gargantuan disembodied head of the former apartheid statesman JG Strijdom, 12 times larger than life. "... [T]he 12 foot high head [was] placed on a level close to the spectator so that every spectator [could] stand literally below his gaze and metaphorically come under his influence" (Hook 2005). In the centre of the Square was the fountain consisting of a column with four horses, representing the then four provinces of South Africa (Hook 2005 and Saunderson-Meyer 1979).

1973 *Laat Berig* ('Late Newsflash'), the prophetic poem about Strijdom Square, by Wilma Stockenström is published.

1976 Volkskas building for Volkskas (Nation's Chest) Bank – now Absa Bank - is completed (Janneke 2009).

1988 At this time "Strijdom Square constituted an entire city block devoted to Afrikaner heritage, accomplishment, and culture. It was to many...apartheid's sacred precinct, a monumental public space that aimed to build and mould an Afrikaner National identity" (Hook 2005).

1992 Barend Strydom, JG Strijdom's unrelated namesake, who killed 8 people in 1988, on the Square is released from prison. On the same day red dye was poured into the fountain on the Square by artist Jacques Coetzer. He claimed that he wanted to "wrench South Africans from a placid and spineless acceptance of horror" (Hook 2005).

31 May 2001 On the morning of the the 40th anniversary of what would have been Republic Day, the cupola with the Strijdom head, collapsed into the parking area of the State Theatre, taking a large part of the Square with it. The director of city-planning noted that it was just a coincidence that the dome collapsed on the anniversary of the old Republic Day (Hook 2005).

2009 All that remains is the old fountain column with the heap of rocks and the pattern on the Square.

At the end of The Lorax, only a heap of rocks with the words 'UNLESS' is left behind by the Lorax.

8. PRECEDENTS

The truth is stranger than fiction.

"'The power to kill can be as satisfying as the power to create.'"

"'Murder is a crime for most but a privilege for a few...Moral concepts of good and evil, of right and wrong, do not hold for superior beings.'"

Brandon in *Rope (Pallasmaa 2001:62)*

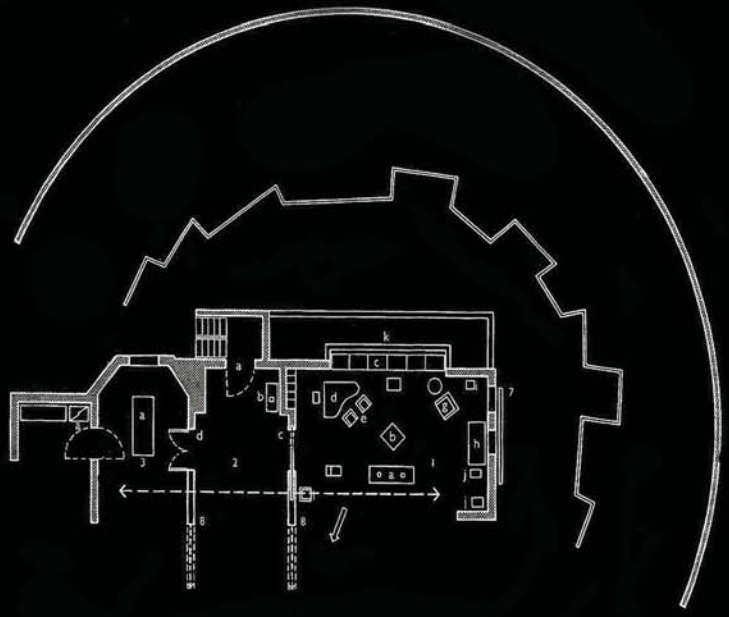


Figure 8.17 *Left:* Hitchcock sitting on the fibreglass clouds next to the miniature of the Manhattan skyline, on the *Rope* set (IMDb 2009).

Figure 8.18 *Right:* The plan of the set for *Rope* (Pallasmaa 2001:53).

8.1 ROPE (1948)

Set Type
Sound stage

Synopsis

Two young homosexual men strangle their 'inferior' classmate with a rope, as response to their mentor's Nietzchean teachings of 'supermen'. They hide his body in a chest in their apartment and invite his friends, family and their mentor to a dinner party, to prove the 'perfection' of their crime (IMDb 2009; Raubicheck and Srebnick 1991:223). The use of such ideas for justification of murder and even genocide indicates that the film addresses the Nazi atrocities (Raubicheck and Srebnick 1991:223).

Producers
Sidney Bernstein, Alfred Hitchcock

Director
Alfred Hitchcock

Screenplay
Arthur Laurents, from the 1929 play by Patrick Hamilton (Raubicheck and Srebnick 1991:223)

Directors of Photography
Joseph Valentine, William V. Skall

Art Direction
Perry Ferguson

Set Decoration
Emile Kuri, Howard Bristol

Technicolor Colour Director
Natalie Kalmus

Editor
Bill Ziegler

Leading Cast
James Stewart (Rupert Cadell); John Dall (Shaw Brandon); Farley Granger (Phillip)

Being both the producer and director of *Rope*, allowed Hitchcock complete control of the film (Spoto 1992: 166). He also called it '*My Most Exciting Picture'*, in an essay, with the same title regarding the film (Bauso in Raubicheck and Srebnick 1991:228).

Rope was a film of firsts for Hitchcock – the first film with a single set, the first film in uninterrupted ten-minute takes and his first colour film (Spoto 1992: 166).

Narrative content was secondary to emotion for Hitchcock (Pallasmaa 2001:62). He took his knack for associative images in film to a unprecedented extreme in *Rope* in order to achieve the desired emotive state in the audience. Hitchcock realised that the two most basic ingredients in any film is **time and place**. He experimented with both in *Rope*, going against normal cinematic conventions by not using cuts to portray the passage of time and using a single set. In doing so, the film itself became a metaphoric associative image. The linear usage of time and the single 'linear' set enhances the conception of 'rope' - a rope being a single linear piece of cord (OED 2006:896). In this his '*Most Exciting Picture*', everything was an associative image to illicit emotion.

8.1.1 UNCONVENTIONAL FILMIC SPACE

Rope is essentially one continuous *mise en scène* shot (Van Sijll 2005:54). The entire film, except the opening sequence, was shot on one sound stage and designed to portray a Manhattan apartment. The single set is a rare occurrence in film, with movies typically having anything from sixty to three hundred sets (Spoto 1992: 166).

The setting appears simplistic and ordinary on film, but this was not the case in reality. James Stewart (*Cadell*) remarked that "shooting a film of the making of *Rope* would have been a much more thrilling cinema than the actual film..." (Pallasmaa 2001:50).

Hitchcock had an ability to fuse film with reality – and in doing so strengthened the end result of the film. The filming of *Rope* can be described as a thriller in itself. "[I]t seems clear that Hitchcock's penchant for anxiety informed his making of a film requiring actors...to master lines, cues, placement and movement extending over several minutes of uninterrupted action. Such a demanding procedure must at some level have been designed to provoke distress in creator, cast and crew and must have also succeeded."

Hitchcock satisfactorily said that he himself "... was so scared that something would go wrong that I couldn't even look during the first take" (Hitchcock in Raubicheck and Srebnick 1991:229) and that James Stewart couldn't sleep for nights due to the picture. "It was the bewildering technique that made him worry" (Hitchcock in Raubicheck and Srebnick 1991:228). The architectural lesson that can be learned from Hitchcock is that an ordinary space can be used as an amplifier for the desired emotion (Pallasmaa 2001:25; 42).

It can be assumed that Hitchcock was "...familiar with the early modernist utopias of mechanized architecture" such as Pierre Chareau's *Maison*

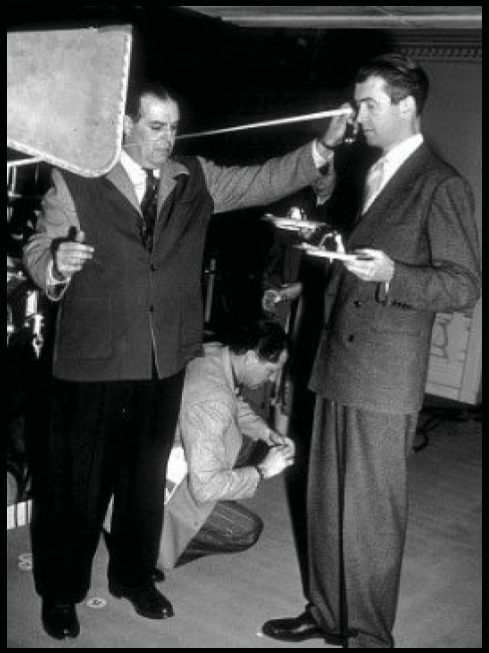


Figure 8.19 *Above:* Hitchcock, cast and crew on the *Rope* set (IMDb 2009).

Figure 8.20 *Left:* James Stewart's position in relation to the camera is checked (IMDb 2009).

Figure 8.21 *Below:* ambigious associations - the victim's father is handed a heap of books tied with the murder weapon - the rope (Spoto 1992:166).

de Verre (1929) and that this influenced his conception for the set (Pallasmaa 2001:55).

On this single set the walls and objects disappeared and reappeared by means of complex technical machinery and assistants (Pallasmaa 2001:54). Wild elements such as sliding walls on mechanisms and flies were used to make way for the large Technicolour cameras (Pallasmaa 2001:54; Spoto 1992: 166-167).

The set was "...conceived and utilized like a checkerboard; the entire floor area was subdivided into one-foot squares, marked in chalk and numbered, to be used as coordinates for the moves in Hitchcock's cinematic game. The carefully preconceived and rehearsed movements of the actors, furniture, light fittings and entire walls, enabled an uninterrupted continuity of action through space" (Pallasmaa 2001:42). Every piece of set decoration or property had to be moved on cue by grips (Pallasmaa 2001:54;Spoto 1992: 166-167).

The single set was, typical of Hitchcock, neither a mere gimmick or nor only for technical reasons. The design contributed to the narrative and emotional value of the film; the audience is given an understanding of how the rooms link together, creating a sense that they are truly are experiencing the space in real time. This in turn implicates the viewer in the crime, creating a feeling of great unease. Hitchcock used the unnatural sterility of the studio-bound environment to contribute to the visual and emotional message of the film, while the theatre-like character is reminiscent of the original play (Barnwell 2004:15; Pallasmaa 2001:50).

8.1.2 UNCONVENTIONAL FILMIC TIME

"In addition to the extreme limitations of space, Hitchcock chose the additional challenge of restricted cinematic technique, most importantly the idea of uninterrupted and unedited shots throughout the length of eleven successive film reels" (Pallasmaa 2001:39). In order to create the appropriate narrative technique, Hitchcock went against his own theories of cutting and montage and contradicted the very "... basic nature of film itself, which is of course the cut..." (Hitchcock Raubicheck and Srebnick 1991:227; Spoto 1992: 166).

Whereas *Rope* consisted only of eleven shots, standard films consist of approximately six hundred shots. Scene transferals were created by passing the camera across the back of an actor, which created a black frame. The last transferral is made by the opening of the chest against the camera, when the protagonist (*Cadell*) is about to discover the victim inside (Pallasmaa 2001:43; Spoto 1992: 166-167).

The film was pre-cut or pre-edited. "Hitchcock [gave] special credit to his film editor Bill Ziegler, who, for the first time in the history of cinema, had to edit a film before it got onto film. All the work of cutting, framing and changes in scale had to be preconceived before the shooting of the film" (Pallasmaa 2001:52). If a mistake was made the whole take had to be redone (Spoto 1992: 167).

In a certain sense Hitchcock was committing 'the cinematic equivalent of a mortal sin' and this again linked with the narrative theme in *Rope* and fuses film with reality (Bauso in Raubicheck and Srebnick 1991:227).

8.1.3 ASSOCIATIONS AS EMOTIONAL CUES

Apart from the already stated fact that the whole film is an association for the overarching concept, Hitchcock also employed ambiguous remarks (ex. 'hanging a picture') layered with meaning and prop usage (ex. books being tied up by a rope), throughout the film. This reinforces emotional associations and strengthens the overall narrative concept (Pallasmaa 2001:45; 59). Brandon even makes an ambiguous remark when referring to the glass tumbler set. He says; "I'd hate to break up the set," which, considering the ambiguous nature of remarks in the whole film and Hitchcock's tendency to fuse film with reality, no doubt refers to the constant mechanical and physical breaking up of the set that was going on throughout the film.

Hitchcock used the film set (an illusion) to influence the performance of crew and cast (reality). The behaviour of crew and cast (reality) due to this, provided the end result of fear and claustrophobia in the film (illusion) that Hitchcock hoped to achieve. It can thus be said that Rope is a heterotopic image, due to this mutual influential relationship. The film set was no mere backdrop for the action to unfold; the film set became the generator for fear.

The following year, the slightly re-furbished apartment set was used in the film *My Dream Is Yours* (1949) (IMDb 2009).

8.1.4 THE INFLUENCE ON THE PRODUCTION DESIGN OF *THE LORAX*

1. The production needs to be influenced by the set and vice versa. There must be a blurring of the boundaries between film and reality. A heterotopic image has to be created.

2. Viewing the production (principal photography), needs an experience as well.

3. The set needs to form an integral part of the concept.

4. Associative images needs to strengthen and enhance the concept to ellicit emotion.

5. The set could be a single set if possible. This will also aid in the ease and budget of the production.

6. The set could comprise of 'wild elements' in order to aid adaptability for various scenes.

7. The set needs to be re-usable.

Figure 8.22 The community of Thokoza watches from their houses as filming of *The Bang Bang Club* takes place.

8.2 *THE BANG BANG CLUB* (2010)

Set Type
Location based

Synopsis
The true story of four South African combat photographers, called The Bang Bang Club, who risked their lives to capture the images of political violence of the early 1990's. The film is based on the semi-autobiographical book written by the two remaining club members, Silva and Marinovich (Gauteng Film Commission 2009; IMDb 2009).

Production
Out of Africa Entertainment; Foundry Films Inc.

Producers
Adam Friedlander, Daniel Iron, Lance Samuels

Director
Steven Silver

Screenplay
Steven Silver

Director of Photography
Miroslav Baszak

Production Design
Emelia Weavind

Set Decoration
Guy Potgieter

Editor
Tad Seaborn

Location Manager
Elliott Borkum

Leading Cast
Ryan Phillippe (Greg Marinovich), Taylor Kitsch (Kevin Carter), Frank Rautenbach (Ken Oosterbroek), Neels van Jaarsveld (Joao Silva), Malin Akerman (Anna)

8.2.1 THE PRODUCTION OF *THE BANG BANG CLUB* AS HETEROTOPIC IMAGE

Filming for *The Bang Bang Club* took place in ninety percent of the actual locations. The majority of the shoot took place in Soweto and other areas, including Thokoza, Downtown Johannesburg, Melville and the Magaliesberg (Gauteng Film Commission 2009; Weavind 2009).

While on set in Thokoza for the scene of fighting between the IFP and ANC, the reciprocal interaction between the film production and the community of Thokoza was observed.

Firstly, the most obvious and interesting occurrence was that the community of Thokoza was watching the filming taking place and thoroughly enjoying it. They were viewing the film from behind the scenes for entertainment. A new kind of 'viewing' was occurring - the real streetscape with the fictional action of the film. An enjoyable experiential heterotopic viewing was occurring. This was controlled by security, in order to prevent locals being in the cameras view range.

Secondly, the community was also actively involved in the production in more direct ways. All of the extras were from the local area, which they obviously delighted in. The local housing was also 'involved'. For a specific scene, a wall needed to explode. A local home owner's partial exterior wall was retrofitted and pyrotechnicians filled it with small explosives. After the filming was completed, the construction crew fulfilled the home owner's wishes by extending the wall to enclose the garden.

The wall, the economic surge and the involvement in an international film was what remained in the community of Thokosa after filming. No doubt it was the exciting experience of such an event that will be remembered long after.

It was also a special production for the crew. Lance Samuals, producer from Out of Africa said "The thing that is special for me about *The Bang Bang Club* is that for once I am working on a movie which happened during a period which I remember well..." and that they worked with Marinovich and Silva to create the film (Gauteng Film Commission 2009).

The film thus influenced the community and vice versa. The boundary of the real and the film image became blurred. A new form of entertainment - the viewing of film production in progress - is an interesting occurrence that is mostly overlooked.

The whole production in itself was heterotopic in nature. The production was a Canadian and South African co-production between Foundry Films Canada and Out of Africa Entertainment. Principal photography took place between 30 March and 2 May 2009 in South Africa (Gauteng Film Commission 2009). The cast and crew were an interesting mix from South African, Hollywood and the rest of the world. Post-production took place in Canada and camera; light and grips were supplied by Media Film Services, from South Africa.

The final image was thus a heterotopic image - a mix comprising of images made in South Africa and Canada of international subjects.

8 • The Bang Bang Club (2010)

8.2.2 PRODUCTION DESIGN OF *THE BANG BANG CLUB*

The nature of the field of production design was also apparent while on location. This specific scene would have been shot in Soweto, but moved to the street in Thokoza only the previous night. This street was the actual street in which the events took place.

To realise the narrative requirements on this new location, quick action on the part of the production designer, the art department and location scouts, was required. The wall for the explosion scene was completed while other scenes in the same location were being filmed.

The location being used was thus secondary to the narrative. As long as it appeared narratively correct on film, the actual location didn't matter. This choice of location during production, occurred long after the design process in preproduction had finished. This is in direct contrast to the chronological order of design followed by most traditional architectural projects follow.

The production designer was also insistent that the wall be extended to fulfil the home owner's wishes . By doing this **the production designer left not only a lasting film image that will be shown in cinemas around the world, but a real change in the community of Thokoza. A real life, lasting heterotopic image.**

The location had to be checked by the production designer and on-location art director for colours, signage and brand that was not allowed in the camera's view range.

The location also had to have enough space for staging, dressing and holding and space to park the truck with film equipment.

8.2.3 THE INFLUENCE ON THE PRODUCTION DESIGN OF *THE LORAX*

Being a location based shoot, the following four influences, differ from that of a sound stage film such as *Rope*.

1. The films left a 'footprint' behind, namely the wall, the economic influx and of course the memory of it being made.

2. It is important to note the less significant role of a location in film production as opposed to the role of a site in architecture.

3. The location needs to provide enough space for staging, dressing and holding; and parking space for equipment trucks as well as provide in other cast and crew needs.

4. The location colours need to be adapted to that of the production. Location singage needs to be temporarily removed or covered

This precedent reinforces the previous study on *Rope* regarding the first two influences mentioned below.

5. Here again, the production is influenced by the location and *vice versa*. There must be a blurring of the boundaries between film and reality. A heterotopic image has to be created.

6. As with *Rope*, the experience of viewing the film needs to be extended to the period of principal photography (production) and audiences watching the production taking place need to be accommodated in a controlled manner.

Figure 8.23 *Top row from left to right:* extras from Thokoza on a car that is part of the set decoration; gaffers getting the dolly set-up for the shot; exstras running towards the camera on the dolly track as part of the scene.

Figure 8.24 *Second row from left to right:* the wall being built; the production designer check's the wall, while people from the community watch the pyrotechnicians insert mini explosives at the back; finishing touches are done by the scenic artist and production designer.

Figure 8.25 *Third row from left to right*: equipment trucks, extras and crew; inside the equipment trucks; the production designer and scenic artist finishing and ageing a styrofoam 'brick' for the wall.

Figure 8.26 *Bottom row from left to right*: the community watches the filming, excited extras, the film crew being entertained by the action being filmed.

Figure 8.27 *This page above*: storyboard panels of the maze scenes (Pallasmaa 2001:112).

Figure 8.28 *This page right*: Jack looks at the miniature model of the maze (dvdbeaver s.a).

Figure 8.29 *Opposite page from top*: a plan of the maze set (Pallasmaa 2001:112); the maze pattern on the carpet (Kubrick 1980).

8.3 *THE SHINING* (1980)

Set Type *Back lot and Sound Stage*

Synopsis
A family of three heads to the isolated Overlook Hotel for the winter. Here "...an evil and spiritual presence influences the father into violence, while his psychic son sees horrific forebodings from the past and of the future" (IMDb 2009).

Executive Producer
Jan Harlen

Producer
Stanley Kubrick

Director
Stanley Kubrick

Screenplay
Stanley Kubrick, Diane Johnson. Based on the novel by Stephen King

Director of Photography
John Alcott

Steadicam Operator
Garrett Brown

Production Design
Roy Walker

Art Direction
Les Tomkins

Set Dresser
Tessa Davies

Editor
Ray Lovejoy

Leading Cast
Jack Nicholson (Jack Torrance); Shelly Duval (Wendy Torrance); Danny Lloyd (Danny Torrance)

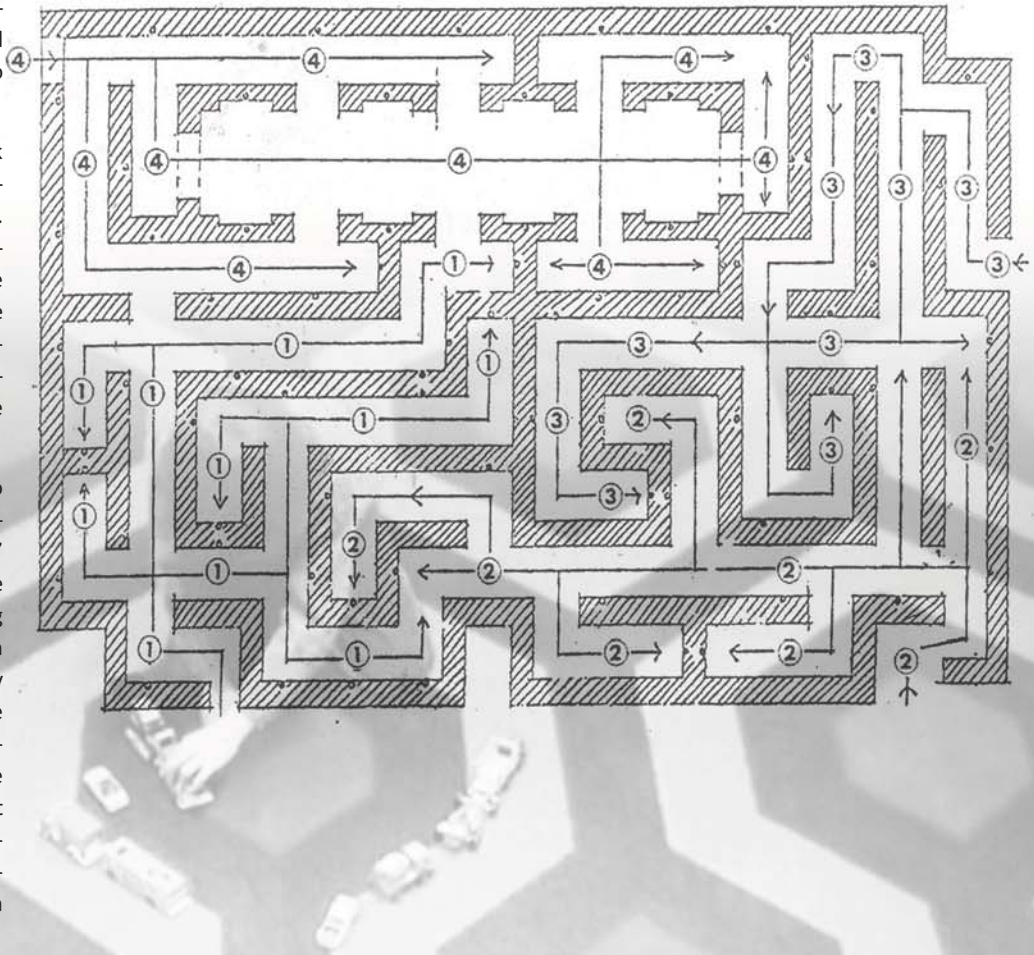
The overarching concept or theme of *The Shining* is that of a maze. It is intended to disorientate and disturb the viewer and is repeated throughout the film in various ways, so much so that the film itself becomes an endless maze.

The entire spatial configuration of the 'Overlook Hotel' is a maze that cannot be visualized or conceived as a singular space (Pallasmaa 2001:100). Maze-like passage and stair corridors of the hotel even contain dizzying maze patterns on the carpets. To achieve the maze-like effect in the design and "[t]o get an authentic look, thousands of photos were taken of hundreds of hotel rooms and then Kubrick picked the ones he wanted built" (Duncan 2003:166).

The famous Hedge Maze in the film, has also been described as "...one of the most intriguing creations in the history of motion pictures." Wendy and Danny go to explore the maze on the hotel grounds. Meanwhile Jack starts staring at a miniature model of the maze and with an unsettling movement the camera shows Wendy and Danny inside it in the next shot. Neither the miniature maze model nor the map shown before Wendy and Danny enter the maze are the same as the actual set. "The actual maze set does not follow either the model or the drawing: it is a simplified design to facilitate the required actions and camera moves" (Pallasmaa 2001:113).

The feel of disorientation in the film and the maze theme, would not have been possible, if it was not for the Steadicam. The narrow space within the maze, following characters on maze-like stair corridors and following young Danny on his three-wheeler at a low angle, all called for specific camera techniques and equipment.

Kubrick wanted low angles, in order to portray



the young boy's point of view and enhance the disorientating and dizzying effect (Brown s.a.).

Fortunately, at the time, Cinema Products prototyped the new "Universal II-raised monitor" Steadicam (or floating camera) and the camera crew devised a suspension platform for the Steadicam. This permitted lens heights as low as 450mm up to waist height. Kubrick thus used the Steadicam as it was intended to be used – a tool to get the lens where it is needed without the limitations of the dolly and the crane (Brown s.a.).

The Steadicam had a tremendous effect on how *The Shining* was shot. The "...sets were designed with the Steadicam's possibilities in mind and were not therefore, necessarily provided with either flyaway walls or dolly-smooth floors. One set in particular, the giant Hedge Maze, could not have been photographed as Kubrick intended by any other means" (Brown s.a.).

The Hedge Maze had both a 'summer' form and the more terrifying 'winter form'. The summer version was constructed at MGM's old outdoor lot at Borehamwood. "It was beautiful. The 'hedges' consisted of pine boughs stapled to plywood forms. It was lined with gravel paths, and contained a centre section (although built to one side of the set) which was wider than the rest." The camera crew determined that the maze set was best photographed with a lens height of 600mm. This gave the "correct appearance of height to the walls." Tripod type shots were made in the centre of the maze (Brown s.a.).

Blurring the boundary between film and reality – it was not only the actors that got lost in the Maze in the narrative, but the camera crew as well. To prevent this, the set was first designed with certain passages open to the outside. This was changed when the crew found that "a terrific shot would inadvertently wind up staring out one of the holes" (Brown s.a.).

For the winter version of the maze, the set was struck and reerected at EMI Studios. The production design team 'snowed' the set "...with two feet of dendritic dairy salt and Styrofoam snow crusted on the pine boughs" (Brown s.a.).

"The quartz outdoor-type lights were turned on and a dense oil-smoke atmosphere was pumped in for eight hours a day... the maze became an unpleasant place in which to work. It was hot, corrosive and difficult ...to breathe. The speed of the shots stepped up, since everything now happened at nearly a run." The Styrofoam also posed an extreme fire hazard. The camera crew switched to a lighter camera type with a "special underslung cage for it" (Brown s.a.).

Apart from the ease of use, the Steadicam also provided the more intimate and subjective effect achieved with a handheld device. The Steadicam is steadier than a handheld shot but "retains a small amount of jitteriness that is translated into dramatic tension" (Campbell 2002:28). This added to the haunting emotional effect of the film as well, which would not have been achievable with a more objective dolly or crane shot.

The crew got lost and scared of real dangers such as fire in the maze, just like the characters of Wendy and Danny - thus the boundaries between film and reality was blurred. Apart from this, there was also the uncanny happening of the sets being burned after filming. "Echoing the mad contents of the film, the sets of the shining caught fire on a freezing February evening in 1979 and virtually obliterated Sound Stage 3. In Stephen King's novel the hotel actually burned

down in a fire" (Pallasmaa 2001:113-114).

8.3.1 THE INFLUENCE ON THE PRODUCTION DESIGN OF *THE LORAX*

1. The set which you see in one scene, need not necessarily be the same in the next - altough it appears the same.

2. The Steadicam can be used for tight spaces. If such a scene needs to have a subjective viewpoint it will also add to the emotion.

3. The set needs to be re-usable.

The Shining also strengthens both the studies on *Rope* and *The Bang Bang Club* with the same influences of:

4. The production is influenced by the set and *vice versa*. There must be a blurring of the boundaries between film and reality. A heterotopic image has to be created.

5. The set needs to form an integral part of the concept.

6. Associative images needs to strengthen and enhance the concept to illicit emotion.

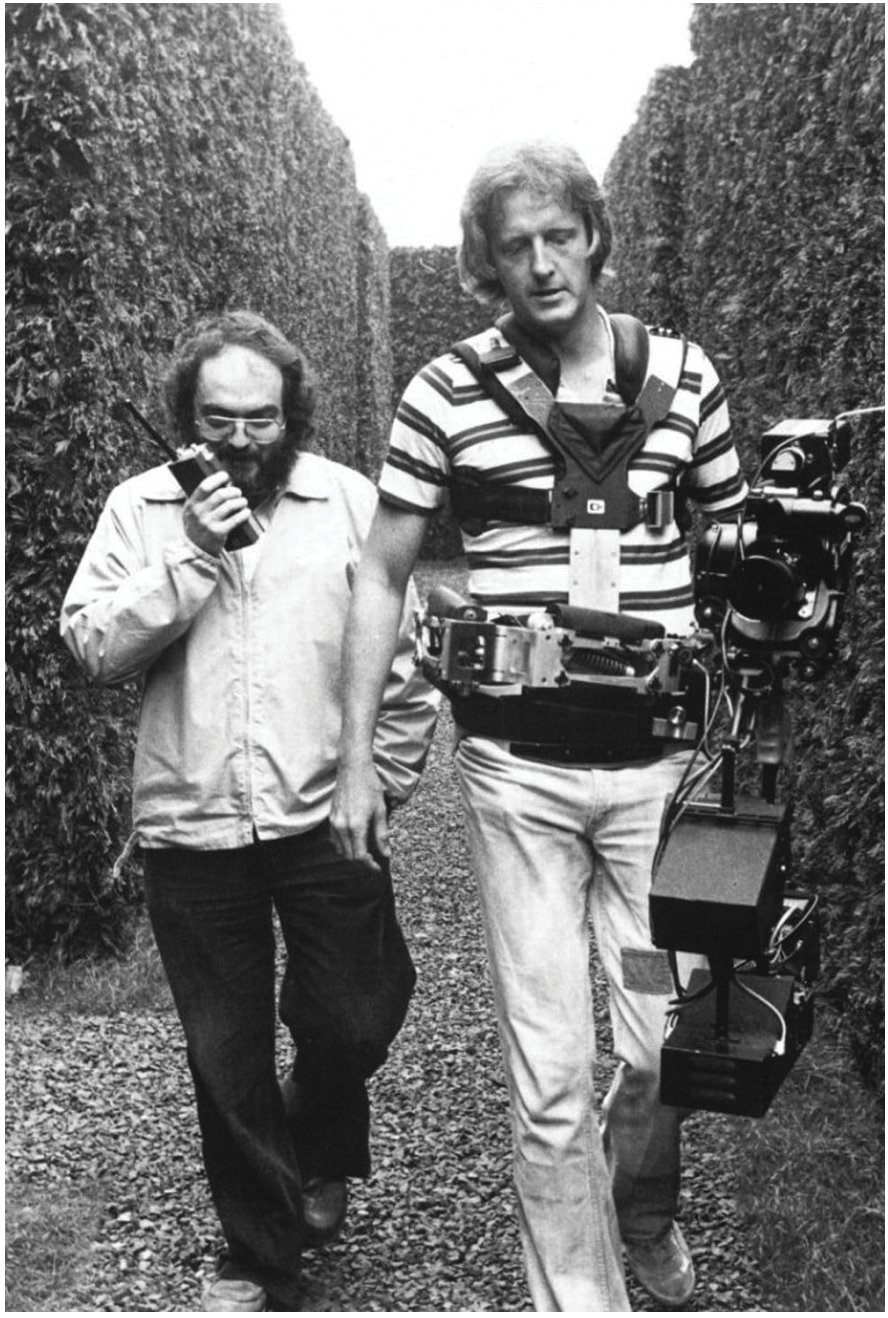


Figure 8.30 *Opposite left*: scenes of the maze in *The Shining* (Kubrick 1980).

Figure 8.31 *This page right*: Kubrick and Brown in the maze with the Steadicam (Wordpress.com s.a.).

8.4 THE GREAT (BAMBOO) WALL (2002)

Architect
Kengo Kuma

Site
Beijing, next to the Great Wall of China

Materials
Bamboo

Qualities
Rapidly renewable material - bamboo

Of interest is "a central feature of the project is a two-storey skylit space, actually an exterior 'room' — enclosed by bamboo walls on three sides — that seems to float over a shallow pool" (Brown 2004). The shape and composition is the same as the feel needed for the 'Grickle Grass Maze'. The spacing between bamboo poles are done so that visibility through the structure is maintained. This central space was also used in a Chinese film (Designboom 2007)

8.4.1 THE INFLUENCE ON THE PRODUCTION DESIGN OF *THE LORAX*

1. Bamboo as material
2. The shape and composition of the space.
3. Spacing between bamboo poles to maintain visibility through the structure

Figure 8.32 The central space that was used in the filming of a Chinese film (e-architect 2008).

8.5 JAPANESE PAVILION (2000)

Architect
Shigeru Ban Architects, (Tokyo, Japan)

Architectural Team
Nobutaka Hiraga, Shigeru Hiraki, Yun Yashiki

Site
Hanover Expo 2000, Germany

Materials
Cardboard tubing (Sonoco Europe) and timber

Qualities
Low impact, easily recycled, rapid construction

Shigeru Ban is renowned for his use of often overlooked materials such as paper cardboard and bamboo (Drew 2008).

The theme of the 2000 Hanover Expo was the environment and sustainable development. The architectural team's environmentally conscious solution was to design a paper pavilion. The structure was formed mainly by exploiting the strength of recycled paper tubes (Brower et al 2005:18-20).

The paper tubes could be manufactured in the lengths required. Ban decided on 120mm dia x 20m long x 22mm thick cardboard tubes that each weighed 100kg. The tubes were combined with thin timber arches and wire on the outside; and a glass-reinforced paper waterproof cover. The whole structure was erected in two weeks (Drew 2008; Eekhout et al 2008:107).

> *"Acknowledging the environmental impact and life span of the materials, Ban and team created an architectural story of construction, demolition and recycling for this temporary structure." "The completion of a building is usually though to be the end of the project, but the Paper Pavilion completes its story after demolition;its materials are chosen for their low impact and ease of recyclability "(Brower et al 2005:18-20).*

8.5.1 THE INFLUENCE ON THE PRODUCTION DESIGN OF *THE LORAX*

1. Rapid construction.
2. Thought about what happens after the structure has fulfilled its purpose.
3. Low impact, easily recyclablity of structure.
4. The use of cardboard as material.
5. Connection with rope-like material.

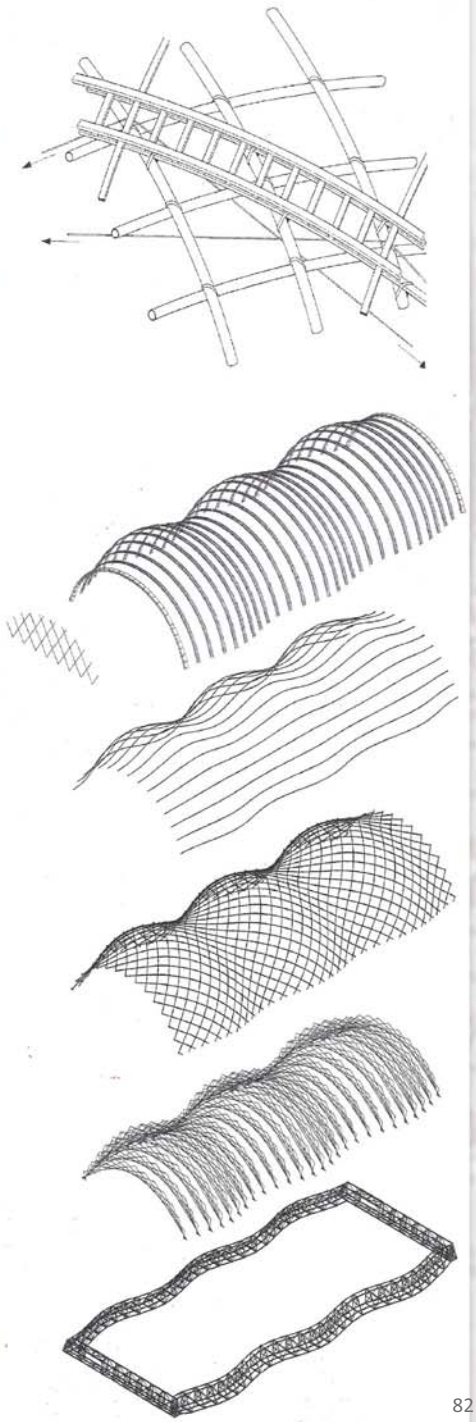


Figure 8.33 The connection of the cardboard tubes with a rope-like material and the different layers of the structure (Drew 2008)

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9. PRODUCTION DESIGN DEVELOPMENT

"All things are one"

-Paulo Coelho in 'The Alchemist'

9.1 THE DESIGN THOUGHT PROCESS

Film industry conventions were used in the design. For explanation on the conventions, please refer to chapter 11, as these two chapters go hand in hand.

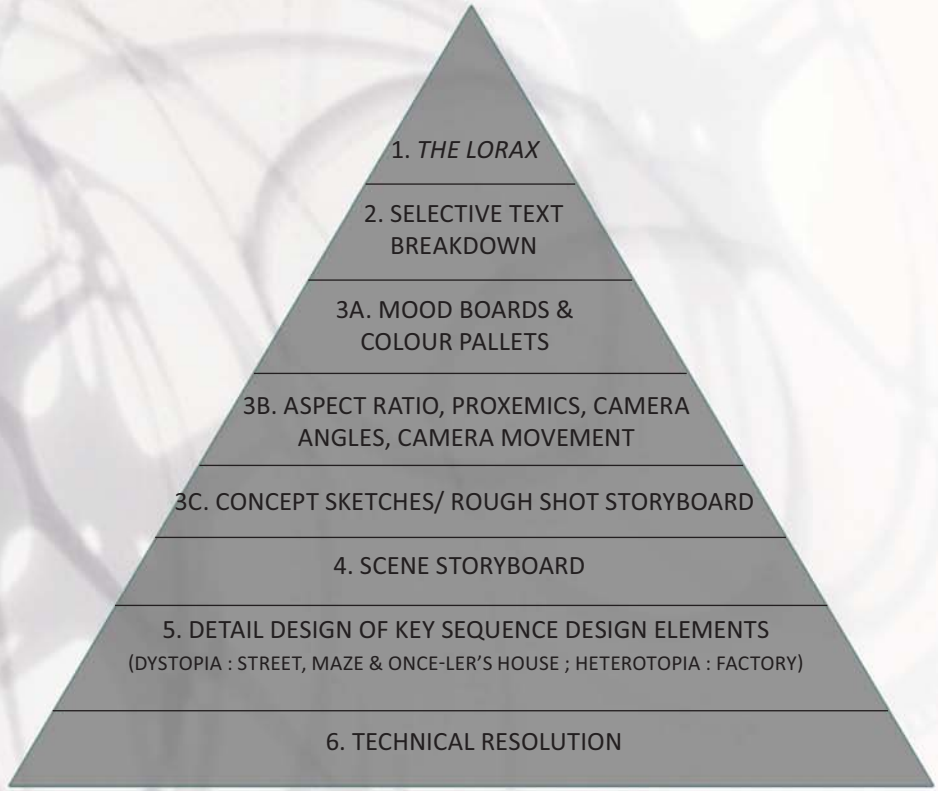


Figure 9.34 Design Process

9.1.1 THE DESIGN PROCESS

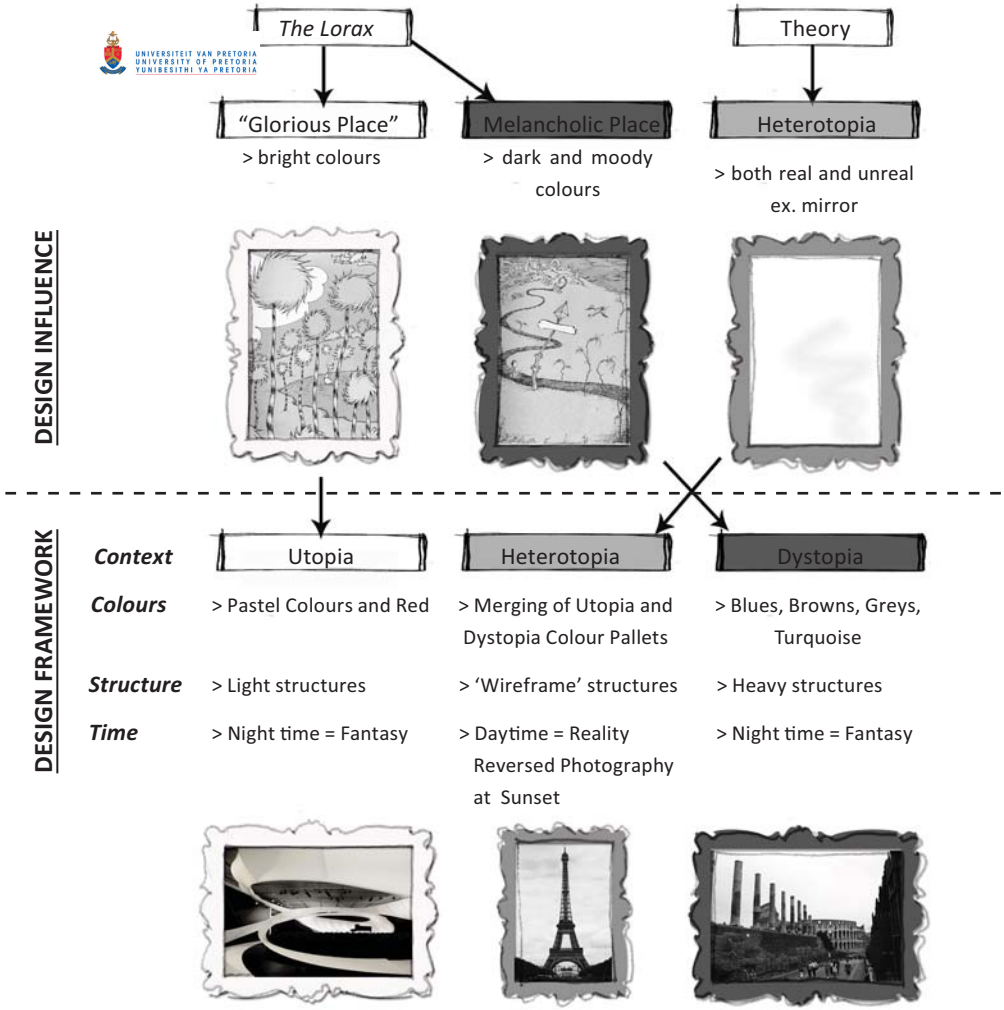
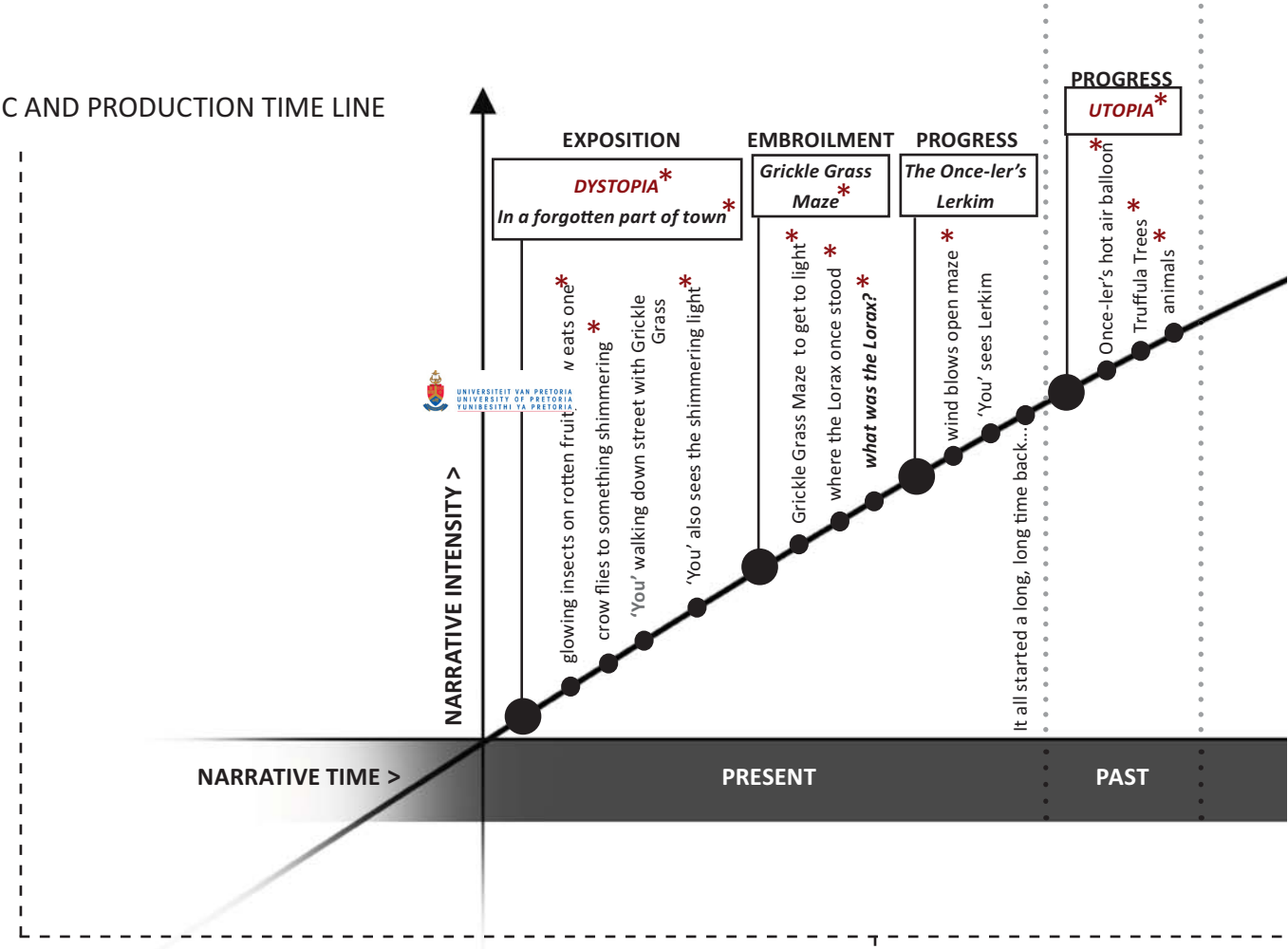


Figure 9.35 Narrative and Theoretical Influence on the Design Process

9.1.2 NARRATIVE AND THEORETICAL INFLUENCES

9.2 THE DIEGETIC AND PRODUCTION TIME LINE



Production Design ***ZEITGEIST***

Bring the message of *The Lorax* (global thinking) to Pretoria (acting locally)

Avarice of environmental destruction, economic downfall, Strijdom Square

Location Scouting Underutilized Location - Lillian Ngoyi Square

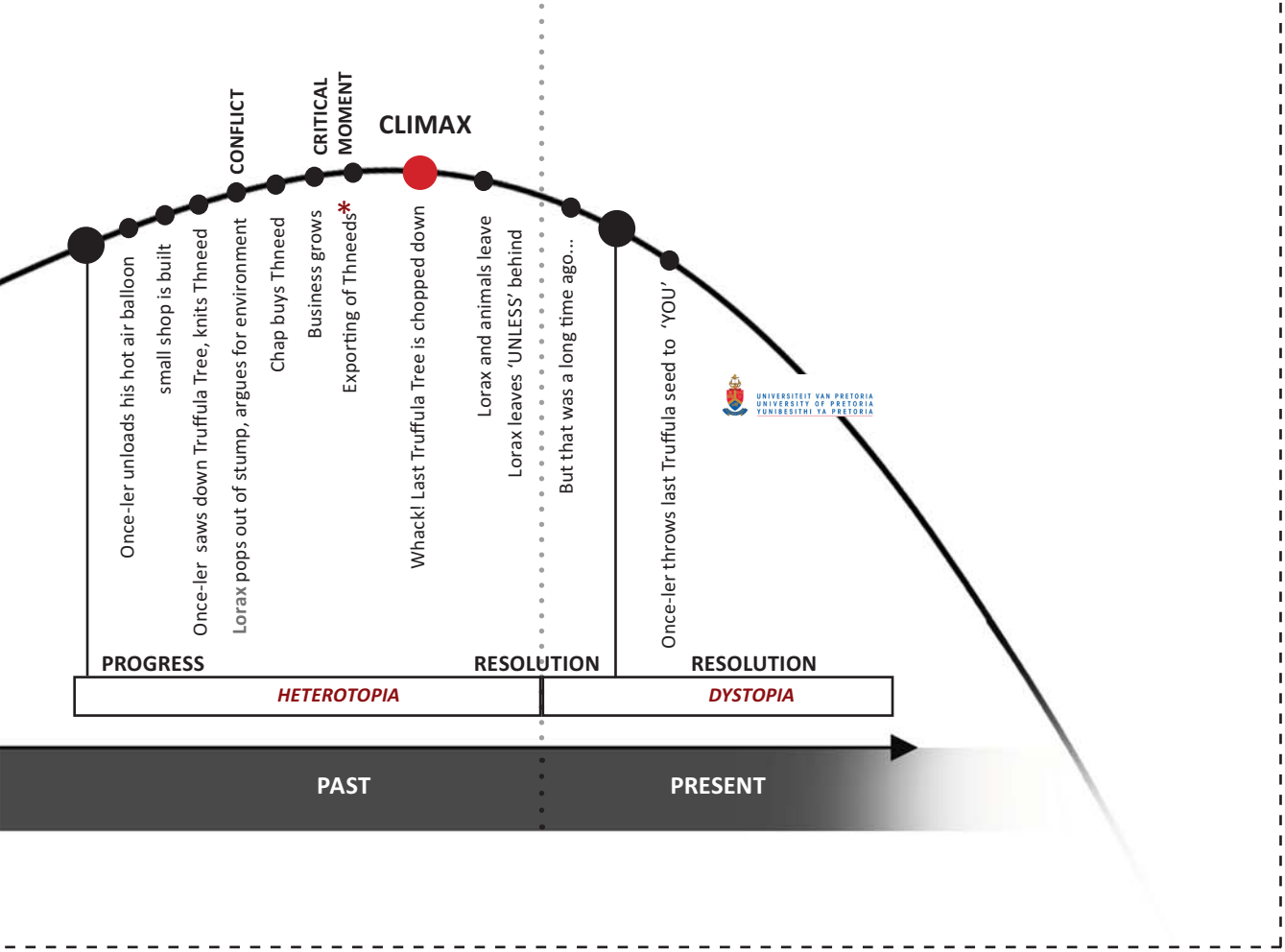
Set Construction Underutilized State Theatre Workshop Space
> Use for Set Construction

Public Viewing of Filming
From State Theatre Balcony

Camera Angles
Use of State Theatre Balcony for camera placement

Staging,Holding, Dressing
State Theatre

PREPRODUCTION | **PRODUCTION**



Visual Effects

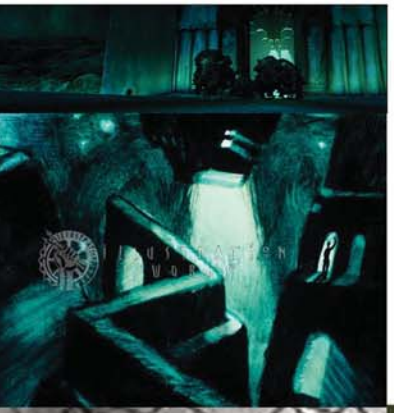
Stars & 'Clouds'

'UNLESS' Luminaire

Hanging Bars on Sammy Marks Square Tower

POST PRODUCTION

POST POST PRODUCTION : THE SHADOW OF THE LORAX



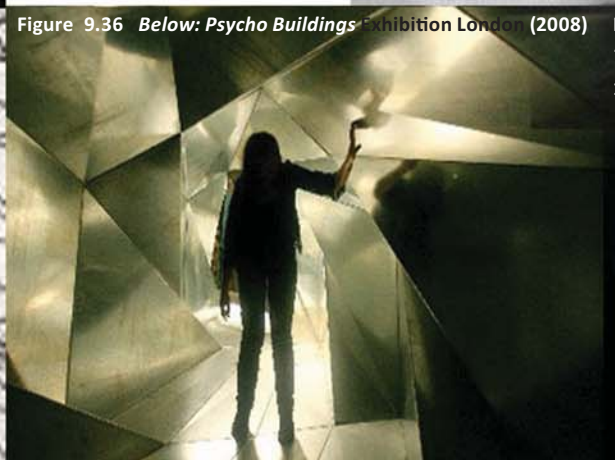
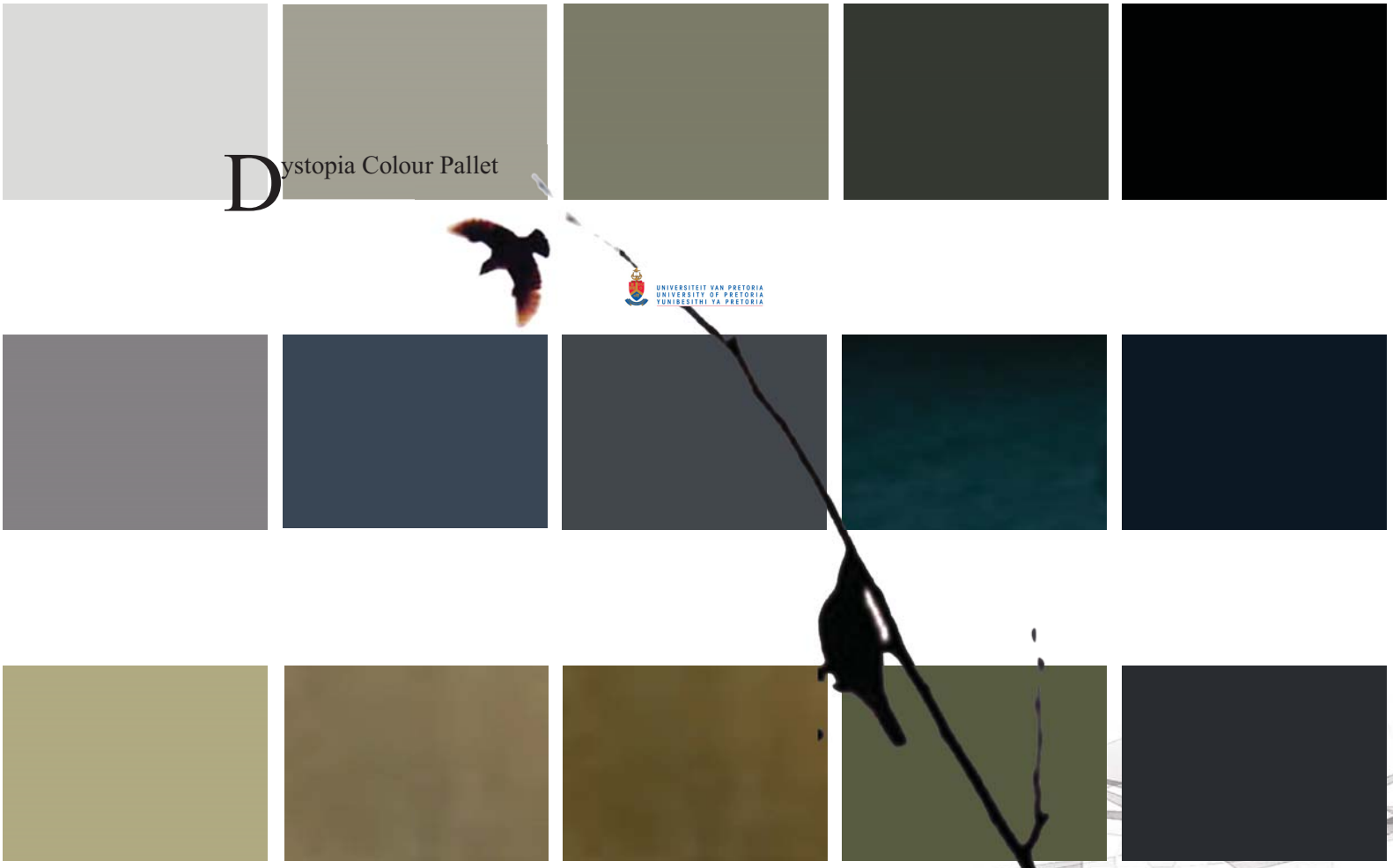


Figure 9.36 *Below: Psycho Buildings* Exhibition London (2008)

Dystopia Mood Board

Figure 9.37 *Below*: a haunting scene from *The Cabinet of Dr Caligari* (1919-1920) (Lang 1919-1920)

Dystopia Colour Pallet



9.3 MOOD BOARDS & COLOUR PALLETS

Figure 9.38 *Top row far left*: Claude Monet's *Impression, Soleil Levant* (1872/1873). Note red sun with pink and turquoise background

Figure 9.39 *Top row left*: part of a setting background from *Spirited Away* (2001) (Miyazaki 2001)

Figure 9.40 *Middle row*: fire dancers and other possibilities for Truffula Trees

Figure 9.41 *Bottom row*: light and airiness - the way which the background for Utopia should be

Utopia Mood Board

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Utopia Colour Pallet

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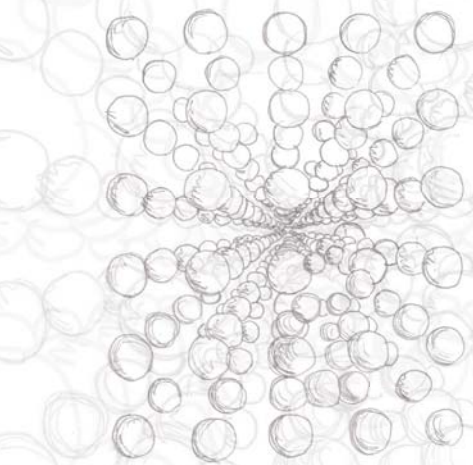

dystopia >

utopia >

heterotopia >

dystopia >

9.4 SCENE STORYBOARD

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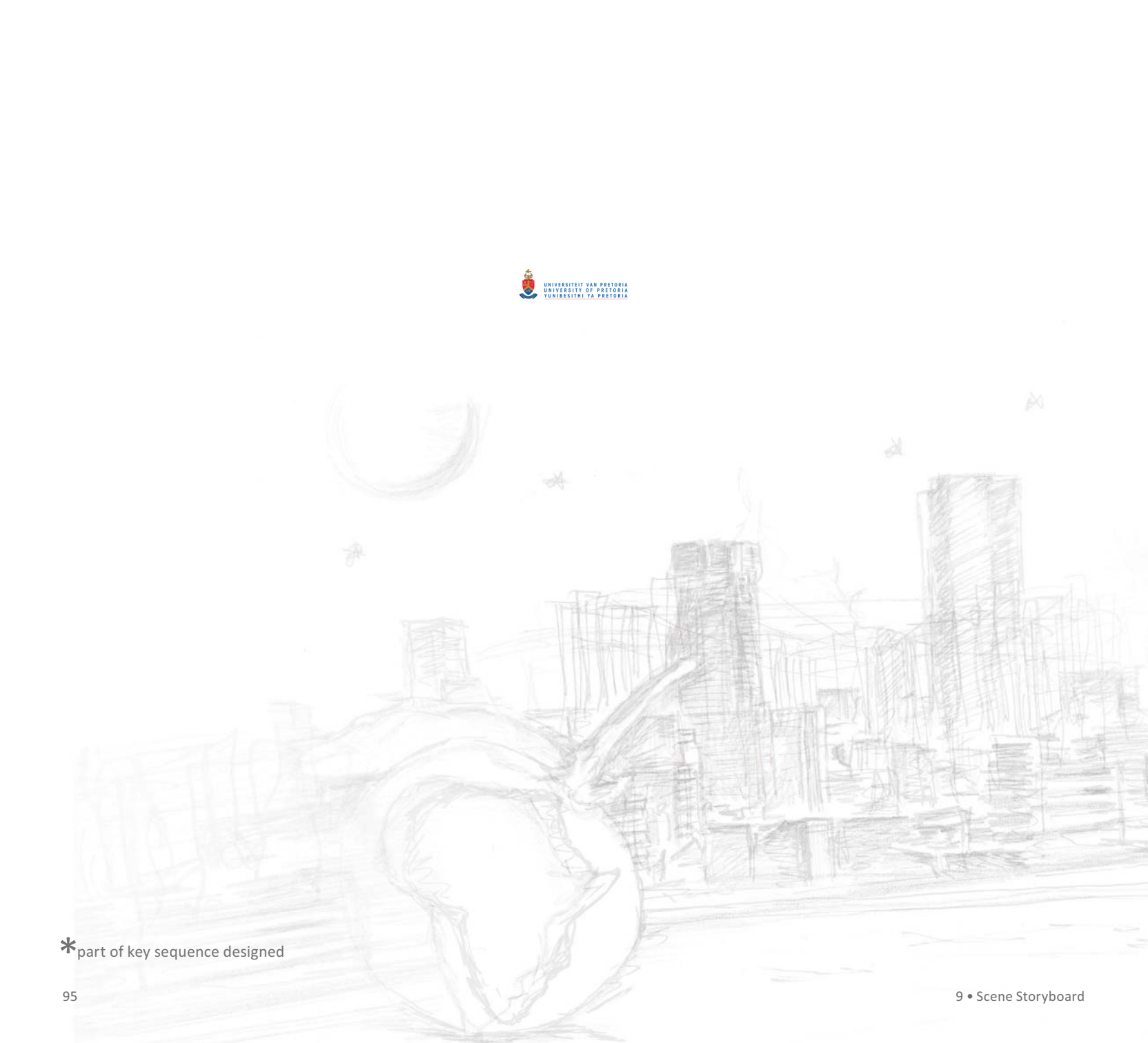


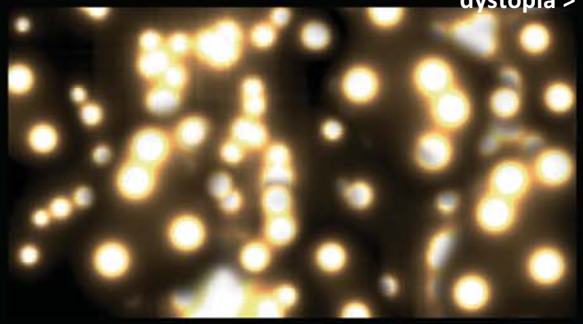
*part of key sequence designed

1 ***Action*** Shimmering firefly-like insects.
One is bigger and brighter than the others.

Proxemics Extreme Close-Up

Camera Angle Frontal

Camera Movement Zoom out



2 ***Action*** A crow is munching at what was the brightest shining insect on the rotten piece of fruit. The crow sees something shining in the distance. The camera provides an establishing shot of 'Pretoria' in the background

Proxemics Close-Up to Establishing Shot (from fruit to 'Pretoria')

Camera Angle Low Angle

Camera Movement Zoom out, then Pan

3 ***Action*** The crow flies towards the shimmering light. A boy is walking down 'Church street', throwing a coin in the air. The Absa Building and the Reserve Bank are in the background

Proxemics Extreme Long Shot

Camera Angle Extreme High Angle

Camera Movement Aerial Shot

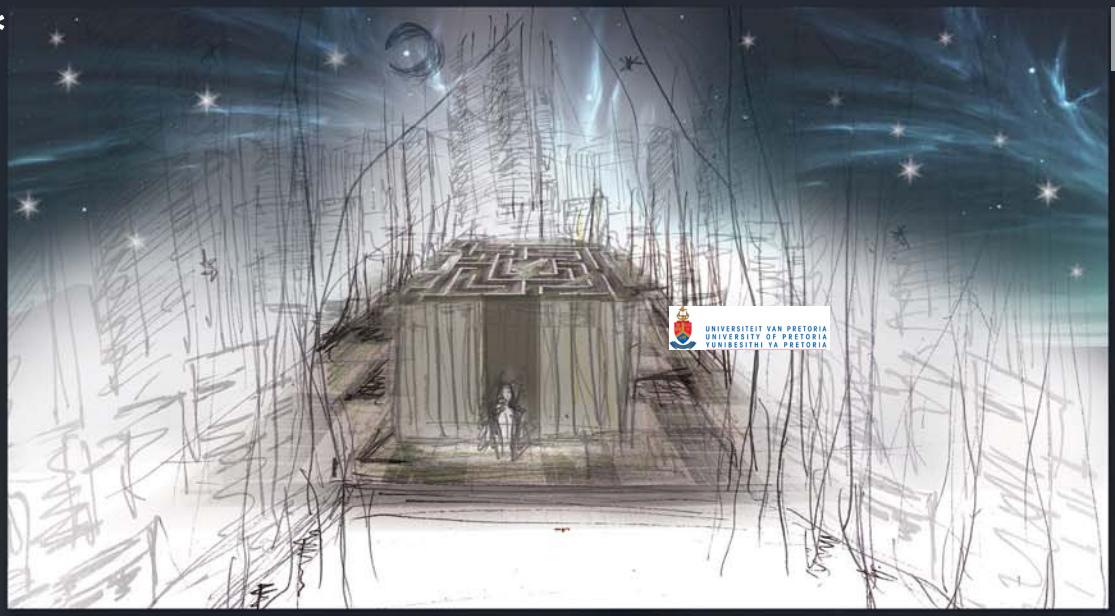
4 ***Action*** The crow flies closer and sits on a branch. The boy ('You') is still throwing the coin in the air when he sees the shining light the crow saw before

Proxemics Extreme Long Shot combined with 'Over the Shoulder Shot'.

Camera Angle Extreme High Angle

Camera Movement Crane Down

*



5 *Action*

‘You’ arrives at the entrance of the Grickle Grass maze in the clearing. He hesitates to enter

Proxemics

Extreme Long Shot

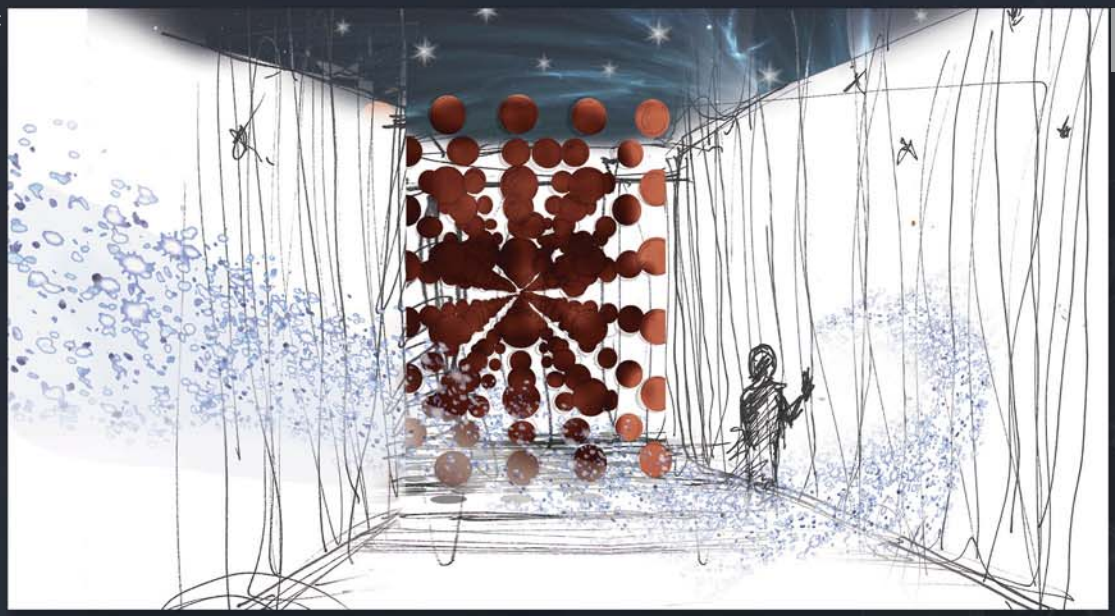
Camera Angle

High Angle

Camera Movement

Crane Down

*



6 *Action*

Inside the maze ‘You’ comes to the strange lights that resemble an explosion that stopped in mid-air. This is deep in the Grickle Grass “where the Lorax once stood just as long as it could” (Seuss 1971)

Proxemics

Extreme Long Shot

Camera Angle

Frontal

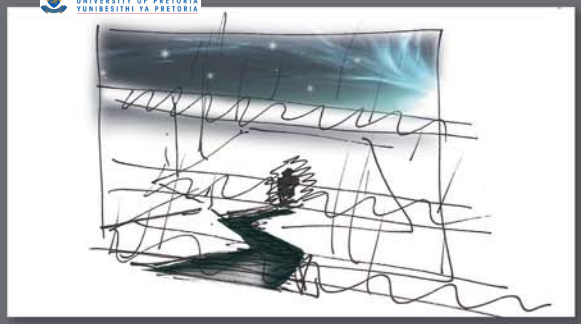
Camera Movement

Dolly in

7	*Action*	The wind blows open the maze and 'You' sees the Once-ler's Lerkim
	Proxemics	Extreme Long Shot
	Camera Angle	Low Angle
	Camera Movement	Tilt Up

Insert Shot of 'You's' sneakers turning to walk towards the Once-ler House, hesitating

9	*Action*	The Once-ler peeks through his shutters
	Proxemics	Point of View Shot
	Camera Angle	Frontal to High Angle
	Camera Movement	Dolly in and Tilt Down

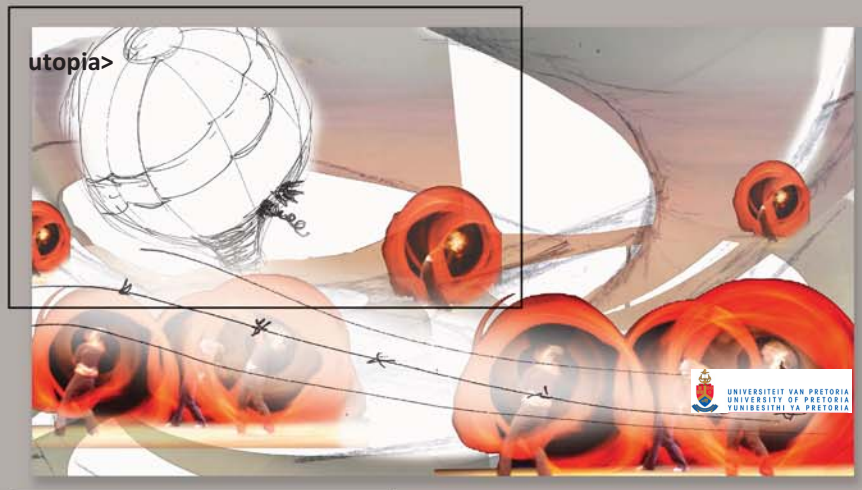


10	*Action*	The Once-ler let down a tin pail so 'You' can pay him to here the story of the Lorax
	Proxemics	Long Shot
	Camera Angle	Low Angle
	Camera Movement	Zoom in

Insert Shot of Once-ler hiding the money in his Snuvv

12	*Action*	The Once-ler lets down the Whis-pa-ma-Phone to tell the secret of the Lorax to 'You'
	Proxemics	Long Shot
	Camera Angle	Low Angle
	Camera Movement	Zoom in

It all started a long time ago...

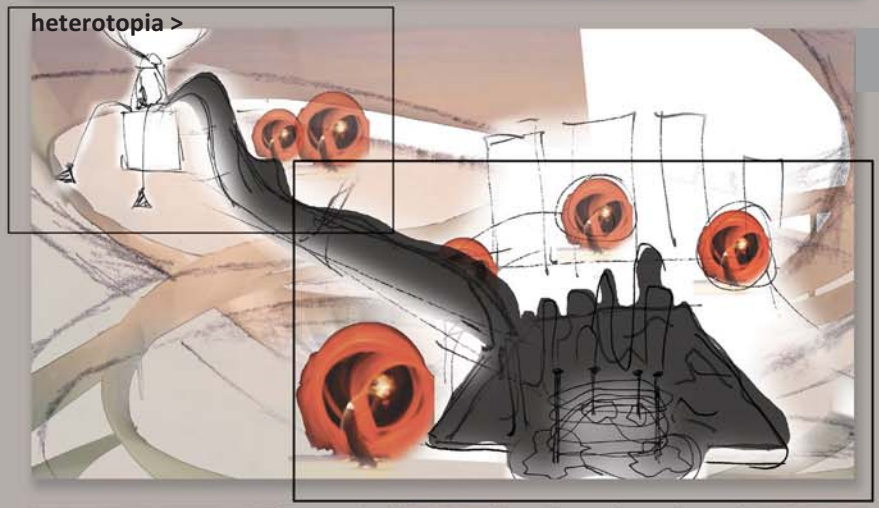


14 ***Action*** **The Once-ler arrives in Utopia in his hot air balloon and sees the beautiful Truffula Trees**

Proxemics **Extreme Long Shots**

Camera Angle **Extreme High Angle to Frontal Establishing Shot of Utopia**

Camera Movement **Crane Pan**

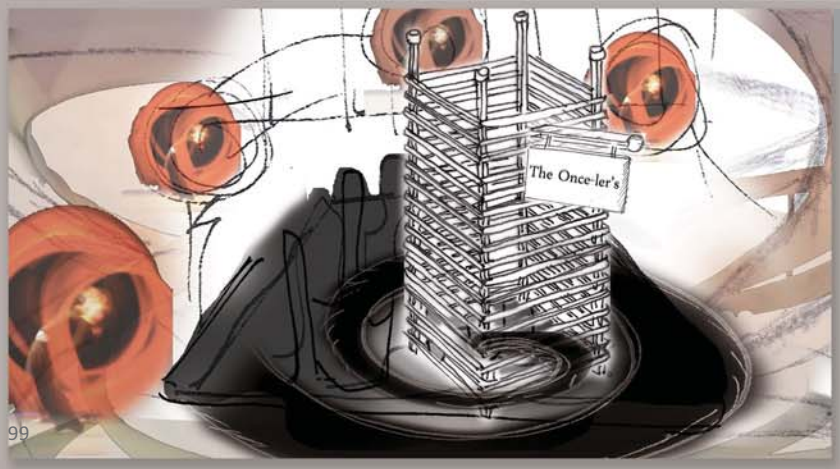


15 ***Action*** **The Once-ler unloads his hot air balloon and start 'building' a shop**

Proxemics **Medium Shot to Exteme Long Shot**

Camera Angle **Low Angle to High Angle**

Camera Movement **Crane Pan**



16 ***Action*** **The Once-ler's shop is complete**

Proxemics **Extreme Long Shot**

Camera Angle **High Angle**

Camera Movement **Tilt up towards shop sinage**

17 ***Action*** The Once-ler starts the chainsaw to saw down the tree

Proxemics Point of View Extreme Long Shot

Camera Angle Frontal

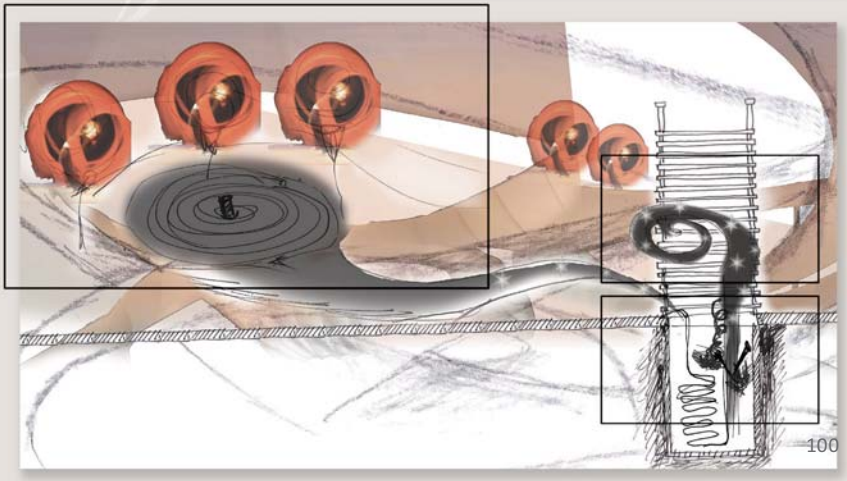
Camera Movement Pan

18 ***Action*** The sawn down tree's Truffula Tuft 'flows' towards the Once-ler's shop where he starts to knit the Thneed

Proxemics Extreme Long Shot to Medium Shots

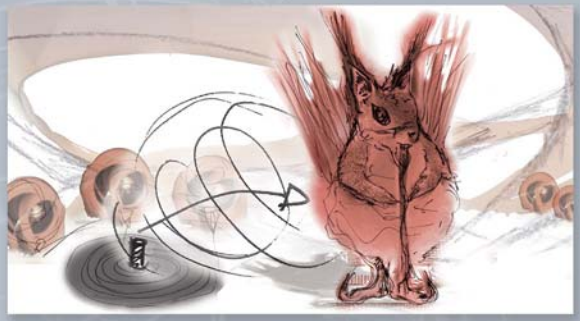
Camera Angle High Angle to Frontal

Camera Movement Pan to Tilt Down



19	***Action***	The Once-ler finishes knitting the Thneed
	Proxemics	Extreme Long Shot to Long Shot
	Camera Angle	Frontal
	Camera Movement	Zoom in

20	***Action***	The Lorax pops out of the stump of the sawn down tree
	Proxemics	Long Shot
	Camera Angle	Frontal
	Camera Movement	Pan and Zoom out

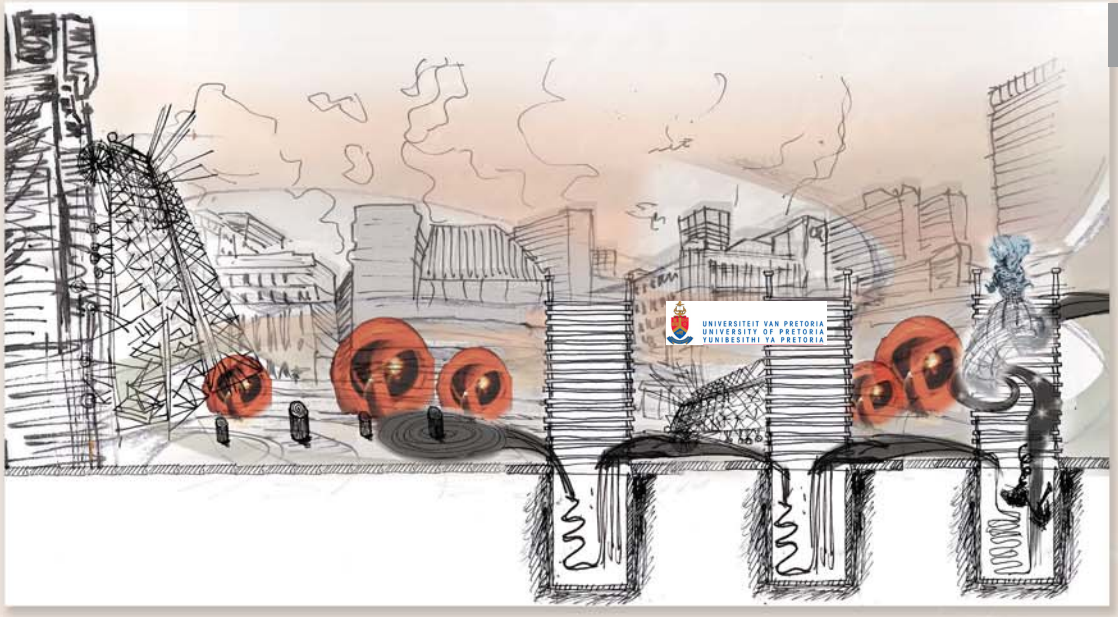


21	***Action***	The Lorax pleas for the environment as the Once-ler argues for that the Thneed is something that all people need at it is multifunctional
	Proxemics	Long Shot
	Camera Angle	**Frontal**
	Camera Movement	None

22	***Action***	A 'chap' comes along and buys the Thneed
	Proxemics	Extreme Close-Up
	Camera Angle	Frontal
	Camera Movement	None

23	***Action***	The Once-ler hands over the wrapped Thneed
	Proxemics	Extreme Close-Up
	Camera Angle	**Frontal**
	Camera Movement	None

*



24 *Action*

The Once-ler's business grows and he builds a factory. He invents Super-Axe-Hackers that saw down many trees at once.

Proxemics

Extreme Long Shot to Long Shot

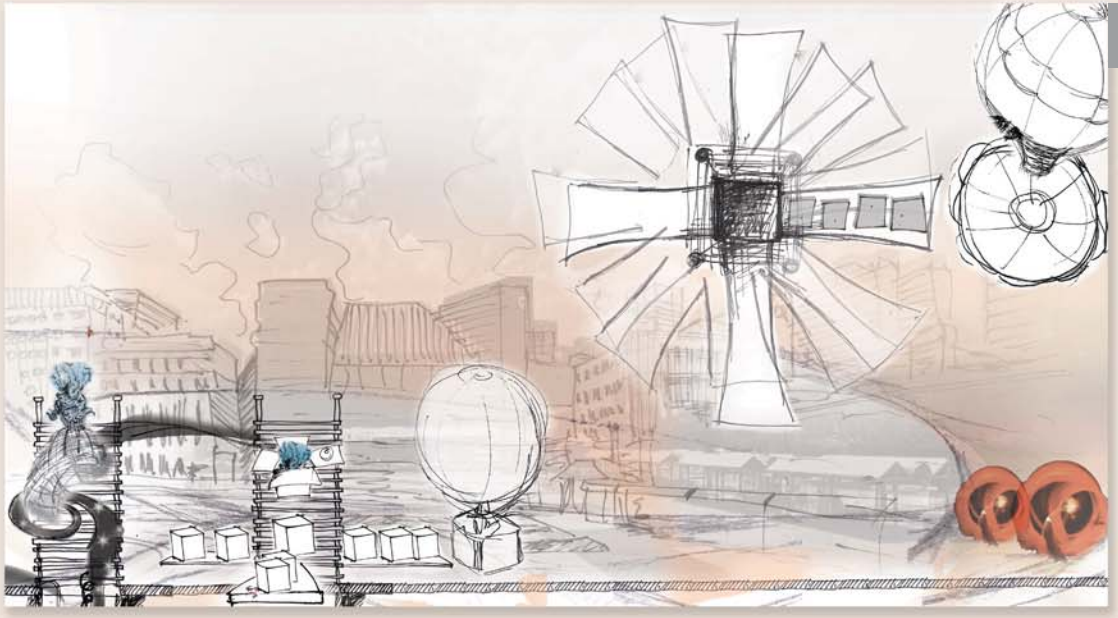
Camera Angle

High Angle (Sectional)

Camera Movement

Crane Pan to Tilt Down

*



25 *Action*

The Thneeds are exported in hot air balloons to all four corners of the earth

Proxemics

Extreme Long Shot

Camera Angle

High Angle to Bird Eye View

Camera Movement

Crane Up

26 *Action*

The very last Truffula Tree is sawn down

Proxemics

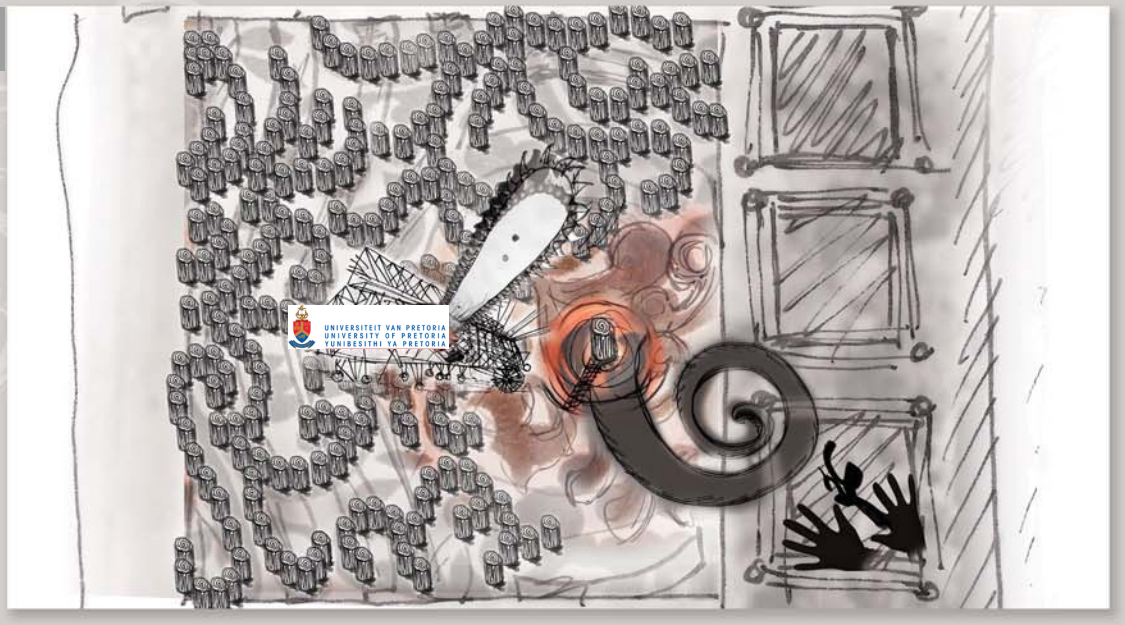
Extreme Long Shot

Camera Angle

Birds Eye View

Camera Movement

Zoom in



27 *Action*

The Lorax and all the animals leave. The Lorax only leave a small pile of rocks with the word 'UNLESS' behind

Proxemics

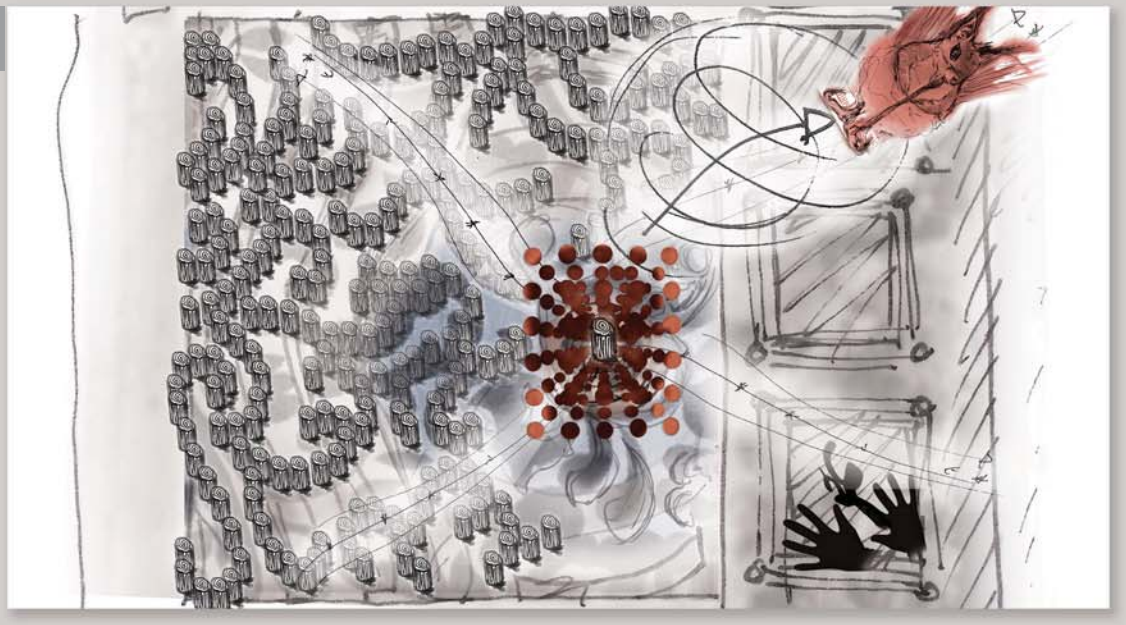
Extreme Long Shot

Camera Angle

Bird Eye view

Camera Movement

Pan to follow The Lorax



28 *Action* But that was a long time ago...

Proxemics Long Shot

Camera Angle Frontal

Camera Movement Rotating Zoom in

29 *Action* The Once-ler , realising what the Lorax meant with 'UNLESS', throws the last Truffual Tree Seed to 'You'

Proxemics Extreme Long Shot

Camera Angle Extreme Low Angle

Camera Movement Zoom out

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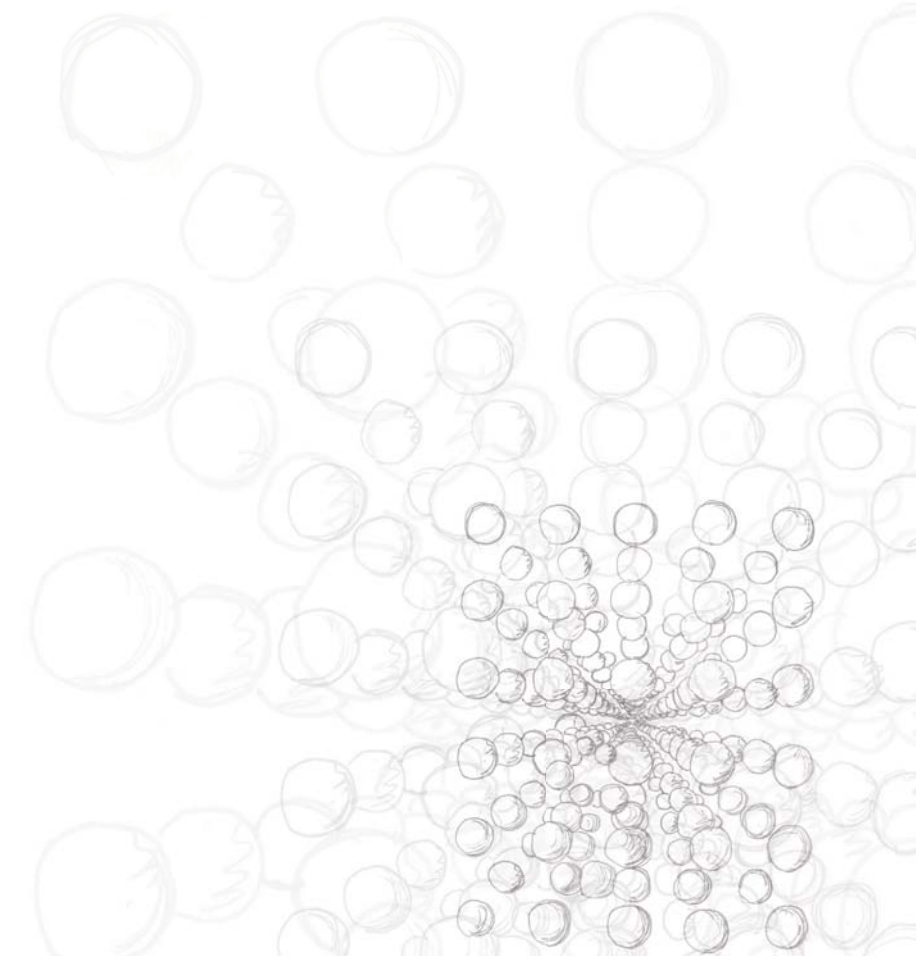
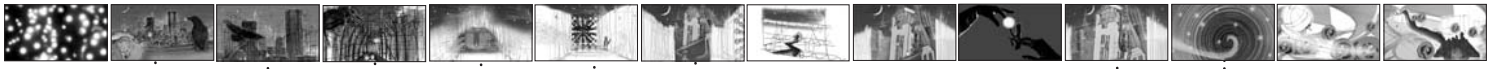


Key Sequence Design Elements

SCENES

1 2 3 4 5 6 7 9 10 11 12 13 14 15



dystopia > utopia > heterotopia >

SEQUENCES

1 2 3 4 5

CGI CGI

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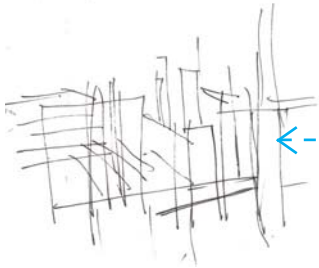
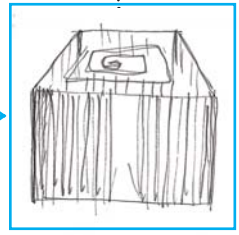
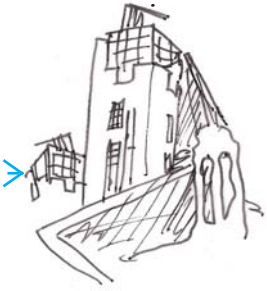
KEY SEQUENCES ELEMENTS



1 Grickle Grass 'Buildings'



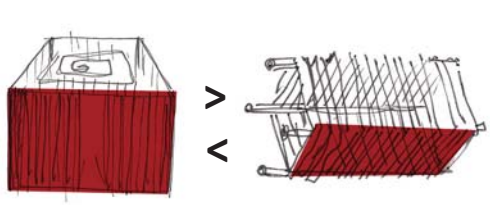
2 Grickle Grass Maze

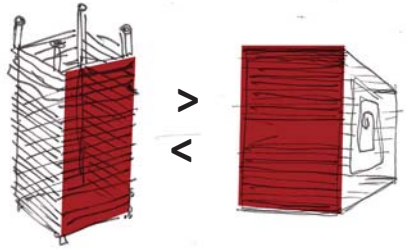


3 Once-ler Lerkim

4 Utopia 'clouds'

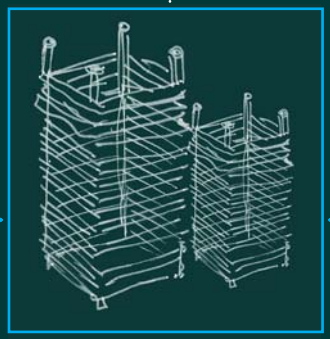
CENTRE KEY SEQUENCES ELEMENTS' ADAPTABILITY





Centre Sequences

Linked Sequences



5 *Tolletjie Brei* (French Knitting) Factory & Shop Buildings

6 Truffula Tree Stumps

3 Once-ler Lerkim

9.5 SEQUENCE AND SEQUENCE ELEMENT DESIGN

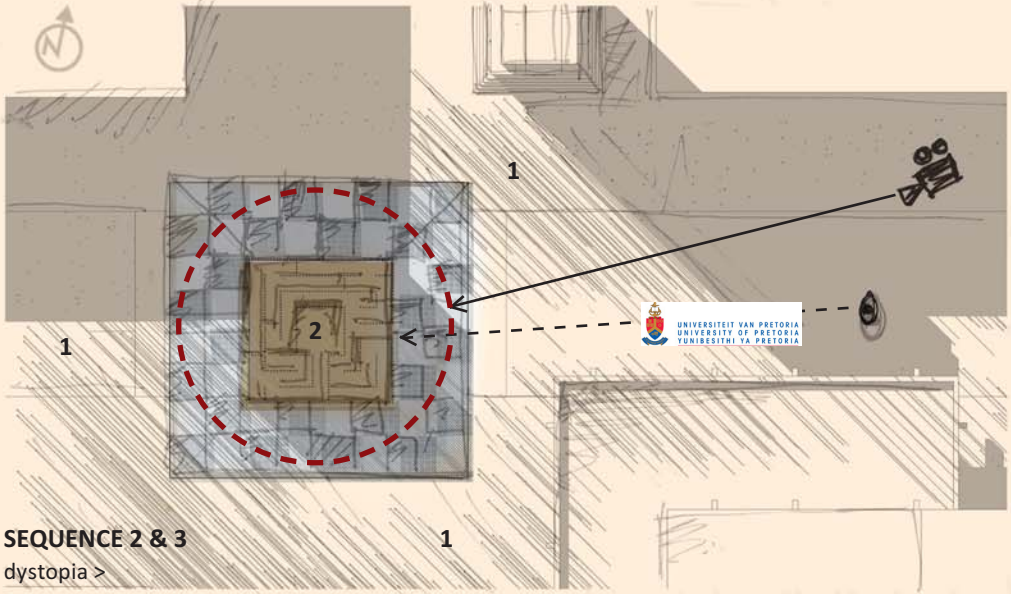
From the scene storyboard 8 sequences can be identified. From these, most will be physically constructed, as location influences are desired for the production. In each of these sequences, the most important design elements were identified.

To create a flow between linked sequences, the detail design was started at the design elements centred between other sequences. These centred design elements are the Grickle Grass Maze and the *Tolletjie Brei* or French Knitting buildings. It was observed that these two design elements were very similar in appearance, just differently orientated. Therefore the adaptability of the one design element into the other (maze to building) together with their surrounding filmic environments was explored. This will be beneficial for the budget of the production and links with the two sub-themes of environmental consideration and multifuncitonality in the original text of *The Lorax.*

The first sequence of dystopic Pretoria and the crow flying towards Church street, will not be designed in detail as this sequence will need to be done with CGI and VFX by a specialist.

Sequence Overheads

Before exploring the detail design of the Maze and its adaptability into the *Tolletjie Brei* Building, the position of both elements in their filmic settings needed to be developed. This would provide a list of requirements that the two elements (Maze and *Tolletjie Brei* Building) would need to adhere to in order to create the desired shots.



SEQUENCE 2 & 3
dystopia >

Adaptable set elements (Maze to Factory Building)

Camera Movement

Character Movement

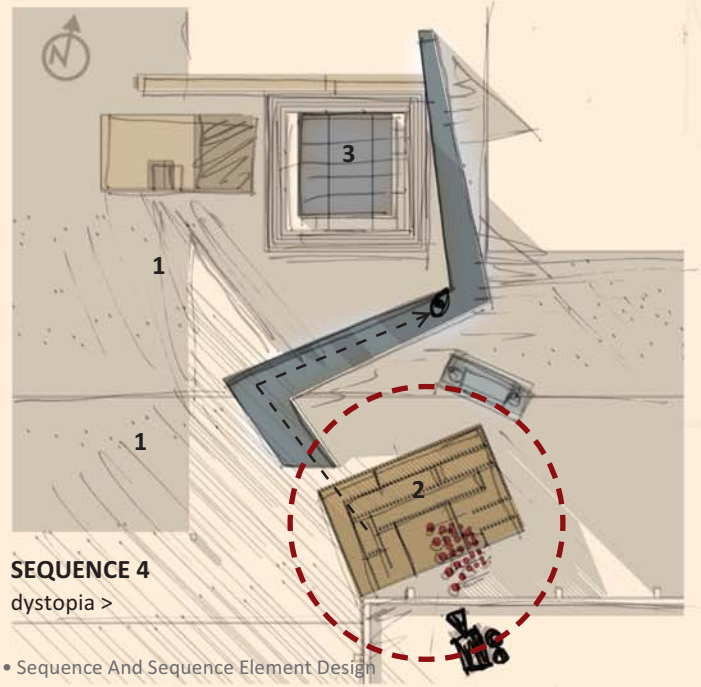
1 Grickle Grass 'Buildings'

2 Grickle Grass Maze

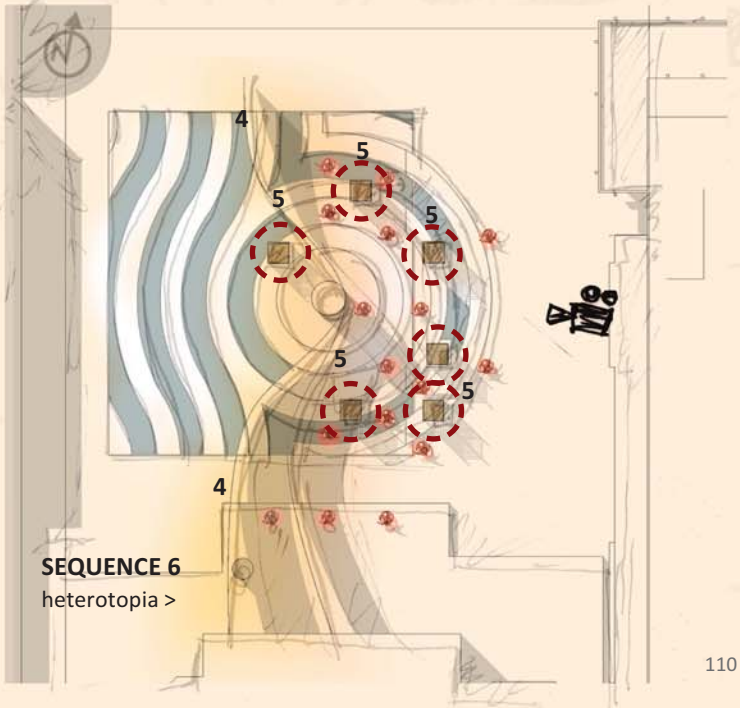
3 Once-ler Lerkim

4 Utopia 'clouds'

5 *Tolletjie Brei* (French Knitting) Factory & Shop Buildings



SEQUENCE 4
dystopia >



SEQUENCE 6
heterotopia >

Maze & *Tolletjie Brei* Building Adaptibility:

Shot, Scene & Sequence Changes

"A maze is a particular form of puzzle, into which one puts oneself in order to solve it" (Fisher and Gerster 2000)

The Grickle Grass Maze was added to the original text of *The Lorax*, in order to enhance the embroilment. In the original text the Grickle Grass is where 'You' asks the question 'What *was* the Lorax?' The Grickle Grass Maze was designed to create a metaphoric reflection image of puzzlement of this question that is central to the narrative.

In dystopia the Grickle Grass Maze had to accommodate the following shots:

> An establishing aerial shot, where all the 'walls' were at right angles to each other. For this shot, the centre of the maze needs to be small in order to appear in proportion with the rest of the maze.

> Before 'You' enters the maze, added perspective was needed in order to draw the camera (and thus the viewer) into the maze.

> Added perspective was needed again when 'You' comes to 'UNLESS'. The centre of the maze needs to be larger than in the establishing shot to accommodate 'UNLESS' and to create a large enough space that will be visually pleasing on camera.

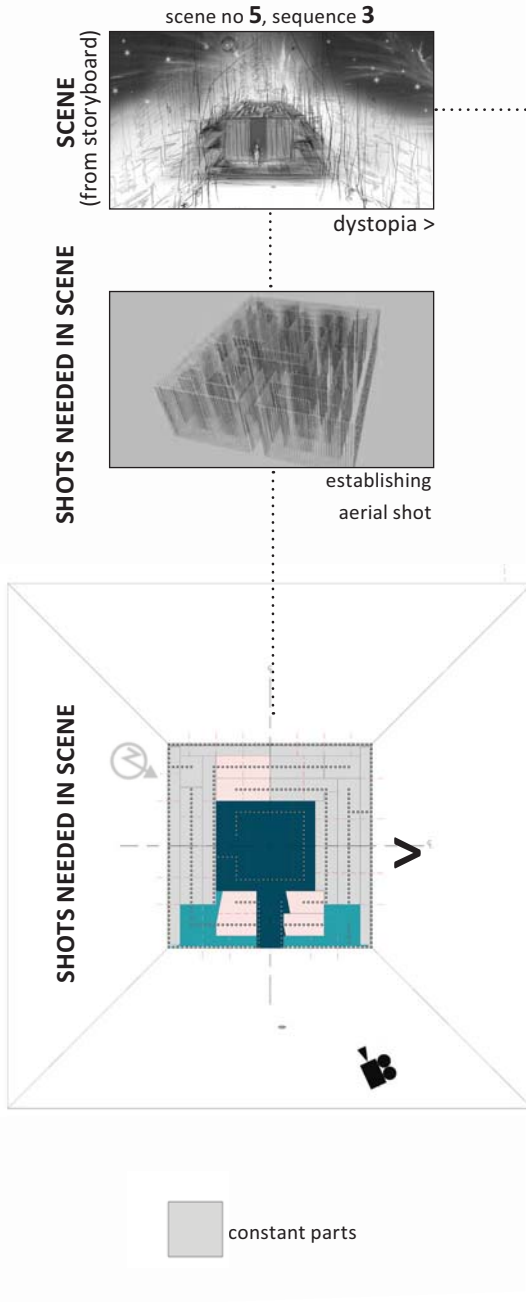
> The maze has to open up in order to expose the Once-ler's house.

> The edge 'walls' of the maze needed to come off in order to be adapted for the *Tolletjie Brei* Building.

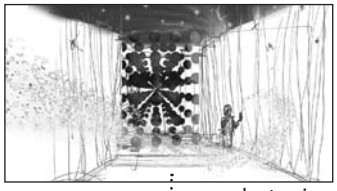
To accommodate these requirements, the maze was designed in parts on castors that could clip together and be moved and rotated for the scenes as needed.

The materials decided on were bamboo from plantations near Nelspruit in Mpumalanga (Biomass Corporation 2008), as the 'Grass', because bamboo is sustainable and lightweight (an important requirement if grips need to move parts around). For the base marine plywood was chosen, because it is waterproof and even though the maze is a temporary structure, it will be used outdoors and is exposed to the elements for that period of time.

More details regarding the materials can be found in the section on materials.

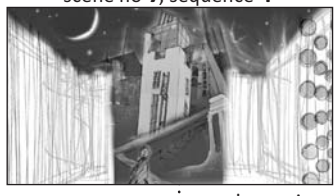


scene no **6**, sequence **3**



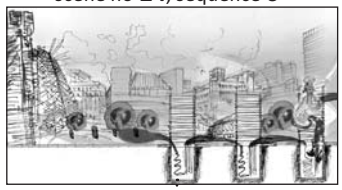
dystopia >

scene no **7**, sequence **4**

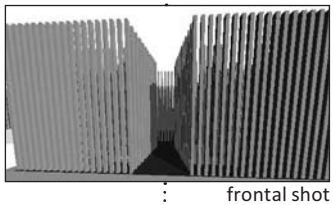


dystopia >

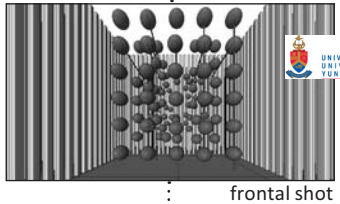
scene no **24**, sequence **6**



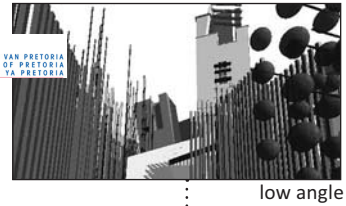
heterotopia >



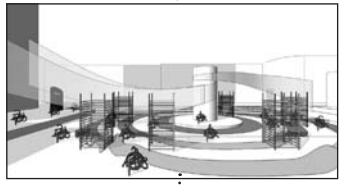
frontal shot with added perspective

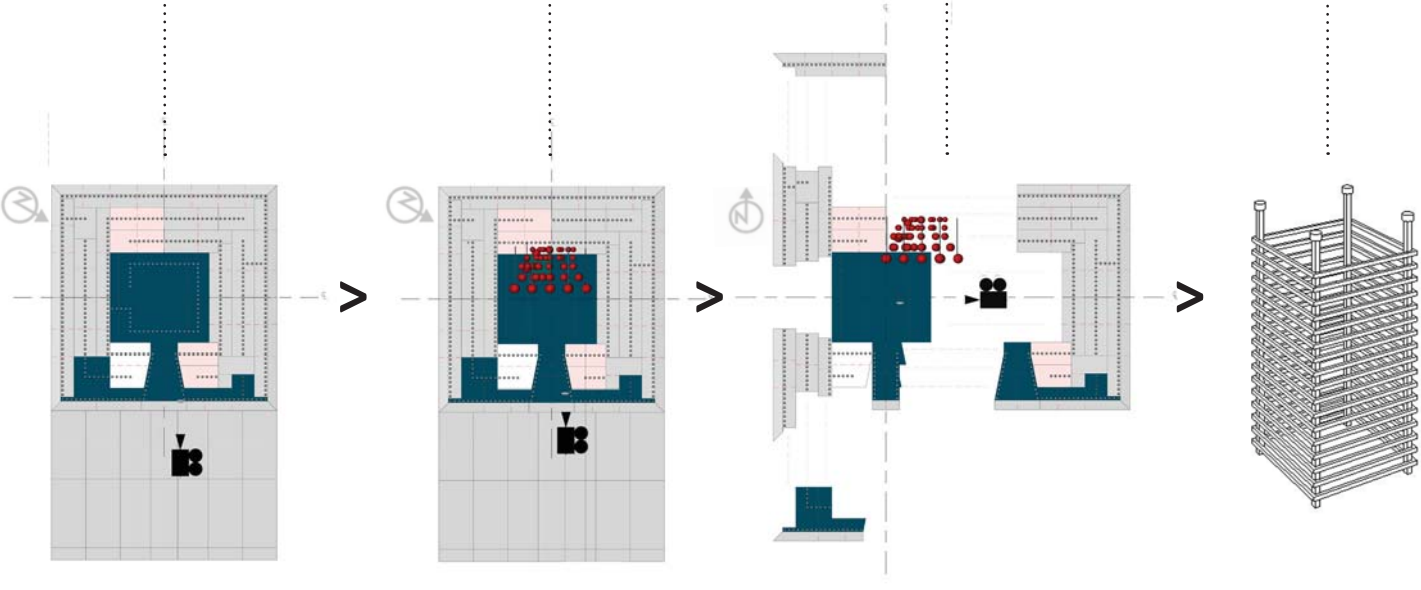


frontal shot with added perspective



low angle shot of maze opening up





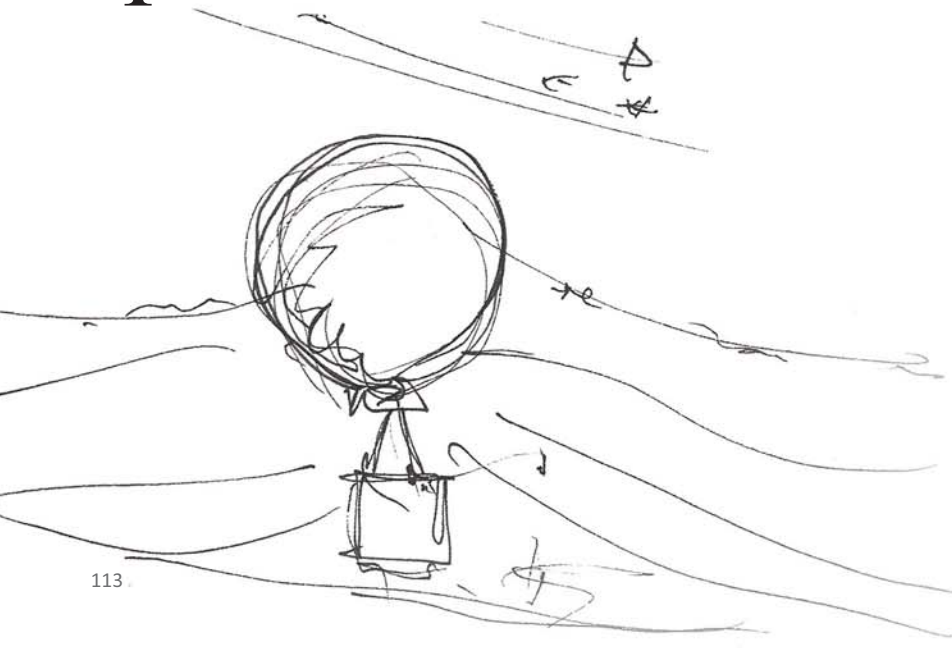
parts that are used more than once

parts that need to be rotated or moved

parts used only once - edge part bamboo is used for *Tolletjie Brei* building

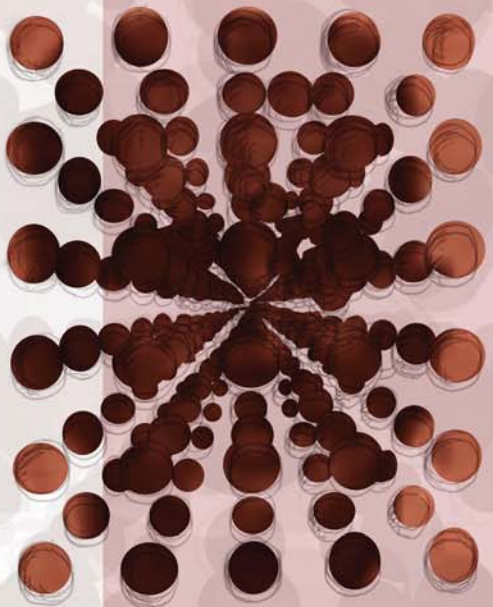
For the utopic and heterotopic clouds, the idea was to suspend a tensile structure between the ABSA building and the old fountain column. After discussions with a structural engineer, Carl von Geyso, it was clear that this would not be possible, because the loads would interfere with that of the ABSA building. The alternative was to add vertical supports, but this would need to be removed in post production. Together with von Geyso it was deemed best if these elements are added in with visual effects. This will be done with a technique called rotoscoping. (For more information see the technical chapter.)

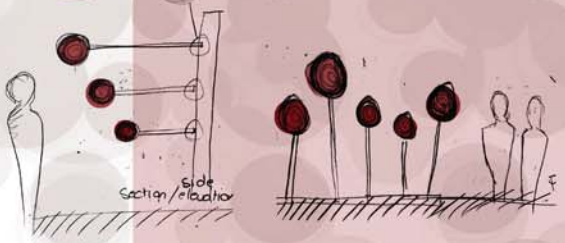
‘The clouds were still clean’



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

‘Unless’

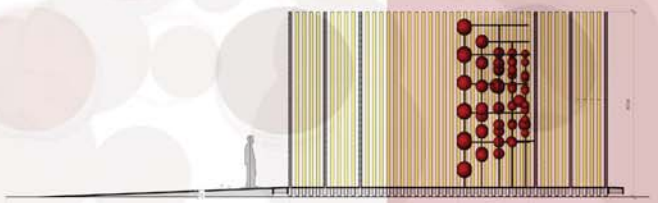


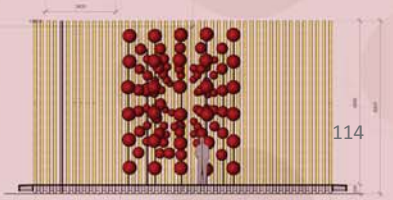


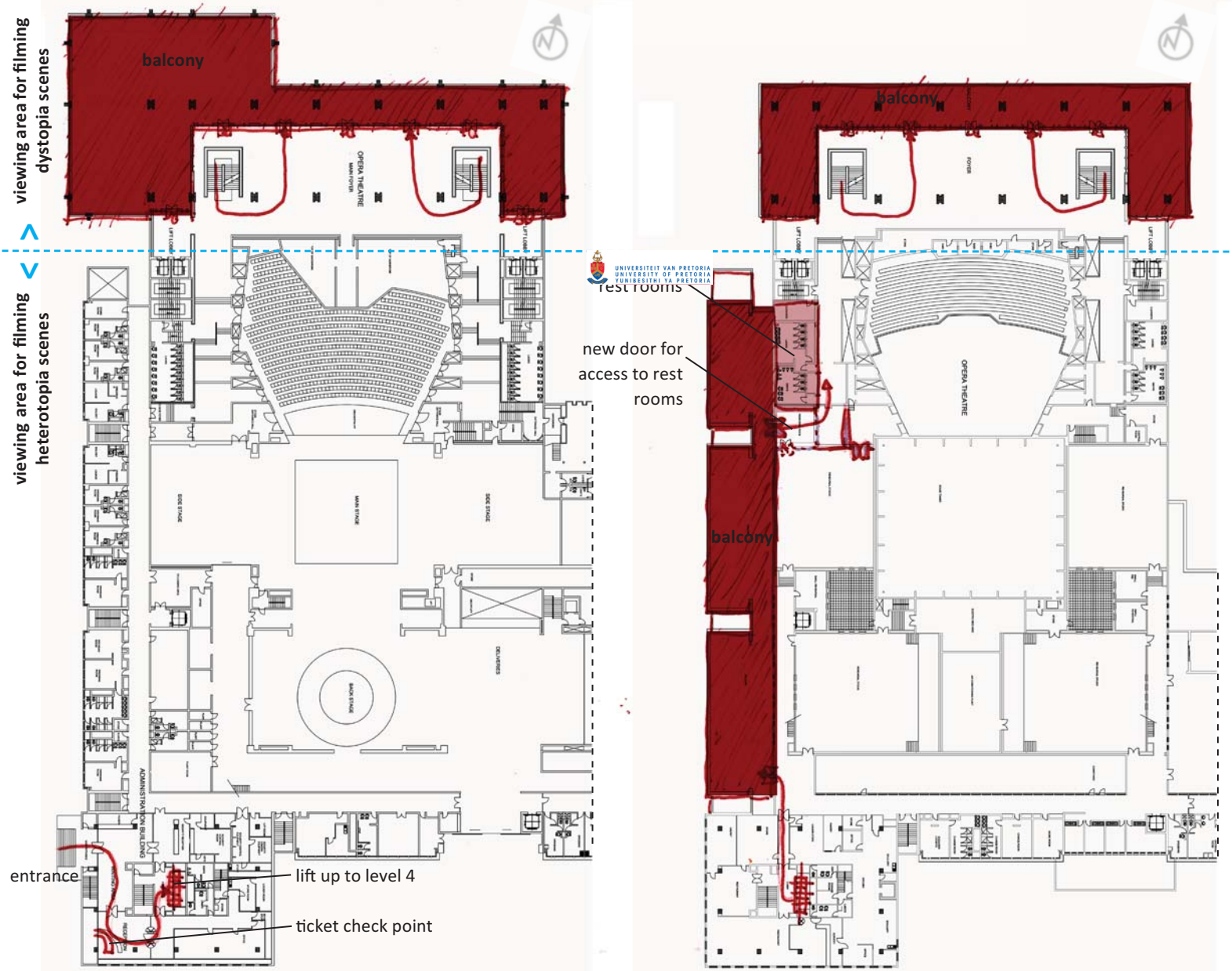
When the Lorax leaves after the last Truffula Tree is sawn down, all that he leaves behind is a small pile of rock with the word ‘Unless’.

All that is left of the Strijdom Square Monument is the old fountain column with a heap of rocks.

The lights from the ‘Unless’ scene (Scene story-board no. 6) is all that will remain on the location after the production finishes.






viewing area for filming dystopia scenes
viewing area for filming heterotopia scenes
balcony
OPERA THEATRE
MAIN FOYER
SIDE STAGE
MAIN STAGE
BACK STAGE
DRESSING ROOMS
ADMINISTRATION BUILDING
entrance
lift up to level 4
ticket check point
Level 1
UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
rest rooms
new door for access to rest rooms
balcony
FOYER
OPERA THEATRE
Level 4

Behind the Scences

It is possible to have members from the public watch while filming takes place, as the production for *The Lorax* is filmed 'MOS' (without sound) and sound is added during post-production. This will take place from the State Theatre balconies on Level 1 and Level 4. The northern balconies on Level 1 and 4 will be used during filming of scenes for dystopia and the western balcony on Level 4 will be used when heterotopia scenes are filmed, as indicated on the diagram to the left.

Access for the northern balconies will occur in the usual way, as these are open to the public. For the western balcony the entrance to the State Theatre offices will be used. There is a security check point where tickets and entrance can be monitored. Viewers will be taken up with the elevator to Level 4. To use the public restrooms a door needs to be added as shown on the diagram. Access will then also be possible to the refreshment facilities.

For the seating it is suggested that the old Opera Theatre chairs, currently stored in the workshop area be covered with left over pieces of costume, decor fabric and plastic layer for waterproofing. The seating arangement can be informal, as the filming process is lenghty and people will need to move around as they desire.

Figure 9.42 *Top left:* the western balcony

Figure 9.43 *Top right:* the norhern balcony

Figure 9.44 *Right:* scrap fabric covered chair by Bokja for The Quirico Company (Dezeen 2009)

10. LIGHTING DESIGN DEVELOPMENT

"Heaven would never use a fluorescent tube to light a room."
-Paulo Coelho in 'Veronica Decides to Die'

Figure 10.45 *From top right:* Inspiration for lighting the character 'You' from *A Clockwork Orange* (1971) (Photobucket s.a.)

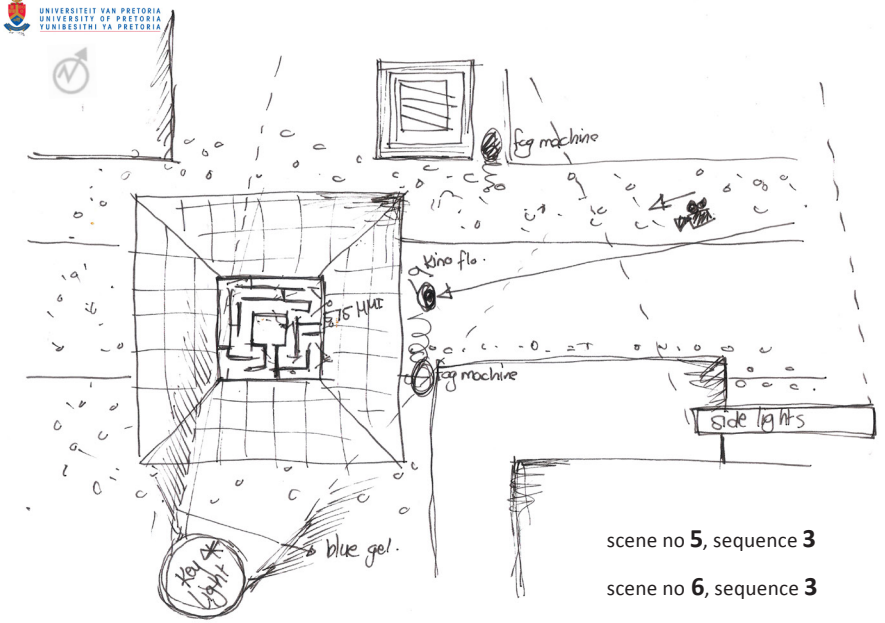
Figure 10.46 Inspiration from *Twilight* (2008) for the fog (Kellyquin s.a.)

Figure 10.47 Inspiration for the glowing walkway

Figure 10.48 Inspiration for the light shining through the Grickle Grass

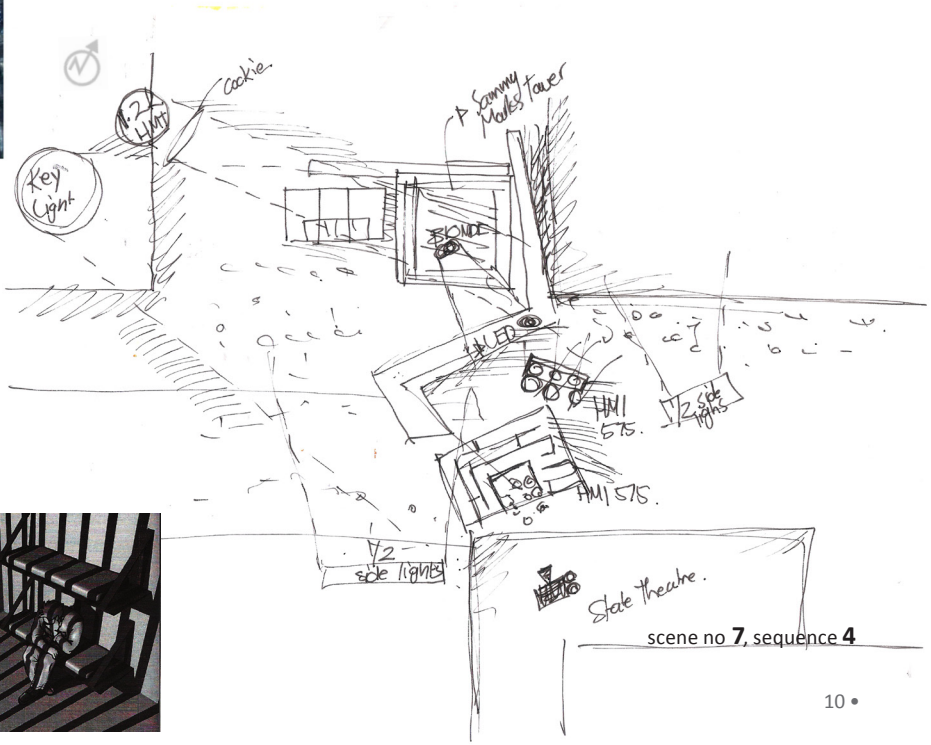
Figure 10.49 A scene from *Angels and Demons* (2009) in Italy (Mohen 2009)

Figure 10.50 Prison lighting (Tumminello 2005:132)



scene no **5**, sequence **3**

scene no **6**, sequence **3**



scene no **7**, sequence **4**

It is difficult to precisely plan lighting beforehand, as it is subject to change during actual filming, due to numerous factors. A rough idea of the various instruments, accessories and their locations are usually drawn up by the DP on a light plot during preproduction. The DP will fine tune lighting before filming a scene (Block 2001:121; Louw 2009). A small change in scene action by the director can cause major rerigging of lights (Brown 1996:73).

Film industry conventions were used in the lighting design. For explanations on the conventions, please refer to chapter 12, as these two chapters go hand in hand.

Lighting Continuity is important, as with all other areas of filming (Louw 2009; Mamer 2009).

10.1 LIGHTING FOR DYSTOPIA

Scenes for dystopia are filmed during the night. The desired lighting effect is an eerie mood, with strong contrast and shadow but with a slight haziness. A moonlight effect with a slight blueish tint is necessary.

Light needs to shine through bamboo Grickle Grass structures, in order to create a look that is almost prison like – man made himself a prisoner with his materialistic obsessions.

The character 'You' has to be completely in shadow and appear as a silhouette because the set and the narrative are the important aspects. The character has to appear without identity - in order to place the responsibility with the viewer - the same as Seuss did with the reader.

In order to achieve this effect, the following strategy needs to be followed:

Scene no 5, Sequence 3

1. As strong shadows are desired, low key lighting will be applied. Therefore there will be no fill light. What is important here is that all lights need to shine in the same direction, or shadows will be filled and lighting continuity will not be achieved.

2. The design has to start with the key light that has to create the moonlight effect. This will be the primary source of light for the scene. An 18k HMI is a good option, due to its high output and efficiency. In order to gain on-location flexibility and fine tuning by the DP, a dimmer is needed. This light needs to be placed high up for the moonlight effect and to create enough luminance for the whole set. It can be placed on a crane.

The optimum illumination direction for scenes that are moonlit, is from behind subjects (Millerson 1991:261). Therefore the 18k can be placed slightly behind the Sammy Marks Tower.

3. For creating the prison-like lighting through the Grickle Grass, sidelights are added. Eight 2.5k HMI's can be rigged to shine through the Grickle Grass and four 2.5k HMI's can shine over the Grickle Grass to light the Grickle Grass on the opposite side of Church Street.

4. Inside and in front of the maze small 575 HMI's nook lights can be place to illuminate the structure.

5. To create just a 'silver lining' of light on the character 'You', a Kino Flo Four Bank Four Foot can be used to follow the character as he walks down the street.

6. For the 'UNLESS' luminaire red bulbs can be used, as this is a 'practical' and needs a red look as opposed to just a red glow (please refer to the glossary for a definition of 'practical').

7. For the walkway up to the Once-ler's Lerkim LED's on a dimmer can be used to shine through the turquoise 3form Chroma.

8. Blue colour gels can be used on the 18k HMI to create a blue hue in the scene.

9. To slightly diffuse the light from the 18k a diffuser gel can be used.

10. Two fog machines can be placed on either side of Church Street for the final touch.

Scene no 5, Sequence 3

All the lighting in this scene is the same as in scene no 5, sequence 3, except for the following:

1. The 18k is moved behind the Sammy Marks Tower. This will not cause a problem with continuity as the disorientating maze sequence is prior to this sequence.

2. For the moon-look effect a 1.2k HMI is added with a cutout (cookie) of the moon shape as indicated in the storyboard. This light is close to the 18k, shining in the same direction. So the 18k is there for a moonlight effect and the 1,2k, for a moon-look.

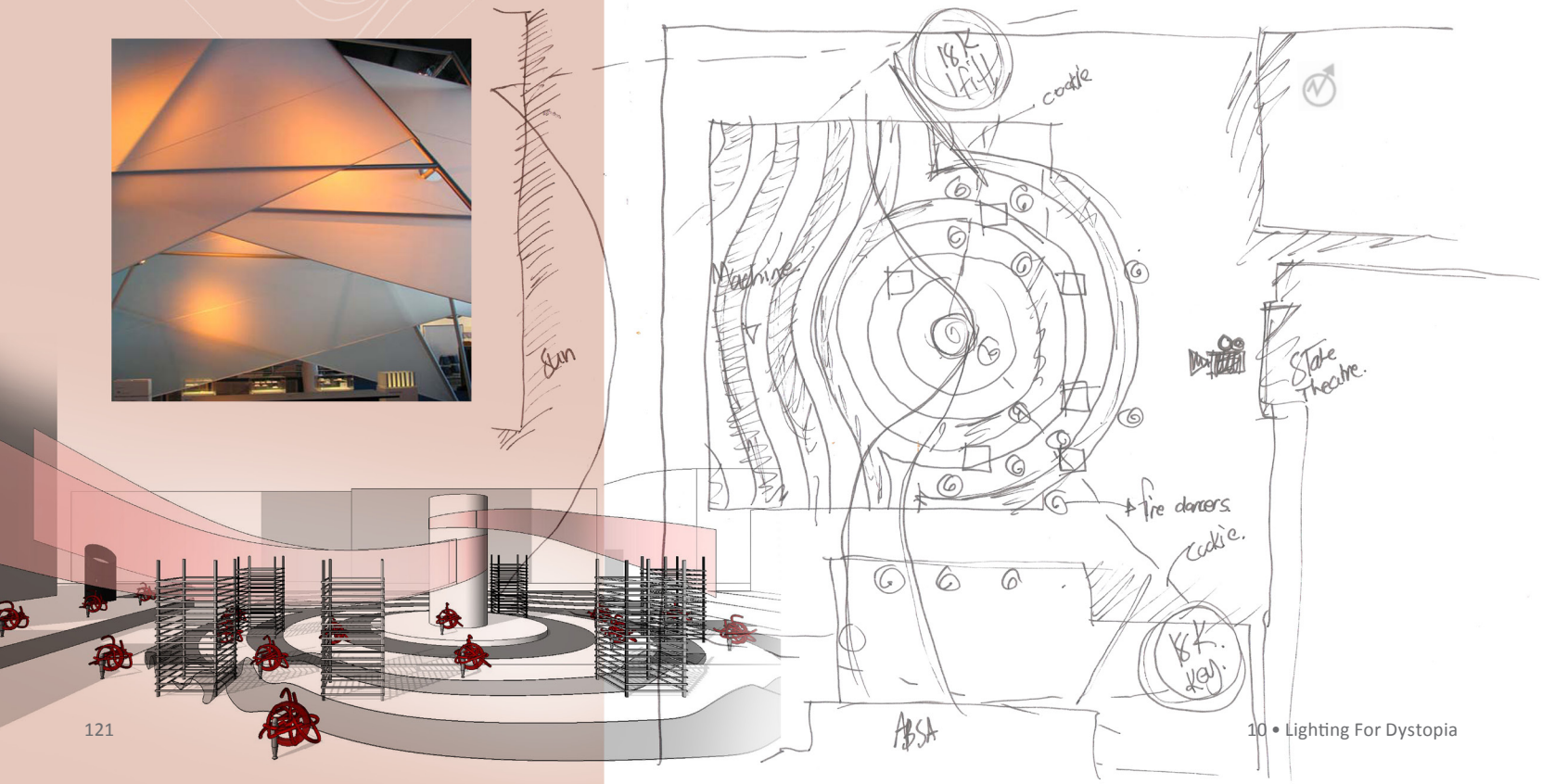
3. Each of the three pilars to the right of the Lerkim will also have a 575 HMI shining up at it.

4. Inside the Lerkim a 1k 'blonde' will be positioned, shining through the window. This is chosen for its yellow colour.

5. No Kino Flo is necessary as 'You' will be illuminated by the key light and the blonde.

6. The glowing walkway of LED's with automatic

Figure 10.51 Inspiration for lighting the heterotopic 'clouds' (aeronautec s.a.)



dimmer through opaque perspex/acrylic sheet is added.

10.2 LIGHTING FOR HETEROTOPIA

Scene no 24, Sequence 6

> *"...[S]unrise appears more lavender, noon daylight is more blue, and a sunset is more red. Filming during the "magic hour" (periods of daylight when the sun is below the horizon) produces an unusual quality of daylight that has no shadows" (Block 2001:121).*

This scene is filmed at sunset. Because this scene is when heterotopia becoming dystopia it needs to go from day (heterotopia and reality) to night (dystopia and fantasy). The sun sets in the west in the background of the scene, going from light to dark.

In this scene it was originally planned that the tensile structures would be suspended from the ABSA building. A discussion with structural engineer Carl von Geyso (2009) pointed out that such a design would not be possible as this would disrupt the design of the ABSA building. A solution could be to add steel supports, but this would need to be visually removed in post-production. Therefore together with Von Geyso, it was decided that it would be best if the 'clouds' are done in visual effects (VFX). The fire dancers will be filmed and then the visual effects will be added to the shots afterwards.

At this time the lighting design for the scene was already completed. The only difference between the two lighting designs is that the scene does not need two 18k HMI on a spot follower with a cutout of the pattern of the clouds anymore. Instead the two HMI's will only provide key and fill lights for general illuminance of the scene when the sun goes down.

In order to achieve the desired effect in this scene the following strategy needs to be followed:

1. Here high key lighting is followed, because a soft ooze of light is desired.

2. In this scene, the setting sun is the key light.

3. When it gets dark the two 18k HMI's with dimmers can slowly be turned on for light.

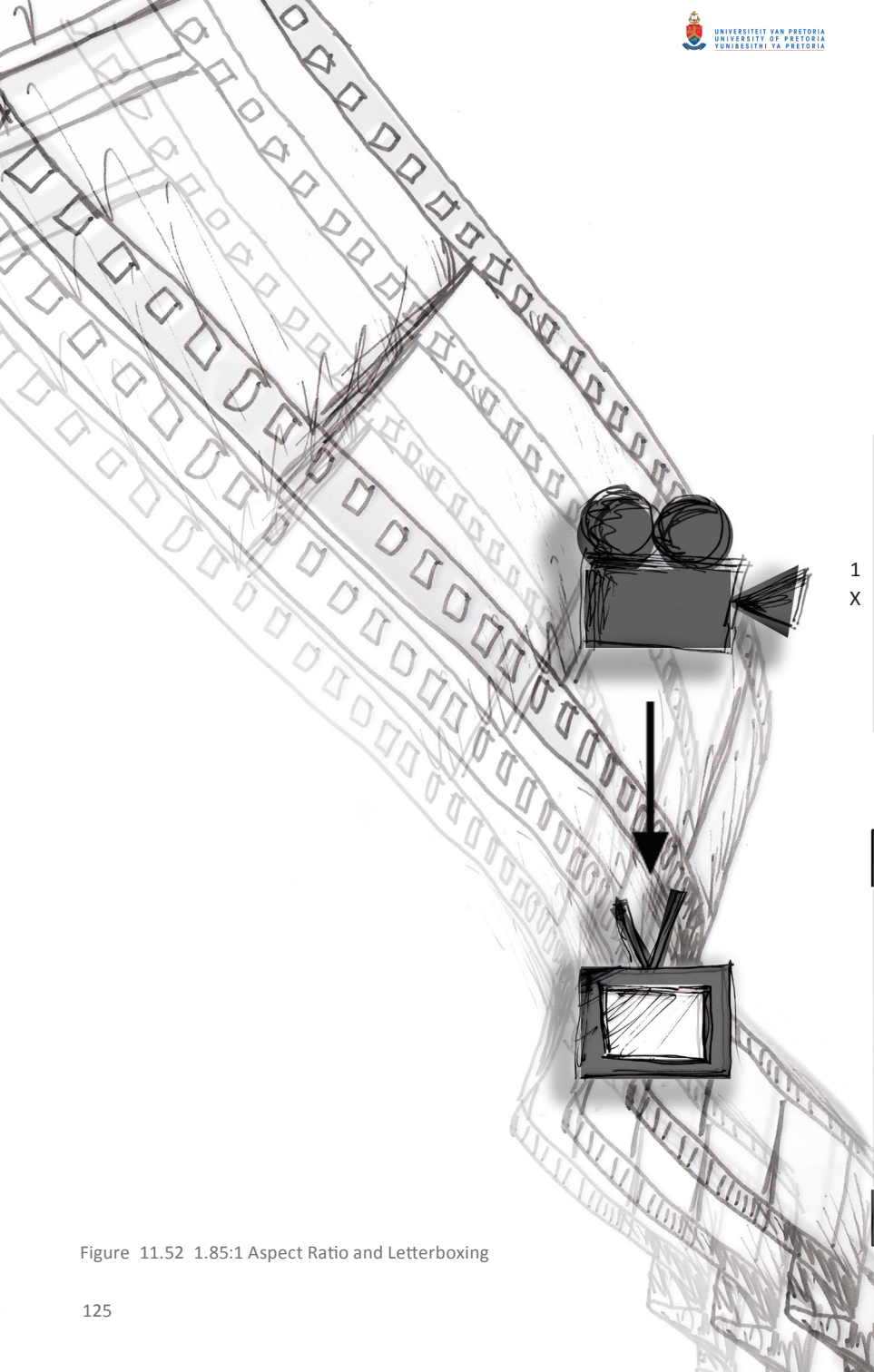
4. Fire dancers in this scene can be classified as 'practicals'. Each fire dancer needs a 3x3 meter area to dance in (Stolly 2009). Fire dancers need to wear tight black clothing made of a fireproof material.

5. For the Super-Axe-hackers in the background Kino Flo's can be used.

6. The lighting of the 'clouds' will now be done with visual effects.

11. TECHNICAL RESOLUTION: THE CELLULOID CANVAS

'UNLESS'



1
X

Aspect Ratio

1.85:1
(widescreen)

1.85
X=Y x 1.85

Neutral Space

Letterboxing

1.33:1
(standard TV screen)

Neutral Space

Figure 11.52 1.85:1 Aspect Ratio and Letterboxing

This chapter relates to chapter 9 on production design development.

Each shot in a film has a composition that needs to be considered by the designer, because this is what communicates the emotional message to the audience.

The composition of a shot is related to the 'canvas' - the film screen. Before designing the PD needs to know this 'canvas' and its characteristics. Even more important than this, the PD needs to understand the tools available to create a composition. Of these the most basic is the set-up of the camera.

The designer needs to translate the script into visuals by means of the storyboard. Storyboards are drawn as if the paper is the screen, thus before the aspects mentioned above is understood by the designer, the design process for a film, cannot commence.

11.1 FILM FORMAT - THE CANVAS

Film formats comes in different aspect ratios and sizes (mm), which each has pros and cons regarding resolution and price (Campbell 2002:35). It is the area of the DP and director, but has an influence on the work of the PD.

35mm focal length focal length together with an aspect ratio 1.85:1 are one of the most commonly used standards. This is what will be used for *The Lorax* due to factors discussed below.

11.1.1 SIZE

35mm is the industry standard. It is small enough to make processing not too expensive and large enough to provide acceptable resolution when projected on large screens (Campbell 2002:37; Mamer 2002:416). "Production cameras in 35mm generally come from two companies: Arriflex and Panavision (Mamer 2002:99).

11.1.2 ASPECT RATIO

Aspect ratio refers to "the relationship of the frame's width to its height" (Bordwell and Thompson 1997:477).

The aspect ratio 1.85:1, known as flat 'unsqueezed' widescreen, is the industry standard for widescreen format (Block 2001:53; Katz 1991:356-357; Rizzo 2005:306; Tumminello 2005:26) Eighty percent of films in America is shot in this aspect ratio (Allen 2000:5).

The first number (1.85) indicates the frame's width, relative to the second number (1), its height (Tumminello 2005:22). The aspect ratio numbers indicate the width and the height proportion or the shape of the screen and not the actual size of the frame (Block 2001:52-53)

There has been many aspect ratios since the beginning of cinema. At the beginning the aspect ratio was 1.33: 1, which is a square shape. Widescreen formats were developed to help differentiate film from television and to help combat the competition. Today of course, television is a major outlet for the screening of films (Barnwell 2004:108-109; Rizzo 2005:321).

The 1.85:1 aspect ratio of standard feature films has to be adjusted when shown on 1.33:1 standard television screen. One option is to use letterboxing – where the image is displayed in its original aspect ratio and the top and the bottom of the TV screen are not used. The other option is to view the film full screen on the TV and then the "...television viewer actually sees the area above and below the 1.85 frame that was not projected in theatres" (Block 2001:55) When a film is shot with the bottom and the top included for later television screening, it is referred to as 'TV protect' (Campbell 2002:45; Tumminello 2005:28).

Large screen sizes are beneficial for audience involvement and participation (Allen 2000:1-2). The 1.85:1 shows more shows more height than its 2.40:1 counterpart (Rizzo 2005:83), which is beneficial for displaying architecture, as opposed to landscapes.

It was also part of the concept for dystopia to create excess height in the setting to contrast with the character of 'You', in order to make the character seem more scared, small, insignificant and like a boy. Here the 1.85:1 ratio was used for the desired effect, whereas 2.40:1 would not have been as successful.

Calculation for a rendered storyboard can be done in the following steps:

1. First decide the height that the image is to be rendered (Y).

2. Multiply this height by 1.85 to obtain the width (X=Y x 1.85).

Figure 11.53 The monitor on set of *The Bang Bang Club* (2010) to check the image included for cinema's and TV.

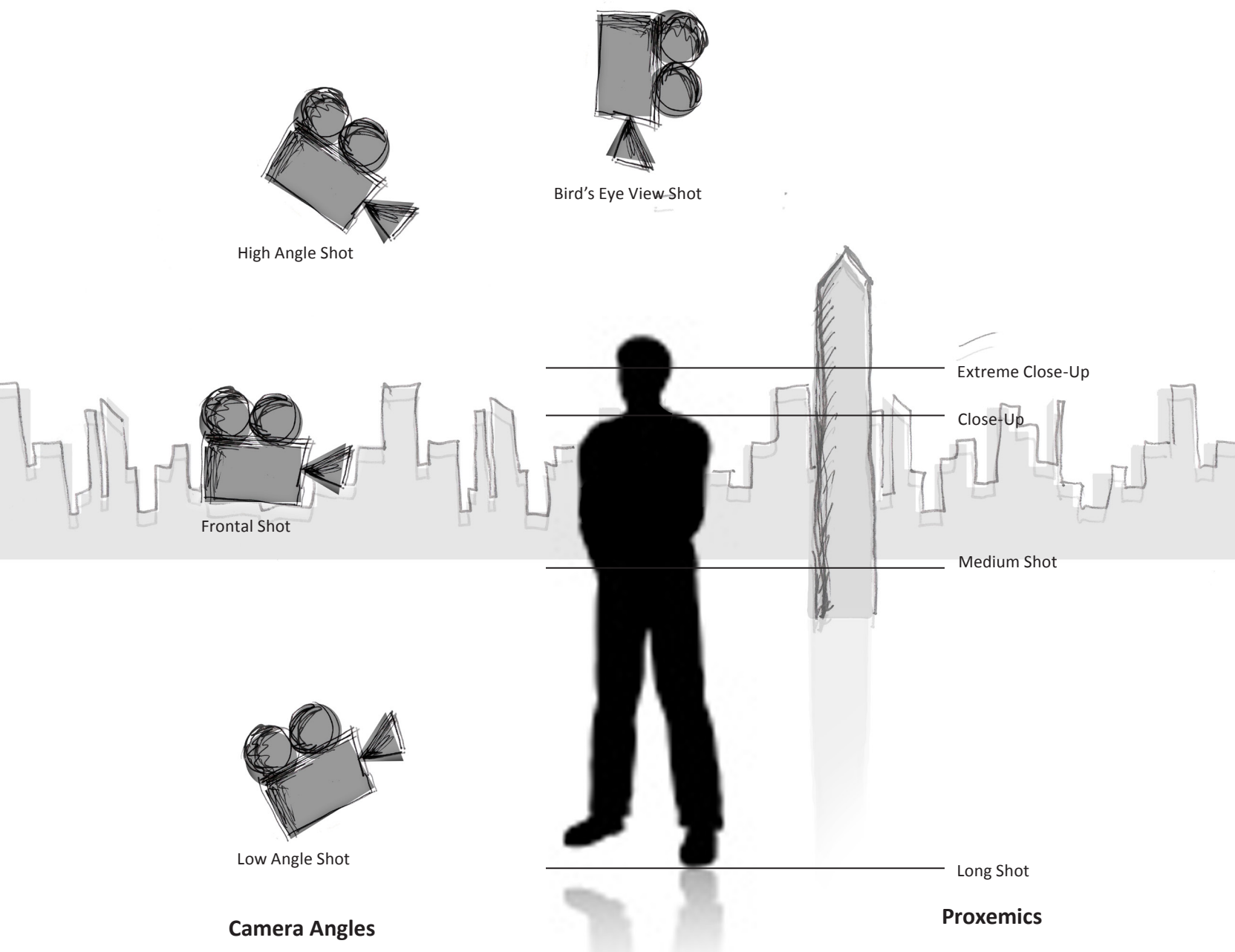


Figure 11.54 Camera Angles and Proxemics

11.2 CAMERA SET UP - THE COMPOSITION TOOLS

11.2.1 PROXEMICS

Proxemics is the distance between the subject and the camera (Mamer 2002:4; 422; Tumminello 2005:34).

There are three main positions, namely the long shot, medium shot and close-up, with various points between or outside of these such as extreme long shots or medium close-ups (Mamer 2002:4).

Extreme Long Shot (ELS) or Master Shot

"A shot that establishes the setting" (Mamer 2002:420). It is where "...the subject is exceptionally far away from the camera" (Mamer 2002:5).

This shot establishes the context for following shots by setting up the location (Mamer 2002:31; Tumminello 2005:36), and was used in the production design of *The Lorax* to establish the scene of Pretoria, Church street and the Grickle Grass Maze.

An ELS can also be used to diminish a subject, as the subject will tend to appear overwhelmed by the surroundings (Mamer 2002:5). The shot was also used to make the character of 'You' appear small against the dystopic landscape.

Long shot (LS) / Wide Shot (WS)

A "...shot that includes the full human body or more" (Mamer 2002:5). This shot answers the questions of where, what and who (Tumminello 2005:37).

Medium Shot (MS)

A "...shot of a person from the waist up..." (Mamer 2002:5).

Close-Up (CU)

A head and neck shot (Mamer 2002:6).

Extreme Close-Up (ECU)

Anything shot that is closer than a CU (Mamer 2002:6).

11.2.2 CAMERA ANGLES

The height or level and orientation of the camera in relation to the subject (Mamer 2002:7).

Low Angle Shot

The camera is below the subject and is angled upward. It has the tendency to make the subject appear threatening or powerful (Mamer 2002:7).

High Angle Shot

The camera is above the subject, but not directly overhead. The subject appears insignificant and intimidated (Mamer 2002:8; Tumminello 2005:41).

Eye Level Shot

When the camera is positioned at the eye-level of the subject being filmed (Mamer 2002:9; (Tumminello 2005:46).

Bird's Eye View Shot / Overhead Shot

It is an extreme high angle shot from directly above; the subject appears insignificant (Mamer 2002:9; Tumminello 2005:42).

Point of View Shot (POV)

Portrays the viewpoint or perception of a specific character, it therefore has a subjective feel (Mamer 2002:10).

Over the Shoulder Shot (OTS)

The camera is positioned above the shoulder of a character, partly revealing the back of their head and shoulders (Tumminello 2005:46).

Single Shot

A shot with only one character in the frame, usually as focal point in a medium or close-up shot (Tumminello 2005:39).

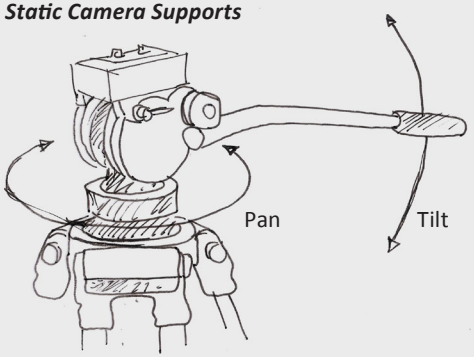
Two Shot

When two characters occupy the frame. There are variations such as face to face, side to side etc. (Tumminello 2005:40).

Insert Shot

This is a CU of action or an object inserted between the main action (Tumminello 2005:40).

> Static Camera Supports



> Wheeled Camera Supports

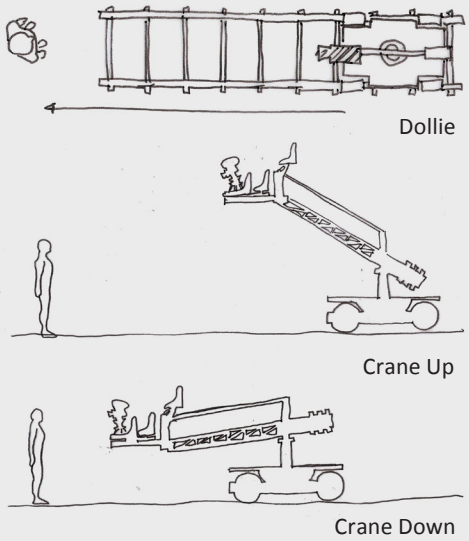


Figure 11.55 Camera Movement

11.2.3 CAMERA MOVEMENT

> Static Camera Supports

Pan

A shot where the camera is pivoted horizontally on a tripod (Mamer 2002:11).

Tilt

A shot where the camera is pivoted vertically on a tripod (Mamer 2002:11).

> Wheeled Camera Supports

Dollies

"A wheeled vehicle with a camera mounting device on it" (Mamer 2002:12; Campbell 2002: 101-102) usually used on a specially designed track, to eliminate bumpiness when moving on uneven surfaces (Mamer 2002:12).

Dollies are preferred to tripods even for static shots as "[i]t is easier to adjust the position of the camera between set up if it is on wheels" (Campbell 2002: 101). There are two types of dollies – crab dollies that can go sideways, as well as going forward and backward, and spider dollies with adjustable legs. Most camera crews choose crab dollies due to its greater stability (Campbell 2002: 101-102). This is what will be used for the production of *The Lorax.*

When the camera follows alongside, in front of or behind a moving subject, the shot is called a **tracking shot** (Mamer 2002:11). It is important to note that "[a] dolly or zoom towards a subject usually requires a tilt" (Mamer 2002:179).

Cranes

"A camera platform that can rise up in the air, carrying the cameraman and the director, as well as the camera itself" (Campbell 2002: 216). It has "...a single elevating arm on a rolling vehicle" This can be a large vehicle to get the camera high in the air or a smaller one incorporated into a dolly (Mamer 2002:12). A jib only carries the camera (Campbell 2002: 216). For the production of *The Lorax* a crane will be used.

> Special Rigs

Steadicam / Floating Cameras

"[A] gyroscopically balanced body rig" (Bordwell and Thompson 1997:19) where the "...camera attached to a camera operator via a mechanical harness which reduces or eliminates the unsteadiness of the operator's motion" (IMDb 2009).

"The Steadicam was designed in recognition of the benefits of freedom of movement offered by the handheld camera, while also recognizing the desire to eliminate its attendant shakiness. It is a device that mounts on the camera operator's chest. It incorporates balanced weight and reciprocating movement to give fluid movement to what are essentially handheld shots" (Mamer 2002:19).

The first floating camera, the Steadicam, was designed by Cinema Products. It was so popular that the word 'Steadicam' is mostly used regardless of brand name (Campbell 2002: 104).

Aerial

Aerial shots are made from planes or helicopters and for vibration reduction need specialized mounts (Mamer 2002:19). A Cineflex helicopter, such as the one used for the *Shoreline* (2009) series, is recommended.

11.2.4 LENS PERSPECTIVE AND CHARACTERISTICS

Lens perspective refers to the way space is represented by lenses. It is the field of the DP and therefore will be discussed only briefly. This influences depth and dimensionality. Lenses are chosen by DP's for how they represent space, and not for subject proximity. (Mamer 2002:22)

Normal Lenses

Perspective is presented in a normal way (Mamer 2002:23) as opposed to wide angle or telephoto lenses that respectively make objects appear further apart or closer together than they actually are (Mamer 2002:22, 24). Because this is not desired in the representation of images of the production of *The Lorax*, a normal lens will be used.

Zoom Lenses

Zoom is categorized under lenses and not movement, because it is not a camera movement, but a lens movement. The object and the camera keep the same distance from each other (Mamer 2002:22).

11.3 THE COLOUR PALETTE

Colour can be used as a psychological, narrative and ordering element in film (Bordwell and Thompson 1997:175). Colour has a very important role in cinema. When films were first made in colour by Technicolor, rules were even laid down for its use by the legendary Natalie Kalmus (Higgens 2007).

Each colour has symbolism, meaning and thus has emotion attached to it. These perceptions vary in different individuals and nationalities, which is not ideal if the film needs to communicate a specific message and emotion. The PD can 'override' these associations by forming new association specific to the film. "Once you establish a colour and its meaning, the audience will accept the idea and react accordingly" (Block 2001:4).

"The best way to control colour is to control the colour palette..." (Block 2001:120) which is "[t]he range and scope of colours to be used in the production design" (LoBrotto 2002:176). The colour palette is one of the first and most important decisions the production designer will make (Weavind 2009, LoBrotto 2002:77). "Limiting your colour choices will allow the colours you use to have visual meaning to the audience (Block 2001:120).

Key colours can be attributed to time or plot development, place and characters as an organizing principle, to establish emotion, mood and atmosphere (Barnwell 2004:54; LoBrotto 2002:77; Outside-Hollywood 2009)

Colour in film can be achieved in four ways in film:

1. The actual ***setting*** colour (Block 2001:120).

2. ***Film stock and camera filters*** – used to adjust the colour the camera sees. This is the field of the DP (Barnwell 2004:54; Block 2001:122).

3. ***Lighting filters (gels)*** - adjusts the light source colour temperature to film stock. it can also be used to produce a coloured light. This is the field of the DP (Block 2001:120).

4. ***Post production colour correction*** is a process where final alterations to the colour of a film is made to the instructions of the DP in a film laboratory or digital suite (LoBrotto 202:176). "The digital world can manipulate hue, brightness, saturation and contrast in an entire shot or a single object within a shot. In the digital world any type of colour change can be made in any frame...in postproduction, but **it shouldn't be used as an excuse to ignore colour control during production**" (Block 2001: 123).

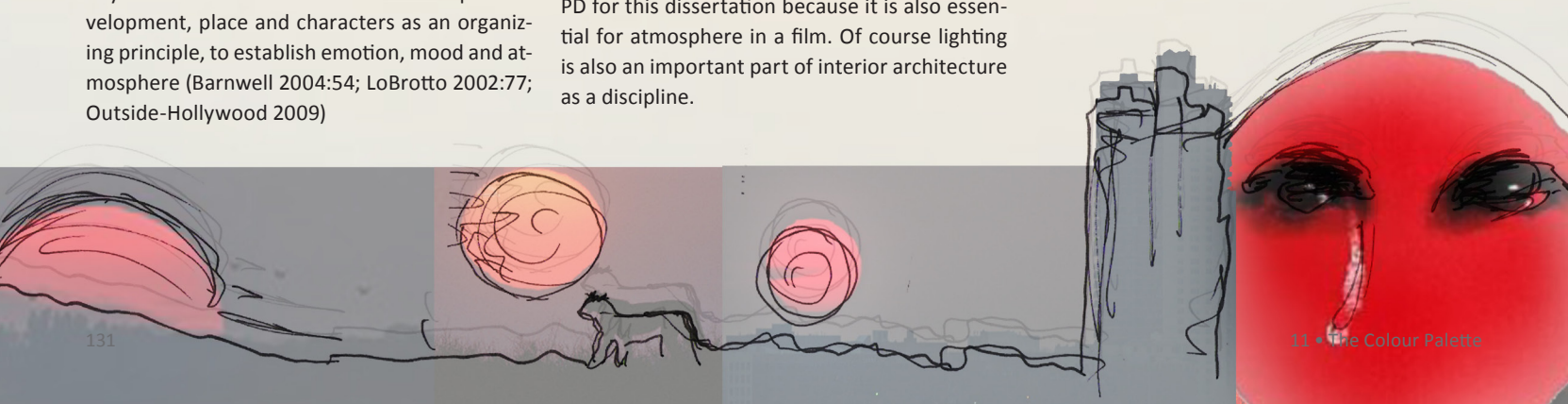
For the production design of *The Lorax* only setting and lighting colour were worked with, because the areas of lighting and camera are the field of the DP and post production that of the editor. Lighting was included in the role of the PD for this dissertation because it is also essential for atmosphere in a film. Of course lighting is also an important part of interior architecture as a discipline.

A discussion of the colour choices will follow. Please see the mood boards and colour palettes (9.4) for details on the colour usage.

Dystopic Colour Palette

Cool colours represent coldness – both environmentally and emotionally. Grey can reflect lifelessness (LoBrotto 2002:82) and blue can mean murder (Block 2001:3). Blues, greys, browns and blacks were chosen for dystopia, with an absence of the cool colour green, because it is stereotypically associated with the environment and money (Eisenstein 1968:110; LoBrotto 2002:82; Tumminello 2005:132, 134).

In the original text of *The Lorax*, green was used for the Once-ler's gloves and the grass (environment) which diminished the strength of the contrast between good (environment) and evil (Once-ler). Because of these dualities and its association with the real world environment, green was left out of the whole colour pallet for the production design of *The Lorax*. Instead black was assigned to the Once-ler for its associations with evil, death and luxury (LoBrotto 2002:82; Tumminello 2005:132).



Utopic Colour Palette

Reds and pinks were chosen for the utopic colour pallet because the red sun against the pastel sky is often the colours of African and Pretorian sunsets. In cities such as Pretoria, it is probably the case due to air pollution.

The Truffula Trees are fire dancers in the production and the use of red here is as the colour of danger, a warning (Kalmus in Higgens 2007: 44) of what is to come - a future reflection image.

Another reason for the use of pink and pastel colours is that it is associated with tranquillity, lightness and softness (Tumminello 2005:132), but also with frivolity (Eisenstein 1968:114) Thus pink has dual meaning in the production.

The idea was to create oozes of colours for the utopian background, as in Impressionism. Claude Monet's *Impression, Soleil Levant* (1872/1873), uses the combination of pinks and blues with a red sun (see utopia mood board for image).

Heterotopic Colour Palette

Heterotopia's colour needed to be a combination of the utopic and dystopic colour pallet's, as this is the transition period between the two phases. Pinks and reds then symbolizes utopia, while blues, greys, browns and black represents of the ever nearing dystopia.

11.4 THE STORYBOARD

The storyboard as production tool

A storyboard is a visual version of the script produced by drawing the script, shot by shot, in chronological sequence. The first storyboards were conceived in the early 1930's by Disney Studios (Tumminello 2005:17).

It is a pre-visualization tool that represents on paper (or screen in the case of an animatic) what will eventually appear on the film screen. The storyboard represents the camera and is therefore drawn to indicate the angle and position of the camera. Besides this, shot size, action lighting and setting needs to be indicated. Therefore the previously discussed technical knowledge is essential to design a storyboard (Barnwall 2004:13,62; Tumminello 2005:1). Storyboards are done by storyboard artists.

Elements of the Storyboard

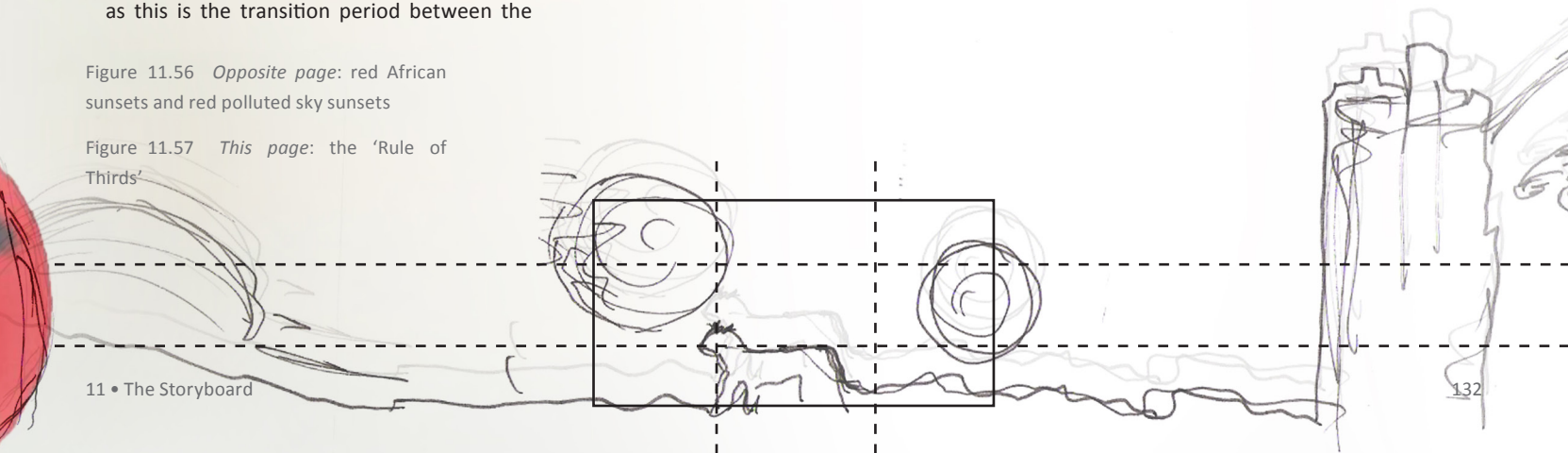
Elements of a storyboard, that need to accompany it, are the **shot number, the proxemics, the camera angle, the camera movement and the action taking place** (Tumminello 2005:72).

The Rule of Thirds

Storyboards are often designed by means of the 'Rule of Thirds'. The storyboard artist divides the frame into thirds vertically and horizontally with guidelines to create balanced composition (Mamer 2002:422).

Figure 11.56 *Opposite page*: red African sunsets and red polluted sky sunsets

Figure 11.57 *This page*: the 'Rule of Thirds'



12. TECHNICAL RESOLUTION: FILM LIGHTING

"Heaven would never use a fluorescent tube to light a room."

-Paulo Coelho in 'Veronica Decides to Die'

Figure 12.58 Three point lighting

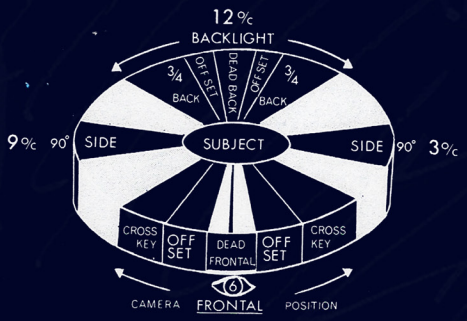


Figure 12.59 Lighting direction (Zettl 2000:64)

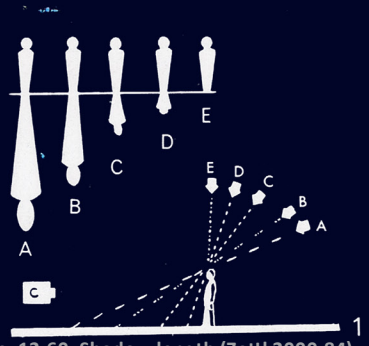


Figure 12.60 Shadow length (Zettl 2000:84)

12.1 THE IMPORTANCE OF FILM LIGHTING

Lighting is not part of the field of production design (Weavind 2009), but the field of the DP. Film lighting is a highly specialised field and requires a special team to execute it (a few role players of this department is mentioned in the chapter on production design). Because film is light, every role player in film needs to be sensitive to light, regardless of work description (Campbell 2002:74).

Lighting is also essential for the atmosphere and visual appearance of a film, for which the PD is responsible. Film lighting also assists in focusing the audience's attention (Block 2001:121; Campbell 2002:55).

Therefore a lighting study was done up to the point where a basic specification for the visual 'look' and suggested light sources could be handed over to the DP for more in depth specifications.

12.2 FILM LIGHTING PRINCIPLES

12.2.1 THREE POINT LIGHTING

Although film lighting is a very complex field, this basic setup is the starting point when lighting a scene (Bordwell and Thompson 1997:181; Mamer 2002:236) and needs to be understood before a basic 'lighting plot' can be done.

Key Light / Point Source

The key light is the main source of light illuminating the scene. It is often at a 45 degree angle to the left or right of the camera. It illuminates the subject and creates shadows. The sun is also considered a key light source (Mamer 2002:236; Tumminello 2005:123).

Fill Light

The fill light is usually on the opposite side of the camera in relation to the key light. "The fill light 'fills in' or softens the shadows created by the key light and lowers the contrast between light and dark (Mamer 2002:236; Tumminello 2005:123).

Backlight

A source light that is positioned behind an object or subject, "which allows the object to stand out from the background" (Bordwell and Thompson 1997:179; Mamer 2002:236; Tumminello 2005:123).

There are numerous other types of lighting placements added to these three basic lighting positions, of which only the applicable types are briefly discussed.

Sidelights / Crosslights

Used to create and cast sharp and long shadows. "A strong contrast is created when one side of an object is brightly lit and the other is in shadow. Side lighting creates a three-dimensional effect because of the shadows [cast] on one-side of an object." This is opposed to frontal light that creates a flat image (Bordwell and Thompson 1997:179; Tumminello 2005:129).

Background / Set light

The light used to light background sets. It is best if it is placed on the same side as the key light (Zettl 2000:163), in order to promote lighting continuity.

12.2.2 HIGH KEY AND LOW KEY LIGHTING

High key and low key lighting essentially refers to the relationship between the key and the fill light. "The relationship of key to fill light is described with the contrast ratio [or fill ratio]...If the contrast ratio is high then the key is much stronger than the fill, producing deep, dramatic shadows" (Campbell 2002:71; Brown 1996:63).

High Key / Normal Key

High key lighting has minimal contrast between light and dark areas. There are minimal shadows and an even distribution of light. (Bordwell and Thompson 1997:179; Mamer 2002:238; Tumminello 2005:124). This is the basic lighting concept that was followed for heterotopia.

Low Key

Low key lighting has a high contrast between dark and light areas. There is an abundance of shadows and an uneven distribution of light. It is a moody and atmospheric type of lighting, which was popular in the German Expressionistic films and *film noir*, because the dark shadows allowed for minimal set construction in times of economic hardship (Bordwell and Thompson 1997:179; Mamer 2002:239; Tumminello 2005:124). Such a lighting setup is the basic lighting concept followed for dystopia - in order to produce deep shadows.

"If the fill is close to the key in intensity, the shadows will be light and the shot will be high key. If the fill is much less intense than key, the shadows will be darker and thus the shot more low key" (Mamer 2002:240).

12.3 FILM LIGHTING EQUIPMENT

Lights are generally referred to as 'instruments', in order to distinguish between the light source (equipment) and the light itself" (Mamer 2002:241). Grips and gaffers often call lighting instruments 'heads' (Campbell 2002: 228).

12.3.1 LIGHT SOURCES

Light sources used in the production design of *The Lorax* are discussed below.

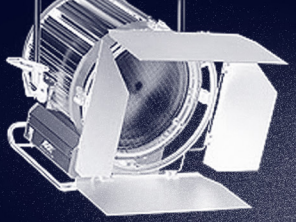
Light sources are named according to their wattage, for example an 18k is 18000 watts or 18 kilowatts. The 'k' stands for 'one thousand' An 18k HMI, means the source uses an HMI bulb (Box 2003:447). Different light sources also have different colour temperatures, measured in degrees Kelvin (K). Please see the appendix for more information on colour temperature.

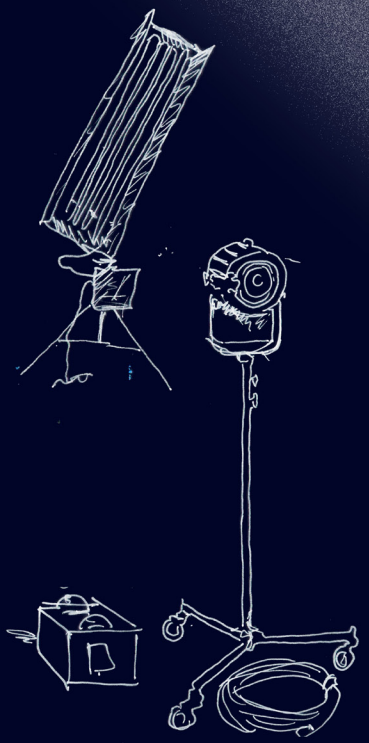
HMI's

'HMI' stands for high pressure mercury metal iodide (Millerson 1991:288). HMI's were designed by OSRAM to simulate the colour of daylight and has a colour temperature of 5600K (Block 2001:242).

HMI's are efficient lights for wattage usage as it turns more energy into illumination as opposed to heat, than tungsten lamps. "HMI's generate three to four times the light of tungsten-halogen, but consume up to 75% less energy..."(Brown 1996:41, 127; Campbell 2002: 126; Zettle 2002:136, 155).

HMI-type lamps are available up to **18k** (Millerson 1991:291) which are often used to simulate **moonlight** or sunlight by mounting units on cranes (Brown 1996:41; Campbell 2002:





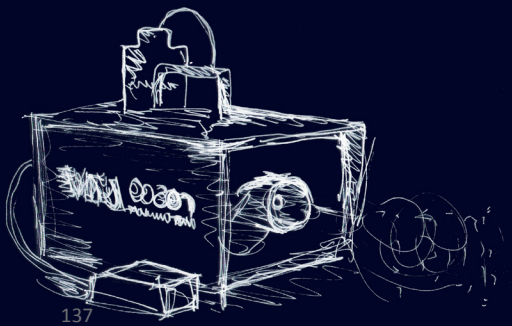


Figure 12.61 ***Left, from top***: 18k HMI
Figure 12.62 Kino Flo Four Bank
Figure 12.63 HMI and Ballast
Figure 12.64 Rosco Smoke Machine

135). One of these on a crane, can light up an entire city block at night (Campbell 2002: 130-131). An 18k will be used as the key light in dystopia for the production of The Lorax.

The **2.5k** is a general purpose light. The **1.2k** is a smaller and versatile HMI unit. It is lightweight and compact (Brown 1996:42). The **575–watt** version HMI is the smallest HMI unit often used in interior settings (Campbell 2002: 130-131).

Kino-Flos

Fluorescent lights used to have a negative reputation in the film industry due to the fact that "[t]hey only reproduce a narrow part of the colour spectrum, they flicker, they can't be dimmed and their colour temperature is positively green" (Campbell 2002: 132).

Today Kino-Flo, manufactures film-friendly fluorescent fixtures that are "lightweight, efficient, flicker-free and most importantly colour-correct" (Campbell 2002: 132). Kino Flos are also lightweight which means it can follow actors around. The light produced by Kino-Flos wrap around actors' features and fills in shadows to produce a "smooth shadowless light" (Campbell 2002: 132). This is what will be used to film 'You' from the front while his back is turned to the camera - creating only an edge of lighting and rendering the actor as a silhouette (Louw 2009).

Blondes

A **1k blonde** will be used. It is open-faced light -which means it has quite a high output of light. The lighting quality is quite yellow, which is the typical look for a light shining through a window in a night scene (Louw 2009). This is

what will be used to shine through the Once-ler's window onto 'You'.

12.3.2 LIGHTING CONTROL

Numerous devices are available to control the fall, intensity and quality of light.

Colour Filters

> **Colour balancing filters / conversion filters** are used to correct lighting or camera colour temperature**.**

> **Colour enhancement filters/gels** for 'effects lighting' such as moonlight (Millerson 1991:42). Gels are coloured plastic or gelatin sheets that are placed over lamps to produce a colour light. It is available in a wide varieties of colours (Block 2001:120; LoBrotto 2002:177; Van der Walt). Gels are attached to lights with C-47s (Brown 1996:153).

Gels, from the international company Rosco, can be obtained from local suppliers. Gels are classified as 'expendables' meaning it is used up (it melts due to the heat of light sources), thus roles of gels are kept handy when filming (Box 2003: 447; Movie Camera Company 2008:47; van der Walt 2009).

"Blue light is widely accepted as a convention to simulate moonlight...[m]any Lighting Directors prefer light blue...for this purpose" (Millerson 1991:261). Light blue gels will be added to the key light in dystopia for the production of *The Lorax* for a **moonlight effect** (van der Walt 2009).

It is important to distinguish between when a coloured gel is used and when a colour bulb is used. Gels are used for a coloured effect or hue - such as blue moonlight, whereas a bulb would be used in 'practicals' if a coloured look is desired, such as the red lights of 'UNLESS' (Stoller 2003:171; van der Walt 2009).

Diffusers

A diffuser is filter with a slightly uneven surface which refracts light (Movie Camera Company 2008:59).

The 18K produce a sharp light, therefore it is best if a diffuser gel is added for the moonlight effect (Brown 1996:41; van der Walt 2009).

Cookie (Cukaloris)

A piece of light modifying equipment that is a cutout design that breaks up the light (Mamer 2002: 255). It can be made from cardboard, plastic, wood, steel or any available material with a bit of stiffness. A half moon cutout cookie is used to create the moonlight look in the scenes with the Once-ler's Lerkim.

12.3.3 EFFECTS: THE FOG MACHINE

Smog or fog in film are special effects. It is done by the lighting department, under the DP.

For a general fog effect, two standard Rosco Fog machines on each side of Church street can be used. Thus a heavy fog effect will be achieved on the ground and a lighter one up higher.

Rosco Smoke Machines can be obtained from The Movie Camera Company, based in Johannesburg and Cape Town.

The aerosol from a Rosco fog machine is naturally buoyant and tends to follow air currents. If the fog (not the fluid) is chilled, it will be heavier than air and lie low to the ground. To achieve this effect, Rosco offers the Chiller Module as an accessory for Rosco fog machines. By running the fog over regular ice or dry ice (dry ice works best), it is chilled below ambient temperature. For ideal low lying fog, Rosco Stage & Studio fluid is used. "Water fog, liquid nitrogen, carbon dioxide or dry ice (solid carbon dioxide) would only produce a short lived fog with a lot of residual moisture" (Rosco laboratories 2009).

"The fog is produced from water-based glycol and glycerol. It has been extensively tested and is generally considered non-hazardous" (Winslow 2006:152).

It is suggested that two Rosco fog machine are used in conjunction with the Chiller Module accessory to the left and right of Church Street, in order to achieve an effect where the fog stays mostly low to the ground.

13. TECHNICAL RESOLUTION

'UNLESS'

Figure 13.65 *Above:* Diameter of *Bambusa Balcooa* (NMBA 2009); section through a bamboo culm (Von Vegesack and Kries 2000:205)

Figure 13.66 *Right:* The design process for working with bamboo

13.1 MATERIALS

The most commonly used materials in the film industry are timber frames, plastic foam, wood, stone, fibreglass, moulded glass, Styrofoam, plaster drywall, plywood and papier-mâché (Lo-Brotto 2002:139; Ward 1994:169)

Materials used in cinematic architecture need to have the following qualities:

> it needs to accommodate the temporary nature of filmic structures, thus being sustainable, economical, re-usable or recyclable where possible. Unfortunately this is not currently a consideration in mainstream production design (Weavind 2009);

> it needs to be as lightweight as possible for practical reasons;

> materials need to be easy to work with, especially in the South African film industry.

Relating back to the sub-theme of environmental destruction in *The Lorax,* the approach was to find materials that are sustainable. Regarding the nature of film production, lightweight and cost effective materials were sought out.

Pre-constructed units such as flats and platforms are also discussed under materials.

13.1.1 BAMBOO

Bamboo is prop for life (Scheer 2004:10)

Bamboo in effect is actually a giant grass - ideal for use as a cinematic portrayal of the Grickle Grass, in juxtaposition with the character of 'You' - a small boy.

For the Grickle Grass Street the bamboo needs to be black in order to achieve the desired prison-like effect with lighting (Louw 2009). This can either be painted, as most paints work well on bamboo (Pearce 2009) or if the bamboo is smoke impregnated, it can be used as is, for it will already have an almost black colour (Von Vegesack and Kries 2000).

Bamboo in South Africa

The majority of bamboo in Southern Africa is *Bambusa Balcooa,* brought to South Africa by Dutch tradersin the 17th century.

Bambusa Balcooa is a clumping bamboo (Biomass 2008; Pearce 2009). Clumping bamboo is known as 'Bamboo That Behaves®' (Flemmons and Cunningham 2006:16), as opposed to running bamboo. It is non-invasive - meaning it never spreads further than 1.5 meters from the mother plant. Clumping bamboo is ideally suited to the South African environment as no sophisticated farming methods are needed. Yielding per hectare is in fact better if bamboo is left to its own devices, instead of watering and fertilising crops. Plantations of bamboo can be found near Nelspruit in Mpumalanga and will soon be started in Natal (Biomass 2008).

Therefore the species *Bambusa Balcooa* was selected for the production design of *The Lorax,* as it can be sourced locally. The Biomass Corporation produces bamboo for housing, laminates and roofing (Biomass 2008; Pearce 2009), so after the production has finished, the bamboo can be sent back to be reused.

Bamboo as Material

Bambusa Balcooa also accommodated the desired thickness and height of Grickle Grass elements. It grows up to 25 meters high, with a maximum diameter of 150 mm (Bamboo-oz s.a.). This genus also has a long standing history as construction material in the East and is even used as scaffolding (Flemmons, Cunningham 2006:16; von Geyso 2009).

Bamboo is 'rapidly renewable'. It is the fastest growing plant on earth. 18 meters can be reached in a few months. It can be harvested annually and culms (what is called a 'trunk' in the case of a tree, is called the 'culm' of a bamboo) the regrow after harvesting (Biomass 2008; DeBoer and Bareis 2005:235; Janssen 1988:1).

Bamboo also has other desirable characteristics. It is extremely lightweight yet strong due to the hollow cylyndrical shape. It has a high tensile and compressive strength (DeBoer and Bareis 2005:235, 240; Scheer 2004:16). Bamboo has "twice the compressive strength of concrete and roughly the same strength to weight ratio of steel in tension" (DeBoer and Bareis 2005:240). It is also a flexible material, allowing it to be stable even in earthquake conditions

Bamboo is easy to work with (Janssen 1988:2; Scheer 2004:10), but as bamboo culms split lengthwise easily, it should not be joined by nailing (DeBoer and Bareis 2005:237). Instead it should be pre-drilled (Scheer 2004:19-20).

When growing, bamboo plants of 25 meters only have shallow, hair-like roots keeping them in place, which is why the Grickle Grass elements of six meters only need a footing of 300mm, centred in a base plate of approximately one meter to be stable. Just to keep the elements from moving in the wind it will

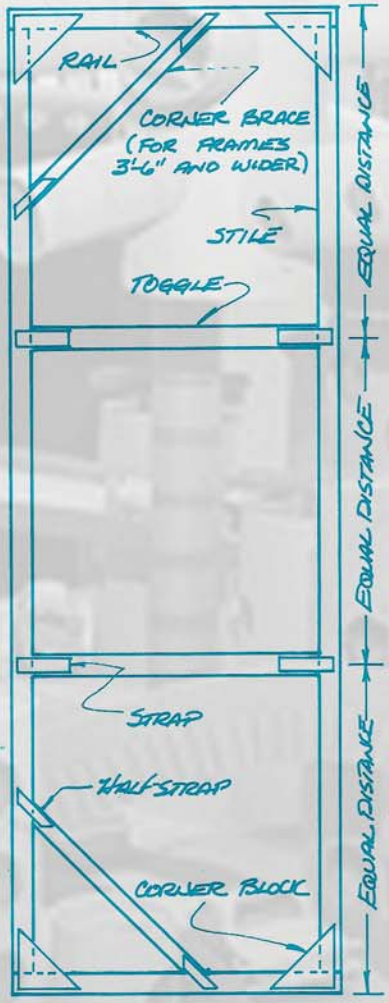


Figure 13.67 *Top left:* the standard parts of a flat (Raoul 1990: 24)

Figure 13.68 *Top right:* painting on a dutchman (Raoul 1990: 100)

Figure 13.69 *Bottom left:* The use of cardboard to construct a heterotopic cinematic city in the film *The Science of Sleep* (2006) (Flickr s.a.)

Figure 13.70 *Bottom right:* another heterotopic cinematic city in *The Cabinet of Dr. Caligari* (1919-1920) (IMDb 2009)

be connected on the top.

Other Advantages of Bamboo

> Bamboo can "...rehabilitate degraded or contaminated ground..." (Biomass 2008).

> Bamboo can be intercropped and contrary to popular belief, uses very little water (Biomass 2008).

> Apart from the culm, all other parts of the plant can be used - shoots for food and leaves for animal feed (Biomass 2008; DeBoer and Bareis 2005:248).

13.1.2 CARDBOARD

Cardboard is used to cover the bamboo, just for the Grickle Grass Maze and not the Grickle Grass Street, by folding it squarely around the bamboo. This is because the maze needs to appear more geometric with square elements to provide a visual distinction from the rest of the Grickle Grass (refer to scene storyboard no 5 to see the visual appearance needed for the two elements).

The brown colour of the cardboard is an added bonus, as it will not need to be painted. In order to waterproof the cardboard, as precautionary action in the event of rain, it is recommended that lignen from sugarcane biomass is used (IANS 2009). If this is not available the cardboard can be sprayed with silicone.

13.1.3 FLATS

For the Once-ler's Lerkim the existing Sammy Marks Tower served as starting point. The tower has the desired height and approximate shape, but the visual appearance had to change somewhat.

In order to be transformed into the Once-ler's Lerkim the tower needs to be temporarily cladded. After discussion with a structural engineer (Von Geyso 2009), it was deemed best to use canvas type structures on that could be hung from steel supports.

This provided the added benefit of using stock flats - frames covered with muslin (Raoul 1990:19) - that could afterwards be re-used by the adjacent State Theatre for theatre productions.

"...[S]tock scenery is designed with the specific goal of being able to keep it on hand and re-use it, thus gaining significant savings of time, money...personnel [and resources]." Stock scenery is used in film, television and theatre productions (Raoul 1990:19).

Stock scenery can be divided into flats, draperies, platforms with ramps and steps (Raoul 1990:19).

So the aim of the design for covering the tower is to use stock flats as much as possible. In odd areas plugs were specified. Plugs are fillers added to flats to complete a scenery wall - a plug is a flat that is nonstandard in size (Raoul 1990:42).

For the top of the Once-ler's Lerkim profile flats of marineply was specified instead, due to the odd shapes that would be difficult to cover with muslin. A profile flat is "..[a]ny flat which has its edge altered to mock a given shape..." Instead of being covered by muslin, like standard flats, it is best if these pieces are covered by plywood (Raoul 1990:60-61).

Before use a flat frame is covered with medium-weight unbleached muslin (Raoul 1990:66).

13.1.4 MUSLIN

"Muslin is an undyed plain-weave fabric made with carded cotton yarns containing characteristic slubs, speck and impurities. Muslin for covering flats must be unbleached and not flame proofed when purchased" (Raoul 1990:69).

"Because muslin is unbleached and undyed, the cotton fibres have been subjected to a minimum of shrinkage, but when sized will, therefore, shrink on a flat frame, forming a tight 'skin' of cloth" (Raoul 1990:69).

Most muslin is classified as a medium weight fabric (Raoul 1990:69). The plain-weave fabric provides a cloth with good strength, that stretches easily and can even be used to cover spherical surfaces (Raoul 1990:69).

Synthetic white glue or alpihatic resin is used to attach muslin to flat frames (Raoul 1990:69).

Muslin is back-painted to make it opaque and prevents light from bleeding through and silhouetting the flat frame. Back-paint needs to be medium to dark grey (Raoul 1990:72).

The joints visible between two flats are covered by a dutchman. "A dutchman is the cloth strip which is affixed over a crack or cracks created when two flats...are joined." It is made from left over strips of muslin (Raoul 1990:99).

"It is efficient to use the primer or base coat paint to attach a dutchman. Never glue a dutchman unless it is to be permanent. There is sufficient binder in the paint to hold the dutchman, even for most touring situations" (Raoul 1990:99).

For the chessboard pattern surrounding the Grickle Grass Maze, muslin that has been painted and back-painted with a 'drop bottom' chain pocket to keep it in place, can be used (Raoul

1990:123).

13.1.5 3FORM CHROMA

For the Once-ler's Lerkim walkway a dark turquoise translucent material is needed, in order to allow the light from the LED panel beneath to shine through.

3form Chroma was selected because the surface can be refinished to be used for the 'windmill' type structure in scene storyboard no. 25. After the production it can either be used by the State Theatre for theatre productions or go to 3form Reclaim which keeps end-of-life materials out of landfills (Matspec-Chroma 2008).

3form Chroma is manufactured from cast polymethyl methacrylate (PMMA) resin. It comes in rigid panels. The exact look of the walkway can also be produced for the finish without scenic paint effects as finishes can be customised (Matspec-Chroma 2008).

13.1.6 STYROFOAM

Styrofoam can be sculpted into the columns to the right of the Once-ler's Lerkim (LoBrotto 2002:140) and muslin can be layered over it to provide a textured finish.

Styrofoam is one of the most widely used materials in the film and television industry (Wilkie 1996:32).

13.1.7 DULLING SPRAY

Where needed during production, dulling spray can be applied. "When applied to a surface, a dulling spray deflects hot spots and glare due to lighting" (Brown 1996:151; LoBrotto 2002:177).

13.1.8 PLATFORMS

Casterboards and dollies are a great aid in shifting scenery (Raoul 1990:150). Therefore after the bamboo has been removed from the Grickle Grass Maze base platforms, it can be re-used in the State Theatre. A Grickle Grass platform can also be called a 'wagon' which is "a low platform on casters" (LoBrotto 2002:180).

Platforms need to be made from marine plywood in order to be waterproof (Von Geyso 2009).

13.2 SUSTAINABILITY

13.2.1 THE FILM INDUSTRY

A film itself can be said to be sustainable as the effort of one production is shown around the world to millions of people, first on film and then on dvd.

The actual production process is usually not as sustainable, as the film industry is currently still mostly ignoring sustainability (Weavind 2009).

Information on the film industry and sustainability is few and far in between. A few films claim to be carbon neutral, but usually this just involves actors planting trees. Looney Bins, a company in Los Angeles recycles film and TV sets and FaARI (Film and Entertainment Recycling Initiative) promotes recycling of other on location recyclables such as water bottles (California Integrated Waste mangement Board 2004; Film and Entertainment Recycling Initiative s.a.). Lately newly built film studios are constructed to be sustainable buildings. There has also been a green film premiere for the film *The Age of Stupid* (2008) (Carus 2009). No information could be found on production design and sustainability, except that some sets are retrofitted and re-used (Van der Walt 2009)

International and national sustainability assessments such as LEED or the Green Star SA, rating systems cannot be used to assess structures of a temporal nature. This is a shortcoming that such assessment systems need to address. Alternatively a separate system needs to be created for temporal structures. Hopefully in future there can even be assessment systems for films - that can possibly determine the choices film audiences make when deciding which films to watch.

13.2.2 THE SUSTAINABILITY OF THE PRODUCTION FOR *THE LORAX*

The Lorax is about the dangers of avarice and its influence on the environment. More specifically, it is about a inventive character, comparable to a designer, the Once-ler, that destroys the environment. Therefore from the starting point the aim was to design a production that is as sustainble as possible. This was on the immediate level, but hopefully the message of *The Lorax* will have the greatest influence of the finished film production.

The Location

> The location chosen for filming, is underutilized, especially during the night, when most filming needs to take place.

> The State Theatre has a workshop space that is underutilized and will be used for the construction of the sets.

> A single set location, where possible, as in this production, is more sustainable than various sets.

The Design

> The aim was to design sequence set elements that can be changed into other sequence elements. This was achieved with the adaptability of the Grickle Grass Maze into the *Tolletjie Brei* (French Knitting) Building.

> Where this was not possible, sets could either be recycled or re-used by the State Theatre.

Materials

As discussed under materials and light sources, the following was used with sustainability in mind : bamboo, cardboard, flats, 3 from Chroma, platforms, and HMI's.

13.3 POST PRODUCTION

13.3.1 VISUAL EFFECTS (VFX)

Visual Effects is a subcategory of special effects, although technically 'special effects' refers to something that was in the original shot, whereas visual effects are when the original image is edited in some way during post production (Barnwall 2004:126; Rizzo 2005:321).

Rotoscoping

For the stars in dystopia, extra stars need to be added for a twinkling effect. Rotoscoping is a technique where the film image is projected and traced to create artwork for instance stars, lighting and ghosts. The image is rephotographed and optically combined with the other footage. A shot created from more than one visual element such as this, is called a 'composite shot' (Rickitt 2006:374).

13.3.2 SOUND

The Lorax will be filmed without sound, thus the following will be necessary:

MOS

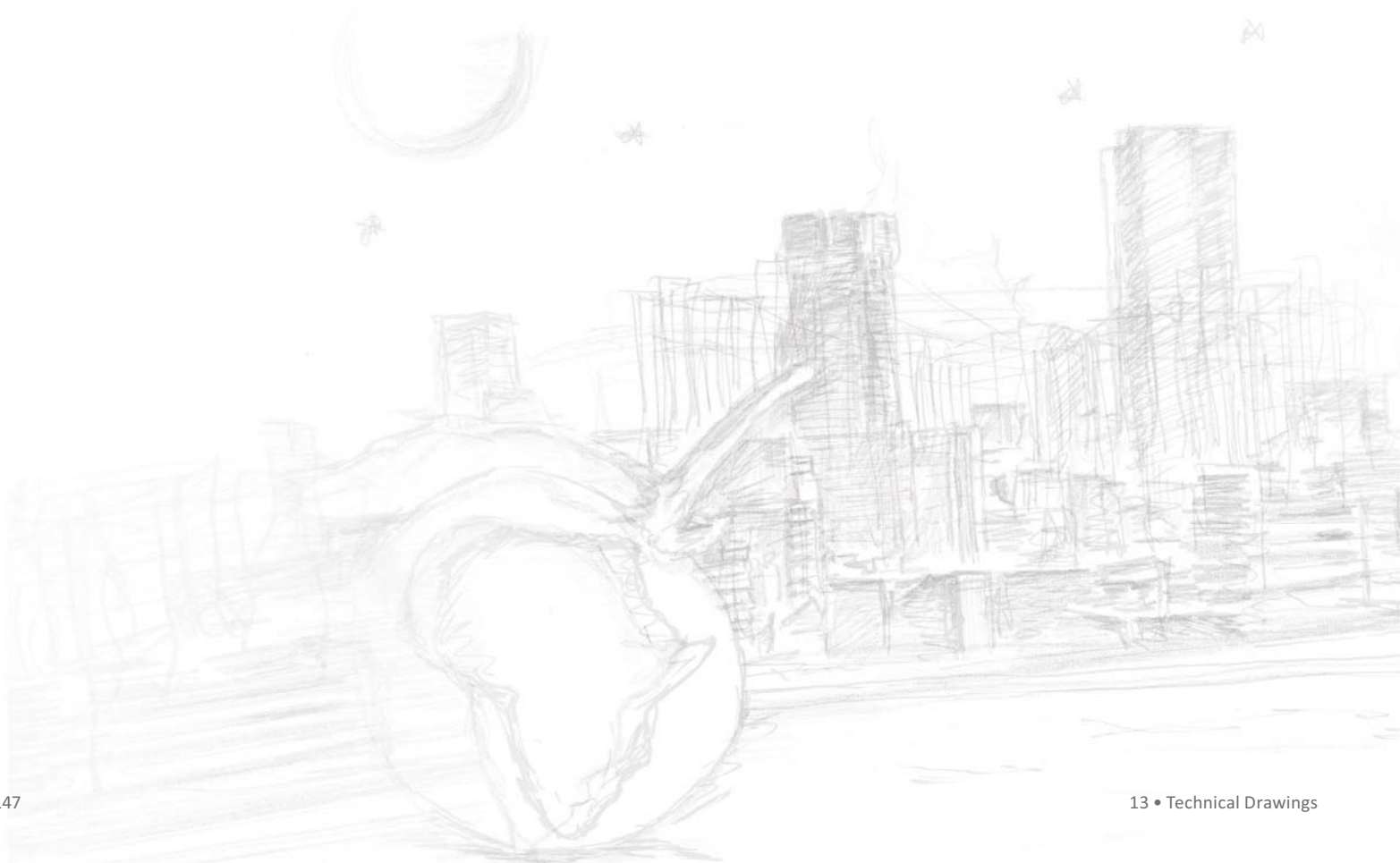
'MOS' is a shot where the image is filmed without the sound track. It stands for 'Minus Optical Stripe' (Campbell 2002: 230). Sound is then added in post production. This is the suggested way for filming *The Lorax,* as a voice over will be used for most of the film.

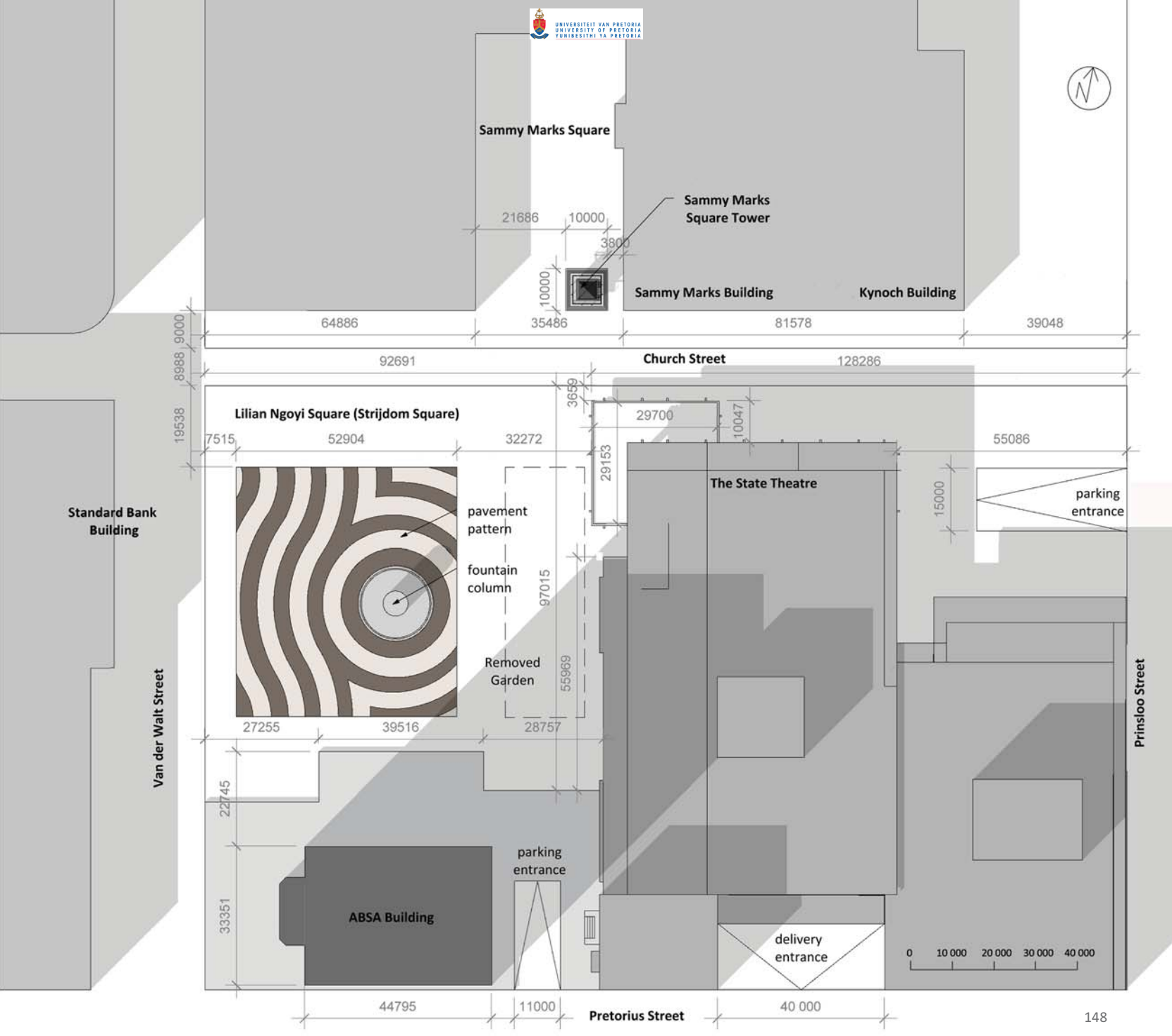
Foleying

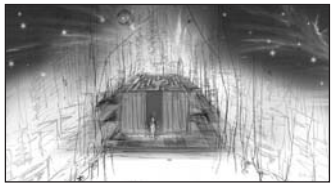
Foleying is "The recording of synchronized sound effects to match silent images. Most noises heard in a film are created during a Foley session rather than being recorded during original filming" and is done by a Foley artist (Rickett 2006:371). This will be used to create walking sounds, the Once-ler throwing the money down his Snuvv etc.

Figure 13.71 FaERI recycling bins on set (FaERI s.a.)

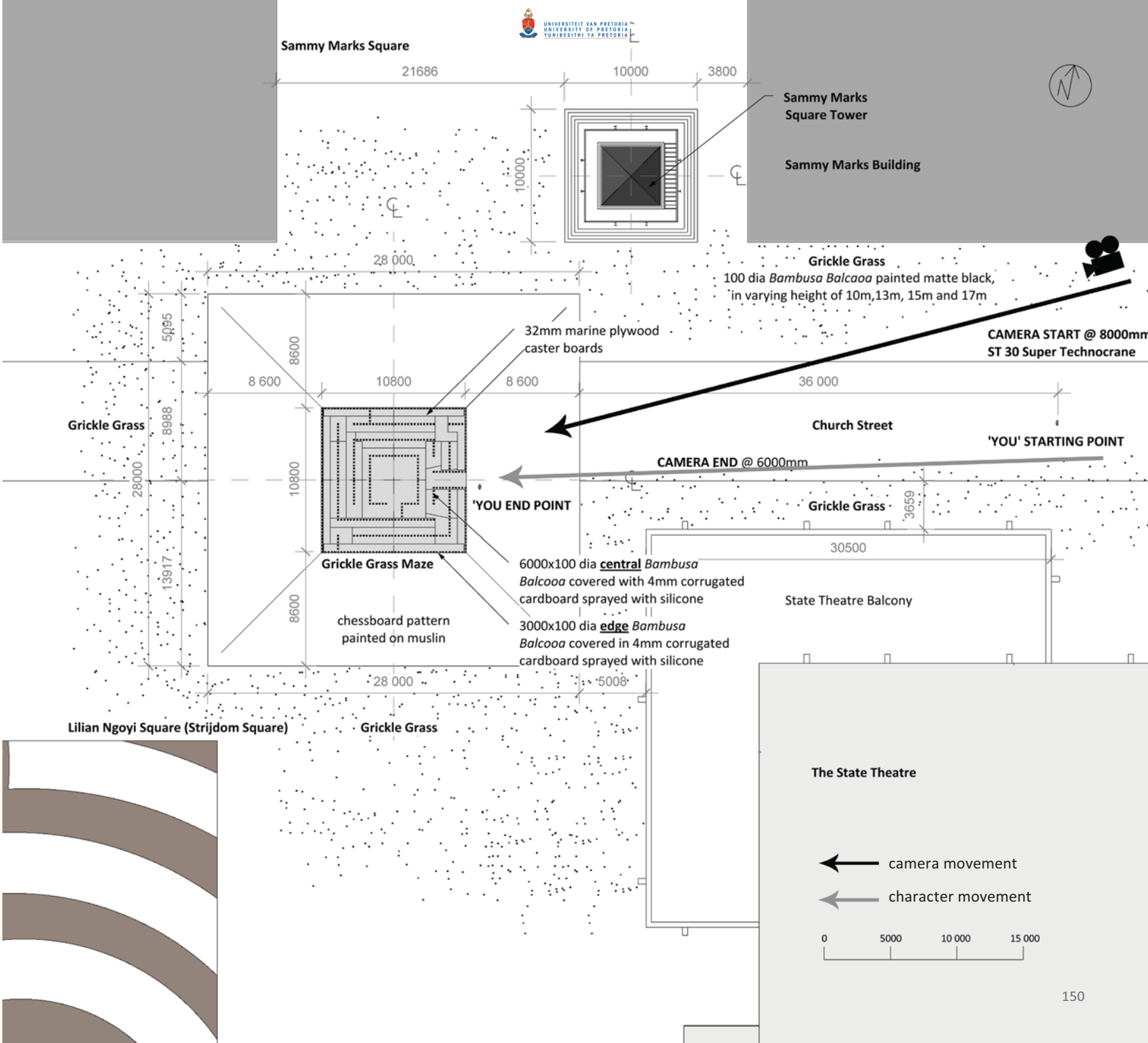
Existing Location Plan

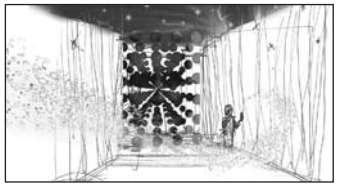


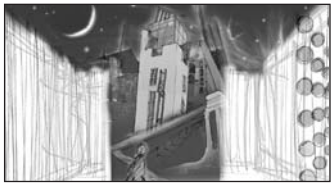

Sammy Marks Square
Sammy Marks Square Tower
21686
10000
3800
10000
Sammy Marks Building
Kynoch Building
64886
35486
81578
39048
9000
8988
19538
92691
Church Street
128286
3659
Lilian Ngoyi Square (Strijdom Square)
7515
52904
32272
29700
10047
29153
55086
The State Theatre
15000
parking entrance
Standard Bank Building
pavement pattern
fountain column
97015
Removed Garden
55969
27255
39516
28757
Van der Walt Street
Prinsloo Street
22745
parking entrance
ABSA Building
33351
delivery entrance
0
10 000
20 000
30 000
40 000
44795
11000
Pretorius Street
40 000



PLAN

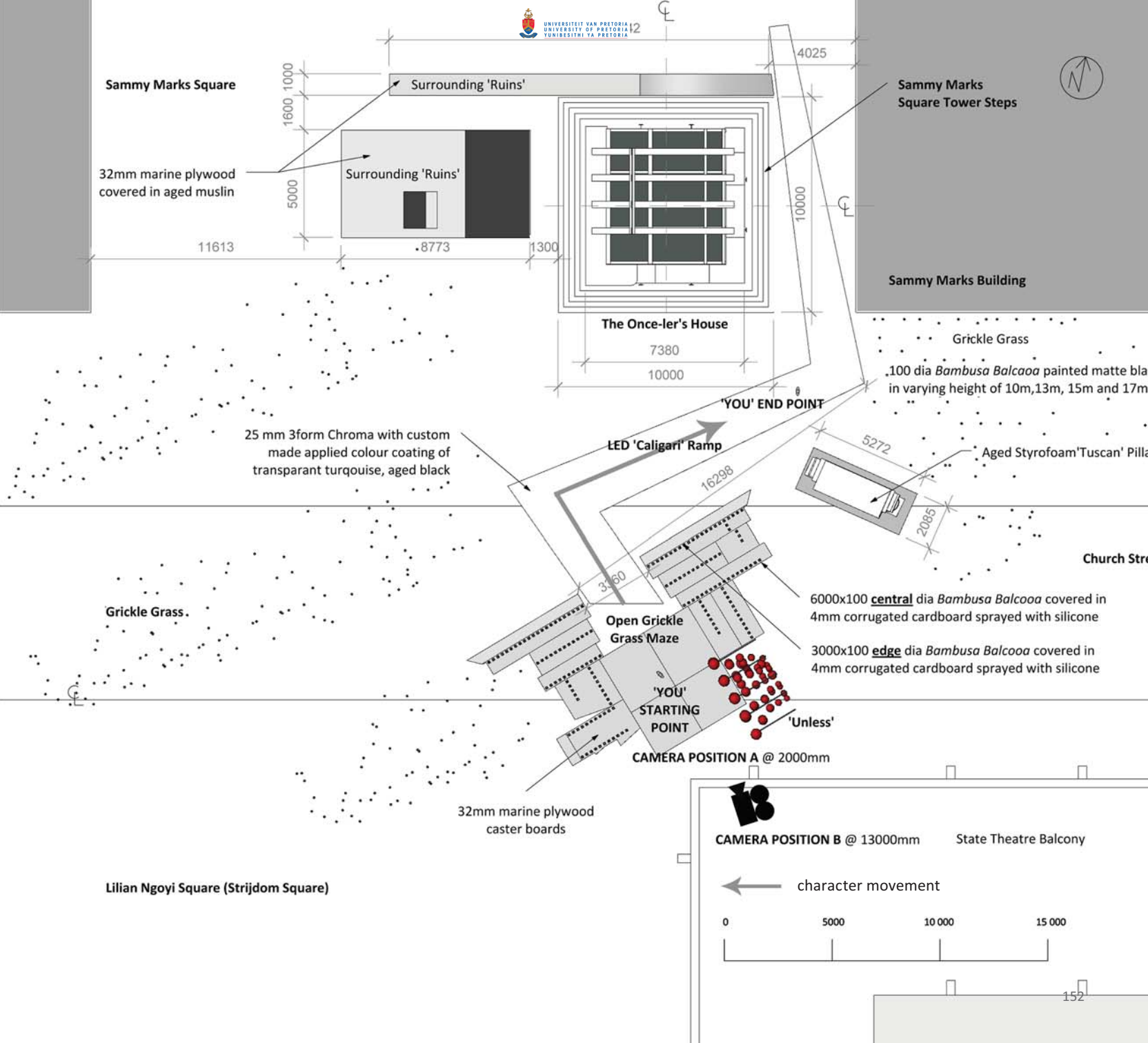

Sammy Marks Square
21686
10000
3800
Sammy Marks Square Tower
Sammy Marks Building
10000
28 000
Grickle Grass
100 dia Bambusa Balcaoa painted matte black, in varying height of 10m,13m, 15m and 17m
32mm marine plywood caster boards
CAMERA START @ 8000mm
ST 30 Super Technocrane
5095
8600
8 600
10800
8 600
36 000
Grickle Grass
8988
Church Street
'YOU' STARTING POINT
28000
CAMERA END @ 6000mm
10800
'YOU END POINT
Grickle Grass
3659
30500
Grickle Grass Maze
6000x100 dia central Bambusa Balcooa covered with 4mm corrugated cardboard sprayed with silicone
State Theatre Balcony
13917
8600
chessboard pattern painted on muslin
3000x100 dia edge Bambusa Balcooa covered in 4mm corrugated cardboard sprayed with silicone
28 000
5008
Lilian Ngoyi Square (Strijdom Square)
Grickle Grass
The State Theatre
camera movement
character movement
0
5000
10 000
15 000

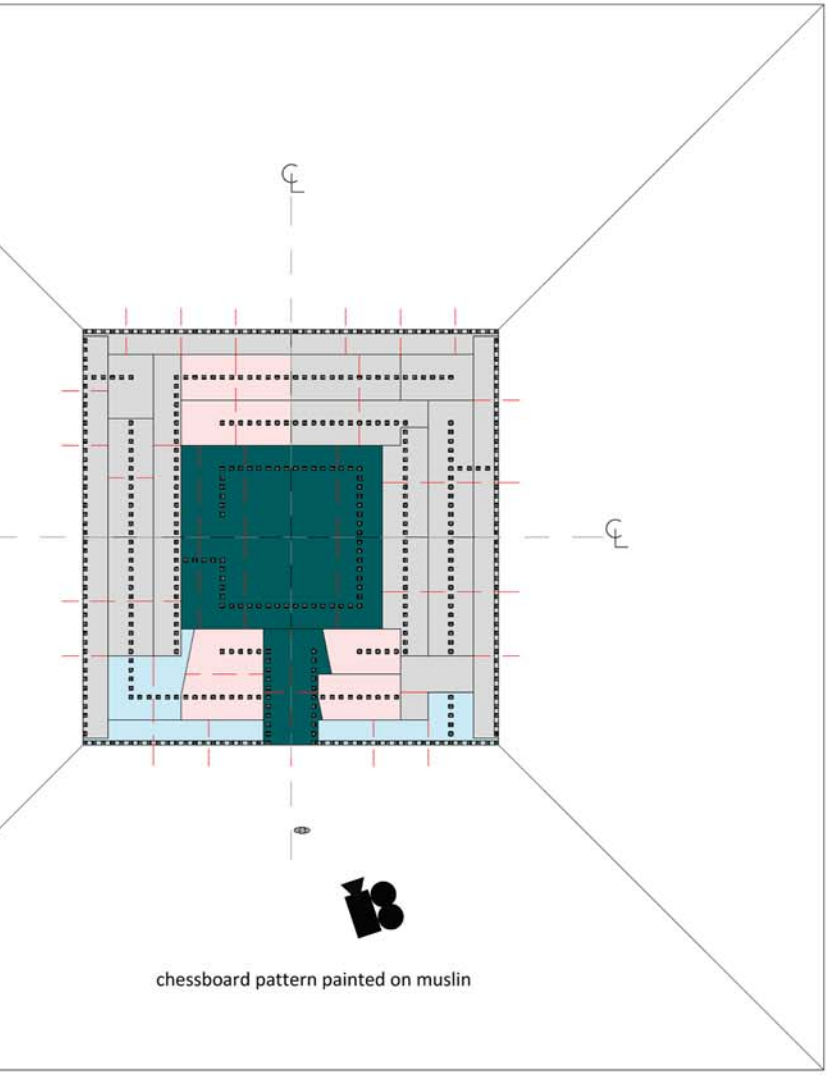




dystopia > Scene no 6, Sequence 3

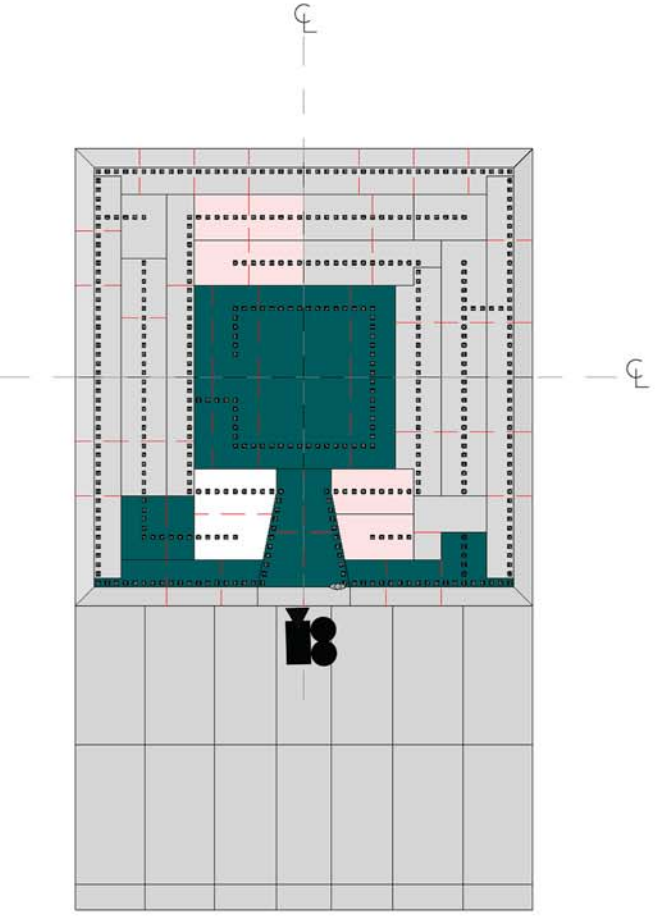
PLAN


Sammy Marks Square
Surrounding 'Ruins'
Sammy Marks
Square Tower Steps
32mm marine plywood
covered in aged muslin
Surrounding 'Ruins'
1000
1600
5000
11613
8773
1300
4025
10000
Sammy Marks Building
The Once-ler's House
7380
10000
Grickle Grass
'YOU' END POINT
25 mm 3form Chroma with custom
made applied colour coating of
transparant turqouise, aged black
LED 'Caligari' Ramp
16298
5272
2085
Aged Styrofoam'Tuscan' Pilla
Church Stre
3360
Grickle Grass
Open Grickle
Grass Maze
6000x100 central dia Bambusa Balcooa covered in
4mm corrugated cardboard sprayed with silicone
3000x100 edge dia Bambusa Balcooa covered in
4mm corrugated cardboard sprayed with silicone
'YOU'
STARTING
POINT
'Unless'
CAMERA POSITION A @ 2000mm
32mm marine plywood
caster boards
CAMERA POSITION B @ 13000mm
State Theatre Balcony
character movement
0
5000
10 000
15 000
Lilian Ngoyi Square (Strijdom Square)

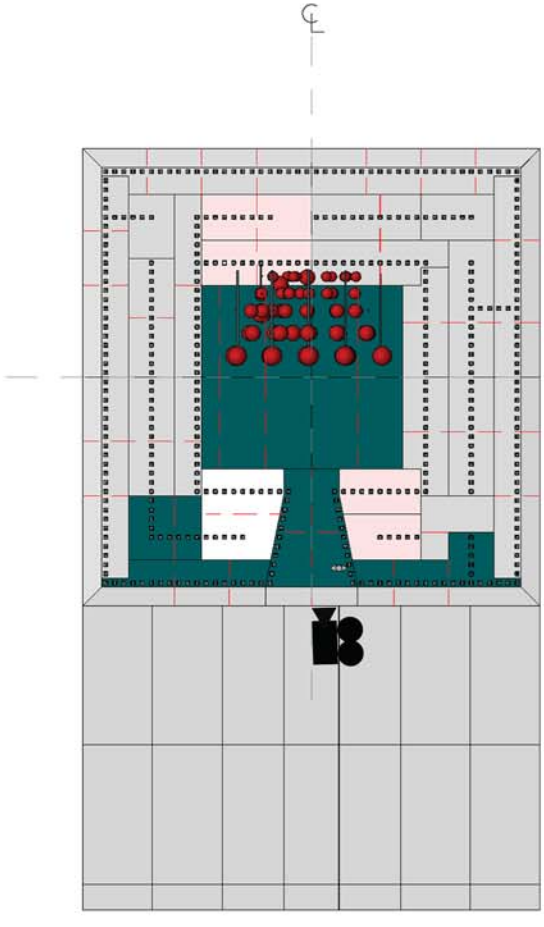


Dystopia Scene 5 Sequence 3a

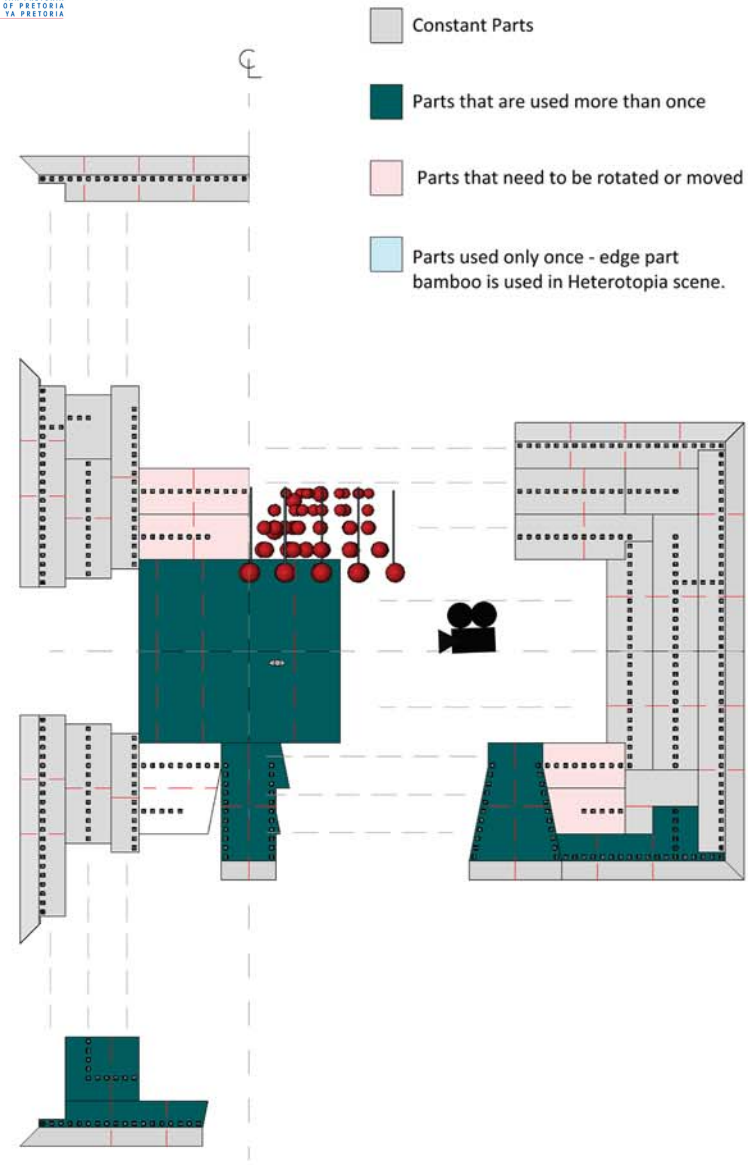
CAMERA POSITION @ 13000mm



Dystopia Scene 5 Sequence 3b

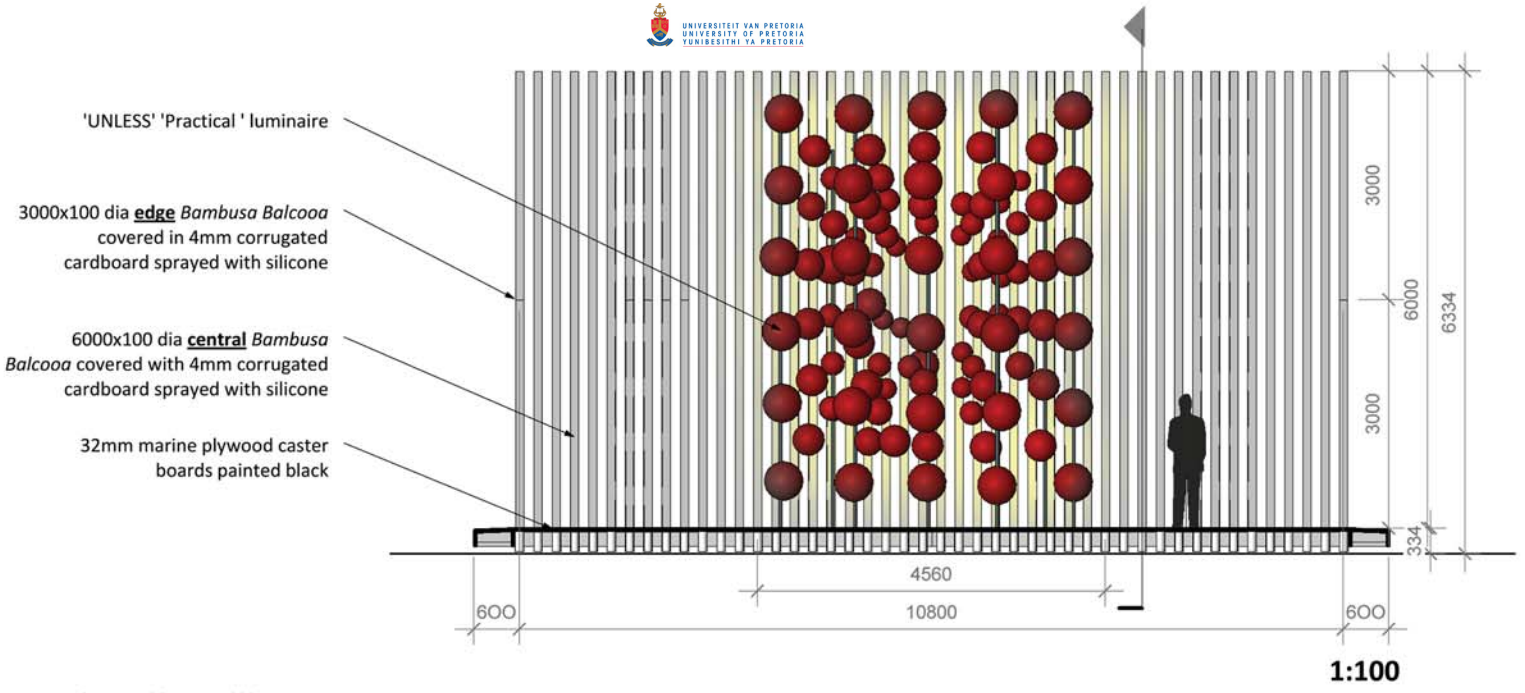


Dystopia Scene 6 Sequence 3

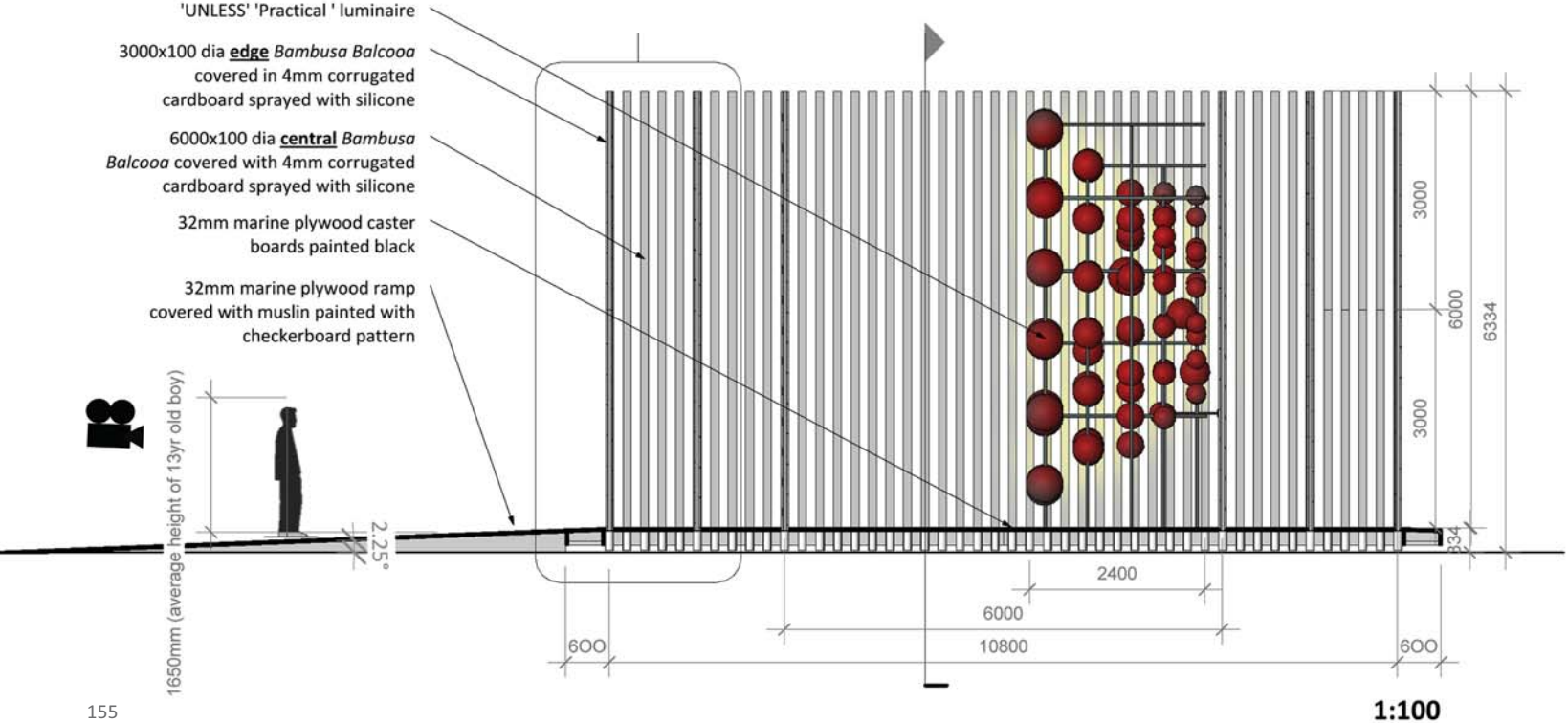


Dystopia Scene 7 Sequence 4

0 2500 5000 7500 10 000

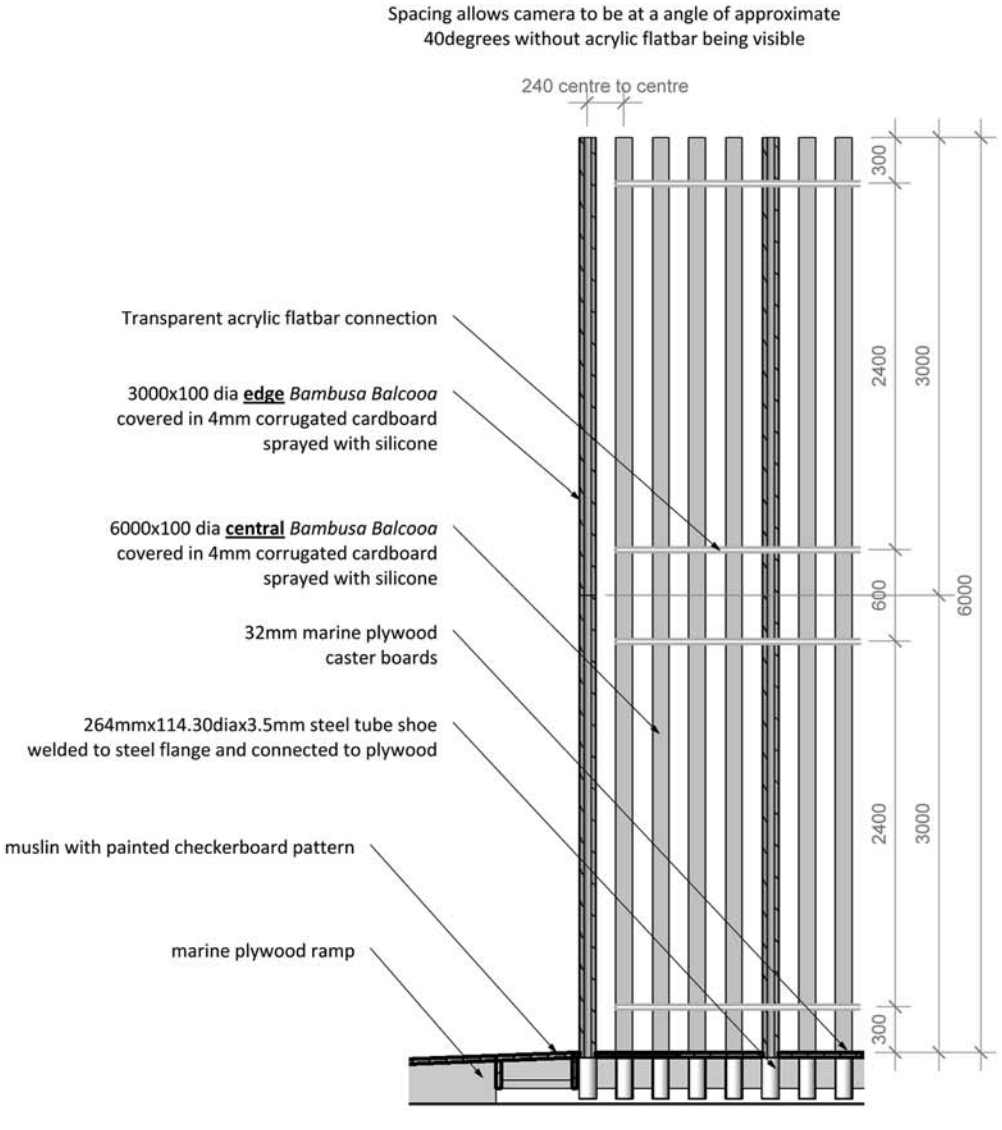

'UNLESS' 'Practical ' luminaire
3000x100 dia **edge** *Bambusa Balcooa* covered in 4mm corrugated cardboard sprayed with silicone
6000x100 dia **central** *Bambusa Balcooa* covered with 4mm corrugated cardboard sprayed with silicone
32mm marine plywood caster boards painted black
3000
6000
6334
3000
334
4560
10800
600
600

1:100


'UNLESS' 'Practical ' luminaire
3000x100 dia **edge** *Bambusa Balcooa* covered in 4mm corrugated cardboard sprayed with silicone
6000x100 dia **central** *Bambusa Balcooa* covered with 4mm corrugated cardboard sprayed with silicone
32mm marine plywood caster boards painted black
32mm marine plywood ramp covered with muslin painted with checkerboard pattern
1650mm (average height of 13yr old boy)
2.25°
3000
6000
6334
3000
334
2400
6000
10800
600
600

1:100

Scene no 6, Sequence 3 **MAZE AND 'UNLESS' SECTIONS**



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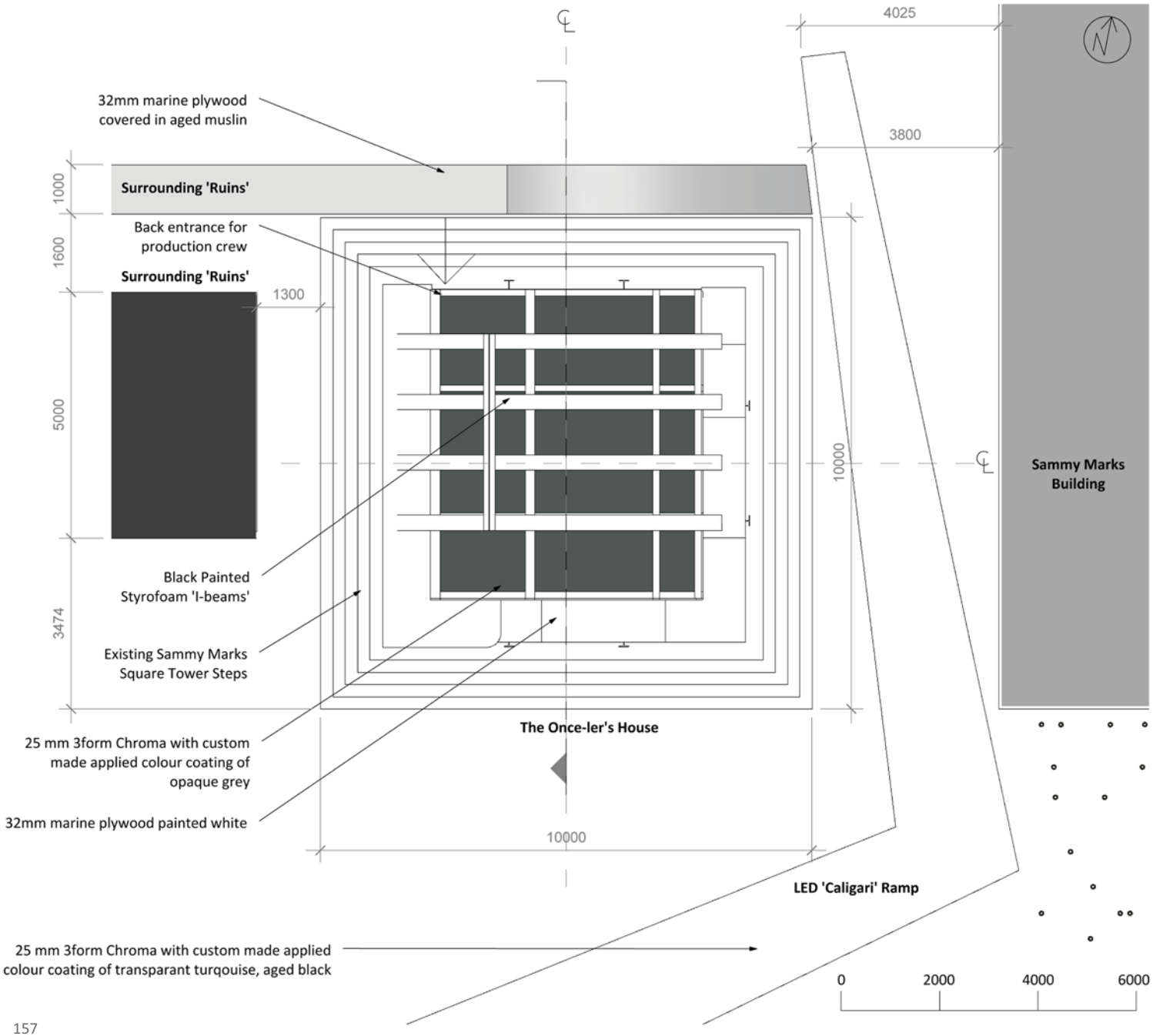
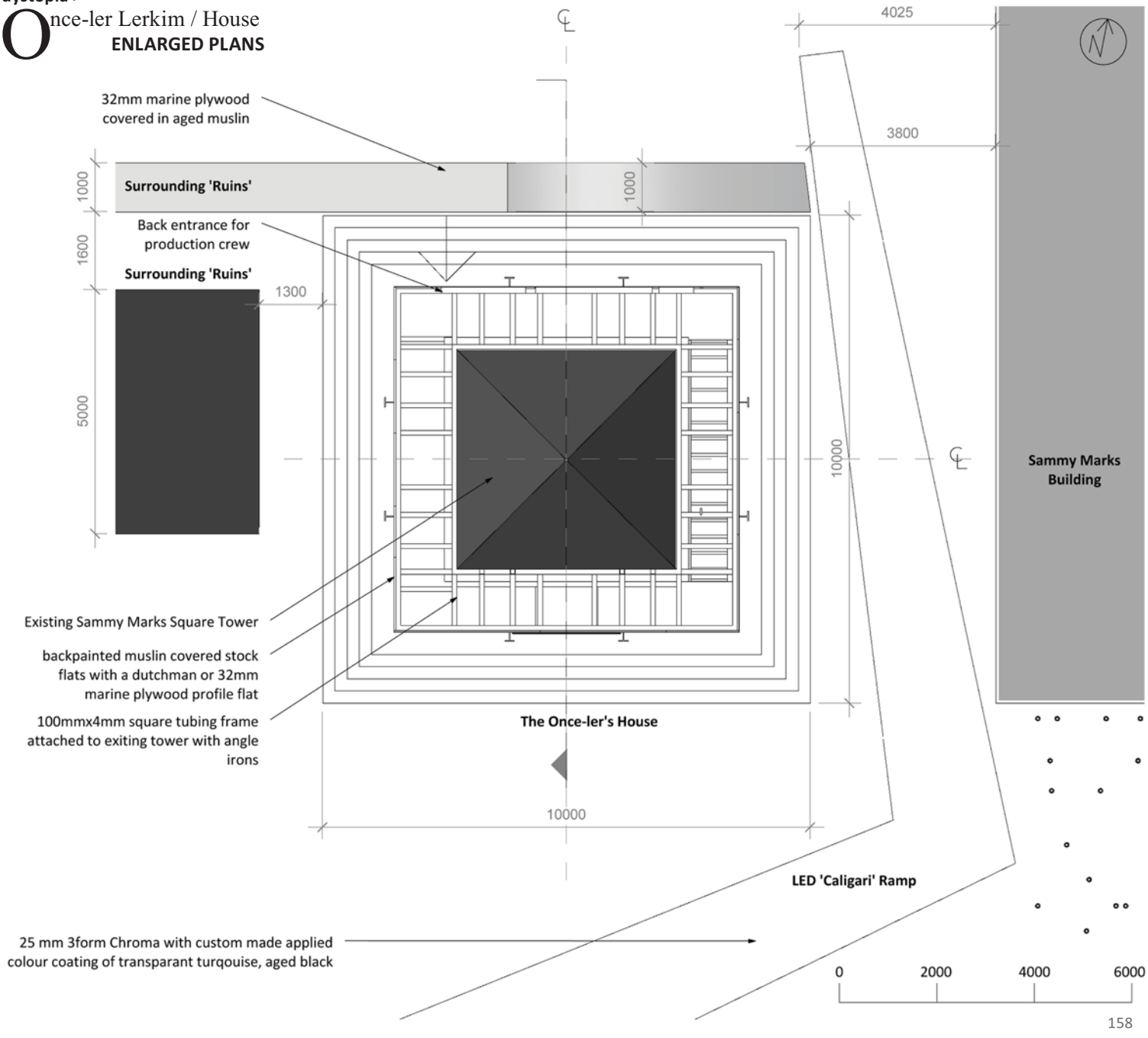
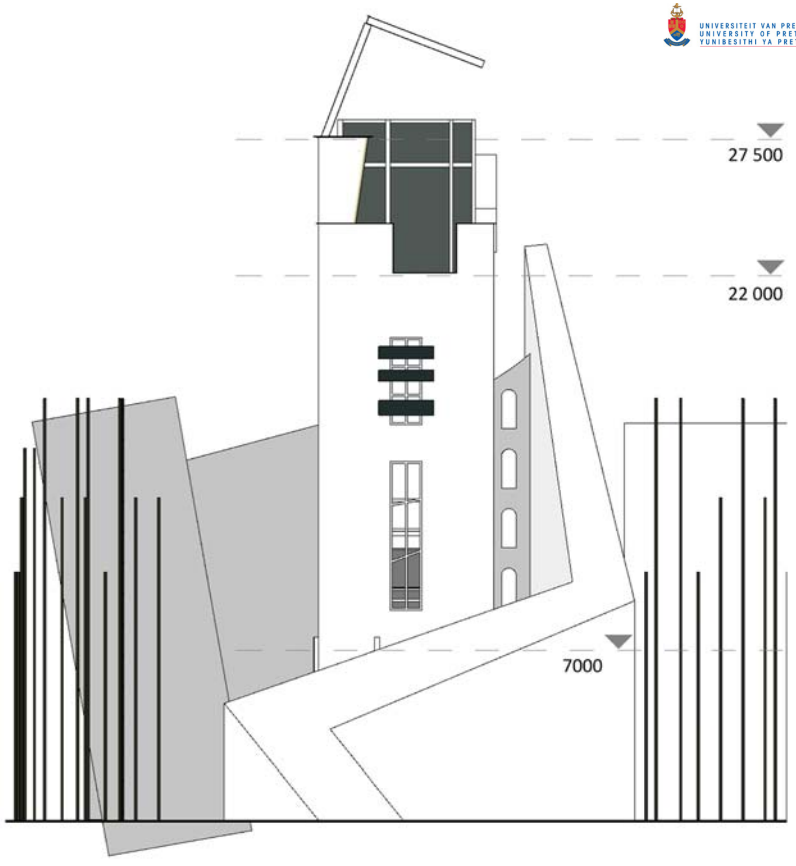
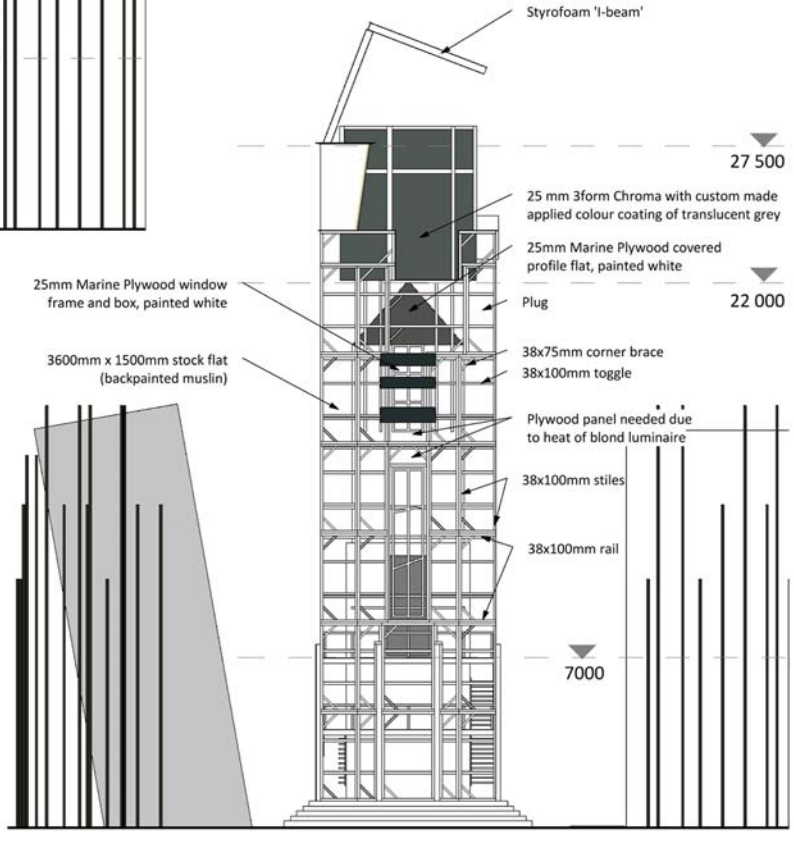

32mm marine plywood covered in aged muslin
Surrounding 'Ruins'
Back entrance for production crew
Surrounding 'Ruins'
1000
1600
5000
3474
1300
4025
3800
10000
Sammy Marks Building
Black Painted Styrofoam 'I-beams'
Existing Sammy Marks Square Tower Steps
25 mm 3form Chroma with custom made applied colour coating of opaque grey
32mm marine plywood painted white
The Once-ler's House
10000
LED 'Caligari' Ramp
25 mm 3form Chroma with custom made applied colour coating of transparant turqouise, aged black
0
2000
4000
6000

ENLARGED PLANS

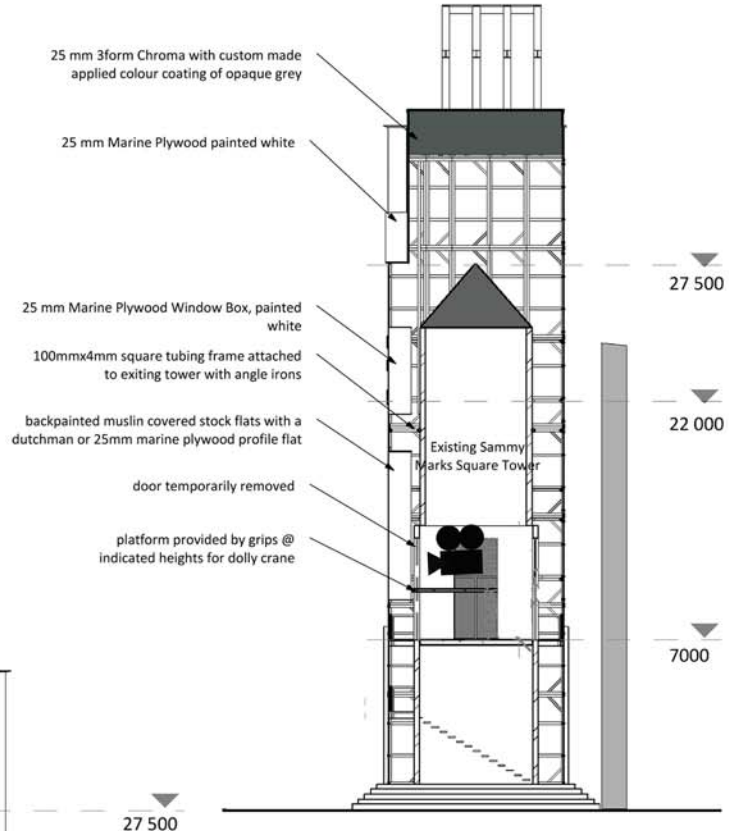


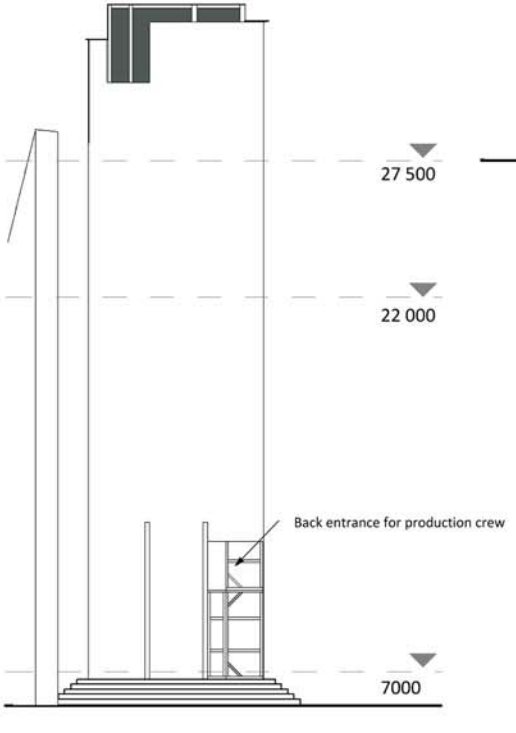
ELEVATIONS & SECTION

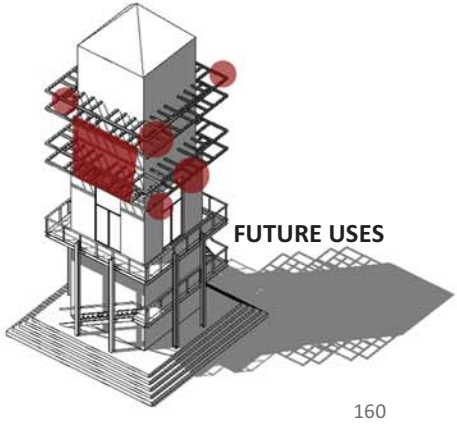


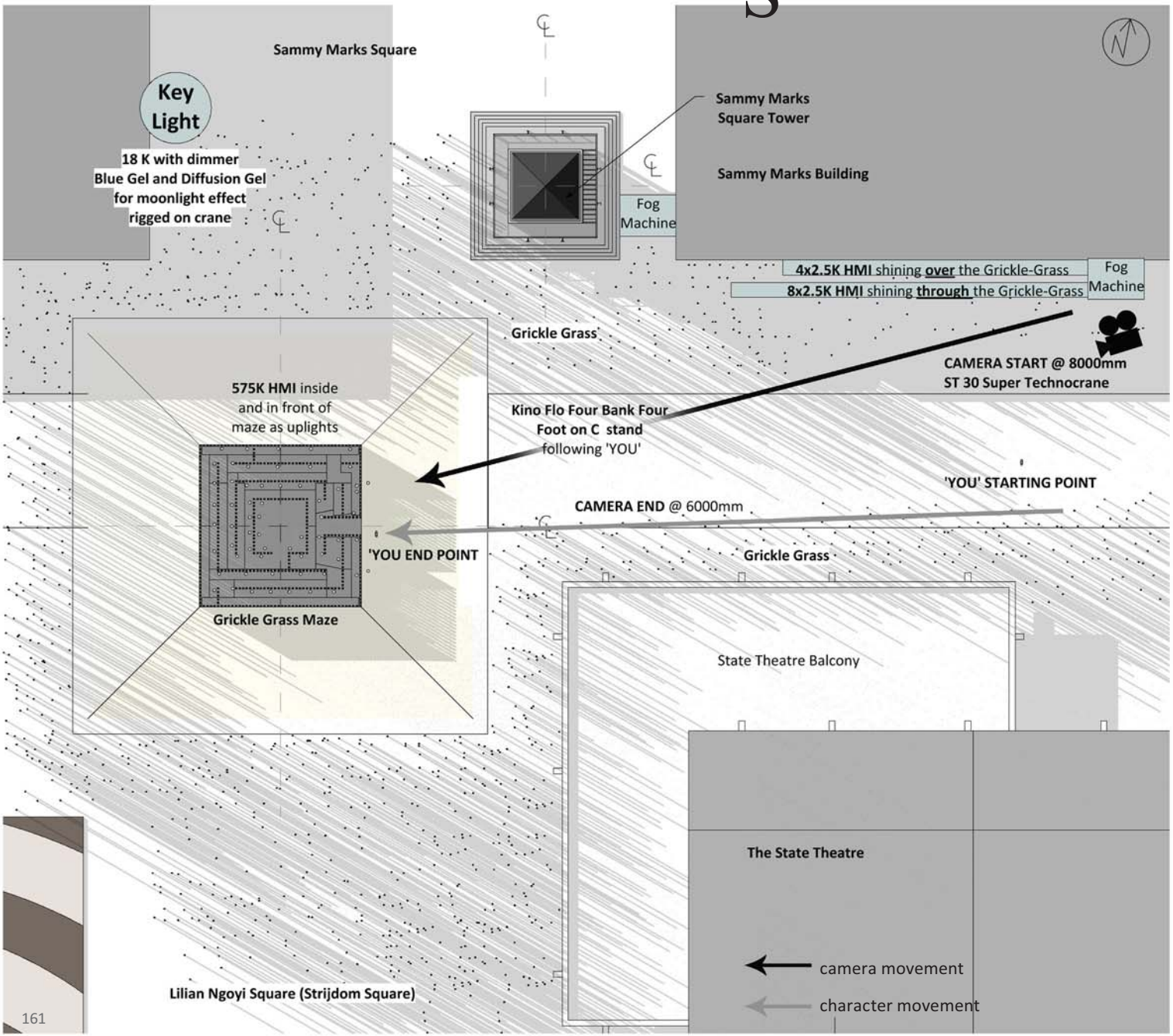


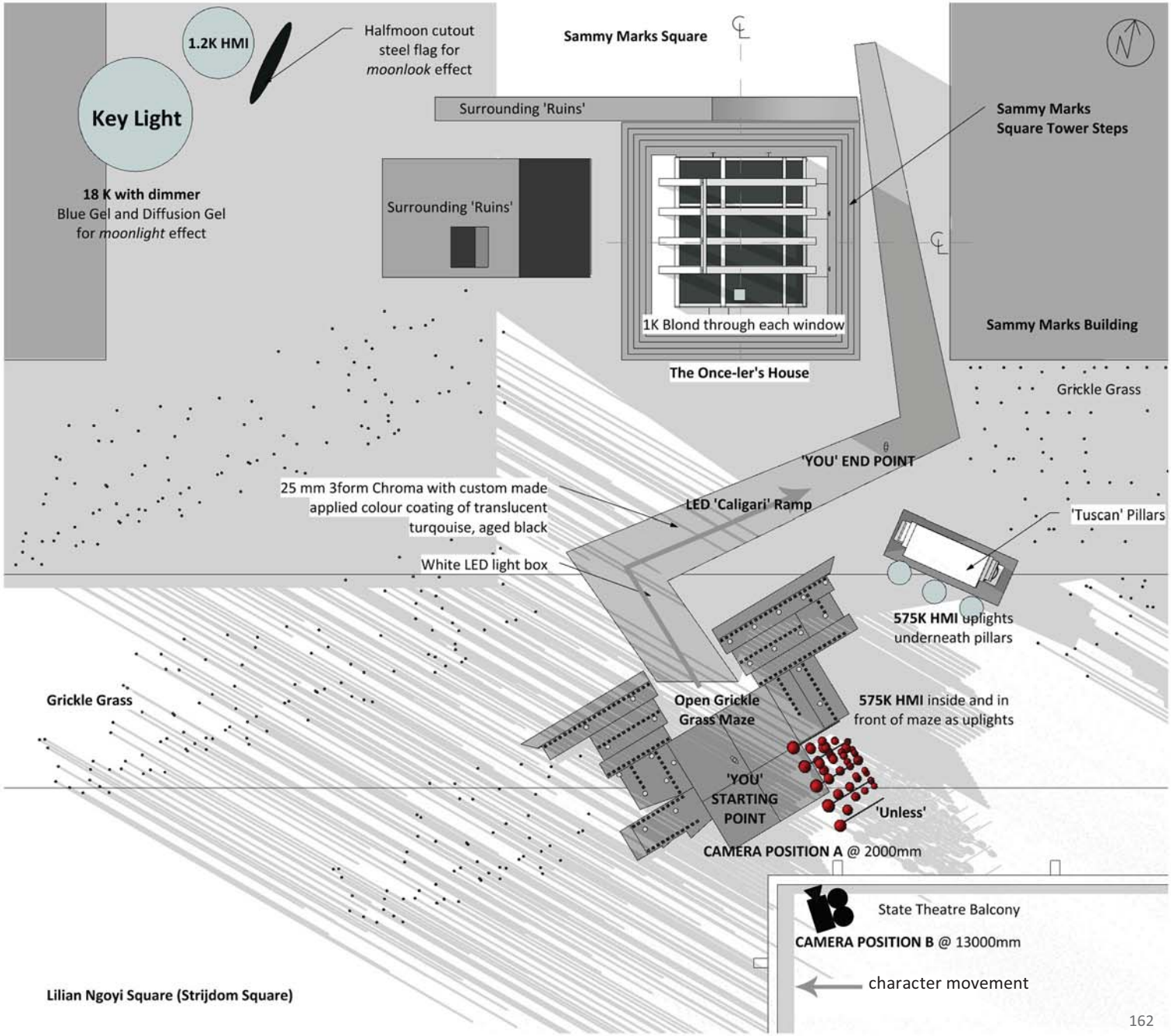
0 2500 5000 7500 10 000

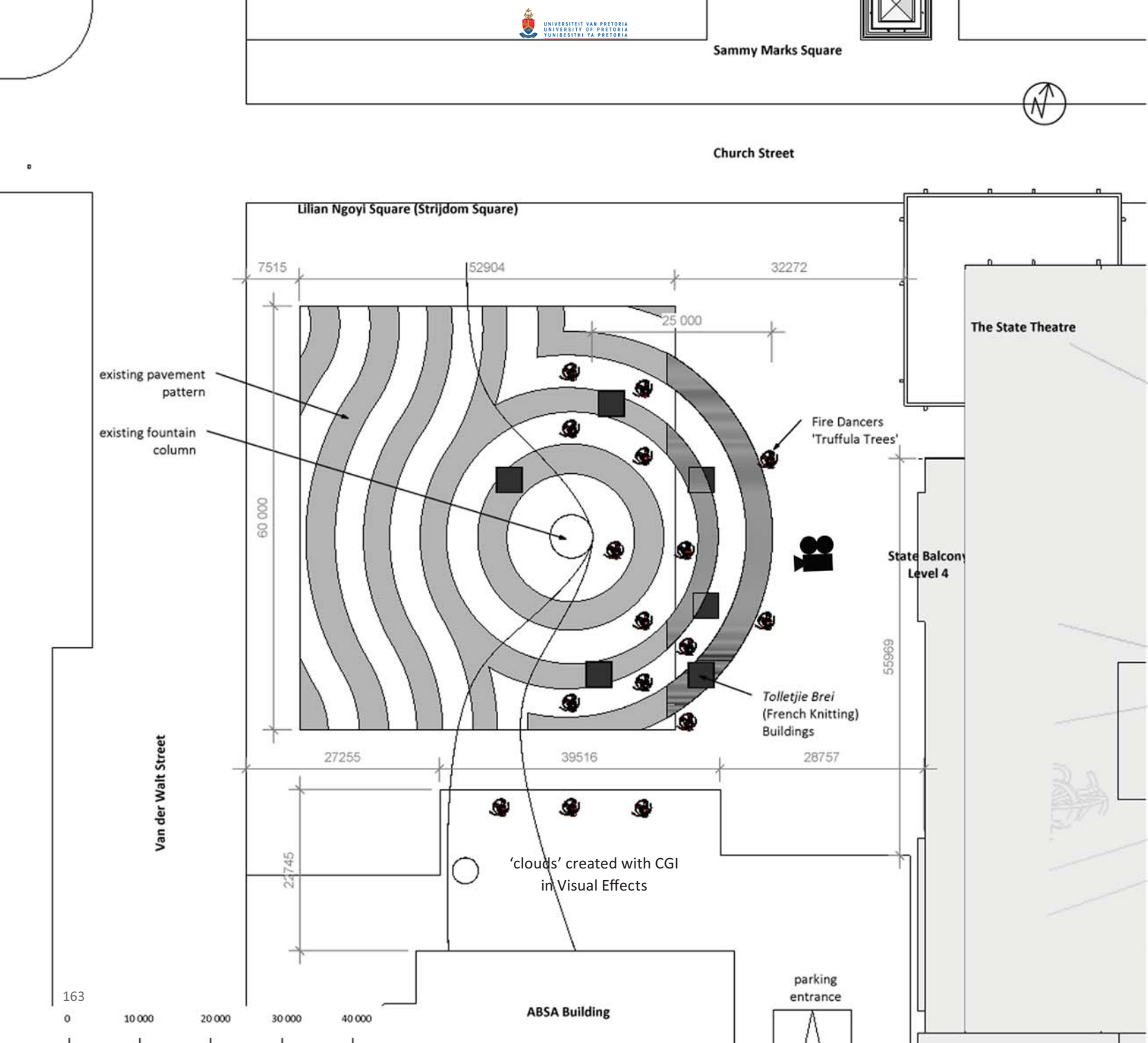

25 mm 3form Chroma with custom made applied colour coating of opaque grey
25 mm Marine Plywood painted white
25 mm Marine Plywood Window Box, painted white
100mmx4mm square tubing frame attached to exiting tower with angle irons
backpainted muslin covered stock flats with a dutchman or 25mm marine plywood profile flat
door temporarily removed
platform provided by grips @ indicated heights for dolly crane
Existing Sammy Marks Square Tower
27 500
22 000
7000

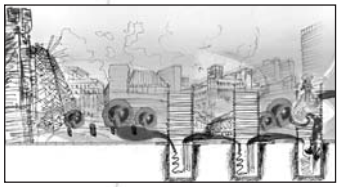

27 500
22 000
Back entrance for production crew
7000

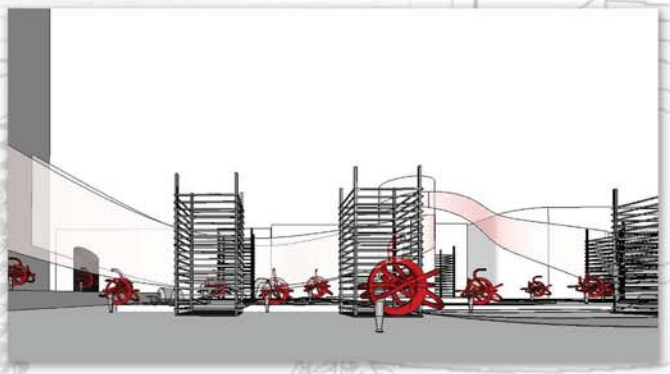

FUTURE USES

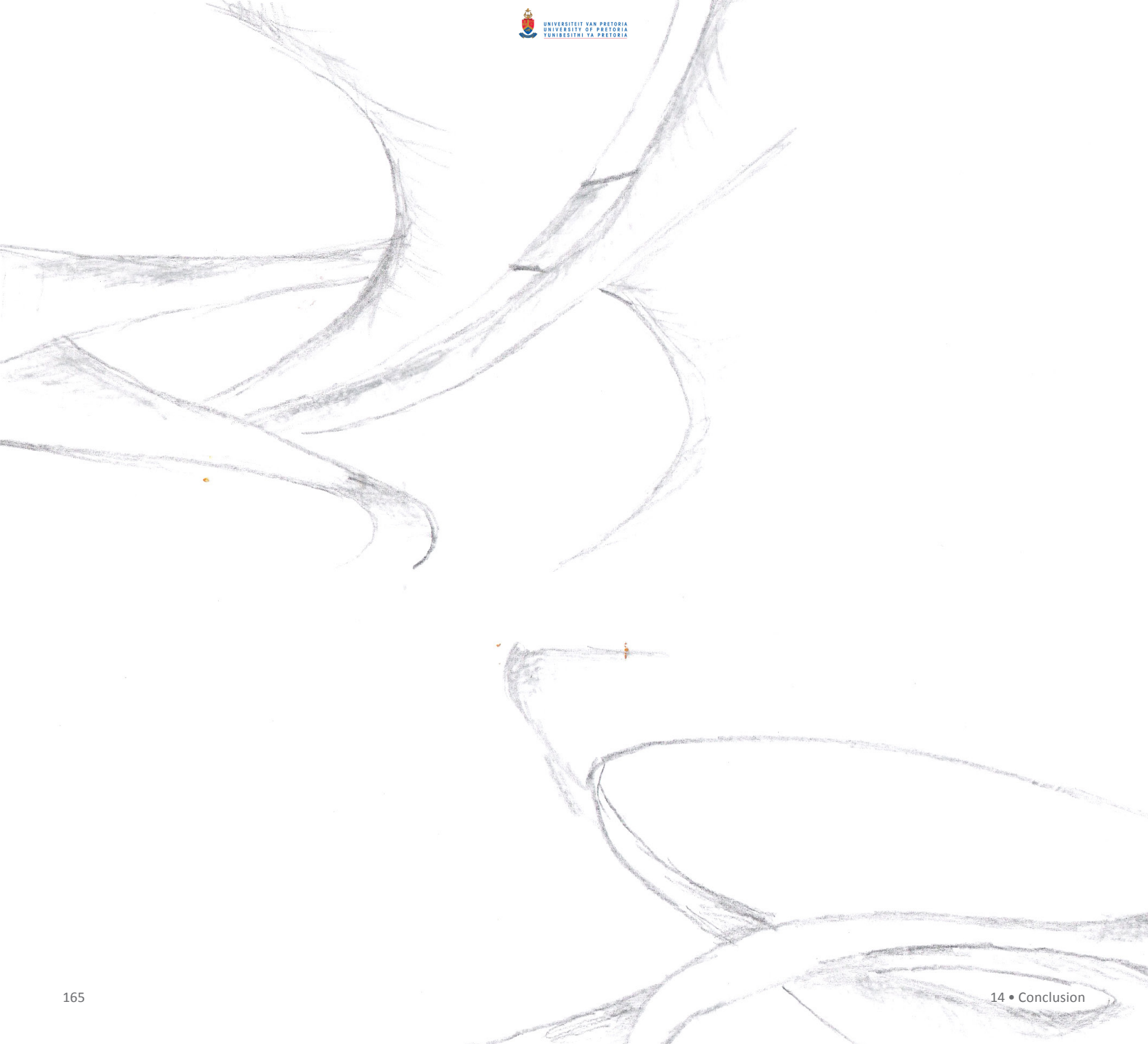

Sammy Marks Square
Key Light
18 K with dimmer
Blue Gel and Diffusion Gel
for moonlight effect
rigged on crane
Sammy Marks Square Tower
Sammy Marks Building
Fog Machine
4x2.5K HMI shining over the Grickle-Grass
8x2.5K HMI shining through the Grickle-Grass
Fog Machine
Grickle Grass
CAMERA START @ 8000mm
ST 30 Super Technocrane
575K HMI inside
and in front of
maze as uplights
Kino Flo Four Bank Four
Foot on C stand
following 'YOU'
'YOU' STARTING POINT
CAMERA END @ 6000mm
'YOU END POINT
Grickle Grass
Grickle Grass Maze
State Theatre Balcony
The State Theatre
camera movement
character movement
Lilian Ngoyi Square (Strijdom Square)


1.2K HMI
Halfmoon cutout steel flag for *moonlook* effect
Key Light
18 K with dimmer
Blue Gel and Diffusion Gel for *moonlight* effect
Sammy Marks Square
Surrounding 'Ruins'
Surrounding 'Ruins'
Sammy Marks Square Tower Steps
1K Blond through each window
Sammy Marks Building
The Once-ler's House
Grickle Grass
'YOU' END POINT
25 mm 3form Chroma with custom made applied colour coating of translucent turqouise, aged black
LED 'Caligari' Ramp
'Tuscan' Pillars
White LED light box
575K HMI uplights underneath pillars
Grickle Grass
Open Grickle Grass Maze
575K HMI inside and in front of maze as uplights
'YOU' STARTING POINT
'Unless'
CAMERA POSITION A @ 2000mm
State Theatre Balcony
CAMERA POSITION B @ 13000mm
character movement
Lilian Ngoyi Square (Strijdom Square)


Sammy Marks Square
Church Street
Lilian Ngoyi Square (Strijdom Square)
7515
52904
32272
25 000
60 000
existing pavement pattern
existing fountain column
Fire Dancers 'Truffula Trees'
The State Theatre
State Balcony Level 4
55969
Tolletjie Brei (French Knitting) Buildings
27255
39516
28757
Van der Walt Street
22745
'clouds' created with CGI in Visual Effects
parking entrance
ABSA Building
0
10 000
20 000
30 000
40 000







14. CONCLUSION

A short summary of the nature of production design was given. The conventions of the discipline and the film industry in general was investigated and applied to a practical example - *The Lorax.*

The following aims were achieved:

> a universal message was applied within the local Pretoria context. The production will have *zeitgeist*, because the universal message links with contemporary world events and South African contexts;

> apart from the 'clouds' in heterotopia and the stars in dystopia, all designs can be physically built;

> the input of the production designer was maximized in the following ways:

1. an underutilized location was chosen;

2. the exact locations for various scenes are only a few meters apart, minimizing time wastage and transportation;

3. key sequence set elements were designed to be adapted into set elements for other sequences. This is the adaptation of the Grickle Grass Maze into the *Tolletjie Brei* (French Knitting) building;

4. sustainable material options were employed as far as possible. Certain elements such as the flats of the Once-ler Lerkim and platforms can be utilized by the State Theatre after the production;

5. the underutilized workshops of the State Theatre can be used for manufacturing sets. This has the added benefit of minimizing transport;

6. a rough concept was devised for the public to be able to view filming take place in a controlled manner;

7. a shadow of the production of *The Lorax* will be left behind with the 'Unless' luminaire remaining on location.

> the message of the narrative was 'going easy on what we've got' - a message that the production design also adhered to;

> the production design is socially and environmentally sustainable;

> the dissertation adheres to film industry standards;

> a brief summary of the discipline of production design was presented with a practical example.

Areas in this dissertation that could have been developed further are:

> The public viewing area

> The concept 'Unless' luminaire remaining on location as a shadow of *The Lorax.*

This dissertation aimed at casting light on the field of production design and its place in society. The discipline has shortcomings, but also vast potential. *The Lorax* not only provided the production design with a way of looking at the production design process, but also a new way of looking at the possibilities of the discipline itself.

A special thank you to my Father in Heaven
"Jesus looked at them and said; With man this is impossible, but with God all things are possible" (Matthew 19:26 NIV).

Dankie Mamma, Pappa, Oom Heine, Tannie Estelle, Sussies, Anja, Elonah, Elze, Excelda, Stephan, Gus & Marie, Raymond, Nico, Emelia, Cornell, Bertus, Me. Boshoff, Klas van 2009, Pretoria.

"Though it may be rendered in images, in words, in music, a mythic city is no mere copy. It is a world unto itself, its pieces seeming interconnected, self-referential, and full - a vital, living counterpart to the city that spawned it. A mythic city embodies the idea of a city, a powerful thing indeed. An idea can travel, after all, as a city cannot – radiating across land and sea into the minds of millions around the world. Those who have never seen or visited the real place can nonetheless imagine it intensely, can picture it. And beyond that, it calls to them, it beckons. They can dream of it" (Sanders 2002:15).

15. REFERENCES

Adler, J.H. 2005. *The Lorax Revisited*. The Commons Blog: Markets protecting the Environment. 28 July 2008.
http://commonsblog.org/archives/000498.php
[accessed 28/03/09]

Aeronautec. S.a. *Aerolight Lichttechnisches Gewebe.* Aeronautec.
http://www.aeronautec.de/material/aerolight.htm
[accessed 22/08/2009]

AFDA. 2009. *The South African School of Motion Picture Medium and Live Performance Prospectus 2010*. Johannesburg, Cape Town: AFDA.

Allen, I. 2000. Screen Size: *The Impact on Picture and Sound*. San Francisco: Dolby laboratories, Inc.

Arnheim, R. 1958. *Film as Art*. London: Faber and Faber Ltd.

ANC. 1967. *Speech at the special meeting of the special committee against apartheid to commemorate the international day for the elimination of racial discrimination (Sharpeville day, 21 March 1967.* ANC.org.
http://www.anc.org.za/un/marof210367.html
[accessed 07/09/2009]

Annazhu.com. [S.a.] *Coraline 3*.
http://www.annazhu.com/blog/images/coraline3.jpg
[accessed 20/06/2009]

Baker-Smith, D.; Barfoot, C.C. (Ed.) 1987. *Between Dream and Nature: Essays on Utopia and Dystopia*. Amsterdam: Editions Rodopi B.V.

Bamboo-oz. S.a. *Bambusa Balcooa (Clumping Bamboo)*. Bamboo-oz.
(http://www.bamboo-oz.com.au/species/B_balcooa.html)
[accessed 24 July 2009]

Barnwell, J. 2004. *Production Design: Architects of the Screen*. London and New York: Wallflower.

Biomass Corporation. 2008. *Bamboo*. Biomasscorp.com.
http://www.biomasscorp.com
[accessed 23 July 2009]

Blackham, H.J. 1985. *The Fable as Literature*. London, Dover : The Athlone Press Ltd.

Block, B. 2001. *The Visual Story: Seeing the Structure of Film, TV, and New Media*. Burlington: Focal Press.

Bogue, R. 2003. *Deleuze on Cinema*. New York, London: Routledge.

Bordwell, D. Thompson, K. 1997. *Film Art: An Introduction*. Fifth Edition. New York et al: The McGraw-Hill Companies Inc.

Box, H.C. 2003. *Set Lighting Technician's Handbook*. Third Edition. S.d.:Focal Press.

Brower C.; Mallory, R.; Ohlman, Z. 2005. *Experimental Eco Design: Architecture/Fashion/Product*. Mies: Rotovision.

Brown, A. 2004. *Making Magic with Materials and Light*. Kateigaho International Edition
http://int.kateigaho.com/mar04/architect-kuma.html
[accessed 13/10/2009]

Brown, B. 1996. *Motion Picture and Video Lighting*. Boston et al: Focal Press.

Brown, G. S.a. *The Steadicam and the Shining*. American Cinematographer.
http://www.visual-memory.co.uk/sk/ac/pag e2.htm
[accessed 20/07/2009]

California Integrated Waste Management Board. 2004. *$2 Million State Loan Helps Looney Bins Expand in L.A.: New Downtown Diversion to recycle more construction & demolition waste.* California Integrated Waste Management Board. 26 March 2004.
http://www.ciwmb.ca.gov/Pressroom/2004/March/11.htm
[accessed 12/08/2009]

Calvino, I. 1974. *Invisible Cities*. London: The Random House Group Limited.

Campbell, D. 2002. *Technical Film and TV for Nontechnical People*. New York: Allworth Press.

Cannell, M. 2009. *Design loves a Depression*. The New York Times, 3 January 2009.
http://www.nytimes.com/2009/01/04/weekinreview/04cannell.html?_r=1
[accessed 28/03/2009]

Carter, P. 1994. *Backstage Handbook: An Illustrated Almanac of Technical Information*. Third Edition. Louisville, Kentucky: Broadway Press.

Carus, F. 2009. *Climate change drama aims for world's most ecofriendly premiere - Green carpet, solar-powered projectors and stars on bikes: London gears up for low-carbon film premiere.* The Guardian. 26 February 2009
http://www.guardian.co.uk/environment/2009/feb/26/the-age-of-stupid-climate-change
[accessed 06/08/2009]

Chapman, J.; Gant; N(Ed.). 2007. *Designers, Visionaries + Other Stories: A Collection of Sustainable Design Essays*. London; Sterling: Earthscan.

Clarke, D.B. (Ed.) 1997. *The Cinematic City*. London and New York: Routledge.

Coelho, P. 1995. *The Alchemist*. San Francisco: Harper.

Coelho, P. 2001. *Veronica Decides to Die*. Perennial: Harper

Coleman, N. 2005. *Utopias and Architecture*. London and New York: Routledge.

DeBoer, D; Bareis, K. in Elizabeth, L; Adams, C. (Ed.) 2005. *Bamboo*. Alternative Construction:Contemporary Natural Building Methods. New York et al: John Wiley & Sons, Inc. p 235 - 254.

De Botton, A. 2006. *The Architecture of Happiness: The Secret Art of Furnishing Your Life*. London: Penguin Books.

Deleuze, G. Translated: Tomlinson, H. Habberjam, B. 1986. *Cinema 1: The Movement Image*. London, New York: Continuum. P204-205, p221-223.

Designboom. 2007. *Designboom: Kengo Kuma - Great (Bamboo) Wall.* Youtube.

http://www.youtube.com/watch?v=xBoeWBdLOCA
[accessed 02/09/2009]

Dezeen. 2009. *Bokja for The Quirico Company*.
http://www.dezeen.com/2009/08/21/bokja-for-the-quirico-company/
[accessed 22/08/ 2009]

Doxiadis, D.A. 1966. *Between Dystopia and Utopia*. Hartford, Connecticut: The Trinity College Press.

Duncan, P. 2003. *Stanley Kubrick: Visual Poet 1928-1999*. Köln: Taschen.

Durning, A.T. 1992. *How Much is Enough? The Consumer Society and the Future of the Earth*. London, New York: W.W. Norton & Company.

Dvdbearer.com. S.a. The Shining Maze.
http://www.dvdbeaver.com/film/Reviews/shin/lookit%20maze.gif
[accessed 20/07/ 2009]

E-architect. 2008. *Great Bamboo Wall*. E-architect.
http://www.e-architect.co.uk/japan/jpgs/great_bamboo_wall_kk090908.jpg
[accessed 13/09/2009]

Earth Day Network. 2009. *History of Earth Day*. Earth Day Network.
http://www.earthday.net/node/77
[accessed 31/08/2009]

Eekhout, M.; Verheijen, F.; Visser, R. 2008. (Eds.) *Cardboard in Architecture*. Delft: Delft University of Technology.

Eisenstein, S. 1968. *Colour and Meaning*. The Film Sense. London: Faber and Faber Limited.

Film and Entertainment Recycling Initiative (FaERI). S.a. *Film and Entertainment Recycling Initiative (FaERI)*
http://faeri.org/departments.html
[accessed 23/08/2009]

Film Sound.org. 1997. *MOS; Prodution Sound*. FilmSound.Org
http://filmsound.org/terminology/mos.htm
[accessed 31/08/2009]

Fisher, A.; Gerster, G. 2000. *The Art of the Maze*. Phoenix: Phoenix Illustrated.

Flemmons, K.; Cunningham, LB. 2006. *Discovering Bamboo*. Mount Vernon, WA: Boo-Shoot Gardens.

Flickr. s.a. *The Science of Sleep*. Flickr.com
http://farm1.static.flickr.com/96/237186842_1c0508586b.jpg?v=0
[accessed 09/05/2009]

Footprint Films. Unknown. *Inside Out : Escape from Pretoria*. IMDbPro
http://pro.imdb.com/title/tt1334245/storyline

[accessed 27/04/2009]

Foucault, M. 1967. *Of Other Spaces, Heterotopias*. Foucault Info.
http://www.foucault.info/documents/heteroTopia/foucault.heteroTopia.en.html
[accessed 21/05/2009]

Garvy, H. 2007. *Before You Shoot*. Fourth Edition. California: Shire Press

Geisel, A.S. 1971. *The Lorax*. London, Glasgow: W Collins Sons & Co.

Hasluck, P.N.(Ed.). 2006. *How-To Bamboo: Simple Instructions and Projects*. Atglen: Schiffer Publishing Ltd.

Higgens, S. 2007. *Harnessing the Technicolor Rainbow: Color Design in the 1930s*. Austin: University of Texas Press.

Himmelsbach, E. 2008. *New Popularity for Dr. Seuss' 'The Lorax'*. Los Angeles Times. 14 December 2008
http://www.latimes.com/features/books/la-ca-lorax14-2008dec14,0,5975279.story
[accessed 28/03/09]

Hook, D. 2005. *Monumental Space and the Uncanny*. London: LSE Research Online.
http://eprints.lse.ac.uk/archive/951
[accessed 26/04 2009]

Howell, R.T. Hill, G. 2009. *The Mediators of Experiential Purchases: Determining the impact of psychological needs satisfaction and social comparison*. San Francisco State University. 3 June 2009.
http://bss.sfsu.edu/rhowell/Publications.htm
[accessed 08/07/2009]

IANS. 2008. *Scientists create waterproof paper out of sugarcane waste*. Thaindian News. 14 August, 2008
http://www.thaindian.com/newsportal/enviornment/scientists-create-waterproof-paper
[accesed 22/10/2009]

Icon Magazine Online. 2007. *Why Design Needs a Recession*. Icon Magazine Online.
http://www.iconeye.com/index.php?option=com_content&view=article&id=2366:why-design-needs-a-recession--icon-050--august-2007
[accessed 28/03/2009]

Internet Movie Database (IMDb). 2009. *Movie Terminology Glossary*. IMDb
http://www.imdb.com/Glossary
[accessed 08/06/2009]

Internet Movie Database (IMDb). 2009. *Rope*. IMDb
http://www.imdb.com/title/tt0040746/
[accessed 26/05/2009]

Internet Movie Database (IMDb). 2009. *The Shining*. IMDb
http://www.imdb.com/Glossary
[accessed 20/07/2009]

Ingham, R. 1998. *From Page to Stage: How Theatre Designers Make Connections Between Scripts and Images.* Portsmouth : Heineman

Janneke, A. 2009. *Personal Communication*. Technical Manager Volkskas Building. 29 April 2009.

Janssen, J.J.A. 1988. *Building with Bamboo: A Handbook*. London: Intermediate Technology Publications.

Jasonic.com. 2009. Impressionism. Jasonic.com
http://www.jahsonic.com/Impressionism.html
[accessed 20/03/09]

Katz, S. 1991. *Film Directing Shot by Shot: Visualizing from Concept to Screen*. Studio City, California: Michael Wiese Productions.

Kellyquinn. S.a. *Creepy Forest.*
http://kellyquinn.files.wordpress.com/2008/11/creepy-forest.jpg
[accessed 11/06/09]

Lebeko, J.; Dreyer, E. 2009. *Dystopia*. Pretoria: Unisa.

Library of Congress. 2002. *Great Depression and World War II, 1929-1945: Art and Entertainment in the 1930s and 1940s*. The Library of Congress

http://memory.loc.gov/learn/features/timeline/depwwii/art/art.html
[accessed 25/03/09]

Lim, C.J. 2000. *Sins + Other Spacial Relatives*. London: Studio 8 Architects Ltd.

LoBrotto, V. 2002. *The Filmmaker's Guide to Production Design*. New York: Allworth Press.

Logan, G.M.; Adams, R.M. 2002.(Ed.). More, T. *Utopia.* Revised Edition. Cambridge: Cambridge University Press.

Lone Star College. 2008. *American Cultural History 1930-1939*. Lone Star College – Kingswood.
http://kelibrary.lonestar.edu/decade30html
[accessed 25/03/09]

Louw, C. 2009. *Personal Communication*. Cinematographer. 26 August 2009.

Maier, R.G. 1994. *Location Scouting and Management Handbook*. Boston, London: Focal Press.

Maingard, J. 2007. *South African National Cinema*. New York: Routledge.

Mamer, B. 2002. *Film Production Technique: Creating the Accomplished Image*. Second Edition. Stamford et al.: Wadsworth/Thomson Learning.

McCarthy, C. 2005. Towards a Definition of Interiority. Space and Culture 2005; 8; 112. Sage Publications.
http://sac.sagepub.com/cgi/reprint/8/2/112
[accessed 02/04/2009]

Matspec Chroma. 2008. *3form Chroma*. 3form Inc.

Media Film Service. 2007. *Rental Catalogue 2008-2009*. Media Film Service.
http://www.mediafilmservice.com
[accessed 03/09/2009]

Millerson, G. 1991. *Lighting for Television and Film*. Oxford: Focal Press.

Mogoshane, S. 2009. *Personal Communication*. Locations Officer at Gauteng Film Office.

Mohen, D. 2009. *Personal Communication*. Lighting Designer Airstarlight and Pixocom.

Movie Camera Company. 2008. Movie Camera Company 2008 Catalogue. Movie Camera Compay
http://www.moviecamera.co.za
[accessed 24/08/2009]

National Mission on Bamboo Applications (NMBA). 2009. *Bambusa Balcooa*. National Mission on Bamboo Applications: Gallery on Species.
http://www.bambootech.org/showgallery.asp?catid=5
[accessed 21/08/2009]

Naturebright. S.a. *Colour Temperature in Degrees Kelvin*. Naturebright
http://www.naturebright.com/images/colour-temperature.gif
[accessed 25/09/2009]

Nussbaum, B. 2007. *Are Designer's the Enemy of Design?* Nussbaum on Design. Businessweek, March 18 2007.
http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2007/03/are_designers_t.html
[accessed 04/09/2009]

Outside - Hollywood. 2009. *Colour Theory for Cinematographers*. Outside-Hollywood, 5 March 2009.
http://www.outside-hollywood.com/2009/03/color-theory-for-cinematographers/
[accessed 24/08/2009]

Pallasmaa, J. 2001. *The Architecture of Image: Existential Space in Cinema*. Helsinki: Rakennustieto Publishing.

Pauw, S., Botha, H., et al. 1969. *Volkskas hoofgebou op Strijdomplein Pretoria*. 6 December 1969. Pretoria.

Pearce, P. 2009. *Personal Communication*. Biomass Corporation.

Photobucket.com S.a. *A Clockwork Orange*.
http://media.photobucket.com/image/a+clockwork+orange+shadow/miguecastano/a_c
[accessed 29/09/2009]

Preston, W. 1994. *What an Art Director Does: An Introduction to Motion Picture Production Design*. Beverly Hills: Silman-James Press.

Raubicheck, W.; Srebnick,W. (Ed.) 1991. *Hitchcock's Rereleased Films: From Rope to Vertigo*. Detroit: Wayne State University Press.

Raoul, B. 1990. *Stock Scenery Construction Handbook*. Shelter Island, N.Y.: Broadway Press.

Rickitt, R. 2006. *Special Effects: The History and Technique*. London: Aurum Press Ltd.

Rizzo, M. 2005. *The Art Direction Handbook*. Oxford: Focal Press.

Rosco Laboratories. 2009. *Rosco US : Technotes - Fog Products.* Rosco US.
http://www.rosco.com
[accessed 20/09/2009]

Sahistory.org. Unknown. *South African Film – Where have all the Features gone?*
http://www.sahistory.org.za/pages/artsmediaculture/arts/performance/film/features.htm
[accessed 3 May 2009]

Sahistory.org. Unknown. *South African History Timelines: The Women's struggle against Apartheid & for Women's Rights 1900-present day*.
http://www.sahistory.org.za/pages/chronology/special-chrono/governance/womens-struggle.html
[accessed 04/05/2009]

Sanders, J. 2002. *Celluloid Skyline*. New York: Alfred A. Knopf.

Saunderson-Meyer, W. 1979. *Pretoria's heart is ugly and cold, say architects*. Rand Daily Mail, 23 November 1979, p5.

Scheer, J. 2004. *How to Build with Bamboo*. Layton, Utah: Gibbs Smith Publisher.

Screenwriting.info. 2009. *Glossary.* Screenwriting.info. Ink to Pixel.
http://www.screenwriting.info/glossary.php
[accessed 08/07/2009]

Skillset. S.a. *The Construction Department*. Skillset.
http://www.skillset.org/film/jobs/construction/
[accessed 22/07/2009]

Smith, G.M. 2003. *Film Structure and the Emotion System*. Cambridge: Cambridge University Press.

S.n. S.a. *Pretoria*. Allexperts.com
http://en.allexperts.com/e/p/pr/pretoria.htm
[accessed 16 /08/2009]

Soanes, C. (Ed.), Hawker, S. 2006. *Compact Oxford English Dictionary for Students*. Oxford: Oxford University Press.

Spoto, D. 1992. *The Art of Alfred Hitchcock: Fifty Years of His Motion Pictures*. Second Edition. New York et al. : Anchor Books.

State Theatre Pretoria. 1981. *Staatsteater Pretoria – Gedenksbrojure*. Pretoria: State Theatre.

State Theatre. S.a. *The State Theatre*.
http://www.statetheatre.co.za
[accessed 02/05/2009]

Stockenström, W. 1973. *Spieël van Water.* Laat Berig. Cape Town, Pretoria: Human & Rosseau.

Stoller, B.M. 2003. *Filmmaking for Dummies*. Indiana: Wiley Publishing, Inc.

Stolly, C. 2009. *Personal Communication*. Fire Dancer. August 2009.

Tashiro, C. 2008. *Production Design*. Film Reference. Advameg Inc.
http://www.filmreference.com/encyclopedia/Independent-Film-Road-Movies/Production-Design.html
[accessed 03/05/2009]

Tashiro, C.S. 1998. *Pretty Pictures: Production Design and the History Film*. Austin: University of Texas Press.

The Movie Camera Company. 2008. *2008 Catalogue*. MCC Logical Designs.
http://www.moviecamera.co.za
[accessed 24/08/2009]

Tomaselli, K. 1981. *The S.A. Film Industry. Index of Feature Films Made in South Africa 1910-1980*. Johannesburg: University of Witwatersrand.

Tumminello, W. 2005. *Exploring Storyboarding*. New York: Thomson Delmar Learning.

University of Pretoria. 2009. *Degrees in Interior Architecture*. Faculty of Engineering, Built Environment and Information Technology (Part 2): Regulations and Syllabi. Pretoria: University of Pretoria

Van Boven, L. 2005. *Experientialism, Materialism, and the Pursuit of Happiness*. Educational Publishing Foundation. Review of General Psychology 2005, Vol. 9, No. 2, 132–142.
http://psych.colorado.edu/~vanboven/VanBoven/Publications_files/vanboven_rgp_2005.pdf
[accessed 08/07/2009]

Van Boven, L.; Gilovich, T. 2003. *To Do or to Have? That Is the Question*. American Psychological Association, Inc. Journal of Personality and Social Psychology 2003, Vol. 85, No. 6, 1193–1202.
http://www.psych.cornell.edu/sec/pubPeople/tdg1/VB_&_Gilo.pdf
accessed 08/07/2009]

Van der Merwe, C. 2009. *Personal Communication*. Car Park Manager State Theatre. 28 April 2009.

Van der Walt, B. 2009. *Personal Communication*. Producer and Film Crew; Set Constructor for *District 9*. August and September 2009.

Van Graan, H.J. 2009. *Personal Communication*. Economist. March 2009.

Van Sijll, J. 2005. *Cinematic Storytelling: The 100 Most Powerful Film Conventions Every Filmmaker Must Know*. Studio City, California: Michael Wiese Productions.

Viljoen, G. 2009. *Personal Communication*. Technical Director State Theatre. 28 April 2009.

Von Geyso, C. 2009. *Personal Communication.* Structural Engineer. 18 September 2009.

Von Vegesack, A.; Kries, M.(Eds). 2000. *Grow Your Own House - Simon Velez and Bamboo Architecture*. S.d: Vitra design Museum.

Weavind (Roux), E. 2009. *Personal Communication*. Production Designer, Set Decorator, Art Director. 20 April 2009. Thokoza.

Wilkie, B.1996. *Creating Special Effects for TV and Video*. Third Edition. Oxford: Focal Press.

Winslow, C. 2006. *The Handbook of Set Design*. Marlborough, Wiltshire: Crowood Press Ltd.

Wollen, P. 2002. *Paris Hollywood: Writings on Film*. London and New York: Verso.

Wordpress.com. S.a. *The Shining Maze Steadicam*. Wordpress.com
http://verdoux.files.wordpress.com/2009/06/the-shining-maze-steady-cam.jpg
[accessed 20/07/ 2009]

YouTube.com. 2009. *Alice in Wonderland Official Trailer*. YouTube. com
http://www.youtube.com/watch?v=LjMkNrX60mA
[accessed 03/10/2009]

Zettl, H. 2000. *Television Production Handbook*. Seventh Edition. Various: Wadsworth Thomson Learning.

FILMOGRAPHY

Blomkamp, N. 2009. *District 9*. S.d.: Sony Pictures.

Fleming, V. 1939. *The Wizard of Oz*. S.d.: Turner Entertainment Company.

Gondry, M. 2006. *The Science of Sleep.*

Hitchcock, A. 1948. *Rope.* California: Universal Studios.

Kubrick, S. 1980. *The Shining*. S.d.: Warner Brothers.

Lang, F. 1919-1920. *Das Cabinet des Dr. Caligari (The Cabinet of Dr. Caligari).* S.d.: Decla-Bioscop AG.

Miyazaki, H. 2001. *Spirited Away*. S.d.: Studio Ghibli.

Selick, H. 2009. *Coraline*. S.d. Focus Features. S.d. Partizan.

A. GLOSSARY

action image

An image in Deleuze's cinematic taxonomy. Occurs when a living image acts on the affection image (Bogue 2003:4).

aerial shot

"An extremely high-angle view of a subject, usually taken from a plane, helicopter, crane or stationary elevated camera position" (Katz 1991:357).

affection image

The affection felt after perceiving something through the perception image, before an action is taken (Deleuze 1986:221-2).

ageing

"Creating the effect of the passage of time on surfaces/objects" (Barnwall 2004:124).

animatic

1. "An animatic is a moving storyboard that helps the director of a production determine how scenes flow together" (Tumminello 2005:210).
2. According to Rizzo (2005:59-60; 306) an animatic analyzes storyboard frame by means of a computer generated images according to plan, elevation, isometric sketches, set info, camera info and additional equipment info where applicable.

art department

"The team who work under the supervision of the production designer, includes the art director, set decorator, scenic artist and property master" (Barnwall 2004:124; Rizzo 2005:317).

art director (AD)

"Previously the head of the art department, now the person who works directly beneath the production designer, executing the designing of the sets" (Barnwall 2004:124). Also responsible for the budget and art department (Rizzo 2005:317).

aspect ratio

"The relationship of the frame's width to its height" (Bordwell and Thompson 1997:477) eg. 1.85:1, which is the American standard for widescreen format (Katz 1991:357 and Rizzo 2005:306). "The first number in an aspect ratio indicates the frame's width, relative to its height" (Tumminello 2005:22).

assistant director (1st AD)

The assistant director is the "...crew member primarily responsible for organization and efficiency on set" (Mamer 2002:416). Resposible for keeping the "...cast and crew on schedule during the shoot. Assists the director and DP in planning the shooting schedule" (Campbell 2002: 219).

associational form

A film structure where the film's elements "...are juxstaposed to suggest similarities, contrasts, concepts, emotions and expressive qualities" (Bordwell and Thompson 1997:477).

avarice

"Extreme greed for wealth or material things" (The Compact Oxford English Dictionary for Students 2006: 59). Cosidered the third worst sin of the seven deadly sins (Lim 2000: 8-9).

background light

"Illumination of the set, set pieces and backdrops. Also called set light" (Zettl 2000: 159).

back Light / backlighting

Illumination cast onto figures... from the opposite side the camera, usually creating a thin outline of highlighs on the figures (Bordwell and Thompson 1997:477). "Used with no other sources of light, backlight tends to create silhouettes..." (Bordwell and Thompson 1997:179).

back lot

"The oudoor studio area where exterior sets are built" (Barnwall 2004:124; LoBrotto 2002:175).

blocking

"The process of plotting the actors [and major prop] positions in relation to the set and camera" (Barnwall 2004:124; Katz 1991:357; Rizzo 2005:307).

breakdown

A list of the sets, props etc. made from the the shooting script. Each department in the production usually does their own breakdown.

C-47s

A piece of grip equipment that is in actual fact a clothespin used to attach gels and filters to light sources (Brown 1996:153; Campbell 2002:66).

camera angle

"The position of the camera in relation to the subject it shows: above it, looking down (a high angle); horizontal, on the same level (a straight – on angle); looking up (a low angle)" (Bordwell and Thompson 1997:477).

chiaroscuro

"Ligting design using strong contrast of light and shade, associated with German Expressionism and *Film Noir*" (Barnwall 2004:124).

celluloid

"The cinema considered as a type of art" (The Compact Oxford English Dictionary for Students 2006:153).

cinematography

"A general term for all the manipulations of the film strip by the camera in the shooting phase and by the laboratory in the developing phase" (Bordwell and Thompson 1997:477).

close-up

"A framing in which the scale of the object shown is relatively large; most commonly a person's head seen from the neck up, or an object of comparable size that fills most of the screen" (Bordwell and Thompson 1997:477).

colour correction

1. "The process of correcting the colour of a light sources to match the colour of the main light source (Campbell 2002:66; 222).
2. "The final alteration of the colour of a film...to the instructions of the DOP done at a film laboratory...or digital suite" (LoBrotto 202:176)

colour palette

"The range and scope of colours to be used in the production design" (LoBrotto 2002:176) to evoke mood and atmosphere.

colour temperature

"The relative 'warmth' or 'coolness' of a light source, which translates to a light that is more orange or more blue" (Campbell 2002: 222).

composite set

"a set featuring several spaces through which a sequence of action unfolds" (Barnwall 2004:124).

composite shot

A shot created from more than one visual element in "...the laboratory stage or [trough] manipulation by digital software" (Rickitt 2006:374).

conceptual artist

Assists the PD in conceptualising fantastical world spaces, objects or creatures such as those in *Star Wars* (Campbell 2002:16).

consume

"Use up a resource; completely destroy something" (The Compact Oxford English Dictionary for Students 2006:209).

construction department

Responsible for building the set. Overseen by the Construction Manager. "Construction Managers are responsible for hiring the required number of carpenters, painters, riggers and plasterers, as well as for co-ordinating the purchase of all the necessary materials and tools" (Skillset s.a.).

continuity (style)

"The photographic and editorial style that creates the illusion of a spatial/temporal continuum so that a sequence of shots appears to present events as they happenend" (Katz 1991:358). It means "[m]aking sure that details from one shot...match those in successive shots" (Campbell 2002: 222).

contrast

"In cinematography, the difference between the brightest and darkest areas within the frame" (Bordwell and Thompson 1997:478).

contrast ratio

The relationship between the key and the fill lights (Mamer 2002:420).

coverage

"The collection of shots that depict a scene from a variety of angles" so that many options are available to the editor (Campbell 2002:167,223).

crab dolly

"A dolly that can move forward and backward, as well as sideways" (Campbell 2002: 223).

crane

"A camera platform that can rise up in the air, carrying the cameraman

and the director, as well as the camera itself" (Campbell 2002: 216). Opposed to a jib that only carries the camera. The type of shot made is called a crane shot (Bordwell and Thompson 1997:478).

CTB

"Colour temperature blue. Blue filter that increases colour temperature of a light source in variable amounts" (LoBrotto 2002:177).

CT filter

"Stands for 'Correct To.' A filter used to correct the colour temperature of a light source to that of another source" (Campbell 2002:223).

CTO

"Colour temperature orange. Orange or amber filter used to decrease the colour temperature of a light source in variable amounts" (LoBrotto 2002:177).

cucalorus / cookie

"Any pattern cut out of thin metal, that, when placed in front of [a light source], produces a shadow pattern." (Zettl 2000: 127)

culm

What is called a 'trunk' in the case of a tree, is called the 'culm' of a bamboo (Janssen 1988:1).

cut

"In film making , the joining of two strips of film together with a splice. In the finished film an instantaneous change from one framing to another" (Bordwell and Thompson 1997:478).

detail shot

A "...highly magnified version of a close-up used to show a fragment of a whole subject or a small object in its entirety" (Katz 1991:358).

diegesis

The narrative world of a film (Bordwell and Thompson 1997:478).

diffusers

A filter with a slightly uneven surface which refracts light (Movie Camera Company 2008:59). Used for softening light (Van der Walt 2009).

dimmer

"a device that controls the intensity of light by throttling the electric current flowing to the lamp" (Zettl 2000: 127).

dipping

"dyeing white or light-coloured fabrics to reduce their reflctive qualities on camera" (LoBrotto 2002:177).

director

The key decision making and creative force in all stages of a film (Mamer 2002:418). "[T]he director breaks down the screenplay, visualizes how the film should be shot and works with the cast and crew to carry out his visions" (Sahistory s.a.).

director of photography (DP) / Cinematographer

"The DP works closely with the director and is responsible for the photographic look of the picture" i.e. lighting and framing each shot. As head of the camera department the DP "...instructs the camera operators and gaffers on how to arrange shots and lighting" (Campbell 2002: 224; Barnwall 2004:125; Mamer 2002:418; Sahistory s.a.).

dolly

"a camera support with wheels, used in making tracking shots." (Bordwell and Thompson 1997:478). It is "...sometimes mounted on a track, that allows the camera to be moved smoothly during the shot" (Campbell 2002:101, 224).

dolly track

"Specially built track used for fluid movement" (Mamer 2002:99).

dressing

1."the arrangement of furnishings, props etc within the set" (Barnwall 2004:418). 2.Space for make-up and hair (Maier 1994: 77).

dulling spray

"When applied to a surface, a dulling spray deflects hot spots and glare due to lighting" (LoBrotto 2002:177).

dutchman

"A dutchman is the cloth strip which is affixed over a crack or cracks created when two flats...are joined" (Raoul 1990:99).

dystopia

"An imaginary place or society in which everything is bad." (The Compact Oxford English Dictionary for Students 2006:311)

editing

"In filmmaking, the task of selecting and joining camera takes. In the

finished film, the set of techniques that governs the relations among shots." Also known as montage (Bordwell and Thompson 1997:478, 480) Montage in french means 'to assemble'.

editor

"The editor is responsible for putting together all the shots. The editor generally screen each day's film footage (called dailies or rushes) and edits while the picture is being shot" (sahistory s.a.). Most of an editors work takes place in post-production when, together with the director the film is put in its final form (Weavind 2009).

electricians

"Lighting crew members responsible to gaffer" (Mamer 2002:418).

ellipsis

"In a narrative film, the shortening of plot duration achieved by omitting intervals of story duration" (Bordwell and Thompson 1997:478; Rizzo 2005:310)

emotion

Intense emotive states that lasts only seconds or minutes. Emotion is an "action tendency to spur us toward functional activity" (Smith 2003:37).

ephemeral

"Items of short-lived interest or usefulness, especially those later valued by collectors" (The Compact Oxford English Dictionary for Students 2006: 333)

espace quelconque

A subcategory of the affection image. It is characterized as a fragmented, disconnected and decontextualized, space with no logical coordinates. There is also an absence of linkage in such spaces and it is a virtual space (Bogue 2003:80; Deleuze 1986: 112). The ways of constructing an *espace quelconque* can either be with shadows or fog, as found in German Expressionistic film; or by means of colour that absorbs the characters in a film or void empty frames (Bogue 2003:81 and Deleuze 1986:114-123).

establishing shot / master shot

Typically a long shot at the beginning of a scene designed to inform viewers of a change in location or to orient them to the general mood and relative placement of subjects in the scene" (Katz 1991:358).

eutopia

Greek for 'happy' or 'fortunate' place, it is significant that utopia puns the word. This possibly gave rise to its positive associations regarding utopia (Logan and Adams 2002: xi).

experiential design

The practise of designing something that creates an experience with consideration to the 'moments' of engagement and memories created (Chapman and Gant 2007:30).

exposition

"The initial plot layout of a film revealed within the first ten minutes as a psychological or emotional 'hook' to dramatically enrol the attention of the audience" (Rizzo 2005:311).

extreme close-up

"A framing in which the scale of the object...is very large..." (Bordwell and Thompson 1997:478).

extreme long shot

"A framing in which the scale of the object shown is very small..." (Bordwell and Thompson 1997:478).

fable

The fable can be defined as an extended metaphor written in prose or verse that illustrates a moral lesson or more importantly something to think about. It features animals or inanimate objects that are anthropomorphized (given human qualities). It can also not merely be written but there must be a philosophical or political reason for it. "The message is not delivered…it is embodied" (Blackham 1985).

falloff

"The speed (degree) with which a light picture portion turns into a shadow area. Fast falloff means that the light areas turn abruptly into shadow areas and there is a great brightness difference between light and shadow areas. Slow falloff indicates a very gradual change from light to dark and a minimal brightness difference between light and shadow areas." (Zettl 2000: 159)

feature film

"A movie made primarily for distribution in theatres. (Screenwriting.info 2009) "Feature films are the long format, fictional (non-factual) films you see in cinemas. They are called long format because they are longer than most other forms of filmmaking – anything between 80

minutes and four hours, with 90 minutes being the average length. They are generally the most expensive kind of film to make, the most demanding, and the most prestigious." "A feature film usually has a dramatic story...Different countries have developed different kinds of feature films: USA – the Hollywood blockbuster, India – the Bollywood musical melodrama, New Zealand – intense art-house films, Europe – the Dogme 95 movement" (sahistory s.a.).

fill light

"Additional light on the opposite side of the camera from the key light to illuminate shadow areas..." (Zettl 2000: 159)Fills in shadows of key light. (Bordwell and Thompson 1997:179) Usually less bright than the key light, used to soften deep shadows in a scene" (Bordwell and Thompson 1997:478).

film noir

A term applied to American films of the 1940's and 1950's by French film critics. The films had low key lighting and sombre moods(Bordwell and Thompson 1997:479).

film stock

Raw film that has not been exposed yet (Campbell 2002: 226)

flag

"A thin, rectangular sheet of metal, plastic, or cloth used to block light from falling in specific areas" (Zettl 2000: 127).

flashback

Inversion of normal narrative order, to show events that happened prior to the current events shown (Bordwell and Thompson 1997:479).

flat / flattage

"A scenery wall" (Rizzo 2005:311), comprising of "a wooden frame covered with material or board..." (LoBrotto 2002:177).

floating camera

"A camera mounted on a wearible harness that reduced shakes and wobbles" (Campbell 2002: 226).

foley

"Sound effects that imitate the sounds caused by the movement of the actor" or other sounds that cannot be found in a sound library. It is done by a foley artist (Campbell 2002: 216).

form

"The general system of relationships among the parts of the film" (Bordwell and Thompson 1997:479).

format

"Format refers to the shape of the screen, or size relationship between its width and height" (Tumminello 2005:22).

frame

A single photographic image on a strip of film (Bordwell and Thompson 1997:479; Mamer 2002: 3)

framing

"The use of the edges of the film frame to select and to compose what will be visible onscreen" (Bordwell and Thompson 1997:479).

Fresnel

A lens made of concentric ridges of glass, which is used to control the focus of the light (Mamer 2002:244).

Fuller's earth / movie dirt

"...taupe coloured, powdery substance used primarily to age set dressing or reduce glare on reflective surfaces that the camera sees when shooting" (Rizzo 2005:311).

gaffers

Lighting technicians that are "...responsible for technical implementation of the DP's lighting plan" (Campbell 2002: 216,227; Mamer 2002:419; Rizzo 2005:311).

gel

"Gelatin or plastic material that comes in a variety of colours. When placed over lamps, they produce coloured light" (LoBrotto 2002:177).

greed

"A strong and selfish desire for possessions, wealth and power"; a desire for more than necessary (The Compact Oxford English Dictionary for Students 2006:441).

Grickle-grass

Extremely tall black grass that grows very sparsely "[a]t the far end of town." It is the only growing thing in the melancholic part of the narrative. Deep in the Grickle-grass you can see where the Lorax once stood (Seuss 1971: 1-2). With the 'gr' alliteration Seuss achieves the sound of the Grickle-grass in the wind.

grip

"A crew member who moves scenery, lays track and adjusts some kinds of nonelectric equipment" (Campbell 2002: 227). Also "the jack-of-all-trades on the set" (Mamer 2002:419).

grip equipment

"Specialized clamps and tools used to mount instruments" (Mamer 2002:419).

hard lighting

"Illumination that creates sharp edged shadows" (Bordwell and Thompson 1997:479).

heads

"A grip's word for lighting instruments" (Campbell 2002: 228).

hero

"A term referring to any set, set piece, item of set dressing, prop, or vehicle relating to a main character...[it] can refer to a hero or a villain" (Rizzo 2005:312).

heterotopia

A combination of the real and unreal (Foucault 1967)

high key lighting

"Low contrast between brighter and darker areas...the light quality is soft, making shadows fairy transparent" (Bordwell and Thompson 1997:182). Not related to the vertical position of key light (Zettl 2000: 159).

HMI light

'HMI' stands for high pressure mercury metal iodide (Millerson 1991:288). HMI's were designed to simulate the colour of daylight and has a colour temperature of 5600K (Block 2001:242; Campbell 2002: 228; Zettl 2000: 127)

holding

Space for extras to rest and change (Maier 1994: 77).

insert shot

"...[U]sually a close-up of an action or an object that is inserted into the main action" (Tumminello 2005:40)

k

One Thousand (Box 2003:533).

Kelvin degrees (K)

A measure of colour temperature; the relative reddishness or bluishness of white light" (Zettl 2000: 127).

Kelvin scale

"A system that measures the colour temperature of a light. Low colour tmeperatures have warm properties. High Kelvin light sources are cold and blue in nature" (LoBrotto 2002:178).

key light

Principal source of illumination. (Zettl 2000: 159)Casts the strongest shadows (Bordwell and Thompson 1997:179) Brightest light in three point lighting (Bordwell and Thompson 1997:479)

lead man

The assistant to the property master and responsible for tracking down props (Bordwell and Thompson 1997:19).

lens perspective

Refers to the way space is represented by lenses. This influenced depth and dimensionality. Lenses are normally chosen by DP's for how they represent space, and not for subject proximity (Mamer 2002:22).

Lerkim

The Once-ler's house (Seuss 1971).

letterboxing

Where the image is displayed in its original aspect ratio and the top and the bottom of the TV screen is not used (Block 2001:55; Tumminello 2005:28).

light plot

"A plan, similar to a floor plan, that shows the type, size (wattage) and location of the lighting instruments relative to the scene to be illuminated and general direction of beams" (Zettl 2000: 159).

location

"Any outdoor or indoor setting found in the real world and adapted to provide the setting for the production" (Barnwall 2004:125).

location manager

Supervises locations (LoBrotto 2002:178).

location scouting / recce

"The activity of looking for an appropriate location for a film shoot."

Done by location scouts /rekkies (Rizzo 2005:318).

long shot

"A framing in which the the scale of the object shown is small; a standing human figure would appear nearly the height of the screen." (Barnwall 2004:125; Bordwell and Thompson 1997:479).

long take / plan-séquence

"A shot that continues for an unuasually lengthy time before the transition to the next shot" (Bordwell and Thompson 1997:479, 481).

Lorax

Anthropomorphic protagonist that pops out of a Truffula Tree stump. According to the Once-ler is 'shortish, oldish, brownish and mossy'. He 'speaks for the trees' and the environment. The word 'Lorax' can also imply 'lower axe' (Seuss 1971)

low key lighting

"Illumination that creates strong contrast between light and dark areas of a shot, with deep shadows and little fill light" (Bordwell and Thompson 1997:479).

luminaire

"Technical term for lighting instrument" (Zettl 2000: 127).

luminant

"Lamp that produces the light; the light source" (Zettl 2000: 127).

master shot / establishing shot

"The viewpoint of a scene in which the relationships between subjects are clear and the entire dramatic action could be understood if no other shots were used (as opposed to the wider establishing shot)" (Katz 1991:360). "A shot that establishes the setting" (Mamer 2002:420).

medium close-up

"A framing in which the scale of the object shown is fairly large: a human figure seen from the chest up would fill most of the screen" (Bordwell and Thompson 1997:480).

medium shot

A framing where the object scale is moderate in size. The human figure will be shot from the waist up and fill most of the screen (Bordwell and Thompson 1997:480).

mise en scène

"In French, 'putting in the scene' (Katz 1991:360; Rizzo 2005:315). What appears in the film frame namely setting, lighting, costume and the behaviour of the figures (Bordwell and Thompson 1997:169).

mnemosign

Flashback memory (Bogue 2003:5 & 115).

montage

"In filmmaking, the task of selecting and joining camera takes. In the finished film, the set of techniques that governs the relations among shots." Also known as montage. (Bordwell and Thompson 1997:478, 480) Montage In French. 'to assemble'.

mood

Less intense, low-level, emotive states (Smith 2003:37-38).

MOS

'MOS' is a shot where the image is filmed without the sound track. It stands for 'Minus Optical Stripe' (Campbell 2002: 230)

movement image

The movement image is time as portrayed in the commonsense world and perceived by the senses (Bogue 2003:4-5).

nook light

"A tiny soft light that can be stuck into a small place" (Campbell 2002: 231)

muslin

"Muslin is an undyed plain-weave fabric made with carded cotton yarns containing characteristic slubs, speck and impurities."It is used to cover stock flats for film and theatre (Raoul 1990:69).

normal lens

"A lens that shows the objects without severely exaggerating or reducing the depth of the scene's planes", as opposed to telephoto or wide -angle lenses (Bordwell and Thompson 1997:480). "A lens that essentially gives a normal representation of space" (Mamer 2002:421).

Once-ler

Antagonist in *The Lorax* (1971) that tells the narrative through a flashback image. As symbol of greed in the narrative, only his green hands are visible. He is the inventor, designer and builder of the Thneed, Super-Axe-Hacker and the Thneed factory.

onriosign

Onriosigns are dream landscapes such as Hollywood musicals (Bogue 2003:5).

overhead

"Drawn view of a scene from above, helpful for planning blocking and camera positions" (Mamer 2002:421).

over the shoulder shot (OTS)

"A shot in which a subject who is facing us is composed using the back of the head and the shoulder of another subject in the extreme foreground as a framing device." (Katz 1991:360)

pan

"A camera movement with the camera body turning to the right or left. On screen it produces a mobile framing which scans the space horizontally" (Bordwell and Thompson 1997:480).

perception image

When the living image perceives the outside world (Bogue 2003:4).

photo floods - "A lightbulb that has a high colour temperature and can match tungsten or daylight fixtures" (Campbell 2002:232).

picture vehicle

"A vehicle that actually appears on screen" (Campbell 2002: 232).

plug

Plugs are fillers added to flats to complete a scenery wall, in effect a plug is a flat that is nonstandard in size (Raoul 1990:42).

point of view shot (POV shot

"A subjective viewpoint, one that is understood to represent the [character's] vision" (Katz 1991:361).

post production

"The time in film production when the editing of all previously shot footage, sound editing, foley and optical/visual effects compositing takes place" (Rizzo 2005:316).

postsynchronization

"The process of adding sound to images after they have been shot and assembled. This can include dubbing of voices, as well as inserting diegetic music or sound effects. It is opposite to direct sound" (Bordwell and Thompson 1997:481).

practical

"Anything on set that actually works" (LoBrotto 2002:179).

practical / source light

"A lighting instrument...that appears on screen and actually works" (Campbell 2002: 232).

pre production

"The planning stage in a film's production *before* principal photography commences, involving script treatment and editing, scheduling, previsualization, set design and construction, casting, ...financial planning and scouting/selection of locations..." (Rizzo 2005:317).

process shot

"Any shot involving rephotography to combine two or more images into one, or to create a special effect; also called a composite shot.

producer

"The producer usually finds the money to make the film. The producer also hires cast and crew and not only supervises the production process but the film's distribution and makes sure it gets into cinemas" (sahistory s.a.)

production

"[T]he process of creating the film" (Bordwell and Thompson 1997:481). This also refers to the actual time the film is being shot. "'The production' refers to the film project itself. 'Production' refers to the production office staff and its activity" (Rizzo 2005:317)

production design

"Refers to the film's overall design,...visual look and composition, i.e. colour palette, graphics, pre-visualization, set design and construction, costumes, set dressing, props, locations, etc., that are the responsibility of the production designer" (Rizzo 2005:17)

profile flat

"Any flat which has its edge altered to mock a given shape..." (Raoul 1990:60).

prop

Items handled by actors (LoBrotto 2002:21).

property dresser

"Positions in a set prior to shooting" (Barnwall 2004:125).

property master

"Member of set crew who supervises the use of all props, or movable objects in the film" (Bordwell and Thompson 1997:19). "The person in charge of obtaining or building props mentioned in the script" (Campbell 2002: 232).

proxemics

The distance between the subject and the camera, from the word proximity (Mamer 2002:4; 422).

recce / rekkie

"A New Zealand term for scout or drive" (Rizzo 2005:317), also used in South Africa.

reflection image

A metaphoric image, that which reflects something else.

retrofitting

"Making specific physical changes to a location site to insure that the design concept is seamless and believable" (Rizzo 2005:317). "Technical addition to an existing structure" (LoBrotto 2002:179).

reverse shot

"Two or more shots edited together that alternate characters, typically in a conversation situation." (Bordwell and Thompson 1997:481)

rotoscoping

A technique where the film image is projected and traced to create artwork for instance stars, lighting and ghosts. The image is rephotographed and optically combined with the other footage (Rickitt 2006:374).

rule of thirds

Dividing the frame into thirds vertically and horizontally with guidelines to create blanced composition (Mamer 2002:422; Hart 2008:38).

scene

"A segment in a narrative film that takes place in one time and space [setting]" (Barnwall 2004:126; Bordwell and Thompson 1997:481).

screen direction

"The right-left relationships in a scene...Continuity editing will attempt to keep screen direction consistent between shots.' (Bordwell and Thompson 1997:481)

scenic artist

"A member of the crew responsible for work which includes the preparation, painting and/or coloration of all textures, plastering, appliqueing on scenery, sets, and properties; the application of all decorative wall or surface coverings; all lettering and sign work (including signs and murals; miniature sets and/or models and properties and the painting and aging in the (construction) studio or on the set..." (IMDb 2009).

screenplay

"A script written to be produced as a movie" (IMDb 2009).

screenwriter

"A writer who either adapts an existing work for production as a movie, or creates a new screenplay" (IMDb 2009; sahistory s.a.).

script

"A general term for a written work detailing story, setting, and dialogue. A script may take the form of a screenplay, shooting script, lined script, continuity script, or a spec script " (IMDB 2009).

set

An environment where the narrative takes place. Basis for diegetic world.

set up

"the position of the camera in relation to the set and action during a single shot" (Barnwall 2004:126).

sequence

"Term commonly used a moderately large segment of a film, involving one complete stretch of action" (Bordwell and Thompson 1997:481).

set decorator

In charge of "decorating the set with all furnishings, drapery, interior plants, and anything seen on indoor or outdoor sets" (IMDb 2009).

set designer

The person responsible for doin ghte set construction drawings.

set dresser

Maintains, moves and resets the set decoration items according to the decorator's requirements and to accommodate camera, grip and lighting setups. Also responsible for set decoration continuity (IMDb 2009).

setting

The time and place of a play or screenplay (Screenwriting.info 2009).

shooting script

"The shooting script is the finalized screenplay that has received the "green light" for production" (Tumminello 2005:58).

shot

"In shooting, one uninterrupted run of the camera to expose a series of frames. Also called a take. In the finished film, one uninterrupted image with a single static or mobile framing" (Bordwell and Thompson 1997:481). "A sequence of frames is called a shot...the shot is generally considered the basic building block of the film" (Mamer 2002:3).

short subject / short

A movie that is shorter than 45 minutes. Contrast with feature.

side lighting

"Usually directional light coming from the side of the object (Zettl 2000: 159). Sidelights or crosslights are used to cast sharp and long shadows (Bordwell and Thompson 1997:179).

soft lighting

"Illumination that avoids harsh bright and dark areas, creating a gradual transition from highlights to shadows" (Bordwell and Thompson 1997:481).

source light / pratical

"A light motivated particular source ie a table lamp" (Barnwall 2004:126).

special effects (SFX)

"An artificial effect used to create an illusion in a movie. Refers to effects produced on the set, as opposed to those created in post-production. Most movie illusions are created in post production. These are called visual effects" (IMDb 2009).

staging

1. Room for preparing film equipment (Maier 1994: 77). 2.The placement of actors in the shot.

Steadicam / floating camera

"A camera attached to a camera operator via a mechanical harness which reduces or eliminates the unsteadiness of the operator's motion" (IMDb 2009; Mamer 2002:423).

stock scenery

"...[S]tock scenery is designed with the specific goal of being able to keep it on hand and re-use it, thus gaining significant savings of time, money and personnel" (Raoul 1990:19). Savings of resources can be added to this.

storyboard

A pre-visualization tool. "A tool used in planning film production, consisting of comic-strip like drawings of individual shots or phases of shots with descriptions written below each drawing" (Bordwell and Thompson 1997:482). "The storyboard is a reminder, not the finished production." To indicate general composition and components (Block 2001:254). "The drawing of the script, shot by shot, in chronological sequence, shows on paper what will eventually appear on screen...details like the shot size, action, lighting and setting are all necessary in producing a storyboard. Once shooting commences this can be deviated from but is very helpful to fall back on" (Barnwell 2004:62).

strike

The taking down or apart of a set, once filiming has ended (Rizzo 2005:318; LoBrotto 2002:180).

studio

"a factory for the production of films, containing a number of stages and a back lot on which sets can be built and a tank where water scenes can be shot; as well as housing other relevant resources (production ana art department offices, actors' dressing rooms, cutting rooms, equipment hire companies, visual effects companies, construction facilities and paint shops) (Barnwall 2004:126).

synopsis

"A summary of the major plot points and characters of a script, generally in a page or two" (IMDb 2009).

syntagmatic

"Referring to the syntax or organization ot the elements that make up a sentence or film image and how each element relates to the other parts of that sentence or image. In 'film language'...the elements of space and time are a vital part of the equation" (Rizzo 2005:320)

taxonomy

"The branch of science concerned with the classification of things..." "a particular scheme of classification." (The Compact Oxford English

Dictionary for Students 2006:1061)

three-point lighting

The key, fill and back light in a triangular arrangement with regards to the camera and subject.

Thneed

According to the Once-ler a multifunctional wardrobe item that also has other uses besides being a garment, when in fact it cannot be worn. The Once-ler knitted from the Truffula tuft of a chopped down tree (Seuss 1971).

tilt

"A camera movement with the camera body swivelling upward or downward on a stationary support. It produces a mobile framing that scans the space vertically" (Bordwell and Thompson 1997:482).

time image

Where the common sense conception of time breaks down and shattered time emerges. It is found in modern cinema (Bogue 2003:5).

Truffula Trees

Brightly coloured trees with pompom-like tufts that are "softer than silk" and have "the sweet smell of fresh butterfly milk" (Seuss 1971).

TV protect

When a film is shot with the bottom and the top included for later television screening, as opposed to just the desired film screening aspect ratio, it is referred to as 'TV protect' (Campbell 2002:45).

two shot

"A shot that frames two people." (Katz 1991:362)

uncanny

"Strange or mysterious; so accurate or intense as to be unsettling." (The Compact Oxford English Dictionary for Students 2006:1126)

UNLESS

The Lorax left a "small pile of rocks" with only the word "UNLESS" (Seuss 1971).

utopia

"An imaginary place, society, or situation where everything is perfect. ORIGIN the title of a book by Sir Thomas More, from Greek *ou* 'not' + *topos* 'place'" (The Compact Oxford English Dictionary for Students 2006:1147).

verisimilitude

"The appearance of being true or real" (The Compact Oxford English Dictionary for Students 2006:1155).

visual effects (VFX)

"Any visual manipulation of the reality presented to the camera" (Barnwall 2004:126). "Considered a subcategory of special effects; it refers to anything addad to the final picture that was not in the original shot" (Rizzo 2005:321).

voice over (VO)

"The voice of an unseen narrator"(Katz 1991:362).

widescreen

"Refers to projection systems in which the aspect ratio is wider than the 1.33:1 ratio...many widescreen processes were introduced to combat the growing popularity of television..." (Rizzo 2005:321)

wild

"An element of a set that can be removed [or moved] to enable shooting lighting, for example a wall or ceiling" (Barnwall 2004:126; LoBrotto 2002:180).

'You'

The narrator in the Lorax. Unnamed by Dr Seuss in order to achieve universality with narrative message.

zeitgeist

The German term for "spirit of the time" (Ingham 1998:86-87).

zoom

"The movement of a zoom lens ..." (Katz 1991:362).

B. APPROXIMATE PRODUCTION TIME

Dystopia and utopia sequences are filmed during the evening. Heterotopia is filmed during the day. The filming time and in between prep time will be approximately 20 days. The total number of days, including pre-filming construction, assembling and disassembling will be six weeks.

Most parts of the sets only need to be assembled on location. Approximately two weeks pre-filming assembling and a week after for striking the set should be sufficient. There will be an aerial shot done on the first day of filming by helicopter.

C. ESTIMATED FILM CREW AND CAST NUMBERS

Crew

> Approximately 50 people (excluding pre-construction crew)

> Approximately six equipment trucks

> Parking space for crew members

Cast

> 1 actor ('You')

> 15 fire dancers ('Truffula Trees')

D. COLOUR TEMPERATURE

"Different light sources produce different coloured light." The human eye perceives all of these as neutral or colourless, even though no light source produces white light. Colour temperature is classified according to degrees Kelvin (Block 2001:242; Campbell 2002:64-65; Lo-Brotto 2002:178).

The Kelvin scale describes and compares the colour of light emitted from different sources. The lower the degrees in Kelvin (K), the redder the light and the higher the degrees in the Kelvin the bluer the light." The scale has nothing to do with thermal heat (Block 2001:242; Campbell 2002:65).

Lights on the Kelvin scale can also be called "'continuous spectrum light sources' because each contains all of the wavelengths of visible light in various proportions [whereas] fluorescent , neon, sodium vapour and mercury vapour lights are called 'discontinuous spectrum light sources' because they are missing certain wavelengths completely." This is why these lights "cannot be classified on the Kelvin scale" (Block 2001:243).

Film does have the ability to adjust to different colour temperature like the human eye (Block 2001:243; Campbell 2002:65).

"Motion picture films are manufactured to be compatible (or balanced with only two light sources. There [is] indoor or tungsten-balanced film, which is manufactured to see 3,200K light as 'normal' and...outdoor or daylight-balanced film, which is manufactured to see 5,500K light as 'normal'" (Block 2001:243-244). The film colour temperature has to match the lighting colour temperature or the colour will not appear normal. If the film colour temperature is lower than the light temperature the image will appear blue. If film colour temperature is higher than the light temperature, the image will appear red. This is fixed by adding filters to the camera lens or gels to the light source (Block 2001:244-245; Brown 1996: 32; Campbell 2002:66; Mamer 2002:144).

If the colour temperature is too blue due to the film being lower in colour temperature than the light source, a orange filter is added over the camera lens to make the colour temperature neutral. The filter does however contribute to loss of light, which can be compensated for by opening the camera lens up for more exposure (Block 2001:247).

The problem comes in when more than one type of light source is used – such as an incandescent in a 'practical' light with daylights. The solution is to choose the primary light source, buy the appropriate film stock (done by DP) and 'correct' the other light sources accordingly. This process is called colour correction.

To correct a light source a colour filter is placed in front of it to match its colour temperature according to the primary light source. Such a filter is called a CT filter. These filters come in three colours blue (CTB), orange (CTO) and magenta.

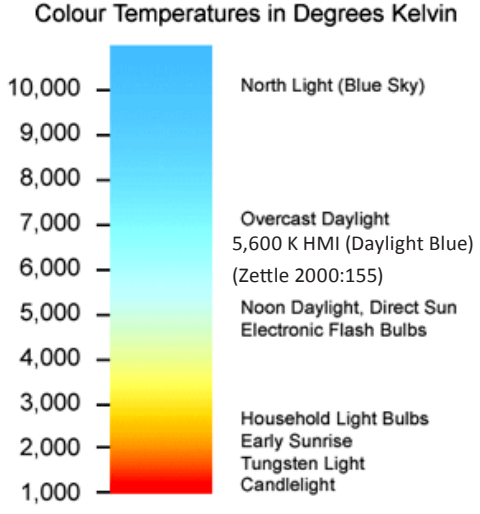


Figure 16.72 Colour Temperatures in Degrees Kelvin (Naturebright s.a.)

The blue filter moves colour temperature up and the orange filter moves it down (Campbell 2002:66). The magenta colour filter is used for fluorescent lights. The DP uses a colour chart to make exact matches (Campbell 2002:67). Colour filters are attached to lights with clothespins known as C-47s (Campbell 2002:66).

Most practical lights are low colour temperature incandescents. The standard incandescent bulbs are often replaced with more expensive photo floods "...which offer a similar light quality of light at a higher colour temperature (Campbell 2002:73).

For the production of *The Lorax*, the HMI which is daylight balanced, is used as the key source, therefore daylight balanced film stock will need to be used.

E. LIST OF MACHINES OF THE STATE THEATRE WORKSHOP

Only machines that can be used to manufacture setting elements for the production design of *The Lorax* are included in this appendix.

There is also a large workshop space which can be used for 'staging' by the film crew.

List of machines

> big bandsaw

> crosscut circular saw

> big table circular saw

> plane machine

(Viljoen 2009)

Community Safety Department

Pro Active Policing Services

TMPS Head Office I cnr DF Malan Drive and Church Street I Pretoria West I 0183
PO Box 4133 | Pretoria I 0001
Tel: 012 358 7004 I Fax: 012 358 7081
Email: tmpdevents@tshwane.gov.za I www.tshwane.gov.za

My ref:
Your ref:
Contact person: **DD NKHWASHU**
Division/Section/Unit: Events Coordination
TMPS Offices: Rondalia Building, 174 Visagie Street, 4th Floor, Pretoria Central, 0002

Tel: 012 358 0027
Fax: 012 358 7081
Email: daininghamn@tshwane.gov.za

APPLICATION FOR SERVICE DELIVERY

To the Events Management Office:
Tshwane Metropolitan Police Service
Directorate: Pro-Active Policing Services
Section: Operational Support
Events Management Office

174 Visagie Street
Rondalia Building
4th Floor
(Middle block)

PO Box 4133
Pretoria
0001

Telephone: (27) (12) 358 0027
Telephone: (27) (12) 358 7162
Telephone: (27) (12) 358 0027
Telephone: (27) (12) 358 7168
Facsimile: (27) (12) 358 7081
tmpdevents@tshwane.gov.za

1. ORGANIZER(S)

	TITLE, FULL NAME(S) & SURNAME:	ADDRESS:	ID NUMBER:	TELEPHONE & FAX NUMBERS:	EMAIL ADDRESS & OTHER NUMBERS:
ORGANIZER	Production Design for the Lorax			Tel: Cell: Fax:	
ORGANIZER (ADDITIONAL)				Tel: Cell: Fax:	

2. ORGANIZATION
(If the Organizer(s) is acting on behalf of an organization, state full details of organization)

3. THE EVENT / SPECIAL DUTY

3.1 The type of event / special duty (complete description):

Filming of a short film on location at Lilian Ngoyi/Strijdom Square, Sammy Marks Square, The area of Church Street between the two squares, The State Theatre Exterior and Parking lot, and The Absa Building Exterior, Pretoria. The filming time and in between prep time will be approximately 20 days. The total number of days, including pre-filming construction, assembling and disassembling will be 6 weeks. Some amount of pre-filming construction will need to take place on location. 80 % of the filming will take place during the evening, when the location is fairly quite and the retail outlets are closed.

There will be an aerial shot done on the first day of filming by helicopter.

3.2 Day(s), date(s) & time(s) of the event / special duty:

DAY(S):	DATE(S):	TIME(S):
6 weeks	Ex. 1 April - 15 May 2010	Ex. 5am-18pm except 16-20 April 2010 from 4pm to 4am (night shoots)

3.3 Venue of the event / special duty (state full details):

Lilian Ngoyi/Strijdom Square, Sammy Marks Square, The area of Church Street between the two squares, The State Theatre Exterior and Parking lot, The Absa Building Exterior, Pretoria

3.4 The anticipated number of participants / spectators at the event / special duty: .....80 people.....

3.5 I, the organizer(s) has appointed / intend to appoint (number) ……10……..marshals for crowd controlling / route indication. (The list of names of these marshals is enclosed separately)

4. OTHER INFORMATION PERTAINING TO THE EVENT / SPECIAL DUTY

5. GENERAL CONDITIONS

The information received in this application is to be used by the City of Tshwane Metropolitan Municipality employees. Access to this information is open to members of the public upon written application. The Municipality is to be regarded as the agency that holds the information. You may make application for access or amendment to the information held by the Municipality. You may also request the Municipality to suppress your personal information from a public register.

The organiser(s) must ensure that all participants / spectators and other role players adhere to the conditions set out by the TMPS as well as all applicable legislation.

The organizer(s) must comply with all provisions of the National Road Traffic Act, 1996 (Act 93 of 1996), as well as the regulations made under the Act, and the municipal traffic by-laws and all other legal provisions applicable to this event.

The organizer(s) and all participants / spectators must adhere to all instructions given by members of the Tshwane Metropolitan Police Service (TMPS).

No marks may be made on the road surface or on any municipal property and there may be no tampering whatsoever with road traffic signs and marks.

Final arrangements between the organiser(s) of the event / special duty and the TMPS must be done at least five working days prior to the event / special duty.

No advertising sign, mark or poster may be displayed without the written permission of the General Manager: City Planning Division of the City of Tshwane Metropolitan Municipality (CTMM). (If and when the General Manager has given permission, an example of the approved advertising sign, mark or poster must be submitted to the Events Coordinating (Planning) Office at least five working days prior to the event).

The organiser(s) is responsible for the clearing up and removal of all refuse left by participants and spectators at the venue of the event / special duty. The Service Delivery Department of the CTMM could provide this service at current rates. Arrangements in this regard must be made at least five working days prior to the event / special duty with the Department concerned and proof of this must be submitted to the Events Coordination (Planning) Office.

The organizer(s) must control all participants and spectators at the venue of the event / special duty prevent any obstruction to other traffic. (No support vehicle is allowed to drive next to competitors / participants).

Children younger than 7 years may not participate in road / cycle races.

Children between the ages of 7 and 12 years may only participate in road / cycle races under the supervision of an adult.

The organizer(s) must ensure that the starting / ending time of the event / special duty is adhered to.

The organiser(s) must complete and hand-in the official indemnity form of the TMPS at least five working days prior to the event to the Events Coordination (Planning) Office.

The organizer/company must be in possession of public liability insurance for the said event and proof thereof must be handed in at the Events Management office of this Department.

The organizer(s) is liable for the service delivery cost (as calculated by the TMPS) relating to the event / special duty:
(1) All payments must be done at Ground Floor, Rondalia Building, 174 Visagie Street, Pretoria.
(2) A deposit of 50% of the full amount owing must be paid in at the TMPS at least five working days prior to the event.
(3) Failure to pay the deposit will lead to cancellation of the said event / special duty.
(4) The balance of the full amount owing, must be paid in at the TMPS within five working days after the completion of the said event / special duty.
(5) Where payments have been made, proof thereof must be submitted to the Events Coordination (Planning) Office.
(6) Failure to pay moneys owed to the TMPS will result in possible legal action and the possibility of non-approval to host / execute future events / special duties.

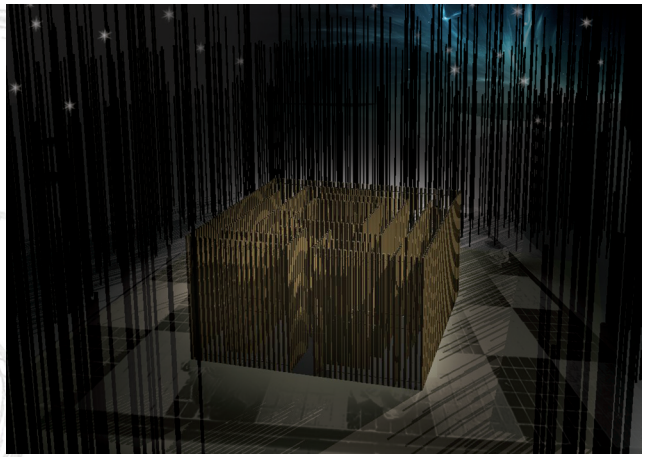
The organizer(s) may only appoint marshals who are at least 18 years old. Marshals must be equipped with a red flag. The organizer(s) must further ensure that all marshals are present at the points where they have undertaken to provide a service. If, for some reason, a marshal does not arrive or cannot provide the service, it is the duty of the organizer(s) to provide a substitute who will meet the requirements set out in this paragraph. The duties of appointed marshals are strictly limited to the protection of participants / spectators and to indicate the route of the race, where applicable. **(Marshals may not execute traffic control.)**

The organizer(s) must honour all agreements with the TMPS as well as adhere to all instructions relating to the event / special duty.

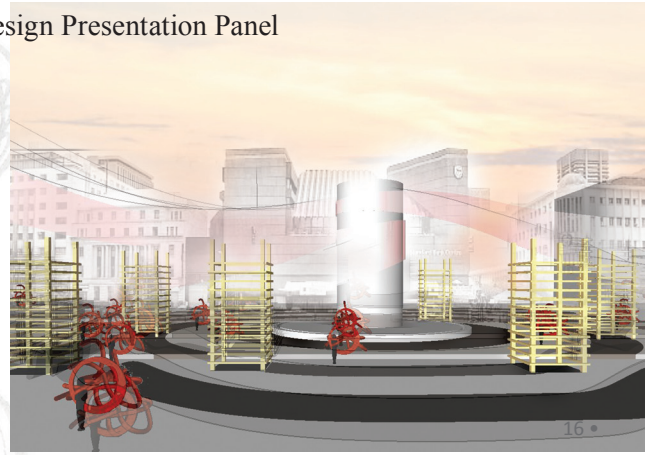
The Strategic Executive Director: Community Safety Department of the TMPS, or his representative, reserves the right to stop the event or parts thereof if the conditions set out in this document are not met and / or if circumstances relating to the provisions of any act should require this.

I, the organizer(s), hereby state that I have provided correct and true information and I further accept all the conditions as set out in this document and will adhere to them.

G. PRESENTATION PANELS



Design Presentation Panel



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UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Experiential Consumerism
Film Structure
FRAME
SHOT
SCENE
SEQUENCE
FILM
Film Production Phases
Preproduction
Production
Post Production
Dystopia
Heteropia
Utopia
MOS =
Design Presentation Panel
Filmic architecture - the field of production design - and its previously unmentioned contributions during the phases of the film production process, was researched for this dissertation. It is a discipline that can have an impact both on screen and behind the scenes.
Dissertation Map
Theoretical Premise
Production Design
Narrative Context : The Lorax (1971)
Location : The Physical Context of Lilian Ngoyi Square
Precedents
Scene Storyboard
Key Sequence Design Elements
Sequence Overview
Real Fictions
A Heterotopic Production Design for The Lorax
The Design Thought Process
Heterotopia=
director
production designer
director of photography
Location =

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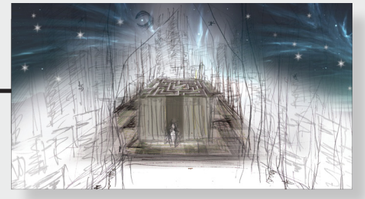
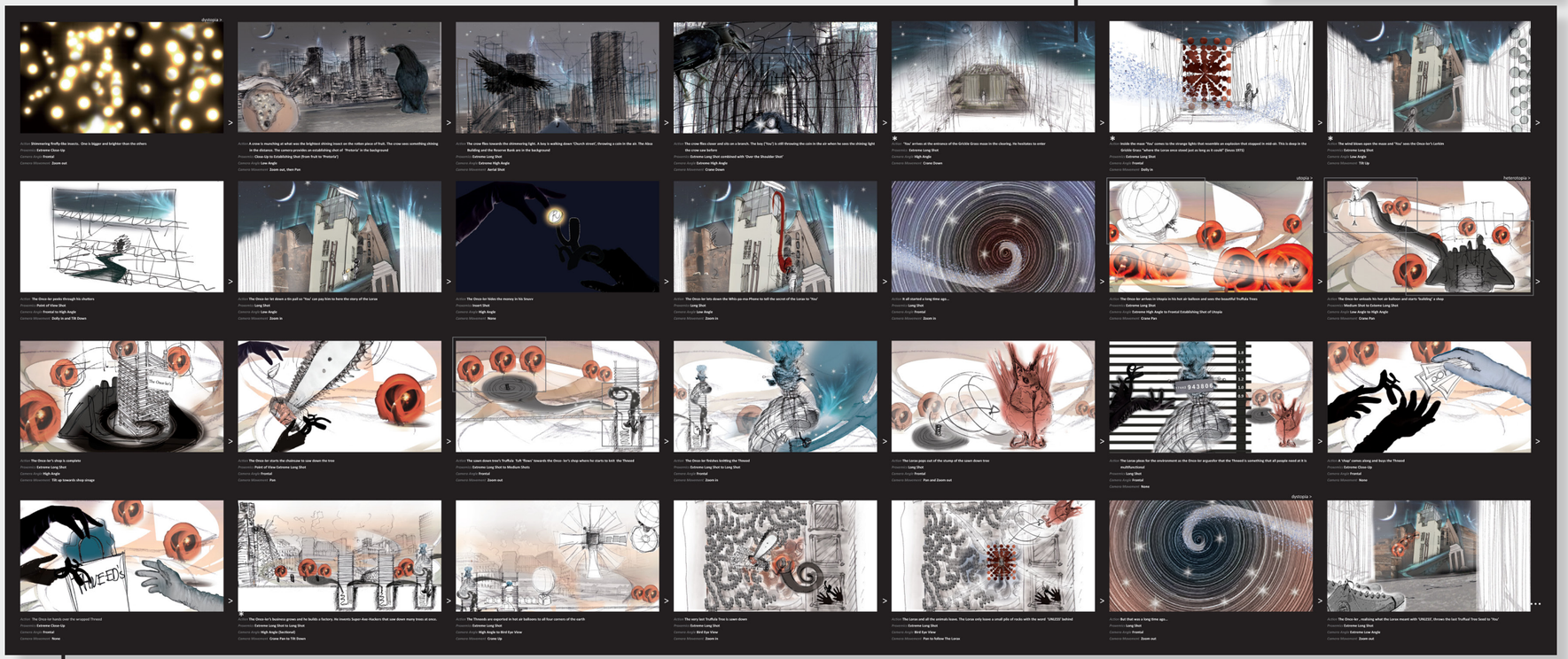
Storyboard Presentation Panel

Rotoscoping =

> for the stars in dystopia
> technique where the film image is projected and traced to create artwork
> The image is rephotographed and optically combined with the other footage.
> A shot created from more than one visual element is called a 'composite shot'





Scene Storyboard

Aspect Ratio = 1.85:1
(widescreen)
the relationship of the frame's width to its height

NOTE :
TBC with director and director of photography

Proxemics =
> distance between the subject and the camera

Camera Angle =
> height or level and orientation of the camera in relation to the subject

Camera Movement

Technical Presentation Panel
Sustainability of The Lorax
> Film = 1 prduction shown to millions + dvd's
> Adaptable sequence elements (Grickle Grass Maze to Tolletjie Brei Building)
> Re-usable and recyclable set elements eg. flats, platforms, muslin
> Material Choices : Bamboo, cardboard, 3 form Chroma
> Under utilized location
> On location construction at State Theatre workshop
> Single location minimizes transport and time wastage
> HMI lights
Three Point Lighting
BACK LIGHT
FILL
KEY
Low Key =
No or minimal fill light
Low key lighting has a high contrast between dark and light areas.
HMI =
> high pressure mercury metal iodide
> simulate moonlight / sun
> daylight colour temperature
> efficient lights for wattage usage (more light, less heat)
dystopia > Grickle Grass Maze
DETAIL 1:20
Bamboo =
> rapidly renewable and sustainable
> light weight and strong
> desired length and height for Grickle Grass Maze elements
> sourced from Nelspruit
FLAT =
> Stock scenery
> Re-use by State Theatre
> Backpainted muslin on timber frame